Planning Commission Regular Meeting

Town Board Room
807 Mountain Avenue
Berthoud, Colorado 80513
Thursday, May 28, 2026, at 6:00 PM

This is an **In-Person** meeting at the location and time noted above.

This meeting will be streamed live on YouTube. The live stream is accessible by visiting www.berthoud.org/stream.

1. **Call to Order**
2. **Pledge of Allegiance**
3. **Roll Call**
4. **Approval of Meeting Minutes**
   A. May 14, 2026 Meeting Minutes
5. **Public Hearing(s)**
   B. Tundra Flats Rezoning and Neighborhood Master Plan
6. **Work Session**
   C. Informational Update on the Town-Wide Intersection Traffic Model
7. **Report by Staff**
8. **Adjourn**

Individuals needing special accommodation may request assistance by contacting the Town Clerk at 807 Mountain Avenue, Berthoud, Colorado 80513, 970-532-2643 at least 24 hours in advance.

Town of Berthoud Planning Commission
Town Hall
Board Room
807 Mountain Avenue, Berthoud, CO 80513
May 14, 2026 at 6:00 p.m.

1. Meeting called to order – Vice Chair Semedalas at 6:11 p.m.

2. Pledge of Allegiance

3. Roll Call
   The following Planning Commission members were present:
   Nick Semedalas, Vice Chair
   Bryce Filho, Secretary
   Mark Hofmans, Commissioner
   David Pond, Commissioner
   Marleene Buttice, Commissioner
   Brandon Terrazas, Commissioner

   The following Planning Commission members were absent:
   Stacy Sigman, Chair

   The following staff members were present:
   Anne Johnson, Community Development Director
   Tawn Hillenbrand, Planning Manager
   Bella Manzo, Planner

4. Work Session
   a. Technology Setup for Planning Commissioner eNotebooks and Email Addresses
      i. This work session was removed from the agenda by Vice Chair Semedalas due to the absence of IT Specialist Bryan Fister.

5. Approval of Minutes from April 9, 2026, were moved for approval by Commissioner Pond and a second to the motion was made by Commissioner Hofmans.

6. Public Hearing: Berthoud Industrial Annexation and Zoning
   A Public Hearing to consider a request for an Annexation and Zoning of a property, known as Berthoud Industrial, located west of and adjacent to 1st Street, east of Clayton Place, north of W County Road 10E and south of E County Road 12.
   a. Planner Bella Manzo provided a staff presentation at 6:18 p.m.
   b. The applicant was represented by Derek Griess. They provided a presentation at 6:26 p.m.
   c. Public testimony opened at 6:31 p.m. and closed at 6:31 p.m. No members of the public provided testimony.
   d. Planning Commissioners deliberated and discussed the proposed Annexation. Discussion opened at 6:31 p.m. and closed at 6:37 p.m.

e. Commissioner Pond moved to send a recommendation of approval to the Town Board of Trustees of the Annexation as proposed. A second to this motion was made by Commissioner Hofmans.
f. Planning Commissioners deliberated and discussed the proposed Zoning. Discussion opened at 6:39 p.m. and closed at 6:39 p.m.
g. Commissioner Buttice moved to send a recommendation of approval to the Town Board of Trustees of the Zoning as proposed. A second to this motion was made by Commissioner Hofmans.
h. The public hearing closed at 6:40 p.m.

7. Public Hearing: Landscape Design Guidelines Amendment
   Public Hearing to review the proposed amendment to the Landscape Design Guidelines, specifically the Wildland Urban Interface (WUI) section and Master Plant Lists, in consideration of the newly adopted Colorado Wildfire Resiliency Code.
   a. Planning Manager Tawn Hillenbrand provided a staff presentation at 6:41 p.m.
   b. Public testimony opened at 6:45 p.m. and closed at 6:45 p.m.
   c. Planning Commissioners deliberated and discussed the proposed amendment. Discussion opened at 6:45 p.m. and closed at 6:46 p.m.
   d. Commissioner Hofmans moved to send a recommendation of approval to the Town Trustees of the amendment as proposed. A second to this motion was made by Commissioner Buttice.
   e. The public hearing closed at 6:47 p.m.

8. Report by Staff:
   a. Planner Bella Manzo provided information on items presented during the May 12 Town Board of Trustees Meeting. The Historic Preservation Advisory Committee Chairperson, Leslie Moore, provided the Committee's 2025 Annual Report. May 2026 was proclaimed to be Historic Preservation Month in Berthoud. The Town of Berthoud Historic Preservation Plan, created in collaboration with stakeholder groups, the public at large, Town Staff, the HPAC, and consultants Chronicle Heritage was presented by consultant John Schuttler. The Town Board of Trustees approved the adoption of the Historic Preservation Plan.
   b. Planning Manager Tawn Hillenbrand provided an update on the Public Art Master plan currently in progress. The community-wide public survey is set to close on May 15. So far, approximately 130 responses have been received. Consultants NineDOTArts are expected to begin work on the first draft of the Public Art Master Plan.
   c. Community Development Director Anne Johnson provided an update on the addition of a Strategic Growth element in the Comprehensive Plan. The State of Colorado requires the Strategic Growth element to be implemented by December 31, 2026.
   d. An update on the Mountain Vista Park (Richardson Park) project was provided by Community Development Director Anne Johnson in response to a question by Commissioner Pond regarding the project status.

9. Adjourn
   The meeting was adjourned by Motion of Commissioner Terrazas and seconded by Commissioner Pond at 7:06 p.m.

_____ _____

Chairperson Secretary

Planning Commission Information

Community Development Department

Meeting Date:	**May 28, 2026**
Agenda Title/Subject:	**Tundra Flats Rezoning and Neighborhood Master Plan**
Type of Item:	**Regular Item**
Purpose:	**Request to approve the Neighborhood Master Plan for the Tundra Flats property and to change the existing zoning to bring the Tundra Flats property into conformance with the 2021 Comprehensive Plan.**
Presented by:	**Tawn Hillenbrand**

Attachments:

1. Tundra Flats NMP Rezone Staff Report
2. Tundra Flats Combined Staff Report Attachments
3. Tundra Flats Draft Resolution 2026
4. Tundra Flats Draft Ordinance 2026

Background:

According to project records, the subject property was originally created and zoned PUD – Planning Unit Development in 1999 as part of the Gateway Park Overall Development Plan (ODP). The property was replatted several times in the 2000s, with the most recent replat taking place in 2017 as part of the Gateway Park Replat Three as Tract A.

The current application includes two requests:

- The first request is to rezone the property from PUD – Planned Unit Development to C1 – Neighborhood Commercial. The proposed zoning aligns with the vision and intent of the Comprehensive Plan and Future Land Use Map. The Comprehensive Plan's Future Land Use Map is not legislative in nature and establishes a vision of how properties should be zoned based on public input, Planning Commission and the Town Board's input during the Comprehensive Planning process. The Future Land Use Map is a vision document to guide future development. Staff has been consistent in requiring developers with properties zoned PUD to rezone to the current districts acknowledged through the Comprehensive Plan update from 2021.

- The second request is the Tundra Flats Neighborhood Master Plan. A Neighborhood Master Plan is required with any Rezone request. The purpose of the Neighborhood Master Plan is to conceptualize the overall character of a future land use inclusive of "zoning, transportation, pedestrian network, parks, open space, subdivision identity standards and other amenities."

Update/Next Steps:
Tonight, the Planning Commission will hear two requests of the applicant. The first will be the Neighborhood Master Plan. The purpose of the Neighborhood Master Plan is to conceptualize the overall character of a future development inclusive of "zoning, transportation, pedestrian network, parks, open space, subdivision identity standards and other amenities." The second request is the Change of Zone which should be a simple public hearing if the Neighborhood Master Plan is approved as the Change of Zone is simply a map illustrating zoning boundaries which conform to the Neighborhood Master Plan. Should the Neighborhood Master Plan be approved as proposed, the Zone Change should be approved to follow the intended use of the property as outlined in the Neighborhood Master Plan. Should the Neighborhood Master Plan not be approved, the Zone Change request should not be considered as the rezone is contingent on the Neighborhood Master Plan approval.

The applicant will be required to record the Neighborhood Master Plan and Change of Zone if approved by the Town Board of Trustees at their hearing on July 14, 2026. Following recording of the documents, the next step would be a Site Plan Review application for the proposed development. The Site Plan Review phase includes review of the Construction Documents (100% completeness), referral agency review, analysis of the utilities and infrastructure planned for the project, and off-site and on-site improvements, architecture and landscape design, for example. The Site Plan must adhere to the approved Neighborhood Master Plan as well as the Mountain Avenue Overlay District Standards, the Town's Architectural Guidelines and the Landscape Guidelines, for example.

Referral agencies, including but not limited to the school district, fire protection district, utility and infrastructure providers, have reviewed the Neighborhood Master Plan and the Change of Zone applications. Referral agency comments at this concept phase are incorporated into the Staff Report and are used by the applicant when they are preparing their next land use application (Site Plan Review) materials for review. Sanitary sewer and water main engineering designs, the need for water dedication, and school bus stop locations, if needed, for example are reviewed at the Site Plan Review phase.

Fiscal Impact and Fund Source:
There is no negative impact to the Town in consideration of this Neighborhood Master Plan and request to rezone the property in conformance with the 2021 Comprehensive Plan update. Public notice is funded through fees paid by the applicant. Development review is funded through fees paid by the applicant.

Community Touchstones:
Consideration of this request does not negatively impact community touchstones and in fact is supportive of the 2021 Comprehensive Plan update. The applicant's request for Neighborhood Master Plan and Rezone illustrates a change to align the proposal with the vision of continued growth within the Town's utility service area. The C1 – Neighborhood Commercial zoning classification aligns more closely with the Comprehensive Plan's vision for this area.

Recommended Action(s):
Neighborhood Master Plan
Staff recommends Planning Commission make a motion to recommend approval to the Town Board of Trustees of the Tundra Flats Neighborhood Master Plan based on meeting the review criteria in Section 30-6-106.E of the Berthoud Development Code.
Rezoning
Staff recommends Planning Commission make a motion to recommend approval to the Town Board of Trustees of the Tundra Flats Rezone request to rezone from PUD –

Planned Unit Development to C1 – Neighborhood Commercial based on meeting the review criteria in Section 30-3-110.G of the Berthoud Development Code.

STAFF REPORT: TUNDRA FLATS NEIGHBORHOOD MASTER PLAN AND REZONE

DATE: May 28, 2026

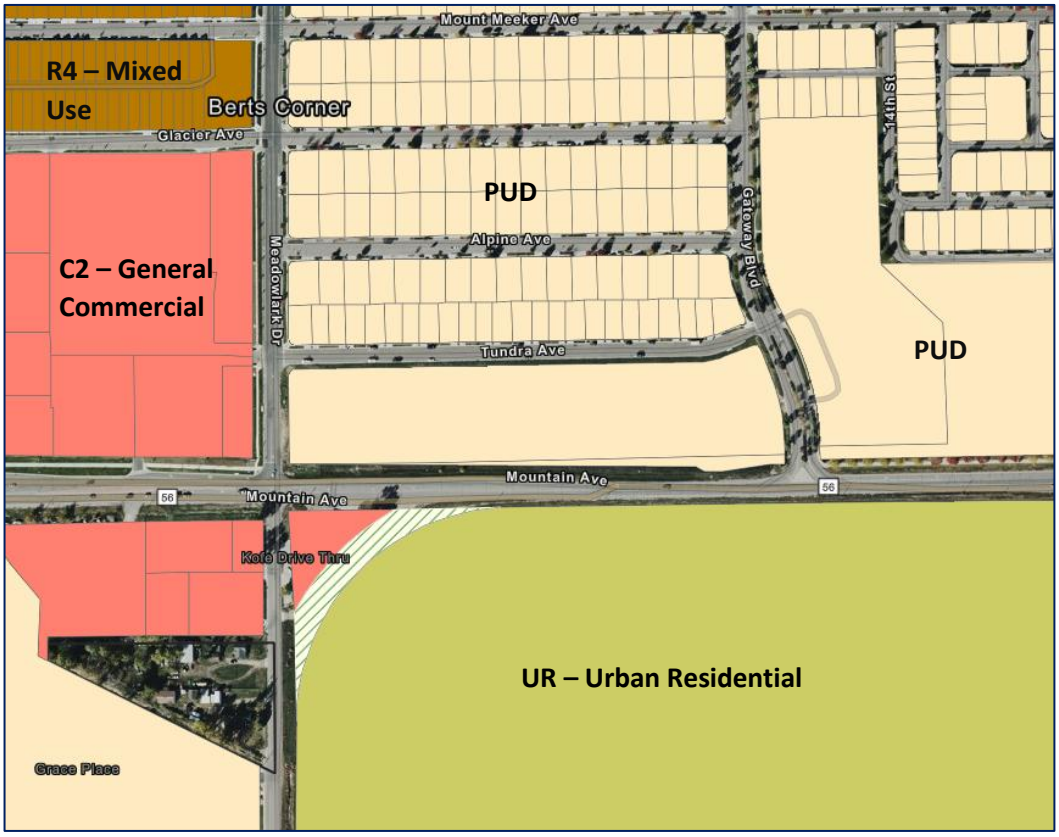
GENERAL INFORMATION		
Applicant:	Golden Eye Investment c/o Matt Notter	Size: 6.6 acres
Site Location:	Parcel #: 9415443001; Tract A, Gateway Park Replat Three Located north of Mountain Avenue between Meadowlark Drive on the west and Gateway Park Boulevard on the east (shaded in blue below) 	
Applicant's Request:	The Applicant is requesting Neighborhood Master Plan approval for a proposed mixed-use development inclusive of 3,700 sf of ground floor commercial space and 140-150 multi-family residential units with a concurrent request to rezone the subject property from PUD – Planned Unit Development to C1 - Neighborhood Commercial.	
Current Zoning:	PUD – Planned Unit Development	
PROPOSED ZONING DISTRICT INFORMATION		
Proposed Zone District	C1 – Neighborhood Commercial	
Max Density	24 dwelling units per gross acre	
Min. Lot Area	N/A	
Min. Lot Width	25’	
Building Front Setback	0’	
Building Side Setback	0’ or 20’ when adjacent to a different zone district	
Building Rear Setback	0’ or 20’ when adjacent to a different zone district	
Max Building Height:	50-feet	

MOUNTAIN AVENUE OVERLAY DISTRICT INFORMATION	
Character District	Berthoud West
Max Building Height	3 Stories (40-feet)
Building Setback	Mountain Avenue: 14 feet minimum, 20 feet maximum
	Secondary or side street: 20 feet minimum
	Side yard (3 stories): 10 feet minimum
	Side yard (2 stories): per underlying zone district

SURROUNDING ZONING, LAND USE AND REQUIRED BUFFERS

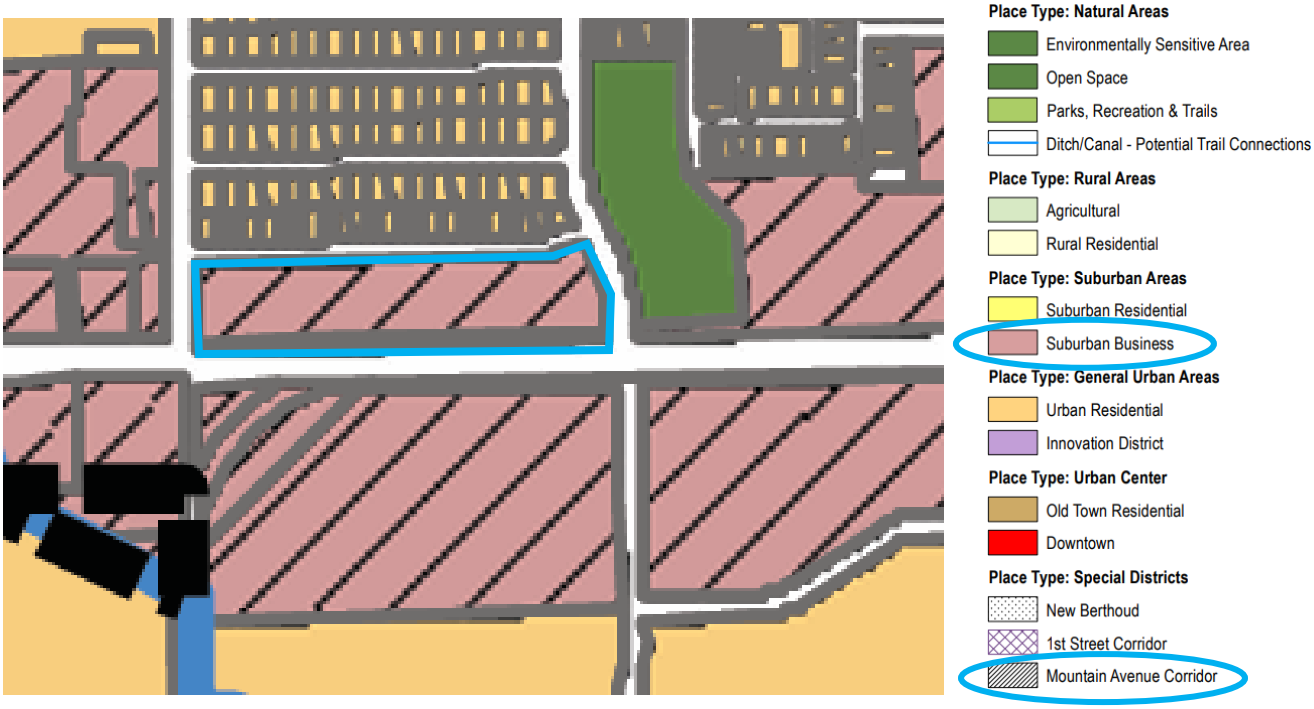
	Adjacent Zoning	Adjacent Land Uses	Buffer Requirement
North	**Gateway Park PUD**	**Single-family Residential**	**N/A**
South	**UR, C2**	**Public ROW, currently Undeveloped, Commercial (southwest)**	**N/A**
East	**Gateway PUD**	**Park**	**N/A**
West	**C2**	**Westside Crossing Commercial, currently undeveloped**	**N/A**

Berthoud Zoning Map:

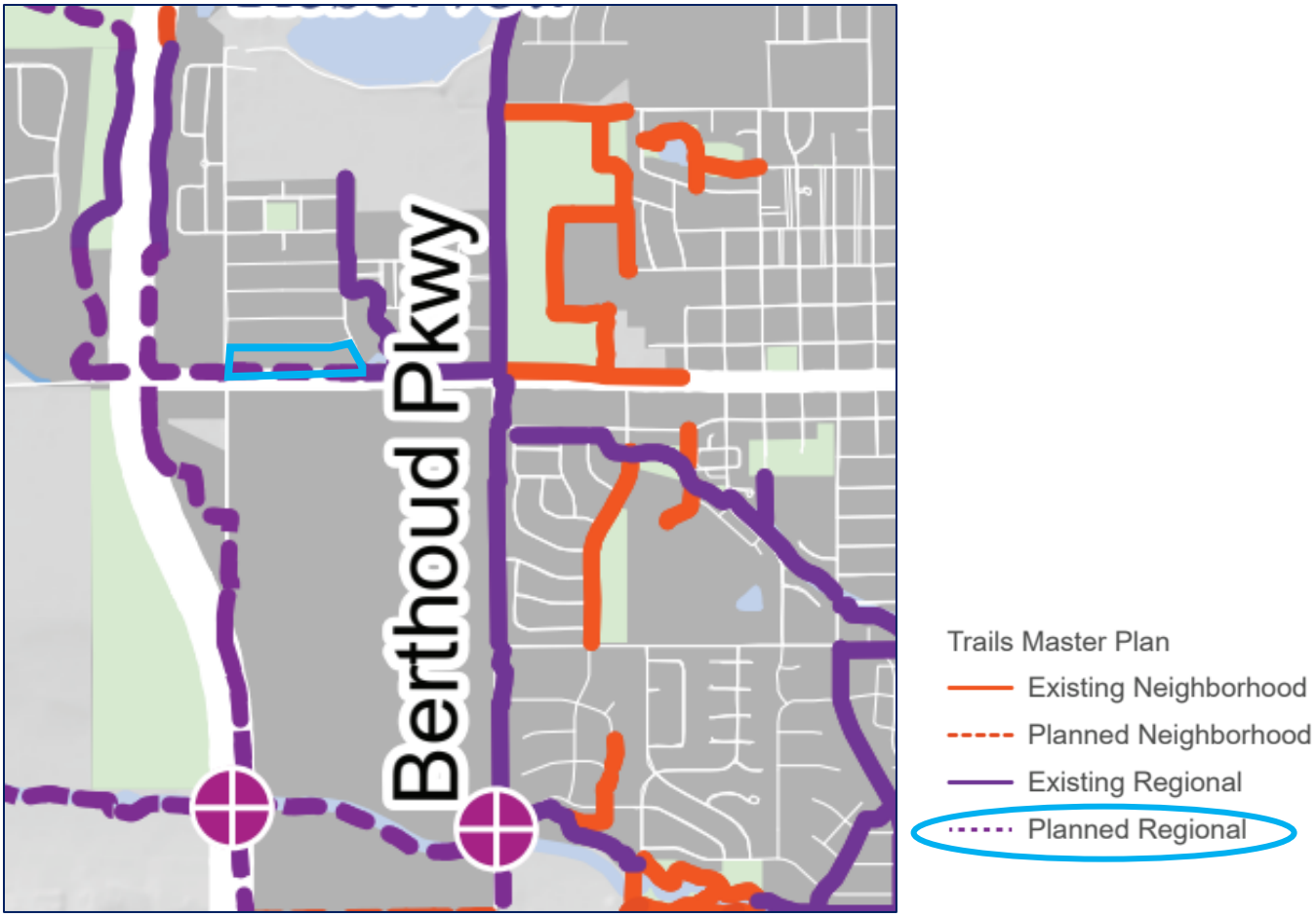


BERTHOUD COMPREHENSIVE PLAN AND MASTER PLANS

Berthoud Comprehensive Plan – Future Land Use Map:



Berthoud Trails Master Plan:



Berthoud Open Space Plan:



Proposal

The applicant is proposing the following two requests: Neighborhood Master Plan for a proposed mixed-use development inclusive of 3,700 sf of ground floor commercial space and 140-150 multi-family residential units with a concurrent request to Rezone the subject property from PUD – Planned Unit Development to C1 – Neighborhood Commercial.

Background

According to project records, the subject property was originally created and zoned PUD – Planning Unit Development in 1999 as part of the Gateway Park Overall Development Plan (ODP). The property was replatted several times in the 2000s, with the most recent replat taking place in 2017 as part of the Gateway Park Replat Three as Tract A.

Neighborhood Master Plan

The Neighborhood Master Plan is a conceptual design of the development, submitted with a rezoning or major subdivision application, that depicts the applicant's vision for the overall development, including zoning, transportation, pedestrian network, parks, open space, subdivision identity standards and other amenities. The Neighborhood Master Plan is binding on a development, and all future platting/zoning actions must follow the approved plan or apply for an amendment of said plan. Section 30-6-106(E) of the municipal code states that a Neighborhood Master Plan must consist of the following required elements:

30-6-106(E) Required Elements	Finding	Rationale
1. Traffic Plan: The applicant shall provide a preliminary traffic plan that addresses the following elements: i. The proposed street network connectivity to the existing road network, including all proposed access points. ii. The location and layout of all arterial and collector roads within the development. Local streets and alleys do not need to be depicted. iii. A preliminary traffic impact study prepared by a licensed traffic engineer which evaluates proposed access points, the existing street system, and any need for any road improvements (including-off-site improvements) created by the proposed development.	Yes	i. The proposed development would connect to the existing road network via three (3) proposed connections to Tundra Avenue. ii. The project does not propose arterial or collector roads within the development. Tundra Avenue is an existing public right-of-way created with the original Gateway Park development. iii. A preliminary traffic impact study (TIS)/analysis was provided with the submittal. The Town Engineer reviewed the TIS and was satisfied with the preliminary data provided at this concept phase. A Final TIS, at 100% completeness, will be required at the next phase (Site Plan Review) for further evaluation and to ensure the proposed project is functional.
2. Open Space Plan: The applicant shall provide a preliminary open space plan that addresses the following elements: 1. Proposed open space distribution and location, including percentage of open space. 2. Compliance with 30-2-109(D)(4) open space elements. 3. Required buffer areas as per 30-2-109(C)(2)	Yes	i. An open space plan was provided as part of the Neighborhood Master Plan. The plan includes more than 10% open space and is proposing approximately 57%, or 3.76 acres of open space, exceeding the minimum requirement. ii. By code the applicant would be required to provide two (2) open space elements. The project is fulfilling this requirement by proposing a mixed-use plaza and green area. iii. There are no required buffer areas with this request; however, the applicant is electing to provide 30-foot-wide buffer areas along the

		south and north property lines adjacent to Tundra Avenue and Mountain Avenue as part of meeting the Subdivision Identity and Place Standards elements.
30-6-106(E) Required Elements	**Finding**	**Rationale**
3. <u>Park(s) Plan:</u> i. Proposed park locations and types of parks as per Section 30-2-109(B)(2) and (3) ii. Proposed park acreage as per Section 30-2-109(B)(2)	Yes	(i.-ii.) Gateway Park is a master-planned community and includes several previous filings. According to the Gateway Park Development Agreement (dated July 2002), park dedication requirements were previously satisfied; therefore, park dedication requirements are not required as part of this specific project.
4. <u>Pedestrian Network:</u> i. Location of all trails within development, and connection to existing trail network. ii. Connectivity of sidewalks to the existing pedestrian system, including any off-site sidewalk improvements. iii. Depiction of any bike lanes or any other multi-modal features.	Yes	i. Locations of all trails are depicted on the NMP. The applicant is proposing to provide the portion of the 10-foot wide concrete Regional Trail along Mountain Avenue as required by the Berthoud Trails Master Plan. Connections from the proposed development to this Regional Trail are proposed. ii. Sidewalks will be constructed within the development serving each proposed building and will then connect to the existing pedestrian system adjacent to the property. iii. Bike lanes are not proposed nor required internal to the site. Designated bike lanes are not required along roads classified as 'Local' (Tundra Avenue). Bike lanes are provided along Mountain Avenue and Gateway Park Blvd.
5. <u>Zoning:</u> i. The location of zoning boundaries shall be provided with the application and depicted on the Neighborhood Master Plan. ii. The plan should show how lot diversity standards of Section 30-2-116(D)(1)(c), are met and create a mix of zoning which is harmonious with the surrounding area, and within the property itself. iii. Density and lot diversity shall be distributed throughout the project and shall not be located in only one area.	Yes	In addition to the Neighborhood Master Plan, this project also includes a rezoning request. The Neighborhood Master Plan identifies the project showing the proposed zoning changes. i. The subject property is less than 20 acres in size and therefore, lot diversity requirements are not applicable to this project. However, when considering the Gateway Park Subdivision in its entirety, this proposal would provide a housing type not currently existing in the overall subdivision nor within the immediate area, thereby contributing to housing diversity. The proposed zoning district, C1 – Neighborhood Commercial, would be compatible with the existing commercial development to the west at Westside Crossing and with the proposed Legacy Park subdivision to the south across Mountain Avenue. The zoning would be consistent with the existing PUD zoning of the subject property and the remaining Gateway Park development. ii. As stated above, lot diversity standards are not applicable. The project proposes 5 total buildings which are distributed across the 6.6-

		acre property and are not located in only one area of the site.
30-6-106(E) Required Elements	**Finding**	**Rationale**
6. Overall Utility Plan: i. A preliminary utility plan depicting the existing capacity of the utility system for both the proposal and any potential future development. ii. Proposed connections to the existing utility system. iii. The location of any proposed or required lift stations. iv. Utility plans for the interior of the development (such as water and sewer service lines) are not required as part of this process.	Yes	(i. – iv.) A preliminary utility plan has been provided showing the water line and sewer line connections capacity and demand, and where the lines would be located to verify the project can be served by utilities. The project will connect to Town of Berthoud utilities through existing connections. The Town Engineer reviewed the preliminary utility plan and is satisfied with the data provided at this concept phase of the project. Final Construction Plans at 100% completeness, will be required at the next phase (Site Plan Review). The location of all existing utility, drainage, and irrigation easements interior and adjacent to the property are required to be addressed with the next phase (Site Plan Review) and will be evaluated to ensure the project is functional as proposed.
7. Subdivision Identity Standards: i. The applicant shall provide compliance with subdivision identity standards found in Section 30-2-131.	Yes	i. Per Code, six (6) subdivision identity and place elements are required. The project is proposing the following elements: Artwork, Playground, Community Garden, Pollinator Gardens, Buffer Areas, and Enhanced Fences. Additional details, including the location and design of these elements will be required with the next submittal (Site Plan Review) and will be evaluated to ensure compliance with Code.

Neighborhood Master Plan Review Criteria

Section 30-6-106(G) states that the town shall use the following criteria in addition to other applicable provisions of the code to evaluate the application.

30-6-106(G) Review Criteria	**Finding**	**Rationale**
1. The land use mix within the project conforms to Berthoud's Zoning District Map and Comprehensive Plan Preferred Land Use Map and furthers the goals and policies of the Comprehensive Plan.	Yes	The Future Land Use Map envisions this area being developed as Suburban Business Character District. Additionally, the property is located in the Mountain Avenue Overlay District, specifically the Berthoud West Character District. The Comprehensive Plan states that the preferred uses in the Suburban Business Character District will include a variety of businesses that serve local residents and employees, such as retail stores, lodging, services, restaurants, and offices. The Comprehensive Plan also states that the Suburban Business Character District is envisioned as a walkable commercial district with opportunities for

		shopping, eating, employment, and other services, and will generally maintain low to moderate intensity. The suburban business character district includes Berthoud's two commercial zoning districts; C1 – Neighborhood Commercial and C2 – General Commercial. The Mountain Avenue Overlay District, specifically the Berthoud West Character District, is envisioned as a vibrant walkable commercial district with opportunities for shopping, employment, and other services. Preferred land uses include retail, grocery store, restaurants, commercial, office, services, lodging, and other similar uses. Residential uses on upper floors would also be appropriate within this district. This is similar to a typical downtown building with non-residential uses on the first floor and housing above. This mixed-use development, inclusive of 3,700sf of ground floor commercial space and 140-150 residential units would be allowed in the proposed C1 – Neighborhood Commercial zone district following land use approval (Site Plan Review). While the Suburban Business Character District envisions this area as primarily commercial or business use, the Berthoud West Character District supports mixed-use (commercial + multi-family residential). While this proposed project would provide more residential units than commercial space, Staff believes this proposed land use mix fulfills a need within the Town of Berthoud and is consistent with the goals and policies of the Comprehensive Plan. More specifically, the proposed project furthers the Comprehensive Plan Achievable Goal of Housing Diversity by providing a housing type not readily found in the Town while also providing much needed and desired neighborhood commercial space.
30-6-106(G) Review Criteria	**Finding**	**Rationale**
2. The Neighborhood Master plan represents a functional system of land use and is consistent with the rationale and criteria set forth in this Chapter, the Town Comprehensive Plan, and the Parks, Open Space and Recreation (PORT) Plan as amended.	Yes	The proposed plan is consistent with this criterion. The proposed project reflects transect-based planning by maintaining a higher density near the Town core and major transportation routes (Mountain Avenue). The trail and sidewalk system proposed will provide pedestrian connections throughout the project and into neighboring areas, including the neighboring commercial developments to the west and south as well as to the existing community park to the east. The proposed project would contribute to housing diversity by providing a housing type not prevalent in the Town. The project includes 3,700sf of ground floor commercial space,

		creating an opportunity for potential shopping, eating, employment, and other neighborhood services that will serve not only the residents within the Tundra Flats development but also those in the surrounding Gateway Park subdivision. This proposal represents a functional system of land use and furthers the goals and policies of the Comprehensive Plan.
30-6-106(G) Review Criteria	**Finding**	**Rationale**
3. The preliminary traffic, open space, park, utility and pedestrian design is adequate and functional given the existing and planned capacities of each system, and meets the standards found in this Code.	Yes	Plans were reviewed by Town staff as well as outside referral agencies. No deficient capacity issues were identified at this concept phase of the project. The applicant will be required to provide updated plans and reports (i.e. – Final Traffic Impact Study, Final Drainage Report, Final Utility Plans) at 100% completeness at the next phase of the project (Site Plan Review) for further evaluation.
4. Negative impacts on adjacent land uses have been identified and satisfactorily mitigated.	Yes	A preliminary Traffic Impact Study (TIS), Geotech Report, and Utility Plan were required and provided by the applicant as part of this Neighborhood Master Plan application. Staff and referral agencies with expertise in each specific area of study reviewed the preliminary plans to ensure impacts to adjacent land uses and infrastructure were identified and have been adequately addressed at this concept phase of the project. Final versions of these reports, addressing any outstanding items of concern, will be required with the next phase (Site Plan Review) which will be reviewed in depth at that time.
5. There is a need or desirability within the community for the development and the development will help achieve a balance of land use and/or housing types within Berthoud according to town goals.	Yes	The proposed project would contribute to housing diversity in the Town by providing a housing type not readily found in the Town. Additionally, the project proposes 3,700sf of ground floor commercial space with additional residential units above. This commercial component provides opportunities for shopping, eating, employment, and other services. While the Comprehensive Plan envisions this area as primarily commercial, Staff concludes that this proposed mixed-use development achieves a balance of land use and, therefore, is within the goals of the Town reflected in the Comprehensive Plan.

Rezoning

The subject property is currently zoned PUD – Planned Unit Development. According to project records, the subject property was originally zoned PUD in 1999 as part of the Gateway Park Overall Development Plan (ODP).

The PUD process has been phased out by the Town, and the PUD zone district is no longer a preferred zone district. As the Town has eliminated the potential for future PUDs and previously approved PUDs are not clear regarding land uses and densities, applicants are encouraged to change the zoning of their properties to reflect the vision and values of the 2021 Comprehensive Plan.

The applicant is requesting a rezone from PUD to C1 – Neighborhood Commercial to allow more flexibility in potential uses and to better align with the Town of Berthoud Comprehensive Plan.

Rezoning is addressed through an official zoning map amendment. Section 30-3-110(D) states for the purpose of establishing and maintaining sound stable and desirable development within the Town, the Zoning Map shall not be amended except when it addresses one or more of the criteria in the following table.

30-3-110(D) Zoning Map Amendment Criteria	Finding	Rationale
1. To correct a manifest error in an ordinance establishing the zoning for a specific property; or 2. To rezone an area or extend the boundary of an existing district because of changed or changing conditions in a particular area or in the Town generally; or 3. The land to be rezoned was zoned in error and as presently zoned is inconsistent with the policies and goals of the Town Comprehensive Plan; or 4. The proposed rezoning is necessary to provide land for a community-related use that was not anticipated at the time of the adoption of the Town Comprehensive Plan, and the rezoning will be consistent with the policies and goals of the Comprehensive Plan; or 5. The area requested for rezoning has changed or is changing to such a degree that it is in the public interest to encourage development or redevelopment of the area	Yes	Staff finds that the proposed rezoning meets criteria 2. The town has shifted away from Planned Unit Developments, and the proposed rezoning will provide clarity and transparency on allowed land uses and densities for the subject property, while aligning with what is envisioned in the Future Land Use map in the Comprehensive Plan. The Future Land Use Map envisions this area as the Suburban Business Character District. The proposed C1 – Neighborhood Commercial district is defined as a relevant zone district within the Suburban Commercial Character District. Furthermore, the proposed zoning district would be consistent with the existing PUD zoning of the subject property and the remaining Gateway Park development. This district would also be compatible with the zone district directly to the west, C2 – General Commercial as well as the UR - Urban Residential district to the south across Mountain Avenue. The C1 - Neighborhood Commercial District is intended to provide for the development of mixed use (including multi-family residential), retail, commercial and service businesses to support residential neighborhoods. New development or redevelopment in this district should be scaled in size to fit the adjacent neighborhood. This proposal is scaled in size to the adjacent neighborhood, with paired homes directly across Tundra Avenue, future neighborhood commercial to the west across Meadowlark Drive and future commercial and mixed-use to the south across Mountain Avenue.

PUBLIC NOTICE AND COMMENT

Notice of the Planning Commission and Town Board of Trustees Public Hearings has been mailed to property owners within 500 feet of the subject property May 12, 2026, a legal ad published May 13, 2026, and the property was posted as required by the Development Code by the applicant on May 12, 2026.

As of the drafting of this staff report, staff have not received public comment emails regarding the proposed request.

The Tundra Flats Neighborhood Master Plan and Rezone application completed five (5) rounds of referral agency and staff review in the following sequence:

Submittal Number	Review documents submitted by Applicant on:	Staff and Referral Agency comments provided to Applicant on:
1st	August 14, 2025	September 25, 2025
2nd	October 22, 2025	December 4, 2025
3rd	February 25, 2026	April 6, 2026
4th	April 21, 2026	May 5, 2026
5th (final)	May 6, 2026	May 11, 2206

FINDINGS AND RECOMMENDATIONS

Neighborhood Master Plan

Staff recommends Planning Commission make a motion to recommend approval to the Town Board of Trustees of the Tundra Flats Neighborhood Master Plan based on meeting the review criteria in Section 30-6-106.E of the Berthoud Development Code.

Rezoning

Staff recommends Planning Commission make a motion to recommend approval to the Town Board of Trustees of the Tundra Flats Rezone request to rezone from PUD – Planned Unit Development to C1 – Neighborhood Commercial based on the review criteria in Section 30-3-110.G of the Berthoud Development Code.

Attachments

1. Application form
2. Project Narratives
3. Neighborhood Master Plan
4. Rezoning Map
5. Preliminary traffic impact study/analysis

Town of Berthoud
807 Mountain Ave.
P.O. Box 1229
Berthoud, CO 80513
970.532.2643

DEVELOPMENT REVIEW APPLICATION

All required information must be provided before submittal will be accepted and deemed complete.
To be complete, the application must include all items identified on the submittal checklist.
Please complete both sides of application form.

Parcel Number(s): 9415443001

Site Address: TBD

Project Name: TUNDRA FLATS

Brief description of project:
NMP and Rezoning of Gateway Park Replat 3 for Mixed-Use.

APPLICATION TYPE ***(Check as appropriate)*****:**

☐ Annexation	☐ Preliminary Subdivision Plat	☐ Final Site Plan
☑ Rezoning	☐ Final Subdivision Plat	☐ PUD Amendment
☐ Concept Plan	☐ Plat Amendment	☐ PUD Preliminary Development Plan
☐ Minor Subdivision	☐ Oil and Gas	☐ PUD Final Development Plan
☐ Special Use Review	☐ ROW Vacation	☑ Other Neighborhood MP

APPLICANT

Name: Golden Eye Investment c/o Matt Notter

E-mail: mnotter@rocheconstructors.com	Mailing Address: 361 71st Avenue
Phone: 970-356-3611	City/State/Zip: Greeley, CO 80634

CONTACT PERSON ***(will receive correspondence from Town Staff/Referral Agencies)***

Name: Don Ryan

E-mail: dryan@laidesigngroup.com	Mailing Address: 116 Inverness Drive East, Suite 340
Phone: 303-734-1777	City/State/Zip: Englewood, CO 80112

OWNER(S) ***(If different than applicant)***

Name: Same as Applicant

E-mail:	Mailing Address:
Phone:	City/State/Zip:

CONSULTANT ***(Engineer, Surveyor, or Planner)***

Name: Same as Contact Person

E-mail:	Mailing Address:
Phone:	City/State/Zip:

LAND USE INFORMATION

Existing Use: Vacant

Proposed Use: Mixed-Use

Existing Zoning: PUD

Proposed Zoning: (if applicable): C1

Number of acres: 6.6

Proposed Access: Tundra Avenue

Adjacent zoning / land use:	
East Side: PUD	North Side: PUD
West Side: C2	South Side: UR, C2, Transition, PUD

UTILITY SERVICE INFORMATION

Water: Town of Berthoud	Sewer: Town of Berthoud

PROJECT INFORMATION

Number of proposed units: 148

Number of phases: 1

Number of Units per phase: 148

Number of lots proposed: 1

Lot size minimum: N/A

Lot size maximum: N/A

Lot size average: N/A

Gross density (units/acre): 16 d.u./ac.

Net density (units/acre): 22 d.u./ac.

Area and percent open space: N/A

Non-Residential Building Area (Sq. Ft.) Proposed: 3,700 s.f.

Non-Residential Construction Floor Area Ratio Proposed: .011 (or approx. 1%)

Total Number of Parking Spaces: 161

Acreage of Site:

a. Gross: 8.9 acres
b. Right-of-Way: 2.3 acres
c. Net (a-b) 6.6 acres

Type of Housing Proposed (*please check*):

☐ Future Single Family	☐ Townhouse
☐ Duplex	☐ Condominium
☑ Multi-family	
(# of units: 148)	

Signatures are required for ALL Property Owners and the Applicant

I hereby certify that I am the lawful owner of the parcel(s) of land that this application concerns and consent to the action. I hereby permit Town of Berthoud staff to enter upon the property for the purposes of inspection relating to the application. Building Permits will not be accepted while this application is in process.

Property Owner(s): _____ Date: 7/30/2025

Property Owner(s): _____ Date: _____

In submitting the application materials and signing this application agreement, I acknowledge and agree that the application is subject to the applicable processing and public hearing requirements set forth in the Development Code.

Applicant: _____ Date: 7/30/2025

FOR OFFICE USE ONLY	***Received By:***	***Date:***

Revised: February 18, 2026

City of Berthoud
Planning Department
807 Mountain Avenue
Berthoud, CO 80513

Submittal #3 – Tundra Flats – Neighborhood Master Plan
Re: Narrative

Contact Information

Property Owner	**Applicant / Contact**
Golden Eye Investments 361 71st Avenue Greeley, CO 80634 Contact: Matt Notter Email: mnotter@rocheconstructors.com	LAI Design Group 116 Inverness Drive East, 340 Englewood, Colorado 80112 Phone: 303.734.1777 Contact: Don Ryan Email: dryan@laidesigngroup.com
Engineering Consultants	**Traffic Consultants**
CWC Consulting Group 9360 Teddy Lane, Suite 203 Lone Tree, Colorado 80124 Phone: 303.395.2700 Contact: Brett Woolard	Delich Associates 2272 Glen Haven Drive Loveland, Colorado 80538 Phone: 970.669.2061 Contact: Joe Delich

Subject Property Information

Property Location	North side of Mountain Avenue between Gateway Park Blvd (east) and Meadowlark Drive (west)
Closest Major Intersection	Hwy 287 & Mountain Ave
Parcel Number	9415443001
Legal Description	Tract A GATEWAY PARK REPLAT THREE, BER (20170016550)
Area (AC/ SF)	6.6 Acres / 287,500 sf
Current Zoning	PUD
Proposed Zoning	C1 – Neighborhood Commercial

Project Summary

The current PUD zoning is in default to the current Town code and therefore the development is proposed for Rezoning to Neighborhood Commercial (C1). The project scope is to develop a 3-story mixed-use building and four additional 3-story residential buildings on the 6.6-acre site, which is fully developable. The mixed-use building is planned for retail/commercial on the ground floor and apartments on the ground through 3rd floors. A total of 3,700 square feet of ground floor commercial space and 140-150 units are proposed. Landscape areas, buffer areas, gardens, greens, plazas, walks, and a required stormwater detention pond will provide amenities and open space elements. The site includes 3.8 acres or over 57% of open space with the remaining 42% covered by buildings and parking. Gross density is 16.6 units per acre, and net density is 22.4 units per acre. The proposed FAR is 0.6, or 60%.

Future Land Use Map
The Future Land Use Map is a map established by the Town Board which guides development and is a vision of how land could develop. The Tundra Flats site is designated as Suburban Business which supports the mixed-use building and ground floor commercial and retail space oriented towards Mountain Avenue.

Zoning Map
The Zoning Map designates the Tundra Flats site as PUD, which was established as part of the Gateway PUD. Rezoning from PUD to C1 – Neighborhood Commercial is desired to bring the site more in line with recent planning efforts and guiding documents for this site, especially the Mountain Avenue Corridor Design Plan.

Comprehensive Plan Compliance
The Town of Berthoud Comprehensive Plan was approved in 2021 and includes a section for the Mountain Avenue Special District which applies to the Tundra Flats site:

Preferred Land Uses
Preferred uses include a mix of infill and new development built to advance a walkable, mixed-use environment and pedestrian/bicycle connectivity to adjacent neighborhoods, parks, schools, jobs, and businesses.
Tundra Flats proposes a mix of commercial and residential uses with ample landscape areas and outdoor amenities to support these land uses. Outdoor amenities are intended to meet or exceed the code requirements and propose a mixed-use plaza, playground, community gardens, pollinator gardens, bike racks, buffer landscape areas, landscaped greens, and sidewalk connections to the existing network.

Relevant Zone Districts
within Town limits, the Mountain Avenue Corridor is covered by a range of zoning districts, including the Neighborhood Commercial (C1), General Commercial (C2), Single Family (R1), Limited Multi-Family (R2), MultiFamily (R3), Planned Unit Development (PUD), Light Industrial (M1), and Industrial (M2).
Tundra Flats proposes rezoning from a dated PUD zone to Neighborhood Commercial (C1) to bring the site more in line with recent planning efforts and guiding documents for this site.

Character of Development
Mountain Avenue is Berthoud's main east/west corridor extending the entire length of the town and outward to the eastern growth area around the I-25 interchange. The corridor accentuates the accessibility of Downtown Berthoud and emerging mixed-use areas at major intersections.
Tundra Flats proposes mixed-use development at the intersections of Meadowlark Drive and Gateway Park Boulevard with Mountain Avenue.

Density & Intensity
This Character District will maintain moderate to high density, with higher intensities closer to intersections.
Tundra Flats proposes higher density and intensity along the Mountain Avenue Corridor and at the intersections with Meadowlark Dr. and Gateway Park Blvd.

Scale
While this Character District will see a variety of uses (e.g., residential, commercial, office, mixed-use, etc.), all will maintain building scale ranging from 1 to 3 stories.
Tundra Flats proposes mixed-use and residential buildings at a maximum of 3 stories.

Streetscape
Streets will be welcoming and inviting to walk and bike along. They will have detached sidewalks and be lined on both sides with informal groupings of street trees. ***Tundra Flats will provide street trees to be located where possible outside of existing drainage easements and drainage improvements.***

Public Spaces
Parks, greenways, recreation, and civic spaces should be located within, or near, this Special District, or it should be well connected to such facilities via public trails and bikeways. ***The adjacent offsite 10-foot-wide multi-modal trail will connect Tundra Flats to adjacent and nearby parks and other civic destinations including Gateway Park and other multi-modal trails.***

Private Spaces
Private outdoor spaces will enable people to work and/or meet outside, eat lunch, and provide open areas for outdoor displays, entertainment, or special events, where permissible. ***Plazas, gardens and landscape areas will be provided on-site at Tundra Flats.***

Frontage Types
Primary building facades will be oriented towards public streets, and four-sided architecture will create an attractive appearance from each side. ***The Tundra Flats buildings have been oriented towards Mountain Avenue with a landscaped buffer area.***

Street Characteristics
Adjacent streets that accommodate higher traffic volumes and larger vehicles will be common along the corridor. These streets will incorporate detached pedestrian sidewalks and dedicated bicycle facilities. Buffer bike lanes will be preferred, as described in the Town's Street standards. ***Detached sidewalks will be provided on all four street frontages.***

Access & Connectivity
Arterial and collector streets will provide primary access to the corridor. Local streets may be used to access small businesses located within mixed-use areas. ***Access will be from 3 driveways to the local Tundra Avenue and then to the collectors Meadowlark and Gateway Park to access Mountain Avenue.***

Parking
Where possible, off-street parking lots should be shared to reduce the overall footprint of paved parking areas, and parking lots should be tucked behind buildings to minimize their visual presence. Availability of on-street parking will be limited in most areas. ***Off-street parking is provided for the proposed commercial and residential uses. Parking is located behind buildings fronting Mountain Avenue and includes a 30-foot-wide buffer area to the other street frontages.***

Pedestrian Facilities
Streets will have detached sidewalks on both sides and paths will provide access to each business. Where possible, connections to adjacent local and regional trails will be provided. ***Internal walks and plazas will connect proposed buildings to on-site parking, plazas and to the public detached sidewalks and trail.***

Bicycle Facilities
Dedicated bike facilities will be provided on collector and arterial streets. Bike parking should also be provided.
The existing bike lane network is located on westbound Mountain Avenue, on Meadowlark north of Tundra, and on Gateway Park. The bike network will be completed on the east side of Meadowlark. Bike racks will be installed on-site.

Mountain Avenue Corridor Design Plan Compliance

Guiding Principle: Mountain Avenue is "the face" of Berthoud and the experience along Mountain Avenue creates a lasting impression. The plan defines and emphasizes unique character districts along the corridor and addresses topics related to architecture, site planning, parking, urban design and streetscapes.
Building architecture for Tundra Flats and other details to comply with the Mountain Avenue Corridor Plan will be included in future applications.

Development Code Compliance

The proposed mixed-use project will comply with the following and other Berthoud Development Code ordinances:

§ 30-2-109 Parks, trails and open space.
The Tundra Flats site provides 57% open space with functional open space elements including green areas, a plaza for mixed-use developments, and buffer areas.

§ 30-2-116. Residential Design Standards for Multi-family stacked units.
C.1-5. Individual building identity, Articulation, Roofs, Color, and Garages.
Building architecture for Tundra Flats will be included in future applications.

§ 30-2-131. Subdivision identity and place standards
C.3.Elements

ELEMENTS	SIZE, TYPE	COUNT
c. Artwork	TBD	1
d. Playground	1,000 sf	1
e. Community Garden	1,000 sf	1
f. Pollinator Garden	1,000 sf	1
j. Buffer Areas	30 feet wide minimum	1
k. Enhanced Fences	Exceeds 500 linear feet	1
	Total:	**6**

Refer to the attached Identity and Place Plan. Tundra Flats proposes several design elements to meet the identity and place standards including:

- A community garden at least 1,000 sf in size
- Artwork, with details to be determined.
- A playground at least 1,000 sf in size
- A pollinator garden at least 1,000 sf in size.
- Buffer areas of at least 30 feet wide along Tundra Avenue and Mountain Avenue; and
- Enhanced fences to be located along a major corridor for more than 500 feet.

§ 30-2-112. Landscape design
Tundra Flats will meet or exceed landscape design requirements.

Open Space Requirements

§ 30-2-112. Parks, trails and open space
Open space shall be required for ten percent of the total area of any project as approved in a Neighborhood Master Plan. Developments consisting of five acres to 50 acres in total size shall be required to satisfy two elements;
The Tundra Flats site provides 57% open space with functional open space elements including a green area of ½ acre in size and at least 50 feet wide, and a mixed-use plaza.

Park Land Dedication

Per the Gateway Park PUD, Development Agreements and its Amendments, the parks constructed upon Tract B and various Outlots satisfies Park Land Dedication requirements. The area is over 11 acres total, or over 15% of the Gateway PUD.

Landscape Design Guidelines

Tundra Flats will meet or exceed the applicable landscape design guidelines.

Character District Design Guidelines

Architectural Guidelines: Urban Residential
Tundra Flats will meet or exceed the applicable Urban Residential design guidelines. Building architecture for Tundra Flats will be included in future applications.

Neighborhood Master Plan review criteria.

The Town shall use the following criteria in addition to other applicable provisions of this Code to evaluate the applicant's application:

1. The land use mix within the project conforms to Berthoud's Zoning District Map and Comprehensive Plan Preferred Land Use Map and furthers the goals and policies of the Comprehensive Plan.
The Comprehensive Plan anticipates Suburban Business zoning. The Suburban Business zone is designed as a walkable district near the Town core. The district calls for general uses at a low to moderate intensity. Tundra Flats will provide a mixed-use development with plazas, walks and other amenities and as stated above under Comprehensive Plan Compliance, responds to all relevant aspects of the Plan for this site.

2. The Neighborhood Master Plan represents a functional system of land use and is consistent with the rationale and criteria set forth in this Chapter, the Town Comprehensive Plan, and the Parks, Open Space and Recreation (PORT) Plan as amended.
Based on guidance from Berthoud code, the Town Comprehensive Plan, and PORT Plan, the proposed Tundra Flats infill development aims to integrate a balanced mix of commercial and residential spaces, emphasizing community-oriented outdoor amenities and sustainable design. The project proposes a complete plan including a mixed-use plaza, playground, community and pollinator gardens, bike racks, buffer landscapes, green spaces, and sidewalk connections to existing networks, all designed to meet or surpass local code requirements with 57% of the site as open space. The development promotes pedestrian and bike accessibility through detached sidewalks on all street frontages, internal walkways, and plazas connecting to nearby trails, bike lanes, parks and civic destinations. Tundra Flats proposes a vibrant, accessible community with substantial green spaces, sustainable transportation options, and a thoughtful urban design that integrates with the surrounding area.

3. The preliminary traffic, open space, park, utility, and pedestrian design is adequate and functional given the existing and planned capacities of each system and meets the standards found in this Code.
Tundra Flats proposes to build on a site that has been planned for development since 2002. A Traffic Impact Study has been completed, and the development is feasible from a traffic engineering standpoint. The plan is supported by functional open space, parks, utilities and pedestrian connections and will not place an undue burden on existing or planned capacities of these systems.

4. Negative impacts on adjacent land uses have been identified and satisfactorily mitigated.
No negative impacts on adjacent land uses are anticipated; however, significant buffers and open spaces provide a landscaped transition from adjacent streets and land uses. Perimeter landscape buffers range from a minimum of 30 feet up to 60 feet in width.

5. There is a need or desirability within the community for the development, and the development will help achieve a balance of land use and/or housing types within Berthoud according to Town goals.
Benefits of the proposed development include:

- ***Infill development: The project proposes commercial and housing uses on vacant, underutilized land within existing developed and developing areas of Berthoud that offers significant benefits to the community.***
- ***Maximizes existing infrastructure: Roads, utilities, and public services are already in place, reducing the need for costly expansions.***
- ***Supports walkability and biking: The project will add sidewalks and connections to existing networks, and the infill site is near other destinations and amenities along Mountain Ave., encouraging less car dependency.***
- ***Diversifies housing options: The project will offer a range of unit sizes and price points, increasing attainability for residents; and will make new unit types available to Berthoud, helping to ease pressure on the housing market.***
- ***Boosts the local Berthoud economy: More residents mean more demand for local businesses and services.***
- ***Increases tax base: This infill development will generate taxes without the need for significant new infrastructure.***
- ***Fosters community cohesion: This mixed-use infill project will create a vibrant, inclusive neighborhood with shared public spaces, which are requirements of the Berthoud code and guiding documents for this site.***

END OF NARRATIVE

Revised: February 18, 2026

City of Berthoud
Planning Department
807 Mountain Avenue
Berthoud, CO 80513

Submittal #3 – Tundra Flats – Change Of Zone
Re: Narrative

Contact Information

Property Owner	Applicant / Contact
Golden Eye Investments 361 71st Avenue Greeley, CO 80634 Contact: Matt Notter Email: mnotter@rocheconstructors.com	LAI Design Group 116 Inverness Drive East Englewood, Colorado 80112 Phone: 303.734.1777 Contact: Don Ryan Email: dryan@laidesigngroup.com

Subject Property Information

Property Location	North side of Mountain Avenue between Gateway Park Blvd (east) and Meadowlark Drive (west)
Closest Major Intersection	Hwy 287 & Mountain Ave.
Parcel Number	9415443001
Legal Description	Tract A GATEWAY PARK REPLAT THREE, BER (20170016550)
Area (AC/ SF)	6.6 Acres / 287,500 sf
Current Zoning	PUD (Gateway Park)
Proposed Zoning	C1 – Neighborhood Commercial

The application is seeking a rezone for Tract A of Gateway Park Replat 3 of the existing "Gateway Park" PUD.
Current Zoning: PUD per the approved and recorded Gateway Park Plat
Requested Zoning: Neighborhood Commercial (C1)
The subject property is approximately 6.6 acres and located on the northeast corner of Meadowlark Drive and Mountain Avenue

Rationale for the Proposed Rezoning
The zone change is from PUD zoning to Neighborhood Commercial (C1) zoning, which is in conformance with the 2021 Comprehensive Plan. The Future Land Use Map identifies this property as 'Suburban Business' as well as being located within the Mountain Avenue Corridor boundary. A rezone is encouraged by the Town in instances of older PUDs that include limited development criteria by which to evaluate a development application. Since the PUD does not include clear development standards, a request to 'straight zoning' will allow for clarity and transparency in required design requirements and expectations by the applicant and the Town. The property has remained undeveloped for many years with the existing PUD zoning. Recognizing that this is an important site along the Mountain Avenue Corridor, a rezone will allow for the best and highest uses to be considered.

Impacts on the Adjacent Zone Districts, Uses, and Physical Character of the Surrounding Area
Impacts on existing adjacent properties are expected to be minimal. The property is bordered by Gateway Park Blvd. and Gateway Park to the east (PUD zoning). Mountain Avenue on the south, and Legacy Park to the south (UR – Urban Residential zoning) in addition to C2 and Transitional zoning across Mountain Ave. to the southwest. Commercial development is located to the west (Westside Crossing, C2 zoning). Residential development is located to the north, with for-rent townhomes directly across Tundra Avenue (PUD zoning). The existing adjacent C2, UR and PUD zone districts allow for some of the same uses as permitted in the proposed C1 zone district. Shared uses between the adjacent UR, PUD and zone district include commercial development and a variety of residential development types.

Development of uses like mixed-use and multifamily are often found in communities along important travel corridors or near other high intensity or commercial development, which is consistent with the general existing and planned development along Mountain Avenue. There are many reasons for this including but not limited to accessibility to transportation corridors and/or public transportation, access to commercial development, development within a more walkable area of town, access to other services and employment and adjacency to other community amenities, such as the town's community center and parks.

Impact of the Proposed Zone on Area Accesses and Traffic Patterns
A Traffic Impact Study (TIS) was conducted and assessed the impacts of the Tundra Flats development on the street system in the vicinity of the proposed development in the build-out (2028), short range (2033) and long range (2048) future. The Tundra Flats development is feasible from a traffic engineering standpoint. Tundra Flats will generate 1,410 daily trip ends, 78 morning peak hour trip ends, and 122 afternoon peak hour trip ends. Please see the TIS for additional details.

Availability of Utilities for any Potential Development
Water – One 8" water line is proposed with this development to loop through the site and connect, on either end, to the existing waterline within Tundra Avenue. The proposed 8" loop will provide domestic water service connections, landscaping irrigation connections if needed, fire hydrant lateral connections, and fire line connections for the site.

Non- Pot Water – As part of a master agreement for the Gateway development, this lot can connect to the non-potable water system. The intent is to use the non-pot system for common area irrigation.

Sanitary Sewer – One 8" sanitary sewer line is proposed to run through the site and connect to the existing sewer main located within Tundra Ave. to the north side of the property. The proposed 8" sanitary sewer line will provide domestic sanitary service connections for the site buildings. The existing line in Tundra Ave. reflects adequate capacity.

Dry Utilities – The proposed property is surrounded by the required dry utilities. Existing gas, electric, and communications are found. Connections will be made to the existing infrastructure to provide service to the site based on the providing agency requirements.

Drainage – The project site historically sheet flows from northwest to southeast into a roadside drainage channel. There are no existing detention facilities or drainage conveyance features within the property limits. Per discussions with the Town, a full spectrum detention facility will be constructed for on-site detention. This will be achieved with an extended detention basin and outlet structure. Flows will be released downstream at their historic rate into the existing Highway 56 roadside ditch.

Present and Future Impacts on Public Facilities and Services, including but not limited to Fire, Police, Water, Sanitation, Roadways, Parks, Schools, and Transit.
Impacts on public facilities and services are acknowledged. Tundra Flats has been designed based on criteria in the Comprehensive Plan and other Berthoud plans to create a connected site designated for development along a major frontage on Mountain Avenue. As part of the Town's review process, we understand this application will refer to the various agencies and any comments collected from these agencies will be incorporated into the project.

The Relationship between the Proposal and the Comprehensive Plan.
The rezoning is consistent with the Town's Comprehensive Plan 2021 Land Use Goals with proposed zoning in line with the Future Land Use Plan. The Future Land Use Map identifies this property for suburban business development which is consistent with the proposed zoning of Neighborhood Commercial (C1).

Public benefits
The proposed rezone to Neighborhood Commercial (C1) will allow for development of the highest and best use along this section of Mountain Avenue and ensure the most recently adopted criteria for site design and development standards are incorporated. *Additional public benefits include the following:*
Infill Development
- This infill project proposes commercial and housing uses on vacant, underutilized land within existing developed and developing areas of Berthoud that offers significant benefits to the community.

Urban Efficiency and Smart Growth
- Maximizes existing infrastructure: Roads, utilities, and public services are already in place, reducing the need for costly expansions.
- Reduces sprawl and preserves green space: By building inward rather than outward, Berthoud can preserve surrounding natural and agricultural land. By avoiding development on untouched land, infill helps maintain existing ecosystems and biodiversity.
- Supports walkability and biking: The project will add sidewalks and connections to existing networks, and the infill site is near other destinations and amenities along Mountain Ave., encouraging less car dependency.

Housing Supply and Affordability
- Diversifies housing options: The project will offer a range of unit sizes and price points, increasing attainability for residents; and will make new unit types available to Berthoud, helping to ease pressure on the housing market.

Economic and Social Benefits
- Boosts the local Berthoud economy: More residents mean more demand for local businesses and services.
- Increases tax base: This infill development will generate taxes without the need for significant new infrastructure.
- Fosters community cohesion: This mixed-use infill project will create a vibrant, inclusive neighborhood with shared public spaces, which are requirements of the Berthoud code and guiding documents for this site.

Zoning Map Amendment Review Criteria

The proposed rezone must meet the following criteria for amendments. For establishing and maintaining sound, stable and desirable development within the Town, the Zoning Map shall not be amended except:

1. To correct a manifest error in an ordinance establishing the zoning for a specific property;
2. **To rezone an area or extend the boundary of an existing district because of changed or changing conditions in a particular area or in the Town generally; or**
3. The land to be rezoned was zoned in error and as presently zoned is inconsistent with the policies and goals of the Town Comprehensive Plan; or
4. The proposed rezoning is necessary to provide land for a community-related use that was not anticipated at the time of the adoption of the Town Comprehensive Plan, and the rezoning will be consistent with the policies and goals of the Comprehensive Plan; or
5. **The area requested for rezoning has changed or is changing to such a degree that it is in the public interest to encourage development or redevelopment of the area;**

The proposed rezoning meets criteria for **2.** and **5.** above. The Planned Unit Development (PUD) initially designated this parcel for commercial use. However, due to a variety of market factors, commercial use only is no longer the most suitable option for this site. Limited visibility from Hwy 287 and limited access to the site from Mountain Avenue diminishes its attractiveness for commercial development compared to other nearby locations, such as Westside Crossing. The proposed mixed-use and residential housing will serve as a transitional use, linking the surrounding road network, commercial areas, townhomes for-rent and single-family residences. This aligns with the Comprehensive Plan by providing mixed-use and additional housing options in Berthoud and reduces traffic that would otherwise result from only commercial development at this site.

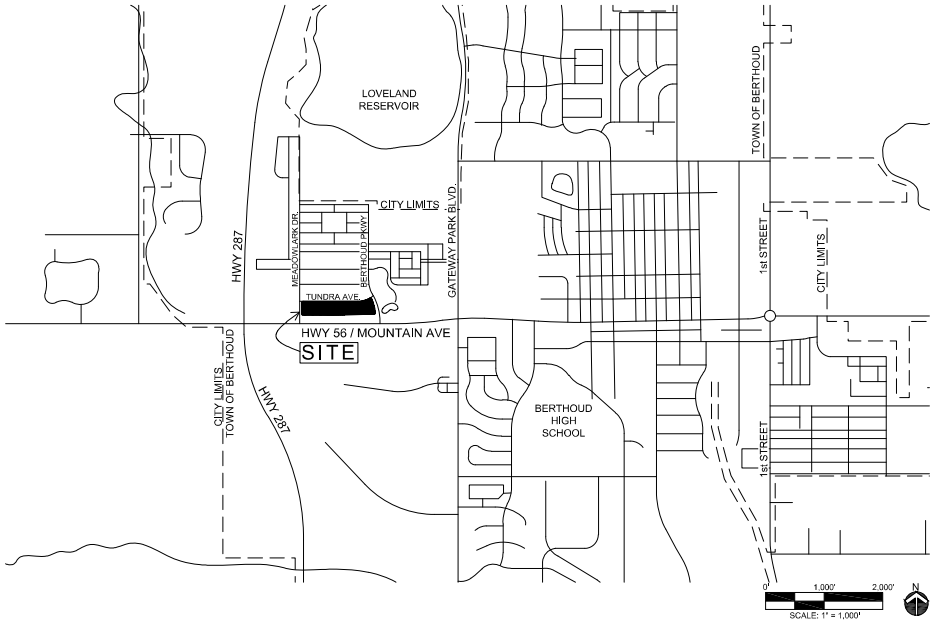
END OF NARRATIVE

NEIGHBORHOOD MASTER PLAN
FOR
TUNDRA FLATS

BEING A REPLAT OF TRACT A, GATEWAY PARK REPLAT THREE, ALL BEING SITUATED IN THE SOUTH HALF OF THE SOUTHEAST QUARTER OF SECTION 15, TOWNSHIP 4 NORTH, RANGE 69 WEST OF THE 6TH P.M., TOWN OF BERTHOUD, COUNTY OF LARIMER, STATE OF COLORADO

Know what's below. Call before you dig.

VICINITY MAP



DEVELOPMENT SUMMARY

SITE AREA:	6.59 ACRES (287,258 SF)
ZONING	
CURRENT:	PUD
PROPOSED:	C1 (NEIGHBORHOOD COMMERCIAL)
FUTURE LAND USE (PER COMP PLAN):	SUBURBAN COMMERCIAL
PROPOSED LAND USE:	MIXED-USE (RETAIL & RESIDENTIAL)
OVERLAY DISTRICT:	MOUNTAIN AVENUE
DENSITY:	
TOTAL COMMERCIAL AREA:	3,700 SF
TOTAL PROPOSED UNITS:	140-150
MAX DENSITY ALLOWED:	24 UNITS PER ACRE
PROPOSED DENSITY:	22-23 UNITS PER ACRE
OPEN SPACE:	
OPEN SPACE REQUIRED:	10% (28,725 SF)
OPEN SPACE PROVIDED:	57% (163,875 SF)
MAXIMUM BUILDING HEIGHT:	3 STOREYS

SHEET INDEX

COVER AND CONTENTS	1
NEIGHBORHOOD MASTER PLAN	2
PROPOSED ZONING PLAN	3
SUBDIVISION IDENTITY AND PLACE STANDARDS PLAN	4
PEDESTRIAN NETWORK AND OPEN SPACE PLAN	5
VEHICULAR NETWORK PLAN	6
PRELIMINARY ENGINEERING AND UTILITIES PLAN	7

PROJECT TEAM

OWNER / OWNER REPRESENTATIVE

Golden Eye Investments
361 71st Avenue
Greeley, CO 80634
Contact: Matt Notter
Email: mnotter@rocheconstructors.com
Phone: (970) 250-2559

PLANNERS, LANDSCAPE ARCHITECTS & ARCHITECTS

LAI Design Group
116 Inverness Drive Suite #340
Englewood, CO 80112
Contact: Don Ryan
Email: dryan@laidesigngroup.com
Phone: (303) 734-1777

CIVIL ENGINEER

CWC
9360 Teddy Ln
Lone Tree, CO 80124
Contact: Brett Woolard, PE
Email: BrettW@cwc-consulting.com
Phone: (303) 395-2700

TRAFFIC ENGINEER

Delich Associates
2272 Glen Haven Dr
Loveland, CO 80538
Contact: Matt Delich, PE
Email: Matt@delichassoc.com
Phone: (970) 669-2061

SURVEY

Intermill Land Surveying, Inc
1301 Cleveland Ave
Loveland, CO 80537
Phone: (970) 669-0516

LEGAL DESCRIPTION

That portion of the South Half of the Southeast Quarter of Section 15, Township 4 North, Range 69 West of the 6th Principal Meridian, Town of Berthoud, County of Larimer, State of Colorado, being more particularly described as follows:
TRACT A, GATEWAY PARK REPLAT THREE, TO THE TOWN OF BERTHOUD, COUNTY OF LARIMER, STATE OF COLORADO, EXCEPT THAT PORTION AS CONVEYED BY WARRANTY DEED RECORDED OCTOBER 24, 2001, AT RECEPTION NO. 2001095630
Containing 287,257.88 Square Feet (6.594 Acres), more or less.

BOARD OF TRUSTEES

Approved by the Town of Berthoud, Colorado, this ____ day of _____, 20___.

_____
Mayor

The foregoing map is approved for filing and accepted by the Town of Berthoud, Colorado this ____ day of _____, 20___.

ATTEST: _____
Town Clerk

CERTIFICATE OF DEDICATION AND OWNERSHIP

Know all persons by these presents that Golden Eye Investemnts, being the owner(s), mortgage or lienholder of certain land in Berthoud, Colorado, described as follows:

TRACT A, GATEWAY PARK REPLAT THREE, ALL BEING SITUATED IN THE SOUTH HALF OF THE SOUTHEAST QUARTER OF SECTION 15, TOWNSHIP 4 NORTH, RANGE 69 WEST OF THE 6TH P.M., TOWN OF BERTHOUD, COUNTY OF LARIMER, STATE OF COLORADO, Containing 6.6 Acres more or less:

Executed this _____ day of _____, A.D. _____ .

Owner(s) or Representatives, Mortgages or Lienholder

_____

The foregoing dedication was acknowledged before me this _____ day of _____ , A.D., _____ .

My commission expires _____ .

Witness My Hand and Seal

_____

Notary Public

SURVEYOR

I, _____, a duly registered Professional Land Surveyor in the State of Colorado, do hereby certify that this plat truly and correctly represents the results of a survey made on (date of survey), by me or under my direct supervision and that all monuments exist as shown hereon; that mathematical closure errors are less than 1:50,000 (second order); and that said plat has been prepared in full compliance with all applicable laws of the State of Colorado dealing with monuments, subdivisions or surveying of land and all provisions, within my control, of the Town Subdivision regulations.
I attest the above on this ____ day of _____, 20___.

_____
Signature

Colorado Registered Professional Land Surveyor

_____
Print

Colorado Registered Professional Land Surveyor

_____

Surveyor #_____

PLANNING COMMISSION

Approved by the Planning Commission of the Town of Berthoud, Colorado this ____ day of _____, 20___.

_____
Chairperson

The foregoing map is approved for filing and accepted by the Town of Berthoud, Colorado this ____ day of _____, 20___.

ATTEST: _____
Town Planner

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Attachment 3 - Neighborhood Master Plan

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OWNER/CLIENT
GOLDENEYE INVESTMENTS
361 71st Ave
Greeley, Colorado 80634
MATT NOTTER

TUNDRA FLATS
TOWN OF BERTHOUD, COLORADO
NEIGHBORHOOD MASTER PLAN
COVER & CONTENTS

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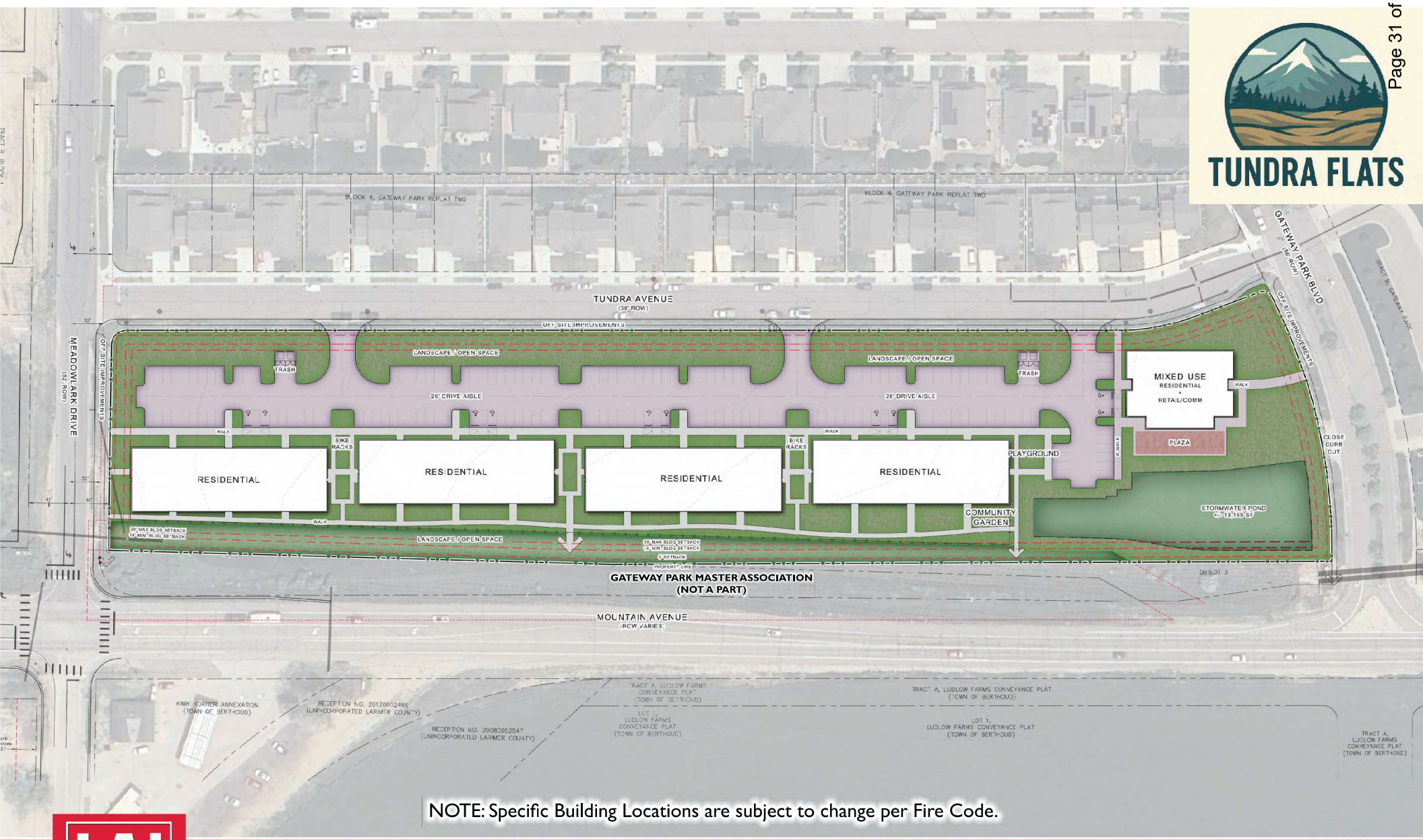
PROJECT INFORMATION

PROJECT #:	241041
DRAWN BY:	LAI
CHECKED BY:	LAI

ISSUE RECORD

SUBMITTAL #1	07/31/2025
REVISION DATE	10/17/2025
REVISION DATE	2/17/2026

SHEET NUMBER
1
1 OF 3



NOTE: Specific Building Locations are subject to change per Fire Code.

#241041

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REVISION DATE: FEBRUARY 18, 2026

TUNDRA FLATS
NEIGHBORHOOD MASTER PLAN

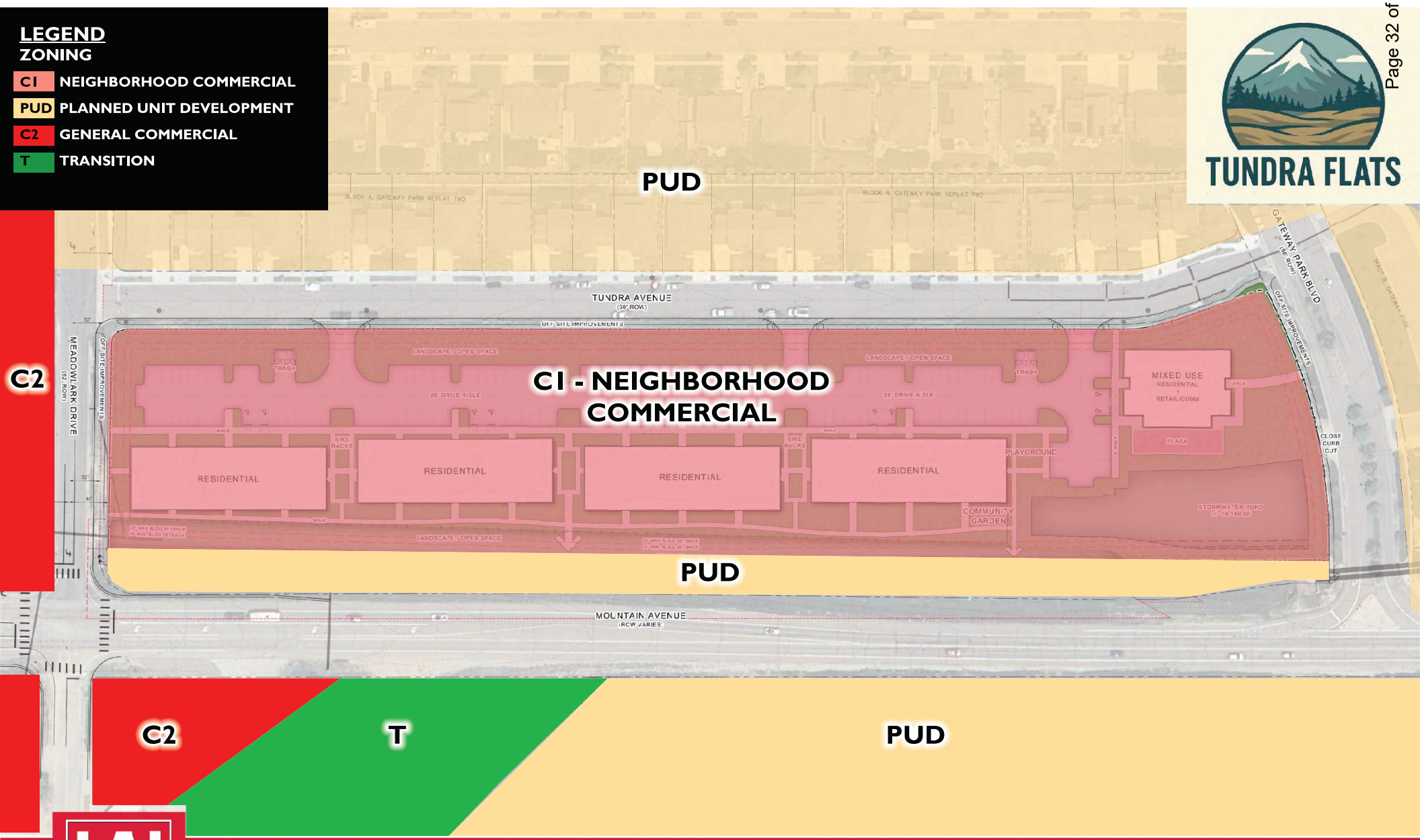
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SHEET 2

NORTH

GRAPHIC SCALE: 1" = 40'



TUNDRA FLATS

#241041

REVISION DATE: FEBRUARY 18, 2026

TUNDRA FLATS
PROPOSED ZONING PLAN

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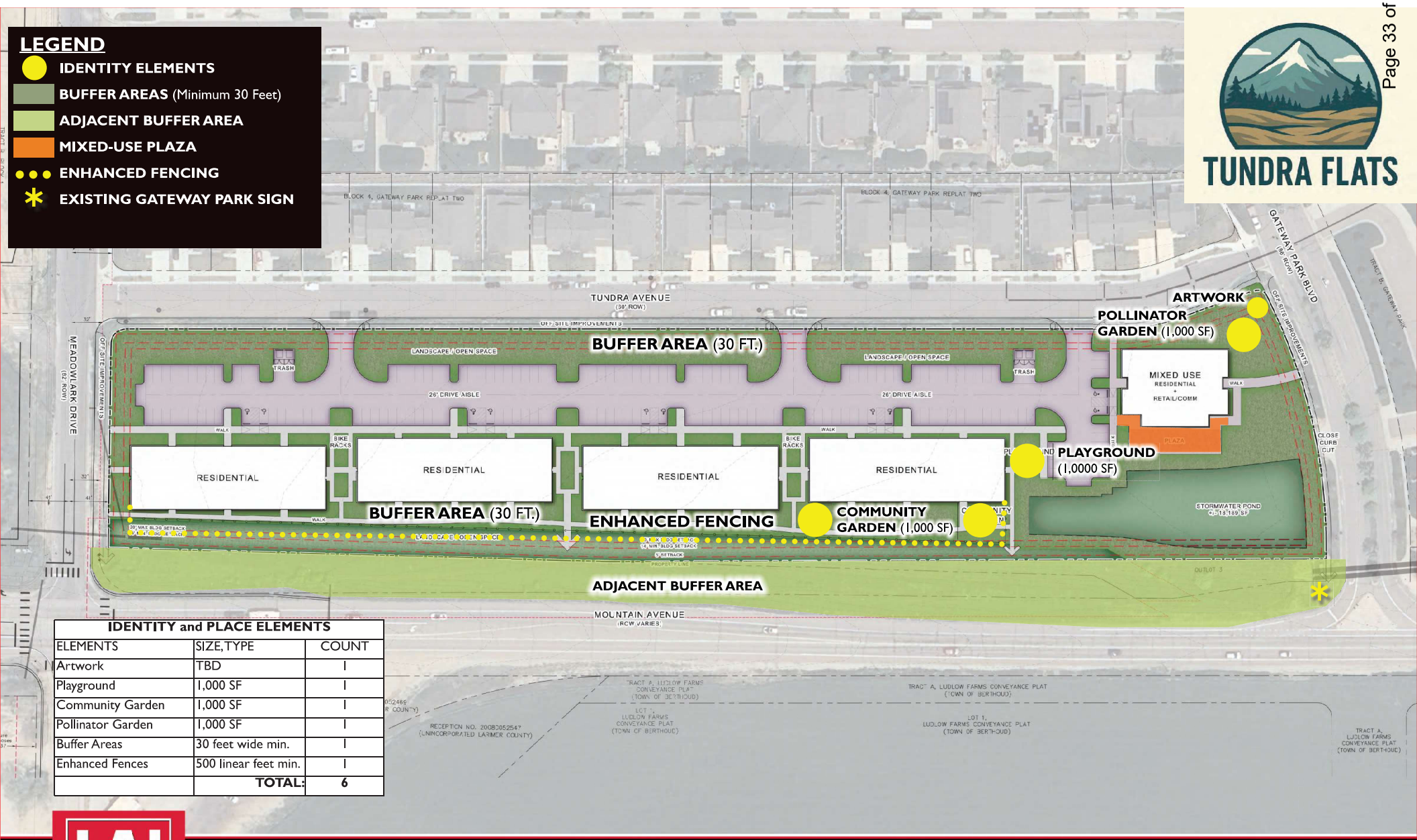
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SHEET 3

NORTH

GRAPHIC SCALE: 1" = 40'

TUNDRA FLATS



IDENTITY and PLACE ELEMENTS		
ELEMENTS	SIZE, TYPE	COUNT
Artwork	TBD	1
Playground	1,000 SF	1
Community Garden	1,000 SF	1
Pollinator Garden	1,000 SF	1
Buffer Areas	30 feet wide min.	1
Enhanced Fences	500 linear feet min.	1
	TOTAL:	6

#241041

LAI DESIGN GROUP
Design for when it Matters

REVISION DATE: FEBRUARY 18, 2026

TUNDRA FLATS
SUBDIVISION IDENTITY and PLACE STANDARDS PLAN

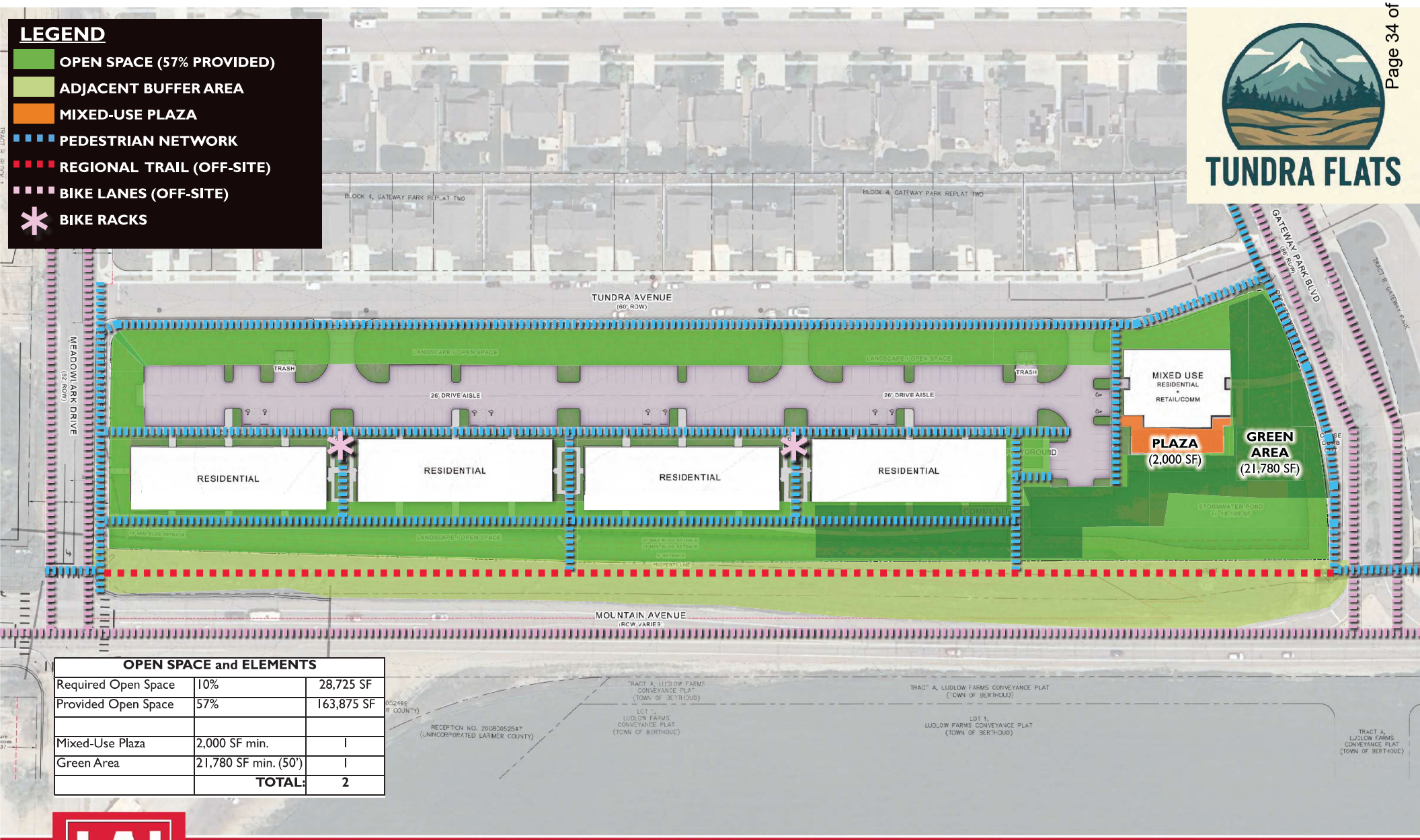
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SHEET 4

NORTH

GRAPHIC SCALE: 1" = 40'



OPEN SPACE and ELEMENTS		
Required Open Space	10%	28,725 SF
Provided Open Space	57%	163,875 SF
Mixed-Use Plaza	2,000 SF min.	1
Green Area	21,780 SF min. (50')	1
	TOTAL:	**2**

#241041

REVISION DATE: FEBRUARY 18, 2026

TUNDRA FLATS

PEDESTRIAN NETWORK and OPEN SPACE PLAN

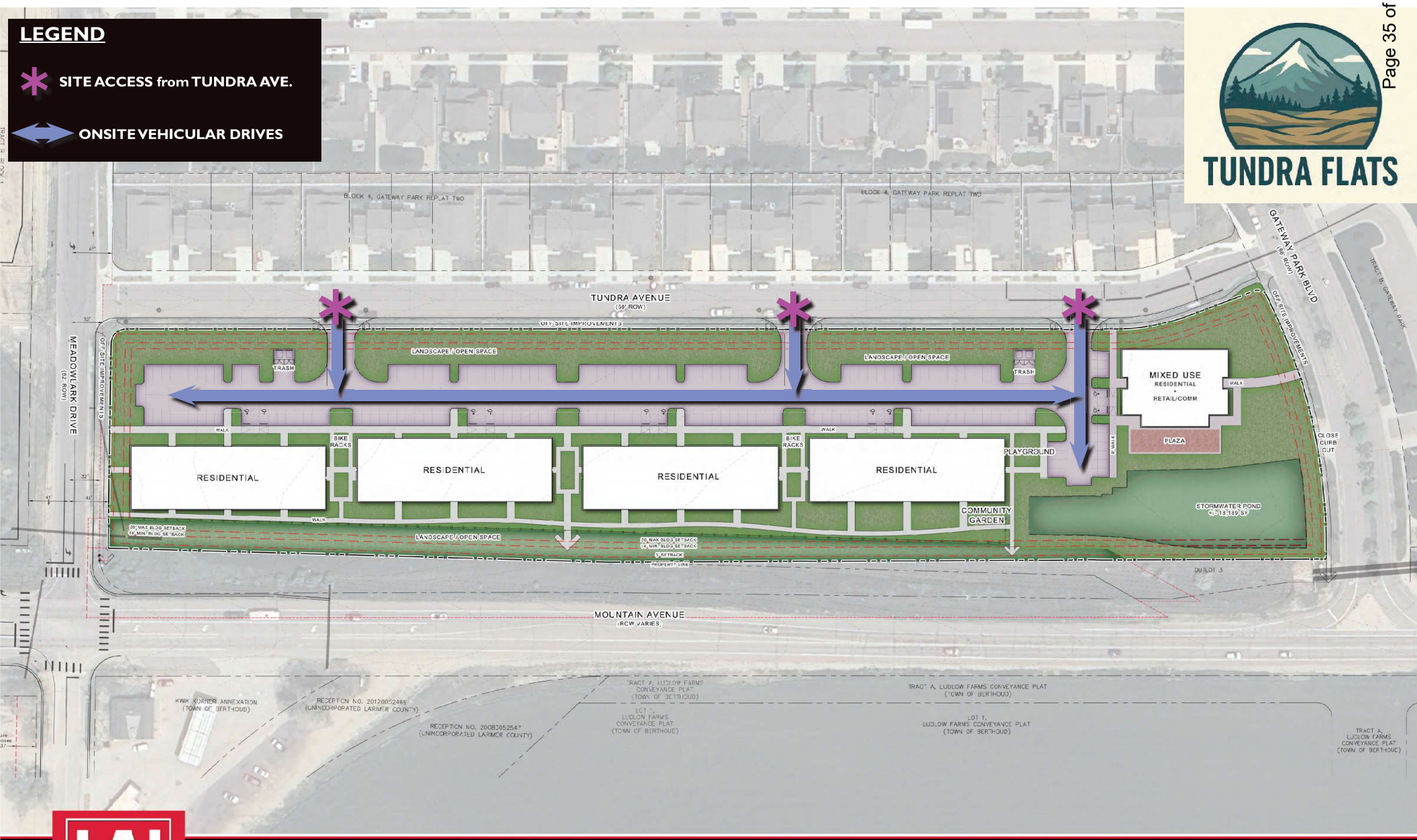
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SHEET 5

NORTH

GRAPHIC SCALE: 1" = 40'



#241041

REVISION DATE: FEBRUARY 18, 2026

TUNDRA FLATS
VEHICULAR NETWORK PLAN

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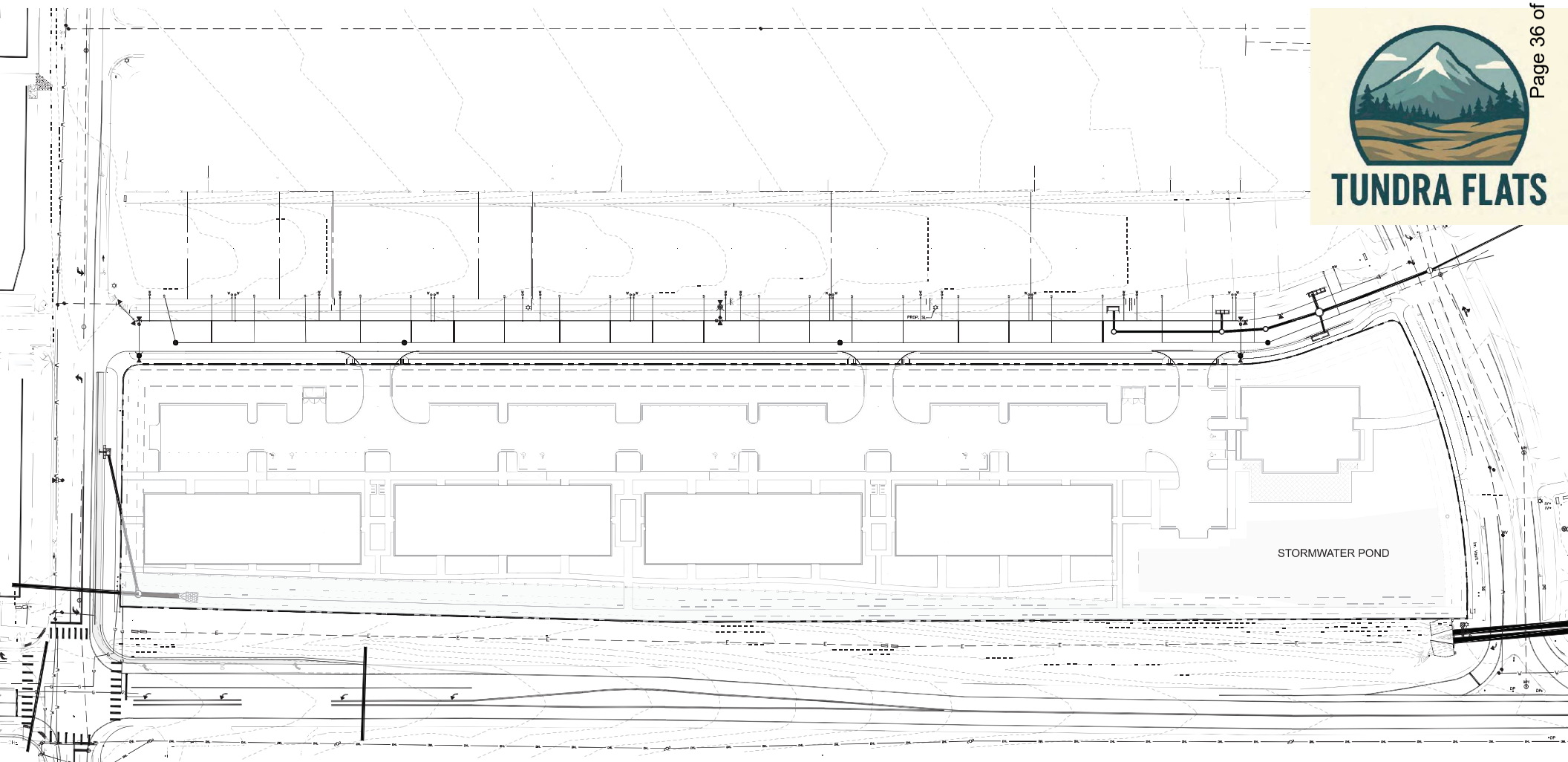
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SHEET 6

NORTH

GRAPHIC SCALE: 1" = 40'

TUNDRA FLATS



PRELIMINARY UTILITIES NOTES:

WATER: Proposed 8" Loop connection to existing Tunrda Ave. line

SANITARY SEWER: Proposed 8" connection to existing Tundra Ave.

NON-POT WATER: Available for connection to existing Gateway system for common irrigation

DRY UTILITIES: All required dry utilities exist adjacent to site for connections

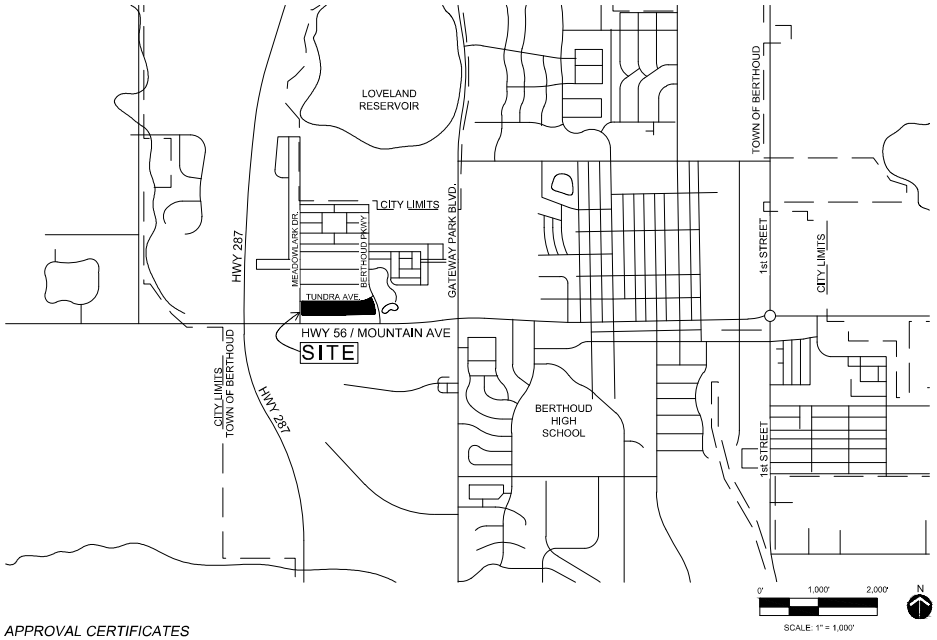
DRAINAGE: Proposed full spectrum detention facility on-site

Know what's below. Call before you dig.

REZONING MAP
FOR
TUNDRA FLATS

BEING A REPLAT OF TRACT A, GATEWAY PARK REPLAT THREE, ALL BEING SITUATED IN THE SOUTH HALF OF THE SOUTHEAST QUARTER OF SECTION 15, TOWNSHIP 4 NORTH, RANGE 69 WEST OF THE 6TH P.M., TOWN OF BERTHOUD, COUNTY OF LARIMER, STATE OF COLORADO

VICINITY MAP



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PROJECT TEAM

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Greeley, CO 80634
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SURVEY

Intermill Land Surveying, Inc
1301 Cleveland Ave
Loveland, CO 80537
Phone: (970) 669-0516

APPROVAL CERTIFICATES

LEGAL DESCRIPTION

That portion of the South Half of the Southeast Quarter of Section 15, Township 4 North, Range 69 West of the 6th Principal Meridian, Town of Berthoud, County of Larimer, State of Colorado, being more particularly described as follows:
TRACT A, GATEWAY PARK REPLAT THREE, TO THE TOWN OF BERTHOUD, COUNTY OF LARIMER, STATE OF COLORADO, EXCEPT THAT PORTION AS CONVEYED BY WARRANTY DEED RECORDED OCTOBER 24, 2001, AT RECEPTION NO. 2001095630
Containing 287,257.88 Square Feet (6.594 Acres), more or less.

BOARD OF TRUSTEES

Approved by the Board of Trustees of the Town of Berthoud, Colorado, this ____ day of _____, 20___.

_____
Mayor

The foregoing map is approved for filing and accepted by the Town of Berthoud, Colorado this ____ day of _____, 20___.

ATTEST: _____
Town Clerk

CERTIFICATE OF DEDICATION AND OWNERSHIP

Know all persons by these presents that Golden Eye Investemnts, being the owner(s), mortgage or lienholder of certain land in Berthoud, Colorado, described as follows:

TRACT A, GATEWAY PARK REPLAT THREE, ALL BEING SITUATED IN THE SOUTH HALF OF THE SOUTHEAST QUARTER OF SECTION 15, TOWNSHIP 4 NORTH, RANGE 69 WEST OF THE 6TH P.M., TOWN OF BERTHOUD, COUNTY OF LARIMER, STATE OF COLORADO, Containing 6.6 Acres more or less:

Executed this _____ day of _____ , A.D. _____ .

Owner(s) or Representatives, Mortgages or Lienholder

_____

The foregoing dedication was acknowledged before me this _____ day of _____ , A.D., _____ .

My commission expires _____ .

Witness My Hand and Seal

_____
Notary Public

SURVEYOR CERTIFICATE

I, STEVEN JOHN STENCEL, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT THE REZONING MAP OF TRACT A, GATEWAY PARK REPLAT THREE WAS PREPARED UNDER MY PERSONAL SUPERVISION, THAT THE FOREGOING MAP IS AN ACCURATE REPRESENTATION THEREOF, AND IS IN COMPLIANCE WITH THE DEVELOPMENT REGULATIONS OF THE TOWN OF BERTHOUD, ALL THIS TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THIS IS NOT A GUARANTY OR WARRANTY, EITHER EXPRESSED OR IMPLIED.

Colorado Registered Professional Land Surveyor

STEVEN JOHN STENCEL

CO PLS#: 30462

PLANNING COMMISSION

Approved by the Planning Commission of the Town of Berthoud, Colorado this ____ day of _____, 20___.

_____
Chairperson

The foregoing map is approved for filing and accepted by the Town of Berthoud, Colorado this ____ day of _____, 20___.

ATTEST: _____
Town Planner

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Attachment 4 - Zoning Map

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OWNER/CLIENT

GOLDENEYE INVESTMENTS
361 71st Ave
Greeley, Colorado 80634

MATT NOTTER

TUNDRA FLATS
TOWN OF BERTHOUD, COLORADO
REZONING MAP
COVER & CONTENTS

NOT FOR CONSTRUCTION

PROJECT INFORMATION

PROJECT #:	241041
DRAWN BY:	LAI
CHECKED BY:	LAI

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REVISION DATE	4/16/2026
REVISION DATE	5/5/2026

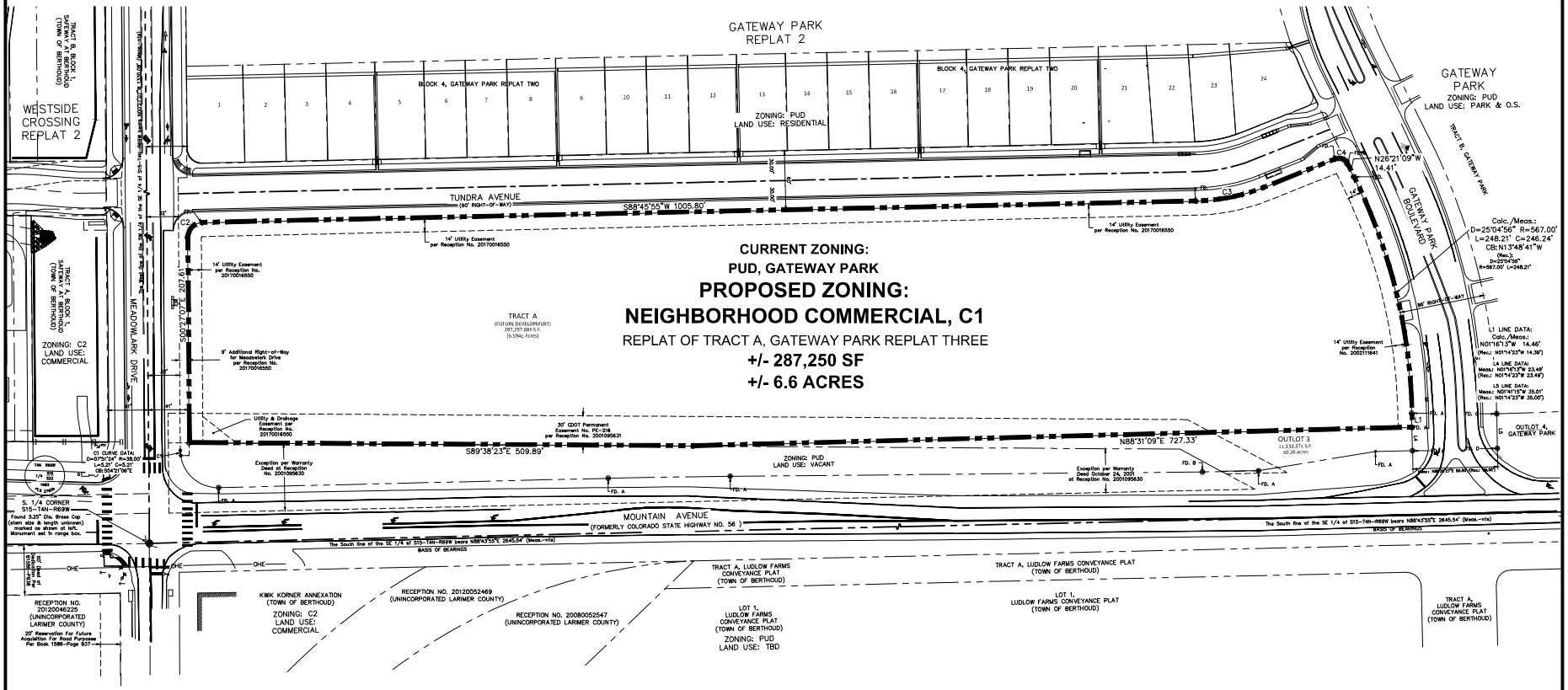
SHEET NUMBER

1

1 OF 2

REZONING MAP
FOR
TUNDRA FLATS

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REZONING

LEGEND

- Boundary Line/Lot Line
- Existing Right-of-Way Line
- Aliquot Line/Adjacent Property Line
- Edge of Asphalt Surface
- Edge of Gravel/Dirt Surface
- Existing Fenceline
- ⊕ : Found Monument (as noted).
- ⊕ : Set No. 4 Rebar (length unknown) with 1" Dia. Red Plastic Cap Marked LS 30462
- DNS : Indicates calculated position of change in direction (bearing) and/or distance. No Monument Found or Set.

Note: Lines and/or Symbols, as shown above, may or may not have been used.

CURVE TABLE

CURVE	DELTA	RADIUS	LENGTH	BEARING	CHORD
C2	89°13'01"	15.00'	23.36'	S44°09'24"W	21.07'
C3	20°27'57"	195.00'	69.65'	N78°31'56"E	69.28'
C4	85°20'54"	10.00'	14.90'	N69°01'36"W	13.56

0' 50' 100'
SCALE: 1" = 50'
N

MONUMENTATION LEGEND

FD. : Indicates Set No. 5 rebar (length unknown) with 1" dia. yellow plastic cap marked LS 332002.

FD. A: Indicates Found No. 5 rebar (length unknown) with 1"± dia. yellow plastic cap marked LS 38199.

FD. B: Indicates Found No. 5 rebar (length unknown) with 1"± dia. yellow plastic cap illegible.

FD. C: Indicates Found No. 5 rebar (length unknown) with 1"± dia. orange plastic cap marked LS 23500.

FD. D: Indicates Found Nail and Shiner marked LS 23500.

STEVEN JOHN STENCEL, FOR AND ON BEHALF OF
INTERMILL LAND SURVEYING, INC.
COLORADO LICENSED PROFESSIONAL LAND SURVEYOR
PLS#: 30462

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DRAWN BY:	LAI
CHECKED BY:	LAI

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REVISION DATE	5/5/2026

SHEET NUMBER
2
2 OF 2

TUNDRA FLATS
TOWN OF BERTHOUD, COLORADO
REZONING MAP

TUNDRA FLATS
TRANSPORTATION IMPACT STUDY

BERTHOUD, COLORADO

JULY 2025
REVISED OCTOBER 2025
REVISED FEBRUARY 2026

Prepared for:

Roche Construction, Inc.
361 71st Avenue
Greeley, CO 80634

Prepared by:



DELICH ASSOCIATES
2272 Glen Haven Drive
Loveland, CO 80538
Phone: 970-669-2061
FAX: 970-669-5034

Project #2517

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I. INTRODUCTION

This Transportation Impact Study (TIS) addresses the capacity, geometric, and control requirements for the proposed Tundra Flats development. The proposed Tundra Flats development is located north of Mountain Avenue (SH56) and between Meadowlark Drive and Gateway Park Boulevard in Berthoud, Colorado.

During the course of the analysis, numerous contacts were made with the project developer (Roche Constructors, Inc.), project planning consultant (LAI Design Group), Town of Berthoud, and CDOT – Region 4. Appendix A contains the Transportation Impact Study Base Assumption form and related attachments for the Tundra Flats development. This study generally conforms to the format set forth in the TIS Guidelines in the "Larimer County Urban Area Street Standards" (LCUASS) and CDOT standards. The study involved the following steps:

- Collect physical, traffic, and development data;
- Perform trip generation, trip distribution, and trip assignment;
- Determine peak hour traffic volumes;
- Conduct capacity and operational level of service analyses on key intersections;
- Analyze signal warrants;

The following intersections, as agreed to in the scoping discussions, were addressed in this traffic study: US287/Mountain (major intersection), Mountain/Meadowlark (major intersection), Mountain/Gateway Park (minor intersection), Mountain/Berthoud Pkwy (major intersection), Meadowlark/Tundra (minor intersection), and Gateway Park/Tundra-Park Access (minor intersection) intersections.

This TIS is a revision of the "Tundra Flats Transportation Impact Study" dated July 2025. It addresses Berthoud and CDOT staff comments.

II. EXISTING CONDITIONS

The location of Tundra Flats is shown in Figure 1. It is important that a thorough understanding of the existing conditions be presented.

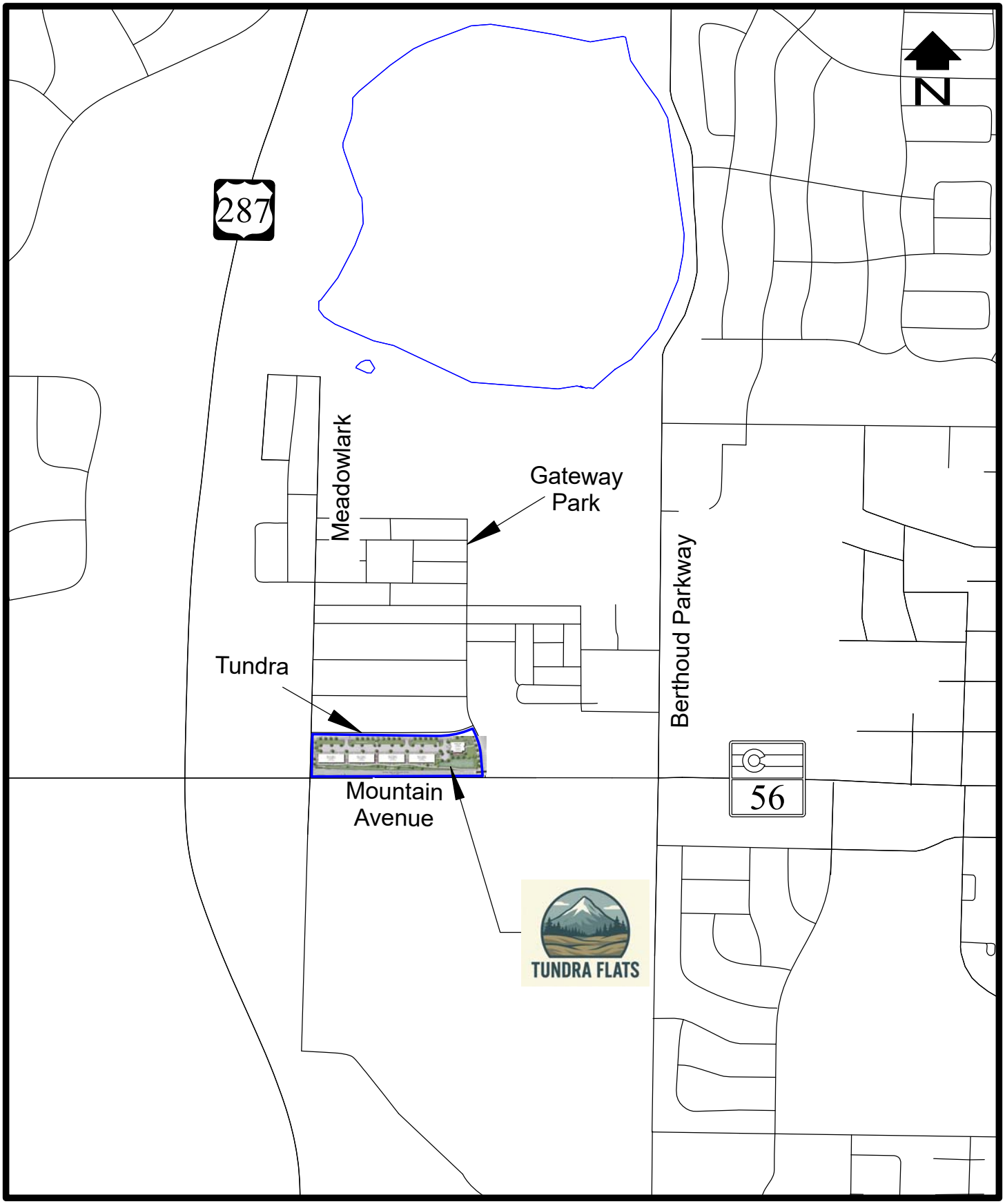
Land Use

Land uses in the area are primarily residential, commercial, or open. There are residential uses to the north and east of the site. There are commercial uses to the southwest of the site. The areas to the west and south have planned developments. The Tundra Flats site is currently vacant. The center of Berthoud lies to the east of the proposed Tundra Flats site.

Streets

The primary streets in the Tundra Flats area are Mountain Avenue (SH56), US287, Meadowlark Drive, Gateway Park Boulevard, Berthoud Parkway, and Tundra Avenue. The existing geometry and control at the US287/Mountain, Mountain/Meadowlark, Mountain/Gateway Park, Mountain/Berthoud Pkwy, Meadowlark/Tundra, and Gateway Park/Tundra-Park Access intersections are shown in Figure 2.

Mountain Avenue (SH56B) is classified as a two-lane arterial street on the Berthoud Transportation Map and categorized as a NR-B (Non-Rural Arterial) according to the State Highway Access Code (SHAC). Currently, Mountain Avenue has a two-lane cross-section with auxiliary lanes at most intersections. The Mountain/Meadowlark intersection is located at approximately milepost 3.0. At the US287/Mountain intersection, Mountain Avenue has an eastbound left-turn lane, dual westbound left-turn lanes, a through lane in each direction, eastbound and westbound right-turn lanes, and an eastbound right-turn acceleration lane. The US287/Mountain intersection has signal control. At the Mountain/Meadowlark intersection, Mountain Avenue has eastbound and westbound left-turn lanes and a through/right-turn lane in each direction. At the Mountain/Gateway Park intersection, Mountain Avenue has a through lane in each direction and a westbound right-turn lane. It has right-in/right-out operation. The Mountain/Meadowlark and Mountain/Gateway Park intersections have stop sign control on Meadowlark Avenue and Gateway Park Boulevard, respectively. At the Mountain/Berthoud Pkwy intersection, Mountain Avenue has eastbound and westbound left-turn lanes, a through lane in each direction, a westbound right-turn lane, and eastbound and westbound right-turn acceleration lanes. The Mountain/Berthoud Pkwy intersection has signal control. The posted speed on Mountain Avenue is 50 mph, west of US287, and 45 mph, east of US287.

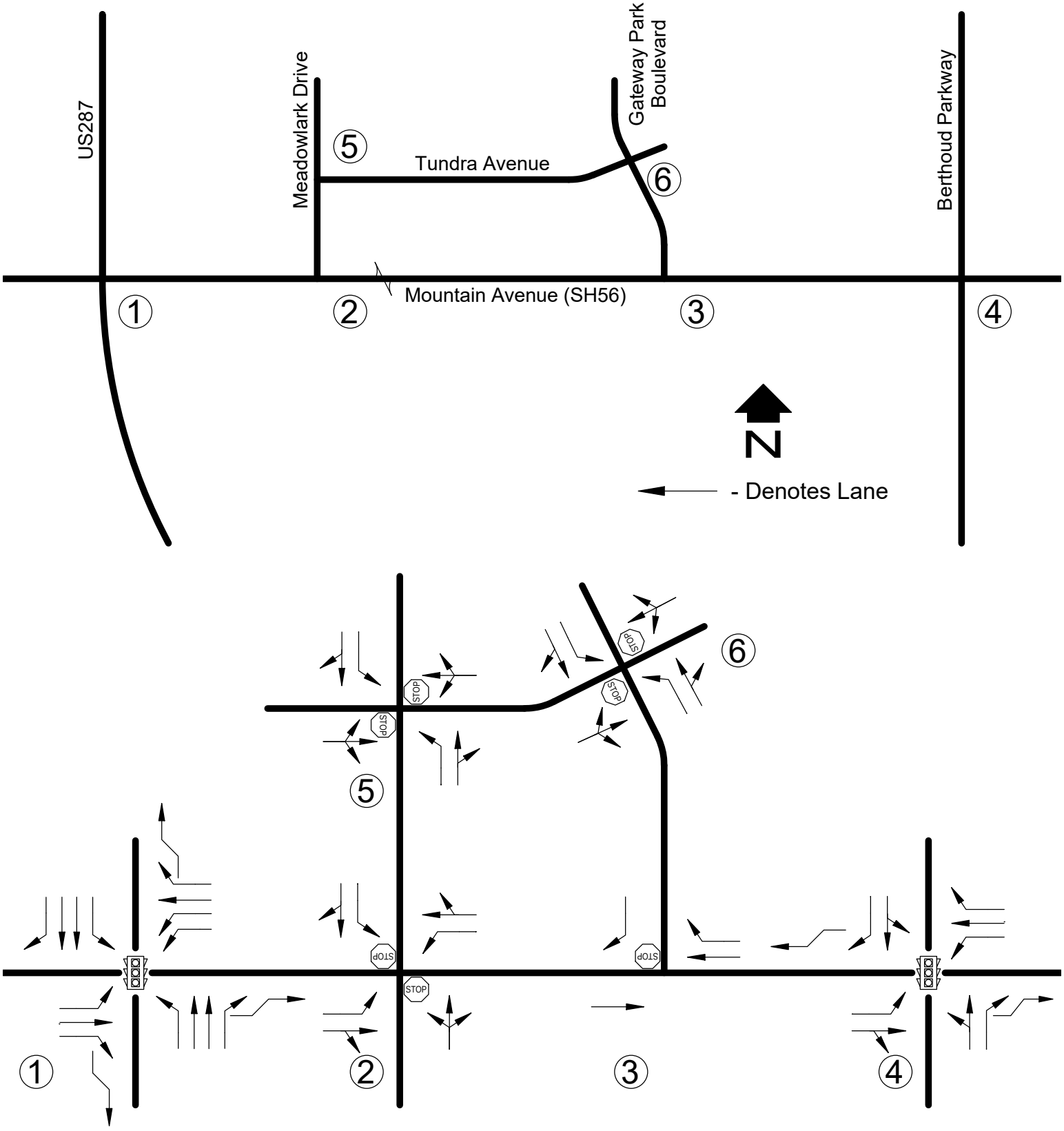


SCALE: 1"=1000'

SITE LOCATION

Figure 1

DELICH ASSOCIATES



EXISTING INTERSECTION GEOMETRY AND CONTROL

Figure 2

United States Highway 287 (US287C) is classified as a four-lane arterial street on the Berthoud Transportation Map and categorized as a NR-A (Non-Rural Principal Highway), south of Mountain Avenue, and as a F-W (Freeway), north of Mountain Avenue according to the State Highway Access Code (SHAC). Currently, US287 has a four-lane cross-section with auxiliary lanes. The US287/Mountain intersection is located at approximately milepost 325.5. At the US287/Mountain intersection, US287 has northbound and southbound left-turn lanes, two through lanes in each direction, northbound and southbound right-turn lanes, and northbound and southbound right-turn acceleration lanes. The posted speed on US287 is 65 mph.

Meadowlark Drive is not classified on the Berthoud Transportation Map. Currently, Meadowlark Drive has a two-lane cross-section and a posted speed of 25 mph. At the Mountain/Meadowlark intersection, Meadowlark Drive has a southbound left-turn lane, a southbound through/right-turn lane, and all northbound movements combined into a single lane. At the Meadowlark/Tundra intersection, Meadowlark Drive has northbound and southbound left-turn lane and a northbound and southbound through-right-turn lane. The Meadowlark/Tundra intersection has stop sign control on Tundra Avenue.

Gateway Park Boulevard is not classified on the Berthoud Transportation Map. Currently, Gateway Park Boulevard has a two-lane cross-section and a posted speed of 25 mph. Gateway Park Boulevard only has a north leg at the Mountain/Gateway Park intersection. At the Mountain/Gateway Park intersection, Gateway Park Boulevard has a southbound right-turn lane. At the Gateway Park/Tundra-Park Access intersection, Gateway Park Boulevard has northbound and southbound left-turn lanes and a through/right-turn lane in each direction. The Gateway Park/Tundra-Park Access intersection has stop sign control on Tundra Avenue and the Park Access.

Tundra Avenue is not classified on the Berthoud Transportation Map. Currently, Tundra Avenue has a two-lane cross-section and no posted speed limit. Tundra Avenue only has an east leg at the Meadowlark/Tundra-Park Access intersection. At the Meadowlark/Tundra intersection, Tundra Avenue has all movements combined into a single lane. Tundra Avenue is the west leg, and the Park Access is the east leg of the Gateway Park/Tundra-Park Access intersection. At the Gateway Park/Tundra-Park Access intersection, Tundra Avenue and the Park Access have all movements combined into single lanes.

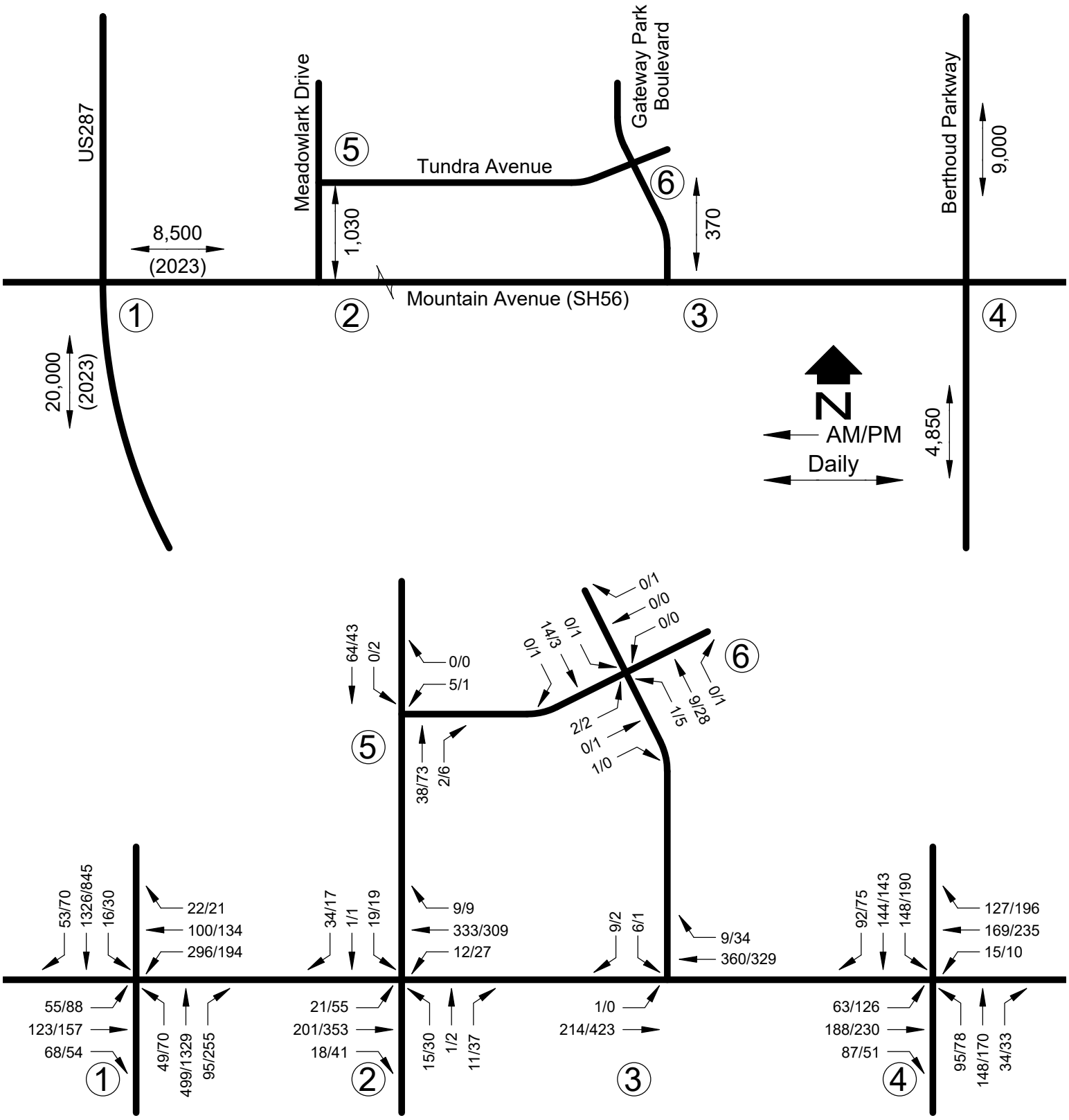
Berthoud Parkway is classified as a two-lane arterial street on the Berthoud Transportation Map. Currently, Berthoud Parkway has a two-lane cross-section and a posted speed of 40 mph, south of Mountain Avenue, and 35 mph, north of Mountain Avenue. At the Mountain/Berthoud Pkwy intersection, Berthoud Parkway has northbound and southbound left-turn/through lanes, and northbound and southbound right-turn lanes.

Existing Traffic

Figure 3 shows the recent daily and peak hour traffic counts at the US287/Mountain, Mountain/Meadowlark, Mountain/Gateway Park, Mountain/Berthoud Pkwy, Meadowlark/Tundra, and Gateway Park/Tundra-Park Access intersections. The counts at the US287/Mountain intersection were obtained in October 2025. The counts at the Mountain/Meadowlark, Mountain/Gateway Park, Meadowlark/Tundra, and Gateway Park/Tundra-Park Access intersections were obtained in June 2025. The counts at the Mountain/Berthoud Pkwy intersection were obtained in November 2024. Raw peak hour traffic count data is provided in Appendix B. Daily traffic count data on US287 and Mountain Avenue (SH56) was obtained from CDOT's Online Transportation Information System. Daily volumes on Meadowlark Drive, Gateway Park Boulevard, Berthoud Parkway were estimated based upon the peak hour volumes. Figure 4 is the averaged/balanced traffic based upon the traffic counts being obtained on different days.

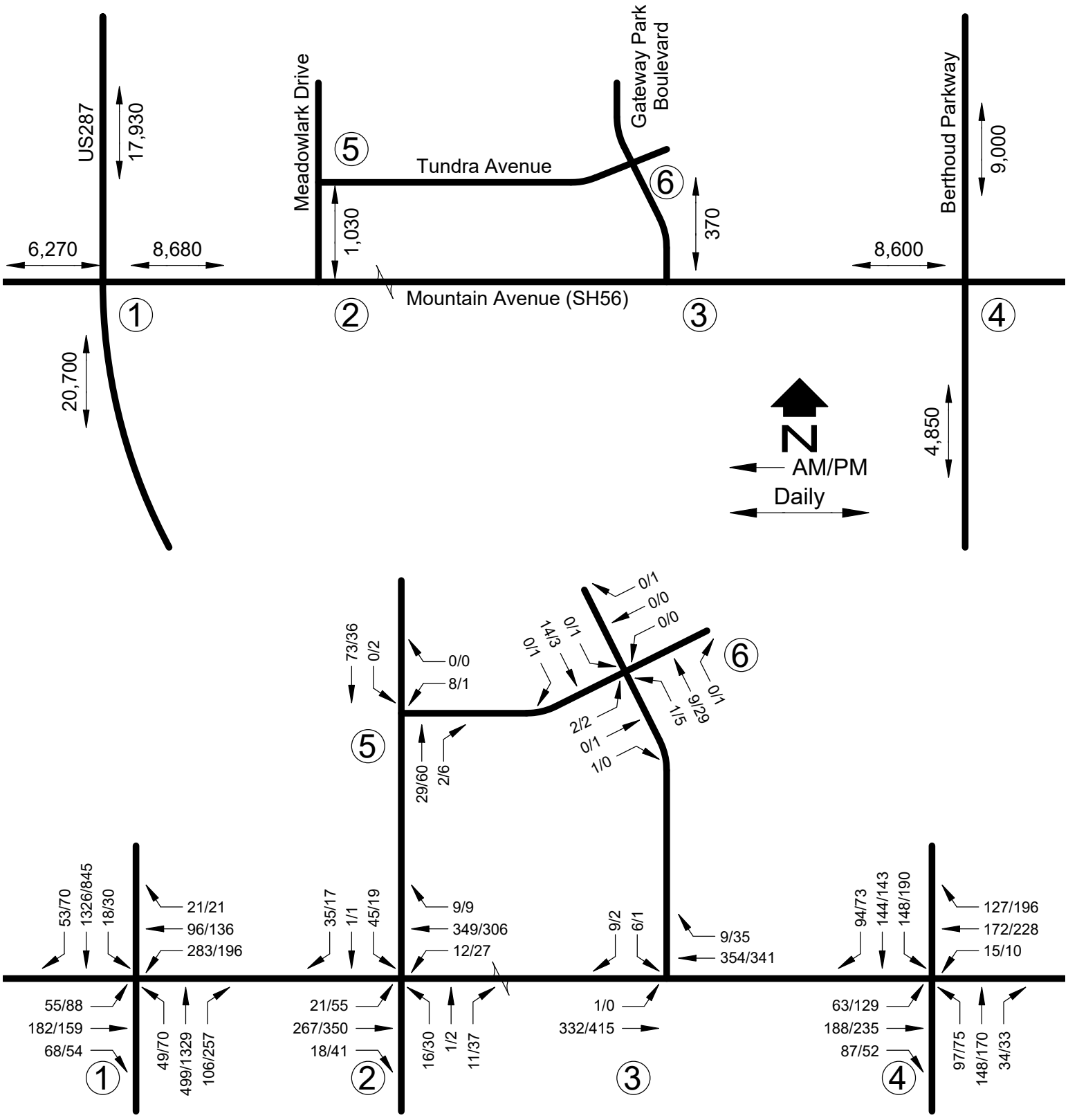
Existing Operation

Using the peak hour traffic shown in Figure 4, the current peak hour operation at the US287/Mountain, Mountain/Meadowlark, Mountain/Gateway Park, Mountain/ Berthoud Pkwy, Meadowlark/Tundra, and Gateway Park/Tundra-Park Access intersections are shown in Table 1. Calculation forms are provided in Appendix C. The US287/Mountain, Mountain/Meadowlark, Mountain/Gateway Park, Mountain/Berthoud Pkwy, Meadowlark/Tundra, and Gateway Park/Tundra-Park Access intersections were evaluated using the existing control and geometry. The Mountain/Meadowlark intersection was also evaluated as a signalized intersection since it is designed and will be installed soon. The design hour truck percentage on US287 is 0.6 percent and on Mountain Avenue (SH56) is 0.6 percent. The peak hour factor for the US287/Mountain intersection is 0.95 in the morning peak hour and 0.96 in the afternoon peak hour. The peak hour factor for the Mountain/Meadowlark intersection is 0.96 in the morning peak hour and 0.91 in the afternoon peak hour. The peak hour factor for the Mountain/Gateway Park intersection is 0.88 in the morning peak hour and 0.93 in the afternoon peak hour. The peak hour factor for the Mountain/Berthoud Pkwy intersection is 0.92 in the morning peak hour and 0.89 in the afternoon peak hour. The peak hour factor for the Meadowlark/ Tundra intersection is 0.85 in the morning peak hour and 0.93 in the afternoon peak hour. The peak hour factor for the Gateway Park/Tundra intersection is 0.85 in the morning peak hour and 0.85 in the afternoon peak hour. The intersections were analyzed using techniques provided in the Highway Capacity Manual, 7th Edition. A description of level of service (LOS) for signalized and unsignalized intersections from the Highway Capacity Manual, 7th Edition is provided in Appendix C. Synchro 12 software was used for the operational analyses. Acceptable operation is defined by the Town of Berthoud as level of service (LOS) C or better overall. At intersections on State Highways, overall LOS D is acceptable. At major intersections, any leg can operate at level of service D and any movement can operate at level of service E. At minor intersections, any leg can operate at level of service E and any movement can operate at level of service F. The Loveland (Berthoud) Motor Vehicle LOS Standards from LCUASS are also provided in Appendix



RECENT PEAK HOUR TRAFFIC

Figure 3



ADJUSTED/BALANCED RECENT DAILY AND PEAK HOUR TRAFFIC

Figure 4

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TABLE 1
Current Peak Hour Operation

Intersection	Movement	AM			PM		
		LOS	Delay (secs.)	v/c Ratio	LOS	Delay (secs.)	v/c Ratio
US287/Mountain (signal)	EB LT	C	33.3	0.21	D	42.9	0.55
	EB T	D	44.5	0.81	D	45.0	0.78
	EB RT	A	0.0		A	0.0	
	EB APPROACH	D	41.9		D	44.3	
	WB LT	D	49.7	0.79	D	45.0	0.74
	WB T	D	47.8	0.68	D	42.5	0.76
	WB RT	A	0.0		A	0.0	
	WB APPROACH	D	49.3		D	44.0	
	NB LT	B	14.3	0.22	A	8.5	0.17
	NB T	B	11.4	0.27	B	15.0	0.67
	NB RT	A	0.0		A	0.0	
	NB APPROACH	B	11.7		B	14.6	
	SB LT	A	9.7	0.04	B	11.0	0.12
	SB T	B	19.8	0.75	B	12.3	0.44
	SB RT	A	0.0		A	0.0	
	SB APPROACH	B	19.6		B	12.2	
	OVERALL	C	24.5		B	19.9	
Mountain/Meadowlark (stop sign)	EB LT	A	8.1	0.018	A	8.1	0.05
	WB LT	A	7.9	0.01	A	8.3	0.026
	NB LT/T/RT	B	14.5	0.071	C	18.3	0.219
	SB LT	C	17.7	0.142	C	23.0	0.095
	SB T/RT	B	10.8	0.057	B	10.9	0.031
	SB APPROACH	B	14.6		C	17.1	
	OVERALL	A	2.4		A	2.9	
Mountain/Meadowlark (signal)	EB LT	A	8.4	0.03	A	8.0	0.08
	EB T/RT	A	0.6	0.29	A	1.2	0.43
	EB APPROACH	A	1.2		A	2.1	
	WB LT	A	8.7	0.02	A	8.5	0.05
	WB T/RT	A	1.0	0.37	A	1.0	0.35
	WB APPROACH	A	1.3		A	1.6	
	NB LT/T/RT	C	23.7	0.06	C	25.7	0.16
	SB LT	C	24.1	0.10	C	24.3	0.05
	SB T/RT	C	24.0	0.08	C	24.3	0.05
	SB APPROACH	C	24.1		C	24.3	
	OVERALL	A	4.4		A	4.6	

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Continued from previous page

TABLE 1
Current Peak Hour Operation

Intersection	Movement	AM			PM		
		LOS	Delay (secs.)	v/c Ratio	LOS	Delay (secs.)	v/c Ratio
Mountain/Gateway Park (stop sign)	SB RT	B	10.6	0.016	B	10.3	0.003
	OVERALL	A	0.1		A	0	
Mountain/Berthoud Pkwy (signal)	EB LT	C	23.5	0.18	C	24.9	0.45
	EB T/RT	D	38.6	0.53	D	39.6	0.58
	EB APPROACH	D	35.6		C	34.9	
	WB LT	C	24.0	0.06	C	25.3	0.04
	WB T	C	29.1	0.38	C	33.9	0.55
	WB RT	C	25.8	0.13	C	28.1	0.22
	WB APPROACH	C	28.1		C	32.2	
	NB LT/T	D	38.6	0.64	D	41.8	0.69
	NB RT	C	27.3	0.04	C	28.1	0.04
	NB APPROACH	D	38.0		D	41.1	
	SB LT/T	D	37.0	0.67	D	40.3	0.76
	SB RT	C	25.7	0.10	C	24.7	0.08
	SB APPROACH	D	35.7		D	39.0	
	OVERALL	C	34.6		D	36.6	
Meadowlark/Tundra (stop sign)	WB LT/T/RT	A	9.2	0.011	A	9.2	0.011
	SB LT	A	0	0	A	0	0
	OVERALL	A	0.7		A	0.7	
Gateway Park/Tundra (stop sign)	EB LT/T/RT	A	8.6	0.004	A	8.6	0.004
	WB LT/T/RT	A	0	0	A	0	0
	NB LT	A	7.3	0.001	A	7.3	0.001
	SB LT	A	0	0	A	0	0
	OVERALL	A	1.2		A	1.2	

C. According to the SHAC, at signalized intersections, all movements and the overall intersection should operate at LOS D or better in the peak hours. Acceptable operation for a two-way stop-controlled intersection is considered to be level of service (LOS) D or better during the peak hours. The US287/Mountain, Mountain/Meadowlark, Mountain/Gateway Park, Mountain/Berthoud Pkwy, Meadowlark/Tundra, and Gateway Park/Tundra-Park Access intersections currently meet the Berthoud and CDOT LOS criteria during the morning and afternoon peak hours.

Crash Analysis

Crash data was obtained from CDOT for the US287/Mountain, Mountain/ Meadowlark, Mountain/Gateway Park, Mountain/Berthoud Pkwy intersections for a five period (2020 thru 2024). At the US287/Mountain intersection, there were 42 reported crashes: fifteen rear-end crashes, twelve broadside crashes, ten crashes involving turning vehicles, one sideswipe crash, three crashes involving a vehicle striking a fixed object, and one crash involving striking an animal. At the Mountain/Meadowlark intersection, there were two reported crashes: two crashes involving a vehicle striking a fixed object (curb). At the Mountain/Gateway intersection, there were zero reported crashes. At the Mountain/Berthoud Pkwy intersection, there were 13 reported crashes: six rear-end crashes, four broadside crashes, one sideswipe crash, one head-on crash, and one crash involving a vehicle striking a fixed object.

III. PROPOSED DEVELOPMENT

The Tundra Flats development will consist of 148 multifamily housing dwelling units and 3,700 square feet of commercial/retail, located on the north side of Mountain Avenue and between Meadowlark Drive and Gateway Park Boulevard in Berthoud. Figure 5 shows a site plan of the Tundra Flats development. The site plan shows that the Tundra Flats development will have access to/from Tundra Avenue. The build-out year is 2028. The short range analysis (Year 2033) includes full development of the Tundra Flats. The long range analysis (Year 2048) includes full development of the overall Tundra Flats area and is in general accordance with the Berthoud Comprehensive Plan.

Trip Generation

Trip generation is important in considering the impact of a development such as this upon the existing and proposed street system. A compilation of trip generation information contained in Trip Generation, 12th Edition, ITE was used to estimate the trips that would be generated by the proposed/expected uses at the Tundra Flats site. A trip is defined as a one-way vehicle movement from origin to destination. The fitted curve equation for Multifamily Housing (Low-Rise) (Code 220) was used as the land use trip generators with dwelling units as the variable for the housing. The weighted average rate for Strip Retail Plaza (<40k) (Code 822) was used as the land use trip generators with square feet as the variables for the commercial. The morning and afternoon peak hour of the generator was used. Table 2 shows the expected trip generation on a daily and peak hour basis for the Tundra Flats. The trip generation for full development of the Tundra Flats site resulted in 1,156 daily trip ends, 90 morning peak hour trip ends, and 115 afternoon peak hour trip ends.

TABLE 2
Trip Generation

Land Use	ITE Code	Proposed Size	Weekday Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Multifamily Housing (Low Rise)	220	148 D.U.	954	19	51	70	55	37	92
Strip Retail Plaza (<40k)	822	3.70 KSF	202	10	10	20	13	10	23
Total Trips			1,156	29	61	90	68	47	115

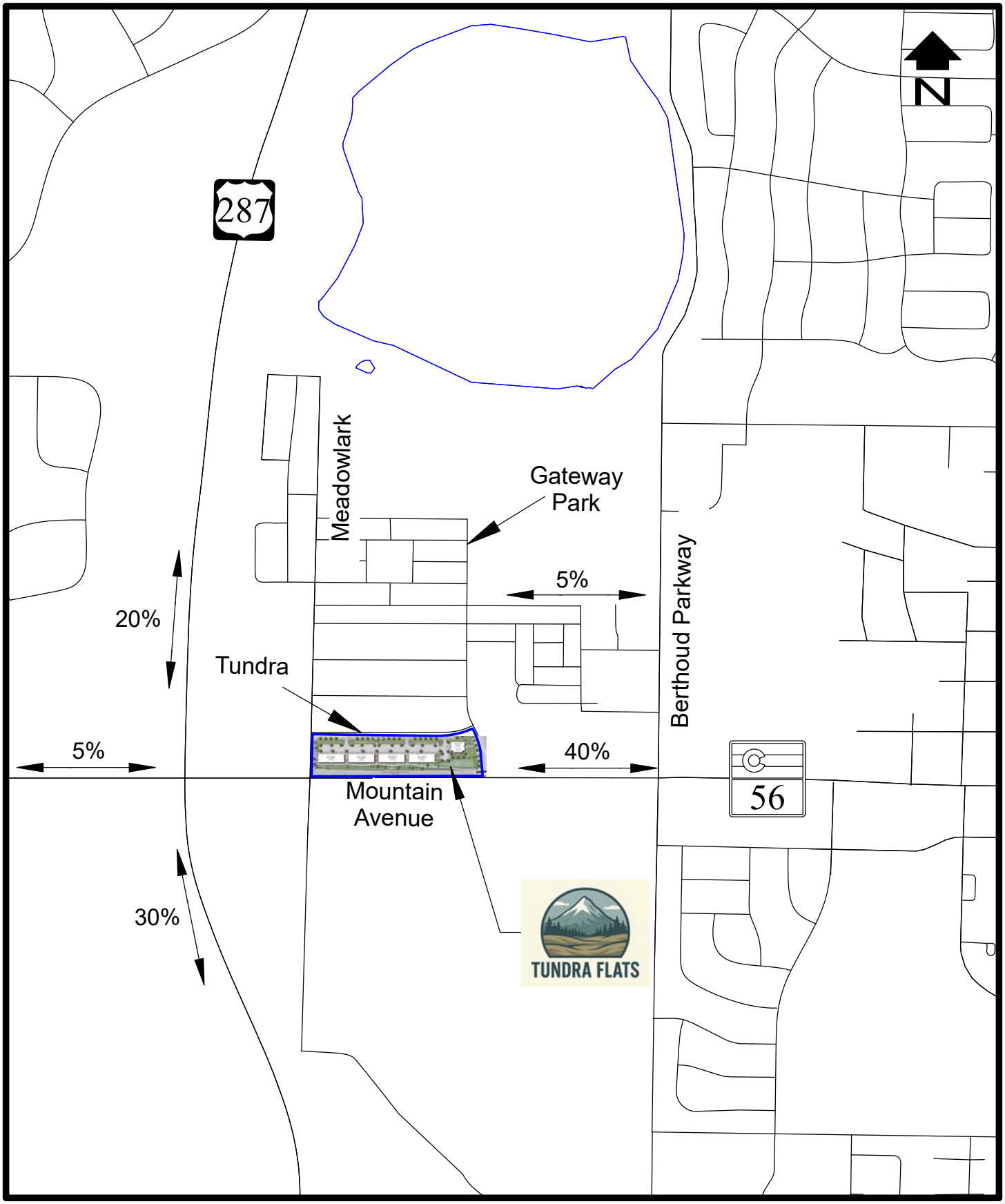
Trip Distribution

Trip distribution for the Tundra Flats development was based on existing/future travel patterns, land uses in the area, consideration of trip attractions/productions in the area, and engineering judgment. Figure 6 shows the trip distribution for the Tundra Flats development.



SITE PLAN

Figure 5



SCALE: 1"=1000'

TRIP DISTRIBUTION

Figure 6

DELICH ASSOCIATES

Trip Assignment

Trip assignment is how the generated and distributed trips are expected to be loaded on the street system. The assigned trips are the resultant of the trip distribution process. Figure 7 shows the build-out (2028), short range (2033), and long range (2048) site generated daily and peak hour traffic at the key intersections.

Background Traffic Projections

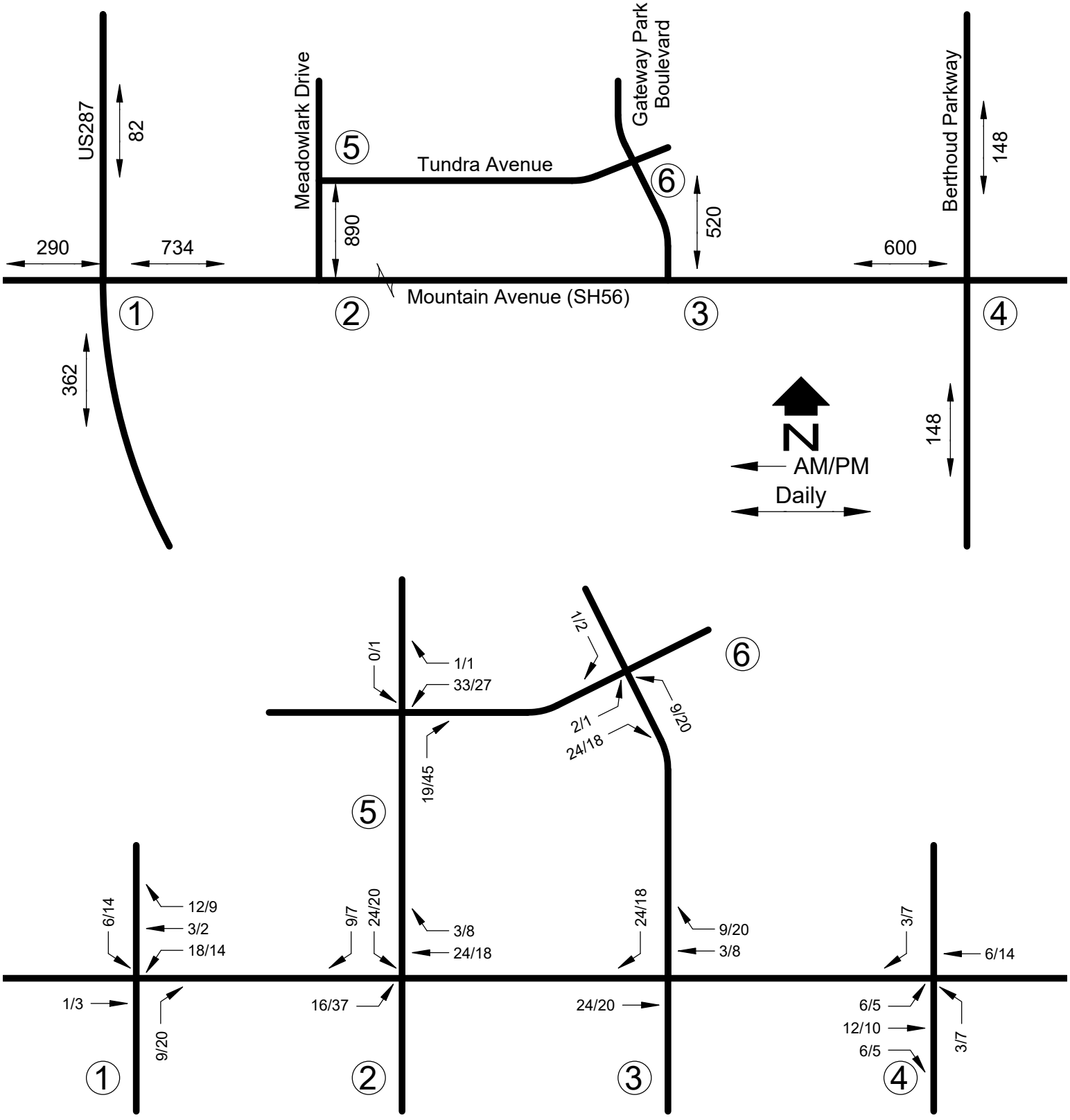
Figures 8, 9, and 10 shows the respective build-out (2028), short range (2033) and long range (2048) background traffic projections. Background traffic projections for the build-out (2028), short range (2033), and long range (2048) future horizons were obtained by reviewing CDOT 20-year traffic factors, the North Front Range Regional Transportation Plan, and various traffic studies prepared for this area of Berthoud/Larimer County. According to CDOT, the 20-year factor for US287 in this area is 1.35 and for SH56 in this area is 1.21. Traffic volumes on all other roads were increased by approximately 2 percent per year. There have been development proposals and traffic studies done for various properties in this area. In the build-out (2028) future, the Westside Crossing, Berthoud Multifamily, and the Legacy Park Initial Phase were included. In the short range (2033) future, the Westside Crossing, Berthoud Multifamily, the Legacy Park Phase 1, and half of Revere were included. In the long range (2048) future, the Westside Crossing, Berthoud Multifamily, all of Legacy Park, and all of Revere were included. The long range traffic forecast on Meadowlark Drive is commensurate with that of a Major Collector Street. The long range traffic forecast on Gateway Park Boulevard is commensurate with that of a Minor Collector Street.

Total Traffic

The traffic volumes generated by the proposed Tundra Flats site were added to the background traffic volumes to produce the total traffic volume forecasts for the build-out (2028), short range (2033) and long range (2048) futures. Figures 11, 12 and 13 show the respective build-out (2028), short range (2033), and long range (2048) total daily and peak hour traffic at the key intersections.

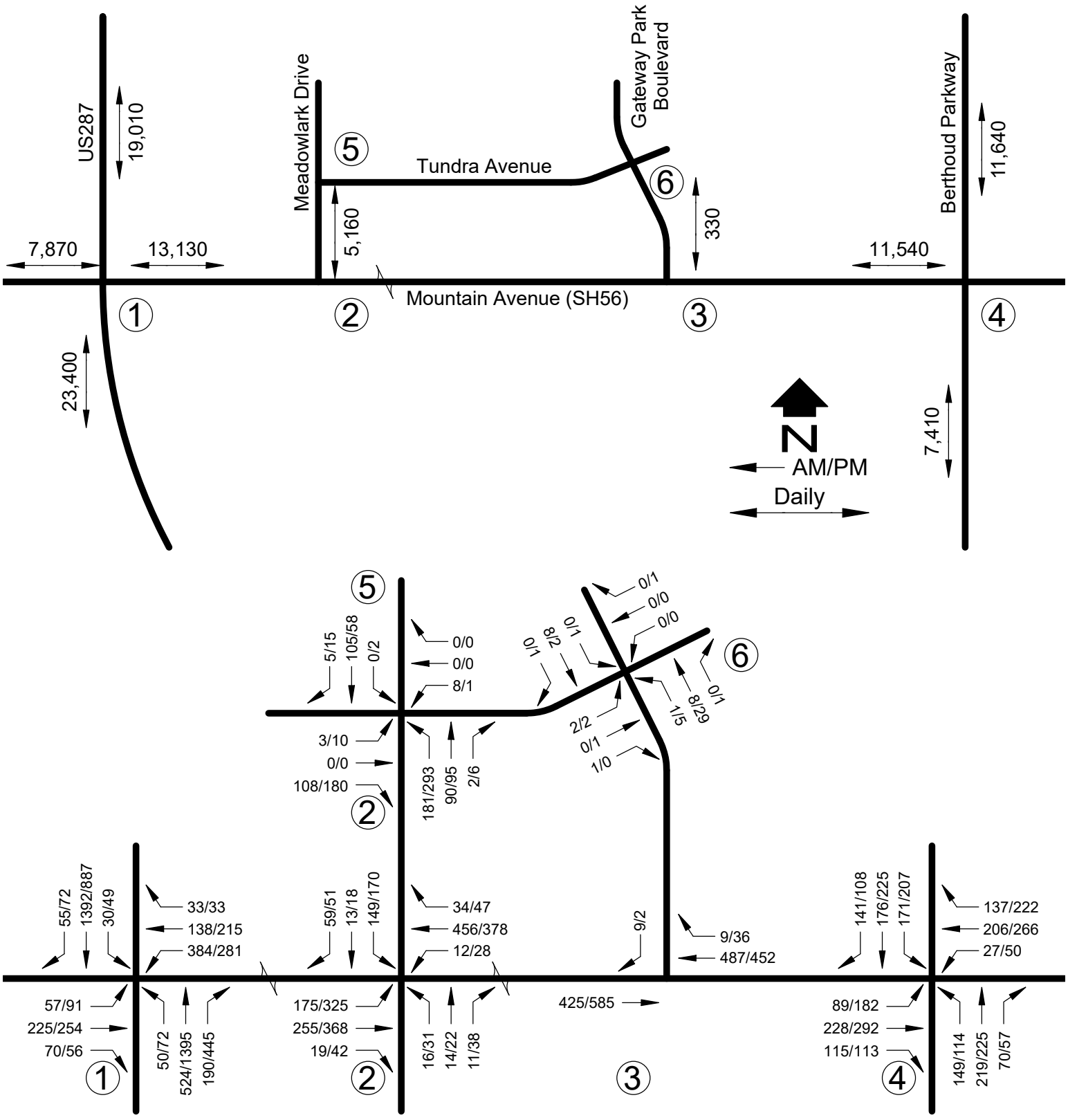
Signal Warrants

As a matter of policy, traffic signals are not installed at any location until such time that signal installation warrants are met according to the Manual on Uniform Traffic Control Devices. The US287/Mountain and Mountain/Berthoud Pkwy are signalized. The Mountain/Meadowlark intersection will be signalized in the near future. The Mountain/ Gateway Park intersection will not meet signal spacing requirements and will not be signalized.



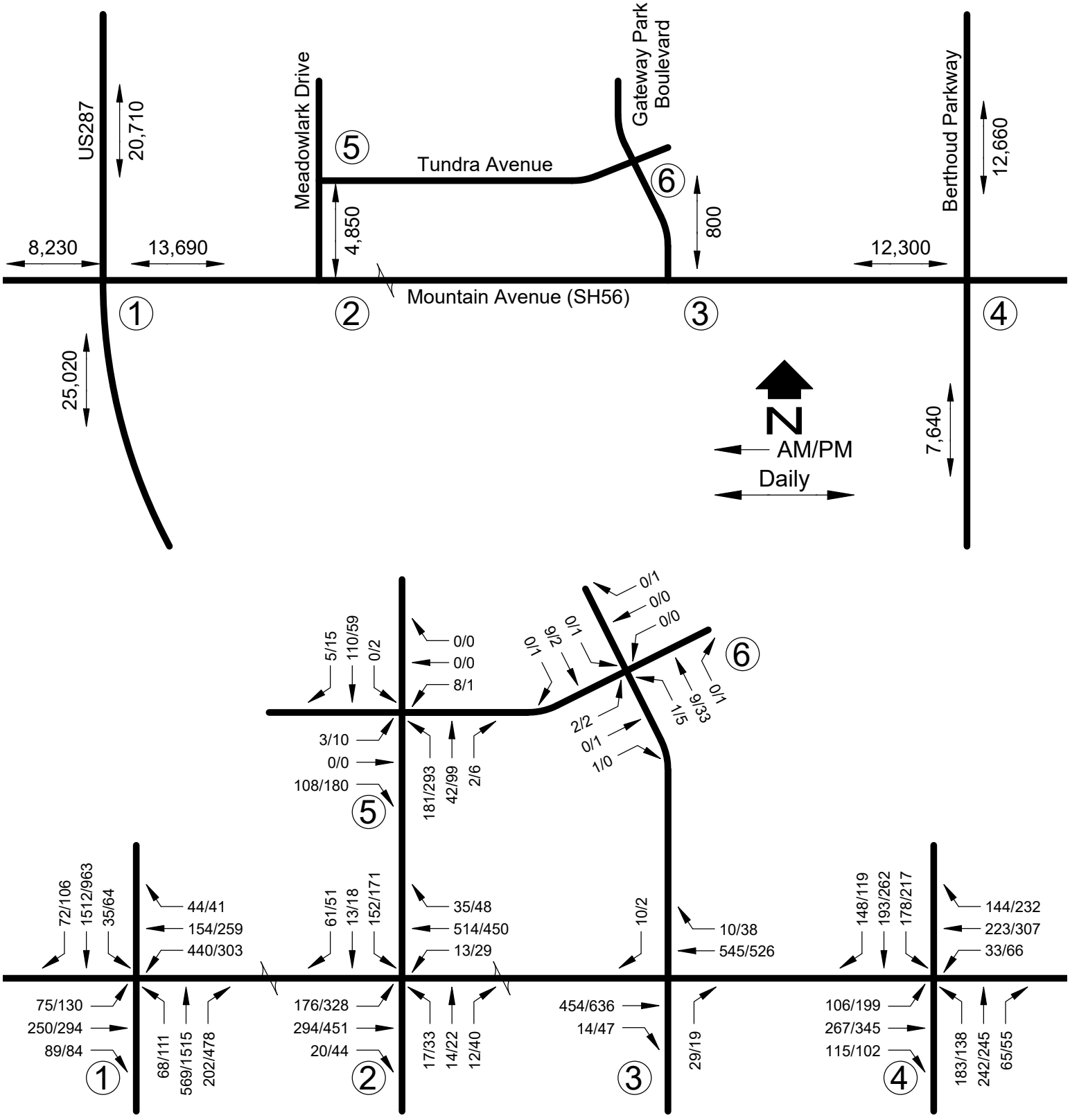
BUILD-OUT (2028), SHORT RANGE (2033), AND LONG RANGE SITE GENERATED DAILY AND PEAK HOUR TRAFFIC

Figure 7



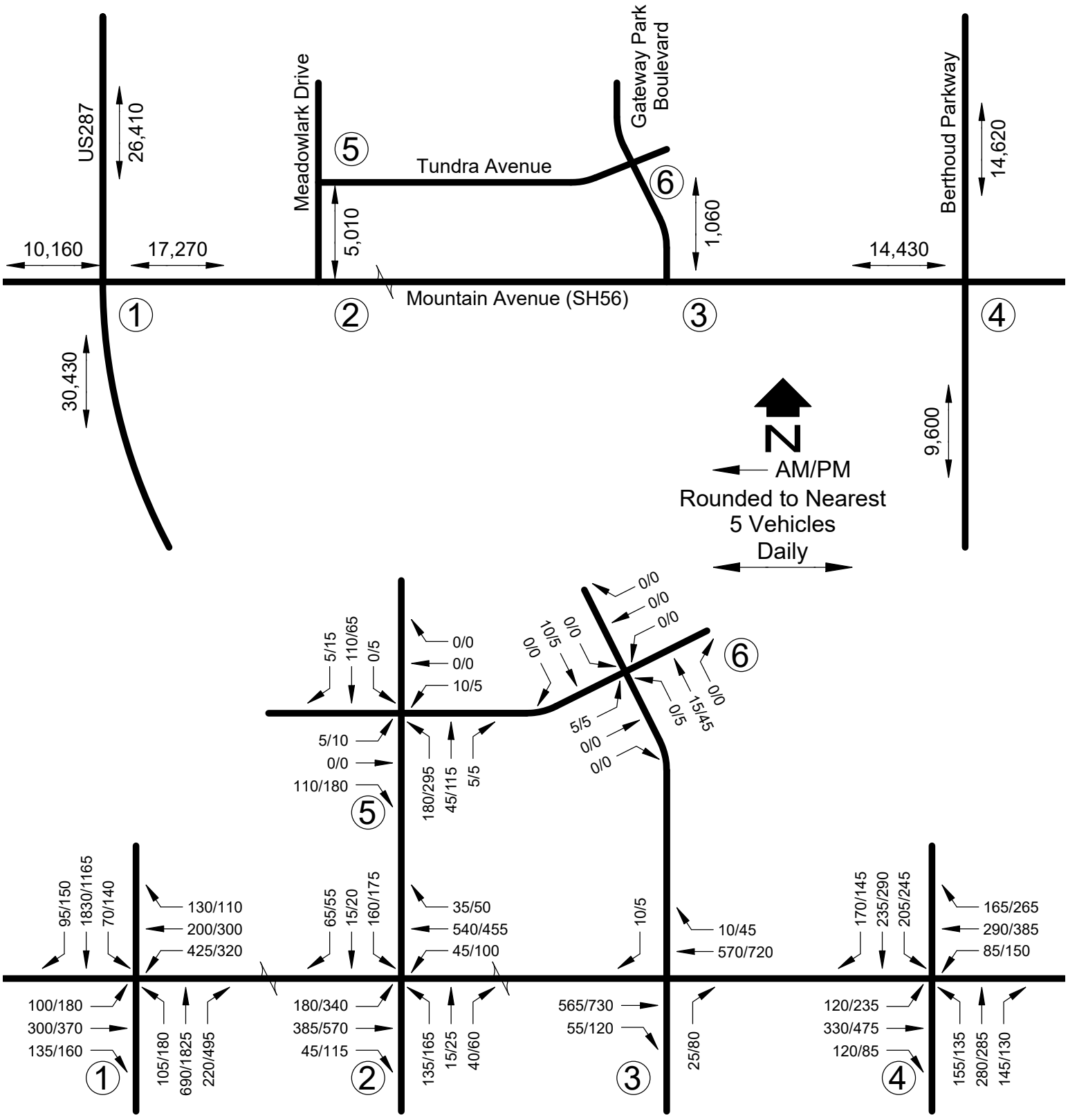
BUILD-OUT (2028) BACKGROUND DAILY AND PEAK HOUR TRAFFIC

Figure 8



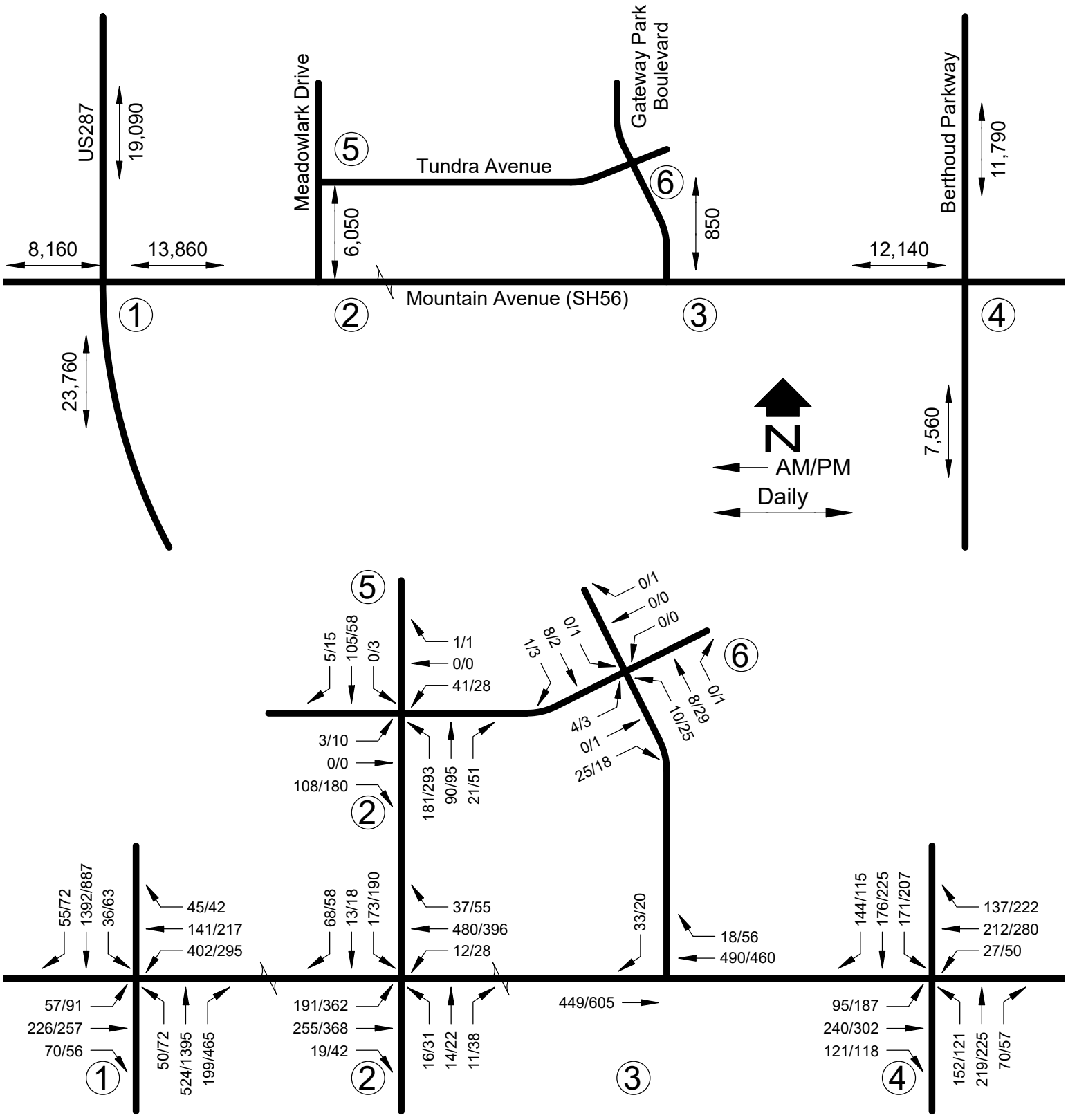
SHORT RANGE (2033) BACKGROUND DAILY AND PEAK HOUR TRAFFIC

Figure 9



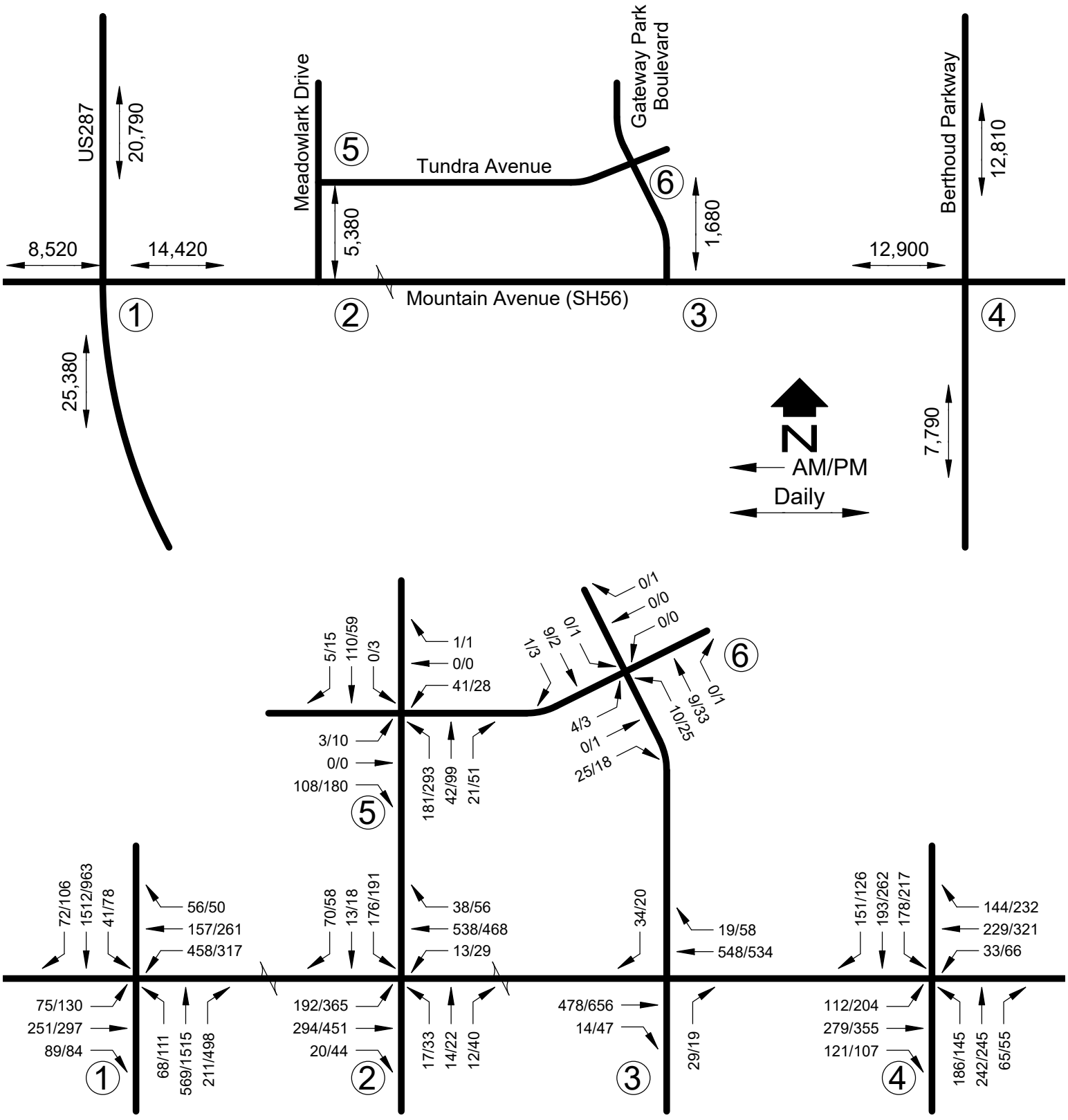
LONG RANGE (2048) BACKGROUND DAILY AND PEAK HOUR TRAFFIC

Figure 10



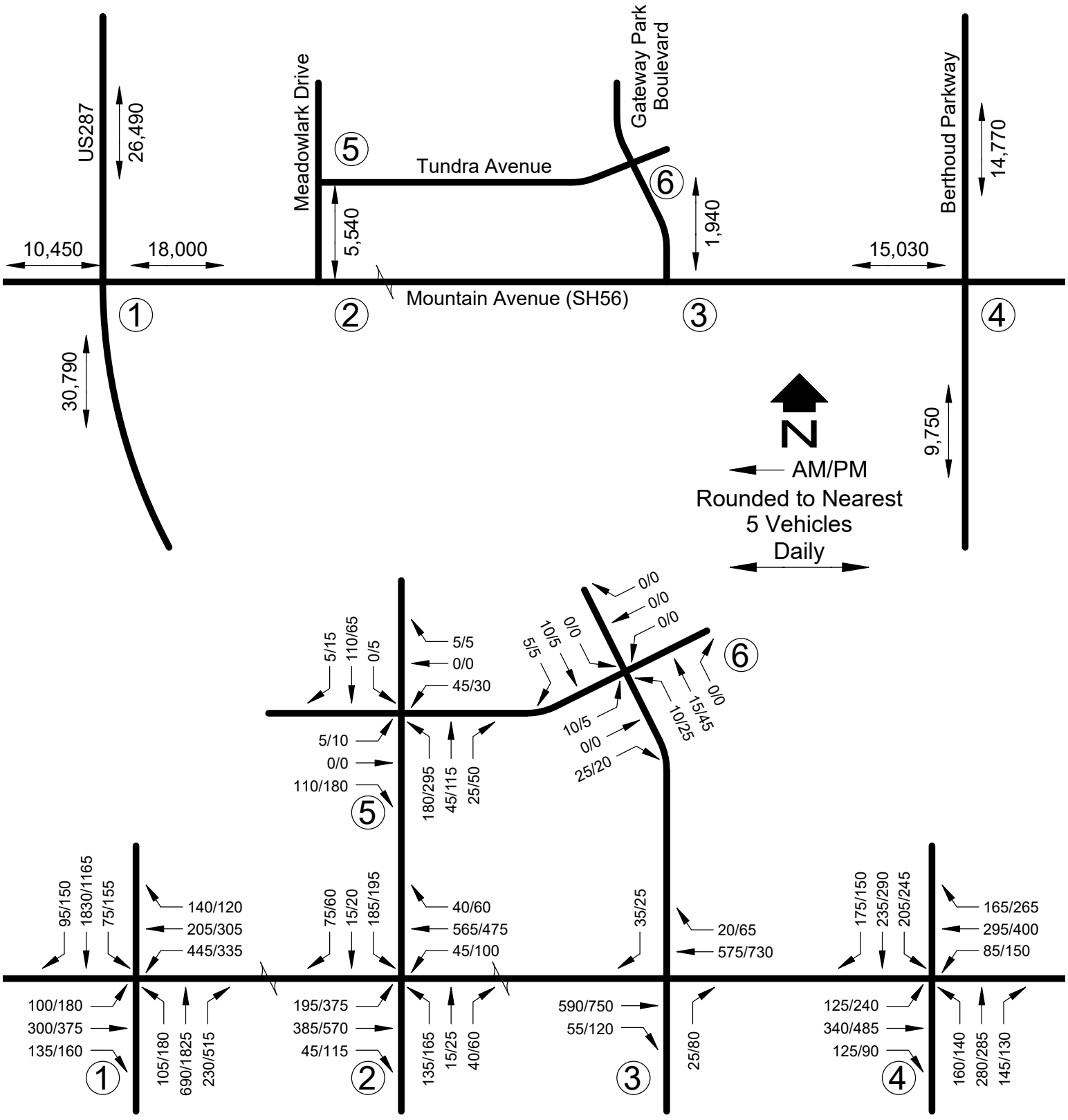
BUILD-OUT (2028) TOTAL DAILY AND PEAK HOUR TRAFFIC

Figure 11



SHORT RANGE (2033) TOTAL DAILY AND PEAK HOUR TRAFFIC

Figure 12



LONG RANGE (2048) TOTAL DAILY AND PEAK HOUR TRAFFIC

Figure 13

Geometry

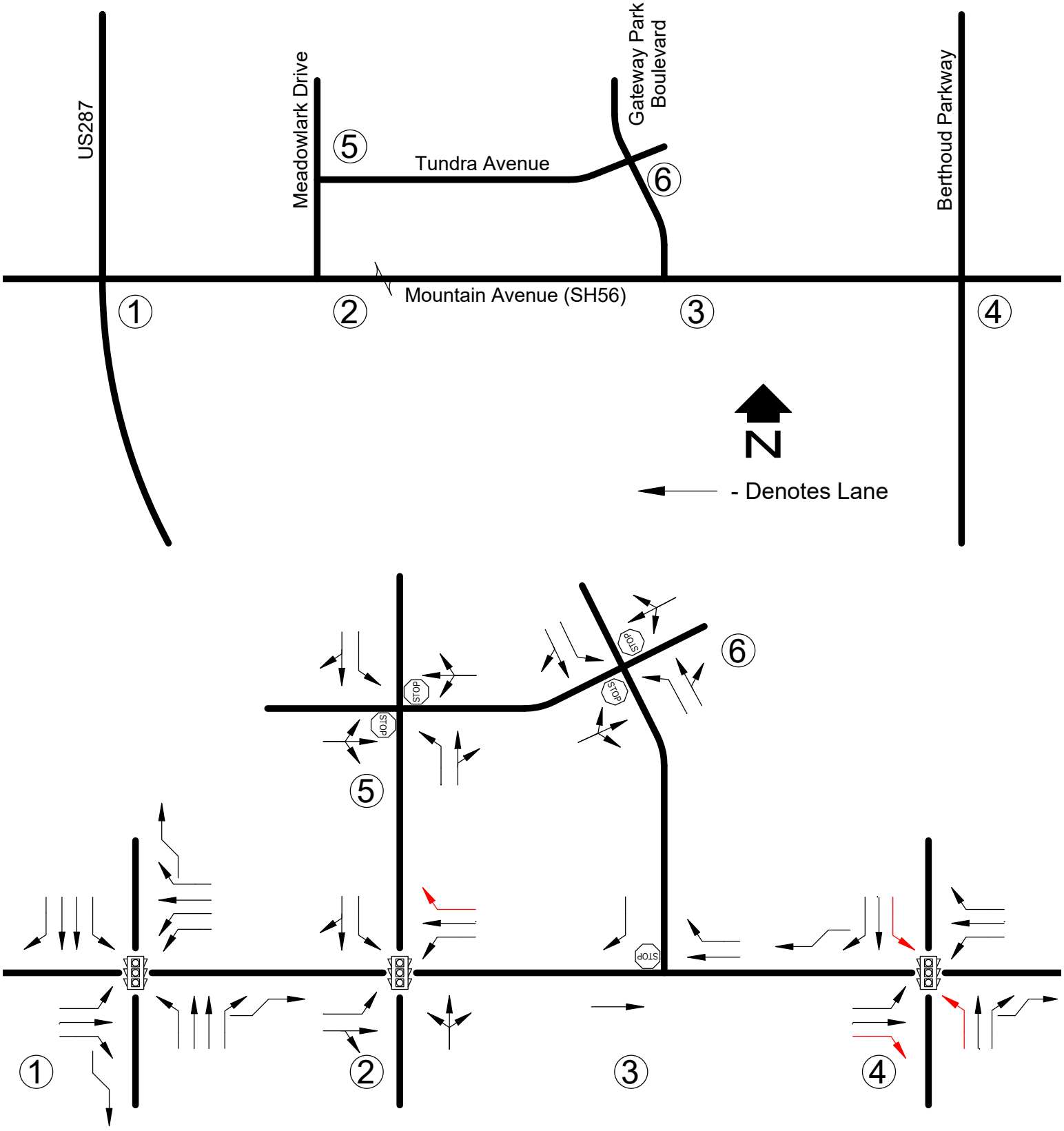
CDOT uses the State Highway Access Code (SHAC) in evaluating auxiliary lanes and Berthoud uses the Larimer County Urban Area Street Standards. The build-out (2028) geometry and control at the US287/Mountain, Mountain/Meadowlark, Mountain/ Gateway Park, Mountain/Berthoud Pkwy, Meadowlark/Tundra, and Gateway Park/ Tundra-Park Access intersections is shown in Figure 14. At the Mountain/Meadowlark intersection, a westbound right-turn lane is required. This lane will be built with this development. At the Mountain/Berthoud Pkwy intersection, northbound and southbound left-turn lanes and an eastbound right-turn lane are required. These lanes are required based on existing traffic. Tundra Flats adds minimal traffic to the northbound left-turn and eastbound right-turn movements and no traffic to the southbound left-turn movements.

The short range (2033) geometry and control at the US287/Mountain, Mountain/Meadowlark, Mountain/Gateway Park, Mountain/Berthoud Pkwy, Meadowlark/ Tundra, and Gateway Park/Tundra-Park intersections are shown in Figure 15. At the Mountain/Gateway Park intersection, an eastbound right-turn lane is required. This lane will be required/built with the Legacy Park development.

The long range (2048) geometry and control at the US287/Mountain, Mountain/Meadowlark, Mountain/Gateway Park, Mountain/Berthoud Pkwy, Meadowlark/ Tundra, and Gateway Park/Tundra-Park intersections are shown in Figure 16. At the US287/Mountain intersection, dual left-turn lanes are required on all legs and an additional eastbound through is required. At the Mountain/Meadowlark intersection, a northbound left-turn lane, a northbound right-turn lane, and an eastbound right-turn lane are required. These lanes will be required/built with the Legacy Park development. Lane dimensions are shown on Figure 16 for the various auxiliary lanes.

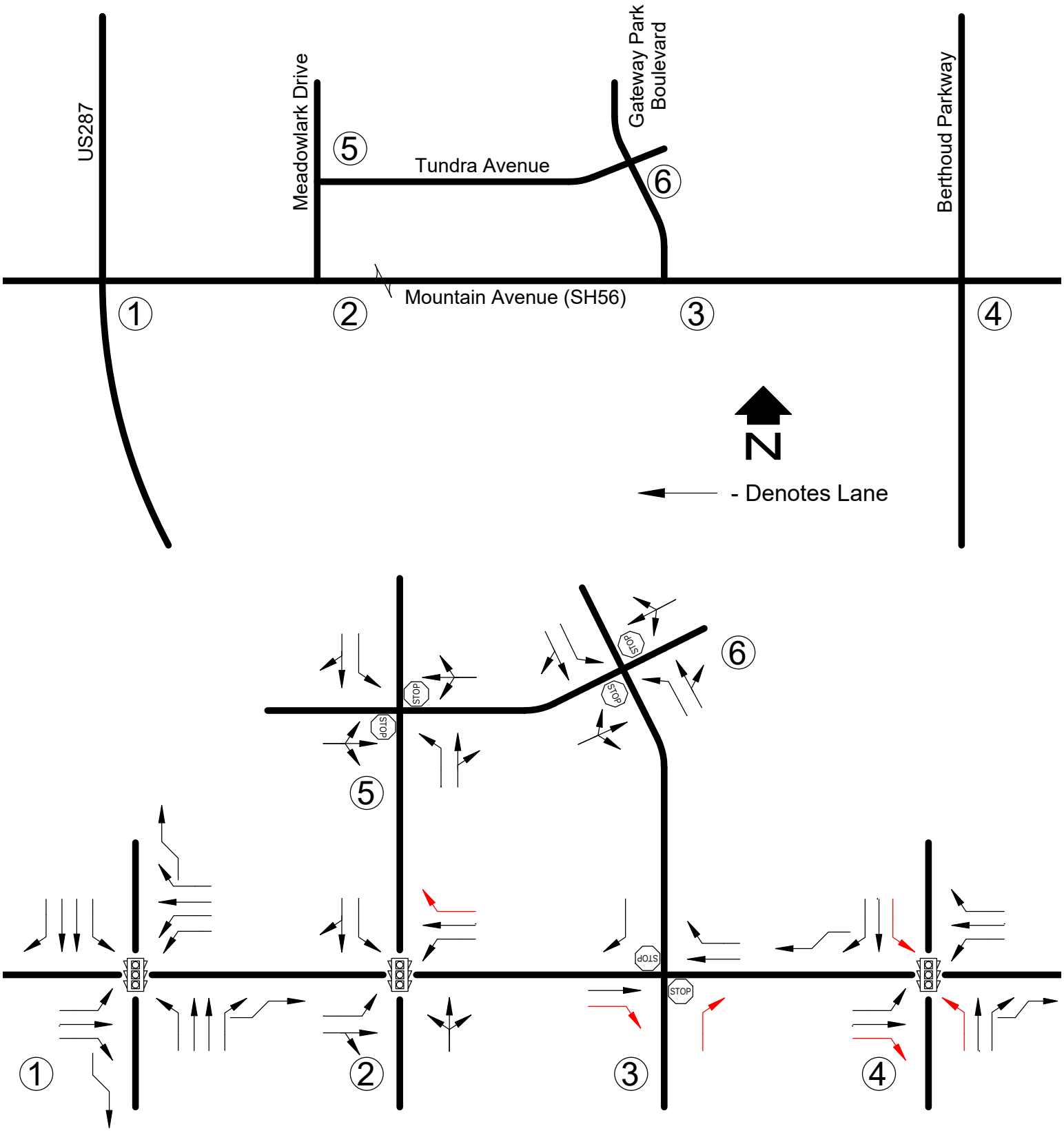
Table 5 shows the 95th percentile queue length for movements at the various intersections in the short range (2033) and long range (2048) futures. For vehicle queues at unsignalized intersections, the vehicle lengths were assumed to be 25 feet. The queue lengths for the key intersections were based on the calculated 95th percentile from the Synchro analyses. For the minor street legs at the Mountain/Meadowlark, Mountain/Gateway Park, and Mountain/Berthoud Pkwy intersections, it is recommended that only storage/bay taper be provided.

The following applies to the US287/Mountain intersection using the long range forecasts in Figure 13. Currently, there is a northbound left-turn deceleration/storage lane on US287 with a length of approximately 1600 feet including the bay taper. At a speed of 65 mph, the left-turn deceleration lane should be 980 feet in length; this includes the deceleration, storage lengths and a bay taper at 25:1. Therefore, the existing northbound left-turn lane meets/exceeds the requirement. Currently, there is a northbound right-turn deceleration lane on US287 with a length of approximately 900 feet including the bay taper. Based on the northbound right-turn volume and a design speed of 65 mph, the right-turn deceleration lane should be 800 feet in length; this includes the deceleration length and a bay taper at 25:1. Therefore, the existing northbound right-turn lane meets/



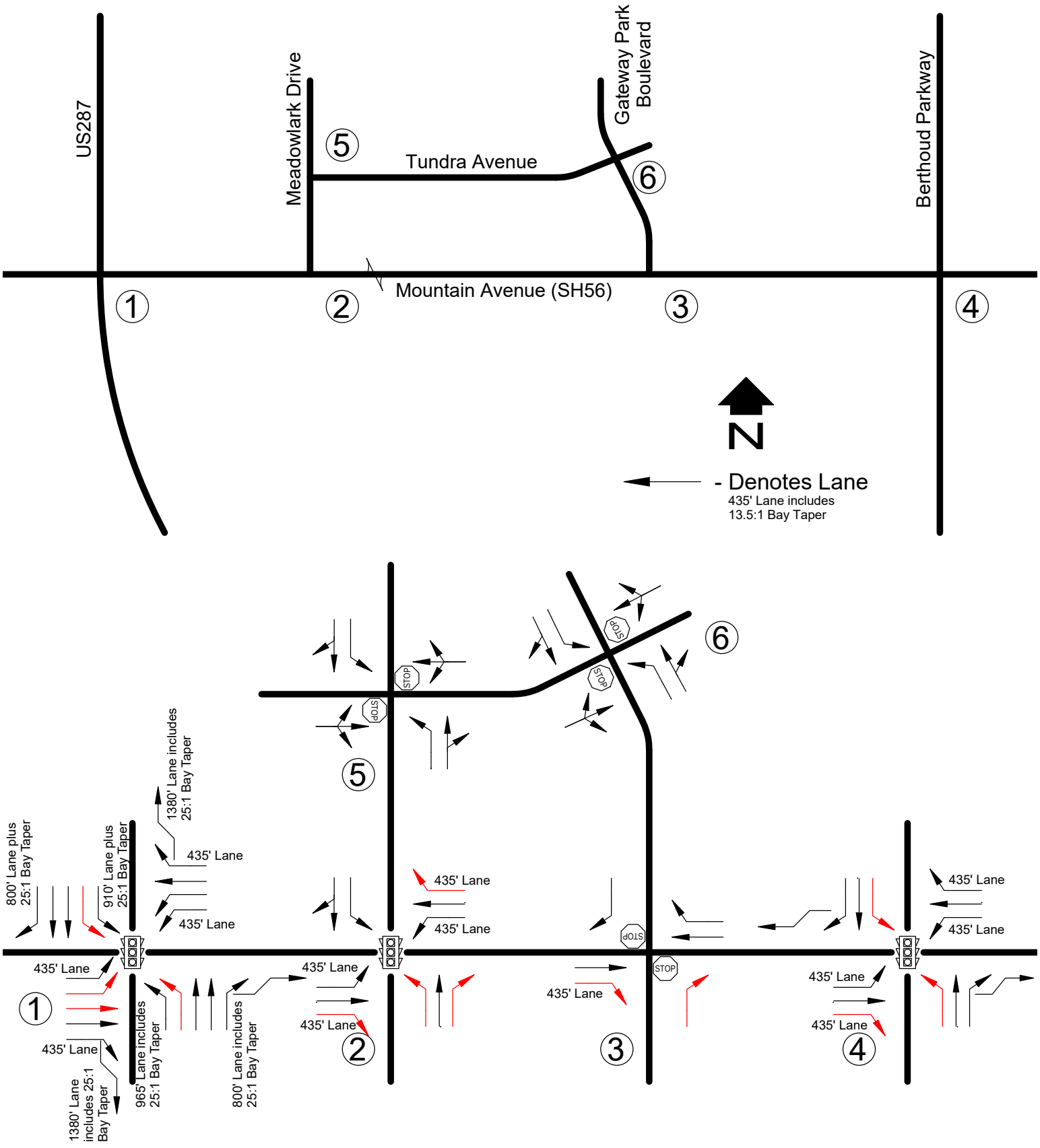
BUILD-OUT (2028) INTERSECTION GEOMETRY AND CONTROL

Figure 14



SHORT RANGE (2033) INTERSECTION GEOMETRY AND CONTROL

Figure 15



LONG RANGE (2048) INTERSECTION GEOMETRY AND CONTROL

Figure 16

TABLE 5 95th Percentile Queuing Length Analysis				
Intersection	**Movement**	**AM/PM 2033 Calculated Queue Length (feet)**	**AM/PM 2048 Calculated Queue Length (feet)**	**Long Range (2048) Required Lane Length (feet) per SHAC/LCUASS**
US287/Mountain (signal)	EB LT	82'/139'	73'/136'	500' Lane includes 15:1 Taper
	EB RT	29'/24'	104'/65'	500' Lane includes 15:1 Taper
	WB LT	176'/129'	305'/226'	435' Lane includes 13.5:1 Taper
	WB RT	11'/2'	56'/36'	435' Lane includes 13.5:1 Taper
	NB LT	51'/71'	103'/119'	980' Lane includes 25:1 Taper
	NB RT	48'/64'	43'/78''	800' Lane includes 25:1 Taper
	SB LT	35'/53'	60'/142'	1255' Lane includes 25:1 Taper
	SB RT	0'/11'	28'/35'	1100' Lane includes 25:1 Taper
Mountain/Meadowlark (signal) Single EB Left-Turn Lane	EB LT	130'/241'	123'/160'	435' Lane includes 13.5:1 Taper
	EB RT		3'/6'	435' Lane includes 13.5:1 Taper
	WB LT	12'/18'	19'/111'	435' Lane includes 13.5:1 Taper
	WB RT	1'/4'	7'/7'	435' Lane includes 13.5:1 Taper
	NB LT		151'/180'	110' of storage
	NB RT		0'/0'	N/A
	SB LT	149'/196'	202'/64'	220' of storage (150' existing)
Mountain/Meadowlark (signal) Dual EB Left-Turn Lanes	DUAL EB LT		125'/185'	435' Lane includes 13.5:1 Taper
	EB RT		3'/22'	435' Lane includes 13.5:1 Taper
	WB LT		24'/93'	435' Lane includes 13.5:1 Taper
	WB RT		4'/4'	435' Lane includes 13.5:1 Taper
	NB LT		149'/176'	110' of storage
	NB RT		0'/0'	N/A
	SB LT		199'/206'	220' of storage (150' existing)
Mountain/Gateway Park (signal)	NB RT	5'/5'	5'/5'	N/A
	SB RT	8'/3'	5'/20'	N/A
Mountain/Berthoud Pkwy (signal)	EB LT	71'/114'	105'/164'	435' Lane includes 13.5:1 Taper
	EB RT	35'/23'	61'/29'	435' Lane includes 13.5:1 Taper
	WB LT	32'/51'	74'/111'	435' Lane includes 13.5:1 Taper
	WB RT	48'/54'	50'/61'	435' Lane includes 13.5:1 Taper
	NB LT	118'/103'	130'/126'	175' of storage
	NB RT	11'/0'	51'/34'	N/A
	SB LT	113'/152'	165'/216'	325' of storage
	SB RT	45'/35'	52'/51'	N/A
Meadowlark/Tundra (stop sign)	EB LT/T/RT	13'/28'	13'/23'	N/A
	WB LT/T/RT	15'/10'	13'/15'	N/A
	NB LT	13'/23'	10'/13'	300' of storage (50' existing)
	SB LT	0'/0'	0'/0'	N/A
Mountain/Berthoud Pkwy (signal)	EB LT/T/RT	3'/3'	3'/3'	N/A
	EB RT/T/RT	0'/0'	0'/0'	N/A
	NB LT	0'/0'	0'/0'	Existing 175' Lane
	SB RT	0'/0'	0'/0'	Existing 100'

exceeds the requirement. Currently, there is a northbound right-turn acceleration lane on US287 with a length of approximately 1700 feet including the bay taper. Based on the northbound right-turn volume and a design speed of 65 mph, the right-turn acceleration lane should be 1680 feet in length; this includes the acceleration length and a bay taper at 25:1. Therefore, the existing northbound right-turn acceleration lane meets/exceeds the requirement. Currently, there is a southbound left-turn deceleration lane on US287 with a length of approximately 1400 feet including the bay taper. At a speed of 65 mph, the left-turn deceleration/storage lane should be 1255 feet in length; this includes the deceleration, storage lengths and a bay taper at 25:1. Therefore, the existing southbound left-turn lane meets/exceeds the requirement. Currently, there is a southbound right-turn deceleration lane on US287 with a length of approximately 1200 feet including the bay taper. Based on the southbound right-turn volume and a design speed of 65 mph, the right-turn deceleration lane should be 1100 feet in length; this includes the deceleration length and a bay taper at 25:1. Therefore, the existing southbound right-turn lane meets/ exceeds the requirement. Currently, there is a southbound right-turn acceleration lane on US287 with a length of approximately 1680 feet including the bay taper. Based on the westbound right-turn volume and a design speed of 65 mph, the right-turn acceleration lane should be 1680 feet in length; this includes the acceleration length and a bay taper at 25:1. Therefore, the existing northbound right-turn acceleration lane meets/exceeds the requirement. Currently, there is an eastbound left-turn deceleration lane on Mountain Avenue with a length of approximately 670 feet including the bay taper. Based on the eastbound left-turn volume and a design speed of 50 mph, the left-turn deceleration lane should be 500 feet in length; this includes the deceleration length and a bay taper at 15:1. Therefore, the existing eastbound left-turn lane meets/exceeds the requirement. Currently, there is an eastbound right-turn deceleration lane on Mountain Avenue with a length of approximately 420 feet including the bay taper. Based on the eastbound right-turn volume and a design speed of 50 mph, the right-turn deceleration lane should be 500 feet in length; this includes the deceleration length and a taper bay at 15:1. Therefore, the existing eastbound right-turn lane is short by approximately 80 feet. The Tundra Flats development does not add traffic to this movement. Currently, there is a westbound left-turn deceleration lane on Mountain Avenue with a length of approximately 540 feet including the bay taper. Based on the westbound left-turn volume and a design speed of 45 mph, the left-turn deceleration lane should be 435 feet in length; this includes the deceleration length and a bay taper at 13.5:1. Therefore, the existing eastbound left-turn lane meets/exceeds the requirement. Currently, there is a westbound right-turn deceleration lane on Mountain Avenue with a length of approximately 350 feet including the bay taper. Based on the westbound right-turn volume and a design speed of 45 mph, the right-turn deceleration lane should be 435 feet in length; this includes the deceleration length and a bay taper at 13.5:1. Therefore, the existing westbound right-turn deceleration lane is short by approximately 85 feet.

The following applies to the Mountain/Meadowlark intersection using the long range forecasts in Figure 13. Currently, there is an eastbound left-turn deceleration/storage lane on Mountain Avenue with a length of approximately 350 feet including the bay taper. At a speed of 45 mph, the left-turn deceleration lane should be 435 feet in length; this includes the deceleration length and a bay taper at 13.5:1.

Therefore, the existing eastbound left-turn lane is short by approximately 85 feet. The required deceleration lane length can accommodate the long range (2048) single eastbound left-turn lane 95th percentile queue (160 feet) without spilling into the eastbound through lane. An eastbound right-turn lane is required with the Legacy Park development. At a speed of 45 mph, the eastbound right-turn deceleration lane should be 435 feet; this includes the deceleration length and a bay taper at 13.51. Currently, there is a westbound left-turn deceleration lane on Mountain Avenue with a length of approximately 450 feet including the bay taper. Based on the westbound left-turn volume and a design speed of 45 mph, the left-turn deceleration lane should be 435 feet in length; this includes the deceleration length and a bay taper at 13.5:1. Therefore, the existing westbound left-turn lane meets/exceeds the requirement. A westbound right-turn lane is required with this development. At a speed of 45 mph, the westbound right-turn deceleration lane should be 435 feet; this includes the deceleration length and a bay taper at 13.51. Currently, there is a southbound left-turn deceleration/storage lane on Meadowlark Drive with a length of approximately 150 feet. Based on the southbound left-turn volume and LCUASS Figure 8-2, the left-turn storage lane should be approximately 220 feet in length. Therefore, the existing southbound left-turn lane is short by approximately 70 feet. However, with the existing access to Westside Crossing at Tundra Avenue, this length cannot be extended. Based on the northbound left-turn volume and LCUASS Figure 8-2, the northbound left-turn storage lane should be approximately 110 feet in length. The eastbound right-turn lane and the northbound left-turn lane are due to the Legacy Park development and Tundra Flats does not add traffic to these movements.

The following applies to the Mountain/Gateway Park intersection using the long range forecasts in Figure 13. Currently, there is a westbound continuous right-turn acceleration deceleration lane on Mountain Avenue with a deceleration length of approximately 325 feet. Based on a design speed of 45 mph, the right-turn deceleration lane should be 435 feet in length; this includes the deceleration length and a bay taper at 13.5:1. Therefore, the existing westbound right-turn deceleration lane meets/exceeds the requirement. An eastbound right-turn lane is required with the Legacy Park development. At a speed of 45 mph, the eastbound right-turn deceleration lane should be 435 feet; this includes the deceleration length and a bay taper at 13.51. Tundra Flats does not add traffic to this movement.

The following applies to the Mountain/Berthoud Pkwy intersection using the long range forecasts in Figure 13. At a speed of 45 mph, the eastbound and westbound left-turn and right-turn deceleration lanes should be 435 feet in length; this includes the deceleration length and a bay taper at 13.5:1. Based on the southbound left-turn volume and LCUASS Figure 8-2, the left-turn storage lane should be approximately 325 feet in length. Based on the northbound left-turn volume and LCUASS Figure 8-2, the northbound left-turn storage lane should be approximately 175 feet in length.

The geometry at the Meadowlark/Tundra and Gateway Park/Tundra intersections is the ultimate geometry. The only substandard lane is the northbound left-turn lane at the Meadowlark/Tundra intersection. Based on the northbound left-turn volume and LCUASS Figure 8-2, the northbound left-turn storage lane should be approximately 300

feet in length. However, with the access to Westside Crossing at Tundra Avenue, this length cannot be extended. The segment of Meadowlark Drive, between Mountain Avenue and Tundra Avenue, is approximately 290 feet (stop bar to stop bar). This segment cannot accommodate (store) the forecasted southbound and northbound left-turn in vehicles. The driveway to Westside Crossing, across from Tundra Avenue, was approved/granted by Berthoud. The only way to correct this is to move the access to Westside Crossing Further to the north or make the access right-in/right-out.

Operation Analysis

Operation analyses were performed at the US287/Mountain, Mountain/ Meadowlark, Mountain/Gateway Park, Mountain/Berthoud Pkwy, Meadowlark/Tundra, and Gateway Park/Tundra-Park Access intersections. The operations analyses were conducted for the build-out future, reflecting a year 2028 condition, short range future, reflecting a year 2033 condition, and long range future, reflecting a year 2048 condition. The long range (2048) operational analyses are used for planning and informational purposes only.

Using the build-out (2028) background traffic (Figure 8), the US287/Mountain, Mountain/Meadowlark, Mountain/Gateway Park, Mountain/Berthoud Pkwy, Meadowlark/ Tundra, and Gateway Park/Tundra-Park Access intersections operate as indicated in Table 6. Calculation forms for these analyses are provided in Appendix D.

Using the short range (2033) background traffic (Figure 9), the US287/Mountain, Mountain/Meadowlark, Mountain/Gateway Park, Mountain/Berthoud Pkwy, Meadowlark/ Tundra, and Gateway Park/Tundra-Park Access intersections operate as indicated in Table 7. Calculation forms for these analyses are provided in Appendix E.

Using the long range (2048) background traffic (Figure 10), the US287/Mountain, Mountain/Meadowlark, Mountain/Gateway Park, Mountain/Berthoud Pkwy, Meadowlark/ Tundra, and Gateway Park/Tundra-Park Access intersections operate as indicated in Table 8. Calculation forms for these analyses are provided in Appendix F. At the US287/Mountain intersection during the morning and afternoon peak hours, level of service E for some movements and approaches cannot be mitigated regardless of how much green time is given to the minor street approaches. In some instances, the more green time given to the minor street approaches, the worse the delay becomes. This is likely caused by the amount of green time required for US287 and that there is so much more traffic on US287 as compared to Mountain Avenue. The arrival on a green phase for the eastbound and westbound volume is only between 5-21 percent in the morning and afternoon peak hours. This means most vehicles arrive with a red light.

Using the build-out (2028) total traffic (Figure 11), the US287/Mountain, Mountain/ Meadowlark, Mountain/Gateway Park, Mountain/Berthoud Pkwy, Meadowlark/Tundra, and Gateway Park/Tundra-Park Access intersections operate as indicated in Table 9. Calculation forms for these analyses are provided in Appendix G. The key intersections

TABLE 6 Build-Out (2028) Background Peak Hour Operation							
Intersection	**Movement**	**AM**			**PM**		
		LOS	**Delay (secs.)**	**v/c Ratio**	**LOS**	**Delay (secs.)**	**v/c Ratio**
US287/Mountain (signal)	EB LT	C	34.2	0.18	D	41.2	0.41
	EB T	D	51.0	0.84	D	50.6	0.85
	EB RT	A	0.0		A	0.0	
	EB APPROACH	D	47.6		D	48.1	
	WB LT	D	45.1	0.84	D	46.6	0.81
	WB T	D	47.2	0.78	D	45.4	0.85
	WB RT	A	0.0		A	0.0	
	WB APPROACH	D	45.6		D	46.1	
	NB LT	B	19.6	0.28	B	12.6	0.21
	NB T	B	15.2	0.31	C	23.9	0.80
	NB RT	A	0.0		A	0.0	
	NB APPROACH	B	15.6		C	23.4	
	SB LT	B	12.1	0.07	B	17.8	0.25
	SB T	C	26.9	0.84	B	17.6	0.51
	SB RT	A	0.0		A	0.0	
	SB APPROACH	C	26.6		B	17.6	
	OVERALL	C	30.0		C	27.8	
Mountain/Meadowlark (signal)	EB LT	B	19.5	0.34	B	19.1	0.57
	EB T/RT	A	0.7	0.30	A	1.3	0.47
	EB APPROACH	A	8.1		A	9.2	
	WB LT	B	19.7	0.03	C	21.0	0.08
	WB T	B	11.8	0.64	B	12.7	0.59
	WB RT	A	6.4	0.02	A	8.0	0.04
	WB APPROACH	B	11.8		B	13.0	
	NB LT/T/RT	C	22.1	0.06	C	25.0	0.14
	SB LT	C	25.1	0.28	C	28.6	0.36
	SB RT	C	22.0	0.05	C	24.2	0.06
	SB APPROACH	C	24.6		C	27.9	
	OVERALL	B	12.7		B	13.8	
Mountain/Gateway Park (stop sign)	SB RT	B	11.9	0.019	B	11.2	0.004
	OVERALL	A	0.1		A	0.0	

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TABLE 6
Build-out (2028) Background Peak Hour Operation

Intersection	Movement	AM			PM		
		LOS	Delay (secs.)	v/c Ratio	LOS	Delay (secs.)	v/c Ratio
Mountain/Berthoud Pkwy (signal)	EB LT	B	18.8	0.20	B	17.0	0.41
	EB T	C	32.8	0.34	C	62.4	0.40
	EB RT	C	27.6	0.07	C	25.4	0.07
	EB APPROACH	C	28.7		C	26.4	
	WB LT	B	18.8	0.07	B	17.6	0.13
	WB T	C	23.5	0.32	C	23.8	0.41
	WB RT	C	20.8	0.10	C	20.3	0.16
	WB APPROACH	C	22.6		C	22.2	
	NB LT	C	21.4	0.33	C	27.3	0.34
	NB T	C	29.9	0.42	D	41.0	0.60
	NB RT	C	24.9	0.06	C	30.9	0.07
	NB APPROACH	C	26.4		D	36.0	
	SB LT	C	21.5	0.40	C	25.9	0.59
	SB T	C	27.6	0.32	C	34.4	0.50
	SB RT	C	24.9	0.12	C	27.9	0.10
	SB APPROACH	C	24.6		C	30.1	
	OVERALL	C	25.7		C	28.4	
Meadowlark/Tundra (stop sign)	EB LT/T/RT	A	9.8	0.148	B	11.0	0.273
	WB LT/T/RT	C	17.2	0.031	D	27.3	0.007
	NB LT	A	7.9	0.146	A	8.1	0.228
	SB LT	A	0.0	0.00	A	7.5	0.002
	OVERALL	A	5.9		A	6.8	
Gateway Park/Tundra (stop sign)	EB LT/T/RT	A	8.5	0.028	A	9.0	0.004
	WB LT/T/RT	A	0.0	0.00	A	8.5	0.001
	NB LT	A	7.2	0.004	A	7.2	0.004
	SB LT	A	0.0	0.0	A	7.3	0.001
	OVERALL	A	5.2		A	1.8	

TABLE 7 Short Range (2033) Background Peak Hour Operation							
Intersection	Movement	AM			PM		
		LOS	Delay (secs.)	v/c Ratio	LOS	Delay (secs.)	v/c Ratio
US287/Mountain (signal)	EB LT	C	33.0	0.21	D	45.4	0.78
	EB T	D	53.1	0.86	D	51.3	0.86
	EB RT	A	0.0		A	0.0	
	EB APPROACH	D	48.5		D	49.3	
	WB LT	D	43.0	0.87	D	46.3	0.76
	WB T	D	44.3	0.80	D	46.3	0.69
	WB RT	A	0.0		A	0.0	
	WB APPROACH	D	43.3		D	46.3	
	NB LT	C	25.5	0.46	B	14.6	0.23
	NB T	B	17.5	0.36	C	30.4	0.84
	NB RT	A	0.0		A	0.0	
	NB APPROACH	B	18.4		C	29.3	
	SB LT	B	13.8	0.09	C	22.6	0.34
	SB T	D	43.9	0.98	B	19.7	0.54
	SB RT	A	0.0		A	0.0	
	SB APPROACH	D	43.2		B	19.9	
	OVERALL	D	38.7		C	31.5	
Mountain/Meadowlark (signal)	EB LT	C	21.9	0.37	C	22.8	0.63
	EB T/RT	A	0.9	0.35	A	1.9	0.56
	EB APPROACH	A	8.4		B	10.3	
	WB LT	B	19.7	0.03	C	21.0	0.08
	WB T	B	13.9	0.72	B	15.5	0.71
	WB RT	A	6.4	0.02	A	7.9	0.02
	WB APPROACH	B	13.9		B	15.6	
	NB LT/T/RT	C	22.1	0.06	C	25.1	0.14
	SB LT	C	25.2	0.28	C	28.6	0.36
	SB T/RT	C	22.1	0.06	C	24.2	0.06
	SB APPROACH	C	24.7		C	27.9	
	OVERALL	B	13.6		B	14.8	
Mountain/Gateway (stop sign)	NB RT	B	11.9	0.061	B	13.4	0.050
	SB RT	B	12.5	0.023	B	11.9	0.004
	OVERALL	A	0.5		A	0.2	

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TABLE 7
Short Range (2033) Background Peak Hour Operation

Intersection	Movement	AM			PM		
		LOS	Delay (secs.)	v/c Ratio	LOS	Delay (secs.)	v/c Ratio
Mountain/Berthoud Pkwy (signal)	EB LT	C	20.1	0.26	C	22.0	0.55
	EB T	D	35.2	0.41	C	33.1	0.55
	EB RT	C	28.5	0.07	C	24.3	0.07
	EB APPROACH	C	30.7		C	28.7	
	WB LT	C	20.2	0.10	C	22.3	0.22
	WB T	C	25.8	0.37	C	32.4	0.58
	WB RT	C	22.3	0.11	C	25.7	0.21
	WB APPROACH	C	24.6		C	29.6	
	NB LT	C	20.6	0.40	C	22.8	0.33
	NB T	C	39.6	0.44	D	42.9	0.65
	NB RT	C	23.9	0.05	C	30.9	0.07
	NB APPROACH	C	25.6		D	35.4	
	SB LT	C	20.9	0.42	C	25.8	0.51
	SB T	C	28.1	0.36	D	44.9	0.70
	SB RT	C	24.9	0.12	C	31.7	0.13
	SB APPROACH	C	24.7		D	35.9	
	OVERALL	C	26.5		C	32.2	
Meadowlark/Tundra-Westgate Access (stop sign)	EB LT/T/RT	A	9.8	0.149	B	11.1	0.273
	WB LT/T/RT	C	16.4	0.032	D	27.5	0.007
	NB LT	A	7.9	0.147	A	8.1	0.228
	SB LT	A	0.0	0.00	A	7.5	0.002
	OVERALL	A	5.8		A	6.8	
Gateway Park/Tundra-Park Access (stop sign)	EB LT/T/RT	A	8.6	0.003	A	9.0	0.004
	WB LT/T/RT	A	0.0	0.00	A	8.5	0.001
	NB LT	A	7.2	0.001	A	7.2	0.004
	SB LT	A	0.0	0.00	A	7.3	0.001
	OVERALL	A	1.5		A	1.6	

TABLE 8
Long Range (2048) Background Peak Hour Operation

Intersection	Movement	AM			PM		
		LOS	Delay (secs.)	v/c Ratio	LOS	Delay (secs.)	v/c Ratio
US287/Mountain (signal)	EB LT	E	60.2	0.65	E	74.1	0.78
	EB T	D	54.5	0.78	E	61.9	0.70
	EB RT	A	0.0		A	0.0	
	EB APPROACH	E	55.9		E	65.9	
	WB LT	E	65.5	0.89	E	65.9	0.87
	WB T	D	42.6	0.53	E	69.5	0.93
	WB RT	A	0.0		A	0.0	
	WB APPROACH	E	58.1		E	67.6	
	NB LT	E	77.4	0.76	E	67.0	0.78
	NB T	B	15.7	0.37	D	43.1	0.97
	NB RT	A	0.0		A	0.0	
	NB APPROACH	C	23.8		D	45.3	
	SB LT	E	59.8	0.56	E	57.1	0.67
	SB T	D	45.2	0.99	C	22.2	0.63
	SB RT	A	0.0		A	0.0	
	SB APPROACH	D	45.7		C	27.0	
	OVERALL	D	44.2		D	45.6	
Mountain/Meadowlark (signal)	EB LT	B	18.4	0.31	B	34.5	0.64
	EB T	B	15.2	0.37	A	21.0	0.66
	EB RT	A	0.0		A	0.0	
	EB APPROACH	B	16.2		A	25.6	
	WB LT	B	18.9	0.11	C	30.4	0.43
	WB T	A	3.2	0.61	D	52.2	0.95
	WB RT	A	0.15	0.01	B	11.2	0.03
	WB APPROACH	A	4.3		D	49.1	
	NB LT	D	42.1	0.37	D	37.2	0.25
	NB T	D	47.5	0.06	C	34.1	0.08
	NB RT	D	47.7	0.07	C	34.4	0.09
	NB APPROACH	D	43.1		D	36.1	
	SB LT	D	41.3	0.40	C	28.4	0.36
	SB T/RT	D	48.8	0.22	C	24.2	0.07
	SB APPROACH	D	43.3		C	27.6	
	OVERALL	B	18.4		C	34.3	

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TABLE 8
Long Range (2048) Background Peak Hour Operation

Intersection	Movement	AM			PM		
		LOS	Delay (secs.)	v/c Ratio	LOS	Delay (secs.)	v/c Ratio
Mountain/Gateway Park (signal)	EB LT	A	6.6	0.03	A	7.1	0.06
	EB T	A	1.5	0.51	B	16.3	0.68
	EB RT	A	0.0	0.02	A	8.5	0.05
	EB APPROACH	A	1.6		B	15.4	
	WB LT	A	6.0	0.07	B	10.6	0.20
	WB T	A	1.3	0.49	A	1.8	0.60
	WB RT	A	0.0	0.01	A	0.0	0.01
	WB APPROACH	A	1.7		A	2.7	
	NB LT	C	30.7	0.20	D	35.4	0.32
	NB T/RT	C	28.1	0.04	C	32.6	0.20
	NB APPROACH	C	30.3		C	34.4	
	SB LT	C	29.0	0.07	C	33.6	0.05
	SB T/RT	C	27.9	0.03	C	30.3	0.03
	SB APPROACH	C	28.7		C	32.3	
	OVERALL	A	4.3		B	12.3	
Mountain/Berthoud Pkwy (signal)	EB LT	B	17.5	0.32	C	29.6	0.75
	EB T	B	12.3	0.53	B	18.2	0.76
	EB RT	A	8.9	0.08	A	10.0	0.06
	EB APPROACH	B	13.3		C	21.5	
	WB LT	B	18.4	0.17	C	22.0	0.40
	WB T	C	27.1	0.51	D	36.0	0.71
	WB RT	C	21.4	0.13	C	25.1	0.21
	WB APPROACH	C	24.8		C	31.4	
	NB LT	C	20.1	0.31	C	23.4	0.27
	NB T	C	30.3	0.54	C	34.7	0.56
	NB RT	C	23.9	0.13	C	27.0	0.12
	NB APPROACH	C	26.6		C	31.1	
	SB LT	C	20.1	0.50	C	22.4	0.59
	SB T	C	25.4	0.40	C	28.0	0.46
	SB RT	C	22.0	0.14	C	22.9	0.11
	SB APPROACH	C	22.8		C	25.1	
	OVERALL	C	21.8		C	26.8	
Meadowlark/Tundra-Westgate Access (stop sign)	EB LT/T/RT	A	9.6	0.134	B	10.4	0.231
	WB LT/T/RT	B	13.1	0.034	C	23.1	0.026
	NB LT	A	7.8	0.128	A	7.9	0.203
	SB LT	A	0.0	0.00	A	7.4	0.003
	OVERALL	A	6.1		A	6.9	
Gateway Park/Tundra-Park Access (stop sign)	EB LT/T/RT	A	8.7	0.011	A	9.3	0.006
	WB LT/T/RT	A	0.0	0.00	A	0.0	0.00
	NB LT	A	0.0	0.00	A	7.3	0.003
	SB LT	A	0.0	0.00	A	0.0	0.00
	OVERALL	A	1.2		A	0.7	

TABLE 9
Build-out (2028) Total Peak Hour Operation

Intersection	Movement	AM			PM		
		LOS	Delay (secs.)	v/c Ratio	LOS	Delay (secs.)	v/c Ratio
US287/Mountain (signal)	EB LT	C	33.9	0.17	D	40.7	0.40
	EB T	D	51.1	0.85	D	50.8	0.86
	EB RT	A	0.0		A	0.0	
	EB APPROACH	D	47.7		D	48.1	
	WB LT	D	45.1	0.85	D	46.9	0.82
	WB T	D	46.8	0.78	D	45.2	0.85
	WB RT	A	0.0		A	0.0	
	WB APPROACH	D	45.5		D	46.2	
	NB LT	C	20.1	0.28	B	12.9	0.22
	NB T	B	15.7	0.32	C	25.2	0.81
	NB RT	A	0.0		A	0.0	
	NB APPROACH	B	16.1		C	24.6	
	SB LT	B	12.3	0.08	B	18.9	0.32
	SB T	C	27.8	0.85	B	18.0	0.52
	SB RT	A	0.0		A	0.0	
	SB APPROACH	C	27.5		B	18.0	
	OVERALL	C	30.6		C	26.5	
Mountain/Meadowlark (signal)	EB LT	C	20.9	0.38	C	24.1	0.65
	EB T/RT	A	0.7	0.30	A	4.7	0.47
	EB APPROACH	A	9.0		B	13.9	
	WB LT	B	19.7	0.03	C	21.2	0.09
	WB T	B	12.6	0.68	B	13.3	0.62
	WB RT	A	6.5	0.03	A	8.0	0.05
	WB APPROACH	B	12.5		B	13.5	
	NB LT/T/RT	C	22.1	0.06	C	25.0	0.14
	SB LT	C	25.9	0.32	C	29.4	0.41
	SB T/RT	C	22.2	0.07	C	24.4	0.08
	SB APPROACH	C	25.2		C	28.6	
	OVERALL	B	13.7		B	16.5	
Mountain/Gateway Park (stop sign)	SB RT	B	12.3	0.071	B	11.5	0.037
	OVERALL	A	0.4		A	0.2	

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TABLE 9
Build-out (2028) Total Peak Hour Operation

Intersection	Movement	AM			PM		
		LOS	Delay (secs.)	v/c Ratio	LOS	Delay (secs.)	v/c Ratio
Mountain/Berthoud Pkwy (signal)	EB LT	B	19.1	0.22	B	17.3	0.43
	EB T	C	33.2	0.35	C	32.8	0.42
	EB RT	C	27.9	0.08	C	25.6	0.08
	EB APPROACH	C	29.0		C	26.7	
	WB LT	B	19.1	0.07	B	17.8	0.14
	WB T	C	24.0	0.34	C	24.4	0.43
	WB RT	C	21.0	0.10	C	20.5	0.16
	WB APPROACH	C	23.0		C	22.8	
	NB LT	C	21.3	0.34	C	27.2	0.36
	NB T	C	29.8	0.42	D	41.0	0.60
	NB RT	C	24.8	0.06	C	30.9	0.07
	NB APPROACH	C	26.2		D	35.8	
	SB LT	C	21.4	0.40	C	26.1	0.58
	SB T	C	27.6	0.32	C	34.8	0.51
	SB RT	C	25.0	0.13	C	28.4	0.12
	SB APPROACH	C	24.6		C	30.4	
	OVERALL	C	25.9		C	26.6	
Meadowlark/Tundra-Westgate Access (stop sign)	EB LT/T/RT	A	9.8	0.148	B	11.0	0.273
	WB LT/T/RT	C	19.1	0.162	D	33.6	0.214
	NB LT	A	7.9	0.146	A	8.1	0.228
	SB LT	A	0.0	0.00	A	7.6	0.003
	OVERALL	A	6.6		A	7.4	
Gateway Park/Tundra-Park Access (stop sign)	EB LT/T/RT	A	8.5	0.028	A	8.6	0.025
	WB LT/T/RT	A	0.0	0.00	A	8.5	0.001
	NB LT	A	7.2	0.004	A	7.3	0.018
	SB LT	A	0.0	0.00	A	7.3	0.001
	OVERALL	A	5.2		A	4.5	

meet the Berthoud level of service standards in the peak hours with signal control at the Mountain/Meadowlark intersection and the proposed geometry (Figure 14) at the Mountain/Meadowlark, Mountain/Berthoud Pkwy and Meadowlark/Tundra intersections.

Using the short range (2033) total traffic (Figure 12), the US287/Mountain, Mountain/Meadowlark, Mountain/Gateway Park, Mountain/Berthoud Pkwy, Meadowlark/ Tundra, and Gateway Park/Tundra-Park Access intersections operate as indicated in Table 10 (control and geometry shown in Figure 15). Calculation forms for these analyses are provided in Appendix H. The key intersections meet the Berthoud level of service standards in the peak hours with signal control at the Mountain/Meadowlark intersection and the proposed geometry at the Mountain/Meadowlark, Mountain/Gateway Park, Mountain/Berthoud, and Meadowlark/Tundra intersections.

Using the long range (2048) total traffic (Figure 13), the US287/Mountain, Mountain/Meadowlark, Mountain/Gateway Park, Mountain/Berthoud Pkwy, Meadowlark/ Tundra, and Gateway Park/Tundra-Park Access intersections operate as indicated in Table 11 (control and geometry shown in Figure 16). Calculation forms for these analyses are provided in Appendix I. The key intersections meet the Berthoud level of service standards in the peak hours with signal control at the Mountain/Meadowlark and Mountain/Gateway Park intersections and the proposed geometry at the Mountain/Meadowlark, Mountain/Gateway Park, Mountain/Berthoud, and Meadowlark/Tundra intersections, except at the US287/Mountain intersection. The Mountain/Meadowlark intersection will operate acceptably with dual eastbound left-turn lanes or a single eastbound left-turn lane. At the US287/Mountain intersection during the morning and afternoon peak hours, level of service E for some movements and approaches cannot be mitigated regardless of how much green time is given to the minor street approaches. In some instances, the more green time given to the minor street approaches, the worse the delay becomes. This is likely caused by the amount of green time required for US287 and that there is so much more traffic on US287 as compared to Mountain Avenue. The arrival on a green phase for the eastbound and westbound volume is only between 5-21 percent in the morning and afternoon peak hours. This means most vehicles arrive with a red light.

Pedestrian/Bicycle Facilities

The Tundra Flats will add pedestrian facilities (sidewalks/paths) along the north side of Mountain Avenue, the south side of Tundra Avenue, the east side of Meadowlark Drive, and the west side of Gateway Park Boulevard. These improvements will provide safe pedestrian facilities within Tundra Flats.

TABLE 10 Short Range (2033) Total Peak Hour Operation							
Intersection	Movement	AM			PM		
		LOS	Delay (secs.)	v/c Ratio	LOS	Delay (secs.)	v/c Ratio
US287/Mountain (signal)	EB LT	C	32.7	0.21	D	42.1	0.78
	EB T	D	53.2	0.86	D	53.5	0.87
	EB RT	A	0.0		A	0.0	
	EB APPROACH	D	48.5		D	50.1	
	WB LT	D	42.8	0.88	D	46.3	0.77
	WB T	D	43.8	0.80	D	45.8	0.68
	WB RT	A	0.0		A	0.0	
	WB APPROACH	D	43.1		D	46.0	
	NB LT	C	25.7	0.47	B	16.0	0.24
	NB T	B	18.1	0.37	D	36.9	0.86
	NB RT	A	0.0		A	0.0	
	NB APPROACH	B	18.9		D	35.4	
	SB LT	B	14.1	0.10	C	25.0	0.37
	SB T	D	46.8	0.99	C	21.6	0.55
	SB RT	A	0.0		A	0.0	
	SB APPROACH	D	46.0		C	21.8	
	OVERALL	D	40.1		C	34.9	
Mountain/Meadowlark (signal)	EB LT	C	23.7	0.42	C	25.7	0.72
	EB T/RT	A	0.9	0.35	A	1.8	0.56
	EB APPROACH	A	9.6		B	12.0	
	WB LT	B	19.7	0.03	C	21.0	0.08
	WB T	B	15.2	0.76	B	16.4	0.73
	WB RT	A	6.5	0.03	A	8.0	0.04
	WB APPROACH	B	15.0		B	16.3	
	NB LT/T/RT	C	22.1	0.06	C	25.1	0.14
	SB LT	C	26.0	0.33	C	29.4	0.41
	SB T/RT	C	22.3	0.07	C	24.4	0.08
	SB APPROACH	C	25.3		C	28.6	
	OVERALL	B	14.8		B	16.2	

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TABLE 10
Short Range (2033) Total Peak Hour Operation

Intersection	Movement	AM			PM		
		LOS	Delay (secs.)	v/c Ratio	LOS	Delay (secs.)	v/c Ratio
Mountain/Gateway (stop sign)	NB RT	B	12.1	0.063	B	13.7	0.051
	SB RT	B	13.0	0.079	B	12.2	0.042
	OVERALL	A	0.7		A	0.4	
Mountain/Berthoud Pkwy (signal)	EB LT	C	20.3	0.27	C	22.7	0.61
	EB T	D	35.7	0.43	C	33.6	0.56
	EB RT	C	28.8	0.08	C	24.4	0.08
	EB APPROACH	C	31.0		C	29.3	
	WB LT	C	20.6	0.10	C	22.5	0.14
	WB T	C	26.3	0.38	D	33.4	0.67
	WB RT	C	22.5	0.11	C	25.9	0.21
	WB APPROACH	C	25.0		C	30.5	
	NB LT	C	20.5	0.41	C	23.1	0.27
	NB T	C	29.5	0.44	D	42.9	0.65
	NB RT	C	23.9	0.05	C	30.9	0.07
	NB APPROACH	C	25.5		D	35.3	
	SB LT	C	20.9	0.42	C	25.8	0.50
	SB T	C	28.1	0.36	D	44.9	0.67
	SB RT	C	24.9	0.12	C	32.0	0.17
	SB APPROACH	C	24.7		D	35.8	
	OVERALL	C	26.7		C	32.5	
Meadowlark/Tundra-Westgate Access (stop sign)	EB LT/T/RT	A	9.8	0.149	B	11.1	0.274
	WB LT/T/RT	C	19.3	0.164	D	29.8	0.109
	NB LT	A	7.9	0.147	A	8.1	0.228
	SB LT	A	0.0	0.00	A	7.6	0.003
	OVERALL	A	6.5		A	6.8	
Gateway Park/Tundra-Park Access (stop sign)	EB LT/T/RT	A	8.5	0.032	A	8.5	0.025
	WB LT/T/RT	A	0.0	0.00	A	8.4	0.001
	NB LT	A	7.3	0.007	A	7.2	0.007
	SB LT	A	0.0	0.00	A	7.2	0.001
	OVERALL	A	5.5		A	5.6	

TABLE 11 Long Range (2048) Total Peak Hour Operation							
Intersection	Movement	AM			PM		
		LOS	Delay (secs.)	v/c Ratio	LOS	Delay (secs.)	v/c Ratio
US287/Mountain (signal)	EB LT	E	60.6	0.65	E	74.1	0.79
	EB T	D	54.9	0.78	E	63.4	0.81
	EB RT	A	0.0		A	0.0	
	EB APPROACH	E	56.3		E	66.9	
	WB LT	E	67.6	0.90	E	66.4	0.88
	WB T	D	42.4	0.53	E	69.4	0.93
	WB RT	A	0.0		A	0.0	
	WB APPROACH	E	59.7		E	67.8	
	NB LT	E	78.6	0.77	E	67.0	0.78
	NB T	B	16.0	0.37	D	43.1	0.97
	NB RT	A	0.0		A	0.0	
	NB APPROACH	C	24.3		D	45.3	
	SB LT	E	60.7	0.59	E	76.2	0.77
	SB T	D	47.2	1.00	C	22.5	0.63
	SB RT	A	0.0		A	0.0	
	SB APPROACH	D	47.7		C	28.8	
	OVERALL	D	45.8		D	46.3	
Mountain/Meadowlark (signal) Single EB left-turn lane	EB LT	B	18.6	0.33	C	20.7	0.59
	EB T	B	14.7	0.36	A	1.6	0.58
	EB RT	A	0.0		A	0.0	
	EB APPROACH	B	16.1		A	9.2	
	WB LT	B	18.7	0.06	C	26.9	0.26
	WB T	A	3.6	0.63	B	17.2	0.70
	WB RT	A	0.2	0.02	A	5.0	0.04
	WB APPROACH	A	4.1		B	18.4	
	NB LT	D	43.1	0.38	D	42.2	0.42
	NB T	D	48.7	0.06	D	49.1	0.10
	NB RT	D	48.9	0.07	D	49.4	0.11
	NB APPROACH	D	44.2		D	43.8	
	SB LT	D	41.3	0.45	D	41.5	0.47
	SB T/RT	D	49.4	0.26	D	48.6	0.17
	SB APPROACH	D	43.5		D	42.8	
	OVERALL	B	18.8		B	19.7	

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TABLE 11
Long Range (2048) Total Peak Hour Operation

Intersection	Movement	AM			PM		
		LOS	Delay (secs.)	v/c Ratio	LOS	Delay (secs.)	v/c Ratio
Mountain/Meadowlark (signal) Dual EB left-turn lane	EB LT	D	54.4	0.49	D	37.6	0.34
	EB T	B	15.2	0.37	A	1.7	0.69
	EB RT	A	0.0		B	0.0	
	EB APPROACH	C	28.4		B	15.9	
	WB LT	B	19.3	0.06	C	24.4	0.43
	WB T	A	4.3	0.64	B	12.0	0.99
	WB RT	A	0.4	0.02	A	3.4	0.05
	WB APPROACH	A	4.8		B	13.8	
	NB LT	D	42.4	0.35	D	41.5	0.26
	NB T	D	47.9	0.06	D	48.2	0.08
	NB RT	D	48.2	0.07	D	48.5	0.09
	NB APPROACH	D	43.4		D	43.1	
	SB LT	D	40.6	0.44	D	40.8	0.38
	SB T/RT	D	46.8	0.16	D	47.7	0.08
	SB APPROACH	D	41.8		D	42.0	
	OVERALL	C	22.9		C	21.3	
Mountain/Gateway (stop sign)	NB RT	B	12.8	0.074	B	14.6	0.066
	SB RT	B	12.8	0.054	C	16.7	0.216
	OVERALL	A	0.6		A	1.0	

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TABLE 11
Long Range (2048) Total Peak Hour Operation

Intersection	Movement	AM			PM		
		LOS	Delay (secs.)	v/c Ratio	LOS	Delay (secs.)	v/c Ratio
Mountain/Berthoud Pkwy (signal)	EB LT	C	23.9	0.31	C	26.3	0.62
	EB T	D	45.6	0.47	D	51.9	0.66
	EB RT	D	35.3	0.08	C	34.3	0.06
	EB APPROACH	D	39.4		D	43.0	
	WB LT	C	24.3	0.25	C	26.8	0.51
	WB T	C	31.0	0.43	D	35.4	0.59
	WB RT	C	25.7	0.11	C	27.2	0.18
	WB APPROACH	C	29.0		C	32.1	
	NB LT	C	27.4	0.38	C	32.8	0.41
	NB T	D	39.2	0.50	D	48.4	0.62
	NB RT	C	32.1	0.12	D	37.7	0.13
	NB APPROACH	C	34.6		D	42.7	
	SB LT	C	27.7	0.51	C	33.1	0.66
	SB T	D	35.0	0.39	D	41.2	0.54
	SB RT	C	30.6	0.13	C	33.2	0.12
	SB APPROACH	C	31.5		D	37.1	
	OVERALL	C	33.8		D	38.6	
Meadowlark/Tundra-Westgate Access (stop sign)	EB LT/T/RT	A	9.7	0.138	B	10.6	0.239
	WB LT/T/RT	C	16.7	0.146	D	26.6	0.181
	NB LT	A	7.8	0.129	A	8.0	0.205
	SB LT	A	0.0	0.00	A	7.6	0.004
	OVERALL	A	6.3		A	6.9	
Gateway Park/Tundra-Park Access (stop sign)	EB LT/T/RT	A	8.6	0.036	A	8.6	0.026
	WB LT/T/RT	A	0.0	0.00	A	0.0	0.00
	NB LT	A	7.3	0.007	A	7.3	0.016
	SB LT	A	0.0	0.00	A	0.0	0.00
	OVERALL	A	5.0		A	3.8	

IV. CONCLUSIONS

This study assessed the impacts of the Tundra Flats development on the street system in the vicinity of the proposed development in the build-out (2028), short range (2033) and long range (2048) future. As a result of this analysis, the following is concluded:

- The Tundra Flats development is feasible from a traffic engineering standpoint. The Tundra Flats will generate 1,156 daily trip ends, 90 morning peak hour trip ends, and 115 afternoon peak hour trip ends.

- Currently, the US287/Mountain, Mountain/Meadowlark, Mountain/Gateway Park, Mountain/Berthoud Pkwy, Meadowlark/Tundra, and Gateway Park/Tundra-Park Access intersections operate acceptably with existing control and geometry. The Mountain/Meadowlark intersection operates acceptably with signal control.

- A signal at the Mountain/Meadowlark intersection is warranted based on the "Transportation Impact Study with Comprehensive Signal Warrant Analysis Westside Crossing – Berthoud, CO" dated January 2, 2023. The signal at the Mountain/Meadowlark intersection is designed and is planned with Westside Crossing. The Mountain/Gateway Park intersection will not meet intersection spacing and will not be signalized.

- In the build-out (2028) future, given development of the Tundra Flats and an increase in background traffic, the US287/Mountain, Mountain/Meadowlark, Mountain/Gateway Park, Mountain/Berthoud Pkwy, Meadowlark/Tundra, and Gateway Park/Tundra-Park Access intersections meet the Berthoud level of service standards in the peak hours with signal control at the Mountain/Meadowlark intersection and the proposed geometry (Figure 14) at the Mountain/Meadowlark and Mountain/Berthoud Pkwy intersections.

- In the short range (2033) future, given development of the Tundra Flats and an increase in background traffic, the US287/Mountain, Mountain/Meadowlark, Mountain/Gateway Park, Mountain/Berthoud Pkwy, Meadowlark/Tundra, and Gateway Park/Tundra-Park Access intersections meet the Berthoud level of service standards in the peak hours with signal control at the Mountain/Meadowlark intersection and the proposed geometry (Figure 15) at the Mountain/Meadowlark, Mountain/Gateway Park, and Mountain/Berthoud Pkwy intersections.

- In the long range (2048) future, given development of the Tundra Flats and an increase in background traffic, the US287/Mountain, Mountain/Meadowlark, Mountain/Gateway Park, Mountain/Berthoud Pkwy, Meadowlark/Tundra, and Gateway Park/Tundra-Park Access intersections meet the Berthoud level of service standards in the peak hours with signal control at the Mountain/Meadowlark intersection and the proposed geometry (Figure 16) at the US287/Mountain, Mountain/Meadowlark, Mountain/Gateway Park, and Mountain/ Berthoud Pkwy intersections, except at the US287/Mountain intersection. At the

US287/Mountain intersection during the morning and afternoon peak hours, level of service E for some movement and approaches cannot be mitigated regardless of how much green time is given to the minor street approaches. In some instances, the more green time given to the minor street approaches, the worse the delay becomes. This is likely caused by the amount of green time required for US287 and that there is so much more traffic on US287 as compared to Mountain Avenue. The arrival on a green phase for the eastbound and westbound volume is only between 5-21 percent in the morning and afternoon peak hours. This means most vehicles arrive with a red light. The Mountain/Meadowlark intersection will operate acceptably with dual eastbound left-turn lanes or a single eastbound left-turn lane.

- It is recommended, at the Mountain/Meadowlark intersection that a single eastbound left-turn be approved. This will eliminate the need for two northbound receiving lanes on Meadowlark Drive.

- The Tundra Flats will add pedestrian facilities (sidewalks/paths) along the north side of Mountain Avenue, the south side of Tundra Avenue, the east side of Meadowlark Drive, and the east side of Gateway Park Boulevard. These improvements will provide safe pedestrian facilities within Tundra Flats.

- The build-out (2028), short range (2033), long range (2048) intersection geometry and control is shown in Figures 14, 15, and 16, respectively. The segment of Meadowlark Drive, between Mountain Avenue and Tundra Avenue, is approximately 290 feet (stop bar to stop bar). This segment cannot accommodate (store) the forecasted southbound and northbound left-turn in vehicles. The driveway to Westside Crossing, across from Tundra Avenue, was approved/granted by Berthoud. The only way to correct this is to move the access to Westside Crossing Further to the north or make the access right-in/right-out.

- The Recommended Improvements Summary is provided in Table 12.

TABLE 12 Recommended Improvements Summary			
Improvement Description and Location	**Responsible Party**		
	Applicant	**Background**	**Master Planned**
BUILD-OUT (2028)			
On-site infrastructure	X		
Westbound right-turn lane at the Mountain/Meadowlark intersection	X		
Northbound and southbound left-turn lanes and eastbound right-turn lane at the Mountain/Berthoud Pkwy intersection		X (Legacy Park)	
SHORT RANGE (2033)			
South leg of the Mountain/Gateway Park intersection		X (Legacy Park)	
Eastbound right-turn lane at the Mountain/Gateway Park intersection		X (Legacy Park)	
LONG RANGE (2048)			
Northbound, southbound, and eastbound dual left-turn lanes and an eastbound through lane at the US287/Mountain intersection		X	
Northbound left-turn and right-turn lanes and eastbound right-turn lane at the Mountain/Meadowlark intersection		X (Legacy Park)	

APPENDIX A

Attachment A
Transportation Impact Study Base Assumptions

Project Information		
Project Name	Berthoud Gateway	
Project Location	North of Mountain Avenue (SH56), between Meadowlark and Gateway Park	
TIS Assumptions		
Type of Study	Full: Yes	Intermediate:
	MTIS:	Memo:
Study Area Boundaries	North: Tundra	South: Mountain (SH56)
	East: Gateway Park	West: Meadowlark
Study Years Build-Out 2028	Short Range: 2033	Long Range: 2048
Future Traffic Growth Rate	OTIS SH56B 20-yr 1.21, 2%/year on others, plus known developments	
Study Intersections	1. Mountain/Meadowlark	5. Mountain/Berthoud Pkwy
	2. Mountain.Gateway Park	6. Mountain/US287
	3. Meadowlark/Tundra	7.
	4. Gateway/Tundra	8.
Time Period for Study	AM: 7:00-9:00 / PM: 4:00-6:00	Sat Noon:
Trip Generation Rates	Per ITE (Attached)	
Trip Adjustment Factors	Passby: N/A	Captive Market: N/A
Overall Trip Distribution	SEE ATTACHED SKETCH	
Mode Split Assumptions	All Auto	
Design Vehicle Information	Passenger Car	
Committed Roadway Improvements	Signal at Mountain/Meadowlark	
Other Traffic Studies	Westgate, Legacy Park (S of SH56)	
Areas Requiring Special Study		

Date: July 1, 2025

Traffic Engineer: Delich Associates

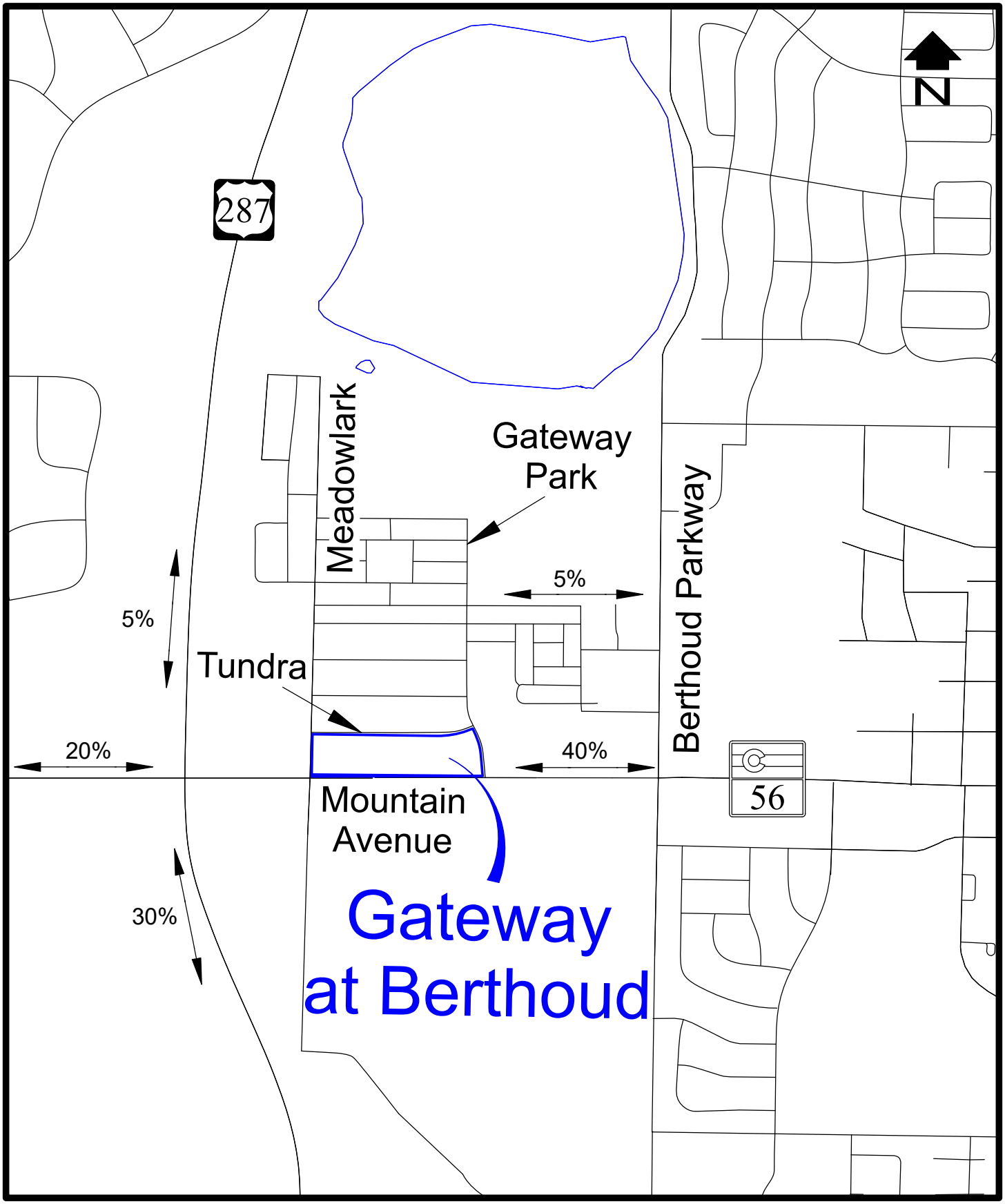
Local Entity Engineer: 

Attachment B
Transportation Impact Study
Pedestrian Analysis Worksheet

		DESTINATION						
Origin (project land use)		Rec.	Res.←	Inst.	Ofc/Bus.	Com.	Ind.	Other (Specify)
	Recreation							
	1) Residential		X	X		X		
	Institution (school, church, civic)							
	Office/Business							
	Commercial							
	Industrial							
	Other (specify)							

INSTRUCTIONS:
Identify the pedestrian destinations within 1320' (1.5 miles for schools) of the project boundary in the spaces above. The pedestrian Level of Service for the facility/corridor linking these destinations to the project site will be based on the directness, continuity, types of street crossings, walkway surface condition, visual interest/amenity, and security of the selected route(s).

← 12 Dwelling units or more.



SCALE: 1"=1000'

SITE LOCATION/TRIP DISTRIBUTION

Figure 1

DEVELOPMENT SUMMARY

TOTAL SITE = 6.67 ACRES
RESIDENTIAL: 4 BLDGS X 32 = 128 UNITS
1 MIXED USE = 20 UNITS
TOTAL UNITS = 148

RETAIL / COMMERCIAL = 3,700 SF

REQUIRED PARKING = 159 SPACES
PROVIDED PARKING = 161 SPACES

BLOCK 4, GATEWAY PARK REPLAT TWO

BLOCK 4, GATEWAY PARK REPLAT TWO

TUNDRA AVENUE
(60' ROW)

GATEWAY PARK BLVD
(86' ROW)

TRACT B, GATEWAY PARK

MEADOWLARK DRIVE
(82' ROW)

OFF SITE IMPROVEMENTS

OFF SITE IMPROVEMENTS

OFF SITE IMPROVEMENTS

LANDSCAPE / OPEN SPACE

LANDSCAPE / OPEN SPACE

TRASH

TRASH

TRASH

26' DRIVE AISLE

26' DRIVE AISLE

30.0

30.0

8' WALK

8' WALK

BIKE RACKS

BIKE RACKS

MULTI-FAMILY APARTMENTS
32 UNITS
32 PKG SPACES

MULTI-FAMILY APARTMENTS
32 UNITS
32 PKG SPACES

MULTI-FAMILY APARTMENTS
32 UNITS
32 PKG SPACES

MULTI-FAMILY APARTMENTS
32 UNITS
32 PKG SPACES

PLAZA

PLAZA

PLAZA

MIXED USE
APARTMENTS
20 UNITS
20 PKG SPACES
+
RETAIL/COMM
3,700 SF
11 PKG SPACES

10' WALK

6' WALK

CLOSE CURB CUT

POND +/- 18,189 SF

10' TRAIL

20' MAX BLDG SETBACK
14' MIN BLDG SETBACK
Sewer & Drainage Easement per Reception No. 20170016550

LANDSCAPE / OPEN SPACE

20' MAX BLDG SETBACK
14' MIN BLDG SETBACK
5' SETBACK

LANDSCAPE / OPEN SPACE

PROPERTY LINE

OUTLOT 3

MOUNTAIN AVENUE
(ROW VARIES)

KWIK KORNER ANNEXATION
(TOWN OF BERTHOUD)

RECEPTION NO. 20120052469
(UNINCORPORATED LARIMER COUNTY)

RECEPTION NO. 20080052547
(UNINCORPORATED LARIMER COUNTY)

TRACT A, LUDLOW FARMS CONVEYANCE PLAT
(TOWN OF BERTHOUD)

LOT 1,
LUDLOW FARMS CONVEYANCE PLAT
(TOWN OF BERTHOUD)

TRACT A, LUDLOW FARMS CONVEYANCE PLAT
(TOWN OF BERTHOUD)

LOT 1,
LUDLOW FARMS CONVEYANCE PLAT
(TOWN OF BERTHOUD)

TRACT A,
LUDLOW FARMS
CONVEYANCE PLAT
(TOWN OF BERTHOUD)

LAI DESIGN GROUP
Design for when it Matters

#241041

GATEWAY PARK

CONCEPT PLAN

Berthoud, Colorado ~ June 26, 2025

Architecture ■ Planning & Entitlements ■ Visual Media ■ Landscape Architecture ■ Real Estate Advisory

www.LAIdesigngroup.com
303.734.1777 - Corporate

NORTH

0' 40' 80'
GRAPHIC SCALE: 1" = 40'

TABLE 2 Trip Generation									
Land Use	ITE Code	Proposed Size	Weekday Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Multifamily Housing (Low Rise)	220	148 D.U.	1,024	16	53	69	53	31	84
Strip Retail Plaza (<40k)	822	3.70 KSF	386	5	4	9	19	19	38
Total Trips			1,410	21	57	78	72	50	122

APPENDIX B

DELICH ASSOCIATES
2272 GLEN HAVEN DRIVE
LOVELAND, CO 80538
Phone: (970) 669-2061

TABULAR SUMMARY OF VEHICLE COUNTS

Date: 7/16/2025 Observer: Vickie

Day: Wednesday Jurisdiction: Berthoud

Intersection: US287/Mountain (SH56)

R = right turn
S = straight
L = left turn

Time	Northbound: US287				Southbound: US287				Total	Eastbound: Mountain				Westbound: Mountain				Total	Total
Begins	L	S	R	Total	L	S	R	Total	north/south	L	S	R	Total	L	S	R	Total	east/west	All
7:00	3	94	14	111	1	276	16	293	404	11	19	20	50	57	10	4	71	121	525
7:15	5	119	16	140	3	294	7	304	444	9	27	15	51	78	21	4	103	154	598
7:30	14	128	18	160	4	351	15	370	530	24	18	22	64	69	23	5	97	161	691
7:45	11	128	33	172	2	374	11	387	559	11	40	19	70	73	22	3	98	168	727
8:00	14	131	21	166	6	314	15	335	501	7	23	12	42	83	23	8	114	156	657
8:15	10	112	23	145	4	287	12	303	448	13	42	15	70	71	32	6	109	179	627
8:30	13	103	24	140	6	273	18	297	437	17	17	18	52	90	21	8	119	171	608
8:45	7	114	20	141	8	225	16	249	390	15	26	19	60	41	19	4	64	124	514
7:30-8:30	49	499	95	643	16	1326	53	1395	2038	55	123	68	246	296	100	22	418	664	2702
PHF	0.88	0.95	0.72	0.93	0.67	0.89	0.88	0.9	0.91	0.57	0.73	0.77	0.88	0.89	0.78	0.69	0.92	0.93	0.93
4:00	11	250	48	309	11	224	13	248	557	13	31	15	59	65	36	8	109	168	725
4:15	12	322	61	395	8	234	14	256	651	17	37	26	80	42	28	5	75	155	806
4:30	17	327	62	406	10	243	16	269	675	25	36	17	78	44	31	8	83	161	836
4:45	12	348	56	416	7	200	13	220	636	26	46	7	79	46	31	4	81	160	796
5:00	25	302	66	393	5	197	28	230	623	17	31	13	61	49	34	5	88	149	772
5:15	16	352	71	439	8	205	13	226	665	20	44	17	81	55	38	4	97	178	843
5:30	16	349	62	427	12	211	18	241	668	19	51	14	84	41	36	6	83	167	835
5:45	16	279	59	354	12	162	12	186	540	13	47	12	72	38	28	3	69	141	681
4:30-5:30	70	1329	255	1654	30	845	70	945	2599	88	157	54	299	194	134	21	349	648	3247
PHF	0.7	0.94	0.9	0.94	0.75	0.87	0.63	0.88	0.96	0.85	0.85	0.79	0.92	0.88	0.88	0.66	0.9	0.91	0.96

DELICH ASSOCIATES
2272 GLEN HAVEN DRIVE
LOVELAND, CO 80538
Phone: (970) 669-2061

TABULAR SUMMARY OF VEHICLE COUNTS

Date: 6/3/2025 Observer: Vickie
Day: Tuesday Jurisdiction: Berthoud

Intersection: Mountain (SH56)/Meadowlark

R = right turn
S = straight
L = left turn

Time	Northbound: Meadowlark				Southbound: Meadowlark				Total	Eastbound: Mountain				Westbound: Mountain				Total	Total
Begins	L	S	R	Total	L	S	R	Total	north/south	L	S	R	Total	L	S	R	Total	east/west	All
7:00	4	0	0	4	2	1	9	12	16	3	32	5	40	7	59	2	68	108	124
7:15	4	0	0	4	2	1	9	12	16	0	41	4	45	3	74	3	80	125	141
7:30	2	0	0	2	2	1	15	18	20	3	42	4	49	2	80	0	82	131	151
7:45	7	1	2	10	3	0	7	10	20	3	59	2	64	1	89	2	92	156	176
8:00	1	0	1	2	4	0	7	11	13	7	51	4	62	4	88	3	95	157	170
8:15	4	0	5	9	8	0	12	20	29	4	40	6	50	3	83	2	88	138	167
8:30	3	0	3	6	4	1	8	13	19	7	51	6	64	4	73	2	79	143	162
8:45	5	1	3	9	4	0	7	11	20	2	66	7	75	10	53	2	65	140	160
7:45-8:45	15	1	11	27	19	1	34	54	81	21	201	18	240	12	333	9	354	594	675
PHF	0.54	0.25	0.55	0.68	0.59	0.25	0.71	0.68	0.7	0.75	0.85	0.75	0.94	0.75	0.94	0.75	0.93	0.95	0.96
4:00	8	0	10	18	6	0	4	10	28	8	80	7	95	6	74	4	84	179	207
4:15	8	0	8	16	2	1	4	7	23	14	95	10	119	2	75	1	78	197	220
4:30	11	0	7	18	5	0	6	11	29	14	89	14	117	5	93	2	100	217	246
4:45	5	1	9	15	5	0	6	11	26	12	71	12	95	8	65	5	78	173	199
5:00	6	1	13	20	7	0	1	8	28	15	98	5	118	12	76	1	89	207	235
5:15	4	0	3	7	1	0	3	4	11	17	100	6	123	2	68	7	77	200	211
5:30	4	1	5	10	5	3	5	13	23	12	109	3	124	5	57	3	65	189	212
5:45	5	2	5	12	1	0	6	7	19	9	72	9	90	6	52	5	63	153	172
4:15-5:15	30	2	37	69	19	1	17	37	106	55	353	41	449	27	309	9	345	794	900
PHF	0.68	0.5	0.71	0.86	0.68	0.25	0.71	0.84	0.91	0.92	0.9	0.73	0.94	0.56	0.83	0.45	0.86	0.91	0.91

DELICH ASSOCIATES
2272 GLEN HAVEN DRIVE
LOVELAND, CO 80538
Phone: (970) 669-2061

TABULAR SUMMARY OF VEHICLE COUNTS

Date: 6/4/2025 Observer: Vickie

Day: Wednesday Jurisdiction: Berthoud

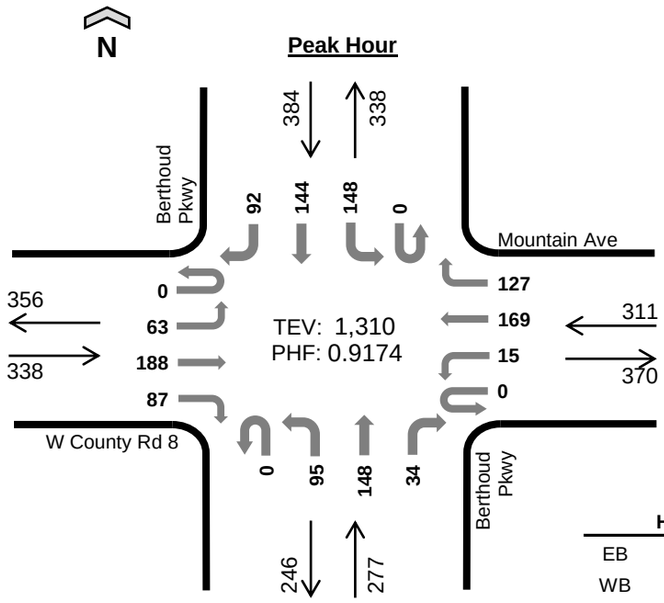
Intersection: Mountain (SH56)/Gateway Park

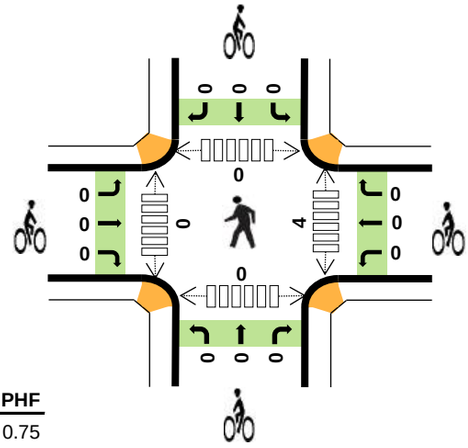
R = right turn
S = straight
L = left turn

Time	Northbound:				Southbound:			Gateway Park	Total	Eastbound:			Mountain	Westbound:			Mountain	Total	Total
Begins	L	S	R	Total	L	S	R	Total	north/south	L	S	R	Total	L	S	R	Total	east/west	All
7:00				0	0		2	2	2	0	28		28		72	0	72	100	102
7:15				0	1		3	4	4	0	36		36		106	2	108	144	148
7:30				0	3		2	5	5	0	55		55		86	2	88	143	148
7:45				0	1		3	4	4	0	72		72		93	2	95	167	171
8:00				0	1		1	2	2	1	51		52		75	3	78	130	132
8:15				0	0		2	2	2	0	54		54		78	2	80	134	136
8:30				0	1		2	3	3	0	68		68		71	0	71	139	142
8:45				0	2		3	5	5	0	68		68		92	4	96	164	169
7:15-8:15	0	0	0	0	6	0	9	15	15	1	214	0	215	0	360	9	369	584	599
PHF	n/a	n/a	n/a	n/a	0.5	n/a	0.75	0.75	0.75	0.25	0.74	n/a	0.75	n/a	0.85	0.75	0.85	0.87	0.88
4:00				0	2		5	7	7	0	90		90		108	4	112	202	209
4:15				0	0		0	0	0	0	106		106		80	6	86	192	192
4:30				0	1		1	2	2	0	103		103		100	8	108	211	213
4:45				0	0		0	0	0	0	91		91		75	8	83	174	174
5:00				0	0		1	1	1	0	123		123		74	12	86	209	210
5:15				0	0		2	2	2	0	102		102		70	4	74	176	178
5:30				0	0		1	1	1	1	117		118		77	3	80	198	199
5:45				0	0		0	0	0	0	104		104		69	4	73	177	177
4:15-5:15	0	0	0	0	1	0	2	3	3	0	423	0	423	0	329	34	363	786	789
PHF	n/a	n/a	n/a	n/a	0.25	n/a	0.5	0.38	0.38	n/a	0.86	n/a	0.86	n/a	0.82	0.71	0.84	0.93	0.93

Berthoud Pkwy
Mountain Ave

Date: 11/21/2024
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM





	HV%	PHF
EB	5%	0.75
WB	6%	0.85
NB	4%	0.77
SB	4%	0.78
TOTAL	5%	0.92

Peak Hour Count Summaries

Peak Hour Interval Start		W County Rd 8 Eastbound				Mountain Ave Westbound				Berthoud Pkwy Northbound				Berthoud Pkwy Southbound				15-min Total	Rolling Hour Total
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
8:00 AM		0	6	42	19	0	5	44	23	0	25	30	6	0	39	56	28	323	0
8:15 AM		0	13	48	52	0	5	28	29	0	24	39	8	0	45	45	21	357	0
8:30 AM		0	15	52	6	0	2	40	43	0	23	52	15	0	34	25	24	331	0
8:45 AM		0	29	46	10	0	3	57	32	0	23	27	5	0	30	18	19	299	1,310
Pk Hr	All	0	63	188	87	0	15	169	127	0	95	148	34	0	148	144	92	1,310	
	HV	0	2	8	7	0	4	7	8	0	2	6	3	0	5	8	1	61	
	HV%	-	3%	4%	8%	-	27%	4%	6%	-	2%	4%	9%	-	3%	6%	1%	5%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) E	W	N	S	Total
8:00 AM	5	7	4	3	*19*	0	0	0	0	*0*	1	0	0	0	*1*
8:15 AM	7	3	1	6	*17*	0	0	0	0	*0*	3	0	0	0	*3*
8:30 AM	1	6	6	2	*15*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	4	3	0	3	*10*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	17	19	11	14	*61*	0	0	0	0	*0*	4	0	0	0	*4*

TJ Wethington
(720) 646-1008

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Count Summaries - All Vehicles

Interval Start	W County Rd 8				Mountain Ave				Berthoud Pkwy				Berthoud Pkwy				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	17	36	7	0	4	43	12	0	7	10	2	0	21	13	30	202	0
7:15 AM	0	14	13	3	0	6	44	15	0	19	35	0	0	26	16	25	216	0
7:30 AM	0	27	30	2	0	6	65	18	0	19	31	3	0	18	14	37	270	0
7:45 AM	0	29	35	4	0	4	57	23	0	15	22	2	0	28	34	36	289	977
8:00 AM	**0**	**6**	**42**	**19**	**0**	**5**	**44**	**23**	**0**	**25**	**30**	**6**	**0**	**39**	**56**	**28**	**323**	**1,098**
8:15 AM	**0**	**13**	**48**	**52**	**0**	**5**	**28**	**29**	**0**	**24**	**39**	**8**	**0**	**45**	**45**	**21**	**357**	**1,239**
8:30 AM	**0**	**15**	**52**	**6**	**0**	**2**	**40**	**43**	**0**	**23**	**52**	**15**	**0**	**34**	**25**	**24**	**331**	**1,300**
8:45 AM	**0**	**29**	**46**	**10**	**0**	**3**	**57**	**32**	**0**	**23**	**27**	**5**	**0**	**30**	**18**	**19**	**299**	**1,310**
Count Total	0	150	302	103	0	35	378	195	0	155	246	41	0	241	221	220	2,287	
Pk Hr All	**0**	**63**	**188**	**87**	**0**	**15**	**169**	**127**	**0**	**95**	**148**	**34**	**0**	**148**	**144**	**92**	**1,310**	
Pk Hr HV	**0**	**2**	**8**	**7**	**0**	**4**	**7**	**8**	**0**	**2**	**6**	**3**	**0**	**5**	**8**	**1**	**61**	
Pk Hr HV%	**-**	**3%**	**4%**	**8%**	**-**	**27%**	**4%**	**6%**	**-**	**2%**	**4%**	**9%**	**-**	**3%**	**6%**	**1%**	**5%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	1	1	0	2	*4*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	1	3	1	5	*10*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	4	4	2	3	*13*	0	0	0	0	*0*	1	0	0	0	*1*
7:45 AM	1	7	2	5	*15*	0	0	0	0	*0*	1	0	0	0	*1*
8:00 AM	**5**	**7**	**4**	**3**	**19**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**
8:15 AM	**7**	**3**	**1**	**6**	**17**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**3**
8:30 AM	**1**	**6**	**6**	**2**	**15**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	**4**	**3**	**0**	**3**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Count Total	24	34	16	29	*103*	0	0	0	0	*0*	6	0	0	0	*6*
Peak Hour	**17**	**19**	**11**	**14**	***61***	**0**	**0**	**0**	**0**	***0***	**4**	**0**	**0**	**0**	**4**

Count Summaries - Heavy Vehicles

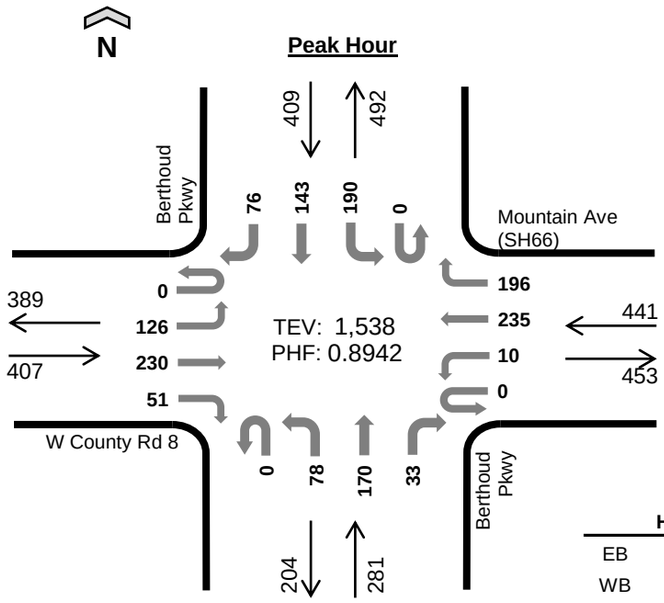
Interval Start	W County Rd 8				Mountain Ave				Berthoud Pkwy				Berthoud Pkwy				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	1	0	0	0	0	0	1	0	0	0	0	0	0	2	0	4	0
7:15 AM	0	0	1	0	0	1	0	2	0	0	1	0	0	2	1	2	10	0
7:30 AM	0	0	4	0	0	0	3	1	0	1	1	0	0	0	0	3	13	0
7:45 AM	0	0	1	0	0	1	4	2	0	2	0	0	0	2	3	0	15	42
8:00 AM	**0**	**1**	**3**	**1**	**0**	**1**	**5**	**1**	**0**	**2**	**2**	**0**	**0**	**1**	**2**	**0**	**19**	**57**
8:15 AM	**0**	**0**	**2**	**5**	**0**	**1**	**1**	**1**	**0**	**0**	**1**	**0**	**0**	**2**	**3**	**1**	**17**	**64**
8:30 AM	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**5**	**0**	**0**	**3**	**3**	**0**	**1**	**1**	**0**	**15**	**66**
8:45 AM	**0**	**1**	**2**	**1**	**0**	**1**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**10**	**61**
Count Total	0	3	14	7	0	6	14	14	0	5	8	3	0	9	14	6	103	
Pk Hr Heavy	**0**	**2**	**8**	**7**	**0**	**4**	**7**	**8**	**0**	**2**	**6**	**3**	**0**	**5**	**8**	**1**	**61**	

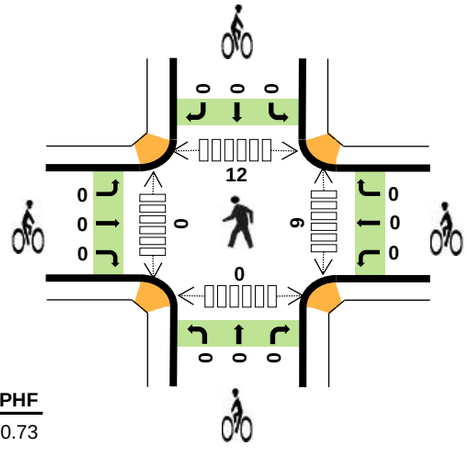
Count Summaries - Bikes

Interval Start	W County Rd 8				Mountain Ave				Berthoud Pkwy				Berthoud Pkwy				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

Berthoud Pkwy
Mountain Ave (SH66)

Date: 11/12/2024
Count Period: 3:00 PM to 6:00 PM
Peak Hour: 3:45 PM to 4:45 PM





	HV%	PHF
EB	2%	0.73
WB	4%	0.84
NB	1%	0.74
SB	1%	0.92
TOTAL	2%	0.89

Peak Hour Count Summaries

Peak Hour Interval Start		W County Rd 8 Eastbound				Mountain Ave (SH66) Westbound				Berthoud Pkwy Northbound				Berthoud Pkwy Southbound				15-min Total	Rolling Hour Total
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:45 PM		0	35	76	29	0	1	43	51	0	17	42	15	0	42	52	17	420	0
4:00 PM		0	38	70	5	0	3	66	52	0	34	51	10	0	54	33	14	430	0
4:15 PM		0	20	40	8	0	3	74	54	0	15	35	6	0	50	30	29	364	0
4:30 PM		0	33	44	9	0	3	52	39	0	12	42	2	0	44	28	16	324	1,538
Pk Hr	All	0	126	230	51	0	10	235	196	0	78	170	33	0	190	143	76	1,538	
	HV	0	2	3	3	0	3	10	5	0	0	2	0	0	3	2	0	33	
	HV%	-	2%	1%	6%	-	30%	4%	3%	-	0%	1%	0%	-	2%	1%	0%	2%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) E	W	N	S	Total
3:45 PM	4	4	0	1	*9*	0	0	0	0	*0*	2	0	1	0	*3*
4:00 PM	3	8	1	2	*14*	0	0	0	0	*0*	6	0	6	0	*12*
4:15 PM	1	2	1	1	*5*	0	0	0	0	*0*	1	0	5	0	*6*
4:30 PM	0	4	0	1	*5*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	8	18	2	5	*33*	0	0	0	0	*0*	9	0	12	0	*21*

Count Summaries - All Vehicles

Interval Start	W County Rd 8				Mountain Ave (SH66)				Berthoud Pkwy				Berthoud Pkwy				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	25	46	6	0	4	35	33	0	11	23	3	0	47	17	22	272	0
3:15 PM	0	41	35	9	0	3	50	37	0	10	24	4	0	32	27	39	311	0
3:30 PM	0	23	42	12	0	3	41	36	0	18	28	0	0	46	30	20	299	0
3:45 PM	**0**	**35**	**76**	**29**	**0**	**1**	**43**	**51**	**0**	**17**	**42**	**15**	**0**	**42**	**52**	**17**	**420**	**1,302**
4:00 PM	**0**	**38**	**70**	**5**	**0**	**3**	**66**	**52**	**0**	**34**	**51**	**10**	**0**	**54**	**33**	**14**	**430**	**1,460**
4:15 PM	**0**	**20**	**40**	**8**	**0**	**3**	**74**	**54**	**0**	**15**	**35**	**6**	**0**	**50**	**30**	**29**	**364**	**1,513**
4:30 PM	**0**	**33**	**44**	**9**	**0**	**3**	**52**	**39**	**0**	**12**	**42**	**2**	**0**	**44**	**28**	**16**	**324**	**1,538**
4:45 PM	0	48	46	8	0	2	40	35	0	15	41	0	0	40	26	17	318	1,436
5:00 PM	0	63	53	10	0	3	45	34	0	11	32	3	0	40	25	25	344	1,350
5:15 PM	0	66	64	13	0	3	53	36	0	15	26	2	0	34	30	16	358	1,344
5:30 PM	0	56	69	14	0	2	53	36	0	13	26	5	0	36	23	9	342	1,362
5:45 PM	0	33	58	10	0	1	41	37	0	13	30	3	0	25	36	14	301	1,345
Count Total	0	481	643	133	0	31	593	480	0	184	400	53	0	490	357	238	4,083	
Pk Hr All	**0**	**126**	**230**	**51**	**0**	**10**	**235**	**196**	**0**	**78**	**170**	**33**	**0**	**190**	**143**	**76**	**1,538**	
Pk Hr HV	**0**	**2**	**3**	**3**	**0**	**3**	**10**	**5**	**0**	**0**	**2**	**0**	**0**	**3**	**2**	**0**	**33**	
Pk Hr HV%	**-**	**2%**	**1%**	**6%**	**-**	**30%**	**4%**	**3%**	**-**	**0%**	**1%**	**0%**	**-**	**2%**	**1%**	**0%**	**2%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	**Total**	EB	WB	NB	SB	**Total**	E	W	N	S	**Total**
3:00 PM	1	0	1	0	*2*	1	0	0	0	*1*	0	0	1	0	*1*
3:15 PM	2	3	1	6	*12*	0	0	0	0	*0*	2	0	1	0	*3*
3:30 PM	2	2	1	3	*8*	0	0	0	0	*0*	2	0	2	0	*4*
3:45 PM	**4**	**4**	**0**	**1**	**9**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**1**	**0**	**3**
4:00 PM	**3**	**8**	**1**	**2**	**14**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**6**	**0**	**12**
4:15 PM	**1**	**2**	**1**	**1**	**5**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**5**	**0**	**6**
4:30 PM	**0**	**4**	**0**	**1**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	3	1	1	0	*5*	0	0	0	0	*0*	0	0	1	0	*1*
5:00 PM	2	1	0	0	*3*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 PM	3	1	0	0	*4*	0	0	0	0	*0*	0	0	1	0	*1*
5:30 PM	1	2	0	0	*3*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	1	0	*1*
Count Total	23	28	6	14	*71*	1	0	0	0	*1*	13	0	19	0	*32*
Peak Hour	**8**	**18**	**2**	**5**	***33***	**0**	**0**	**0**	**0**	***0***	**9**	**0**	**12**	**0**	**21**

Count Summaries - Heavy Vehicles

Interval Start	W County Rd 8				Mountain Ave (SH66)				Berthoud Pkwy				Berthoud Pkwy				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0
3:15 PM	0	1	1	0	0	0	1	2	0	0	0	1	0	0	1	5	12	0
3:30 PM	0	0	1	1	0	0	1	1	0	0	1	0	0	1	1	1	8	0
3:45 PM	**0**	**1**	**0**	**3**	**0**	**0**	**1**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**9**	**31**
4:00 PM	**0**	**0**	**3**	**0**	**0**	**1**	**6**	**1**	**0**	**0**	**1**	**0**	**0**	**1**	**1**	**0**	**14**	**43**
4:15 PM	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**5**	**36**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**1**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**5**	**33**
4:45 PM	0	2	1	0	0	0	0	1	0	0	1	0	0	0	0	0	5	29
5:00 PM	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	3	18
5:15 PM	0	1	2	0	0	0	0	1	0	0	0	0	0	0	0	0	4	17
5:30 PM	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	3	15
5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	11
Count Total	0	7	12	4	0	3	13	12	0	0	5	1	0	4	4	6	71	
Pk Hr Heavy	**0**	**2**	**3**	**3**	**0**	**3**	**10**	**5**	**0**	**0**	**2**	**0**	**0**	**3**	**2**	**0**	**33**	

Count Summaries - Bikes

Interval Start	W County Rd 8				Mountain Ave (SH66)				Berthoud Pkwy				Berthoud Pkwy				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

DELICH ASSOCIATES
2272 GLEN HAVEN DRIVE
LOVELAND, CO 80538
Phone: (970) 669-2061

TABULAR SUMMARY OF VEHICLE COUNTS

Date: 6/3/2025 Observer: Vickie
Day: Tuesday Jurisdiction: Berthoud

Intersection: Meadowlark/Tundra

R = right turn
S = straight
L = left turn

Time	Northbound: Meadowlark				Southbound: Meadowlark				Total	Eastbound:				Westbound: Tundra				Total	Total
Begins	L	S	R	Total	L	S	R	Total	north/south	L	S	R	Total	L	S	R	Total	east/west	All
7:00		4	1	5	1	10		11	16				0	2		1	3	3	19
7:15		1	2	3	0	8		8	11				0	4		1	5	5	16
7:30		3	0	3	0	21		21	24				0	0		0	0	0	24
7:45		12	0	12	0	12		12	24				0	1		0	1	1	25
8:00		10	1	11	0	13		13	24				0	2		0	2	2	26
8:15		7	1	8	0	18		18	26				0	2		0	2	2	28
8:30		9	0	9	0	13		13	22				0	1		0	1	1	23
8:45		5	0	5	0	10		10	15				0	1		0	1	1	16
7:30-8:30	0	32	2	34	0	64	0	64	98	0	0	0	0	5	0	0	5	5	103
PHF	n/a	0.67	0.5	0.71	n/a	0.76	n/a	0.76	0.94	n/a	n/a	n/a	n/a	0.63	n/a	n/a	0.63	0.63	0.92
4:00		12	0	12	0	10		10	22				0	0		0	0	0	22
4:15		15	0	15	1	7		8	23				0	0		1	1	1	24
4:30		14	2	16	0	11		11	27				0	0		0	0	0	27
4:45		18	1	19	0	10		10	29				0	1		0	1	1	30
5:00		17	2	19	1	12		13	32				0	0		0	0	0	32
5:15		22	3	25	1	9		10	35				0	0		0	0	0	35
5:30		16	0	16	0	12		12	28				0	0		0	0	0	28
5:45		15	1	16	0	7		7	23				0	0		0	0	0	23
4:45-5:45	0	73	6	79	2	43	0	45	124	0	0	0	0	1	0	0	1	1	125
PHF	n/a	0.83	0.5	0.79	0.5	0.9	n/a	0.87	0.89	n/a	n/a	n/a	n/a	0.25	n/a	n/a	0.25	0.25	0.89

APPENDIX C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	182	68	283	96	21	49	499	106	18	1326	53
Future Volume (veh/h)	55	182	68	283	96	21	49	499	106	18	1326	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	58	192	0	298	101	0	52	525	0	19	1396	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	281	238		380	148		235	1926		523	1857	
Arrive On Green	0.16	0.13	0.00	0.04	0.03	0.00	0.04	0.54	0.00	0.02	0.52	0.00
Sat Flow, veh/h	1781	1870	1585	3456	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	58	192	0	298	101	0	52	525	0	19	1396	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	2.6	9.0	0.0	7.7	4.8	0.0	1.2	7.1	0.0	0.4	27.8	0.0
Cycle Q Clear(g_c), s	2.6	9.0	0.0	7.7	4.8	0.0	1.2	7.1	0.0	0.4	27.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	281	238		380	148		235	1926		523	1857	
V/C Ratio(X)	0.21	0.81		0.79	0.68		0.22	0.27		0.04	0.75	
Avail Cap(c_a), veh/h	281	384		442	426		271	1926		595	1857	
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.94	0.94	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.0	38.2	0.0	42.3	42.7	0.0	13.8	11.1	0.0	9.6	16.9	0.0
Incr Delay (d2), s/veh	0.4	6.3	0.0	7.4	5.1	0.0	0.5	0.3	0.0	0.0	2.9	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	4.3	0.0	3.7	2.4	0.0	0.4	2.4	0.0	0.1	9.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.3	44.5	0.0	49.7	47.8	0.0	14.3	11.4	0.0	9.7	19.8	0.0
LnGrp LOS	C	D		D	D		B	B		A	B	
Approach Vol, veh/h		250			399			577			1415	
Approach Delay, s/veh		41.9			49.3			11.7			19.6	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.4	53.3	14.4	16.0	8.1	51.5	18.7	11.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	36.5	11.5	18.5	5.5	36.5	9.5	20.5
Max Q Clear Time (g_c+I1), s	2.4	9.1	9.7	11.0	3.2	29.8	4.6	6.8
Green Ext Time (p_c), s	0.0	3.1	0.2	0.5	0.0	4.4	0.0	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	24.5
HCM 7th LOS	C

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

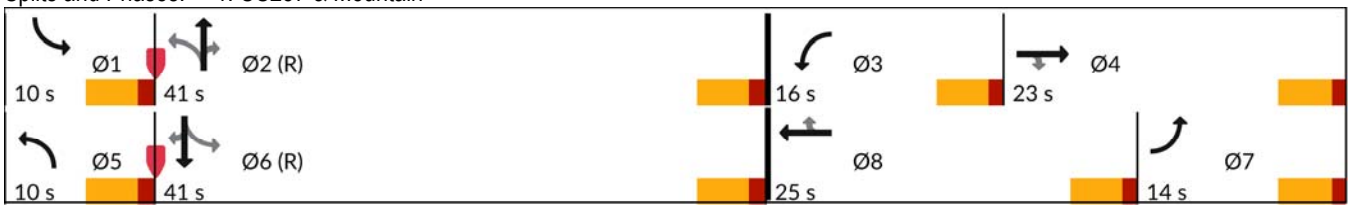
Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBT	NBL	SBTL	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	10	41	16	23	10	41	14	25
Maximum Split (%)	11.1%	45.6%	17.8%	25.6%	11.1%	45.6%	15.6%	27.8%
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Don't Walk (s)		11		11		11		11
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	10	51	67	0	10	76	51
End Time (s)	10	51	67	0	10	51	0	76
Yield/Force Off (s)	5.5	46.5	62.5	85.5	5.5	46.5	85.5	71.5
Yield/Force Off 170(s)	5.5	35.5	62.5	74.5	5.5	35.5	85.5	60.5
Local Start Time (s)	80	0	41	57	80	0	66	41
Local Yield (s)	85.5	36.5	52.5	75.5	85.5	36.5	75.5	61.5
Local Yield 170(s)	85.5	25.5	52.5	64.5	85.5	25.5	75.5	50.5

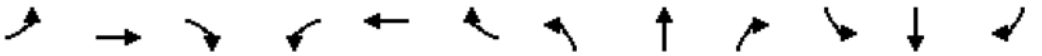
Intersection Summary

Cycle Length	90
Control Type	Actuated-Coordinated
Natural Cycle	90

Offset: 10 (11%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Splits and Phases: 1: US287 & Mountain





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	58	192	72	298	101	22	52	525	112	19	1396	56
v/c Ratio	0.21	0.65	0.20	0.70	0.36	0.06	0.25	0.28	0.12	0.04	0.80	0.06
Control Delay (s/veh)	33.9	45.8	2.4	60.7	56.8	2.8	13.2	14.3	0.7	10.3	26.0	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	33.9	45.8	2.4	60.7	56.8	2.8	13.2	14.3	0.7	10.3	26.0	0.1
Queue Length 50th (ft)	28	103	0	62	42	0	13	75	0	4	375	0
Queue Length 95th (ft)	62	164	8	138	115	m8	32	147	6	16	#559	0
Internal Link Dist (ft)		1325			870			1386			1925	
Turn Bay Length (ft)	650		400	540		320	1000		1000	1000		1000
Base Capacity (vph)	286	382	426	438	435	467	204	1849	914	491	1753	876
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.50	0.17	0.68	0.23	0.05	0.25	0.28	0.12	0.04	0.80	0.06

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	159	54	196	136	21	70	1329	257	30	845	70
Future Volume (veh/h)	88	159	54	196	136	21	70	1329	257	30	845	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	92	166	0	204	142	0	73	1384	0	31	880	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	166	212		275	186		425	2051		254	1992	
Arrive On Green	0.09	0.11	0.00	0.13	0.17	0.00	0.05	0.58	0.00	0.03	0.56	0.00
Sat Flow, veh/h	1781	1870	1585	3456	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	92	166	0	204	142	0	73	1384	0	31	880	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	4.4	7.8	0.0	5.1	6.5	0.0	1.5	24.3	0.0	0.7	13.0	0.0
Cycle Q Clear(g_c), s	4.4	7.8	0.0	5.1	6.5	0.0	1.5	24.3	0.0	0.7	13.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	166	212		275	186		425	2051		254	1992	
V/C Ratio(X)	0.55	0.78		0.74	0.76		0.17	0.67		0.12	0.44	
Avail Cap(c_a), veh/h	166	384		326	405		451	2051		309	1992	
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.94	0.94	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	39.0	38.8	0.0	38.1	36.5	0.0	8.3	13.2	0.0	10.8	11.6	0.0
Incr Delay (d2), s/veh	3.9	6.2	0.0	6.9	6.0	0.0	0.2	1.8	0.0	0.2	0.7	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	3.7	0.0	2.2	3.0	0.0	0.5	8.0	0.0	0.2	4.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	42.9	45.0	0.0	45.0	42.5	0.0	8.5	15.0	0.0	11.0	12.3	0.0
LnGrp LOS	D	D		D	D		A	B		B	B	
Approach Vol, veh/h		258			346			1457			911	
Approach Delay, s/veh		44.3			44.0			14.6			12.2	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.2	56.4	11.7	14.7	8.7	55.0	12.9	13.4
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	39.5	8.5	18.5	5.5	39.5	7.5	19.5
Max Q Clear Time (g_c+I1), s	2.7	26.3	7.1	9.8	3.5	15.0	6.4	8.5
Green Ext Time (p_c), s	0.0	7.2	0.1	0.4	0.0	5.6	0.0	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	19.9
HCM 7th LOS	B

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBT	NBL	SBTL	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	10	44	13	23	10	44	12	24
Maximum Split (%)	11.1%	48.9%	14.4%	25.6%	11.1%	48.9%	13.3%	26.7%
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Don't Walk (s)		11		11		11		11
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	10	54	67	0	10	78	54
End Time (s)	10	54	67	0	10	54	0	78
Yield/Force Off (s)	5.5	49.5	62.5	85.5	5.5	49.5	85.5	73.5
Yield/Force Off 170(s)	5.5	38.5	62.5	74.5	5.5	38.5	85.5	62.5
Local Start Time (s)	80	0	44	57	80	0	68	44
Local Yield (s)	85.5	39.5	52.5	75.5	85.5	39.5	75.5	63.5
Local Yield 170(s)	85.5	28.5	52.5	64.5	85.5	28.5	75.5	52.5

Intersection Summary

Cycle Length	90
Control Type	Actuated-Coordinated
Natural Cycle	80

Offset: 10 (11%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Splits and Phases: 1: US287 & Mountain



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	92	166	56	204	142	22	73	1384	268	31	880	73
v/c Ratio	0.49	0.58	0.16	0.64	0.47	0.06	0.22	0.73	0.28	0.16	0.49	0.08
Control Delay (s/veh)	46.4	42.8	1.0	64.2	46.1	0.7	10.3	21.5	2.9	10.5	17.2	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	46.4	42.8	1.0	64.2	46.1	0.7	10.3	21.5	2.9	10.5	17.2	0.2
Queue Length 50th (ft)	50	89	0	51	64	0	16	336	0	7	176	0
Queue Length 95th (ft)	98	144	0	90	93	m2	38	#514	42	20	249	0
Internal Link Dist (ft)		1325			870			1386			1925	
Turn Bay Length (ft)	650		400	540		320	1000		1000	1000		1000
Base Capacity (vph)	194	382	426	324	408	446	339	1886	968	199	1793	891
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.43	0.13	0.63	0.35	0.05	0.22	0.73	0.28	0.16	0.49	0.08

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	267	18	12	349	9	16	1	11	45	1	35
Future Vol, veh/h	21	267	18	12	349	9	16	1	11	45	1	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	360	-	-	450	-	-	-	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	278	19	13	364	9	17	1	11	47	1	36

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	373	0	0	297	0	0	720	729	288	716	734	368
Stage 1	-	-	-	-	-	-	331	331	-	393	393	-
Stage 2	-	-	-	-	-	-	389	398	-	322	341	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1186	-	-	1264	-	-	343	350	752	345	347	677
Stage 1	-	-	-	-	-	-	682	645	-	632	606	-
Stage 2	-	-	-	-	-	-	635	603	-	690	639	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1186	-	-	1264	-	-	314	340	752	330	338	677
Mov Cap-2 Maneuver	-	-	-	-	-	-	314	340	-	330	338	-
Stage 1	-	-	-	-	-	-	670	633	-	625	600	-
Stage 2	-	-	-	-	-	-	594	597	-	665	627	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.56	0.26	14.48	14.64
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	409	1186	-	-	1264	-	-	330	659
HCM Lane V/C Ratio	0.071	0.018	-	-	0.01	-	-	0.142	0.057
HCM Ctrl Dly (s/v)	14.5	8.1	-	-	7.9	-	-	17.7	10.8
HCM Lane LOS	B	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	0.5	0.2

Intersection												
Int Delay, s/veh	2.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	55	350	41	27	306	9	30	2	37	19	1	17
Future Vol, veh/h	55	350	41	27	306	9	30	2	37	19	1	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	360	-	-	450	-	-	-	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	60	385	45	30	336	10	33	2	41	21	1	19

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	346	0	0	430	0	0	924	934	407	907	951	341
Stage 1	-	-	-	-	-	-	528	528	-	401	401	-
Stage 2	-	-	-	-	-	-	396	405	-	507	551	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1213	-	-	1130	-	-	250	266	644	257	260	701
Stage 1	-	-	-	-	-	-	534	528	-	626	601	-
Stage 2	-	-	-	-	-	-	629	598	-	548	516	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1213	-	-	1130	-	-	224	246	644	221	240	701
Mov Cap-2 Maneuver	-	-	-	-	-	-	224	246	-	221	240	-
Stage 1	-	-	-	-	-	-	507	501	-	609	585	-
Stage 2	-	-	-	-	-	-	595	582	-	486	490	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1	0.65	18.31	17.11
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	346	1213	-	-	1130	-	-	221	634
HCM Lane V/C Ratio	0.219	0.05	-	-	0.026	-	-	0.095	0.031
HCM Ctrl Dly (s/v)	18.3	8.1	-	-	8.3	-	-	23	10.9
HCM Lane LOS	C	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0.8	0.2	-	-	0.1	-	-	0.3	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	267	18	12	349	9	16	1	11	45	1	35
Future Volume (veh/h)	21	267	18	12	349	9	16	1	11	45	1	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	22	278	19	12	364	9	17	1	11	47	1	36
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	670	956	65	693	987	24	291	30	158	484	12	439
Arrive On Green	0.05	1.00	1.00	0.03	1.00	1.00	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1781	1731	118	1781	1817	45	804	107	557	1402	43	1549
Grp Volume(v), veh/h	22	0	297	12	0	373	29	0	0	47	0	37
Grp Sat Flow(s),veh/h/ln	1781	0	1849	1781	0	1862	1468	0	0	1402	0	1592
Q Serve(g_s), s	0.5	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0	1.5
Cycle Q Clear(g_c), s	0.5	0.0	0.0	0.3	0.0	0.0	1.5	0.0	0.0	1.8	0.0	1.5
Prop In Lane	1.00		0.06	1.00		0.02	0.59		0.38	1.00		0.97
Lane Grp Cap(c), veh/h	670	0	1021	693	0	1012	479	0	0	484	0	451
V/C Ratio(X)	0.03	0.00	0.29	0.02	0.00	0.37	0.06	0.00	0.00	0.10	0.00	0.08
Avail Cap(c_a), veh/h	777	0	1021	816	0	1012	479	0	0	484	0	451
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.00	0.90	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.3	0.0	0.0	8.7	0.0	0.0	23.5	0.0	0.0	23.7	0.0	23.7
Incr Delay (d2), s/veh	0.0	0.0	0.6	0.0	0.0	1.0	0.2	0.0	0.0	0.4	0.0	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.2	0.1	0.0	0.3	0.5	0.0	0.0	0.8	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	8.4	0.0	0.6	8.7	0.0	1.0	23.7	0.0	0.0	24.1	0.0	24.0
LnGrp LOS	A		A	A		A	C			C		C
Approach Vol, veh/h		319			385			29			84	
Approach Delay, s/veh		1.2			1.3			23.7			24.1	
Approach LOS		A			A			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.8	54.2		30.0	6.6	53.4		30.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	7.5	43.5		25.5	7.5	43.5		25.5				
Max Q Clear Time (g_c+I1), s	2.3	2.0		3.8	2.5	2.0		3.5				
Green Ext Time (p_c), s	0.0	1.7		0.3	0.0	2.2		0.1				
Intersection Summary												
HCM 7th Control Delay, s/veh			4.4									
HCM 7th LOS			A									

Phase Number	1	2	4	5	6	8
Movement	WBL	EBTL	SBTL	EBL	WBTL	NBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	Max	None	C-Max	Max
Maximum Split (s)	12	48	30	12	48	30
Maximum Split (%)	13.3%	53.3%	33.3%	13.3%	53.3%	33.3%
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Don't Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	40	52	10	40	52	10
End Time (s)	52	10	40	52	10	40
Yield/Force Off (s)	47.5	5.5	35.5	47.5	5.5	35.5
Yield/Force Off 170(s)	47.5	84.5	24.5	47.5	84.5	24.5
Local Start Time (s)	78	0	48	78	0	48
Local Yield (s)	85.5	43.5	73.5	85.5	43.5	73.5
Local Yield 170(s)	85.5	32.5	62.5	85.5	32.5	62.5

Intersection Summary

Cycle Length	90	
Control Type	Actuated-Coordinated	
Natural Cycle	55	

Offset: 52 (58%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Splits and Phases: 2: Meadowlark & Mountain





Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT
Lane Group Flow (vph)	22	297	13	373	29	47	37
v/c Ratio	0.04	0.27	0.02	0.35	0.06	0.12	0.08
Control Delay (s/veh)	4.2	5.4	6.0	12.6	17.5	25.1	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	4.2	5.4	6.0	12.6	17.5	25.1	9.0
Queue Length 50th (ft)	2	29	3	86	7	20	0
Queue Length 95th (ft)	m6	69	m7	264	28	47	23
Internal Link Dist (ft)		870		1236	331		243
Turn Bay Length (ft)	360		450			200	
Base Capacity (vph)	594	1095	680	1054	451	389	476
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.27	0.02	0.35	0.06	0.12	0.08

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	350	41	27	306	9	30	2	37	19	1	17
Future Volume (veh/h)	55	350	41	27	306	9	30	2	37	19	1	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	60	385	45	30	336	10	33	2	41	21	1	19
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	710	901	105	644	966	29	216	32	224	466	22	413
Arrive On Green	0.09	1.00	1.00	0.06	1.00	1.00	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	1781	1644	192	1781	1807	54	582	119	821	1364	80	1517
Grp Volume(v), veh/h	60	0	430	30	0	346	76	0	0	21	0	20
Grp Sat Flow(s),veh/h/ln	1781	0	1836	1781	0	1861	1522	0	0	1364	0	1597
Q Serve(g_s), s	1.3	0.0	0.0	0.7	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.8
Cycle Q Clear(g_c), s	1.3	0.0	0.0	0.7	0.0	0.0	3.1	0.0	0.0	0.8	0.0	0.8
Prop In Lane	1.00		0.10	1.00		0.03	0.43		0.54	1.00		0.95
Lane Grp Cap(c), veh/h	710	0	1007	644	0	995	472	0	0	466	0	435
V/C Ratio(X)	0.08	0.00	0.43	0.05	0.00	0.35	0.16	0.00	0.00	0.05	0.00	0.05
Avail Cap(c_a), veh/h	782	0	1007	741	0	995	472	0	0	466	0	435
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.00	0.93	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.9	0.0	0.0	8.4	0.0	0.0	25.0	0.0	0.0	24.1	0.0	24.1
Incr Delay (d2), s/veh	0.0	0.0	1.2	0.0	0.0	1.0	0.7	0.0	0.0	0.2	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.3	0.2	0.0	0.3	1.3	0.0	0.0	0.4	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	8.0	0.0	1.2	8.5	0.0	1.0	25.7	0.0	0.0	24.3	0.0	24.3
LnGrp LOS	A		A	A		A	C			C		C
Approach Vol, veh/h		490			376			76			41	
Approach Delay, s/veh		2.1			1.6			25.7			24.3	
Approach LOS		A			A			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	53.9		29.0	8.4	52.6		29.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	7.5	44.5		24.5	7.5	44.5		24.5				
Max Q Clear Time (g_c+I1), s	2.7	2.0		2.8	3.3	2.0		5.1				
Green Ext Time (p_c), s	0.0	2.6		0.1	0.0	2.0		0.3				
Intersection Summary												
HCM 7th Control Delay, s/veh			4.6									
HCM 7th LOS			A									

Phase Number	1	2	4	5	6	8
Movement	WBL	EBTL	SBTL	EBL	WBTL	NBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	Max	None	C-Max	Max
Maximum Split (s)	12	49	29	12	49	29
Maximum Split (%)	13.3%	54.4%	32.2%	13.3%	54.4%	32.2%
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Don't Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	33	45	4	33	45	4
End Time (s)	45	4	33	45	4	33
Yield/Force Off (s)	40.5	89.5	28.5	40.5	89.5	28.5
Yield/Force Off 170(s)	40.5	78.5	17.5	40.5	78.5	17.5
Local Start Time (s)	78	0	49	78	0	49
Local Yield (s)	85.5	44.5	73.5	85.5	44.5	73.5
Local Yield 170(s)	85.5	33.5	62.5	85.5	33.5	62.5

Intersection Summary

Cycle Length	90	
Control Type	Actuated-Coordinated	
Natural Cycle	55	

Offset: 45 (50%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Splits and Phases: 2: Meadowlark & Mountain





Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT
Lane Group Flow (vph)	60	430	30	346	76	21	20
v/c Ratio	0.10	0.42	0.06	0.35	0.17	0.06	0.04
Control Delay (s/veh)	7.3	12.8	2.9	7.2	14.8	24.8	11.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	7.3	12.8	2.9	7.2	14.8	24.8	11.5
Queue Length 50th (ft)	9	98	4	64	15	9	0
Queue Length 95th (ft)	32	220	m5	89	48	27	17
Internal Link Dist (ft)		870		1236	331		243
Turn Bay Length (ft)	360		450			200	
Base Capacity (vph)	602	1021	559	978	449	377	448
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.42	0.05	0.35	0.17	0.06	0.04

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Intersection						
Int Delay, s/veh	0.1					

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↱		↱
Traffic Vol, veh/h	0	332	354	9	0	9
Future Vol, veh/h	0	332	354	9	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	700	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	377	402	10	0	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	402
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	648
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	648
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	10.64
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	648
HCM Lane V/C Ratio	-	-	-	0.016
HCM Ctrl Dly (s/v)	-	-	-	10.6
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↱		↱
Traffic Vol, veh/h	0	415	341	35	0	2
Future Vol, veh/h	0	415	341	35	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	700	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	446	367	38	0	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	367
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	679
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	679
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	10.32
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	679
HCM Lane V/C Ratio	-	-	-	0.003
HCM Ctrl Dly (s/v)	-	-	-	10.3
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	188	87	15	172	127	97	148	34	148	144	94
Future Volume (veh/h)	63	188	87	15	172	127	97	148	34	148	144	94
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	68	204	74	16	187	55	105	161	15	161	157	41
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	370	383	139	272	497	421	165	253	361	241	235	414
Arrive On Green	0.01	0.10	0.10	0.02	0.27	0.27	0.23	0.23	0.23	0.26	0.26	0.26
Sat Flow, veh/h	1781	1310	475	1781	1870	1585	724	1110	1585	924	901	1585
Grp Volume(v), veh/h	68	0	278	16	187	55	266	0	15	318	0	41
Grp Sat Flow(s),veh/h/ln	1781	0	1785	1781	1870	1585	1834	0	1585	1824	0	1585
Q Serve(g_s), s	2.5	0.0	13.3	0.6	7.3	2.4	11.8	0.0	0.7	14.0	0.0	1.8
Cycle Q Clear(g_c), s	2.5	0.0	13.3	0.6	7.3	2.4	11.8	0.0	0.7	14.0	0.0	1.8
Prop In Lane	1.00		0.27	1.00		1.00	0.39		1.00	0.51		1.00
Lane Grp Cap(c), veh/h	370	0	523	272	497	421	418	0	361	476	0	414
V/C Ratio(X)	0.18	0.00	0.53	0.06	0.38	0.13	0.64	0.00	0.04	0.67	0.00	0.10
Avail Cap(c_a), veh/h	398	0	523	348	497	421	418	0	361	476	0	414
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.2	0.0	34.8	23.9	27.0	25.1	31.4	0.0	27.1	29.8	0.0	25.2
Incr Delay (d2), s/veh	0.2	0.0	3.8	0.1	2.2	0.6	7.2	0.0	0.2	7.2	0.0	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	6.8	0.2	3.4	0.9	5.8	0.0	0.3	6.9	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.5	0.0	38.6	24.0	29.1	25.8	38.6	0.0	27.3	37.0	0.0	25.7
LnGrp LOS	C		D	C	C	C	D		C	D		C
Approach Vol, veh/h		346			258			281			359	
Approach Delay, s/veh		35.6			28.1			38.0			35.7	
Approach LOS		D			C			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.1	30.9		28.0	8.6	28.4		25.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.5	22.5		23.5	5.5	22.5		20.5				
Max Q Clear Time (g_c+I1), s	2.6	15.3		16.0	4.5	9.3		13.8				
Green Ext Time (p_c), s	0.0	0.8		1.1	0.0	0.8		0.8				

Intersection Summary	
HCM 7th Control Delay, s/veh	34.6
HCM 7th LOS	C

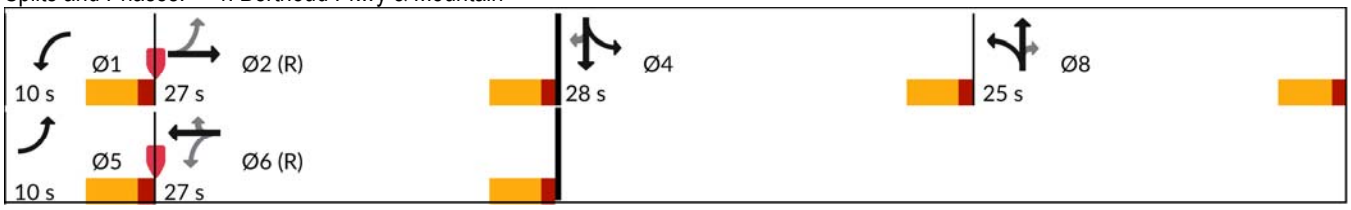
Phase Number	1	2	4	5	6	8
Movement	WBL	EBTL	SBTL	EBL	WBTL	NBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	Max	None	C-Max	Max
Maximum Split (s)	10	27	28	10	27	25
Maximum Split (%)	11.1%	30.0%	31.1%	11.1%	30.0%	27.8%
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Don't Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	1	11	38	1	11	66
End Time (s)	11	38	66	11	38	1
Yield/Force Off (s)	6.5	33.5	61.5	6.5	33.5	86.5
Yield/Force Off 170(s)	6.5	22.5	50.5	6.5	22.5	75.5
Local Start Time (s)	80	0	27	80	0	55
Local Yield (s)	85.5	22.5	50.5	85.5	22.5	75.5
Local Yield 170(s)	85.5	11.5	39.5	85.5	11.5	64.5

Intersection Summary

Cycle Length	90	
Control Type	Actuated-Coordinated	
Natural Cycle	80	

Offset: 11 (12%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Splits and Phases: 4: Berthoud Pkwy & Mountain





Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	68	299	16	187	138	266	37	318	102
v/c Ratio	0.18	0.48	0.05	0.37	0.26	0.64	0.08	0.67	0.20
Control Delay (s/veh)	30.1	33.6	19.1	30.2	6.4	39.5	0.4	37.9	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	30.1	33.6	19.1	30.2	6.4	39.5	0.4	37.9	4.2
Queue Length 50th (ft)	31	133	6	89	0	137	0	162	0
Queue Length 95th (ft)	52	228	19	150	44	220	0	254	26
Internal Link Dist (ft)		1223		961		573		639	
Turn Bay Length (ft)	400		430		400		200		370
Base Capacity (vph)	370	617	331	506	531	416	458	474	507
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.48	0.05	0.37	0.26	0.64	0.08	0.67	0.20

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	235	52	10	228	196	75	170	33	190	143	73
Future Volume (veh/h)	129	235	52	10	228	196	75	170	33	190	143	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	145	264	48	11	256	87	84	191	15	213	161	33
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	325	459	83	247	468	396	122	277	343	282	213	431
Arrive On Green	0.02	0.10	0.10	0.01	0.25	0.25	0.22	0.22	0.22	0.27	0.27	0.27
Sat Flow, veh/h	1781	1540	280	1781	1870	1585	563	1280	1585	1036	783	1585
Grp Volume(v), veh/h	145	0	312	11	256	87	275	0	15	374	0	33
Grp Sat Flow(s),veh/h/ln	1781	0	1820	1781	1870	1585	1842	0	1585	1819	0	1585
Q Serve(g_s), s	5.3	0.0	14.7	0.4	10.7	3.9	12.4	0.0	0.7	17.0	0.0	1.4
Cycle Q Clear(g_c), s	5.3	0.0	14.7	0.4	10.7	3.9	12.4	0.0	0.7	17.0	0.0	1.4
Prop In Lane	1.00		0.15	1.00		1.00	0.31		1.00	0.57		1.00
Lane Grp Cap(c), veh/h	325	0	542	247	468	396	399	0	343	495	0	431
V/C Ratio(X)	0.45	0.00	0.58	0.04	0.55	0.22	0.69	0.00	0.04	0.76	0.00	0.08
Avail Cap(c_a), veh/h	325	0	542	332	468	396	399	0	343	495	0	431
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.9	0.0	35.1	25.2	29.3	26.8	32.5	0.0	27.9	30.0	0.0	24.3
Incr Delay (d2), s/veh	1.0	0.0	4.4	0.1	4.6	1.3	9.4	0.0	0.2	10.3	0.0	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	7.7	0.2	5.1	1.5	6.3	0.0	0.3	8.5	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.9	0.0	39.6	25.3	33.9	28.1	41.8	0.0	28.1	40.3	0.0	24.7
LnGrp LOS	C		D	C	C	C	D		C	D		C
Approach Vol, veh/h		457			354			290			407	
Approach Delay, s/veh		34.9			32.2			41.1			39.0	
Approach LOS		C			C			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.7	31.3		29.0	10.0	27.0		24.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.5	22.5		24.5	5.5	22.5		19.5				
Max Q Clear Time (g_c+I1), s	2.4	16.7		19.0	7.3	12.7		14.4				
Green Ext Time (p_c), s	0.0	0.8		1.1	0.0	1.1		0.7				

Intersection Summary	
HCM 7th Control Delay, s/veh	36.6
HCM 7th LOS	D

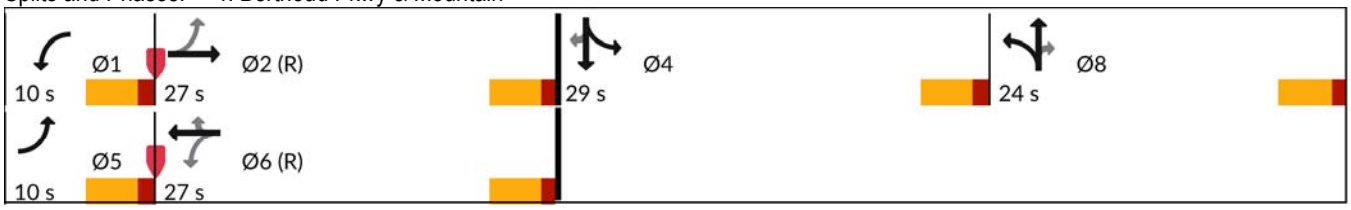
Phase Number	1	2	4	5	6	8
Movement	WBL	EBTL	SBTL	EBL	WBTL	NBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	Max	None	C-Max	Max
Maximum Split (s)	10	27	29	10	27	24
Maximum Split (%)	11.1%	30.0%	32.2%	11.1%	30.0%	26.7%
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Don't Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	3	13	40	3	13	69
End Time (s)	13	40	69	13	40	3
Yield/Force Off (s)	8.5	35.5	64.5	8.5	35.5	88.5
Yield/Force Off 170(s)	8.5	24.5	53.5	8.5	24.5	77.5
Local Start Time (s)	80	0	27	80	0	56
Local Yield (s)	85.5	22.5	51.5	85.5	22.5	75.5
Local Yield 170(s)	85.5	11.5	40.5	85.5	11.5	64.5

Intersection Summary

Cycle Length	90	
Control Type	Actuated-Coordinated	
Natural Cycle	80	

Offset: 13 (14%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Splits and Phases: 4: Berthoud Pkwy & Mountain





Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	145	322	11	256	220	275	37	374	82
v/c Ratio	0.49	0.52	0.04	0.55	0.39	0.69	0.08	0.76	0.16
Control Delay (s/veh)	22.1	22.5	19.0	34.6	6.3	42.9	0.4	41.7	2.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	22.1	22.5	19.0	34.6	6.3	42.9	0.4	41.7	2.3
Queue Length 50th (ft)	56	129	4	127	0	145	0	195	0
Queue Length 95th (ft)	76	238	15	201	52	#230	0	#317	13
Internal Link Dist (ft)		1223		961		573		639	
Turn Bay Length (ft)	400		430		400		200		370
Base Capacity (vph)	298	622	314	465	560	397	442	492	523
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.52	0.04	0.55	0.39	0.69	0.08	0.76	0.16

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	0	29	2	0	73
Future Vol, veh/h	8	0	29	2	0	73
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	0	34	2	0	86

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	121	35	0	0	36	0
Stage 1	35	-	-	-	-	-
Stage 2	86	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	874	1037	-	-	1574	-
Stage 1	987	-	-	-	-	-
Stage 2	937	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	874	1037	-	-	1574	-
Mov Cap-2 Maneuver	874	-	-	-	-	-
Stage 1	987	-	-	-	-	-
Stage 2	937	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	9.16	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	874	1574	-
HCM Lane V/C Ratio	-	-	0.011	-	-
HCM Ctrl Dly (s/v)	-	-	9.2	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection						
Int Delay, s/veh	0.7					

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	0	29	2	0	73
Future Vol, veh/h	8	0	29	2	0	73
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	0	34	2	0	86

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	121	35	0	0	36	0
Stage 1	35	-	-	-	-	-
Stage 2	86	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	874	1037	-	-	1574	-
Stage 1	987	-	-	-	-	-
Stage 2	937	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	874	1037	-	-	1574	-
Mov Cap-2 Maneuver	874	-	-	-	-	-
Stage 1	987	-	-	-	-	-
Stage 2	937	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	9.16	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	874	1574	-
HCM Lane V/C Ratio	-	-	0.011	-	-
HCM Ctrl Dly (s/v)	-	-	9.2	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	1	0	0	0	1	9	0	0	14	0
Future Vol, veh/h	2	0	1	0	0	0	1	9	0	0	14	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	0	1	0	0	0	1	11	0	0	16	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	29	29	16	29	29	11	16	0	0	11	0	0
Stage 1	16	16	-	13	13	-	-	-	-	-	-	-
Stage 2	13	13	-	16	16	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	979	864	1063	979	864	1071	1601	-	-	1609	-	-
Stage 1	1003	882	-	1007	885	-	-	-	-	-	-	-
Stage 2	1007	885	-	1003	882	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	979	863	1063	978	863	1071	1601	-	-	1609	-	-
Mov Cap-2 Maneuver	979	863	-	978	863	-	-	-	-	-	-	-
Stage 1	1003	882	-	1007	884	-	-	-	-	-	-	-
Stage 2	1007	884	-	1002	882	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	8.59	0	0.73	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1601	-	-	1005	-	1609	-	-
HCM Lane V/C Ratio	0.001	-	-	0.004	-	-	-	-
HCM Ctrl Dly (s/v)	7.3	-	-	8.6	0	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	0	-	-

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	1	0	0	0	1	9	0	0	14	0
Future Vol, veh/h	2	0	1	0	0	0	1	9	0	0	14	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	0	1	0	0	0	1	11	0	0	16	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	29	29	16	29	29	11	16	0	0	11	0	0
Stage 1	16	16	-	13	13	-	-	-	-	-	-	-
Stage 2	13	13	-	16	16	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	979	864	1063	979	864	1071	1601	-	-	1609	-	-
Stage 1	1003	882	-	1007	885	-	-	-	-	-	-	-
Stage 2	1007	885	-	1003	882	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	979	863	1063	978	863	1071	1601	-	-	1609	-	-
Mov Cap-2 Maneuver	979	863	-	978	863	-	-	-	-	-	-	-
Stage 1	1003	882	-	1007	884	-	-	-	-	-	-	-
Stage 2	1007	884	-	1002	882	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	8.59	0	0.73	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1601	-	-	1005	-	1609	-	-
HCM Lane V/C Ratio	0.001	-	-	0.004	-	-	-	-
HCM Ctrl Dly (s/v)	7.3	-	-	8.6	0	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	0	-	-

UNSIGNALIZED INTERSECTIONS

Level-of-Service	Average Total Delay sec/veh
A	≤ 10
B	> 10 and ≤ 15
C	> 15 and ≤ 25
D	> 25 and ≤ 35
E	> 35 and ≤ 50
F	> 50

SIGNALIZED INTERSECTIONS

Level-of-Service	Average Total Delay sec/veh
A	≤ 10
B	> 10 and ≤ 20
C	> 20 and ≤ 35
D	> 35 and ≤ 55
E	> 55 and ≤ 80
F	> 80

Table 4-2
Loveland (GMA and City Limits)
Motor Vehicle LOS Standards (Intersections)

Intersection Component	Major Intersection[134]	Minor Intersection[234]	Driveway
Overall (City Limits)	LOS C	LOS C	No Limit
Overall (GMAs)	LOS D	LOS D	No Limit
Any Leg	LOS D	LOS E	No Limit
Any Movement	LOS E	LOS F	No Limit

[1] Includes all signalized and unsignalized arterial/arterial and arterial/major collector intersections
[2] Includes all unsignalized intersections (except major intersections) and high volume driveways
[3] There are no LOS standards for I-25 Interchanges
[4] On State Highways, overall LOS D is acceptable

APPENDIX D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	225	70	384	138	33	50	524	190	30	1392	55
Future Volume (veh/h)	57	225	70	384	138	33	50	524	190	30	1392	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	60	237	0	404	145	0	53	552	0	32	1465	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	338	281		482	187		190	1780		475	1748	
Arrive On Green	0.19	0.15	0.00	0.19	0.13	0.00	0.04	0.50	0.00	0.03	0.49	0.00
Sat Flow, veh/h	1781	1870	1585	3456	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	60	237	0	404	145	0	53	552	0	32	1465	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	2.8	12.3	0.0	11.3	7.5	0.0	1.4	9.2	0.0	0.9	35.6	0.0
Cycle Q Clear(g_c), s	2.8	12.3	0.0	11.3	7.5	0.0	1.4	9.2	0.0	0.9	35.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	338	281		482	187		190	1780		475	1748	
V/C Ratio(X)	0.18	0.84		0.84	0.78		0.28	0.31		0.07	0.84	
Avail Cap(c_a), veh/h	338	421		639	440		219	1780		520	1748	
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.72	0.72	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.0	41.4	0.0	39.6	42.3	0.0	18.8	14.7	0.0	12.0	22.0	0.0
Incr Delay (d2), s/veh	0.2	9.7	0.0	5.4	4.9	0.0	0.8	0.5	0.0	0.1	5.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	6.1	0.0	4.7	3.5	0.0	0.5	3.3	0.0	0.3	13.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	34.2	51.0	0.0	45.1	47.2	0.0	19.6	15.2	0.0	12.1	26.9	0.0
LnGrp LOS	C	D		D	D		B	B		B	C	
Approach Vol, veh/h		297			549			605			1497	
Approach Delay, s/veh		47.6			45.6			15.6			26.6	
Approach LOS		D			D			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.4	54.6	18.5	19.5	8.4	53.7	23.5	14.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	35.5	18.5	22.5	5.5	35.5	17.5	23.5
Max Q Clear Time (g_c+I1), s	2.9	11.2	13.3	14.3	3.4	37.6	4.8	9.5
Green Ext Time (p_c), s	0.0	3.2	0.7	0.7	0.0	0.0	0.1	0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	30.0
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

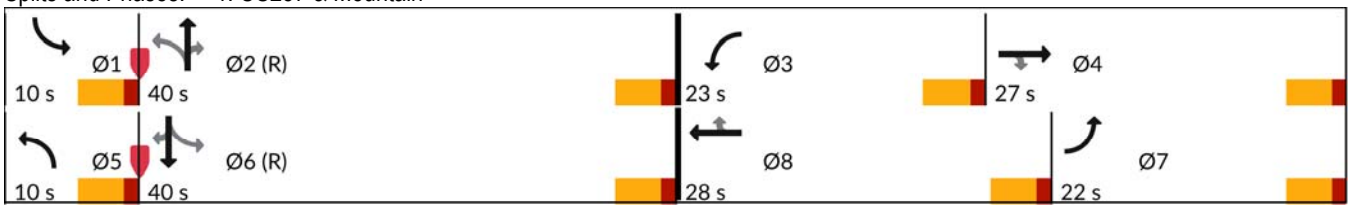
Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBT	NBL	SBTL	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	10	40	23	27	10	40	22	28
Maximum Split (%)	10.0%	40.0%	23.0%	27.0%	10.0%	40.0%	22.0%	28.0%
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Don't Walk (s)		11		11		11		11
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	9	19	59	82	9	19	87	59
End Time (s)	19	59	82	9	19	59	9	87
Yield/Force Off (s)	14.5	54.5	77.5	4.5	14.5	54.5	4.5	82.5
Yield/Force Off 170(s)	14.5	43.5	77.5	93.5	14.5	43.5	4.5	71.5
Local Start Time (s)	90	0	40	63	90	0	68	40
Local Yield (s)	95.5	35.5	58.5	85.5	95.5	35.5	85.5	63.5
Local Yield 170(s)	95.5	24.5	58.5	74.5	95.5	24.5	85.5	52.5

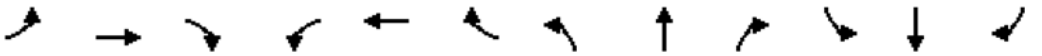
Intersection Summary

Cycle Length	100
Control Type	Actuated-Coordinated
Natural Cycle	90

Offset: 19 (19%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Splits and Phases: 1: US287 & Mountain





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	60	237	74	404	145	35	53	552	200	32	1465	58
v/c Ratio	0.18	0.72	0.20	0.72	0.45	0.10	0.28	0.34	0.24	0.08	0.95	0.07
Control Delay (s/veh)	32.8	51.5	3.3	51.3	52.4	2.9	17.9	20.3	4.1	14.4	43.3	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	32.8	51.5	3.3	51.3	52.4	2.9	17.9	20.3	4.1	14.4	43.3	0.2
Queue Length 50th (ft)	31	143	0	92	78	0	16	126	0	10	~527	0
Queue Length 95th (ft)	65	214	14	136	m113	m3	41	188	46	28	#723	0
Internal Link Dist (ft)		1325			870			1386			1925	
Turn Bay Length (ft)	650		400	540		320	1000		1000	1000		1000
Base Capacity (vph)	373	419	445	635	456	474	187	1633	838	419	1549	785
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.57	0.17	0.64	0.32	0.07	0.28	0.34	0.24	0.08	0.95	0.07

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	254	56	281	215	33	72	1395	445	49	887	72
Future Volume (veh/h)	91	254	56	281	215	33	72	1395	445	49	887	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	95	265	0	293	224	0	75	1453	0	51	924	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	231	310		362	263		351	1818		203	1797	
Arrive On Green	0.13	0.17	0.00	0.17	0.24	0.00	0.04	0.51	0.00	0.04	0.51	0.00
Sat Flow, veh/h	1781	1870	1585	3456	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	95	265	0	293	224	0	75	1453	0	51	924	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	4.9	13.8	0.0	8.2	11.5	0.0	2.0	33.8	0.0	1.3	17.4	0.0
Cycle Q Clear(g_c), s	4.9	13.8	0.0	8.2	11.5	0.0	2.0	33.8	0.0	1.3	17.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	231	310		362	263		351	1818		203	1797	
V/C Ratio(X)	0.41	0.85		0.81	0.85		0.21	0.80		0.25	0.51	
Avail Cap(c_a), veh/h	294	458		467	402		371	1818		234	1797	
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.77	0.77	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	40.0	40.5	0.0	40.3	37.2	0.0	12.3	20.2	0.0	17.1	16.5	0.0
Incr Delay (d2), s/veh	1.2	10.0	0.0	6.3	8.2	0.0	0.3	3.8	0.0	0.6	1.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	6.8	0.0	3.4	5.1	0.0	0.7	12.7	0.0	0.5	6.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	41.2	50.6	0.0	46.6	45.4	0.0	12.6	23.9	0.0	17.8	17.6	0.0
LnGrp LOS	D	D		D	D		B	C		B	B	
Approach Vol, veh/h		360			517			1528			975	
Approach Delay, s/veh		48.1			46.1			23.4			17.6	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	55.7	15.0	21.1	8.9	55.1	17.5	18.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	38.5	13.5	24.5	5.5	38.5	16.5	21.5
Max Q Clear Time (g_c+I1), s	3.3	35.8	10.2	15.8	4.0	19.4	6.9	13.5
Green Ext Time (p_c), s	0.0	2.0	0.3	0.8	0.0	5.5	0.1	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	27.8
HCM 7th LOS	C

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

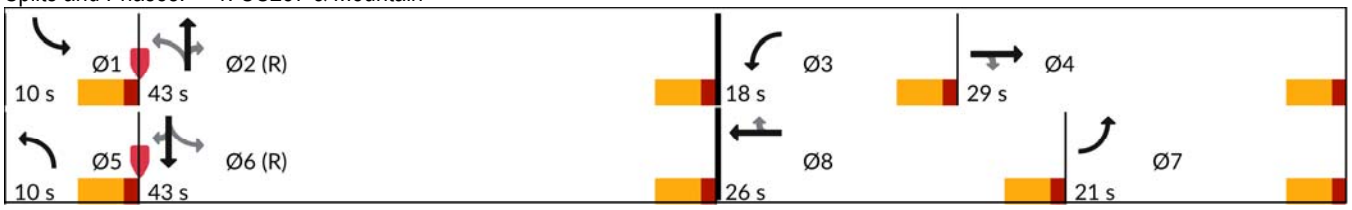
Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBT	NBL	SBTL	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	10	43	18	29	10	43	21	26
Maximum Split (%)	10.0%	43.0%	18.0%	29.0%	10.0%	43.0%	21.0%	26.0%
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Don't Walk (s)		11		11		11		11
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	98	8	51	69	98	8	77	51
End Time (s)	8	51	69	98	8	51	98	77
Yield/Force Off (s)	3.5	46.5	64.5	93.5	3.5	46.5	93.5	72.5
Yield/Force Off 170(s)	3.5	35.5	64.5	82.5	3.5	35.5	93.5	61.5
Local Start Time (s)	90	0	43	61	90	0	69	43
Local Yield (s)	95.5	38.5	56.5	85.5	95.5	38.5	85.5	64.5
Local Yield 170(s)	95.5	27.5	56.5	74.5	95.5	27.5	85.5	53.5

Intersection Summary

Cycle Length	100
Control Type	Actuated-Coordinated
Natural Cycle	90

Offset: 8 (8%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Splits and Phases: 1: US287 & Mountain



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	95	265	58	293	224	34	75	1453	464	51	924	75
v/c Ratio	0.39	0.75	0.15	0.68	0.60	0.08	0.27	0.89	0.47	0.27	0.57	0.09
Control Delay (s/veh)	43.1	50.9	1.0	37.5	24.5	0.5	15.0	35.5	3.8	16.3	23.6	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	43.1	50.9	1.0	37.5	24.5	0.5	15.0	35.5	3.8	16.3	23.6	0.2
Queue Length 50th (ft)	55	160	0	46	61	0	22	465	0	15	239	0
Queue Length 95th (ft)	103	233	2	108	126	m0	50	#677	62	37	324	0
Internal Link Dist (ft)		1325			870			1386			1925	
Turn Bay Length (ft)	650		400	540		320	1000		1000	1000		1000
Base Capacity (vph)	292	456	474	463	422	447	279	1629	979	187	1619	813
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.58	0.12	0.63	0.53	0.08	0.27	0.89	0.47	0.27	0.57	0.09

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	255	19	12	456	34	16	14	11	149	13	59
Future Volume (veh/h)	175	255	19	12	456	34	16	14	11	149	13	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	182	266	18	12	475	14	17	15	4	155	14	17
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	537	876	59	465	739	626	293	248	61	558	265	322
Arrive On Green	0.25	1.00	1.00	0.03	0.79	0.79	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1781	1732	117	1781	1870	1585	695	719	177	1393	769	934
Grp Volume(v), veh/h	182	0	284	12	475	14	36	0	0	155	0	31
Grp Sat Flow(s),veh/h/ln	1781	0	1849	1781	1870	1585	1591	0	0	1393	0	1702
Q Serve(g_s), s	0.0	0.0	0.0	0.4	10.8	0.2	0.0	0.0	0.0	6.5	0.0	1.2
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.4	10.8	0.2	1.3	0.0	0.0	7.8	0.0	1.2
Prop In Lane	1.00		0.06	1.00		1.00	0.47		0.11	1.00		0.55
Lane Grp Cap(c), veh/h	537	0	935	465	739	626	602	0	0	558	0	587
V/C Ratio(X)	0.34	0.00	0.30	0.03	0.64	0.02	0.06	0.00	0.00	0.28	0.00	0.05
Avail Cap(c_a), veh/h	537	0	935	538	739	626	602	0	0	558	0	587
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.00	0.88	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.2	0.0	0.0	19.7	7.5	6.4	21.9	0.0	0.0	23.9	0.0	21.8
Incr Delay (d2), s/veh	0.3	0.0	0.7	0.0	4.3	0.1	0.2	0.0	0.0	1.2	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	0.2	0.2	3.3	0.1	0.6	0.0	0.0	2.9	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.5	0.0	0.7	19.7	11.8	6.4	22.1	0.0	0.0	25.1	0.0	22.0
LnGrp LOS	B		A	B	B	A	C			C		C
Approach Vol, veh/h		466			501			36			186	
Approach Delay, s/veh		8.1			11.8			22.1			24.6	
Approach LOS		A			B			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.9	55.1		39.0	17.0	44.0		39.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.5	46.5		34.5	12.5	39.5		34.5				
Max Q Clear Time (g_c+I1), s	2.4	2.0		9.8	2.0	12.8		3.3				
Green Ext Time (p_c), s	0.0	1.6		0.6	0.3	2.8		0.1				
Intersection Summary												
HCM 7th Control Delay, s/veh			12.7									
HCM 7th LOS			B									

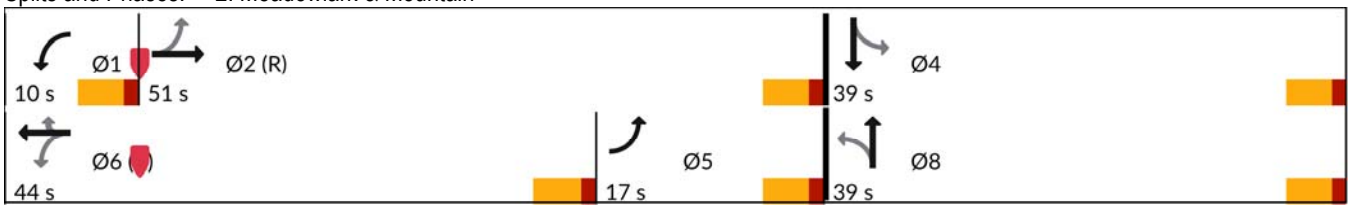
Phase Number	1	2	4	5	6	8
Movement	WBL	EBTL	SBTL	EBL	WBTL	NBTL
Lead/Lag	Lead	Lag		Lag	Lead	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	Max	None	C-Max	Max
Maximum Split (s)	10	51	39	17	44	39
Maximum Split (%)	10.0%	51.0%	39.0%	17.0%	44.0%	39.0%
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Don't Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	51	61	12	95	51	12
End Time (s)	61	12	51	12	95	51
Yield/Force Off (s)	56.5	7.5	46.5	7.5	90.5	46.5
Yield/Force Off 170(s)	56.5	96.5	35.5	7.5	79.5	35.5
Local Start Time (s)	90	0	51	34	90	51
Local Yield (s)	95.5	46.5	85.5	46.5	29.5	85.5
Local Yield 170(s)	95.5	35.5	74.5	46.5	18.5	74.5

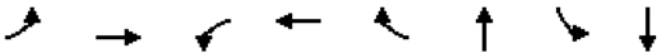
Intersection Summary

Cycle Length	100	
Control Type	Actuated-Coordinated	
Natural Cycle	60	

Offset: 61 (61%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Splits and Phases: 2: Meadowlark & Mountain





Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	182	286	13	475	35	43	155	75
v/c Ratio	0.39	0.28	0.04	0.65	0.05	0.08	0.33	0.12
Control Delay (s/veh)	18.2	13.2	17.0	24.3	1.6	18.1	26.7	8.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.2	13.2	17.0	24.3	1.6	18.1	26.7	8.5
Queue Length 50th (ft)	32	50	3	237	0	14	72	6
Queue Length 95th (ft)	114	167	m12	369	0	38	127	36
Internal Link Dist (ft)		870		1236		331		243
Turn Bay Length (ft)	360		450		300		200	
Base Capacity (vph)	463	1007	369	735	664	572	468	604
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.28	0.04	0.65	0.05	0.08	0.33	0.12

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	325	368	42	28	378	47	31	22	38	170	18	51
Future Volume (veh/h)	325	368	42	28	378	47	31	22	38	170	18	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	357	404	42	31	415	21	34	24	17	187	20	15
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	627	868	90	408	701	594	257	178	112	515	313	234
Arrive On Green	0.35	1.00	1.00	0.06	0.75	0.75	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1781	1666	173	1781	1870	1585	650	565	356	1366	992	744
Grp Volume(v), veh/h	357	0	446	31	415	21	75	0	0	187	0	35
Grp Sat Flow(s),veh/h/ln	1781	0	1839	1781	1870	1585	1571	0	0	1366	0	1736
Q Serve(g_s), s	0.0	0.0	0.0	1.1	10.0	0.3	0.7	0.0	0.0	6.7	0.0	1.4
Cycle Q Clear(g_c), s	0.0	0.0	0.0	1.1	10.0	0.3	3.1	0.0	0.0	9.8	0.0	1.4
Prop In Lane	1.00		0.09	1.00		1.00	0.45		0.23	1.00		0.43
Lane Grp Cap(c), veh/h	627	0	958	408	701	594	547	0	0	515	0	547
V/C Ratio(X)	0.57	0.00	0.47	0.08	0.59	0.04	0.14	0.00	0.00	0.36	0.00	0.06
Avail Cap(c_a), veh/h	627	0	958	454	701	594	547	0	0	515	0	547
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.81	0.00	0.81	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.1	0.0	0.0	20.9	9.1	7.9	24.5	0.0	0.0	26.6	0.0	23.9
Incr Delay (d2), s/veh	1.0	0.0	1.3	0.1	3.6	0.1	0.5	0.0	0.0	2.0	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	0.0	0.4	0.5	3.2	0.1	1.4	0.0	0.0	3.8	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.1	0.0	1.3	21.0	12.7	8.0	25.0	0.0	0.0	28.6	0.0	24.2
LnGrp LOS	B		A	C	B	A	C			C		C
Approach Vol, veh/h		803			467			75			222	
Approach Delay, s/veh		9.2			13.0			25.0			27.9	
Approach LOS		A			B			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.4	56.6		36.0	22.0	42.0		36.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.5	49.5		31.5	17.5	37.5		31.5				
Max Q Clear Time (g_c+I1), s	3.1	2.0		11.8	2.0	12.0		5.1				
Green Ext Time (p_c), s	0.0	2.8		0.7	0.9	2.4		0.4				

Intersection Summary	
HCM 7th Control Delay, s/veh	13.8
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

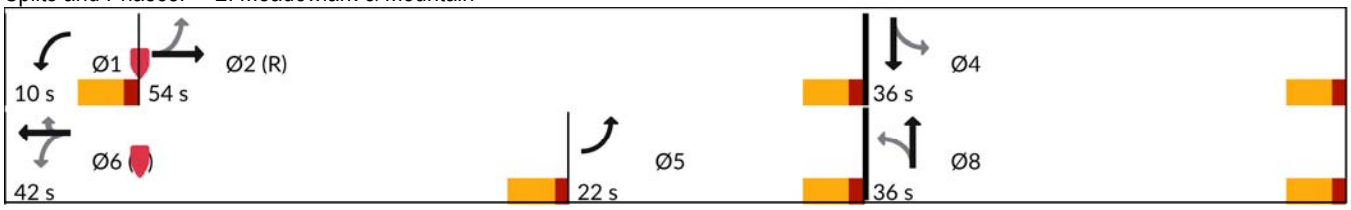
Phase Number	1	2	4	5	6	8
Movement	WBL	EBTL	SBTL	EBL	WBTL	NBTL
Lead/Lag	Lead	Lag		Lag	Lead	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	Max	None	C-Max	Max
Maximum Split (s)	10	54	36	22	42	36
Maximum Split (%)	10.0%	54.0%	36.0%	22.0%	42.0%	36.0%
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Don't Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	33	43	97	75	33	97
End Time (s)	43	97	33	97	75	33
Yield/Force Off (s)	38.5	92.5	28.5	92.5	70.5	28.5
Yield/Force Off 170(s)	38.5	81.5	17.5	92.5	59.5	17.5
Local Start Time (s)	90	0	54	32	90	54
Local Yield (s)	95.5	49.5	85.5	49.5	27.5	85.5
Local Yield 170(s)	95.5	38.5	74.5	49.5	16.5	74.5

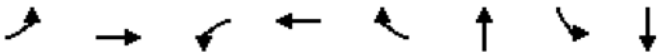
Intersection Summary

Cycle Length	100
Control Type	Actuated-Coordinated
Natural Cycle	60

Offset: 43 (43%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Splits and Phases: 2: Meadowlark & Mountain





Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	357	450	31	415	52	100	187	76
v/c Ratio	0.61	0.46	0.13	0.59	0.08	0.19	0.45	0.14
Control Delay (s/veh)	26.9	18.5	17.0	21.8	3.0	17.1	31.8	10.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	26.9	18.5	17.0	21.8	3.0	17.1	31.8	10.4
Queue Length 50th (ft)	125	160	8	111	0	28	95	9
Queue Length 95th (ft)	230	287	m19	156	m2	67	162	41
Internal Link Dist (ft)		870		1236		331		243
Turn Bay Length (ft)	360		450		300		200	
Base Capacity (vph)	582	985	248	698	634	523	411	560
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.46	0.13	0.59	0.08	0.19	0.45	0.14

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Intersection						
Int Delay, s/veh	0.1					

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↱		↱
Traffic Vol, veh/h	0	425	487	9	0	9
Future Vol, veh/h	0	425	487	9	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	700	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	483	553	10	0	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	553
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	532
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	532
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	11.89
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	532
HCM Lane V/C Ratio	-	-	-	0.019
HCM Ctrl Dly (s/v)	-	-	-	11.9
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection						
Int Delay, s/veh	0					

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↱		↱
Traffic Vol, veh/h	0	585	452	36	0	2
Future Vol, veh/h	0	585	452	36	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	700	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	629	486	39	0	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	486
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	581
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	581
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	11.22
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	581
HCM Lane V/C Ratio	-	-	-	0.004
HCM Ctrl Dly (s/v)	-	-	-	11.2
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	228	115	27	206	137	149	219	70	171	176	141
Future Volume (veh/h)	89	228	115	27	206	137	149	219	70	171	176	141
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	97	248	46	29	224	60	162	238	30	186	191	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	476	740	627	420	698	591	486	570	483	462	589	499
Arrive On Green	0.02	0.13	0.13	0.03	0.37	0.37	0.08	0.30	0.30	0.09	0.31	0.31
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	97	248	46	29	224	60	162	238	30	186	191	60
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	3.3	12.1	2.5	1.0	8.5	2.5	6.1	10.1	1.3	7.0	7.8	2.7
Cycle Q Clear(g_c), s	3.3	12.1	2.5	1.0	8.5	2.5	6.1	10.1	1.3	7.0	7.8	2.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	476	740	627	420	698	591	486	570	483	462	589	499
V/C Ratio(X)	0.20	0.34	0.07	0.07	0.32	0.10	0.33	0.42	0.06	0.40	0.32	0.12
Avail Cap(c_a), veh/h	539	740	627	486	698	591	562	570	483	574	589	499
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.6	31.5	27.4	18.8	22.3	20.4	21.0	27.7	24.6	20.9	26.1	24.4
Incr Delay (d2), s/veh	0.2	1.2	0.2	0.1	1.2	0.3	0.4	2.2	0.2	0.6	1.5	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	6.1	1.0	0.4	3.8	0.9	2.5	4.7	0.5	2.9	3.6	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.8	32.8	27.6	18.8	23.5	20.8	21.4	29.9	24.9	21.5	27.6	24.9
LnGrp LOS	B	C	C	B	C	C	C	C	C	C	C	C
Approach Vol, veh/h		391			313			430			437	
Approach Delay, s/veh		28.7			22.6			26.4			24.6	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.3	44.0	12.7	36.0	9.5	41.8	13.7	35.0				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	6.5	31.5	12.5	31.5	8.5	29.5	15.5	28.5				
Max Q Clear Time (g_c+I1), s	3.0	14.1	8.1	9.8	5.3	10.5	9.0	12.1				
Green Ext Time (p_c), s	0.0	1.3	0.2	1.2	0.1	1.2	0.3	1.2				
Intersection Summary												
HCM 7th Control Delay, s/veh			25.7									
HCM 7th LOS			C									

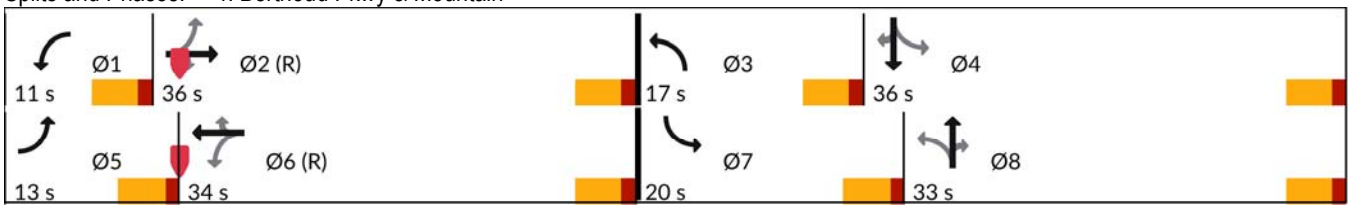
Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EBTL	NBL	SBTL	EBL	WBTL	SBL	NBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	C-Max	None	Max
Maximum Split (s)	11	36	17	36	13	34	20	33
Maximum Split (%)	11.0%	36.0%	17.0%	36.0%	13.0%	34.0%	20.0%	33.0%
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Don't Walk (s)		11		11		11		11
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	11	47	64	0	13	47	67
End Time (s)	11	47	64	0	13	47	67	0
Yield/Force Off (s)	6.5	42.5	59.5	95.5	8.5	42.5	62.5	95.5
Yield/Force Off 170(s)	6.5	31.5	59.5	84.5	8.5	31.5	62.5	84.5
Local Start Time (s)	87	98	34	51	87	0	34	54
Local Yield (s)	93.5	29.5	46.5	82.5	95.5	29.5	49.5	82.5
Local Yield 170(s)	93.5	18.5	46.5	71.5	95.5	18.5	49.5	71.5

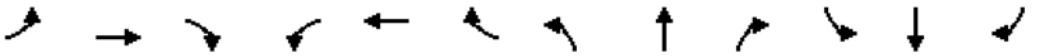
Intersection Summary

Cycle Length	100
Control Type	Actuated-Coordinated
Natural Cycle	65

Offset: 13 (13%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Splits and Phases: 4: Berthoud Pkwy & Mountain





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	97	248	125	29	224	149	162	238	76	186	191	153
v/c Ratio	0.23	0.37	0.19	0.07	0.37	0.24	0.30	0.39	0.13	0.37	0.31	0.24
Control Delay (s/veh)	22.7	31.4	9.7	17.5	29.6	5.6	16.5	29.5	2.4	17.2	26.8	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	22.7	31.4	9.7	17.5	29.6	5.6	16.5	29.5	2.4	17.2	26.8	5.2
Queue Length 50th (ft)	45	125	8	11	114	0	56	116	0	66	90	0
Queue Length 95th (ft)	58	214	39	28	183	44	96	197	14	109	152	44
Internal Link Dist (ft)		1223			961			573			639	
Turn Bay Length (ft)	400		350	430		400	350		200	350		370
Base Capacity (vph)	437	668	648	427	600	611	579	603	590	566	626	633
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.37	0.19	0.07	0.37	0.24	0.28	0.39	0.13	0.33	0.31	0.24

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	182	292	113	50	266	222	114	225	57	207	225	108
Future Volume (veh/h)	182	292	113	50	266	222	114	225	57	207	225	108
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	204	328	47	56	299	100	128	253	26	233	253	43
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	495	817	692	422	732	620	372	421	357	398	505	428
Arrive On Green	0.03	0.14	0.14	0.04	0.39	0.39	0.07	0.22	0.22	0.12	0.27	0.27
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	204	328	47	56	299	100	128	253	26	233	253	43
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	6.4	15.9	2.6	1.8	11.6	4.1	5.4	12.1	1.3	9.6	11.4	2.0
Cycle Q Clear(g_c), s	6.4	15.9	2.6	1.8	11.6	4.1	5.4	12.1	1.3	9.6	11.4	2.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	495	817	692	422	732	620	372	421	357	398	505	428
V/C Ratio(X)	0.41	0.40	0.07	0.13	0.41	0.16	0.34	0.60	0.07	0.59	0.50	0.10
Avail Cap(c_a), veh/h	548	817	692	449	732	620	552	421	357	498	505	428
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.4	30.9	25.2	17.4	22.1	19.8	26.7	34.7	30.5	24.6	30.8	27.4
Incr Delay (d2), s/veh	0.6	1.5	0.2	0.1	1.7	0.6	0.5	6.2	0.4	1.4	3.5	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	8.2	1.0	0.7	5.1	1.5	2.3	6.0	0.5	4.0	5.5	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	17.0	32.4	25.4	17.6	23.8	20.3	27.3	41.0	30.9	25.9	34.4	27.9
LnGrp LOS	B	C	C	B	C	C	C	D	C	C	C	C
Approach Vol, veh/h		579			455			407			529	
Approach Delay, s/veh		26.4			22.2			36.0			30.1	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	48.2	11.9	31.5	13.0	43.6	16.4	27.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	36.5	17.5	22.5	11.5	30.5	17.5	22.5
Max Q Clear Time (g_c+I1), s	3.8	17.9	7.4	13.4	8.4	13.6	11.6	14.1
Green Ext Time (p_c), s	0.0	1.7	0.2	1.0	0.2	1.7	0.3	0.9

Intersection Summary	
HCM 7th Control Delay, s/veh	28.4
HCM 7th LOS	C

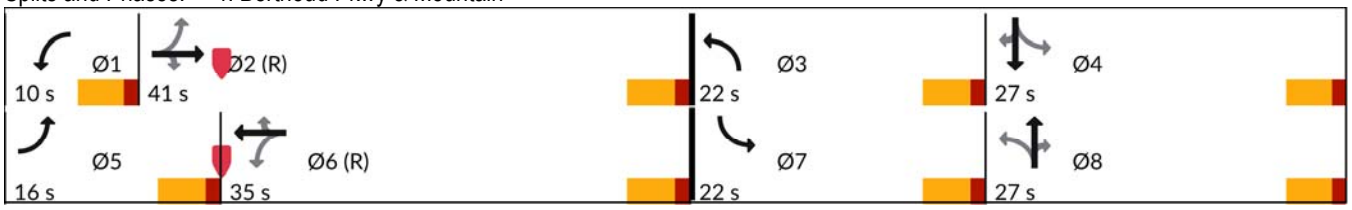
Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EBTL	NBL	SBTL	EBL	WBTL	SBL	NBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	C-Max	None	Max
Maximum Split (s)	10	41	22	27	16	35	22	27
Maximum Split (%)	10.0%	41.0%	22.0%	27.0%	16.0%	35.0%	22.0%	27.0%
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Don't Walk (s)		11		11		11		11
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	84	94	35	57	84	0	35	57
End Time (s)	94	35	57	84	0	35	57	84
Yield/Force Off (s)	89.5	30.5	52.5	79.5	95.5	30.5	52.5	79.5
Yield/Force Off 170(s)	89.5	19.5	52.5	68.5	95.5	19.5	52.5	68.5
Local Start Time (s)	84	94	35	57	84	0	35	57
Local Yield (s)	89.5	30.5	52.5	79.5	95.5	30.5	52.5	79.5
Local Yield 170(s)	89.5	19.5	52.5	68.5	95.5	19.5	52.5	68.5

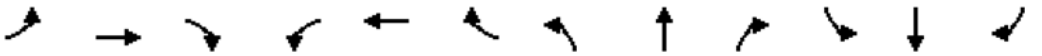
Intersection Summary

Cycle Length	100
Control Type	Actuated-Coordinated
Natural Cycle	65

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Splits and Phases: 4: Berthoud Pkwy & Mountain





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	204	328	127	56	299	249	128	253	64	233	253	121
v/c Ratio	0.48	0.46	0.18	0.14	0.51	0.37	0.29	0.52	0.12	0.52	0.45	0.20
Control Delay (s/veh)	20.4	27.4	6.1	16.4	32.2	5.2	19.1	36.9	0.5	22.2	32.1	2.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.4	27.4	6.1	16.4	32.2	5.2	19.1	36.9	0.5	22.2	32.1	2.7
Queue Length 50th (ft)	55	175	8	19	157	0	47	138	0	92	130	0
Queue Length 95th (ft)	95	269	23	41	238	53	84	225	0	146	212	20
Internal Link Dist (ft)		1223			961			573			639	
Turn Bay Length (ft)	400		350	430		400	350		200	350		370
Base Capacity (vph)	436	716	687	392	582	665	560	489	537	498	561	591
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.46	0.18	0.14	0.51	0.37	0.23	0.52	0.12	0.47	0.45	0.20

Intersection Summary

Intersection												
Int Delay, s/veh	5.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	0	108	8	0	0	181	40	2	0	105	5
Future Vol, veh/h	3	0	108	8	0	0	181	40	2	0	105	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	0	127	9	0	0	213	47	2	0	124	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	599	602	126	598	604	48	129	0	0	49	0	0
Stage 1	126	126	-	474	474	-	-	-	-	-	-	-
Stage 2	473	475	-	124	129	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	413	414	924	414	413	1021	1456	-	-	1557	-	-
Stage 1	877	791	-	571	558	-	-	-	-	-	-	-
Stage 2	572	557	-	881	789	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	353	353	924	305	352	1021	1456	-	-	1557	-	-
Mov Cap-2 Maneuver	353	353	-	305	352	-	-	-	-	-	-	-
Stage 1	877	791	-	488	476	-	-	-	-	-	-	-
Stage 2	488	476	-	759	789	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	9.77	17.18	6.41	0
HCM LOS	A	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1456	-	-	885	305	1557	-	-
HCM Lane V/C Ratio	0.146	-	-	0.148	0.031	-	-	-
HCM Ctrl Dly (s/v)	7.9	-	-	9.8	17.2	0	-	-
HCM Lane LOS	A	-	-	A	C	A	-	-
HCM 95th %tile Q(veh)	0.5	-	-	0.5	0.1	0	-	-

Intersection												
Int Delay, s/veh	6.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	0	180	1	0	0	293	95	6	2	58	15
Future Vol, veh/h	10	0	180	1	0	0	293	95	6	2	58	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	0	212	1	0	0	345	112	7	2	68	18

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	883	890	77	878	895	115	86	0	0	119	0	0
Stage 1	82	82	-	805	805	-	-	-	-	-	-	-
Stage 2	801	808	-	73	91	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	266	282	984	269	280	937	1510	-	-	1469	-	-
Stage 1	927	827	-	376	395	-	-	-	-	-	-	-
Stage 2	378	394	-	937	820	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	205	217	984	162	216	937	1510	-	-	1469	-	-
Mov Cap-2 Maneuver	205	217	-	162	216	-	-	-	-	-	-	-
Stage 1	925	826	-	290	305	-	-	-	-	-	-	-
Stage 2	292	304	-	734	819	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	11.03	27.32	6.01	0.2
HCM LOS	B	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1510	-	-	820	162	1469	-	-
HCM Lane V/C Ratio	0.228	-	-	0.273	0.007	0.002	-	-
HCM Ctrl Dly (s/v)	8.1	-	-	11	27.3	7.5	-	-
HCM Lane LOS	A	-	-	B	D	A	-	-
HCM 95th %tile Q(veh)	0.9	-	-	1.1	0	0	-	-

Intersection												
Int Delay, s/veh	5.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	0	21	0	0	0	6	8	0	0	8	2
Future Vol, veh/h	4	0	21	0	0	0	6	8	0	0	8	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	0	25	0	0	0	7	9	0	0	9	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	34	34	11	33	35	9	12	0	0	9	0	0
Stage 1	11	11	-	24	24	-	-	-	-	-	-	-
Stage 2	24	24	-	9	12	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	973	858	1071	974	857	1072	1607	-	-	1610	-	-
Stage 1	1010	887	-	995	876	-	-	-	-	-	-	-
Stage 2	995	876	-	1012	886	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	968	855	1071	948	853	1072	1607	-	-	1610	-	-
Mov Cap-2 Maneuver	968	855	-	948	853	-	-	-	-	-	-	-
Stage 1	1010	887	-	990	872	-	-	-	-	-	-	-
Stage 2	990	872	-	988	886	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	8.52	0	3.11	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1607	-	-	1053	-	1610	-	-
HCM Lane V/C Ratio	0.004	-	-	0.028	-	-	-	-
HCM Ctrl Dly (s/v)	7.2	-	-	8.5	0	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	-	0	-	-

Intersection												
Int Delay, s/veh	1.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	1	0	0	0	1	5	30	1	1	2	1
Future Vol, veh/h	2	1	0	0	0	1	5	30	1	1	2	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	1	0	0	0	1	6	35	1	1	2	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	52	54	3	53	54	36	4	0	0	36	0	0
Stage 1	5	5	-	48	48	-	-	-	-	-	-	-
Stage 2	47	48	-	5	6	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	946	838	1081	946	838	1037	1618	-	-	1574	-	-
Stage 1	1017	891	-	966	855	-	-	-	-	-	-	-
Stage 2	967	855	-	1017	891	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	941	834	1081	940	834	1037	1618	-	-	1574	-	-
Mov Cap-2 Maneuver	941	834	-	940	834	-	-	-	-	-	-	-
Stage 1	1016	891	-	962	852	-	-	-	-	-	-	-
Stage 2	962	852	-	1015	890	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	9	8.48	1	1.82
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1618	-	-	903	1037	1574	-	-
HCM Lane V/C Ratio	0.004	-	-	0.004	0.001	0.001	-	-
HCM Ctrl Dly (s/v)	7.2	-	-	9	8.5	7.3	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

APPENDIX E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	250	89	440	154	44	68	569	202	35	1512	72
Future Volume (veh/h)	75	250	89	440	154	44	68	569	202	35	1512	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	79	263	0	463	162	0	72	599	0	37	1592	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	373	306		533	203		155	1670		426	1630	
Arrive On Green	0.21	0.16	0.00	0.26	0.18	0.00	0.04	0.47	0.00	0.03	0.46	0.00
Sat Flow, veh/h	1781	1870	1585	3456	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	79	263	0	463	162	0	72	599	0	37	1592	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	3.7	13.7	0.0	12.8	8.3	0.0	2.1	10.7	0.0	1.1	43.9	0.0
Cycle Q Clear(g_c), s	3.7	13.7	0.0	12.8	8.3	0.0	2.1	10.7	0.0	1.1	43.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	373	306		533	203		155	1670		426	1630	
V/C Ratio(X)	0.21	0.86		0.87	0.80		0.46	0.36		0.09	0.98	
Avail Cap(c_a), veh/h	373	421		639	440		176	1670		467	1630	
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.61	0.61	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.7	40.7	0.0	36.1	39.9	0.0	23.4	16.9	0.0	13.7	26.5	0.0
Incr Delay (d2), s/veh	0.3	12.4	0.0	6.9	4.4	0.0	2.1	0.6	0.0	0.1	17.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	7.0	0.0	5.1	3.7	0.0	0.8	4.0	0.0	0.4	19.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.0	53.1	0.0	43.0	44.3	0.0	25.5	17.5	0.0	13.8	43.9	0.0
LnGrp LOS	C	D		D	D		C	B		B	D	
Approach Vol, veh/h		342			625			671			1629	
Approach Delay, s/veh		48.5			43.3			18.4			43.2	
Approach LOS		D			D			B			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.7	51.5	19.9	20.9	8.8	50.4	25.4	15.4
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	35.5	18.5	22.5	5.5	35.5	17.5	23.5
Max Q Clear Time (g_c+I1), s	3.1	12.7	14.8	15.7	4.1	45.9	5.7	10.3
Green Ext Time (p_c), s	0.0	3.5	0.6	0.7	0.0	0.0	0.1	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	38.7
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

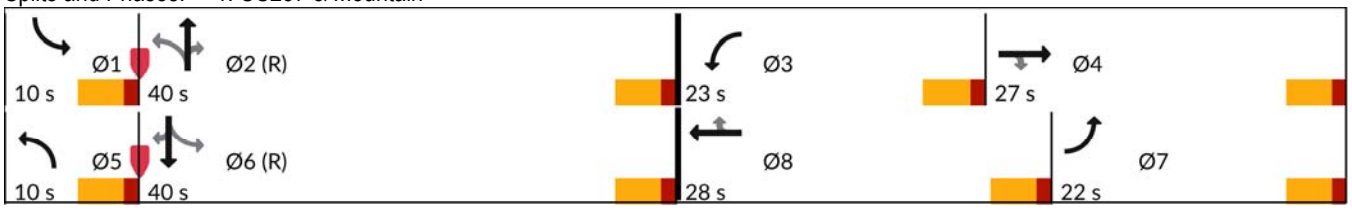
Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBT	NBL	SBTL	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	10	40	23	27	10	40	22	28
Maximum Split (%)	10.0%	40.0%	23.0%	27.0%	10.0%	40.0%	22.0%	28.0%
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Don't Walk (s)		11		11		11		11
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	9	19	59	82	9	19	87	59
End Time (s)	19	59	82	9	19	59	9	87
Yield/Force Off (s)	14.5	54.5	77.5	4.5	14.5	54.5	4.5	82.5
Yield/Force Off 170(s)	14.5	43.5	77.5	93.5	14.5	43.5	4.5	71.5
Local Start Time (s)	90	0	40	63	90	0	68	40
Local Yield (s)	95.5	35.5	58.5	85.5	95.5	35.5	85.5	63.5
Local Yield 170(s)	95.5	24.5	58.5	74.5	95.5	24.5	85.5	52.5

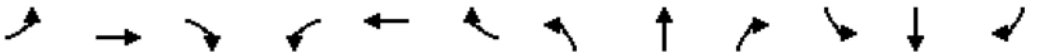
Intersection Summary

Cycle Length	100
Control Type	Actuated-Coordinated
Natural Cycle	100

Offset: 19 (19%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Splits and Phases: 1: US287 & Mountain





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	79	263	94	463	162	46	72	599	213	37	1592	76
v/c Ratio	0.23	0.76	0.24	0.78	0.47	0.12	0.39	0.38	0.26	0.10	1.07	0.10
Control Delay (s/veh)	33.6	52.8	5.7	53.5	51.4	4.4	20.8	21.7	4.1	15.2	76.6	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	33.6	52.8	5.7	53.5	51.4	4.4	20.8	21.7	4.1	15.2	76.6	0.3
Queue Length 50th (ft)	40	159	0	105	86	1	24	147	0	12	~661	0
Queue Length 95th (ft)	82	238	29	164	m115	m5	51	205	47	31	#813	0
Internal Link Dist (ft)		1325			870			1386			1925	
Turn Bay Length (ft)	650		400	540		320	1000		1000	1000		1000
Base Capacity (vph)	384	419	445	635	465	481	187	1571	821	378	1484	758
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.63	0.21	0.73	0.35	0.10	0.39	0.38	0.26	0.10	1.07	0.10

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	264	84	303	259	41	111	1515	478	64	963	106
Future Volume (veh/h)	130	264	84	303	259	41	111	1515	478	64	963	106
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	135	275	0	316	270	0	116	1578	0	67	1003	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	209	320		383	307		322	1762		177	1734	
Arrive On Green	0.12	0.17	0.00	0.19	0.27	0.00	0.05	0.50	0.00	0.04	0.49	0.00
Sat Flow, veh/h	1781	1870	1585	3456	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	135	275	0	316	270	0	116	1578	0	67	1003	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	7.2	14.3	0.0	8.8	13.8	0.0	3.2	40.3	0.0	1.8	20.1	0.0
Cycle Q Clear(g_c), s	7.2	14.3	0.0	8.8	13.8	0.0	3.2	40.3	0.0	1.8	20.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	209	320		383	307		322	1762		177	1734	
V/C Ratio(X)	0.64	0.86		0.82	0.88		0.36	0.90		0.38	0.58	
Avail Cap(c_a), veh/h	294	458		467	402		331	1762		200	1734	
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.64	0.64	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.1	40.3	0.0	39.8	35.3	0.0	14.0	22.9	0.0	21.3	18.3	0.0
Incr Delay (d2), s/veh	3.3	11.0	0.0	6.5	10.9	0.0	0.7	7.5	0.0	1.3	1.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	7.2	0.0	3.7	6.2	0.0	1.2	16.1	0.0	0.7	7.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	45.4	51.3	0.0	46.3	46.3	0.0	14.6	30.4	0.0	22.6	19.7	0.0
LnGrp LOS	D	D		D	D		B	C		C	B	
Approach Vol, veh/h		410			586			1694			1070	
Approach Delay, s/veh		49.3			46.3			29.3			19.9	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.7	54.1	15.6	21.6	9.5	53.3	16.3	20.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	38.5	13.5	24.5	5.5	38.5	16.5	21.5
Max Q Clear Time (g_c+I1), s	3.8	42.3	10.8	16.3	5.2	22.1	9.2	15.8
Green Ext Time (p_c), s	0.0	0.0	0.3	0.8	0.0	5.6	0.2	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	31.5
HCM 7th LOS	C

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

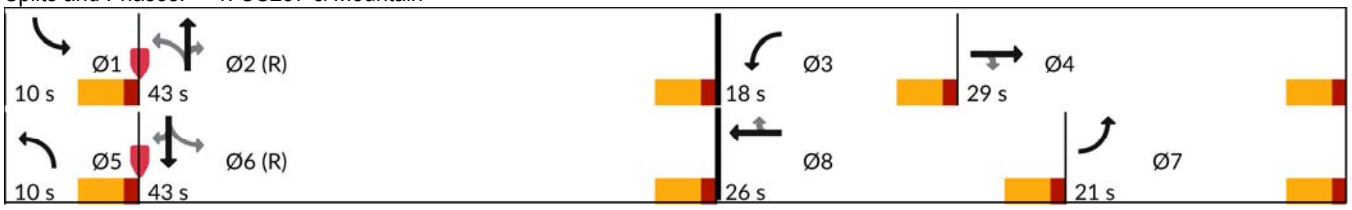
Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBT	NBL	SBTL	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	10	43	18	29	10	43	21	26
Maximum Split (%)	10.0%	43.0%	18.0%	29.0%	10.0%	43.0%	21.0%	26.0%
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Don't Walk (s)		11		11		11		11
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	98	8	51	69	98	8	77	51
End Time (s)	8	51	69	98	8	51	98	77
Yield/Force Off (s)	3.5	46.5	64.5	93.5	3.5	46.5	93.5	72.5
Yield/Force Off 170(s)	3.5	35.5	64.5	82.5	3.5	35.5	93.5	61.5
Local Start Time (s)	90	0	43	61	90	0	69	43
Local Yield (s)	95.5	38.5	56.5	85.5	95.5	38.5	85.5	64.5
Local Yield 170(s)	95.5	27.5	56.5	74.5	95.5	27.5	85.5	53.5

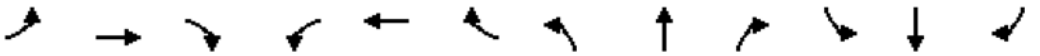
Intersection Summary

Cycle Length	100
Control Type	Actuated-Coordinated
Natural Cycle	90

Offset: 8 (8%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Splits and Phases: 1: US287 & Mountain





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	135	275	88	316	270	43	116	1578	498	67	1003	110
v/c Ratio	0.55	0.76	0.22	0.72	0.78	0.11	0.47	0.98	0.50	0.36	0.67	0.14
Control Delay (s/veh)	48.8	51.1	4.5	43.3	35.1	1.1	19.9	48.9	3.9	18.3	26.7	1.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.8	51.1	4.5	43.3	35.1	1.1	19.9	48.9	3.9	18.3	26.7	1.3
Queue Length 50th (ft)	81	166	0	62	70	0	35	~594	0	20	277	0
Queue Length 95th (ft)	139	242	24	124	m185	m1	71	#766	63	45	361	11
Internal Link Dist (ft)		1325			870			1386			1925	
Turn Bay Length (ft)	650		400	540		320	1000		1000	1000		1000
Base Capacity (vph)	292	456	474	463	400	430	248	1603	989	187	1507	768
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.60	0.19	0.68	0.68	0.10	0.47	0.98	0.50	0.36	0.67	0.14

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	176	294	20	13	514	35	17	14	12	152	13	61
Future Volume (veh/h)	176	294	20	13	514	35	17	14	12	152	13	61
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	183	306	19	14	535	12	18	15	5	158	14	19
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	496	878	55	453	739	626	293	235	72	558	248	337
Arrive On Green	0.25	1.00	1.00	0.03	0.79	0.79	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1781	1743	108	1781	1870	1585	694	681	208	1392	719	976
Grp Volume(v), veh/h	183	0	325	14	535	12	38	0	0	158	0	33
Grp Sat Flow(s),veh/h/ln	1781	0	1851	1781	1870	1585	1583	0	0	1392	0	1695
Q Serve(g_s), s	0.0	0.0	0.0	0.5	14.0	0.2	0.0	0.0	0.0	6.6	0.0	1.3
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.5	14.0	0.2	1.4	0.0	0.0	7.9	0.0	1.3
Prop In Lane	1.00		0.06	1.00		1.00	0.47		0.13	1.00		0.58
Lane Grp Cap(c), veh/h	496	0	933	453	739	626	599	0	0	558	0	585
V/C Ratio(X)	0.37	0.00	0.35	0.03	0.72	0.02	0.06	0.00	0.00	0.28	0.00	0.06
Avail Cap(c_a), veh/h	496	0	933	522	739	626	599	0	0	558	0	585
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.85	0.00	0.85	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.5	0.0	0.0	19.7	7.8	6.4	21.9	0.0	0.0	23.9	0.0	21.9
Incr Delay (d2), s/veh	0.4	0.0	0.9	0.0	6.1	0.1	0.2	0.0	0.0	1.3	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.0	0.2	0.2	4.0	0.1	0.6	0.0	0.0	2.9	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	21.9	0.0	0.9	19.7	13.9	6.4	22.1	0.0	0.0	25.2	0.0	22.1
LnGrp LOS	C		A	B	B	A	C			C		C
Approach Vol, veh/h		508			561			38			191	
Approach Delay, s/veh		8.4			13.9			22.1			24.7	
Approach LOS		A			B			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.1	54.9		39.0	17.0	44.0		39.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.5	46.5		34.5	12.5	39.5		34.5				
Max Q Clear Time (g_c+I1), s	2.5	2.0		9.9	2.0	16.0		3.4				
Green Ext Time (p_c), s	0.0	1.9		0.6	0.3	3.2		0.2				
Intersection Summary												
HCM 7th Control Delay, s/veh			13.6									
HCM 7th LOS			B									

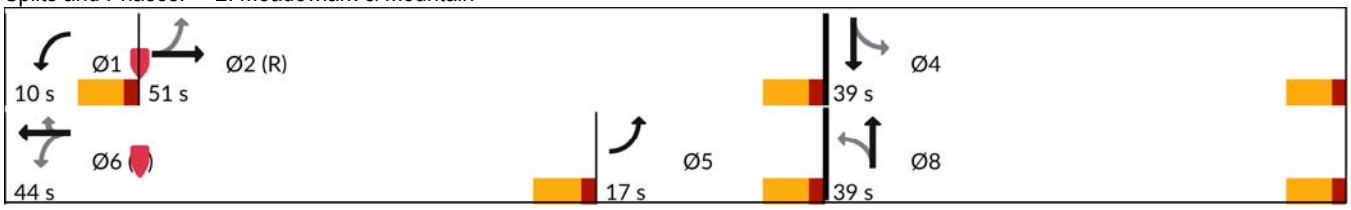
Phase Number	1	2	4	5	6	8
Movement	WBL	EBTL	SBTL	EBL	WBTL	NBTL
Lead/Lag	Lead	Lag		Lag	Lead	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	Max	None	C-Max	Max
Maximum Split (s)	10	51	39	17	44	39
Maximum Split (%)	10.0%	51.0%	39.0%	17.0%	44.0%	39.0%
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Don't Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	51	61	12	95	51	12
End Time (s)	61	12	51	12	95	51
Yield/Force Off (s)	56.5	7.5	46.5	7.5	90.5	46.5
Yield/Force Off 170(s)	56.5	96.5	35.5	7.5	79.5	35.5
Local Start Time (s)	90	0	51	34	90	51
Local Yield (s)	95.5	46.5	85.5	46.5	29.5	85.5
Local Yield 170(s)	95.5	35.5	74.5	46.5	18.5	74.5

Intersection Summary

Cycle Length	100	
Control Type	Actuated-Coordinated	
Natural Cycle	60	

Offset: 61 (61%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Splits and Phases: 2: Meadowlark & Mountain



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	183	327	14	535	36	46	158	78
v/c Ratio	0.45	0.32	0.04	0.73	0.05	0.08	0.34	0.13
Control Delay (s/veh)	22.7	15.1	18.2	28.4	2.2	17.7	26.9	8.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	22.7	15.1	18.2	28.4	2.2	17.7	26.9	8.3
Queue Length 50th (ft)	43	78	4	283	1	14	74	6
Queue Length 95th (ft)	119	196	m12	424	m1	39	129	37
Internal Link Dist (ft)		870		1236		331		243
Turn Bay Length (ft)	360		450		300		200	
Base Capacity (vph)	407	1007	342	735	664	571	467	605
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.32	0.04	0.73	0.05	0.08	0.34	0.13

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	328	451	44	29	450	48	33	22	40	171	18	51
Future Volume (veh/h)	328	451	44	29	450	48	33	22	40	171	18	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	360	496	45	32	495	13	36	24	18	188	20	15
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	575	879	80	384	701	594	261	171	114	515	313	234
Arrive On Green	0.35	1.00	1.00	0.06	0.75	0.75	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1781	1689	153	1781	1870	1585	661	543	361	1365	992	744
Grp Volume(v), veh/h	360	0	541	32	495	13	78	0	0	188	0	35
Grp Sat Flow(s),veh/h/ln	1781	0	1843	1781	1870	1585	1566	0	0	1365	0	1736
Q Serve(g_s), s	0.0	0.0	0.0	1.2	14.1	0.2	0.9	0.0	0.0	6.6	0.0	1.4
Cycle Q Clear(g_c), s	0.0	0.0	0.0	1.2	14.1	0.2	3.2	0.0	0.0	9.8	0.0	1.4
Prop In Lane	1.00		0.08	1.00		1.00	0.46		0.23	1.00		0.43
Lane Grp Cap(c), veh/h	575	0	959	384	701	594	546	0	0	515	0	547
V/C Ratio(X)	0.63	0.00	0.56	0.08	0.71	0.02	0.14	0.00	0.00	0.36	0.00	0.06
Avail Cap(c_a), veh/h	575	0	959	430	701	594	546	0	0	515	0	547
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.79	0.00	0.79	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.1	0.0	0.0	20.9	9.6	7.8	24.5	0.0	0.0	26.6	0.0	23.9
Incr Delay (d2), s/veh	1.7	0.0	1.9	0.1	5.9	0.1	0.5	0.0	0.0	2.0	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	0.0	0.5	0.5	4.2	0.1	1.4	0.0	0.0	3.8	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.8	0.0	1.9	21.0	15.5	7.9	25.1	0.0	0.0	28.6	0.0	24.2
LnGrp LOS	C		A	C	B	A	C			C		C
Approach Vol, veh/h		901			540			78			223	
Approach Delay, s/veh		10.3			15.6			25.1			27.9	
Approach LOS		B			B			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.4	56.6		36.0	22.0	42.0		36.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.5	49.5		31.5	17.5	37.5		31.5				
Max Q Clear Time (g_c+I1), s	3.2	2.0		11.8	2.0	16.1		5.2				
Green Ext Time (p_c), s	0.0	3.5		0.7	0.9	2.8		0.4				
Intersection Summary												
HCM 7th Control Delay, s/veh			14.8									
HCM 7th LOS			B									

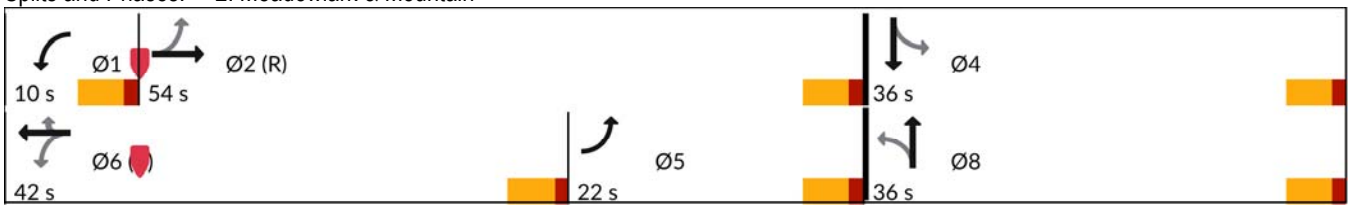
Phase Number	1	2	4	5	6	8
Movement	WBL	EBTL	SBTL	EBL	WBTL	NBTL
Lead/Lag	Lead	Lag		Lag	Lead	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	Max	None	C-Max	Max
Maximum Split (s)	10	54	36	22	42	36
Maximum Split (%)	10.0%	54.0%	36.0%	22.0%	42.0%	36.0%
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Don't Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	33	43	97	75	33	97
End Time (s)	43	97	33	97	75	33
Yield/Force Off (s)	38.5	92.5	28.5	92.5	70.5	28.5
Yield/Force Off 170(s)	38.5	81.5	17.5	92.5	59.5	17.5
Local Start Time (s)	90	0	54	32	90	54
Local Yield (s)	95.5	49.5	85.5	49.5	27.5	85.5
Local Yield 170(s)	95.5	38.5	74.5	49.5	16.5	74.5

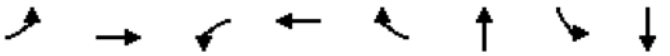
Intersection Summary

Cycle Length	100
Control Type	Actuated-Coordinated
Natural Cycle	60

Offset: 43 (43%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Splits and Phases: 2: Meadowlark & Mountain





Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	360	544	32	495	53	104	188	76
v/c Ratio	0.70	0.55	0.16	0.71	0.08	0.20	0.46	0.14
Control Delay (s/veh)	33.5	20.5	18.0	25.4	3.3	17.2	32.0	10.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	33.5	20.5	18.0	25.4	3.3	17.2	32.0	10.4
Queue Length 50th (ft)	130	211	9	135	0	29	96	9
Queue Length 95th (ft)	#237	356	m18	264	m3	70	163	41
Internal Link Dist (ft)		870		1236		331		243
Turn Bay Length (ft)	360		450		200		200	
Base Capacity (vph)	512	987	194	698	634	521	407	560
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.70	0.55	0.16	0.71	0.08	0.20	0.46	0.14

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Intersection												
Int Delay, s/veh	0.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱		↑	↱			↱			↱
Traffic Vol, veh/h	0	454	14	0	545	10	0	0	29	0	0	10
Future Vol, veh/h	0	454	14	0	545	10	0	0	29	0	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	250	-	-	250	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	85	85	88	88	85	85	85	88	85	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	516	16	0	619	11	0	0	34	0	0	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	516	-	-	619
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.22	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.318	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	559	0	0	488
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	559	-	-	488
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0	11.86	12.55
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	559	-	-	-	-	488
HCM Lane V/C Ratio	0.061	-	-	-	-	0.023
HCM Ctrl Dly (s/v)	11.9	-	-	-	-	12.5
HCM Lane LOS	B	-	-	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	-	0.1

Intersection												
Int Delay, s/veh	0.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱		↑	↱			↱			↱
Traffic Vol, veh/h	0	636	47	0	526	38	0	0	19	0	0	2
Future Vol, veh/h	0	636	47	0	526	38	0	0	19	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	250	-	-	250	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	85	85	93	93	85	85	85	93	85	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	684	55	0	566	41	0	0	22	0	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	684	-	-	566
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.22	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.318	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	449	0	0	524
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	449	-	-	524
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0	13.44	11.9
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	449	-	-	-	-	524
HCM Lane V/C Ratio	0.05	-	-	-	-	0.004
HCM Ctrl Dly (s/v)	13.4	-	-	-	-	11.9
HCM Lane LOS	B	-	-	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	-	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	267	115	33	223	144	183	242	65	178	193	148
Future Volume (veh/h)	106	267	115	33	223	144	183	242	65	178	193	148
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	115	290	43	36	242	60	199	263	25	193	210	59
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	451	707	599	374	657	557	495	592	501	463	589	499
Arrive On Green	0.02	0.12	0.12	0.03	0.35	0.35	0.10	0.32	0.32	0.09	0.31	0.31
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	115	290	43	36	242	60	199	263	25	193	210	59
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	4.0	14.3	2.4	1.3	9.6	2.6	7.4	11.2	1.1	7.2	8.7	2.6
Cycle Q Clear(g_c), s	4.0	14.3	2.4	1.3	9.6	2.6	7.4	11.2	1.1	7.2	8.7	2.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	451	707	599	374	657	557	495	592	501	463	589	499
V/C Ratio(X)	0.26	0.41	0.07	0.10	0.37	0.11	0.40	0.44	0.05	0.42	0.36	0.12
Avail Cap(c_a), veh/h	498	707	599	434	657	557	548	592	501	571	589	499
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.8	33.5	28.3	20.1	24.2	21.9	20.0	27.2	23.7	20.3	26.4	24.4
Incr Delay (d2), s/veh	0.3	1.8	0.2	0.1	1.6	0.4	0.5	2.4	0.2	0.6	1.7	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	7.4	0.9	0.5	4.3	1.0	3.0	5.2	0.4	3.0	4.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.1	35.2	28.5	20.2	25.8	22.3	20.6	29.6	23.9	20.9	28.1	24.9
LnGrp LOS	C	D	C	C	C	C	C	C	C	C	C	C
Approach Vol, veh/h		448			338			487			462	
Approach Delay, s/veh		30.7			24.6			25.6			24.7	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.7	42.3	14.0	36.0	10.3	39.6	13.9	36.1				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	6.5	31.5	12.5	31.5	8.5	29.5	15.5	28.5				
Max Q Clear Time (g_c+I1), s	3.3	16.3	9.4	10.7	6.0	11.6	9.2	13.2				
Green Ext Time (p_c), s	0.0	1.4	0.2	1.3	0.1	1.3	0.3	1.2				
Intersection Summary												
HCM 7th Control Delay, s/veh			26.5									
HCM 7th LOS			C									

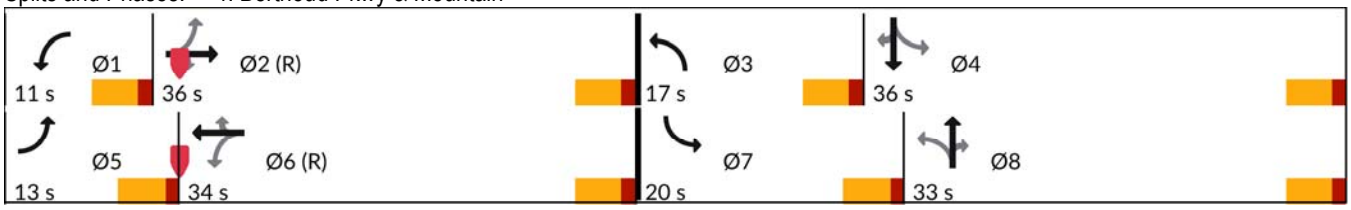
Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EBTL	NBL	SBTL	EBL	WBTL	SBL	NBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	C-Max	None	Max
Maximum Split (s)	11	36	17	36	13	34	20	33
Maximum Split (%)	11.0%	36.0%	17.0%	36.0%	13.0%	34.0%	20.0%	33.0%
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Don't Walk (s)		11		11		11		11
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	11	47	64	0	13	47	67
End Time (s)	11	47	64	0	13	47	67	0
Yield/Force Off (s)	6.5	42.5	59.5	95.5	8.5	42.5	62.5	95.5
Yield/Force Off 170(s)	6.5	31.5	59.5	84.5	8.5	31.5	62.5	84.5
Local Start Time (s)	87	98	34	51	87	0	34	54
Local Yield (s)	93.5	29.5	46.5	82.5	95.5	29.5	49.5	82.5
Local Yield 170(s)	93.5	18.5	46.5	71.5	95.5	18.5	49.5	71.5

Intersection Summary

Cycle Length	100
Control Type	Actuated-Coordinated
Natural Cycle	65

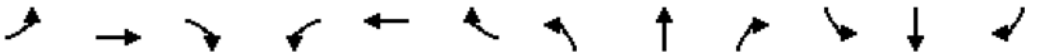
Offset: 13 (13%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Splits and Phases: 4: Berthoud Pkwy & Mountain



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	115	290	125	36	242	157	199	263	71	193	210	161
v/c Ratio	0.29	0.43	0.19	0.09	0.43	0.27	0.38	0.44	0.12	0.40	0.34	0.26
Control Delay (s/veh)	22.8	31.9	8.7	17.8	31.4	5.7	17.5	30.4	2.0	17.7	27.9	5.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	22.8	31.9	8.7	17.8	31.4	5.7	17.5	30.4	2.0	17.7	27.9	5.3
Queue Length 50th (ft)	56	156	8	13	125	0	71	131	0	69	102	0
Queue Length 95th (ft)	64	246	31	32	197	46	116	218	11	113	166	44
Internal Link Dist (ft)		1223			961			573			639	
Turn Bay Length (ft)	400		350	430		400	350		200	350		370
Base Capacity (vph)	406	668	648	396	558	584	554	599	587	547	612	628
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.43	0.19	0.09	0.43	0.27	0.36	0.44	0.12	0.35	0.34	0.26

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	199	345	102	66	307	232	138	245	55	217	262	119
Future Volume (veh/h)	199	345	102	66	307	232	138	245	55	217	262	119
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	224	388	43	74	345	105	155	275	25	244	294	46
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	407	704	597	337	598	506	467	421	357	482	421	357
Arrive On Green	0.07	0.25	0.25	0.04	0.32	0.32	0.17	0.22	0.22	0.17	0.22	0.22
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	224	388	43	74	345	105	155	275	25	244	294	46
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	8.0	18.0	2.1	2.8	15.4	4.8	5.7	13.4	1.2	9.5	14.5	2.3
Cycle Q Clear(g_c), s	8.0	18.0	2.1	2.8	15.4	4.8	5.7	13.4	1.2	9.5	14.5	2.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	407	704	597	337	598	506	467	421	357	482	421	357
V/C Ratio(X)	0.55	0.55	0.07	0.22	0.58	0.21	0.33	0.65	0.07	0.51	0.70	0.13
Avail Cap(c_a), veh/h	433	704	597	358	598	506	467	421	357	482	421	357
HCM Platoon Ratio	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.7	30.1	24.1	22.0	28.4	24.8	20.9	35.2	30.5	22.0	35.6	30.9
Incr Delay (d2), s/veh	1.3	3.1	0.2	0.3	4.0	0.9	1.9	7.7	0.4	3.8	9.3	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	8.9	0.8	1.1	7.2	1.9	2.5	6.8	0.5	4.3	7.5	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.0	33.1	24.3	22.3	32.4	25.7	22.8	42.9	30.9	25.8	44.9	31.7
LnGrp LOS	C	C	C	C	C	C	C	D	C	C	D	C
Approach Vol, veh/h		655			524			455			584	
Approach Delay, s/veh		28.7			29.6			35.4			35.9	
Approach LOS		C			C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.9	42.1	22.0	27.0	14.5	36.5	22.0	27.0				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.5	36.5	17.5	22.5	11.5	30.5	17.5	22.5				
Max Q Clear Time (g_c+I1), s	4.8	20.0	7.7	16.5	10.0	17.4	11.5	15.4				
Green Ext Time (p_c), s	0.0	2.0	0.3	0.9	0.1	1.8	0.4	0.9				
Intersection Summary												
HCM 7th Control Delay, s/veh			32.2									
HCM 7th LOS			C									

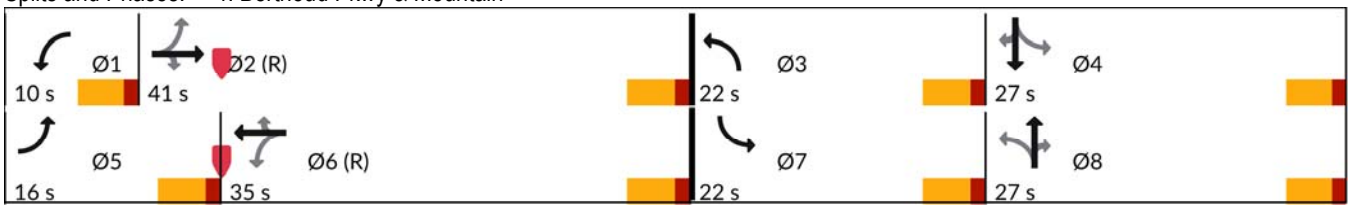
Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EBTL	NBL	SBTL	EBL	WBTL	SBL	NBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	Max	Max	None	C-Max	Max	Max
Maximum Split (s)	10	41	22	27	16	35	22	27
Maximum Split (%)	10.0%	41.0%	22.0%	27.0%	16.0%	35.0%	22.0%	27.0%
Minimum Split (s)	9.5	22.5	22.5	22.5	9.5	22.5	22.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7	7	7		7	7	7
Flash Don't Walk (s)		11	11	11		11	11	11
Dual Entry	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	84	94	35	57	84	0	35	57
End Time (s)	94	35	57	84	0	35	57	84
Yield/Force Off (s)	89.5	30.5	52.5	79.5	95.5	30.5	52.5	79.5
Yield/Force Off 170(s)	89.5	19.5	41.5	68.5	95.5	19.5	41.5	68.5
Local Start Time (s)	84	94	35	57	84	0	35	57
Local Yield (s)	89.5	30.5	52.5	79.5	95.5	30.5	52.5	79.5
Local Yield 170(s)	89.5	19.5	41.5	68.5	95.5	19.5	41.5	68.5

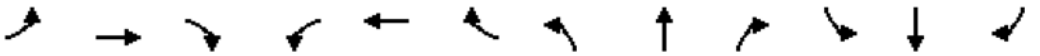
Intersection Summary

Cycle Length	100
Control Type	Actuated-Coordinated
Natural Cycle	80

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Splits and Phases: 4: Berthoud Pkwy & Mountain





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	224	388	115	74	345	261	155	275	62	244	294	134
v/c Ratio	0.57	0.54	0.17	0.22	0.60	0.39	0.35	0.66	0.13	0.54	0.70	0.28
Control Delay (s/veh)	20.6	26.7	4.6	17.2	34.6	5.2	19.6	43.7	0.5	22.9	45.9	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.6	26.7	4.6	17.2	34.6	5.2	19.6	43.7	0.5	22.9	45.9	4.5
Queue Length 50th (ft)	55	208	6	25	187	0	58	160	0	97	173	0
Queue Length 95th (ft)	92	301	17	51	277	54	99	246	0	152	263	29
Internal Link Dist (ft)		1223			961			573			639	
Turn Bay Length (ft)	400		350	430		400	350		200	350		370
Base Capacity (vph)	398	716	679	344	578	671	438	419	483	453	419	483
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.56	0.54	0.17	0.22	0.60	0.39	0.35	0.66	0.13	0.54	0.70	0.28

Intersection Summary

Intersection												
Int Delay, s/veh	5.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	0	108	8	0	1	181	42	2	0	110	5
Future Vol, veh/h	3	0	108	8	0	1	181	42	2	0	110	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	200	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	0	127	9	0	1	213	49	2	0	129	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	608	610	132	606	612	51	135	0	0	52	0	0
Stage 1	132	132	-	476	476	-	-	-	-	-	-	-
Stage 2	475	478	-	129	135	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	408	409	917	409	408	1018	1449	-	-	1554	-	-
Stage 1	871	787	-	569	556	-	-	-	-	-	-	-
Stage 2	570	556	-	874	784	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	348	349	917	301	348	1018	1449	-	-	1554	-	-
Mov Cap-2 Maneuver	348	349	-	301	348	-	-	-	-	-	-	-
Stage 1	871	787	-	486	475	-	-	-	-	-	-	-
Stage 2	486	474	-	753	784	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	9.81	16.41	6.36	0
HCM LOS	A	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1449	-	-	878	326	1554	-	-
HCM Lane V/C Ratio	0.147	-	-	0.149	0.032	-	-	-
HCM Ctrl Dly (s/v)	7.9	-	-	9.8	16.4	0	-	-
HCM Lane LOS	A	-	-	A	C	A	-	-
HCM 95th %tile Q(veh)	0.5	-	-	0.5	0.1	0	-	-

Intersection												
Int Delay, s/veh	6.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	0	180	1	0	0	293	99	6	2	59	15
Future Vol, veh/h	10	0	180	1	0	0	293	99	6	2	59	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	200	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	0	212	1	0	0	345	116	7	2	69	18

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	889	896	78	884	901	120	87	0	0	124	0	0
Stage 1	83	83	-	809	809	-	-	-	-	-	-	-
Stage 2	806	813	-	74	92	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	264	280	982	266	278	931	1509	-	-	1463	-	-
Stage 1	925	826	-	374	393	-	-	-	-	-	-	-
Stage 2	376	392	-	935	819	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	203	216	982	161	214	931	1509	-	-	1463	-	-
Mov Cap-2 Maneuver	203	216	-	161	214	-	-	-	-	-	-	-
Stage 1	924	825	-	289	303	-	-	-	-	-	-	-
Stage 2	290	302	-	732	818	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	11.05	27.55	5.96	0.2
HCM LOS	B	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1509	-	-	818	161	1463	-	-
HCM Lane V/C Ratio	0.228	-	-	0.273	0.007	0.002	-	-
HCM Ctrl Dly (s/v)	8.1	-	-	11.1	27.5	7.5	-	-
HCM Lane LOS	A	-	-	B	D	A	-	-
HCM 95th %tile Q(veh)	0.9	-	-	1.1	0	0	-	-

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	1	0	0	0	1	9	0	0	9	0
Future Vol, veh/h	2	0	1	0	0	0	1	9	0	0	9	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	0	1	0	0	0	1	11	0	0	11	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	24	24	11	24	24	11	11	0	0	11	0	0
Stage 1	11	11	-	13	13	-	-	-	-	-	-	-
Stage 2	13	13	-	11	11	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	988	870	1071	988	870	1071	1609	-	-	1609	-	-
Stage 1	1010	887	-	1007	885	-	-	-	-	-	-	-
Stage 2	1007	885	-	1010	887	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	987	869	1071	986	869	1071	1609	-	-	1609	-	-
Mov Cap-2 Maneuver	987	869	-	986	869	-	-	-	-	-	-	-
Stage 1	1010	887	-	1007	884	-	-	-	-	-	-	-
Stage 2	1007	884	-	1009	887	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	8.56	0	0.72	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1609	-	-	1014	-	1609	-	-
HCM Lane V/C Ratio	0.001	-	-	0.003	-	-	-	-
HCM Ctrl Dly (s/v)	7.2	-	-	8.6	0	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	0	-	-

Intersection												
Int Delay, s/veh	1.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	1	0	0	0	1	5	33	1	1	2	3
Future Vol, veh/h	2	1	0	0	0	1	5	33	1	1	2	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	1	0	0	0	1	6	39	1	1	2	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	57	58	4	56	59	39	6	0	0	40	0	0
Stage 1	6	6	-	51	51	-	-	-	-	-	-	-
Stage 2	51	52	-	5	8	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	940	833	1079	941	832	1032	1615	-	-	1570	-	-
Stage 1	1015	890	-	962	852	-	-	-	-	-	-	-
Stage 2	962	852	-	1017	889	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	935	829	1079	935	828	1032	1615	-	-	1570	-	-
Mov Cap-2 Maneuver	935	829	-	935	828	-	-	-	-	-	-	-
Stage 1	1015	890	-	958	849	-	-	-	-	-	-	-
Stage 2	958	849	-	1015	888	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	9.03	8.49	0.93	1.22
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1615	-	-	897	1032	1570	-	-
HCM Lane V/C Ratio	0.004	-	-	0.004	0.001	0.001	-	-
HCM Ctrl Dly (s/v)	7.2	-	-	9	8.5	7.3	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

APPENDIX F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	300	135	425	200	130	105	690	220	70	1830	95
Future Volume (veh/h)	100	300	135	425	200	130	105	690	220	70	1830	95
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	105	316	0	447	211	0	111	726	0	74	1926	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	161	405		504	399		145	1956		133	1943	
Arrive On Green	0.05	0.11	0.00	0.15	0.21	0.00	0.04	0.55	0.00	0.04	0.55	0.00
Sat Flow, veh/h	3456	3554	1585	3456	1870	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	105	316	0	447	211	0	111	726	0	74	1926	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1870	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	3.6	10.3	0.0	15.1	11.9	0.0	3.8	13.7	0.0	2.5	63.8	0.0
Cycle Q Clear(g_c), s	3.6	10.3	0.0	15.1	11.9	0.0	3.8	13.7	0.0	2.5	63.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	161	405		504	399		145	1956		133	1943	
V/C Ratio(X)	0.65	0.78		0.89	0.53		0.76	0.37		0.56	0.99	
Avail Cap(c_a), veh/h	421	702		538	433		145	1956		189	1943	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	55.7	51.2	0.0	49.8	41.5	0.0	56.4	15.1	0.0	56.2	26.7	0.0
Incr Delay (d2), s/veh	4.4	3.3	0.0	15.7	1.1	0.0	21.1	0.5	0.0	3.6	18.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	4.6	0.0	7.4	5.4	0.0	2.0	5.1	0.0	1.1	28.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	60.2	54.5	0.0	65.5	42.6	0.0	77.4	15.7	0.0	59.8	45.2	0.0
LnGrp LOS	E	D		E	D		E	B		E	D	
Approach Vol, veh/h		421			658			837			2000	
Approach Delay, s/veh		55.9			58.1			23.8			45.7	
Approach LOS		E			E			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.1	69.9	21.9	18.1	9.5	69.5	10.0	29.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	6.5	63.5	18.5	23.5	5.0	65.0	14.5	27.5
Max Q Clear Time (g_c+I1), s	4.5	15.7	17.1	12.3	5.8	65.8	5.6	13.9
Green Ext Time (p_c), s	0.0	4.8	0.3	1.3	0.0	0.0	0.2	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	44.2
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

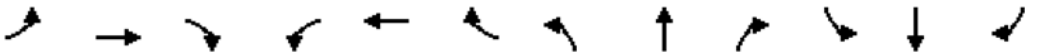
Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBT	NBL	SBT	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	None	Max	None	None
Maximum Split (s)	11	68	23	28	9.5	69.5	19	32
Maximum Split (%)	8.5%	52.3%	17.7%	21.5%	7.3%	53.5%	14.6%	24.6%
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Don't Walk (s)		11		11		11		11
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	11	79	102	0	9.5	79	98
End Time (s)	11	79	102	0	9.5	79	98	0
Yield/Force Off (s)	6.5	74.5	97.5	125.5	5	74.5	93.5	125.5
Yield/Force Off 170(s)	6.5	63.5	97.5	114.5	5	63.5	93.5	114.5
Local Start Time (s)	119	0	68	91	119	128.5	68	87
Local Yield (s)	125.5	63.5	86.5	114.5	124	63.5	82.5	114.5
Local Yield 170(s)	125.5	52.5	86.5	103.5	124	52.5	82.5	103.5

Intersection Summary

Cycle Length	130
Control Type	Actuated-Uncoordinated
Natural Cycle	130

Splits and Phases: 1: US287 & Mountain





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	105	316	142	447	211	137	111	726	232	74	1926	100
v/c Ratio	0.41	0.67	0.49	0.88	0.55	0.31	0.79	0.38	0.24	0.41	1.03	0.11
Control Delay (s/veh)	59.5	58.0	26.3	70.5	49.7	8.6	95.1	18.3	2.8	64.6	56.8	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	59.5	58.0	26.3	70.5	49.7	8.6	95.1	18.3	2.8	64.6	56.8	3.3
Queue Length 50th (ft)	41	127	39	180	151	0	45	177	0	29	~856	0
Queue Length 95th (ft)	73	176	104	#285	237	53	#103	246	42	57	#1073	28
Internal Link Dist (ft)		1325			870			1386			1925	
Turn Bay Length (ft)	650		400	540		320	1000		1000	1000		1000
Base Capacity (vph)	406	679	374	518	421	464	140	1901	957	182	1878	887
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.47	0.38	0.86	0.50	0.30	0.79	0.38	0.24	0.41	1.03	0.11

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	370	160	320	300	110	180	1825	495	140	1165	150
Future Volume (veh/h)	180	370	160	320	300	110	180	1825	495	140	1165	150
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	188	385	0	333	312	0	188	1901	0	146	1214	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	239	490		381	335		242	1955		218	1930	
Arrive On Green	0.07	0.14	0.00	0.18	0.30	0.00	0.07	0.55	0.00	0.06	0.54	0.00
Sat Flow, veh/h	3456	3554	1585	3456	1870	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	188	385	0	333	312	0	188	1901	0	146	1214	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1870	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	7.0	13.6	0.0	12.2	21.1	0.0	7.0	67.3	0.0	5.4	30.8	0.0
Cycle Q Clear(g_c), s	7.0	13.6	0.0	12.2	21.1	0.0	7.0	67.3	0.0	5.4	30.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	239	490		381	335		242	1955		218	1930	
V/C Ratio(X)	0.79	0.79		0.87	0.93		0.78	0.97		0.67	0.63	
Avail Cap(c_a), veh/h	253	506		412	352		332	1955		218	1930	
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.75	0.75	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	59.6	54.2	0.0	52.1	44.8	0.0	59.4	28.3	0.0	59.6	20.6	0.0
Incr Delay (d2), s/veh	14.5	7.8	0.0	13.7	24.7	0.0	7.6	14.8	0.0	7.6	1.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	6.4	0.0	5.5	10.7	0.0	3.2	29.1	0.0	2.5	12.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	74.1	61.9	0.0	65.9	69.5	0.0	67.0	43.1	0.0	67.1	22.2	0.0
LnGrp LOS	E	E		E	E		E	D		E	C	
Approach Vol, veh/h		573			645			2089			1360	
Approach Delay, s/veh		65.9			67.6			45.3			27.0	
Approach LOS		E			E			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.7	76.0	18.8	22.4	13.6	75.1	13.5	27.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	6.5	71.5	15.5	18.5	12.5	65.5	9.5	24.5
Max Q Clear Time (g_c+I1), s	7.4	69.3	14.2	15.6	9.0	32.8	9.0	23.1
Green Ext Time (p_c), s	0.0	1.9	0.2	0.6	0.2	9.2	0.0	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	45.6
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBT	NBL	SBT	EBL	WBT
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	11	76	20	23	17	70	14	29
Maximum Split (%)	8.5%	58.5%	15.4%	17.7%	13.1%	53.8%	10.8%	22.3%
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Don't Walk (s)		11		11		11		11
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	5	59	16	36	59	76	45	16
End Time (s)	16	5	36	59	76	16	59	45
Yield/Force Off (s)	11.5	0.5	31.5	54.5	71.5	11.5	54.5	40.5
Yield/Force Off 170(s)	11.5	119.5	31.5	43.5	71.5	0.5	54.5	29.5
Local Start Time (s)	59	113	70	90	113	0	99	70
Local Yield (s)	65.5	54.5	85.5	108.5	125.5	65.5	108.5	94.5
Local Yield 170(s)	65.5	43.5	85.5	97.5	125.5	54.5	108.5	83.5

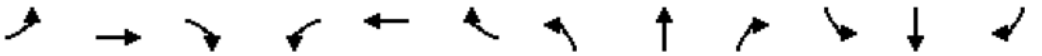
Intersection Summary

Cycle Length	130
Control Type	Actuated-Coordinated
Natural Cycle	120

Offset: 76 (58%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Splits and Phases: 1: US287 & Mountain





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	188	385	167	333	313	115	188	1901	516	146	1214	156
v/c Ratio	0.76	0.78	0.46	0.83	0.92	0.29	0.62	0.97	0.47	0.85	0.66	0.17
Control Delay (s/veh)	78.3	66.0	11.6	58.7	64.0	6.7	66.4	42.0	3.3	99.8	25.6	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	78.3	66.0	11.6	58.7	64.0	6.7	66.4	42.0	3.3	99.8	25.6	3.0
Queue Length 50th (ft)	81	166	0	132	235	14	79	788	12	63	394	0
Queue Length 95th (ft)	#136	224	65	#210	#422	m32	119	#992	64	#126	474	35
Internal Link Dist (ft)		1325			870			1386			1925	
Turn Bay Length (ft)	650		400	540		320	1000		1000	1000		1000
Base Capacity (vph)	250	503	368	409	351	400	330	1967	1094	171	1831	894
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.77	0.45	0.81	0.89	0.29	0.57	0.97	0.47	0.85	0.66	0.17

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	385	45	45	540	35	135	15	40	160	15	65
Future Volume (veh/h)	180	385	45	45	540	35	135	15	40	160	15	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	188	401	0	47	562	10	141	16	16	167	16	44
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	616	1092		423	928	786	380	285	242	423	73	200
Arrive On Green	0.12	0.58	0.00	0.06	0.99	0.99	0.08	0.15	0.15	0.09	0.17	0.17
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	441	1212
Grp Volume(v), veh/h	188	401	0	47	562	10	141	16	16	167	0	60
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	0	1652
Q Serve(g_s), s	0.0	14.8	0.0	1.8	0.8	0.0	8.6	1.0	1.1	10.1	0.0	4.1
Cycle Q Clear(g_c), s	0.0	14.8	0.0	1.8	0.8	0.0	8.6	1.0	1.1	10.1	0.0	4.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.73
Lane Grp Cap(c), veh/h	616	1092		423	928	786	380	285	242	423	0	273
V/C Ratio(X)	0.31	0.37		0.11	0.61	0.01	0.37	0.06	0.07	0.40	0.00	0.22
Avail Cap(c_a), veh/h	616	1092		442	928	786	393	285	242	454	0	273
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.87	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.2	14.3	0.0	18.8	0.3	0.1	41.5	47.1	47.2	40.7	0.0	47.0
Incr Delay (d2), s/veh	0.2	0.8	0.0	0.1	2.9	0.0	0.6	0.4	0.5	0.6	0.0	1.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	6.1	0.0	0.7	0.9	0.0	3.9	0.5	0.5	4.6	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.4	15.2	0.0	18.9	3.2	0.1	42.1	47.5	47.7	41.3	0.0	48.8
LnGrp LOS	B	B		B	A	A	D	D	D	D		D
Approach Vol, veh/h		589			619			173			227	
Approach Delay, s/veh		16.2			4.3			43.1			43.3	
Approach LOS		B			A			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.6	80.4	15.0	26.0	20.0	69.0	16.7	24.3				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.5	73.5	11.5	21.5	14.5	64.5	14.5	18.5				
Max Q Clear Time (g_c+I1), s	3.8	16.8	10.6	6.1	2.0	2.8	12.1	3.1				
Green Ext Time (p_c), s	0.0	2.4	0.0	0.2	0.4	3.7	0.1	0.1				

Intersection Summary	
HCM 7th Control Delay, s/veh	18.4
HCM 7th LOS	B

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

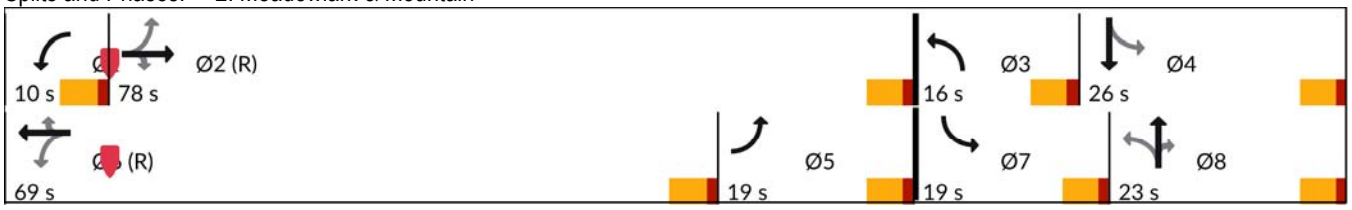
Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EBTL	NBL	SBTL	EBL	WBTL	SBL	NBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	C-Max	None	Max
Maximum Split (s)	10	78	16	26	19	69	19	23
Maximum Split (%)	7.7%	60.0%	12.3%	20.0%	14.6%	53.1%	14.6%	17.7%
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Don't Walk (s)		11		11		11		11
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	66	76	24	40	5	66	24	43
End Time (s)	76	24	40	66	24	5	43	66
Yield/Force Off (s)	71.5	19.5	35.5	61.5	19.5	0.5	38.5	61.5
Yield/Force Off 170(s)	71.5	8.5	35.5	50.5	19.5	119.5	38.5	50.5
Local Start Time (s)	120	0	78	94	59	120	78	97
Local Yield (s)	125.5	73.5	89.5	115.5	73.5	54.5	92.5	115.5
Local Yield 170(s)	125.5	62.5	89.5	104.5	73.5	43.5	92.5	104.5

Intersection Summary

Cycle Length	130	
Control Type	Actuated-Coordinated	
Natural Cycle	70	

Offset: 76 (58%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Splits and Phases: 2: Meadowlark & Mountain



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	188	401	47	47	563	36	141	16	42	167	84
v/c Ratio	0.39	0.37	0.05	0.12	0.61	0.04	0.41	0.06	0.12	0.43	0.25
Control Delay (s/veh)	21.1	16.3	0.4	11.5	21.4	0.9	40.2	48.9	0.7	40.3	16.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	21.1	16.3	0.4	11.5	21.4	0.9	40.2	48.9	0.7	40.3	16.9
Queue Length 50th (ft)	74	179	0	19	347	2	92	12	0	111	12
Queue Length 95th (ft)	115	251	3	32	422	m6	151	35	0	176	59
Internal Link Dist (ft)		870			1236			331			243
Turn Bay Length (ft)	360		360	450		300	250		250	200	
Base Capacity (vph)	480	1082	956	400	924	829	355	283	347	407	334
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.37	0.05	0.12	0.61	0.04	0.40	0.06	0.12	0.41	0.25

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	340	570	115	100	455	50	165	25	60	175	20	55
Future Volume (veh/h)	340	570	115	100	455	50	165	25	60	175	20	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	354	594	0	104	474	13	172	26	24	182	21	18
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	680	1034		393	712	604	416	286	243	426	147	126
Arrive On Green	0.45	1.00	0.00	0.11	0.76	0.76	0.10	0.15	0.15	0.10	0.16	0.16
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	930	797
Grp Volume(v), veh/h	354	594	0	104	474	13	172	26	24	182	0	39
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	0	1727
Q Serve(g_s), s	0.0	0.0	0.0	5.2	15.9	0.2	10.4	1.6	1.7	11.0	0.0	2.5
Cycle Q Clear(g_c), s	0.0	0.0	0.0	5.2	15.9	0.2	10.4	1.6	1.7	11.0	0.0	2.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.46
Lane Grp Cap(c), veh/h	680	1034		393	712	604	416	286	243	426	0	274
V/C Ratio(X)	0.52	0.57		0.26	0.67	0.02	0.41	0.09	0.10	0.43	0.00	0.14
Avail Cap(c_a), veh/h	680	1034		453	712	604	420	286	243	456	0	274
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.73	0.73	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.8	0.0	0.0	26.5	11.5	5.1	40.6	47.3	47.3	40.3	0.0	47.1
Incr Delay (d2), s/veh	0.5	1.7	0.0	0.4	4.9	0.1	0.7	0.6	0.8	0.7	0.0	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	0.5	0.0	2.1	4.8	0.1	4.7	0.8	0.7	5.0	0.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.4	1.7	0.0	26.9	16.4	5.1	41.3	47.9	48.2	41.0	0.0	48.2
LnGrp LOS	B	A		C	B	A	D	D	D	D		D
Approach Vol, veh/h		948			591			222			221	
Approach Delay, s/veh		7.9			18.0			42.8			42.2	
Approach LOS		A			B			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.6	76.4	16.9	25.1	34.0	54.0	17.6	24.4
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	11.5	67.2	12.7	20.6	29.2	49.5	15.3	18.0
Max Q Clear Time (g_c+I1), s	7.2	2.0	12.4	4.5	2.0	17.9	13.0	3.7
Green Ext Time (p_c), s	0.1	4.0	0.0	0.1	1.0	2.9	0.1	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	18.7
HCM 7th LOS	B

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

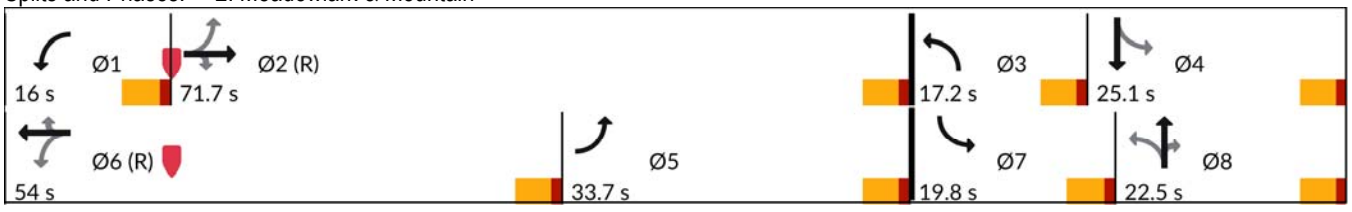
Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EBTL	NBL	SBTL	EBL	WBTL	SBL	NBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	C-Max	None	Max
Maximum Split (s)	16	71.7	17.2	25.1	33.7	54	19.8	22.5
Maximum Split (%)	12.3%	55.2%	13.2%	19.3%	25.9%	41.5%	15.2%	17.3%
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Don't Walk (s)		11		11		11		11
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	114	0	71.7	88.9	38	114	71.7	91.5
End Time (s)	0	71.7	88.9	114	71.7	38	91.5	114
Yield/Force Off (s)	125.5	67.2	84.4	109.5	67.2	33.5	87	109.5
Yield/Force Off 170(s)	125.5	56.2	84.4	98.5	67.2	22.5	87	98.5
Local Start Time (s)	114	0	71.7	88.9	38	114	71.7	91.5
Local Yield (s)	125.5	67.2	84.4	109.5	67.2	33.5	87	109.5
Local Yield 170(s)	125.5	56.2	84.4	98.5	67.2	22.5	87	98.5

Intersection Summary

Cycle Length	130
Control Type	Actuated-Coordinated
Natural Cycle	75

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Splits and Phases: 2: Meadowlark & Mountain



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	354	594	120	104	474	52	172	26	63	182	78
v/c Ratio	0.58	0.60	0.13	0.54	0.67	0.08	0.48	0.09	0.18	0.46	0.25
Control Delay (s/veh)	18.0	16.6	1.3	46.6	32.4	2.7	41.8	49.9	1.2	40.9	19.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.0	16.6	1.3	46.6	32.4	2.7	41.8	49.9	1.2	40.9	19.9
Queue Length 50th (ft)	82	157	1	51	202	0	114	19	0	121	15
Queue Length 95th (ft)	m146	m281	m5	m115	320	m4	180	48	0	190	62
Internal Link Dist (ft)		870			1236			331			243
Turn Bay Length (ft)	360		360	450		300	250		250	200	
Base Capacity (vph)	606	985	893	213	709	657	367	276	342	412	317
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.60	0.13	0.49	0.67	0.08	0.47	0.09	0.18	0.44	0.25

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Intersection												
Int Delay, s/veh	0.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱		↑	↱			↱			↱
Traffic Vol, veh/h	0	565	55	0	570	10	0	0	25	0	0	10
Future Vol, veh/h	0	565	55	0	570	10	0	0	25	0	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	250	-	-	250	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	595	58	0	600	11	0	0	26	0	0	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	595	-	-	600
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.22	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.318	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	504	0	0	501
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	504	-	-	501
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0	12.53	12.34
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	504	-	-	-	-	501
HCM Lane V/C Ratio	0.052	-	-	-	-	0.021
HCM Ctrl Dly (s/v)	12.5	-	-	-	-	12.3
HCM Lane LOS	B	-	-	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	-	0.1

Intersection												
Int Delay, s/veh	0.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱		↑	↱			↱			↱
Traffic Vol, veh/h	0	730	120	0	720	45	0	0	80	0	0	5
Future Vol, veh/h	0	730	120	0	720	45	0	0	80	0	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	250	-	-	250	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	768	126	0	758	47	0	0	84	0	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	768	-	-	758
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.22	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.318	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	401	0	0	407
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	401	-	-	407
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0	16.33	13.96
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	401	-	-	-	-	407
HCM Lane V/C Ratio	0.21	-	-	-	-	0.013
HCM Ctrl Dly (s/v)	16.3	-	-	-	-	14
HCM Lane LOS	C	-	-	-	-	B
HCM 95th %tile Q(veh)	0.8	-	-	-	-	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	330	120	85	290	165	155	280	145	205	235	170
Future Volume (veh/h)	120	330	120	85	290	165	155	280	145	205	235	170
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	126	347	44	89	305	67	163	295	58	216	247	64
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	434	760	644	366	734	622	442	586	497	421	626	530
Arrive On Green	0.02	0.13	0.13	0.04	0.39	0.39	0.08	0.31	0.31	0.10	0.33	0.33
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	126	347	44	89	305	67	163	295	58	216	247	64
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	5.4	22.2	3.2	3.9	15.4	3.5	8.0	16.7	3.4	10.5	13.2	3.6
Cycle Q Clear(g_c), s	5.4	22.2	3.2	3.9	15.4	3.5	8.0	16.7	3.4	10.5	13.2	3.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	434	760	644	366	734	622	442	586	497	421	626	530
V/C Ratio(X)	0.29	0.46	0.07	0.24	0.42	0.11	0.37	0.50	0.12	0.51	0.39	0.12
Avail Cap(c_a), veh/h	490	760	644	392	734	622	476	586	497	499	626	530
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.1	43.1	34.8	23.5	28.6	25.0	27.1	36.4	31.8	26.8	33.2	30.0
Incr Delay (d2), s/veh	0.4	2.0	0.2	0.3	1.7	0.3	0.5	3.1	0.5	1.0	1.9	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	11.5	1.2	1.6	7.0	1.4	3.4	8.0	1.4	4.5	6.3	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.5	45.0	35.0	23.9	30.4	25.4	27.6	39.5	32.3	27.8	35.0	30.5
LnGrp LOS	C	D	C	C	C	C	C	D	C	C	D	C
Approach Vol, veh/h		517			461			516			527	
Approach Delay, s/veh		38.9			28.4			34.9			31.5	
Approach LOS		D			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.1	57.3	14.5	48.0	11.9	55.5	17.3	45.2				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	7.5	48.5	12.5	43.5	11.5	44.5	18.5	37.5				
Max Q Clear Time (g_c+I1), s	5.9	24.2	10.0	15.2	7.4	17.4	12.5	18.7				
Green Ext Time (p_c), s	0.0	2.0	0.1	1.6	0.1	1.8	0.3	1.7				
Intersection Summary												
HCM 7th Control Delay, s/veh			33.6									
HCM 7th LOS			C									

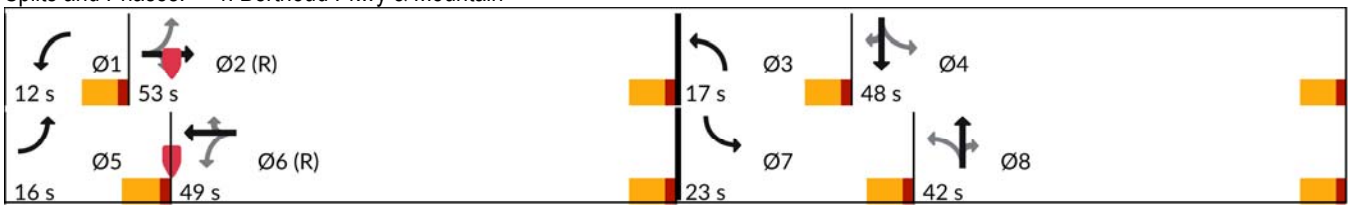
Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EBTL	NBL	SBTL	EBL	WBTL	SBL	NBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	C-Max	None	Max
Maximum Split (s)	12	53	17	48	16	49	23	42
Maximum Split (%)	9.2%	40.8%	13.1%	36.9%	12.3%	37.7%	17.7%	32.3%
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Don't Walk (s)		11		11		11		11
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	125	7	60	77	125	11	60	83
End Time (s)	7	60	77	125	11	60	83	125
Yield/Force Off (s)	2.5	55.5	72.5	120.5	6.5	55.5	78.5	120.5
Yield/Force Off 170(s)	2.5	44.5	72.5	109.5	6.5	44.5	78.5	109.5
Local Start Time (s)	114	126	49	66	114	0	49	72
Local Yield (s)	121.5	44.5	61.5	109.5	125.5	44.5	67.5	109.5
Local Yield 170(s)	121.5	33.5	61.5	98.5	125.5	33.5	67.5	98.5

Intersection Summary

Cycle Length	130
Control Type	Actuated-Coordinated
Natural Cycle	65

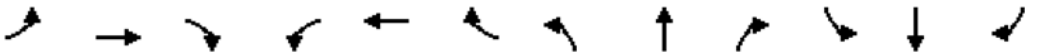
Offset: 11 (8%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Splits and Phases: 4: Berthoud Pkwy & Mountain



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	126	347	126	89	305	174	163	295	153	216	247	179
v/c Ratio	0.31	0.50	0.19	0.24	0.46	0.26	0.35	0.50	0.25	0.50	0.39	0.27
Control Delay (s/veh)	21.9	36.2	7.7	21.7	35.8	5.2	23.2	40.5	6.2	25.5	34.9	5.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	21.9	36.2	7.7	21.7	35.8	5.2	23.2	40.5	6.2	25.5	34.9	5.3
Queue Length 50th (ft)	60	249	19	41	200	0	79	202	0	109	159	0
Queue Length 95th (ft)	95	346	55	74	290	50	127	306	51	165	237	52
Internal Link Dist (ft)		1223			961			573			639	
Turn Bay Length (ft)	400		350	430		400	350		200	350		370
Base Capacity (vph)	429	698	671	369	657	671	478	589	605	472	639	660
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.50	0.19	0.24	0.46	0.26	0.34	0.50	0.25	0.46	0.39	0.27

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	235	475	85	150	385	265	135	285	130	245	290	145
Future Volume (veh/h)	235	475	85	150	385	265	135	285	130	245	290	145
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	247	500	32	158	405	112	142	300	55	258	305	52
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	421	777	659	320	725	615	358	480	407	388	568	482
Arrive On Green	0.03	0.14	0.14	0.07	0.39	0.39	0.07	0.26	0.26	0.12	0.30	0.30
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	247	500	32	158	405	112	142	300	55	258	305	52
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	10.3	32.9	2.3	6.9	22.0	6.1	7.5	18.5	3.5	13.4	17.6	3.1
Cycle Q Clear(g_c), s	10.3	32.9	2.3	6.9	22.0	6.1	7.5	18.5	3.5	13.4	17.6	3.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	421	777	659	320	725	615	358	480	407	388	568	482
V/C Ratio(X)	0.59	0.64	0.05	0.49	0.56	0.18	0.40	0.63	0.14	0.67	0.54	0.11
Avail Cap(c_a), veh/h	488	777	659	355	725	615	372	480	407	440	568	482
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.8	47.0	33.8	25.1	31.1	26.2	32.3	42.8	37.2	30.2	37.6	32.6
Incr Delay (d2), s/veh	1.4	4.1	0.1	1.2	3.1	0.7	0.7	6.0	0.7	3.2	3.6	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	17.3	0.9	2.9	10.2	2.4	3.3	9.2	1.4	6.0	8.6	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.2	51.0	33.9	26.3	34.2	26.9	33.0	48.8	37.9	33.4	41.2	33.0
LnGrp LOS	C	D	C	C	C	C	C	D	D	C	D	C
Approach Vol, veh/h		779			675			497			615	
Approach Delay, s/veh		42.1			31.1			43.1			37.3	
Approach LOS		D			C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.4	58.5	14.0	44.0	17.1	54.9	20.2	37.9				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	11.5	50.5	10.5	39.5	17.5	44.5	19.5	30.5				
Max Q Clear Time (g_c+I1), s	8.9	34.9	9.5	19.6	12.3	24.0	15.4	20.5				
Green Ext Time (p_c), s	0.1	2.6	0.0	1.8	0.3	2.5	0.3	1.3				
Intersection Summary												
HCM 7th Control Delay, s/veh			38.3									
HCM 7th LOS			D									

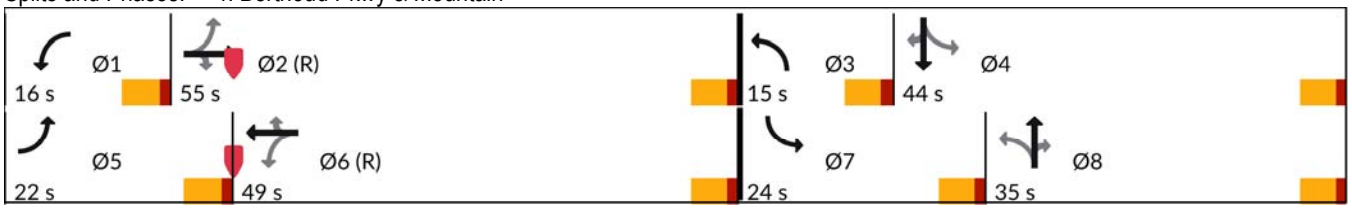
Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EBTL	NBL	SBTL	EBL	WBTL	SBL	NBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	C-Max	None	Max
Maximum Split (s)	16	55	15	44	22	49	24	35
Maximum Split (%)	12.3%	42.3%	11.5%	33.8%	16.9%	37.7%	18.5%	26.9%
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Don't Walk (s)		11		11		11		11
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	76	92	17	32	76	98	17	41
End Time (s)	92	17	32	76	98	17	41	76
Yield/Force Off (s)	87.5	12.5	27.5	71.5	93.5	12.5	36.5	71.5
Yield/Force Off 170(s)	87.5	1.5	27.5	60.5	93.5	1.5	36.5	60.5
Local Start Time (s)	108	124	49	64	108	0	49	73
Local Yield (s)	119.5	44.5	59.5	103.5	125.5	44.5	68.5	103.5
Local Yield 170(s)	119.5	33.5	59.5	92.5	125.5	33.5	68.5	92.5

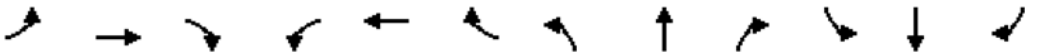
Intersection Summary

Cycle Length	130
Control Type	Actuated-Coordinated
Natural Cycle	75

Offset: 98 (75%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Splits and Phases: 4: Berthoud Pkwy & Mountain





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	247	500	89	158	405	279	142	300	137	258	305	153
v/c Ratio	0.61	0.68	0.13	0.49	0.60	0.37	0.40	0.64	0.26	0.68	0.53	0.26
Control Delay (s/veh)	20.1	33.9	4.5	23.2	39.1	4.9	28.5	51.1	4.5	35.4	41.6	6.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.1	33.9	4.5	23.2	39.1	4.9	28.5	51.1	4.5	35.4	41.6	6.1
Queue Length 50th (ft)	101	376	3	69	279	0	75	229	0	146	214	0
Queue Length 95th (ft)	164	531	m27	111	399	61	122	336	34	216	309	50
Internal Link Dist (ft)		1223			961			573			639	
Turn Bay Length (ft)	400		350	430		400	350		200	350		370
Base Capacity (vph)	433	736	701	333	672	749	357	471	523	404	573	592
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.68	0.13	0.47	0.60	0.37	0.40	0.64	0.26	0.64	0.53	0.26

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Intersection												
Int Delay, s/veh	5.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	0	110	10	0	5	180	45	5	0	110	5
Future Vol, veh/h	5	0	110	10	0	5	180	45	5	0	110	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	200	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	0	116	11	0	5	189	47	5	0	116	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	545	550	118	545	550	50	121	0	0	53	0	0
Stage 1	118	118	-	429	429	-	-	-	-	-	-	-
Stage 2	426	432	-	116	121	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	449	443	933	449	443	1018	1466	-	-	1553	-	-
Stage 1	886	798	-	604	584	-	-	-	-	-	-	-
Stage 2	606	583	-	889	796	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	389	386	933	343	386	1018	1466	-	-	1553	-	-
Mov Cap-2 Maneuver	389	386	-	343	386	-	-	-	-	-	-	-
Stage 1	886	798	-	526	509	-	-	-	-	-	-	-
Stage 2	525	507	-	779	796	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	9.74	13.48	6.12	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1466	-	-	880	440	1553	-	-
HCM Lane V/C Ratio	0.129	-	-	0.138	0.036	-	-	-
HCM Ctrl Dly (s/v)	7.8	-	-	9.7	13.5	0	-	-
HCM Lane LOS	A	-	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0.4	-	-	0.5	0.1	0	-	-

Intersection												
Int Delay, s/veh	6.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	0	180	5	0	0	295	115	5	5	65	15
Future Vol, veh/h	10	0	180	5	0	0	295	115	5	5	65	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	200	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	0	189	5	0	0	311	121	5	5	68	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	829	834	76	824	839	124	84	0	0	126	0	0
Stage 1	87	87	-	745	745	-	-	-	-	-	-	-
Stage 2	742	747	-	79	95	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	290	304	985	292	302	927	1513	-	-	1460	-	-
Stage 1	921	823	-	406	421	-	-	-	-	-	-	-
Stage 2	407	420	-	930	817	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	229	241	985	187	239	927	1513	-	-	1460	-	-
Mov Cap-2 Maneuver	229	241	-	187	239	-	-	-	-	-	-	-
Stage 1	918	820	-	323	335	-	-	-	-	-	-	-
Stage 2	324	334	-	748	814	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	10.63	24.83	5.68	0.44
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1513	-	-	839	187	1460	-	-
HCM Lane V/C Ratio	0.205	-	-	0.238	0.028	0.004	-	-
HCM Ctrl Dly (s/v)	8	-	-	10.6	24.8	7.5	-	-
HCM Lane LOS	A	-	-	B	C	A	-	-
HCM 95th %tile Q(veh)	0.8	-	-	0.9	0.1	0	-	-

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	0	0	0	0	0	0	15	0	0	10	0
Future Vol, veh/h	5	0	0	0	0	0	0	15	0	0	10	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	0	0	0	0	0	0	16	0	0	11	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	26	26	11	26	26	16	11	0	0	16	0	0
Stage 1	11	11	-	16	16	-	-	-	-	-	-	-
Stage 2	16	16	-	11	11	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	984	867	1071	984	867	1063	1609	-	-	1602	-	-
Stage 1	1010	887	-	1004	882	-	-	-	-	-	-	-
Stage 2	1004	882	-	1010	887	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	984	867	1071	984	867	1063	1609	-	-	1602	-	-
Mov Cap-2 Maneuver	984	867	-	984	867	-	-	-	-	-	-	-
Stage 1	1010	887	-	1004	882	-	-	-	-	-	-	-
Stage 2	1004	882	-	1010	887	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	8.68	0	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1609	-	-	984	-	1602	-	-
HCM Lane V/C Ratio	-	-	-	0.005	-	-	-	-
HCM Ctrl Dly (s/v)	0	-	-	8.7	0	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	0	-	-

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	0	0	0	0	0	5	45	0	0	5	0
Future Vol, veh/h	5	0	0	0	0	0	5	45	0	0	5	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	0	0	0	0	0	5	47	0	0	5	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	63	63	5	63	63	47	5	0	0	47	0	0
Stage 1	5	5	-	58	58	-	-	-	-	-	-	-
Stage 2	58	58	-	5	5	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	931	828	1078	931	828	1022	1616	-	-	1560	-	-
Stage 1	1017	891	-	954	847	-	-	-	-	-	-	-
Stage 2	954	847	-	1017	891	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	928	825	1078	928	825	1022	1616	-	-	1560	-	-
Mov Cap-2 Maneuver	928	825	-	928	825	-	-	-	-	-	-	-
Stage 1	1017	891	-	951	844	-	-	-	-	-	-	-
Stage 2	951	844	-	1017	891	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	8.9	0	0.72	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1616	-	-	928	-	1560	-	-
HCM Lane V/C Ratio	0.003	-	-	0.006	-	-	-	-
HCM Ctrl Dly (s/v)	7.2	-	-	8.9	0	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	0	-	-

APPENDIX G

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	226	70	402	141	45	50	524	199	36	1392	55
Future Volume (veh/h)	57	226	70	402	141	45	50	524	199	36	1392	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	60	238	0	423	148	0	53	552	0	38	1465	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	345	281		500	190		186	1749		471	1728	
Arrive On Green	0.19	0.15	0.00	0.19	0.14	0.00	0.04	0.49	0.00	0.03	0.49	0.00
Sat Flow, veh/h	1781	1870	1585	3456	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	60	238	0	423	148	0	53	552	0	38	1465	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	2.8	12.4	0.0	11.8	7.6	0.0	1.5	9.3	0.0	1.0	36.0	0.0
Cycle Q Clear(g_c), s	2.8	12.4	0.0	11.8	7.6	0.0	1.5	9.3	0.0	1.0	36.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	345	281		500	190		186	1749		471	1728	
V/C Ratio(X)	0.17	0.85		0.85	0.78		0.28	0.32		0.08	0.85	
Avail Cap(c_a), veh/h	345	421		639	440		215	1749		511	1728	
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.68	0.68	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.6	41.3	0.0	39.3	42.2	0.0	19.2	15.3	0.0	12.2	22.5	0.0
Incr Delay (d2), s/veh	0.2	9.8	0.0	5.8	4.7	0.0	0.8	0.5	0.0	0.1	5.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	6.2	0.0	5.0	3.5	0.0	0.5	3.4	0.0	0.4	14.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.9	51.1	0.0	45.1	46.8	0.0	20.1	15.7	0.0	12.3	27.8	0.0
LnGrp LOS	C	D		D	D		C	B		B	C	
Approach Vol, veh/h		298			571			605			1503	
Approach Delay, s/veh		47.7			45.5			16.1			27.5	
Approach LOS		D			D			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.8	53.7	19.0	19.5	8.4	53.1	23.9	14.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	35.5	18.5	22.5	5.5	35.5	17.5	23.5
Max Q Clear Time (g_c+I1), s	3.0	11.3	13.8	14.4	3.5	38.0	4.8	9.6
Green Ext Time (p_c), s	0.0	3.2	0.7	0.7	0.0	0.0	0.1	0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	30.6
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

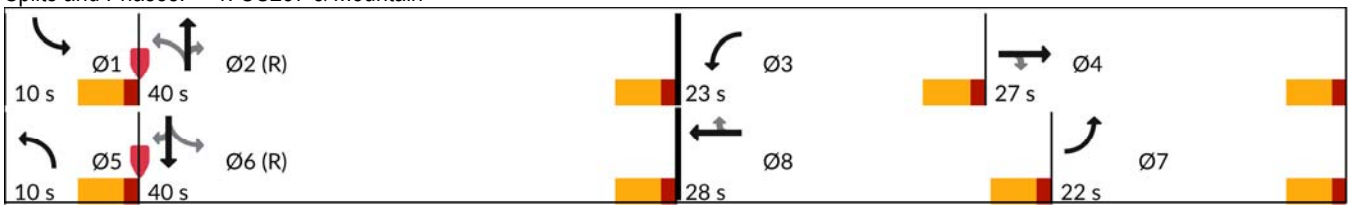
Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBT	NBL	SBTL	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	10	40	23	27	10	40	22	28
Maximum Split (%)	10.0%	40.0%	23.0%	27.0%	10.0%	40.0%	22.0%	28.0%
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Don't Walk (s)		11		11		11		11
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	9	19	59	82	9	19	87	59
End Time (s)	19	59	82	9	19	59	9	87
Yield/Force Off (s)	14.5	54.5	77.5	4.5	14.5	54.5	4.5	82.5
Yield/Force Off 170(s)	14.5	43.5	77.5	93.5	14.5	43.5	4.5	71.5
Local Start Time (s)	90	0	40	63	90	0	68	40
Local Yield (s)	95.5	35.5	58.5	85.5	95.5	35.5	85.5	63.5
Local Yield 170(s)	95.5	24.5	58.5	74.5	95.5	24.5	85.5	52.5

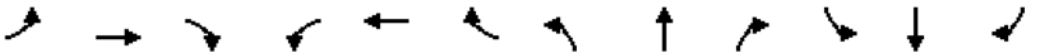
Intersection Summary

Cycle Length	100
Control Type	Actuated-Coordinated
Natural Cycle	90

Offset: 19 (19%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Splits and Phases: 1: US287 & Mountain





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	60	238	74	423	148	47	53	552	209	38	1465	58
v/c Ratio	0.18	0.73	0.20	0.74	0.46	0.13	0.28	0.34	0.25	0.09	0.95	0.07
Control Delay (s/veh)	32.7	51.6	3.3	52.2	52.6	5.0	18.0	20.5	4.1	14.6	44.6	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	32.7	51.6	3.3	52.2	52.6	5.0	18.0	20.5	4.1	14.6	44.6	0.2
Queue Length 50th (ft)	31	144	0	97	80	2	16	128	0	12	~535	0
Queue Length 95th (ft)	65	215	14	144	m112	m7	41	188	47	32	#723	0
Internal Link Dist (ft)		1325			870			1386			1925	
Turn Bay Length (ft)	650		400	540		320	1000		1000	1000		1000
Base Capacity (vph)	375	419	445	635	458	476	187	1619	837	417	1538	780
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.57	0.17	0.67	0.32	0.10	0.28	0.34	0.25	0.09	0.95	0.07

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	257	56	295	217	42	72	1395	465	63	887	72
Future Volume (veh/h)	91	257	56	295	217	42	72	1395	465	63	887	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	95	268	0	307	226	0	75	1453	0	66	924	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	239	313		375	265		347	1785		205	1778	
Arrive On Green	0.13	0.17	0.00	0.18	0.24	0.00	0.04	0.50	0.00	0.04	0.50	0.00
Sat Flow, veh/h	1781	1870	1585	3456	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	95	268	0	307	226	0	75	1453	0	66	924	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	4.9	13.9	0.0	8.5	11.6	0.0	2.0	34.4	0.0	1.8	17.6	0.0
Cycle Q Clear(g_c), s	4.9	13.9	0.0	8.5	11.6	0.0	2.0	34.4	0.0	1.8	17.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	239	313		375	265		347	1785		205	1778	
V/C Ratio(X)	0.40	0.86		0.82	0.85		0.22	0.81		0.32	0.52	
Avail Cap(c_a), veh/h	294	458		467	402		367	1785		228	1778	
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.74	0.74	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	39.6	40.5	0.0	40.0	37.2	0.0	12.6	21.0	0.0	18.0	16.9	0.0
Incr Delay (d2), s/veh	1.1	10.3	0.0	6.9	8.1	0.0	0.3	4.2	0.0	0.9	1.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	6.9	0.0	3.6	5.2	0.0	0.7	13.1	0.0	0.6	6.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	40.7	50.8	0.0	46.9	45.2	0.0	12.9	25.2	0.0	18.9	18.0	0.0
LnGrp LOS	D	D		D	D		B	C		B	B	
Approach Vol, veh/h		363			533			1528			990	
Approach Delay, s/veh		48.1			46.2			24.6			18.0	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.7	54.7	15.3	21.2	8.9	54.5	17.9	18.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	38.5	13.5	24.5	5.5	38.5	16.5	21.5
Max Q Clear Time (g_c+I1), s	3.8	36.4	10.5	15.9	4.0	19.6	6.9	13.6
Green Ext Time (p_c), s	0.0	1.6	0.3	0.8	0.0	5.4	0.1	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	28.5
HCM 7th LOS	C

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

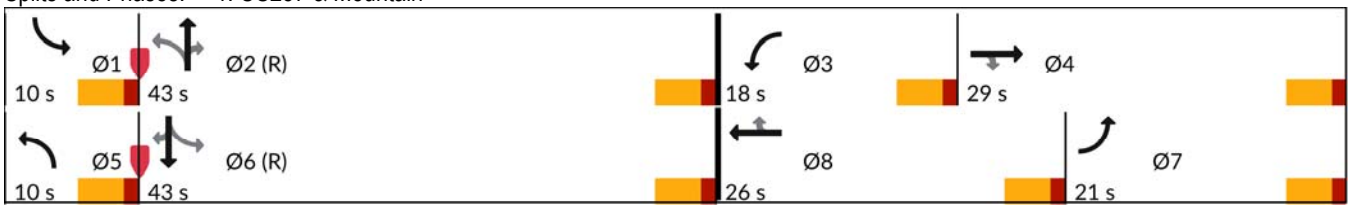
Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBT	NBL	SBTL	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	10	43	18	29	10	43	21	26
Maximum Split (%)	10.0%	43.0%	18.0%	29.0%	10.0%	43.0%	21.0%	26.0%
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Don't Walk (s)		11		11		11		11
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	98	8	51	69	98	8	77	51
End Time (s)	8	51	69	98	8	51	98	77
Yield/Force Off (s)	3.5	46.5	64.5	93.5	3.5	46.5	93.5	72.5
Yield/Force Off 170(s)	3.5	35.5	64.5	82.5	3.5	35.5	93.5	61.5
Local Start Time (s)	90	0	43	61	90	0	69	43
Local Yield (s)	95.5	38.5	56.5	85.5	95.5	38.5	85.5	64.5
Local Yield 170(s)	95.5	27.5	56.5	74.5	95.5	27.5	85.5	53.5

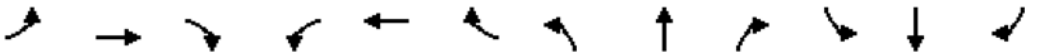
Intersection Summary

Cycle Length	100
Control Type	Actuated-Coordinated
Natural Cycle	90

Offset: 8 (8%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Splits and Phases: 1: US287 & Mountain





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	95	268	58	307	226	44	75	1453	484	66	924	75
v/c Ratio	0.39	0.75	0.15	0.71	0.60	0.11	0.27	0.90	0.49	0.35	0.57	0.09
Control Delay (s/veh)	42.9	51.1	1.0	39.5	25.2	0.8	15.1	36.5	3.9	17.7	23.7	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	42.9	51.1	1.0	39.5	25.2	0.8	15.1	36.5	3.9	17.7	23.7	0.2
Queue Length 50th (ft)	55	162	0	53	60	1	22	472	0	19	240	0
Queue Length 95th (ft)	103	236	2	115	135	m1	50	#677	63	45	324	0
Internal Link Dist (ft)		1325			870			1386			1925	
Turn Bay Length (ft)	650		400	540		320	1000		1000	1000		1000
Base Capacity (vph)	292	456	474	463	423	448	276	1615	985	191	1612	810
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.59	0.12	0.66	0.53	0.10	0.27	0.90	0.49	0.35	0.57	0.09

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	191	255	19	12	480	37	16	14	11	173	13	68
Future Volume (veh/h)	191	255	19	12	480	37	16	14	11	173	13	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	199	266	18	12	500	18	17	15	4	180	14	27
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	519	876	59	465	739	626	292	247	61	558	197	380
Arrive On Green	0.25	1.00	1.00	0.03	0.79	0.79	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1781	1732	117	1781	1870	1585	692	716	176	1393	571	1101
Grp Volume(v), veh/h	199	0	284	12	500	18	36	0	0	180	0	41
Grp Sat Flow(s),veh/h/ln	1781	0	1849	1781	1870	1585	1583	0	0	1393	0	1672
Q Serve(g_s), s	0.0	0.0	0.0	0.4	12.1	0.2	0.0	0.0	0.0	8.0	0.0	1.6
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.4	12.1	0.2	1.3	0.0	0.0	9.3	0.0	1.6
Prop In Lane	1.00		0.06	1.00		1.00	0.47		0.11	1.00		0.66
Lane Grp Cap(c), veh/h	519	0	935	465	739	626	599	0	0	558	0	577
V/C Ratio(X)	0.38	0.00	0.30	0.03	0.68	0.03	0.06	0.00	0.00	0.32	0.00	0.07
Avail Cap(c_a), veh/h	519	0	935	538	739	626	599	0	0	558	0	577
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.00	0.88	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.5	0.0	0.0	19.7	7.6	6.4	21.9	0.0	0.0	24.4	0.0	22.0
Incr Delay (d2), s/veh	0.4	0.0	0.7	0.0	4.9	0.1	0.2	0.0	0.0	1.5	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	0.2	0.2	3.5	0.1	0.6	0.0	0.0	3.4	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.9	0.0	0.7	19.7	12.6	6.5	22.1	0.0	0.0	25.9	0.0	22.2
LnGrp LOS	C		A	B	B	A	C			C		C
Approach Vol, veh/h		483			530			36			221	
Approach Delay, s/veh		9.0			12.5			22.1			25.2	
Approach LOS		A			B			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.9	55.1		39.0	17.0	44.0		39.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.5	46.5		34.5	12.5	39.5		34.5				
Max Q Clear Time (g_c+I1), s	2.4	2.0		11.3	2.0	14.1		3.3				
Green Ext Time (p_c), s	0.0	1.6		0.7	0.4	3.0		0.1				
Intersection Summary												
HCM 7th Control Delay, s/veh			13.7									
HCM 7th LOS			B									

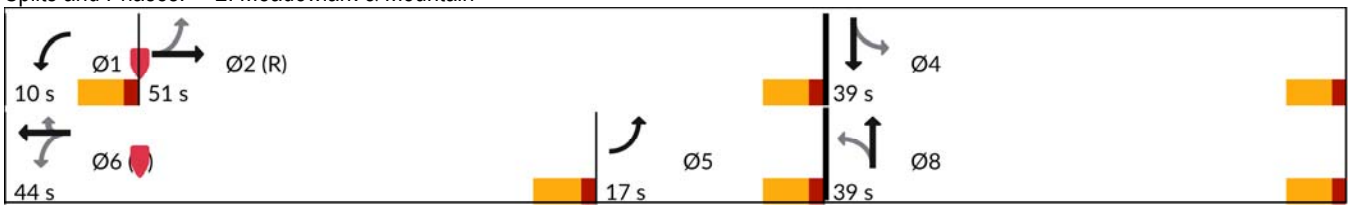
Phase Number	1	2	4	5	6	8
Movement	WBL	EBTL	SBTL	EBL	WBTL	NBTL
Lead/Lag	Lead	Lag		Lag	Lead	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	Max	None	C-Max	Max
Maximum Split (s)	10	51	39	17	44	39
Maximum Split (%)	10.0%	51.0%	39.0%	17.0%	44.0%	39.0%
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Don't Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	51	61	12	95	51	12
End Time (s)	61	12	51	12	95	51
Yield/Force Off (s)	56.5	7.5	46.5	7.5	90.5	46.5
Yield/Force Off 170(s)	56.5	96.5	35.5	7.5	79.5	35.5
Local Start Time (s)	90	0	51	34	90	51
Local Yield (s)	95.5	46.5	85.5	46.5	29.5	85.5
Local Yield 170(s)	95.5	35.5	74.5	46.5	18.5	74.5

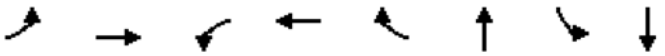
Intersection Summary

Cycle Length	100	
Control Type	Actuated-Coordinated	
Natural Cycle	60	

Offset: 61 (61%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Splits and Phases: 2: Meadowlark & Mountain





Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	199	286	13	500	39	43	180	85
v/c Ratio	0.45	0.28	0.04	0.68	0.06	0.08	0.38	0.14
Control Delay (s/veh)	20.2	13.5	17.0	25.7	2.0	18.1	27.8	8.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.2	13.5	17.0	25.7	2.0	18.1	27.8	8.0
Queue Length 50th (ft)	37	52	3	253	1	14	86	6
Queue Length 95th (ft)	124	169	m12	390	0	38	146	38
Internal Link Dist (ft)		870		1236		331		243
Turn Bay Length (ft)	360		450		300		200	
Base Capacity (vph)	440	1007	369	735	664	570	468	608
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.28	0.04	0.68	0.06	0.08	0.38	0.14

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	362	368	42	28	396	55	31	22	38	190	18	58
Future Volume (veh/h)	362	368	42	28	396	55	31	22	38	190	18	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	398	404	42	31	435	29	34	24	17	209	20	23
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	612	868	90	358	701	594	256	177	112	515	250	287
Arrive On Green	0.29	0.87	0.87	0.06	0.75	0.75	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1781	1666	173	1781	1870	1585	647	563	355	1366	794	913
Grp Volume(v), veh/h	398	0	446	31	435	29	75	0	0	209	0	43
Grp Sat Flow(s),veh/h/ln	1781	0	1839	1781	1870	1585	1566	0	0	1366	0	1706
Q Serve(g_s), s	0.0	0.0	5.3	1.1	10.9	0.5	0.7	0.0	0.0	8.2	0.0	1.8
Cycle Q Clear(g_c), s	0.0	0.0	5.3	1.1	10.9	0.5	3.1	0.0	0.0	11.3	0.0	1.8
Prop In Lane	1.00		0.09	1.00		1.00	0.45		0.23	1.00		0.53
Lane Grp Cap(c), veh/h	612	0	958	358	701	594	546	0	0	515	0	537
V/C Ratio(X)	0.65	0.00	0.47	0.09	0.62	0.05	0.14	0.00	0.00	0.41	0.00	0.08
Avail Cap(c_a), veh/h	612	0	958	404	701	594	546	0	0	515	0	537
HCM Platoon Ratio	1.67	1.67	1.67	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.80	0.00	0.80	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.1	0.0	3.4	21.1	9.2	7.9	24.5	0.0	0.0	27.1	0.0	24.1
Incr Delay (d2), s/veh	1.9	0.0	1.3	0.1	4.1	0.2	0.5	0.0	0.0	2.4	0.0	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.9	0.0	1.6	0.5	3.4	0.2	1.4	0.0	0.0	4.3	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.1	0.0	4.7	21.2	13.3	8.0	25.0	0.0	0.0	29.4	0.0	24.4
LnGrp LOS	C		A	C	B	A	C			C		C
Approach Vol, veh/h		844			495			75			252	
Approach Delay, s/veh		13.9			13.5			25.0			28.6	
Approach LOS		B			B			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.4	56.6		36.0	22.0	42.0		36.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.5	49.5		31.5	17.5	37.5		31.5				
Max Q Clear Time (g_c+I1), s	3.1	7.3		13.3	2.0	12.9		5.1				
Green Ext Time (p_c), s	0.0	2.7		0.8	1.1	2.5		0.4				

Intersection Summary

HCM 7th Control Delay, s/veh	16.5
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

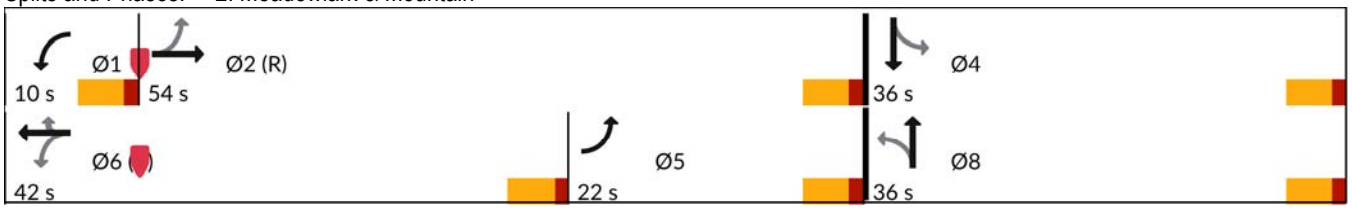
Phase Number	1	2	4	5	6	8
Movement	WBL	EBTL	SBTL	EBL	WBTL	NBTL
Lead/Lag	Lead	Lag		Lag	Lead	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	Max	None	C-Max	Max
Maximum Split (s)	10	54	36	22	42	36
Maximum Split (%)	10.0%	54.0%	36.0%	22.0%	42.0%	36.0%
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Don't Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	33	43	97	75	33	97
End Time (s)	43	97	33	97	75	33
Yield/Force Off (s)	38.5	92.5	28.5	92.5	70.5	28.5
Yield/Force Off 170(s)	38.5	81.5	17.5	92.5	59.5	17.5
Local Start Time (s)	90	0	54	32	90	54
Local Yield (s)	95.5	49.5	85.5	49.5	27.5	85.5
Local Yield 170(s)	95.5	38.5	74.5	49.5	16.5	74.5

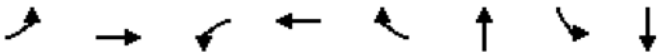
Intersection Summary

Cycle Length	100	
Control Type	Actuated-Coordinated	
Natural Cycle	60	

Offset: 43 (43%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Splits and Phases: 2: Meadowlark & Mountain





Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	398	450	31	435	60	100	209	84
v/c Ratio	0.71	0.46	0.13	0.62	0.09	0.19	0.51	0.15
Control Delay (s/veh)	31.3	18.8	17.3	22.9	3.7	17.1	33.2	9.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	31.3	18.8	17.3	22.9	3.7	17.1	33.2	9.8
Queue Length 50th (ft)	145	164	8	120	0	28	108	9
Queue Length 95th (ft)	261	290	m19	188	m3	67	182	43
Internal Link Dist (ft)		870		1236		331		243
Turn Bay Length (ft)	360		450		300		200	
Base Capacity (vph)	564	985	248	698	634	522	411	563
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.71	0.46	0.13	0.62	0.09	0.19	0.51	0.15

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Intersection						
Int Delay, s/veh	0.4					

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↱		↱
Traffic Vol, veh/h	0	449	490	18	0	33
Future Vol, veh/h	0	449	490	18	0	33
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	700	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	510	557	20	0	38

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	557
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	530
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	530
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	12.31
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	530
HCM Lane V/C Ratio	-	-	-	0.071
HCM Ctrl Dly (s/v)	-	-	-	12.3
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.2

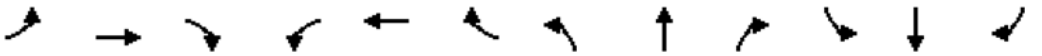
Intersection						
Int Delay, s/veh	0.2					

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↱		↱
Traffic Vol, veh/h	0	605	460	56	0	20
Future Vol, veh/h	0	605	460	56	0	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	700	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	651	495	60	0	22

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	495
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	575
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	575
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	11.51
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	575
HCM Lane V/C Ratio	-	-	-	0.037
HCM Ctrl Dly (s/v)	-	-	-	11.5
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	240	121	27	212	137	152	219	70	171	176	144
Future Volume (veh/h)	95	240	121	27	212	137	152	219	70	171	176	144
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	103	261	53	29	230	60	165	238	30	186	191	64
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	472	737	625	406	691	585	487	572	485	464	589	499
Arrive On Green	0.02	0.13	0.13	0.03	0.37	0.37	0.08	0.31	0.31	0.09	0.31	0.31
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	103	261	53	29	230	60	165	238	30	186	191	64
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	3.5	12.7	2.9	1.0	8.8	2.5	6.2	10.1	1.3	7.0	7.8	2.9
Cycle Q Clear(g_c), s	3.5	12.7	2.9	1.0	8.8	2.5	6.2	10.1	1.3	7.0	7.8	2.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	472	737	625	406	691	585	487	572	485	464	589	499
V/C Ratio(X)	0.22	0.35	0.08	0.07	0.33	0.10	0.34	0.42	0.06	0.40	0.32	0.13
Avail Cap(c_a), veh/h	529	737	625	472	691	585	561	572	485	576	589	499
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.8	31.9	27.6	19.0	22.7	20.7	20.9	27.6	24.6	20.8	26.1	24.4
Incr Delay (d2), s/veh	0.2	1.3	0.3	0.1	1.3	0.4	0.4	2.2	0.2	0.6	1.5	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	6.5	1.1	0.4	3.9	0.9	2.5	4.7	0.5	2.9	3.6	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.1	33.2	27.9	19.1	24.0	21.0	21.3	29.8	24.8	21.4	27.6	25.0
LnGrp LOS	B	C	C	B	C	C	C	C	C	C	C	C
Approach Vol, veh/h		417			319			433			441	
Approach Delay, s/veh		29.0			23.0			26.2			24.6	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.3	43.9	12.8	36.0	9.8	41.4	13.7	35.1				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	6.5	31.5	12.5	31.5	8.5	29.5	15.5	28.5				
Max Q Clear Time (g_c+I1), s	3.0	14.7	8.2	9.8	5.5	10.8	9.0	12.1				
Green Ext Time (p_c), s	0.0	1.3	0.2	1.2	0.1	1.2	0.3	1.2				
Intersection Summary												
HCM 7th Control Delay, s/veh			25.9									
HCM 7th LOS			C									

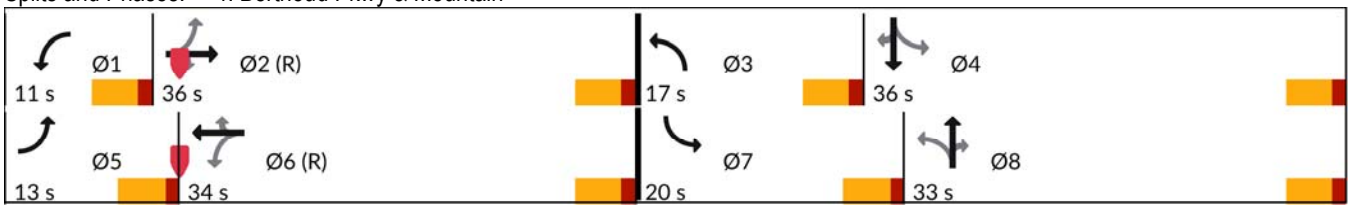
Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EBTL	NBL	SBTL	EBL	WBTL	SBL	NBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	C-Max	None	Max
Maximum Split (s)	11	36	17	36	13	34	20	33
Maximum Split (%)	11.0%	36.0%	17.0%	36.0%	13.0%	34.0%	20.0%	33.0%
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Don't Walk (s)		11		11		11		11
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	11	47	64	0	13	47	67
End Time (s)	11	47	64	0	13	47	67	0
Yield/Force Off (s)	6.5	42.5	59.5	95.5	8.5	42.5	62.5	95.5
Yield/Force Off 170(s)	6.5	31.5	59.5	84.5	8.5	31.5	62.5	84.5
Local Start Time (s)	87	98	34	51	87	0	34	54
Local Yield (s)	93.5	29.5	46.5	82.5	95.5	29.5	49.5	82.5
Local Yield 170(s)	93.5	18.5	46.5	71.5	95.5	18.5	49.5	71.5

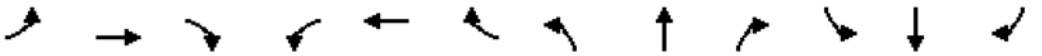
Intersection Summary

Cycle Length	100
Control Type	Actuated-Coordinated
Natural Cycle	65

Offset: 13 (13%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

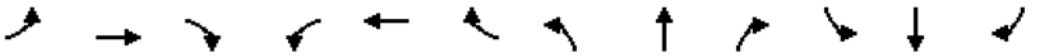
Splits and Phases: 4: Berthoud Pkwy & Mountain





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	103	261	132	29	230	149	165	238	76	186	191	157
v/c Ratio	0.24	0.39	0.20	0.07	0.38	0.24	0.30	0.39	0.13	0.37	0.31	0.25
Control Delay (s/veh)	23.8	32.9	10.4	17.6	29.8	5.6	16.6	29.5	2.4	17.2	26.9	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	23.8	32.9	10.4	17.6	29.8	5.6	16.6	29.5	2.4	17.2	26.9	5.2
Queue Length 50th (ft)	50	137	11	11	118	0	57	116	0	66	90	0
Queue Length 95th (ft)	64	226	42	28	188	44	98	197	14	109	152	44
Internal Link Dist (ft)		1223			961			573			639	
Turn Bay Length (ft)	400		350	430		400	350		200	350		370
Base Capacity (vph)	431	668	653	416	600	611	579	603	590	566	625	635
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.39	0.20	0.07	0.38	0.24	0.28	0.39	0.13	0.33	0.31	0.25

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	187	302	118	50	280	222	121	225	57	207	225	115
Future Volume (veh/h)	187	302	118	50	280	222	121	225	57	207	225	115
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	210	339	53	56	315	100	136	253	26	233	253	51
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	484	816	692	411	727	616	374	421	357	399	498	422
Arrive On Green	0.03	0.14	0.14	0.04	0.39	0.39	0.08	0.22	0.22	0.12	0.27	0.27
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	210	339	53	56	315	100	136	253	26	233	253	51
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	6.6	16.5	2.9	1.9	12.4	4.1	5.8	12.1	1.3	9.6	11.5	2.4
Cycle Q Clear(g_c), s	6.6	16.5	2.9	1.9	12.4	4.1	5.8	12.1	1.3	9.6	11.5	2.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	484	816	692	411	727	616	374	421	357	399	498	422
V/C Ratio(X)	0.43	0.42	0.08	0.14	0.43	0.16	0.36	0.60	0.07	0.58	0.51	0.12
Avail Cap(c_a), veh/h	534	816	692	439	727	616	547	421	357	498	498	422
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.7	31.2	25.4	17.6	22.5	19.9	26.6	34.7	30.5	24.7	31.1	27.8
Incr Delay (d2), s/veh	0.6	1.6	0.2	0.1	1.9	0.6	0.6	6.2	0.4	1.4	3.7	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	8.5	1.1	0.7	5.5	1.6	2.4	6.0	0.5	4.1	5.6	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	17.3	32.8	25.6	17.8	24.4	20.5	27.2	41.0	30.9	26.1	34.8	28.4
LnGrp LOS	B	C	C	B	C	C	C	D	C	C	C	C
Approach Vol, veh/h		602			471			415			537	
Approach Delay, s/veh		26.7			22.8			35.8			30.4	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	48.1	12.3	31.1	13.2	43.4	16.4	27.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	36.5	17.5	22.5	11.5	30.5	17.5	22.5
Max Q Clear Time (g_c+I1), s	3.9	18.5	7.8	13.5	8.6	14.4	11.6	14.1
Green Ext Time (p_c), s	0.0	1.8	0.2	1.0	0.2	1.8	0.3	0.9

Intersection Summary	
HCM 7th Control Delay, s/veh	28.6
HCM 7th LOS	C

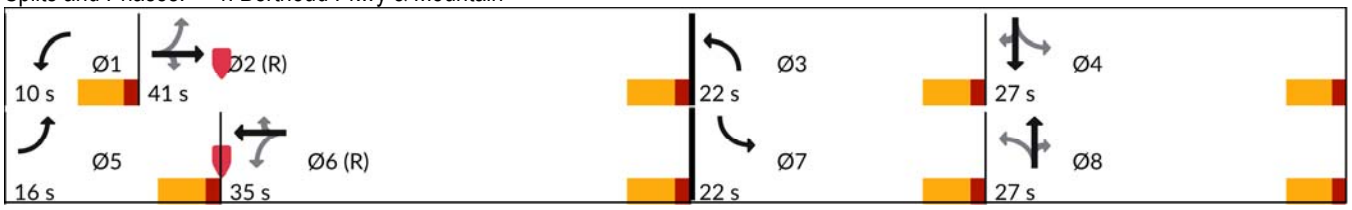
Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EBTL	NBL	SBTL	EBL	WBTL	SBL	NBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	C-Max	None	Max
Maximum Split (s)	10	41	22	27	16	35	22	27
Maximum Split (%)	10.0%	41.0%	22.0%	27.0%	16.0%	35.0%	22.0%	27.0%
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Don't Walk (s)		11		11		11		11
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	84	94	35	57	84	0	35	57
End Time (s)	94	35	57	84	0	35	57	84
Yield/Force Off (s)	89.5	30.5	52.5	79.5	95.5	30.5	52.5	79.5
Yield/Force Off 170(s)	89.5	19.5	52.5	68.5	95.5	19.5	52.5	68.5
Local Start Time (s)	84	94	35	57	84	0	35	57
Local Yield (s)	89.5	30.5	52.5	79.5	95.5	30.5	52.5	79.5
Local Yield 170(s)	89.5	19.5	52.5	68.5	95.5	19.5	52.5	68.5

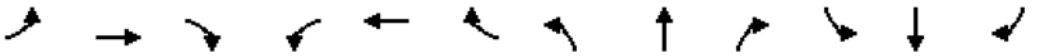
Intersection Summary

Cycle Length	100
Control Type	Actuated-Coordinated
Natural Cycle	65

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Splits and Phases: 4: Berthoud Pkwy & Mountain





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	210	339	133	56	315	249	136	253	64	233	253	129
v/c Ratio	0.51	0.47	0.19	0.15	0.54	0.38	0.31	0.52	0.12	0.51	0.46	0.22
Control Delay (s/veh)	21.7	28.6	6.6	16.4	33.0	5.2	19.3	36.9	0.5	22.2	32.5	3.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	21.7	28.6	6.6	16.4	33.0	5.2	19.3	36.9	0.5	22.2	32.5	3.2
Queue Length 50th (ft)	62	184	10	19	167	0	51	138	0	92	130	0
Queue Length 95th (ft)	104	278	27	41	251	53	88	225	0	146	213	24
Internal Link Dist (ft)		1223			961			573			639	
Turn Bay Length (ft)	400		350	430		400	350		200	350		370
Base Capacity (vph)	422	716	691	383	581	664	556	489	537	499	555	587
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.47	0.19	0.15	0.54	0.38	0.24	0.52	0.12	0.47	0.46	0.22

Intersection Summary

Intersection												
Int Delay, s/veh	6.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	0	108	41	0	1	181	40	21	0	105	5
Future Vol, veh/h	3	0	108	41	0	1	181	40	21	0	105	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	0	127	48	0	1	213	47	25	0	124	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	599	624	126	609	615	59	129	0	0	72	0	0
Stage 1	126	126	-	485	485	-	-	-	-	-	-	-
Stage 2	473	498	-	124	129	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	413	402	924	407	407	1006	1456	-	-	1528	-	-
Stage 1	877	791	-	563	551	-	-	-	-	-	-	-
Stage 2	572	544	-	881	789	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	352	343	924	300	347	1006	1456	-	-	1528	-	-
Mov Cap-2 Maneuver	352	343	-	300	347	-	-	-	-	-	-	-
Stage 1	877	791	-	481	471	-	-	-	-	-	-	-
Stage 2	488	465	-	759	789	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	9.77	19.07	5.91	0
HCM LOS	A	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1456	-	-	885	305	1528	-	-
HCM Lane V/C Ratio	0.146	-	-	0.148	0.162	-	-	-
HCM Ctrl Dly (s/v)	7.9	-	-	9.8	19.1	0	-	-
HCM Lane LOS	A	-	-	A	C	A	-	-
HCM 95th %tile Q(veh)	0.5	-	-	0.5	0.6	0	-	-

Intersection												
Int Delay, s/veh	7.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	0	180	28	0	1	293	95	51	3	58	15
Future Vol, veh/h	10	0	180	28	0	1	293	95	51	3	58	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	0	212	33	0	1	345	112	60	4	68	18

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	885	945	77	906	924	142	86	0	0	172	0	0
Stage 1	84	84	-	831	831	-	-	-	-	-	-	-
Stage 2	801	861	-	75	93	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	265	262	984	257	269	906	1510	-	-	1405	-	-
Stage 1	924	825	-	364	384	-	-	-	-	-	-	-
Stage 2	378	372	-	934	818	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	204	202	984	155	207	906	1510	-	-	1405	-	-
Mov Cap-2 Maneuver	204	202	-	155	207	-	-	-	-	-	-	-
Stage 1	922	823	-	281	297	-	-	-	-	-	-	-
Stage 2	291	287	-	731	816	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	11.04	33.56	5.4	0.3
HCM LOS	B	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1510	-	-	819	160	1405	-	-
HCM Lane V/C Ratio	0.228	-	-	0.273	0.214	0.003	-	-
HCM Ctrl Dly (s/v)	8.1	-	-	11	33.6	7.6	-	-
HCM Lane LOS	A	-	-	B	D	A	-	-
HCM 95th %tile Q(veh)	0.9	-	-	1.1	0.8	0	-	-

Intersection												
Int Delay, s/veh	5.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	0	21	0	0	0	6	8	0	0	8	2
Future Vol, veh/h	4	0	21	0	0	0	6	8	0	0	8	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	0	25	0	0	0	7	9	0	0	9	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	34	34	11	33	35	9	12	0	0	9	0	0
Stage 1	11	11	-	24	24	-	-	-	-	-	-	-
Stage 2	24	24	-	9	12	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	973	858	1071	974	857	1072	1607	-	-	1610	-	-
Stage 1	1010	887	-	995	876	-	-	-	-	-	-	-
Stage 2	995	876	-	1012	886	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	968	855	1071	948	853	1072	1607	-	-	1610	-	-
Mov Cap-2 Maneuver	968	855	-	948	853	-	-	-	-	-	-	-
Stage 1	1010	887	-	990	872	-	-	-	-	-	-	-
Stage 2	990	872	-	988	886	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	8.52	0	3.11	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1607	-	-	1053	-	1610	-	-
HCM Lane V/C Ratio	0.004	-	-	0.028	-	-	-	-
HCM Ctrl Dly (s/v)	7.2	-	-	8.5	0	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	-	0	-	-

Intersection												
Int Delay, s/veh	4.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	1	18	0	0	1	25	30	1	1	2	3
Future Vol, veh/h	3	1	18	0	0	1	25	30	1	1	2	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	1	21	0	0	1	29	35	1	1	2	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	101	102	4	100	103	36	6	0	0	36	0	0
Stage 1	6	6	-	95	95	-	-	-	-	-	-	-
Stage 2	94	95	-	5	8	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	881	788	1079	881	787	1037	1615	-	-	1574	-	-
Stage 1	1015	890	-	912	817	-	-	-	-	-	-	-
Stage 2	913	816	-	1017	889	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	863	773	1079	846	772	1037	1615	-	-	1574	-	-
Mov Cap-2 Maneuver	863	773	-	846	772	-	-	-	-	-	-	-
Stage 1	1015	890	-	895	802	-	-	-	-	-	-	-
Stage 2	895	801	-	995	888	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	8.6	8.48	3.25	1.21
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1615	-	-	1026	1037	1574	-	-
HCM Lane V/C Ratio	0.018	-	-	0.025	0.001	0.001	-	-
HCM Ctrl Dly (s/v)	7.3	-	-	8.6	8.5	7.3	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0	0	-	-

APPENDIX H

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	251	89	458	157	56	68	569	211	41	1512	72
Future Volume (veh/h)	75	251	89	458	157	56	68	569	211	41	1512	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	79	264	0	482	165	0	72	599	0	43	1592	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	380	307		550	206		152	1641		423	1611	
Arrive On Green	0.21	0.16	0.00	0.27	0.18	0.00	0.04	0.46	0.00	0.03	0.45	0.00
Sat Flow, veh/h	1781	1870	1585	3456	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	79	264	0	482	165	0	72	599	0	43	1592	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	3.7	13.7	0.0	13.3	8.4	0.0	2.1	10.9	0.0	1.3	44.4	0.0
Cycle Q Clear(g_c), s	3.7	13.7	0.0	13.3	8.4	0.0	2.1	10.9	0.0	1.3	44.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	380	307		550	206		152	1641		423	1611	
V/C Ratio(X)	0.21	0.86		0.88	0.80		0.47	0.37		0.10	0.99	
Avail Cap(c_a), veh/h	380	421		639	440		173	1641		459	1611	
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.56	0.56	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.4	40.7	0.0	35.8	39.8	0.0	23.5	17.4	0.0	14.0	27.1	0.0
Incr Delay (d2), s/veh	0.3	12.5	0.0	7.0	4.1	0.0	2.3	0.6	0.0	0.1	19.8	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	7.0	0.0	5.3	3.7	0.0	0.8	4.1	0.0	0.5	20.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.7	53.2	0.0	42.8	43.8	0.0	25.7	18.1	0.0	14.1	46.8	0.0
LnGrp LOS	C	D		D	D		C	B		B	D	
Approach Vol, veh/h		343			647			671			1635	
Approach Delay, s/veh		48.5			43.1			18.9			46.0	
Approach LOS		D			D			B			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	50.7	20.4	20.9	8.8	49.8	25.8	15.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	35.5	18.5	22.5	5.5	35.5	17.5	23.5
Max Q Clear Time (g_c+I1), s	3.3	12.9	15.3	15.7	4.1	46.4	5.7	10.4
Green Ext Time (p_c), s	0.0	3.4	0.6	0.7	0.0	0.0	0.1	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	40.1
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

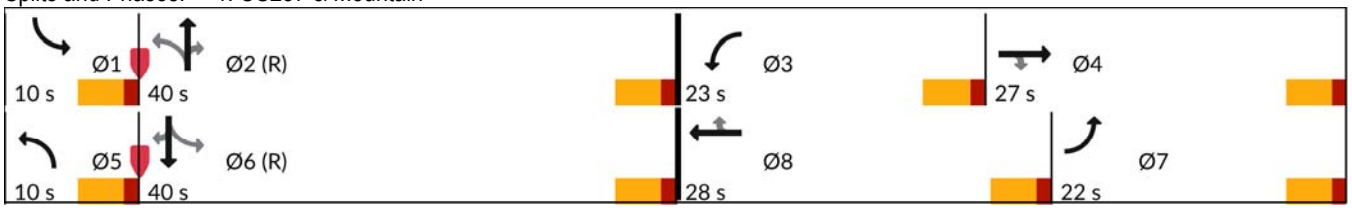
Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBT	NBL	SBTL	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	10	40	23	27	10	40	22	28
Maximum Split (%)	10.0%	40.0%	23.0%	27.0%	10.0%	40.0%	22.0%	28.0%
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Don't Walk (s)		11		11		11		11
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	9	19	59	82	9	19	87	59
End Time (s)	19	59	82	9	19	59	9	87
Yield/Force Off (s)	14.5	54.5	77.5	4.5	14.5	54.5	4.5	82.5
Yield/Force Off 170(s)	14.5	43.5	77.5	93.5	14.5	43.5	4.5	71.5
Local Start Time (s)	90	0	40	63	90	0	68	40
Local Yield (s)	95.5	35.5	58.5	85.5	95.5	35.5	85.5	63.5
Local Yield 170(s)	95.5	24.5	58.5	74.5	95.5	24.5	85.5	52.5

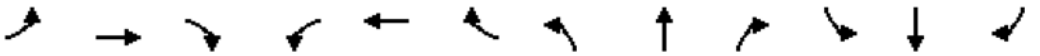
Intersection Summary

Cycle Length	100	
Control Type	Actuated-Coordinated	
Natural Cycle	100	

Offset: 19 (19%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Splits and Phases: 1: US287 & Mountain





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	79	264	94	482	165	59	72	599	222	43	1592	76
v/c Ratio	0.23	0.76	0.24	0.80	0.48	0.15	0.39	0.38	0.27	0.11	1.08	0.10
Control Delay (s/veh)	33.6	52.8	5.7	54.6	51.4	7.0	20.9	21.8	4.1	15.4	79.4	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	33.6	52.8	5.7	54.6	51.4	7.0	20.9	21.8	4.1	15.4	79.4	0.3
Queue Length 50th (ft)	40	160	0	113	89	4	24	148	0	14	~663	0
Queue Length 95th (ft)	82	239	29	176	m114	m11	51	205	48	35	#813	0
Internal Link Dist (ft)		1325			870			1386			1925	
Turn Bay Length (ft)	650		400	540		320	1000		1000	1000		1000
Base Capacity (vph)	385	419	445	635	468	483	186	1559	821	374	1473	754
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.63	0.21	0.76	0.35	0.12	0.39	0.38	0.27	0.11	1.08	0.10

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	297	84	317	261	50	111	1515	498	78	963	106
Future Volume (veh/h)	130	297	84	317	261	50	111	1515	498	78	963	106
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	135	309	0	330	272	0	116	1578	0	81	1003	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	246	353		396	309		307	1678		168	1653	
Arrive On Green	0.14	0.19	0.00	0.19	0.28	0.00	0.05	0.47	0.00	0.04	0.47	0.00
Sat Flow, veh/h	1781	1870	1585	3456	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	135	309	0	330	272	0	116	1578	0	81	1003	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	7.1	16.1	0.0	9.2	13.9	0.0	3.4	42.2	0.0	2.3	21.0	0.0
Cycle Q Clear(g_c), s	7.1	16.1	0.0	9.2	13.9	0.0	3.4	42.2	0.0	2.3	21.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	246	353		396	309		307	1678		168	1653	
V/C Ratio(X)	0.55	0.88		0.83	0.88		0.38	0.94		0.48	0.61	
Avail Cap(c_a), veh/h	294	458		467	402		313	1678		186	1653	
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.60	0.60	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	40.2	39.4	0.0	39.5	35.2	0.0	15.3	25.1	0.0	22.9	19.9	0.0
Incr Delay (d2), s/veh	1.9	14.1	0.0	6.8	10.5	0.0	0.8	11.8	0.0	2.1	1.7	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	8.3	0.0	3.8	6.2	0.0	1.2	17.9	0.0	0.9	7.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	42.1	53.5	0.0	46.3	45.8	0.0	16.0	36.9	0.0	25.0	21.6	0.0
LnGrp LOS	D	D		D	D		B	D		C	C	
Approach Vol, veh/h		444			602			1694			1084	
Approach Delay, s/veh		50.1			46.0			35.4			21.8	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	51.7	16.0	23.4	9.7	51.0	18.3	21.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	38.5	13.5	24.5	5.5	38.5	16.5	21.5
Max Q Clear Time (g_c+I1), s	4.3	44.2	11.2	18.1	5.4	23.0	9.1	15.9
Green Ext Time (p_c), s	0.0	0.0	0.3	0.8	0.0	5.5	0.2	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	34.9
HCM 7th LOS	C

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

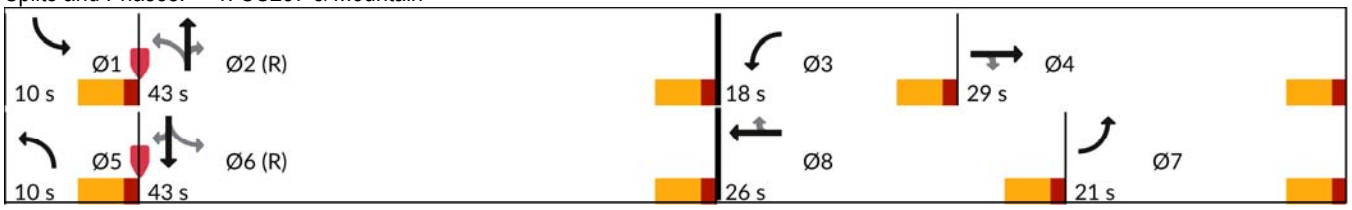
Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBT	NBL	SBTL	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	10	43	18	29	10	43	21	26
Maximum Split (%)	10.0%	43.0%	18.0%	29.0%	10.0%	43.0%	21.0%	26.0%
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Don't Walk (s)		11		11		11		11
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	99	9	52	70	99	9	78	52
End Time (s)	9	52	70	99	9	52	99	78
Yield/Force Off (s)	4.5	47.5	65.5	94.5	4.5	47.5	94.5	73.5
Yield/Force Off 170(s)	4.5	36.5	65.5	83.5	4.5	36.5	94.5	62.5
Local Start Time (s)	90	0	43	61	90	0	69	43
Local Yield (s)	95.5	38.5	56.5	85.5	95.5	38.5	85.5	64.5
Local Yield 170(s)	95.5	27.5	56.5	74.5	95.5	27.5	85.5	53.5

Intersection Summary

Cycle Length	100
Control Type	Actuated-Coordinated
Natural Cycle	90

Offset: 9 (9%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Splits and Phases: 1: US287 & Mountain



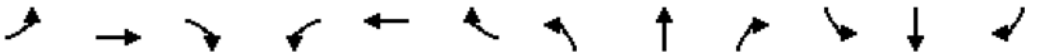
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	135	309	88	330	272	52	116	1578	519	81	1003	110
v/c Ratio	0.50	0.80	0.21	0.74	0.79	0.13	0.50	1.01	0.53	0.44	0.68	0.15
Control Delay (s/veh)	45.7	53.0	4.3	43.0	34.8	1.4	21.8	56.7	4.1	20.9	27.6	1.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	45.7	53.0	4.3	43.0	34.8	1.4	21.8	56.7	4.1	20.9	27.6	1.3
Queue Length 50th (ft)	80	186	0	69	78	0	37	~623	0	25	284	0
Queue Length 95th (ft)	139	273	24	m129	m182	m2	71	#766	64	53	361	11
Internal Link Dist (ft)		1325			870			1386			1925	
Turn Bay Length (ft)	650		400	540		320	1000		1000	1000		1000
Base Capacity (vph)	292	456	474	463	400	430	233	1557	987	185	1471	754
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.68	0.19	0.71	0.68	0.12	0.50	1.01	0.53	0.44	0.68	0.15

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	192	294	20	13	538	38	17	14	12	176	13	70
Future Volume (veh/h)	192	294	20	13	538	38	17	14	12	176	13	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	200	306	19	14	560	16	18	15	5	183	14	28
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	477	878	55	453	739	626	292	234	72	558	192	384
Arrive On Green	0.25	1.00	1.00	0.03	0.79	0.79	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1781	1743	108	1781	1870	1585	691	678	207	1392	557	1113
Grp Volume(v), veh/h	200	0	325	14	560	16	38	0	0	183	0	42
Grp Sat Flow(s),veh/h/ln	1781	0	1851	1781	1870	1585	1577	0	0	1392	0	1670
Q Serve(g_s), s	0.0	0.0	0.0	0.5	15.7	0.2	0.0	0.0	0.0	8.1	0.0	1.7
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.5	15.7	0.2	1.4	0.0	0.0	9.5	0.0	1.7
Prop In Lane	1.00		0.06	1.00		1.00	0.47		0.13	1.00		0.67
Lane Grp Cap(c), veh/h	477	0	933	453	739	626	597	0	0	558	0	576
V/C Ratio(X)	0.42	0.00	0.35	0.03	0.76	0.03	0.06	0.00	0.00	0.33	0.00	0.07
Avail Cap(c_a), veh/h	477	0	933	522	739	626	597	0	0	558	0	576
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.86	0.00	0.86	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.2	0.0	0.0	19.7	8.0	6.4	21.9	0.0	0.0	24.4	0.0	22.0
Incr Delay (d2), s/veh	0.5	0.0	0.9	0.0	7.2	0.1	0.2	0.0	0.0	1.6	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.0	0.2	0.2	4.3	0.1	0.6	0.0	0.0	3.5	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.7	0.0	0.9	19.7	15.2	6.5	22.1	0.0	0.0	26.0	0.0	22.3
LnGrp LOS	C		A	B	B	A	C			C		C
Approach Vol, veh/h		525			590			38			225	
Approach Delay, s/veh		9.6			15.0			22.1			25.3	
Approach LOS		A			B			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.1	54.9		39.0	17.0	44.0		39.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.5	46.5		34.5	12.5	39.5		34.5				
Max Q Clear Time (g_c+I1), s	2.5	2.0		11.5	2.0	17.7		3.4				
Green Ext Time (p_c), s	0.0	1.9		0.7	0.4	3.3		0.2				
Intersection Summary												
HCM 7th Control Delay, s/veh			14.8									
HCM 7th LOS			B									

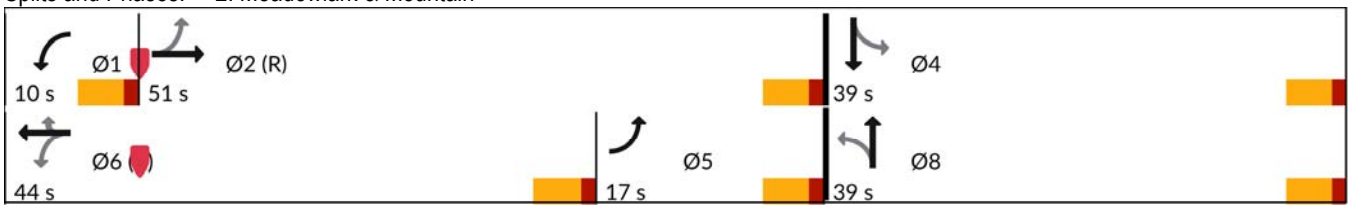
Phase Number	1	2	4	5	6	8
Movement	WBL	EBTL	SBTL	EBL	WBTL	NBTL
Lead/Lag	Lead	Lag		Lag	Lead	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	Max	None	C-Max	Max
Maximum Split (s)	10	51	39	17	44	39
Maximum Split (%)	10.0%	51.0%	39.0%	17.0%	44.0%	39.0%
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Don't Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	51	61	12	95	51	12
End Time (s)	61	12	51	12	95	51
Yield/Force Off (s)	56.5	7.5	46.5	7.5	90.5	46.5
Yield/Force Off 170(s)	56.5	96.5	35.5	7.5	79.5	35.5
Local Start Time (s)	90	0	51	34	90	51
Local Yield (s)	95.5	46.5	85.5	46.5	29.5	85.5
Local Yield 170(s)	95.5	35.5	74.5	46.5	18.5	74.5

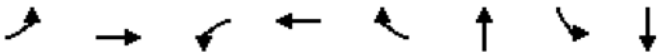
Intersection Summary

Cycle Length	100	
Control Type	Actuated-Coordinated	
Natural Cycle	60	

Offset: 61 (61%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Splits and Phases: 2: Meadowlark & Mountain





Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	200	327	14	560	40	46	183	87
v/c Ratio	0.52	0.32	0.04	0.76	0.06	0.08	0.39	0.14
Control Delay (s/veh)	25.7	15.2	18.2	30.1	2.6	17.7	27.9	7.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	25.7	15.2	18.2	30.1	2.6	17.7	27.9	7.9
Queue Length 50th (ft)	48	80	3	301	1	14	88	6
Queue Length 95th (ft)	130	198	m12	446	m1	39	149	38
Internal Link Dist (ft)		870		1236		331		243
Turn Bay Length (ft)	360		450		300		200	
Base Capacity (vph)	383	1007	342	735	664	569	467	609
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.32	0.04	0.76	0.06	0.08	0.39	0.14

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	365	451	44	29	468	56	33	22	40	191	18	58
Future Volume (veh/h)	365	451	44	29	468	56	33	22	40	191	18	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	401	496	45	32	514	22	36	24	18	210	20	23
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	631	947	86	384	701	594	232	152	99	462	218	251
Arrive On Green	0.43	1.00	1.00	0.06	0.75	0.75	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1781	1689	153	1781	1870	1585	651	551	361	1365	794	913
Grp Volume(v), veh/h	401	0	541	32	514	22	78	0	0	210	0	43
Grp Sat Flow(s),veh/h/ln	1781	0	1843	1781	1870	1585	1563	0	0	1365	0	1706
Q Serve(g_s), s	0.0	0.0	0.0	1.2	15.3	0.4	1.1	0.0	0.0	8.5	0.0	1.9
Cycle Q Clear(g_c), s	0.0	0.0	0.0	1.2	15.3	0.4	3.5	0.0	0.0	11.9	0.0	1.9
Prop In Lane	1.00		0.08	1.00		1.00	0.46		0.23	1.00		0.53
Lane Grp Cap(c), veh/h	631	0	1033	384	701	594	483	0	0	462	0	469
V/C Ratio(X)	0.64	0.00	0.52	0.08	0.73	0.04	0.16	0.00	0.00	0.45	0.00	0.09
Avail Cap(c_a), veh/h	631	0	1033	430	701	594	483	0	0	462	0	469
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.76	0.00	0.76	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.9	0.0	0.0	20.9	9.7	7.9	27.5	0.0	0.0	30.3	0.0	27.0
Incr Delay (d2), s/veh	1.6	0.0	1.4	0.1	6.7	0.1	0.7	0.0	0.0	3.2	0.0	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	0.0	0.4	0.5	4.5	0.1	1.5	0.0	0.0	4.7	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.5	0.0	1.4	21.0	16.4	8.0	28.2	0.0	0.0	33.5	0.0	27.3
LnGrp LOS	B		A	C	B	A	C			C		C
Approach Vol, veh/h		942			568			78			253	
Approach Delay, s/veh		9.1			16.3			28.2			32.5	
Approach LOS		A			B			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.4	60.6		32.0	26.0	42.0		32.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.5	53.5		27.5	21.5	37.5		27.5				
Max Q Clear Time (g_c+I1), s	3.2	2.0		13.9	2.0	17.3		5.5				
Green Ext Time (p_c), s	0.0	3.5		0.7	1.1	2.9		0.4				
Intersection Summary												
HCM 7th Control Delay, s/veh			15.4									
HCM 7th LOS			B									

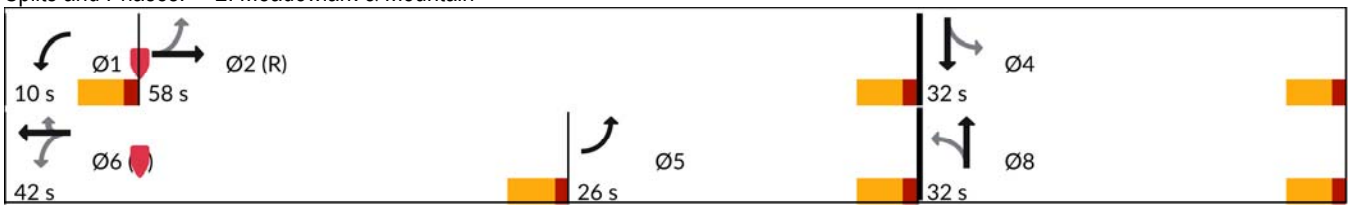
Phase Number	1	2	4	5	6	8
Movement	WBL	EBTL	SBTL	EBL	WBTL	NBTL
Lead/Lag	Lead	Lag		Lag	Lead	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	Max	None	C-Max	Max
Maximum Split (s)	10	58	32	26	42	32
Maximum Split (%)	10.0%	58.0%	32.0%	26.0%	42.0%	32.0%
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Don't Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	33	43	1	75	33	1
End Time (s)	43	1	33	1	75	33
Yield/Force Off (s)	38.5	96.5	28.5	96.5	70.5	28.5
Yield/Force Off 170(s)	38.5	85.5	17.5	96.5	59.5	17.5
Local Start Time (s)	90	0	58	32	90	58
Local Yield (s)	95.5	53.5	85.5	53.5	27.5	85.5
Local Yield 170(s)	95.5	42.5	74.5	53.5	16.5	74.5

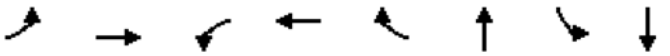
Intersection Summary

Cycle Length	100	
Control Type	Actuated-Coordinated	
Natural Cycle	65	

Offset: 43 (43%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Splits and Phases: 2: Meadowlark & Mountain





Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	401	544	32	514	62	104	210	84
v/c Ratio	0.71	0.51	0.15	0.74	0.10	0.23	0.60	0.17
Control Delay (s/veh)	29.9	16.7	18.0	26.7	4.1	20.2	39.7	11.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	29.9	16.7	18.0	26.7	4.1	20.2	39.7	11.1
Queue Length 50th (ft)	128	182	8	145	0	33	116	9
Queue Length 95th (ft)	241	330	m18	298	m4	76	196	46
Internal Link Dist (ft)		870		1236		331		243
Turn Bay Length (ft)	360		450		200		200	
Base Capacity (vph)	567	1060	209	698	634	455	352	500
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.71	0.51	0.15	0.74	0.10	0.23	0.60	0.17

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Intersection												
Int Delay, s/veh	0.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱		↑	↱			↱			↱
Traffic Vol, veh/h	0	478	14	0	548	19	0	0	29	0	0	34
Future Vol, veh/h	0	478	14	0	548	19	0	0	29	0	0	34
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	250	-	-	250	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	85	85	88	88	85	85	85	88	85	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	543	16	0	623	22	0	0	34	0	0	39

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	543	-	-	623
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.22	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.318	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	540	0	0	486
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	540	-	-	486
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0	12.12	13.04
HCM LOS			B	B

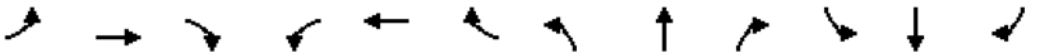
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	540	-	-	-	-	486
HCM Lane V/C Ratio	0.063	-	-	-	-	0.079
HCM Ctrl Dly (s/v)	12.1	-	-	-	-	13
HCM Lane LOS	B	-	-	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	-	0.3

Intersection												
Int Delay, s/veh	0.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱		↑	↱			↱			↱
Traffic Vol, veh/h	0	656	47	0	534	58	0	0	19	0	0	20
Future Vol, veh/h	0	656	47	0	534	58	0	0	19	0	0	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	250	-	-	250	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	85	85	93	93	85	85	85	93	85	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	705	55	0	574	62	0	0	22	0	0	22

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	705	-	-	574
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.22	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.318	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	436	0	0	518
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	436	-	-	518
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0	13.7	12.25
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	436	-	-	-	-	518
HCM Lane V/C Ratio	0.051	-	-	-	-	0.042
HCM Ctrl Dly (s/v)	13.7	-	-	-	-	12.2
HCM Lane LOS	B	-	-	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	-	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	112	279	121	33	229	144	186	242	65	178	193	151
Future Volume (veh/h)	112	279	121	33	229	144	186	242	65	178	193	151
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	122	303	50	36	249	60	202	263	25	193	210	62
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	446	705	597	362	650	550	497	594	503	464	589	499
Arrive On Green	0.02	0.12	0.12	0.03	0.35	0.35	0.10	0.32	0.32	0.09	0.31	0.31
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	122	303	50	36	249	60	202	263	25	193	210	62
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	4.3	15.0	2.8	1.3	10.0	2.6	7.5	11.2	1.1	7.2	8.7	2.8
Cycle Q Clear(g_c), s	4.3	15.0	2.8	1.3	10.0	2.6	7.5	11.2	1.1	7.2	8.7	2.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	446	705	597	362	650	550	497	594	503	464	589	499
V/C Ratio(X)	0.27	0.43	0.08	0.10	0.38	0.11	0.41	0.44	0.05	0.42	0.36	0.12
Avail Cap(c_a), veh/h	488	705	597	421	650	550	548	594	503	573	589	499
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.9	33.8	28.5	20.4	24.6	22.1	20.0	27.1	23.7	20.3	26.4	24.4
Incr Delay (d2), s/veh	0.3	1.9	0.3	0.1	1.7	0.4	0.5	2.4	0.2	0.6	1.7	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	7.8	1.1	0.5	4.5	1.0	3.0	5.2	0.4	3.0	4.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.3	35.7	28.8	20.6	26.3	22.5	20.5	29.5	23.9	20.9	28.1	24.9
LnGrp LOS	C	D	C	C	C	C	C	C	C	C	C	C
Approach Vol, veh/h		475			345			490			465	
Approach Delay, s/veh		31.0			25.0			25.5			24.7	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.7	42.2	14.1	36.0	10.6	39.2	13.9	36.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	6.5	31.5	12.5	31.5	8.5	29.5	15.5	28.5
Max Q Clear Time (g_c+I1), s	3.3	17.0	9.5	10.7	6.3	12.0	9.2	13.2
Green Ext Time (p_c), s	0.0	1.5	0.2	1.3	0.1	1.3	0.3	1.3

Intersection Summary	
HCM 7th Control Delay, s/veh	26.7
HCM 7th LOS	C

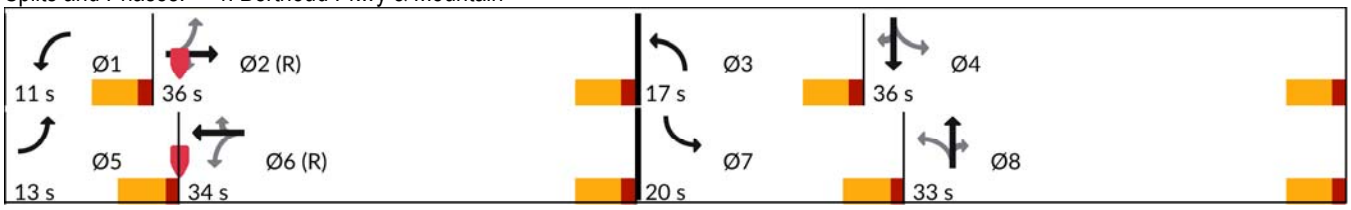
Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EBTL	NBL	SBTL	EBL	WBTL	SBL	NBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	C-Max	None	Max
Maximum Split (s)	11	36	17	36	13	34	20	33
Maximum Split (%)	11.0%	36.0%	17.0%	36.0%	13.0%	34.0%	20.0%	33.0%
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Don't Walk (s)		11		11		11		11
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	11	47	64	0	13	47	67
End Time (s)	11	47	64	0	13	47	67	0
Yield/Force Off (s)	6.5	42.5	59.5	95.5	8.5	42.5	62.5	95.5
Yield/Force Off 170(s)	6.5	31.5	59.5	84.5	8.5	31.5	62.5	84.5
Local Start Time (s)	87	98	34	51	87	0	34	54
Local Yield (s)	93.5	29.5	46.5	82.5	95.5	29.5	49.5	82.5
Local Yield 170(s)	93.5	18.5	46.5	71.5	95.5	18.5	49.5	71.5

Intersection Summary

Cycle Length	100
Control Type	Actuated-Coordinated
Natural Cycle	65

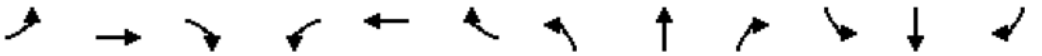
Offset: 13 (13%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Splits and Phases: 4: Berthoud Pkwy & Mountain



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	122	303	132	36	249	157	202	263	71	193	210	164
v/c Ratio	0.31	0.45	0.20	0.09	0.45	0.27	0.38	0.44	0.12	0.40	0.34	0.26
Control Delay (s/veh)	23.9	33.3	9.1	17.8	31.7	5.7	17.6	30.4	2.0	17.7	27.9	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	23.9	33.3	9.1	17.8	31.7	5.7	17.6	30.4	2.0	17.7	27.9	5.2
Queue Length 50th (ft)	61	166	10	13	129	0	72	131	0	69	102	0
Queue Length 95th (ft)	71	259	35	32	203	46	118	218	11	113	166	45
Internal Link Dist (ft)		1223			961			573			639	
Turn Bay Length (ft)	400		350	430		400	350		200	350		370
Base Capacity (vph)	399	668	653	385	556	583	552	599	587	548	611	629
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.45	0.20	0.09	0.45	0.27	0.37	0.44	0.12	0.35	0.34	0.26

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	204	355	107	66	321	232	145	245	55	217	262	126
Future Volume (veh/h)	204	355	107	66	321	232	145	245	55	217	262	126
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	229	399	48	74	361	105	163	275	25	244	294	54
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	397	704	597	329	594	503	467	421	357	482	421	357
Arrive On Green	0.07	0.25	0.25	0.04	0.32	0.32	0.17	0.22	0.22	0.17	0.22	0.22
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	229	399	48	74	361	105	163	275	25	244	294	54
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	8.2	18.6	2.3	2.8	16.3	4.8	6.0	13.4	1.2	9.5	14.5	2.7
Cycle Q Clear(g_c), s	8.2	18.6	2.3	2.8	16.3	4.8	6.0	13.4	1.2	9.5	14.5	2.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	397	704	597	329	594	503	467	421	357	482	421	357
V/C Ratio(X)	0.58	0.57	0.08	0.22	0.61	0.21	0.35	0.65	0.07	0.51	0.70	0.15
Avail Cap(c_a), veh/h	420	704	597	349	594	503	467	421	357	482	421	357
HCM Platoon Ratio	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.0	30.3	24.2	22.2	28.9	24.9	21.1	35.2	30.5	22.0	35.6	31.1
Incr Delay (d2), s/veh	1.8	3.3	0.3	0.3	4.6	0.9	2.1	7.7	0.4	3.8	9.3	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	9.2	0.9	1.1	7.6	1.9	2.7	6.8	0.5	4.3	7.5	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.7	33.6	24.4	22.5	33.4	25.9	23.1	42.9	30.9	25.8	44.9	32.0
LnGrp LOS	C	C	C	C	C	C	C	D	C	C	D	C
Approach Vol, veh/h		676			540			463			592	
Approach Delay, s/veh		29.3			30.5			35.3			35.8	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.9	42.1	22.0	27.0	14.7	36.3	22.0	27.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	36.5	17.5	22.5	11.5	30.5	17.5	22.5
Max Q Clear Time (g_c+I1), s	4.8	20.6	8.0	16.5	10.2	18.3	11.5	15.4
Green Ext Time (p_c), s	0.0	2.1	0.3	0.9	0.1	1.8	0.4	0.9

Intersection Summary	
HCM 7th Control Delay, s/veh	32.5
HCM 7th LOS	C

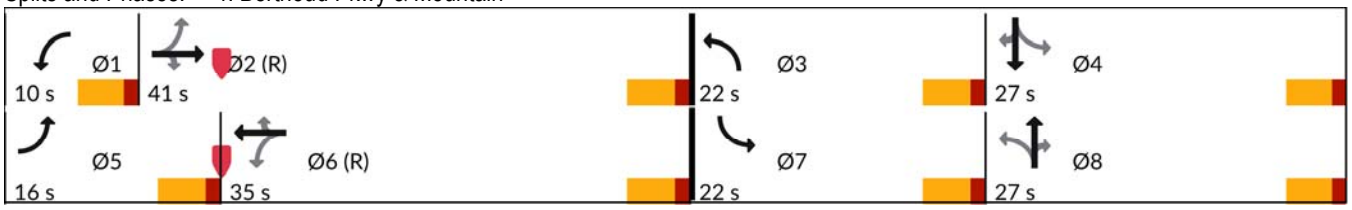
Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EBTL	NBL	SBTL	EBL	WBTL	SBL	NBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	Max	Max	None	C-Max	Max	Max
Maximum Split (s)	10	41	22	27	16	35	22	27
Maximum Split (%)	10.0%	41.0%	22.0%	27.0%	16.0%	35.0%	22.0%	27.0%
Minimum Split (s)	9.5	22.5	22.5	22.5	9.5	22.5	22.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7	7	7		7	7	7
Flash Don't Walk (s)		11	11	11		11	11	11
Dual Entry	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	84	94	35	57	84	0	35	57
End Time (s)	94	35	57	84	0	35	57	84
Yield/Force Off (s)	89.5	30.5	52.5	79.5	95.5	30.5	52.5	79.5
Yield/Force Off 170(s)	89.5	19.5	41.5	68.5	95.5	19.5	41.5	68.5
Local Start Time (s)	84	94	35	57	84	0	35	57
Local Yield (s)	89.5	30.5	52.5	79.5	95.5	30.5	52.5	79.5
Local Yield 170(s)	89.5	19.5	41.5	68.5	95.5	19.5	41.5	68.5

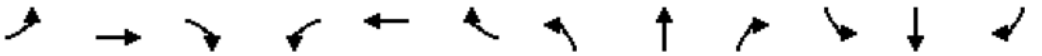
Intersection Summary

Cycle Length	100
Control Type	Actuated-Coordinated
Natural Cycle	80

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Splits and Phases: 4: Berthoud Pkwy & Mountain





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	229	399	120	74	361	261	163	275	62	244	294	142
v/c Ratio	0.60	0.56	0.18	0.22	0.63	0.39	0.37	0.66	0.13	0.54	0.70	0.29
Control Delay (s/veh)	24.3	30.3	5.5	17.3	35.5	5.2	19.8	43.7	0.5	22.9	45.9	5.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	24.3	30.3	5.5	17.3	35.5	5.2	19.8	43.7	0.5	22.9	45.9	5.3
Queue Length 50th (ft)	74	224	8	25	198	0	62	160	0	97	173	0
Queue Length 95th (ft)	114	325	m23	51	293	54	103	246	0	152	263	35
Internal Link Dist (ft)		1223			961			573			639	
Turn Bay Length (ft)	400		350	430		400	350		200	350		370
Base Capacity (vph)	386	716	682	336	577	670	438	419	483	453	419	483
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.59	0.56	0.18	0.22	0.63	0.39	0.37	0.66	0.13	0.54	0.70	0.29

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Intersection												
Int Delay, s/veh	6.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	0	108	41	0	1	181	42	21	0	110	5
Future Vol, veh/h	3	0	108	41	0	1	181	42	21	0	110	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	200	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	0	127	48	0	1	213	49	25	0	129	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	608	632	132	617	623	62	135	0	0	74	0	0
Stage 1	132	132	-	488	488	-	-	-	-	-	-	-
Stage 2	475	500	-	129	135	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	408	397	917	402	402	1003	1449	-	-	1525	-	-
Stage 1	871	787	-	562	550	-	-	-	-	-	-	-
Stage 2	570	543	-	874	784	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	348	339	917	296	343	1003	1449	-	-	1525	-	-
Mov Cap-2 Maneuver	348	339	-	296	343	-	-	-	-	-	-	-
Stage 1	871	787	-	479	469	-	-	-	-	-	-	-
Stage 2	486	463	-	753	784	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	9.81	19.32	5.87	0
HCM LOS	A	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1449	-	-	878	301	1525	-	-
HCM Lane V/C Ratio	0.147	-	-	0.149	0.164	-	-	-
HCM Ctrl Dly (s/v)	7.9	-	-	9.8	19.3	0	-	-
HCM Lane LOS	A	-	-	A	C	A	-	-
HCM 95th %tile Q(veh)	0.5	-	-	0.5	0.6	0	-	-

Intersection												
Int Delay, s/veh	6.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	0	180	14	0	1	293	99	51	3	59	15
Future Vol, veh/h	10	0	180	14	0	1	293	99	51	3	59	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	200	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	0	212	16	0	1	345	116	60	4	69	18

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	891	951	78	912	930	146	87	0	0	176	0	0
Stage 1	85	85	-	836	836	-	-	-	-	-	-	-
Stage 2	806	866	-	76	94	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	263	260	982	254	267	901	1509	-	-	1400	-	-
Stage 1	923	824	-	362	382	-	-	-	-	-	-	-
Stage 2	376	370	-	933	817	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	202	200	982	154	206	901	1509	-	-	1400	-	-
Mov Cap-2 Maneuver	202	200	-	154	206	-	-	-	-	-	-	-
Stage 1	920	822	-	279	295	-	-	-	-	-	-	-
Stage 2	290	286	-	730	815	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	11.06	29.81	5.35	0.3
HCM LOS	B	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1509	-	-	817	163	1400	-	-
HCM Lane V/C Ratio	0.228	-	-	0.274	0.109	0.003	-	-
HCM Ctrl Dly (s/v)	8.1	-	-	11.1	29.8	7.6	-	-
HCM Lane LOS	A	-	-	B	D	A	-	-
HCM 95th %tile Q(veh)	0.9	-	-	1.1	0.4	0	-	-

Intersection												
Int Delay, s/veh	5.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	0	25	0	0	0	10	9	0	0	9	1
Future Vol, veh/h	4	0	25	0	0	0	10	9	0	0	9	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	0	29	0	0	0	12	11	0	0	11	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	45	45	11	45	46	11	12	0	0	11	0	0
Stage 1	11	11	-	34	34	-	-	-	-	-	-	-
Stage 2	34	34	-	11	12	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	956	846	1070	957	846	1071	1607	-	-	1609	-	-
Stage 1	1010	886	-	982	867	-	-	-	-	-	-	-
Stage 2	982	867	-	1010	886	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	949	840	1070	924	840	1071	1607	-	-	1609	-	-
Mov Cap-2 Maneuver	949	840	-	924	840	-	-	-	-	-	-	-
Stage 1	1010	886	-	975	860	-	-	-	-	-	-	-
Stage 2	975	860	-	982	886	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	8.54	0	3.82	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1607	-	-	1051	-	1609	-	-
HCM Lane V/C Ratio	0.007	-	-	0.032	-	-	-	-
HCM Ctrl Dly (s/v)	7.3	-	-	8.5	0	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	-	0	-	-

Intersection												
Int Delay, s/veh	5.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	1	18	0	0	1	10	9	1	1	2	3
Future Vol, veh/h	3	1	18	0	0	1	10	9	1	1	2	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	1	21	0	0	1	12	11	1	1	2	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	41	42	4	40	43	11	6	0	0	12	0	0
Stage 1	6	6	-	35	35	-	-	-	-	-	-	-
Stage 2	34	35	-	5	8	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	963	850	1079	964	849	1070	1615	-	-	1607	-	-
Stage 1	1015	890	-	981	866	-	-	-	-	-	-	-
Stage 2	982	866	-	1017	889	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	954	843	1079	936	842	1070	1615	-	-	1607	-	-
Mov Cap-2 Maneuver	954	843	-	936	842	-	-	-	-	-	-	-
Stage 1	1015	890	-	974	860	-	-	-	-	-	-	-
Stage 2	974	859	-	995	888	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	8.52	8.37	3.62	1.21
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1615	-	-	1047	1070	1607	-	-
HCM Lane V/C Ratio	0.007	-	-	0.025	0.001	0.001	-	-
HCM Ctrl Dly (s/v)	7.2	-	-	8.5	8.4	7.2	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-

APPENDIX I

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	300	135	445	205	140	105	690	230	75	1830	95
Future Volume (veh/h)	100	300	135	445	205	140	105	690	230	75	1830	95
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	105	316	0	468	216	0	111	726	0	79	1926	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	161	404		521	408		144	1941		134	1930	
Arrive On Green	0.05	0.11	0.00	0.15	0.22	0.00	0.04	0.55	0.00	0.04	0.54	0.00
Sat Flow, veh/h	3456	3554	1585	3456	1870	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	105	316	0	468	216	0	111	726	0	79	1926	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1870	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	3.6	10.3	0.0	15.9	12.2	0.0	3.8	13.9	0.0	2.7	64.7	0.0
Cycle Q Clear(g_c), s	3.6	10.3	0.0	15.9	12.2	0.0	3.8	13.9	0.0	2.7	64.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	161	404		521	408		144	1941		134	1930	
V/C Ratio(X)	0.65	0.78		0.90	0.53		0.77	0.37		0.59	1.00	
Avail Cap(c_a), veh/h	419	698		534	430		144	1941		188	1930	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	56.1	51.6	0.0	49.9	41.4	0.0	56.8	15.5	0.0	56.6	27.3	0.0
Incr Delay (d2), s/veh	4.5	3.3	0.0	17.7	1.1	0.0	21.8	0.6	0.0	4.1	20.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	4.6	0.0	8.0	5.6	0.0	2.0	5.2	0.0	1.2	28.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	60.6	54.9	0.0	67.6	42.4	0.0	78.6	16.0	0.0	60.7	47.2	0.0
LnGrp LOS	E	D		E	D		E	B		E	D	
Approach Vol, veh/h		421			684			837			2005	
Approach Delay, s/veh		56.3			59.7			24.3			47.7	
Approach LOS		E			E			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.1	69.9	22.5	18.1	9.5	69.5	10.1	30.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	6.5	63.5	18.5	23.5	5.0	65.0	14.5	27.5
Max Q Clear Time (g_c+I1), s	4.7	15.9	17.9	12.3	5.8	66.7	5.6	14.2
Green Ext Time (p_c), s	0.0	4.8	0.1	1.3	0.0	0.0	0.2	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	45.8
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

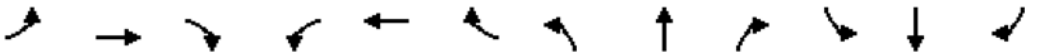
Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBT	NBL	SBT	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	None	Max	None	None
Maximum Split (s)	11	68	23	28	9.5	69.5	19	32
Maximum Split (%)	8.5%	52.3%	17.7%	21.5%	7.3%	53.5%	14.6%	24.6%
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Don't Walk (s)		11		11		11		11
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	11	79	102	0	9.5	79	98
End Time (s)	11	79	102	0	9.5	79	98	0
Yield/Force Off (s)	6.5	74.5	97.5	125.5	5	74.5	93.5	125.5
Yield/Force Off 170(s)	6.5	63.5	97.5	114.5	5	63.5	93.5	114.5
Local Start Time (s)	119	0	68	91	119	128.5	68	87
Local Yield (s)	125.5	63.5	86.5	114.5	124	63.5	82.5	114.5
Local Yield 170(s)	125.5	52.5	86.5	103.5	124	52.5	82.5	103.5

Intersection Summary

Cycle Length	130	
Control Type	Actuated-Uncoordinated	
Natural Cycle	130	

Splits and Phases: 1: US287 & Mountain





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	105	316	142	468	216	147	111	726	242	79	1926	100
v/c Ratio	0.41	0.67	0.50	0.91	0.56	0.33	0.80	0.38	0.25	0.44	1.03	0.11
Control Delay (s/veh)	59.5	58.2	26.3	73.9	49.9	8.4	95.3	18.4	2.8	65.4	57.7	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	59.5	58.2	26.3	73.9	49.9	8.4	95.3	18.4	2.8	65.4	57.7	3.3
Queue Length 50th (ft)	41	127	39	190	155	0	45	177	0	31	~856	0
Queue Length 95th (ft)	73	176	104	#305	242	56	#103	246	43	60	#1073	28
Internal Link Dist (ft)		1325			870			1386			1925	
Turn Bay Length (ft)	650		400	540		320	1000		1000	1000		1000
Base Capacity (vph)	405	677	373	517	420	470	139	1895	960	181	1873	884
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.47	0.38	0.91	0.51	0.31	0.80	0.38	0.25	0.44	1.03	0.11

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	375	160	335	305	120	180	1825	515	155	1165	150
Future Volume (veh/h)	180	375	160	335	305	120	180	1825	515	155	1165	150
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	188	391	0	349	318	0	188	1901	0	161	1214	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	239	486		395	340		242	1955		209	1920	
Arrive On Green	0.07	0.14	0.00	0.19	0.30	0.00	0.07	0.55	0.00	0.06	0.54	0.00
Sat Flow, veh/h	3456	3554	1585	3456	1870	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	188	391	0	349	318	0	188	1901	0	161	1214	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1870	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	7.0	13.9	0.0	12.8	21.5	0.0	7.0	67.3	0.0	6.0	31.0	0.0
Cycle Q Clear(g_c), s	7.0	13.9	0.0	12.8	21.5	0.0	7.0	67.3	0.0	6.0	31.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	239	486		395	340		242	1955		209	1920	
V/C Ratio(X)	0.79	0.81		0.88	0.93		0.78	0.97		0.77	0.63	
Avail Cap(c_a), veh/h	253	506		412	352		332	1955		209	1920	
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.72	0.72	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	59.6	54.4	0.0	51.7	44.5	0.0	59.4	28.3	0.0	60.2	20.9	0.0
Incr Delay (d2), s/veh	14.5	9.0	0.0	14.7	24.9	0.0	7.6	14.8	0.0	16.1	1.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	6.6	0.0	5.8	10.9	0.0	3.2	29.1	0.0	3.0	12.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	74.1	63.4	0.0	66.4	69.4	0.0	67.0	43.1	0.0	76.2	22.5	0.0
LnGrp LOS	E	E		E	E		E	D		E	C	
Approach Vol, veh/h		579			667			2089			1375	
Approach Delay, s/veh		66.9			67.8			45.3			28.8	
Approach LOS		E			E			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.4	76.0	19.4	22.3	13.6	74.7	13.5	28.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	6.5	71.5	15.5	18.5	12.5	65.5	9.5	24.5
Max Q Clear Time (g_c+I1), s	8.0	69.3	14.8	15.9	9.0	33.0	9.0	23.5
Green Ext Time (p_c), s	0.0	1.9	0.1	0.6	0.2	9.2	0.0	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	46.3
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBT	NBL	SBT	EBL	WBT
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	11	76	20	23	17	70	14	29
Maximum Split (%)	8.5%	58.5%	15.4%	17.7%	13.1%	53.8%	10.8%	22.3%
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Don't Walk (s)		11		11		11		11
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	5	59	16	36	59	76	45	16
End Time (s)	16	5	36	59	76	16	59	45
Yield/Force Off (s)	11.5	0.5	31.5	54.5	71.5	11.5	54.5	40.5
Yield/Force Off 170(s)	11.5	119.5	31.5	43.5	71.5	0.5	54.5	29.5
Local Start Time (s)	59	113	70	90	113	0	99	70
Local Yield (s)	65.5	54.5	85.5	108.5	125.5	65.5	108.5	94.5
Local Yield 170(s)	65.5	43.5	85.5	97.5	125.5	54.5	108.5	83.5

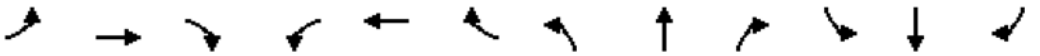
Intersection Summary

Cycle Length	130
Control Type	Actuated-Coordinated
Natural Cycle	120

Offset: 76 (58%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Splits and Phases: 1: US287 & Mountain





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	188	391	167	349	318	125	188	1901	536	161	1214	156
v/c Ratio	0.76	0.80	0.46	0.87	0.93	0.32	0.62	0.97	0.49	0.94	0.66	0.17
Control Delay (s/veh)	78.3	66.9	11.6	61.7	65.4	7.2	66.4	42.3	3.8	116.1	25.7	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	78.3	66.9	11.6	61.7	65.4	7.2	66.4	42.3	3.8	116.1	25.7	3.0
Queue Length 50th (ft)	81	169	0	140	243	16	79	788	20	71	394	0
Queue Length 95th (ft)	#136	#228	65	#226	#436	m36	119	#992	78	#142	474	35
Internal Link Dist (ft)		1325			870			1386			1925	
Turn Bay Length (ft)	650		400	540		320	1000		1000	1000		1000
Base Capacity (vph)	250	503	368	409	351	400	330	1964	1093	171	1828	893
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.78	0.45	0.85	0.91	0.31	0.57	0.97	0.49	0.94	0.66	0.17

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	195	385	45	25	565	40	135	15	40	185	15	75
Future Volume (veh/h)	195	385	45	25	565	40	135	15	40	185	15	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	203	401	0	26	589	16	141	16	16	193	16	54
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	608	1103		418	928	786	374	266	226	430	63	211
Arrive On Green	0.12	0.59	0.00	0.05	0.99	0.99	0.08	0.14	0.14	0.11	0.17	0.17
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	375	1267
Grp Volume(v), veh/h	203	401	0	26	589	16	141	16	16	193	0	70
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	0	1642
Q Serve(g_s), s	0.0	14.6	0.0	1.0	0.9	0.0	8.7	1.0	1.1	11.8	0.0	4.8
Cycle Q Clear(g_c), s	0.0	14.6	0.0	1.0	0.9	0.0	8.7	1.0	1.1	11.8	0.0	4.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.77
Lane Grp Cap(c), veh/h	608	1103		418	928	786	374	266	226	430	0	274
V/C Ratio(X)	0.33	0.36		0.06	0.63	0.02	0.38	0.06	0.07	0.45	0.00	0.26
Avail Cap(c_a), veh/h	608	1103		452	928	786	386	266	226	440	0	274
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.87	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.4	13.9	0.0	18.7	0.3	0.1	42.5	48.2	48.3	40.6	0.0	47.1
Incr Delay (d2), s/veh	0.3	0.8	0.0	0.1	3.3	0.0	0.6	0.4	0.6	0.7	0.0	2.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	6.0	0.0	0.4	1.0	0.0	3.9	0.5	0.5	5.3	0.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.6	14.7	0.0	18.7	3.6	0.2	43.1	48.7	48.9	41.3	0.0	49.4
LnGrp LOS	B	B		B	A	A	D	D	D	D		D
Approach Vol, veh/h		604			631			173			263	
Approach Delay, s/veh		16.1			4.1			44.2			43.5	
Approach LOS		B			A			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.5	81.1	15.1	26.2	19.7	69.0	18.3	23.0				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.5	73.5	11.5	21.5	14.5	64.5	14.5	18.5				
Max Q Clear Time (g_c+I1), s	3.0	16.6	10.7	6.8	2.0	2.9	13.8	3.1				
Green Ext Time (p_c), s	0.0	2.4	0.0	0.2	0.4	4.0	0.0	0.1				

Intersection Summary	
HCM 7th Control Delay, s/veh	18.8
HCM 7th LOS	B

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

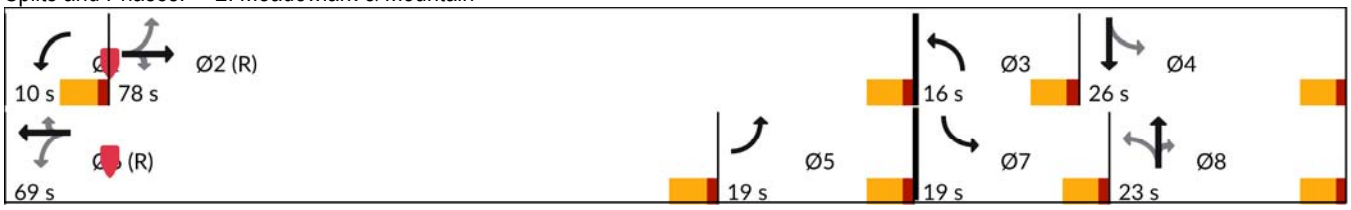
Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EBTL	NBL	SBTL	EBL	WBTL	SBL	NBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	C-Max	None	Max
Maximum Split (s)	10	78	16	26	19	69	19	23
Maximum Split (%)	7.7%	60.0%	12.3%	20.0%	14.6%	53.1%	14.6%	17.7%
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Don't Walk (s)		11		11		11		11
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	66	76	24	40	5	66	24	43
End Time (s)	76	24	40	66	24	5	43	66
Yield/Force Off (s)	71.5	19.5	35.5	61.5	19.5	0.5	38.5	61.5
Yield/Force Off 170(s)	71.5	8.5	35.5	50.5	19.5	119.5	38.5	50.5
Local Start Time (s)	120	0	78	94	59	120	78	97
Local Yield (s)	125.5	73.5	89.5	115.5	73.5	54.5	92.5	115.5
Local Yield 170(s)	125.5	62.5	89.5	104.5	73.5	43.5	92.5	104.5

Intersection Summary

Cycle Length	130
Control Type	Actuated-Coordinated
Natural Cycle	75

Offset: 76 (58%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Splits and Phases: 2: Meadowlark & Mountain



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	203	401	47	26	589	42	141	16	42	193	94
v/c Ratio	0.44	0.36	0.05	0.06	0.64	0.05	0.41	0.06	0.12	0.49	0.28
Control Delay (s/veh)	23.3	15.4	0.4	10.7	22.2	1.0	40.4	49.0	0.8	41.9	16.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	23.3	15.4	0.4	10.7	22.2	1.0	40.4	49.0	0.8	41.9	16.0
Queue Length 50th (ft)	80	179	0	10	368	2	92	12	0	130	12
Queue Length 95th (ft)	123	251	3	m19	444	7	151	35	0	202	62
Internal Link Dist (ft)		870			1236			331			243
Turn Bay Length (ft)	360		360	450		300	250		250	200	
Base Capacity (vph)	459	1110	979	403	924	829	348	276	341	402	341
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.36	0.05	0.06	0.64	0.05	0.41	0.06	0.12	0.48	0.28

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	375	570	115	100	475	60	165	25	60	195	20	60
Future Volume (veh/h)	375	570	115	100	475	60	165	25	60	195	20	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	391	594	0	104	495	24	172	26	24	203	21	24
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	662	1033		393	712	604	412	268	227	432	126	144
Arrive On Green	0.45	1.00	0.00	0.11	0.76	0.76	0.10	0.14	0.14	0.11	0.16	0.16
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	796	910
Grp Volume(v), veh/h	391	594	0	104	495	24	172	26	24	203	0	45
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	0	1707
Q Serve(g_s), s	0.0	0.0	0.0	5.2	17.4	0.3	10.6	1.6	1.7	12.5	0.0	3.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	5.2	17.4	0.3	10.6	1.6	1.7	12.5	0.0	3.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.53
Lane Grp Cap(c), veh/h	662	1033		393	712	604	412	268	227	432	0	270
V/C Ratio(X)	0.59	0.58		0.26	0.70	0.04	0.42	0.10	0.11	0.47	0.00	0.17
Avail Cap(c_a), veh/h	662	1033		453	712	604	414	268	227	443	0	270
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.69	0.69	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.7	0.0	0.0	26.5	11.7	4.8	41.6	48.4	48.4	40.7	0.0	47.3
Incr Delay (d2), s/veh	1.0	1.6	0.0	0.4	5.5	0.1	0.7	0.7	0.9	0.8	0.0	1.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	0.5	0.0	2.1	5.1	0.2	4.8	0.8	0.7	5.6	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.7	1.6	0.0	26.9	17.2	5.0	42.2	49.1	49.4	41.5	0.0	48.6
LnGrp LOS	C	A		C	B	A	D	D	D	D		D
Approach Vol, veh/h		985			623			222			248	
Approach Delay, s/veh		9.2			18.4			43.8			42.8	
Approach LOS		A			B			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.6	76.3	17.0	25.1	33.9	54.0	19.0	23.1				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	11.5	67.2	12.7	20.6	29.2	49.5	15.3	18.0				
Max Q Clear Time (g_c+I1), s	7.2	2.0	12.6	5.0	2.0	19.4	14.5	3.7				
Green Ext Time (p_c), s	0.1	4.0	0.0	0.1	1.2	3.1	0.1	0.1				

Intersection Summary

HCM 7th Control Delay, s/veh	19.7
HCM 7th LOS	B

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

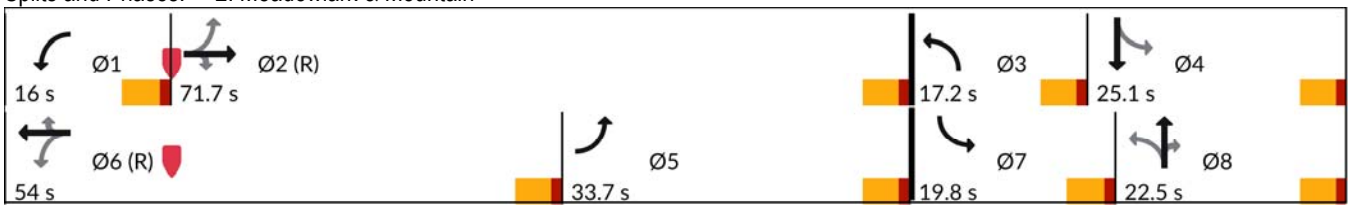
Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EBTL	NBL	SBTL	EBL	WBTL	SBL	NBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	C-Max	None	Max
Maximum Split (s)	16	71.7	17.2	25.1	33.7	54	19.8	22.5
Maximum Split (%)	12.3%	55.2%	13.2%	19.3%	25.9%	41.5%	15.2%	17.3%
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Don't Walk (s)		11		11		11		11
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	114	0	71.7	88.9	38	114	71.7	91.5
End Time (s)	0	71.7	88.9	114	71.7	38	91.5	114
Yield/Force Off (s)	125.5	67.2	84.4	109.5	67.2	33.5	87	109.5
Yield/Force Off 170(s)	125.5	56.2	84.4	98.5	67.2	22.5	87	98.5
Local Start Time (s)	114	0	71.7	88.9	38	114	71.7	91.5
Local Yield (s)	125.5	67.2	84.4	109.5	67.2	33.5	87	109.5
Local Yield 170(s)	125.5	56.2	84.4	98.5	67.2	22.5	87	98.5

Intersection Summary

Cycle Length	130
Control Type	Actuated-Coordinated
Natural Cycle	80

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Splits and Phases: 2: Meadowlark & Mountain



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	391	594	120	104	495	63	172	26	63	203	84
v/c Ratio	0.66	0.60	0.13	0.54	0.70	0.10	0.48	0.10	0.19	0.51	0.26
Control Delay (s/veh)	21.0	16.1	1.3	45.8	34.0	4.3	42.0	50.1	1.2	42.3	19.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	21.0	16.1	1.3	45.8	34.0	4.3	42.0	50.1	1.2	42.3	19.1
Queue Length 50th (ft)	95	155	0	51	214	0	114	19	0	137	15
Queue Length 95th (ft)	m160	m270	m6	m111	344	m7	180	48	0	210	64
Internal Link Dist (ft)		870			1236			331			243
Turn Bay Length (ft)	360		360	450		300	250		250	200	
Base Capacity (vph)	590	985	893	213	709	657	363	269	337	408	321
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.60	0.13	0.49	0.70	0.10	0.47	0.10	0.19	0.50	0.26

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	195	385	45	25	565	40	135	15	40	185	15	75
Future Volume (veh/h)	195	385	45	25	565	40	135	15	40	185	15	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	203	401	0	26	589	16	141	16	16	193	16	29
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	410	1092		409	914	774	402	278	235	438	103	187
Arrive On Green	0.12	0.58	0.00	0.05	0.98	0.98	0.08	0.15	0.15	0.11	0.17	0.17
Sat Flow, veh/h	3456	1870	1585	1781	1870	1585	1781	1870	1585	1781	596	1080
Grp Volume(v), veh/h	203	401	0	26	589	16	141	16	16	193	0	45
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1781	1870	1585	1781	1870	1585	1781	0	1676
Q Serve(g_s), s	7.2	14.8	0.0	1.0	2.6	0.0	8.6	1.0	1.1	11.7	0.0	3.0
Cycle Q Clear(g_c), s	7.2	14.8	0.0	1.0	2.6	0.0	8.6	1.0	1.1	11.7	0.0	3.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.64
Lane Grp Cap(c), veh/h	410	1092		409	914	774	402	278	235	438	0	290
V/C Ratio(X)	0.49	0.37		0.06	0.64	0.02	0.35	0.06	0.07	0.44	0.00	0.16
Avail Cap(c_a), veh/h	410	1092		442	914	774	415	278	235	462	0	290
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.87	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.6	14.3	0.0	19.2	0.8	0.3	41.9	47.5	47.6	40.0	0.0	45.7
Incr Delay (d2), s/veh	0.8	0.8	0.0	0.1	3.5	0.0	0.5	0.4	0.6	0.7	0.0	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	6.1	0.0	0.4	1.3	0.0	3.9	0.5	0.5	5.3	0.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.4	15.2	0.0	19.3	4.3	0.4	42.4	47.9	48.2	40.6	0.0	46.8
LnGrp LOS	D	B		B	A	A	D	D	D	D		D
Approach Vol, veh/h		604			631			173			238	
Approach Delay, s/veh		28.4			4.8			43.4			41.8	
Approach LOS		C			A			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.5	80.4	15.1	27.0	19.9	68.0	18.3	23.8				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.5	72.5	11.5	22.5	14.5	63.5	15.5	18.5				
Max Q Clear Time (g_c+I1), s	3.0	16.8	10.6	5.0	9.2	4.6	13.7	3.1				
Green Ext Time (p_c), s	0.0	2.4	0.0	0.1	0.3	4.0	0.1	0.1				

Intersection Summary	
HCM 7th Control Delay, s/veh	22.9
HCM 7th LOS	C

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

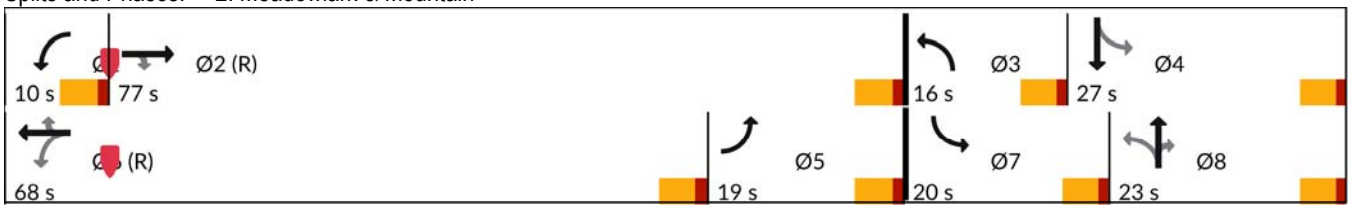
Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EBT	NBL	SBTL	EBL	WBTL	SBL	NBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	C-Max	None	Max
Maximum Split (s)	10	77	16	27	19	68	20	23
Maximum Split (%)	7.7%	59.2%	12.3%	20.8%	14.6%	52.3%	15.4%	17.7%
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Don't Walk (s)		11		11		11		11
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	120	0	77	93	58	120	77	97
End Time (s)	0	77	93	120	77	58	97	120
Yield/Force Off (s)	125.5	72.5	88.5	115.5	72.5	53.5	92.5	115.5
Yield/Force Off 170(s)	125.5	61.5	88.5	104.5	72.5	42.5	92.5	104.5
Local Start Time (s)	120	0	77	93	58	120	77	97
Local Yield (s)	125.5	72.5	88.5	115.5	72.5	53.5	92.5	115.5
Local Yield 170(s)	125.5	61.5	88.5	104.5	72.5	42.5	92.5	104.5

Intersection Summary

Cycle Length	130
Control Type	Actuated-Coordinated
Natural Cycle	75

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Splits and Phases: 2: Meadowlark & Mountain



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	203	401	47	26	589	42	141	16	42	193	94
v/c Ratio	0.53	0.37	0.05	0.07	0.65	0.05	0.41	0.06	0.12	0.48	0.27
Control Delay (s/veh)	60.1	16.0	0.4	16.6	24.5	1.2	39.6	48.9	0.7	40.7	15.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	60.1	16.0	0.4	16.6	24.5	1.2	39.6	48.9	0.7	40.7	15.6
Queue Length 50th (ft)	84	183	0	10	264	0	91	12	0	129	11
Queue Length 95th (ft)	125	256	3	m24	353	4	149	35	0	199	61
Internal Link Dist (ft)		870			1236			331			243
Turn Bay Length (ft)	360		360	450		300	250		250	200	
Base Capacity (vph)	382	1096	967	392	910	818	352	282	346	417	353
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.37	0.05	0.07	0.65	0.05	0.40	0.06	0.12	0.46	0.27

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	375	570	115	100	475	60	165	25	60	195	20	60
Future Volume (veh/h)	375	570	115	100	475	60	165	25	60	195	20	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	391	594	0	104	495	24	172	26	24	203	21	24
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	651	1024		416	770	652	421	281	238	441	132	151
Arrive On Green	0.38	1.00	0.00	0.11	0.82	0.82	0.10	0.15	0.15	0.11	0.17	0.17
Sat Flow, veh/h	3456	1870	1585	1781	1870	1585	1781	1870	1585	1781	796	910
Grp Volume(v), veh/h	391	594	0	104	495	24	172	26	24	203	0	45
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1781	1870	1585	1781	1870	1585	1781	0	1707
Q Serve(g_s), s	11.8	0.0	0.0	4.9	12.9	0.2	10.5	1.6	1.7	12.3	0.0	2.9
Cycle Q Clear(g_c), s	11.8	0.0	0.0	4.9	12.9	0.2	10.5	1.6	1.7	12.3	0.0	2.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.53
Lane Grp Cap(c), veh/h	651	1024		416	770	652	421	281	238	441	0	282
V/C Ratio(X)	0.60	0.58		0.25	0.64	0.04	0.41	0.09	0.10	0.46	0.00	0.16
Avail Cap(c_a), veh/h	651	1024		466	770	652	435	281	238	469	0	282
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.69	0.69	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.5	0.0	0.0	24.1	7.9	3.3	40.9	47.6	47.7	40.0	0.0	46.5
Incr Delay (d2), s/veh	1.1	1.7	0.0	0.3	4.1	0.1	0.6	0.7	0.8	0.8	0.0	1.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	0.5	0.0	1.9	3.7	0.2	4.7	0.8	0.7	5.6	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	37.6	1.7	0.0	24.4	12.0	3.4	41.5	48.2	48.5	40.8	0.0	47.7
LnGrp LOS	D	A		C	B	A	D	D	D	D		D
Approach Vol, veh/h		985			623			222			248	
Approach Delay, s/veh		15.9			13.8			43.1			42.0	
Approach LOS		B			B			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	75.7	17.0	26.0	29.0	58.0	19.0	24.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	66.5	13.5	21.5	23.5	53.5	16.5	18.5
Max Q Clear Time (g_c+I1), s	6.9	2.0	12.5	4.9	13.8	14.9	14.3	3.7
Green Ext Time (p_c), s	0.1	4.0	0.0	0.1	1.0	3.1	0.1	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	21.3
HCM 7th LOS	C

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

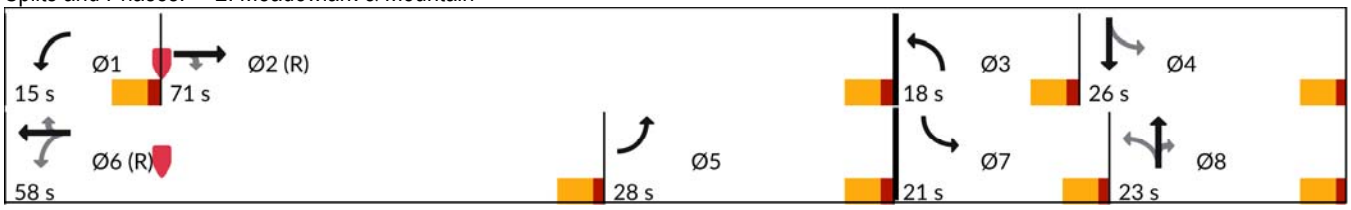
Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EBT	NBL	SBTL	EBL	WBTL	SBL	NBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	C-Max	None	Max
Maximum Split (s)	15	71	18	26	28	58	21	23
Maximum Split (%)	11.5%	54.6%	13.8%	20.0%	21.5%	44.6%	16.2%	17.7%
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Don't Walk (s)		11		11		11		11
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	115	0	71	89	43	115	71	92
End Time (s)	0	71	89	115	71	43	92	115
Yield/Force Off (s)	125.5	66.5	84.5	110.5	66.5	38.5	87.5	110.5
Yield/Force Off 170(s)	125.5	55.5	84.5	99.5	66.5	27.5	87.5	99.5
Local Start Time (s)	115	0	71	89	43	115	71	92
Local Yield (s)	125.5	66.5	84.5	110.5	66.5	38.5	87.5	110.5
Local Yield 170(s)	125.5	55.5	84.5	99.5	66.5	27.5	87.5	99.5

Intersection Summary

Cycle Length	130
Control Type	Actuated-Coordinated
Natural Cycle	75

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Splits and Phases: 2: Meadowlark & Mountain





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	391	594	120	104	495	63	172	26	63	203	84
v/c Ratio	0.63	0.61	0.14	0.49	0.65	0.09	0.46	0.09	0.18	0.49	0.25
Control Delay (s/veh)	48.8	27.5	6.6	34.1	28.0	2.8	40.0	49.4	1.1	40.2	18.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.8	27.5	6.6	34.1	28.0	2.8	40.0	49.4	1.1	40.2	18.6
Queue Length 50th (ft)	134	271	0	39	200	0	112	19	0	135	15
Queue Length 95th (ft)	m185	m384	m22	m93	300	m4	176	48	0	206	63
Internal Link Dist (ft)		870			1236			331			243
Turn Bay Length (ft)	360		360	450		300	250		250	200	
Base Capacity (vph)	620	968	880	224	766	703	383	285	349	432	335
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.63	0.61	0.14	0.46	0.65	0.09	0.45	0.09	0.18	0.47	0.25

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Intersection												
Int Delay, s/veh	0.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱		↑	↱			↱			↱
Traffic Vol, veh/h	0	590	55	0	575	20	0	0	25	0	0	35
Future Vol, veh/h	0	590	55	0	575	20	0	0	25	0	0	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	250	-	-	250	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	621	58	0	605	21	0	0	26	0	0	37

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	621	-	-	605
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.22	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.318	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	487	0	0	497
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	487	-	-	497
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0	12.81	12.81
HCM LOS			B	B

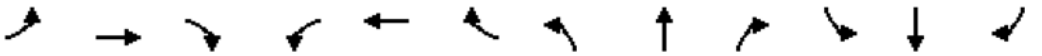
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	487	-	-	-	-	497
HCM Lane V/C Ratio	0.054	-	-	-	-	0.074
HCM Ctrl Dly (s/v)	12.8	-	-	-	-	12.8
HCM Lane LOS	B	-	-	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	-	0.2

Intersection												
Int Delay, s/veh	1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱		↑	↱			↱			↱
Traffic Vol, veh/h	0	750	120	0	730	65	0	0	80	0	0	25
Future Vol, veh/h	0	750	120	0	730	65	0	0	80	0	0	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	250	-	-	250	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	789	126	0	768	68	0	0	84	0	0	26

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	789	-	-	768
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.22	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.318	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	390	0	0	401
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	390	-	-	401
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0	16.74	14.6
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	390	-	-	-	-	401
HCM Lane V/C Ratio	0.216	-	-	-	-	0.066
HCM Ctrl Dly (s/v)	16.7	-	-	-	-	14.6
HCM Lane LOS	C	-	-	-	-	B
HCM 95th %tile Q(veh)	0.8	-	-	-	-	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	340	125	85	295	165	160	280	145	205	235	175
Future Volume (veh/h)	125	340	125	85	295	165	160	280	145	205	235	175
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	132	358	50	89	311	67	168	295	58	216	247	69
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	429	756	641	355	727	616	444	589	499	423	626	530
Arrive On Green	0.02	0.13	0.13	0.04	0.39	0.39	0.08	0.32	0.32	0.10	0.33	0.33
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	132	358	50	89	311	67	168	295	58	216	247	69
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	5.7	23.0	3.6	3.9	15.9	3.5	8.2	16.7	3.4	10.5	13.2	3.9
Cycle Q Clear(g_c), s	5.7	23.0	3.6	3.9	15.9	3.5	8.2	16.7	3.4	10.5	13.2	3.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	429	756	641	355	727	616	444	589	499	423	626	530
V/C Ratio(X)	0.31	0.47	0.08	0.25	0.43	0.11	0.38	0.50	0.12	0.51	0.39	0.13
Avail Cap(c_a), veh/h	481	756	641	380	727	616	475	589	499	501	626	530
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.5	43.5	35.1	23.9	29.1	25.4	26.9	36.2	31.6	26.8	33.2	30.1
Incr Delay (d2), s/veh	0.4	2.1	0.2	0.4	1.8	0.4	0.5	3.0	0.5	1.0	1.9	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	12.0	1.4	1.6	7.3	1.4	3.5	8.0	1.4	4.5	6.3	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.9	45.6	35.3	24.3	31.0	25.7	27.4	39.2	32.1	27.7	35.0	30.6
LnGrp LOS	C	D	D	C	C	C	C	D	C	C	D	C
Approach Vol, veh/h		540			467			521			532	
Approach Delay, s/veh		39.4			29.0			34.6			31.5	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.2	57.1	14.8	48.0	12.2	55.0	17.3	45.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	7.5	48.5	12.5	43.5	11.5	44.5	18.5	37.5
Max Q Clear Time (g_c+I1), s	5.9	25.0	10.2	15.2	7.7	17.9	12.5	18.7
Green Ext Time (p_c), s	0.0	2.1	0.1	1.6	0.1	1.9	0.3	1.7

Intersection Summary	
HCM 7th Control Delay, s/veh	33.8
HCM 7th LOS	C

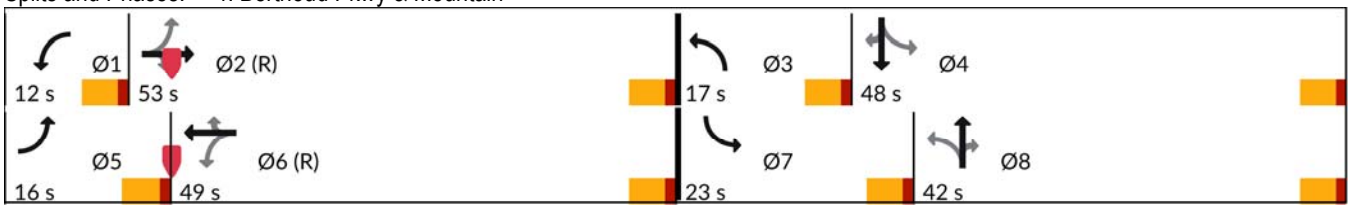
Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EBTL	NBL	SBTL	EBL	WBTL	SBL	NBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	C-Max	None	Max
Maximum Split (s)	12	53	17	48	16	49	23	42
Maximum Split (%)	9.2%	40.8%	13.1%	36.9%	12.3%	37.7%	17.7%	32.3%
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Don't Walk (s)		11		11		11		11
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	125	7	60	77	125	11	60	83
End Time (s)	7	60	77	125	11	60	83	125
Yield/Force Off (s)	2.5	55.5	72.5	120.5	6.5	55.5	78.5	120.5
Yield/Force Off 170(s)	2.5	44.5	72.5	109.5	6.5	44.5	78.5	109.5
Local Start Time (s)	114	126	49	66	114	0	49	72
Local Yield (s)	121.5	44.5	61.5	109.5	125.5	44.5	67.5	109.5
Local Yield 170(s)	121.5	33.5	61.5	98.5	125.5	33.5	67.5	98.5

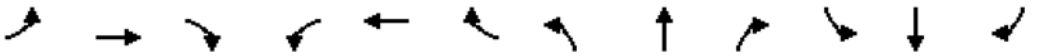
Intersection Summary

Cycle Length	130
Control Type	Actuated-Coordinated
Natural Cycle	65

Offset: 11 (8%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Splits and Phases: 4: Berthoud Pkwy & Mountain





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	132	358	132	89	311	174	168	295	153	216	247	184
v/c Ratio	0.33	0.51	0.20	0.25	0.47	0.26	0.36	0.50	0.25	0.50	0.39	0.28
Control Delay (s/veh)	23.8	38.5	8.6	21.8	36.1	5.2	23.4	40.5	6.2	25.5	35.0	5.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	23.8	38.5	8.6	21.8	36.1	5.2	23.4	40.5	6.2	25.5	35.0	5.3
Queue Length 50th (ft)	66	261	18	41	205	0	82	202	0	109	159	0
Queue Length 95th (ft)	105	361	61	74	298	50	130	306	51	165	237	52
Internal Link Dist (ft)		1223			961			573			639	
Turn Bay Length (ft)	400		350	430		400	350		200	350		370
Base Capacity (vph)	422	698	675	361	655	669	477	589	605	472	638	663
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.51	0.20	0.25	0.47	0.26	0.35	0.50	0.25	0.46	0.39	0.28

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	485	90	150	400	265	140	285	130	245	290	150
Future Volume (veh/h)	240	485	90	150	400	265	140	285	130	245	290	150
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	253	511	38	158	421	112	147	300	55	258	305	57
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	410	773	655	311	718	608	361	484	410	390	568	482
Arrive On Green	0.03	0.14	0.14	0.07	0.38	0.38	0.08	0.26	0.26	0.12	0.30	0.30
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	253	511	38	158	421	112	147	300	55	258	305	57
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	10.5	33.7	2.7	6.9	23.3	6.1	7.8	18.4	3.5	13.3	17.6	3.4
Cycle Q Clear(g_c), s	10.5	33.7	2.7	6.9	23.3	6.1	7.8	18.4	3.5	13.3	17.6	3.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	410	773	655	311	718	608	361	484	410	390	568	482
V/C Ratio(X)	0.62	0.66	0.06	0.51	0.59	0.18	0.41	0.62	0.13	0.66	0.54	0.12
Avail Cap(c_a), veh/h	474	773	655	345	718	608	371	484	410	443	568	482
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.4	47.5	34.1	25.6	31.9	26.6	32.1	42.5	37.0	30.0	37.6	32.7
Incr Delay (d2), s/veh	1.9	4.4	0.2	1.3	3.5	0.7	0.7	5.9	0.7	3.1	3.6	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	17.8	1.1	2.9	10.9	2.4	3.4	9.2	1.4	6.0	8.6	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.3	51.9	34.3	26.8	35.4	27.2	32.8	48.4	37.7	33.1	41.2	33.2
LnGrp LOS	C	D	C	C	D	C	C	D	D	C	D	C
Approach Vol, veh/h		802			691			502			620	
Approach Delay, s/veh		43.0			32.1			42.7			37.1	
Approach LOS		D			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.5	58.3	14.3	44.0	17.4	54.4	20.1	38.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	11.5	50.5	10.5	39.5	17.5	44.5	19.5	30.5
Max Q Clear Time (g_c+I1), s	8.9	35.7	9.8	19.6	12.5	25.3	15.3	20.4
Green Ext Time (p_c), s	0.1	2.7	0.0	1.8	0.3	2.6	0.3	1.3

Intersection Summary	
HCM 7th Control Delay, s/veh	38.6
HCM 7th LOS	D

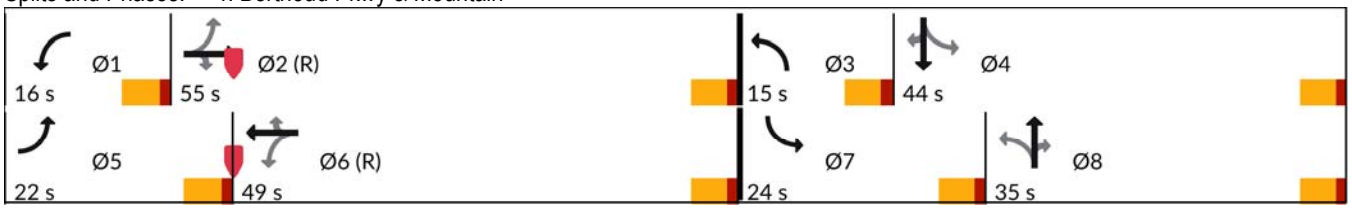
Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EBTL	NBL	SBTL	EBL	WBTL	SBL	NBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	C-Max	None	Max
Maximum Split (s)	16	55	15	44	22	49	24	35
Maximum Split (%)	12.3%	42.3%	11.5%	33.8%	16.9%	37.7%	18.5%	26.9%
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Don't Walk (s)		11		11		11		11
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	76	92	17	32	76	98	17	41
End Time (s)	92	17	32	76	98	17	41	76
Yield/Force Off (s)	87.5	12.5	27.5	71.5	93.5	12.5	36.5	71.5
Yield/Force Off 170(s)	87.5	1.5	27.5	60.5	93.5	1.5	36.5	60.5
Local Start Time (s)	108	124	49	64	108	0	49	73
Local Yield (s)	119.5	44.5	59.5	103.5	125.5	44.5	68.5	103.5
Local Yield 170(s)	119.5	33.5	59.5	92.5	125.5	33.5	68.5	92.5

Intersection Summary

Cycle Length	130
Control Type	Actuated-Coordinated
Natural Cycle	80

Offset: 98 (75%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Splits and Phases: 4: Berthoud Pkwy & Mountain



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	253	511	95	158	421	279	147	300	137	258	305	158
v/c Ratio	0.64	0.69	0.14	0.51	0.63	0.37	0.42	0.64	0.26	0.68	0.53	0.27
Control Delay (s/veh)	20.9	33.7	4.6	23.7	40.1	4.9	28.9	51.1	4.5	35.4	41.6	6.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.9	33.7	4.6	23.7	40.1	4.9	28.9	51.1	4.5	35.4	41.6	6.1
Queue Length 50th (ft)	101	378	4	69	295	0	77	229	0	146	214	0
Queue Length 95th (ft)	164	532	m29	111	419	61	126	336	34	216	309	51
Internal Link Dist (ft)		1223			961			573			639	
Turn Bay Length (ft)	400		350	430		400	350		200	350		370
Base Capacity (vph)	421	736	701	324	670	748	357	471	523	404	572	595
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.69	0.14	0.49	0.63	0.37	0.41	0.64	0.26	0.64	0.53	0.27

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Intersection												
Int Delay, s/veh	6.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	0	110	45	0	5	180	45	25	0	110	5
Future Vol, veh/h	5	0	110	45	0	5	180	45	25	0	110	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	200	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	0	116	47	0	5	189	47	26	0	116	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	545	571	118	555	561	61	121	0	0	74	0	0
Stage 1	118	118	-	439	439	-	-	-	-	-	-	-
Stage 2	426	453	-	116	121	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	449	431	933	442	437	1005	1466	-	-	1526	-	-
Stage 1	886	798	-	596	578	-	-	-	-	-	-	-
Stage 2	606	570	-	889	796	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	389	375	933	337	380	1005	1466	-	-	1526	-	-
Mov Cap-2 Maneuver	389	375	-	337	380	-	-	-	-	-	-	-
Stage 1	886	798	-	519	503	-	-	-	-	-	-	-
Stage 2	525	496	-	779	796	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	9.74	16.66	5.63	0
HCM LOS	A	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1466	-	-	880	361	1526	-	-
HCM Lane V/C Ratio	0.129	-	-	0.138	0.146	-	-	-
HCM Ctrl Dly (s/v)	7.8	-	-	9.7	16.7	0	-	-
HCM Lane LOS	A	-	-	A	C	A	-	-
HCM 95th %tile Q(veh)	0.4	-	-	0.5	0.5	0	-	-

Intersection												
Int Delay, s/veh	6.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	0	180	30	0	5	295	115	50	5	65	15
Future Vol, veh/h	10	0	180	30	0	5	295	115	50	5	65	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	200	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	0	189	32	0	5	311	121	53	5	68	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	829	882	76	847	863	147	84	0	0	174	0	0
Stage 1	87	87	-	768	768	-	-	-	-	-	-	-
Stage 2	742	795	-	79	95	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	290	285	985	282	292	900	1513	-	-	1403	-	-
Stage 1	921	823	-	394	411	-	-	-	-	-	-	-
Stage 2	407	400	-	930	817	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	228	226	985	180	231	900	1513	-	-	1403	-	-
Mov Cap-2 Maneuver	228	226	-	180	231	-	-	-	-	-	-	-
Stage 1	917	820	-	313	326	-	-	-	-	-	-	-
Stage 2	322	317	-	748	813	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	10.63	26.59	5.13	0.45
HCM LOS	B	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1513	-	-	838	203	1403	-	-
HCM Lane V/C Ratio	0.205	-	-	0.239	0.181	0.004	-	-
HCM Ctrl Dly (s/v)	8	-	-	10.6	26.6	7.6	-	-
HCM Lane LOS	A	-	-	B	D	A	-	-
HCM 95th %tile Q(veh)	0.8	-	-	0.9	0.6	0	-	-

Intersection												
Int Delay, s/veh	5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	0	25	0	0	0	10	15	0	0	10	5
Future Vol, veh/h	10	0	25	0	0	0	10	15	0	0	10	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	0	26	0	0	0	11	16	0	0	11	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	50	50	13	47	53	16	16	0	0	16	0	0
Stage 1	13	13	-	37	37	-	-	-	-	-	-	-
Stage 2	37	37	-	11	16	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	950	841	1067	954	839	1063	1602	-	-	1602	-	-
Stage 1	1007	885	-	979	864	-	-	-	-	-	-	-
Stage 2	979	864	-	1010	882	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	944	836	1067	924	833	1063	1602	-	-	1602	-	-
Mov Cap-2 Maneuver	944	836	-	924	833	-	-	-	-	-	-	-
Stage 1	1007	885	-	972	859	-	-	-	-	-	-	-
Stage 2	972	859	-	985	882	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	8.63	0	2.9	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1602	-	-	1029	-	1602	-	-
HCM Lane V/C Ratio	0.007	-	-	0.036	-	-	-	-
HCM Ctrl Dly (s/v)	7.3	-	-	8.6	0	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	-	0	-	-

Intersection												
Int Delay, s/veh	3.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	0	20	0	0	0	25	45	0	0	5	5
Future Vol, veh/h	5	0	20	0	0	0	25	45	0	0	5	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	0	21	0	0	0	26	47	0	0	5	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	108	108	8	105	111	47	11	0	0	47	0	0
Stage 1	8	8	-	100	100	-	-	-	-	-	-	-
Stage 2	100	100	-	5	11	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	871	782	1074	874	780	1022	1609	-	-	1560	-	-
Stage 1	1014	889	-	906	812	-	-	-	-	-	-	-
Stage 2	906	812	-	1017	887	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	857	769	1074	843	767	1022	1609	-	-	1560	-	-
Mov Cap-2 Maneuver	857	769	-	843	767	-	-	-	-	-	-	-
Stage 1	1014	889	-	891	799	-	-	-	-	-	-	-
Stage 2	891	799	-	997	887	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	8.61	0	2.6	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1609	-	-	1022	-	1560	-	-
HCM Lane V/C Ratio	0.016	-	-	0.026	-	-	-	-
HCM Ctrl Dly (s/v)	7.3	-	-	8.6	0	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	-	0	-	-

APPENDIX J

APPENDIX K

APPENDIX L

APPENDIX M

APPENDIX N

APPENDIX O

APPENDIX P

DRAFT Resolution No. ___
Series 2026

A Resolution of the Town of Berthoud Board of Trustees approving a Neighborhood Master Plan for a development know as the "Tundra Flats" development in the Town Of Berthoud.

Whereas, the property under consideration is known as the "Tundra Flats" development; and

Whereas, the Town of Berthoud ("Town") approved Ordinances 831 on November 11, 1999, which approved the Zoning of the Gateway Park property to Planned Unit Development; and

Whereas, the applicant has reviewed the 2021 Comprehensive Plan and seeks to incorporate the Town's new zoning classifications and conform to the land development vision outlined in the 2021 Comprehensive Plan at the request of staff; and

WHEREAS, the Neighborhood Master Plan attached herein as Exhibit A has been reviewed by referral agencies to ensure the proposed development does not present a burden on service provision; and

WHEREAS, notice was properly posted in the manner required by law and a public hearing was conducted on May 28, 2026, before the Berthoud Planning Commission; and

WHEREAS, after the public hearing, the Berthoud Planning Commission made a unanimous recommendation to the Town Board of Trustees to approve the Neighborhood Master Plan as presented; and

WHEREAS, notice was properly posted in a manner required by law and a public hearing was conducted on July 14, 2026, before the Board of Trustees as required by law and which public hearing incorporated the testimony of citizens which were allowed to speak during "Citizen Participation" during the Board of Trustees meeting held July 14, 2026, and which testimony the applicant confirmed it had reviewed; and

WHEREAS, based on the testimony and evidence presented at the public hearing and that given July 14, 2026, the Board of Trustees determines and finds that compliance with the Neighborhood Master Plan review criteria as provided in Section 30-6-106.G of the Berthoud Municipal Code has been demonstrated.

Now Therefore be it Resolved by the Board of Trustees of the Town of Berthoud as follows:

Section 1. NMP Approval. The Neighborhood Master Plan is hereby approved. The Site Plan shall be submitted in accordance with the Neighborhood Master Plan and the processing shall follow the Land Use Code and all master plans affecting the property.

Section 2. Interpretation. This Resolution shall be interpreted and construed to effectuate its general purpose.

Section 3. Effective Date. The provisions of this Resolution shall take effect upon adoption.

Introduced, approved and adopted this 14th day of July, 2026.

Town of Berthoud

_____
William Karspeck, Mayor

Attest

_____
Christian Samora, Town Clerk

DRAFT Ordinance No. ___
Series 2026

An Ordinance of the Town of Berthoud amending the zoning map of the Town of Berthoud to rezone the Tundra Flats property previously zoned to Planned Unit Development to Neighborhood Commercial.

Whereas, the property under consideration is known as the "Tundra Flats" development and was zoned to Planned Unit Development by Ordinances 831 on November 11, 1999, by the Town of Berthoud; and

Whereas, the applicant has reviewed the 2021 Comprehensive Plan and seeks to incorporate the Town's new zoning classifications and conform to the land development vision outlined in the 2021 Comprehensive Plan at the request of staff; and

Whereas, the Planning Commission considered the request to rezone the property at their public hearing on May 28, 2026, and moved to forward their approval of the request to the Town Board of Trustees; and

WHEREAS, notice was properly posted in the manner required by law and a public hearing was conducted on May 28, 2026, before the Berthoud Planning Commission and a public hearing was conducted on July 14, 2026, before the Board of Trustees as required by law; and

Now Therefore be it Ordained by the Board of Trustees of the Town of Berthoud as follows:

Section 1. Map Revision. The official zoning map of the Town of Berthoud shall be amended hereinafter and which property is commonly known as the "Tundra Flats" development as described in Exhibit A, shall be rezoned from Planned Unit Development to Neighborhood Commercial (C1) as illustrated in Exhibit B.

Section 2. Interpretation. This Ordinance shall be so interpreted and construed to effectuate its general purpose.

Section 3. Publication. The Town Clerk shall certify to the passage of this Ordinance and cause its contents to be published and shall cause the appropriate change to be made to the official Berthoud Zoning District Map.

Section 4. Severability. If any provision of this Ordinance is determined to be invalid for any reason, such determination shall not affect the validity of the remaining provisions of this Ordinance, and the Board of Trustees hereby declares that it would have passed this Ordinance and each provision thereof irrespective of the fact that any one or more provisions may be declared invalid.

Section 5. Repeal. Existing ordinances or provisions thereof inconsistent with the provisions of this Ordinance are hereby repealed, except that this repeal shall not affect or prevent the

prosecution or punishment of any person for any act done or committed in violation of any ordinance hereby repealed prior to the effective date of this Ordinance.

Introduced, approved and adopted this 14th day of July, 2026.

Town of Berthoud

_____
William Karspeck, Mayor

Attest

_____
Christian Samora, Town Clerk

Planning Commission Information

Community Development Department

Meeting Date:	**May 28, 2026**
Agenda Title/Subject:	**Informational Update on the Town-Wide Intersection Traffic Model**
Type of Item:	**Regular Item**
Purpose:	**Provide the Planning Commission with an update on the Town-Wide Intersection Traffic Model**
Presented by:	**Luke Seeber**

Attachments:

1. 01 Fehr and Peers Model Development Report_ 04302026 withAppendices

Background:

As the Town grows, staff continuously reviews the immediate and long-term impact of growth to services such as recreation, roads, intersections, water, sewer and stormwater.

In anticipation of growth in the 1st Street corridor and as a directed outcome of the 2021 Comprehensive Plan update, the Planning Commission, along with the Town Trustees, created the Innovation District in April 2023. The vision for developing this Master Plan was to establish goals for guiding growth, development and design for the corridor including architecture, design, scale, form, character, intensity of development, connectivity, and focusing on multi-modal design.

A large component of the Innovation District plan is traffic management. To better understand traffic planning for this area, the Town enlisted the assistance of Fehr & Peers in 2024 to develop a scope of work to understand the current traffic impact reports from pending/past development as well as projections from CDOT and the North Front Range Metropolitan Planning Organization (NFRMPO) specifically for this District. After review of the initial findings, staff determined a Town-wide intersection management plan was needed. With this understanding, the Town extended the contract with Fehr & Peers on September 9, 2025 to create a Town-wide traffic model that could be used to inform Town Staff on existing intersection levels of service and allow for updates to study effects of development-driven or Town-funded infrastructure improvements.

Update/Next Steps:

The model will be utilized to assist with development review and transportation improvement planning through periodic updates as conditions change and improvements are installed.

Fiscal Impact and Fund Source:
There is no negative impact to the Town by providing this information. Project deliverables have been met on-time and under budget.

Community Touchstones:
The three touchstones of resiliency, sustainability, and community identity are central to this action plan item. A town-wide transportation model informed by current and future conditions provides a tool for the Town to proactively plan for growth, strengthen transportation resiliency, support sustainable multimodal connectivity, and guide transportation corridor improvements that reflect and reinforce the community's character and sense of place.

Recommended Action(s):
This report is informational only. No action is required.

Fehr & Peers

Berthoud Travel Model Development

Final Report

Prepared for:
Town of Berthoud

Submitted on:
April 30, 2026

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Introduction

The Berthoud Town-wide Model development project developed a comprehensive traffic model to provide a holistic view of systemwide traffic operations within the Town of Berthoud. Rather than evaluating transportation impacts on a project-by-project basis through individual Traffic Impact Studies (TIS), the model assesses overall network performance and intersection operations across the system.

The model serves multiple functions including a traffic evaluation of future intersection improvements and evaluation of traffic resulting from future development. Individual intersections can be tested with alternative scenarios to understand the operational implications of specific intersection modifications. As a development review resource, the model can be provided to developers as a baseline tool for traffic studies with new trip generation added. This will result in more consistent assumptions and methodology across developments. As new development is approved, the Town's master model can be updated to reflect changing conditions and support ongoing planning efforts.

Project Background

The Town of Berthoud identified the need for a comprehensive, Town-wide evaluation tool to assess system-wide transportation effects, support communication with Town leadership, and guide informed infrastructure investment decisions. This report documents an early model development exploratory effort (Phase 1) and the Synchro model development assumptions process (Phase II) that builds upon the Phase I assessment by refining, expanding, and operationalizing the Town's traffic model to support systemwide planning, development review, and long-term decision-making.

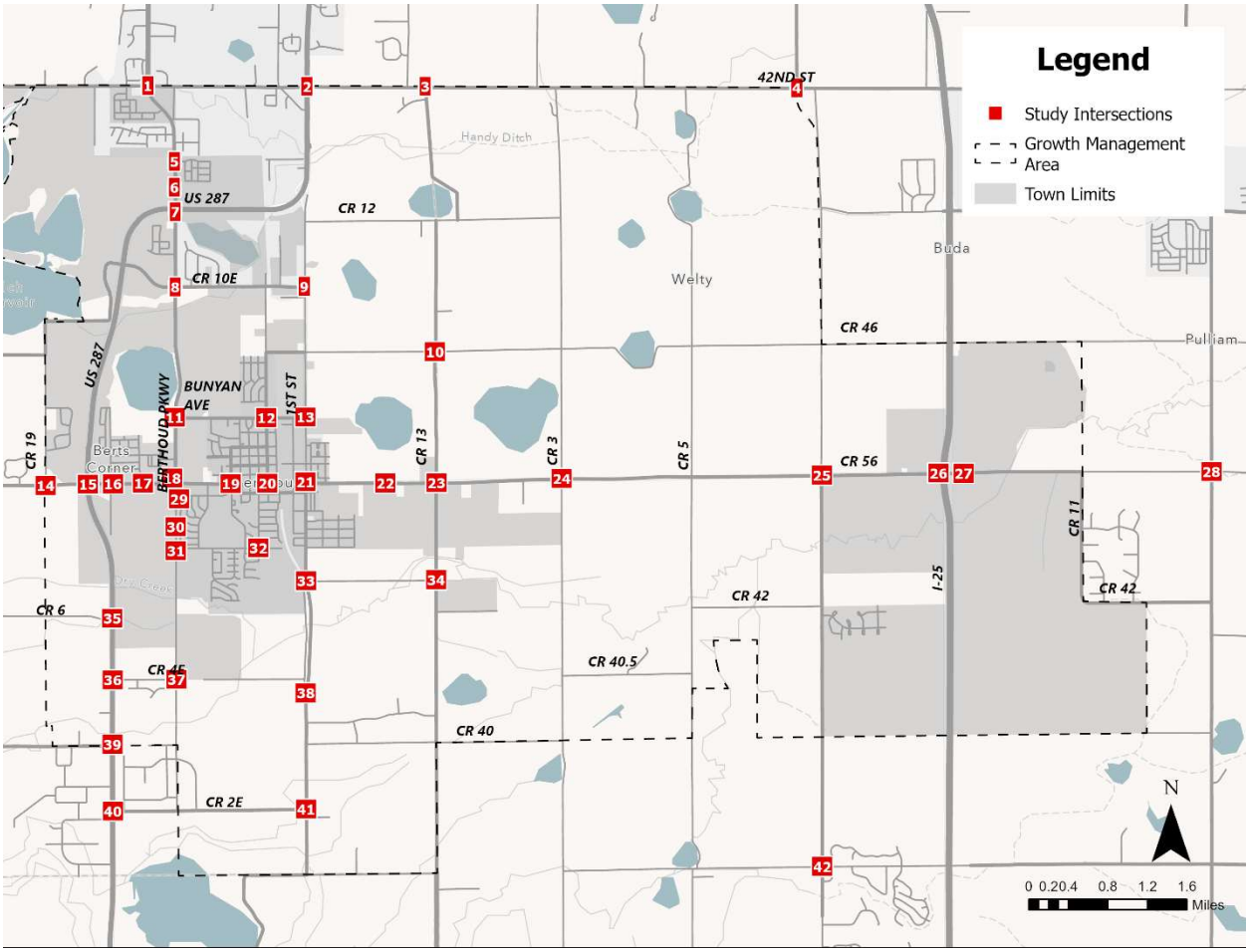
Study Area

The study area includes 42 intersections located within the Town of Berthoud and the surrounding Growth Management Area (GMA), as illustrated in **Figure 1**. The selected intersections represent key nodes along the Town's major arterial and collector roadway network and were identified based on their functional classification, traffic volumes, and importance to overall system operations.

The network generally follows the primary east–west and north–south corridors that provide regional connectivity and local circulation. Major arterial intersections along corridors such as US-287 and SH 56 are included due to their role in carrying regional traffic through and around the community. In addition, principal and minor collector intersections throughout the Town and within developing areas of the GMA are incorporated to capture local traffic distribution patterns and planned growth areas to ensure that both existing conditions and long-term growth impacts are evaluated within a comprehensive, systemwide framework.

Together, the 42 intersections provide a representative cross-section of the Town's transportation network, supporting analysis of current operations, future traffic growth, and potential roadway or intersection improvements.

Figure 1. Map of Analysis Intersections



Source: Fehr and Peers.

Analysis Scenarios

This study establishes a framework to evaluate the potential transportation impacts of future site development on the surrounding roadway network and study area intersections. Operational analyses were conducted to assess both existing conditions and long-term future conditions under projected growth and planned improvements.

The following scenarios were developed and evaluated:

1. Existing Conditions (Baseline)
   This scenario reflects current traffic volumes, roadway geometry, and traffic control conditions and serves as the baseline for comparison with future conditions.
   - Typical Weekday AM Peak Hour (7 AM-9 AM)
   - Typical Weekday PM Peak Hour (4 PM -6 PM)
2. 2045 Future Build Conditions (with and without Planned Improvements)
   The Future Build scenario incorporates projected background traffic growth, traffic associated with anticipated site and area development, and planned roadway and intersection improvements expected to be in place by 2045. This scenario evaluates long-term operational performance and identifies potential capacity or operational deficiencies under full buildout conditions.
   - Typical Weekday AM Peak Hour (7 AM-9 AM)
   - Typical Weekday PM Peak Hour (4 PM -6 PM)

Existing Conditions

The existing conditions analysis assesses the performance of study intersections during peak travel periods under current traffic volumes and geometric configurations, establishing a baseline for subsequent future condition evaluations.

Traffic Volumes

Traffic volume data for the existing study intersections were compiled from three primary sources:

- New Field Data Collection: Turning movement counts (TMCs) were collected on Wednesday, October 22, 2025, during the typical weekday AM (7 AM – 9 AM) and PM (4 PM – 6 PM) peak periods at 10 intersections identified as high priority.
- Big Data Source (Replica[1]): Turning movement counts for seven intersections identified as low- to medium-priority were developed using Replica data to supplement available field information.
- Previous TIS: For the remaining 25 intersections, turning movement counts were obtained from recently completed Traffic Impact Studies conducted within the study area.

These combined data sources provided comprehensive peak-hour traffic volumes for all 42 study intersections and established the basis for existing conditions analysis and model calibration.

Table 1. Intersection TMC Source and Collection Date

ID	Intersection Name	TMC Source	TMC Collection Date
1	Berthoud Pkwy & LCR 14	Heron Lakes	6/1/2022
2	US 287 & CO 60	Replica	2025
3	CO 60 & CO Line Rd	Replica	2025
4	CO 60 & WCR 7	Replica	2025
5	Berthoud Pkwy & Wagon Bend Rd	Heron Lakes	6/1/2022
6	Berthoud Pkwy & Grand Market Ave	Ridgeview Data Collection	10/22/2025
7	US 287 & Berthoud Pkwy	Heron Lakes	6/1/2022
8	Berthoud Pkwy & LCR 10E	Ridgeview Data Collection	10/22/2025
9	1ST ST & LCR 10E	Ridgeview Data Collection	10/22/2025
10	CO Line Rd & WCR 46	Replica	2025
11	Berthoud Pkwy & Bunyan ST	Ridgeview Data Collection	10/22/2025
12	4TH ST & Bunyan ST	Ridgeview Data Collection	10/22/2025
13	1ST ST & Bunyan ST	Ridgeview Data Collection	10/22/2025
14	CO 56 & LCR 19	Revere	12/20/2024

[1] Replica is a transportation data platform that uses anonymized mobile device location data and other data sources to generate modeled estimates of travel patterns, including origin-destination flows, trip characteristics, and intersection turning movements.

ID	Intersection Name	TMC Source	TMC Collection Date
15	US 287 & CO 56	Legacy Park	1/3/2023
16	CO 56 & Meadowlark Dr	Legacy Park	1/3/2023
17	CO 56 & Gate Way Park Blvd	Legacy Park	1/3/2023
18	CO 56 & Berthoud Pkwy	Legacy Park	1/3/2023
19	CO 56 & 8TH ST	Ridgeview Data Collection	10/22/2025
20	CO 56 & 4TH ST	Ridgeview Data Collection	10/22/2025
21	CO 56 & 1st St	River Trails	1/20/2025
22	CO 56 & Dorothy Dr	Farmstead	11/4/2024
23	CO 56 & County Line Rd	Farmstead	11/4/2024
24	CO 56 & WCR 3	Replica	2025
25	CO 56 & WCR 7	Ridgeview Data Collection	10/22/2025
26	I-25 Southbound & WCR 44	Turion	4/8/2021
27	I-25 Northbound & WCR 44	Turion	4/8/2021
28	WCR 13 & WCR 44	Turion	4/8/2021
29	Berthoud Pkwy & Welch Ave	Legacy Park	1/3/2023
30	Berthoud Pkwy & Arapahoe Ave	Legacy Park	1/3/2023
31	Berthoud Pkwy & Spartan Ave	Legacy Park	1/3/2023
32	5TH ST & Spartan AVE	Ridgeview Data Collection	10/22/2025
33	LCR 15 & LCR 6C	River Trails	1/20/2025
34	County Line Rd & LCR 6C	River Trails	1/20/2025
35	US 287 & LCR 6	Replica	2025
36	US 287 & LCR 4E	River Trails	1/20/2025
37	Berthoud Pkwy & LCR 4E	River Trails	1/3/2023
38	LCR 15 & LCR 15A	River Trails	1/20/2025
39	US 287 & LCR 4	Replica	2025
40	US 287 & LCR 2E	River Trails	1/20/2025
41	LCR 15 & LCR 2E	River Trails	1/20/2025
42	WCR 38 & WCR 7	Turion	4/8/2021

Existing Intersection Controls

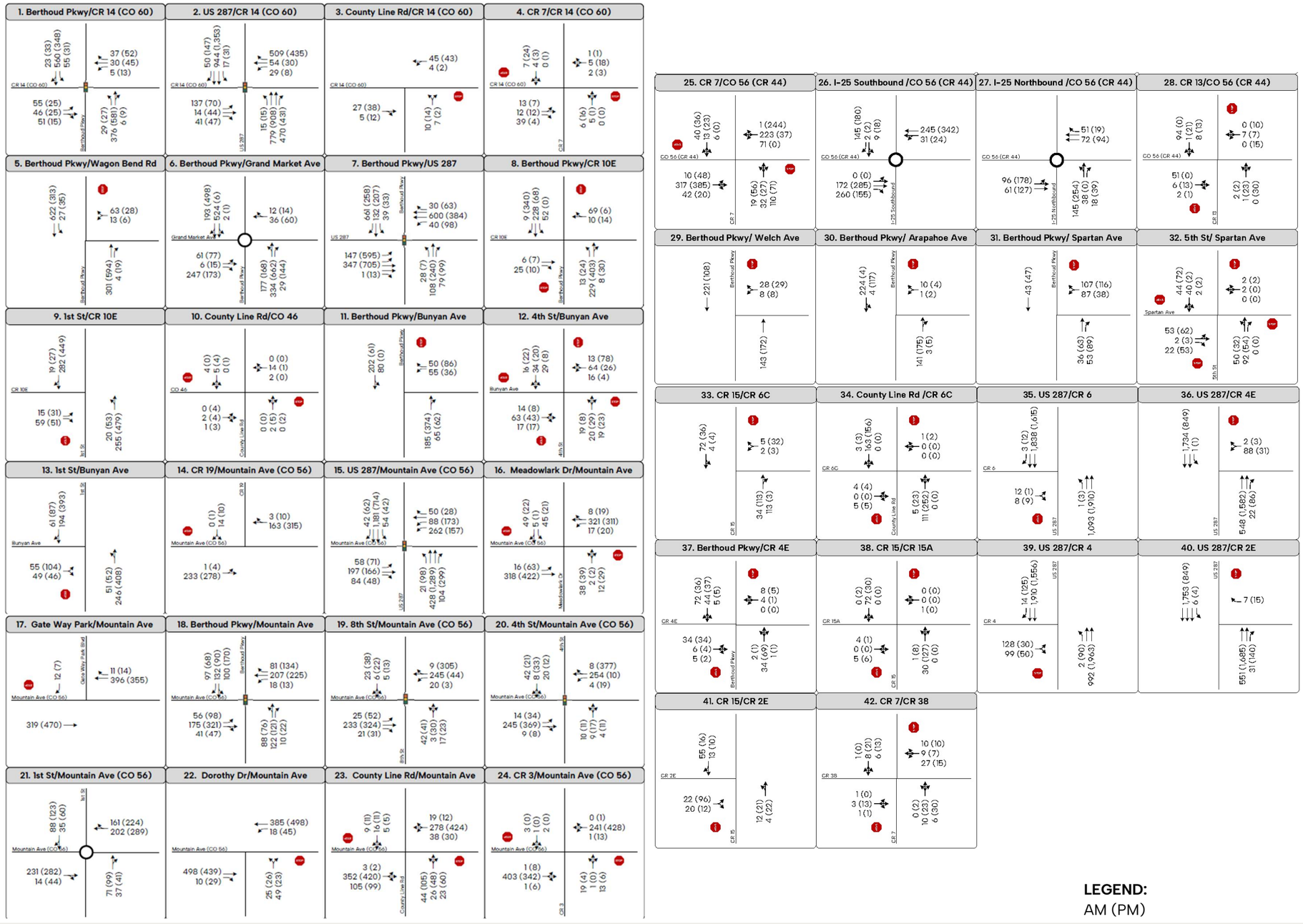
Intersection control types for the existing study intersections were identified primarily through review of Google Street View imagery, cross-referenced with information documented in previous Traffic Impact Studies (TIS), and verified by Town staff.

Of the 42 study intersections (**Figure 2**):

- Seven intersections are signalized. Five signals are maintained by the Colorado Department of Transportation (CDOT), one by the City of Loveland, and one by Lumen8. Signal timing parameters were obtained from the respective maintaining agencies.
- Four intersections operate as roundabouts.
- Two intersections operate under all-way stop control (AWSC).
- One intersection operates as a right-in/right-out (RIRO) configuration under two-way stop control (TWSC).
- The remaining 28 intersections operate under two-way stop control (TWSC).

This inventory of intersection control types was used to develop and calibrate the operational analysis model.

Figure 2. Existing Peak Hour Traffic Volumes



Source: Fehr and Peers.

Intersection Level of Service Analysis

Intersection operations at the study intersections were evaluated using Synchro software in accordance with methodologies outlined in the Highway Capacity Manual (HCM). Synchro applies HCM procedures to estimate intersection performance based on traffic volumes, geometry, and traffic control type.

Level of Service (LOS) is a qualitative measure used to describe the operational performance of an intersection or roadway segment. LOS is quantified based on average control delay per vehicle and is reported on a scale from A to F, where LOS A represents the best operating conditions with minimal delay and LOS F represents the poorest operating conditions with excessive delay and congestion.

Table 2 summarizes the LOS criteria, including the corresponding average control delay thresholds for both signalized and unsignalized intersections. For signalized intersections, LOS is reported for the overall intersection and reflects the weighted average delay of all approaches. For unsignalized intersections, LOS is based on the average delay per vehicle for the worst-performing movement, consistent with HCM standards.

Table 2. Level of Service Descriptions

LOS	Description	Average Delay (seconds/vehicle)	
		Signalized Intersections[1]	Unsignalized Intersections[2]
A	Free Flow/Insignificant Delay Extremely favorable progression. Individual users are virtually unaffected by others in the traffic stream.	< 10.0	< 10.0
B	Stable Operations/Minimum Delays Good progression. The presence of other users in the traffic stream becomes noticeable.	> 10.0 to 20.0	> 10.0 to 15.0
C	Stable Operations/Acceptable Delays Fair progression. The operation of individual users is affected by interactions with others in the traffic stream.	> 20.0 to 35.0	> 15.0 to 25.0
D	Approaching Unstable Flows/Tolerable Delays Marginal progression. Operating conditions are noticeably more constrained.	> 35.0 to 55.0	> 25.0 to 35.0
E	Unstable Operations/Significant Delays Can Occur Poor progression. Operating conditions are at or near capacity.	> 55.0 to 80.0	> 35.0 to 50.0
F	Forced, Unpredictable Flows/Excessive Delays Unacceptable progression with forced or breakdown of operating conditions.	> 80.0	> 50.0

[1] Overall intersection LOS and average delay (seconds/vehicle) for all approaches. Roundabout intersection operations are measured under these conditions as well.
[2] Worst movement LOS and delay (seconds/vehicle) only.

Source: Fehr & Peers descriptions, based on the HCM.

Under existing conditions, most of the 42 study intersections operate at acceptable levels of service (LOS A–C) during both the AM and PM peak periods, indicating generally good traffic operations across the network. The majority of intersections experience average delays below 20 seconds per vehicle, with many operating at LOS A or B, particularly along local roadways and roundabout-controlled intersections such as the I-25 ramp terminals and several intersections along LCR 15 and County Line Road.

A few intersections along major regional corridors experience higher delays due to higher traffic volumes. Notable locations include:

- US-287 & Berthoud Parkway – LOS C in the AM peak and LOS D in the PM peak
- US-287 & CO-56 – LOS D in the AM peak and LOS C in the PM peak
- CO-56 & County Line Road – LOS C in the AM peak and LOS F in the PM peak due to high delay on the northbound approach

Several minor-street stop-controlled intersections along US-287 also experience delays for side-street movements due to heavy mainline traffic, including:

- US-287 & LCR 6 – LOS F (AM) and LOS E (PM)
- US-287 & LCR 4E – LOS D (AM) and LOS F (PM)
- US-287 & LCR 4 – LOS F (AM) and LOS E (PM)

Overall, while most intersections operate efficiently under existing traffic conditions, localized operational issues occur primarily at two-way stop-controlled intersections along major corridors, where minor-street traffic experiences higher delays when entering or crossing high-volume roadways.

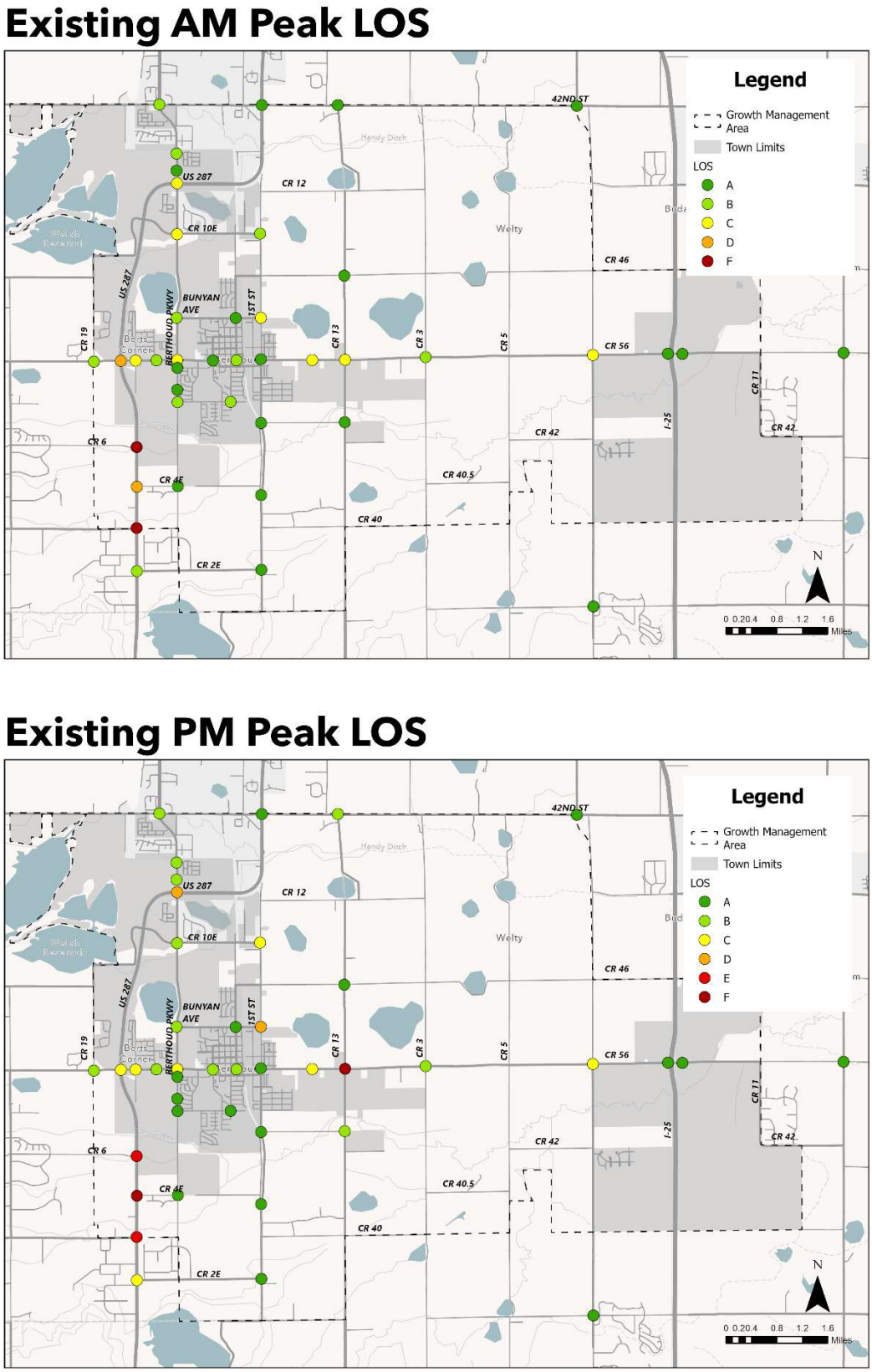
Table 3. Existing AM Peak and PM Peak LOS

#	Intersection	AM Peak			PM Peak		
		Existing	Delay	Worst Movement	Existing	Delay	Worst Movement
1	Berthoud Pkwy & LCR 14	B	11.9		B	11.2	
2	US 287 & CO 60	B	14.1		B	12.9	
3	CO 60 & CO Line Rd	A	8.8	NB	A	9	NB
4	CO 60 & WCR 7	A	9.2	NB	A	9.1	NB
5	Berthoud Pkwy & Wagon Bend Rd	B	11.8	WB	B	13.7	WB
6	Berthoud Pkwy & Grand Market Ave	A	5.6		B	10.3	
7	US 287 & Berthoud Pkwy	C	22.3		D	50.9	
8	Berthoud Pkwy & LCR 10E	C	15	WB	B	14	WB
9	1ST ST & LCR 10E	B	11	EB	C	17.5	EB
10	CO Line Rd & WCR 46	A	9.2	NB	A	9.1	SB
11	Berthoud Pkwy & Bunyan ST	B	12.5	WB	B	12.5	WB
12	4TH ST & Bunyan ST	A	8.5		A	7.5	
13	1ST ST & Bunyan ST	C	15.8	EB	D	28.8	EB
14	CO 56 & LCR 19	B	11.4	SB	B	13.1	SB
15	US 287 & CO 56	D	41.2		C	29.1	
16	CO 56 & Meadowlark Dr	C	18.6	NB	C	22.4	NB
17	CO 56 & Gate Way Park Blvd	B	10.9	SB	B	10.5	SB
18	CO 56 & Berthoud Pkwy	C	28.7		C	31.8	
19	CO 56 & 8TH ST	A	8.8		B	10.9	
20	CO 56 & 4TH ST	A	7.7		A	9.2	
21	CO 56 & 1st St	A	6.1		A	8.4	
22	CO 56 & Dorothy Dr	C	16.3	NB	C	19	NB
23	CO 56 & County Line Rd	C	22.6	NB	F	99.8	NB
24	CO 56 & WCR 3	B	14.4	NB	B	14	NB
25	CO 56 & WCR 7	C	17.9	NB	C	19.2	NB
26	I-25 Southbound & WCR 44	A	2.6		A	3.5	
27	I-25 Northbound & WCR 44	A	4		A	4.9	
28	WCR 13 & WCR 44	A	9.8	WB	A	9.7	EB
29	Berthoud Pkwy & Welch Ave	A	9.8	WB	A	9.9	WB
30	Berthoud Pkwy & Arapahoe Ave	A	9.3	WB	B	10.2	WB
31	Berthoud Pkwy & Spartan Ave	B	12.8	WB	A	10	WB

#	Intersection	AM Peak			PM Peak		
		Existing	Delay	Worst Movement	Existing	Delay	Worst Movement
32	5TH ST & Spartan AVE	B	10.2		A	8.3	
33	LCR 15 & LCR 6C	A	9	WB	A	9.1	WB
34	County Line Rd & LCR 6C	A	9.9	EB	B	10.8	EB
35	US 287 & LCR 6	F	243.7	EB	E	45.3	EB
36	US 287 & LCR 4E	D	30.8	WB	F	51.4	WB
37	Berthoud Pkwy & LCR 4E	A	9.7	EB	A	9.7	EB
38	LCR 15 & LCR 15A	A	9.2	WB	A	8.7	EB
39	US 287 & LCR 4	F	559.5	EB	E	45.5	EB
40	US 287 & LCR 2E	B	10.2	WB	C	18.9	WB
41	LCR 15 & LCR 2E	A	8.9	EB	A	9.5	EB
42	WCR 38 & WCR 7	A	9	EB	A	9.7	EB

Source: Fehr and Peers.

Figure 3. Map of Existing AM and PM Peak LOS



Source: Fehr and Peers.

2045 Future Build Conditions

The future conditions scenario for this project incorporates information from previous TIS and input from Town staff, particularly where conflicting roadway and intersection geometric improvement recommendations exist for a single location. This coordinated approach establishes the basis for determining background traffic growth rates along major and local corridors, incorporating traffic from planned or approved developments, and defining future intersection control types and lane configurations at the study intersections identified in the Introduction.

Background Growth

Upon review of recent Traffic Impact Studies (TIS), Fehr & Peers identified varying background traffic growth factors applied across different studies, as summarized in **Table 4**. The applied growth factors ranged from growth factors of 1.1 to 1.5. These variations reflect that each TIS typically applies growth assumptions specific to the roadway corridors and development conditions surrounding the individual project site. As a result, the growth factors vary based on localized development expectations and corridor characteristics.

Table 4. Comparison of Background Growth Applied over Traffic Impact Studies

TIS	Existing Conditions	Long Range Future Condition	20-Year Growth Factor	Notes
Heron Lakes	March 2022	2042	1.5	across all US-287 intersections
Revere	August 2022	2042	1.1	across all intersections
Westside Crossing	October 2019	2040	1.1 - 1.4	1.44 (US-287); 1.13 (SH-56)
Legacy Park (formerly Ludlow Farm)	October 2019	2042	1.1	across all intersections
River Trails	March 2024	2042	1.4 - 1.5	1.5 (CO-56); 1.4 (Locals)
Farmstead	March 2024	2045	1.3	
Turion	January 2021	2040		
Trails at Creekview	November 2018	2040	1.5 – 1.8	2.3% Annual Rate (US-287); 4% Annual Rate (Locals)

Source: Fehr and Peers, based on previous TIS.

To establish a consistent and corridor-specific approach, Fehr & Peers referenced the forecasted annual growth rates we documented in the Phase I deliverable[2] based on growth shown in the North Front Range MPO Travel Demand Model. Because projected growth varies by corridor based on regional travel patterns and development trends, six growth categories were defined as shown in **Table 5.**

These growth factors differ from those applied in individual TIS because the corridor definitions in this study encompass the entire Town of Berthoud roadway network as well as the GMA. In contrast, TIS analyses typically apply growth rates to smaller, isolated roadway segments immediately surrounding a specific development site. By applying corridor-level growth factors across the broader network, this study provides a more consistent representation of long-term background growth throughout the Town.

For local roadways, traffic volumes vary widely across corridors. To avoid overstating growth on low-volume roads, the applied growth factors were limited to local corridors with 2022 traffic volumes greater than or equal to 2,900 vehicles per day, which represents the average traffic volume across all local corridors included in the model. This approach prevents misleadingly high growth projections that can occur when small increases in traffic are applied to corridors with very low existing volumes. For example, on a low-volume roadway, the addition of only a few hundred vehicles may appear as a disproportionately large percentage increase, even though the operational impact on the roadway network would be minimal.

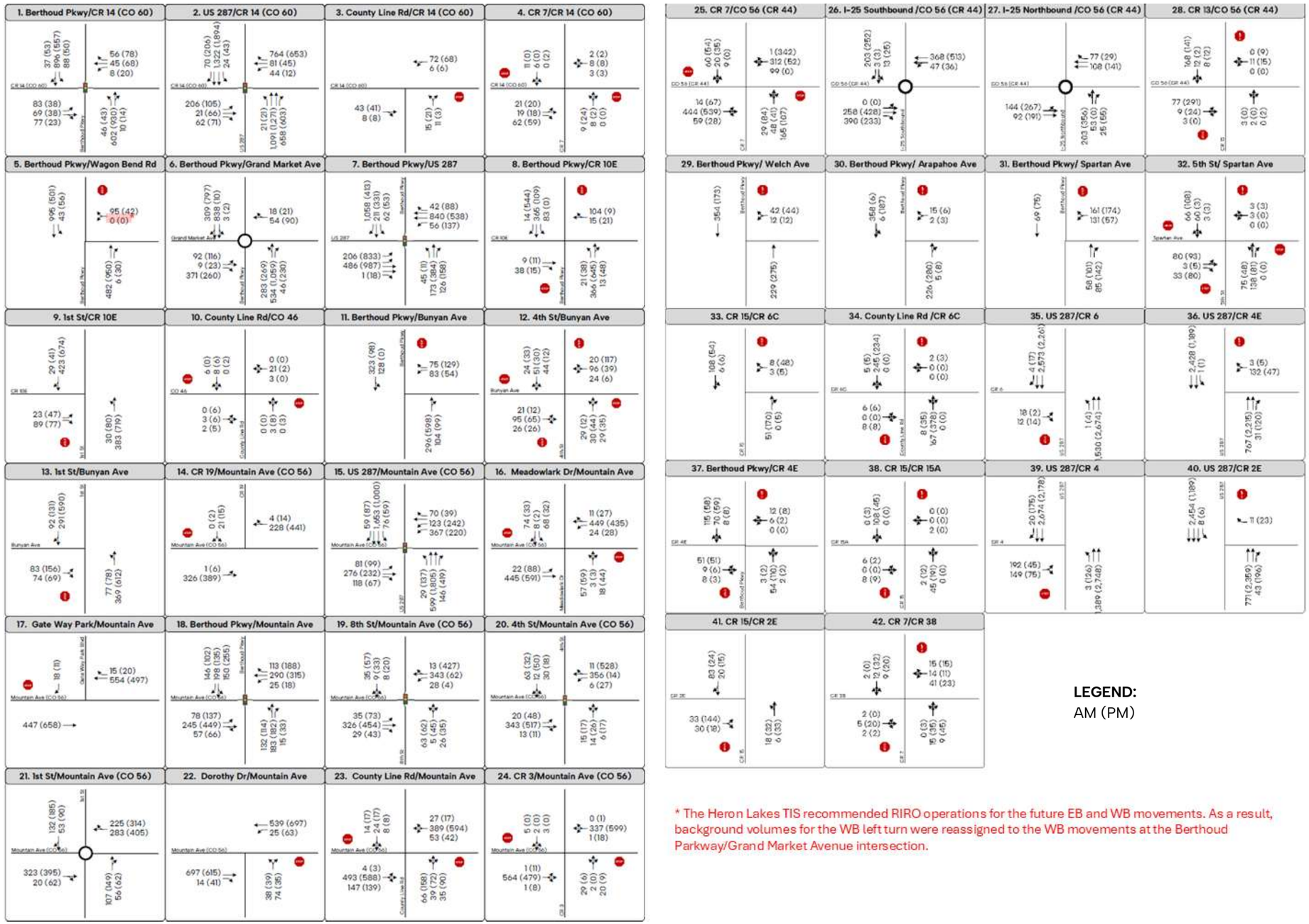
Table 5. Average Annual Growth of Corridors within the Town of Berthoud and GMA.

Corridor	Average ADT	Average Annual Growth	21-Year Growth Factor	Notes
US-287	20,878	1.9%	1.4	
I-25 RAMP	29,292	1.7%	1.4	
CO-56	9,248	1.8%	1.4	
CO-60	8,272	2.9%	1.6	
CR-17	6,439	3.0%	1.6	
Local Roads	2,931	2.3%	1.5	1st St, County Line Rd, CR-14, CR-15, CR-19, CR-44

Source: Fehr and Peers.

[2] See Appendix A.

Figure 4. 2045 Background Peak Hour Traffic Volumes



* The Heron Lakes TIS recommended RIRO operations for the future EB and WB movements. As a result, background volumes for the WB left turn were reassigned to the WB movements at the Berthoud Parkway/Grand Market Avenue intersection.

Source: Fehr and Peers

Project Volumes

Project-generated traffic volumes were compiled from the respective TIS, with adjustments made at locations where recent TMCs were collected at intersections serving developments that are partially built.

Based on information provided by the Town, three developments are currently under construction or partially completed:

Table 6. Applied Project Volumes

TIS	Built Progress	Applied Project Volumes
Heron Lakes	50%	50% at two intersections with 2025 TMCs 100% at other intersections with 2022 TMCs
Revere	0%	100%
Westside Crossing	Residential: 100% Commercial: 0%	100% (No 2025 TMCs at study intersections)
Legacy Park (formerly Ludlow Farm)	0%	100%
River Trails	0%	100%
Farmstead	33%	100% (No 2025 TMCs at study intersections)
Turion	0%	100%
Trails at Creekview	0%	100%

Source: Fehr and Peers, based on previous TIS.

To avoid double-counting traffic that is already reflected in recently collected field data, project volumes from the TIS were adjusted to 50% at two intersections (**Figure 5**) where updated TMCs were obtained:

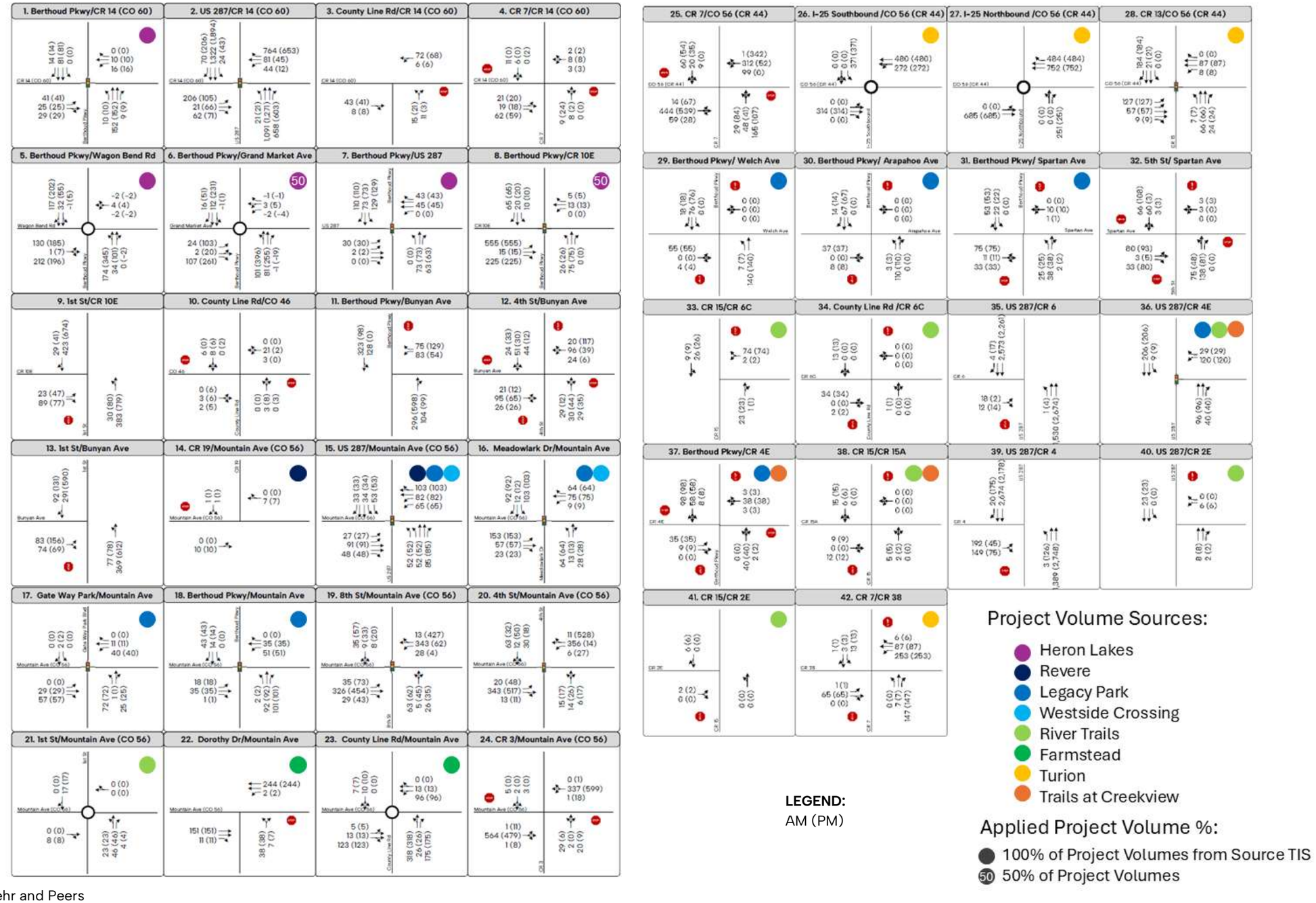
- Intersection #6: Berthoud Parkway & Grand Market Avenue
- Intersection #8: Berthoud Parkway & LCR 10E.

At these locations, it was assumed that the existing traffic counts captured the trips associated with the built portions of the developments; therefore, only the remaining unbuilt portions were added to the future condition volumes.

For other intersections influenced by ongoing developments where no recent TMCs were collected, project traffic volumes were incorporated at 100% buildout. This approach is appropriate because the analysis at those locations relies on previously collected TMCs from the original TIS, which were conducted prior to the construction of the developments and therefore do not reflect any built project traffic.

No project-generated volumes were added at 15 intersections that were newly proposed as part of this study and were not included in previous Traffic Impact Studies.

Figure 5. 2045 Project Peak Hour Traffic Volumes



Source: Fehr and Peers

Future Intersection Controls

Based on a review of recommendations documented in the previous TIS, seven study intersections include proposed control or operational improvements under future conditions (**Table 7**). The recommended improvements are summarized below:

- Berthoud Parkway & LCR 10E: Convert from TWSC to signalized control.
- Berthoud Parkway & Wagon Bend Rd: Convert from TWSC to RIRO.
- CO-56 & Meadowlark Drive: Convert from TWSC to signalized control.
- CO-56 & Gateway Park Boulevard: Convert from RIRO to signalized control.
- CO-56 & County Line Road: Convert from TWSC to a roundabout.
- WCR 14 & WCR 44: Convert from TWSC to signalized control.
- US-287 & LCR 4E: Convert from TWSC to signalized control.
- Berthoud Parkway & LCR 4E: Convert from TWSC to AWSC.

These recommended improvements were incorporated into the Future Build scenario to evaluate anticipated operational performance under long-term growth conditions.

Future Lane Configurations

Future lane configurations for the study intersections were developed based on recommendations documented in previous TIS and additional review conducted as part of this study. In total, 21 study intersections include changes to the existing lane configurations under the 2045 Future Build scenario (**Table 7**).

The recommended configurations from the TIS generally include the addition of turn lanes to accommodate projected traffic growth and improve intersection operations. Fehr & Peers reviewed these recommendations and incorporated them into the model network. In several cases, Fehr & Peers made minor refinements to the recommended configurations to improve operations in the analysis. These refinements primarily involved adding storage length for newly proposed turn lanes to ensure adequate queue accommodation for the projected traffic volumes.

Along the CO-56 corridor, multiple TIS documents recommended varying numbers of future through lanes at several intersections. Because these studies were developed independently and focused on localized development impacts, the resulting recommendations differed across segments of the corridor. Based on coordination with Town staff, the current planning direction for CO-56 does not include additional through lanes beyond those currently planned. Therefore, the future lane configurations used in this study maintain the existing number of through lanes along CO-56, while incorporating turn lane improvements where appropriate.

The resulting lane configurations represent a consolidated and consistent set of assumptions for the 2045 analysis, integrating recommendations from multiple development studies while aligning with current Town planning guidance. These configurations were used in the Synchro model to evaluate intersection operations under future conditions.

Table 7. Existing vs. Recommended Future Intersection Controls & Lane Configurations

ID	Intersection Name	Existing Intersection Control	Future Intersection Control	Existing Lane Configuration				Future Lane Configuration				Fehr & Peers Modification
				NB	SB	EB	WB	NB	SB	EB	WB	
1	Berthoud Pkwy & LCR 14	Signal	Signal									Storage lane added to NBR, SBR
2	US 287 & CO 60	Signal	Signal									
3	CO 60 & CO Line Rd	TWSC	TWSC									
4	CO 60 & WCR 7	TWSC	TWSC									
5	Berthoud Pkwy & Wagon Bend Rd	TWSC	Roundabout									
6	Berthoud Pkwy & Grand Market Ave	Roundabout	Roundabout									"Storage lane added to EBL, WBL, WBR, NBR, SBR.
7	US 287 & Berthoud Pkwy	Signal	Signal									Storage lane is removed from SBL"
8	Berthoud Pkwy & LCR 10E	TWSC	Signal									
9	1ST ST & LCR 10E	TWSC	TWSC									Storage lane added to NBR, EBR, WBR
10	CO Line Rd & WCR 46	TWSC	TWSC									
11	Berthoud Pkwy & Bunyan ST	TWSC	TWSC									
12	4TH ST & Bunyan ST	AWSC	AWSC									
13	1ST ST & Bunyan ST	TWSC	TWSC									
14	CO 56 & LCR 19	TWSC	TWSC									

ID	Intersection Name	Existing Intersection Control	Future Intersection Control	Existing Lane Configuration				Future Lane Configuration				Fehr & Peers Modification
				NB	SB	EB	WB	NB	SB	EB	WB	
15	US 287 & CO 56	Signal	Signal									
16	CO 56 & Meadowlark Dr	TWSC	Signal									
17	CO 56 & Gate Way Park Blvd	RIRO	Signal									Storage lane added to NBL, EBR, WBR, SBR
18	CO 56 & Berthoud Pkwy	Signal	Signal									Storage lane added to NBL, SBL, EBL, EBR, WBL
19	CO 56 & 8TH ST	Signal	Signal									Storage lane added to NBR, SBL, EBR
20	CO 56 & 4TH ST	Signal	Signal									Adjust lanes
21	CO 56 & 1st St	Roundabout	Roundabout									
22	CO 56 & Dorothy Dr	TWSC	TWSC									Storage lane added to NBL
23	CO 56 & County Line Rd	TWSC	Roundabout									
24	CO 56 & WCR 3	TWSC	TWSC									Storage lane added to NBL, EBL, WBL
25	CO 56 & WCR 7	TWSC	TWSC									
26	I-25 Southbound & WCR 44	Roundabout	Roundabout									
27	I-25 Northbound & WCR 44	Roundabout	Roundabout									
28	WCR 13 & WCR 44	TWSC	Signal									

ID	Intersection Name	Existing Intersection Control	Future Intersection Control	Existing Lane Configuration				Future Lane Configuration				Fehr & Peers Modification
				NB	SB	EB	WB	NB	SB	EB	WB	
29	Berthoud Pkwy & Welch Ave	TWSC	TWSC									Storage lane added to NBL, NBR, SBL, SBR, EBL, EBR, WBL, WBR
30	Berthoud Pkwy & Arapahoe Ave	TWSC	TWSC									Storage lane added to NBL, SBL, SBR
31	Berthoud Pkwy & Spartan Ave	TWSC	TWSC									Storage lane added to NBL, SBL, SBR
32	5TH ST & Spartan AVE	AWSC	AWSC									Storage lane added to SBL
33	LCR 15 & LCR 6C	TWSC	TWSC									
34	County Line Rd & LCR 6C	TWSC	TWSC									
35	US 287 & LCR 6	TWSC	TWSC									
36	US 287 & LCR 4E	TWSC	Signal									
37	Berthoud Pkwy & LCR 4E	TWSC	AWSC									Storage lane added to WBR
38	LCR 15 & LCR 15A	TWSC	TWSC									Storage lane added to EBL
39	US 287 & LCR 4	TWSC	TWSC									
40	US 287 & LCR 2E	TWSC	TWSC									
41	LCR 15 & LCR 2E	TWSC	TWSC									Storage lane added to WBR
42	WCR 38 & WCR 7	TWSC	TWSC									

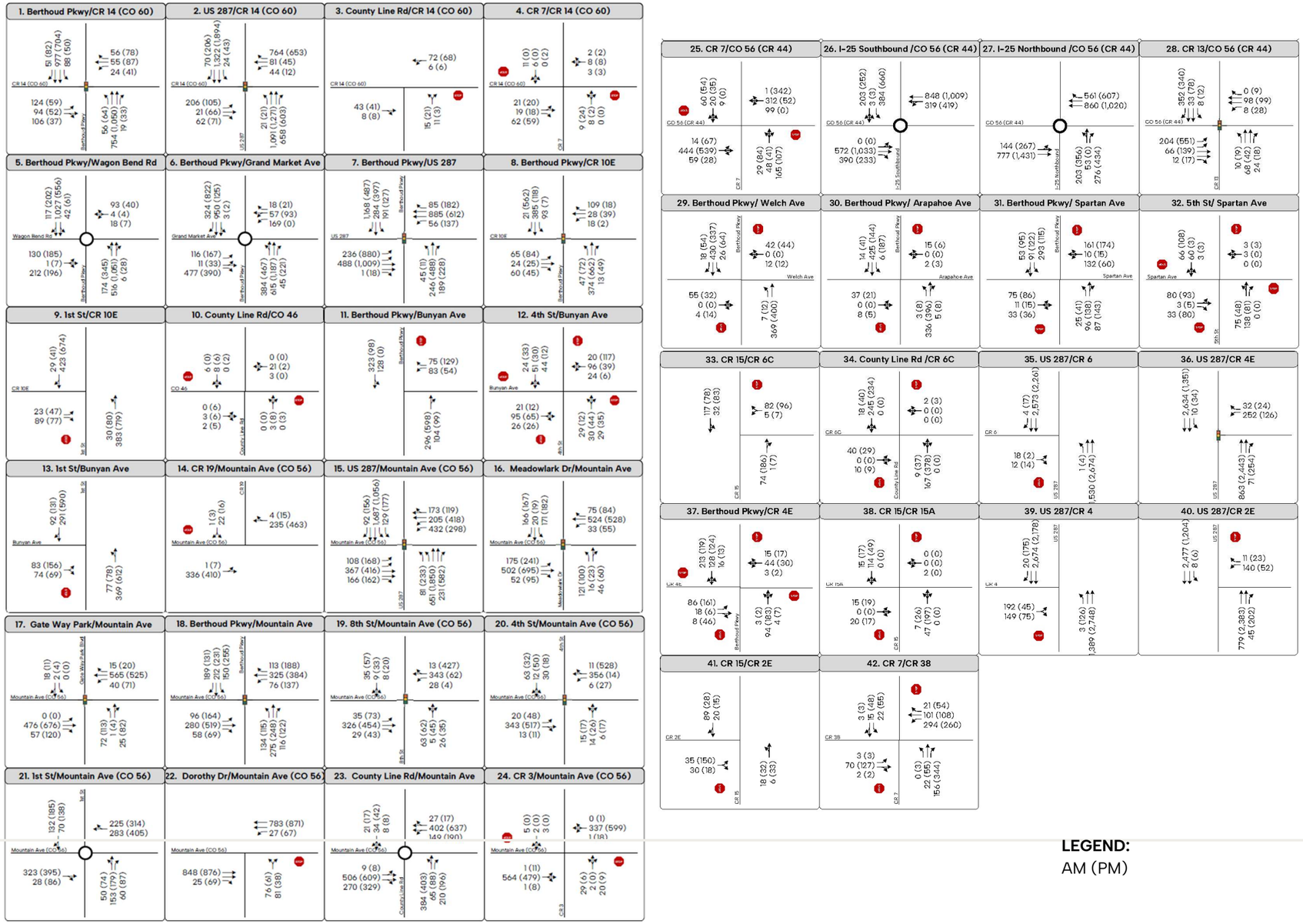
Source: Fehr and Peers.

2045 Total Traffic Volumes

The 2045 total traffic volumes at the study intersections were developed by combining background traffic growth with project-generated traffic from planned and approved developments in the Town of Berthoud. Background growth factors were first applied to the existing volumes based on the corridor-specific rates described in the previous section. Project traffic volumes from previous TIS were then added, with adjustments made to account for partially built developments and locations where recent turning movement counts were collected to avoid double-counting.

The resulting volumes represent the total projected traffic conditions in 2045 and were used as the basis for the Future Build operational analysis.

Figure 6. 2045 Total Peak Hour Traffic Volumes



Source: Fehr and Peer

LEGEND:
AM (PM)

Intersection Level of Service Analysis

Future intersection operations were evaluated for the 2045 Future Build scenario during both the AM and PM peak hours. To illustrate the potential operational effects of planned improvements, two sets of LOS results were documented for each intersection.

- **Future Conditions – No Improvements**: The first set of LOS results reflects future traffic volumes operating under existing intersection controls and lane configurations. This scenario provides a baseline assessment of how the transportation network would perform if no infrastructure upgrades were implemented, allowing potential operational deficiencies to be identified under projected future demand.
- **Future Conditions – With Improvements**: The second set of LOS results reflects conditions with recommended improvements incorporated into the analysis. These improvements include intersection control changes and lane configuration modifications identified in previous Traffic Impact Studies (TIS), along with refinements to ensure consistent modeling assumptions across the study network. These refinements primarily include adjustments to turn lane configurations and storage lengths, as described in the previous section.

Future intersection operations were evaluated in comparison to existing conditions during both the AM and PM peak periods. Overall, the results indicate that while many intersections operate acceptably under existing conditions, several locations are projected to experience significant operational degradation under future traffic volumes if no improvements are implemented. Incorporating the recommended improvements substantially improves intersection performance at many key locations and helps accommodate projected growth in traffic demand across the study network.

Table 8. Future AM Peak and PM Peak LOS

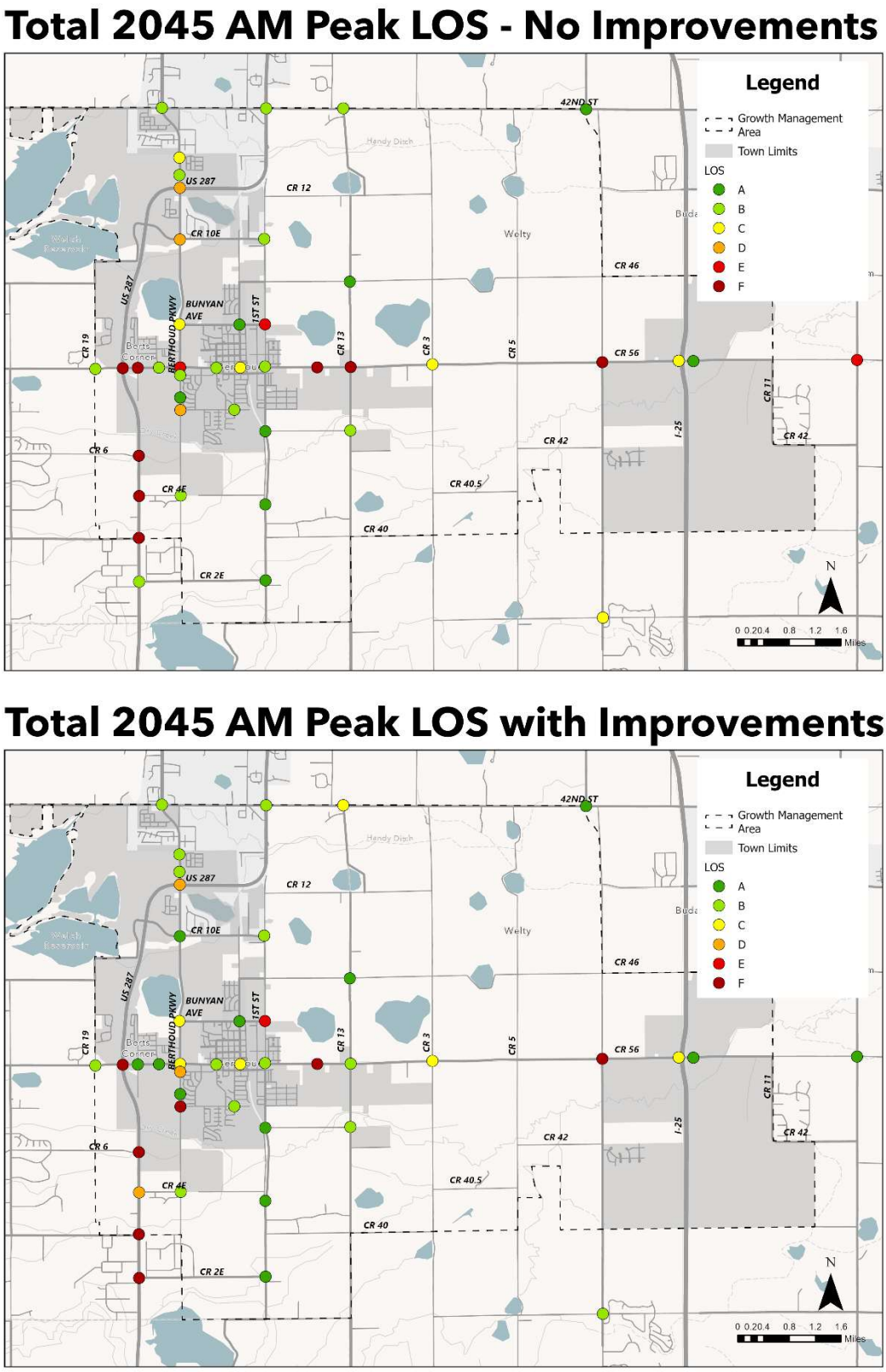
Node	Intersection	AM Peak								PM Peak							
		Existing	Delay	Worst Movement	2045 NO Improvement	Delay	Worst Movement	2045 With Improvements	Delay	Worst Movement	Existing	Delay	Worst Movement	2045 NO Improvement	Delay	Worst Movement	2045 With Improvements	Delay	Worst Movement
1	Berthoud Pkwy & LCR 14	B	11.9		B	18.9		B	11.3		B	11.2		C	20.5		B	10.6	
2	US 287 & CO 60	B	14.1		C	20.2		C	22.2		B	12.9		C	22.5		C	25.9	
3	CO 60 & CO Line Rd	A	8.8	NB	A	9.1	NB	A	9.1	NB	A	9	NB	A	9.3	NB	A	9.3	NB
4	CO 60 & WCR 7	A	9.2	NB	A	9.4	NB	A	9.4	NB	A	9.1	NB	A	9.2	NB	A	9.2	NB
5	Berthoud Pkwy & Wagon Bend Rd	B	11.8	WB	C	21.4	WB	B	11.8		B	13.7	WB	D	27.8	WB	B	13.3	
6	Berthoud Pkwy & Grand Market Ave	A	5.6		B	14.1		B	11.1		B	10.3		F	126.7		F	67	
7	US 287 & Berthoud Pkwy	C	22.3		D	49.3		D	40.3		D	50.9		F	163.4		F	85.1	
8	Berthoud Pkwy & LCR 10E	C	15	WB	D	29.6	WB	A	6		B	14	WB	D	26.4	WB	A	7.2	
9	1ST ST & LCR 10E	B	11	EB	B	13.5	EB	B	13.5	EB	C	17.5	EB	F	52.8	EB	E	43.3	EB
10	CO Line Rd & WCR 46	A	9.2	NB	A	9.2	NB	A	9.2	NB	A	9.1	SB	A	9.1	SB	A	9.1	SB
11	Berthoud Pkwy & Bunyan ST	B	12.5	WB	C	20.4	WB	C	20.4	WB	B	12.5	WB	C	18.6	WB	C	16.6	WB
12	4TH ST & Bunyan ST	A	8.5		A	10		A	10		A	7.5		A	8.1		A	9	
13	1ST ST & Bunyan ST	C	15.8	EB	E	42.8	EB	E	42.8	EB	D	28.8	EB	F	356.6	EB	F	1301.8	EB
14	CO 56 & LCR 19	B	11.4	SB	B	13.3	SB	B	13.3	SB	B	13.1	SB	C	17.8	SB	C	17.8	SB
15	US 287 & CO 56	D	41.2		F	163.7		F	103.1		C	29.1		F	181.8		F	100.8	
16	CO 56 & Meadowlark Dr	C	18.6	NB	F	1779.8	NB	A	9.1		C	22.4	NB	F	7120.1	SB	B	12	
17	CO 56 & Gate Way Park Blvd	B	10.9	SB	B	12.6	SB	A	6.7		B	10.5	SB	B	12.1	SB	A	7.5	

Node	Intersection	AM Peak								PM Peak							
		Existing	Delay	Worst Movement	2045 NO Improvement	Delay	Worst Movement	2045 With Improvements	Delay	Worst Movement	Existing	Delay	Worst Movement	2045 NO Improvement	Delay	Worst Movement	2045 With Improvements	Delay	Worst Movement
18	CO 56 & Berthoud Pkwy	C	28.7		E	57.6		C	33.3		C	31.8		F	105.3		D	41.5	
19	CO 56 & 8TH ST	A	8.8		B	11.6		B	12.6		B	10.9		B	13.1		B	16.5	
20	CO 56 & 4TH ST	A	7.7		B	10.3		B	10.2		A	9.2		B	11		B	12.8	
21	CO 56 & 1st St	A	6.1		B	10.1		B	10.1		A	8.4		D	26		D	26	
22	CO 56 & Dorothy Dr	C	16.3	NB	F	241.4	NB	F	72	NB	C	19	NB	F	305.5	NB	F	98.2	NB
23	CO 56 & County Line Rd	C	22.6	NB	F	5080.7	NB	B	11		F	99.8	NB	F	10815.7	NB	D	32.2	
24	CO 56 & WCR 3	B	14.4	NB	C	20.7	NB	C	20.7	NB	B	14	NB	C	19.8	NB	C	19.8	NB
25	CO 56 & WCR 7	C	17.9	NB	F	67.1	NB	F	67.1	NB	C	19.2	NB	F	81.4	NB	F	93.3	NB
26	I-25 Southbound & WCR 44	A	2.6		C	19.6		C	19.6		A	3.5		F	161		F	161	
27	I-25 Northbound & WCR 44	A	4		A	9.8		A	9.8		A	4.9		F	119.2		F	119.2	
28	WCR 13 & WCR 44	A	9.8	WB	E	27.5	EB	A	6.8		A	9.7	EB	F	433.5	EB	A	8.4	
29	Berthoud Pkwy & Welch Ave	A	9.8	WB	B	13.1	WB	D	26.7	EB	A	9.9	WB	B	13.6	WB	C	22.6	EB
30	Berthoud Pkwy & Arapahoe Ave	A	9.3	WB	B	11.2	WB	C	19.2	EB	B	10.2	WB	B	14.6	WB	D	25.1	EB
31	Berthoud Pkwy & Spartan Ave	B	12.8	WB	D	35	WB	F	128.2	WB	A	10	WB	B	12.8	WB	D	29.7	EB
32	5TH ST & Spartan AVE	B	10.2		B	14.1		B	14.1		A	8.3		A	9.1		B	11	
33	LCR 15 & LCR 6C	A	9	WB	A	9.2	WB	A	9.2	WB	A	9.1	WB	B	10.2	WB	B	10.2	WB
34	County Line Rd & LCR 6C	A	9.9	EB	B	12.6	EB	B	12.6	EB	B	10.8	EB	C	16.5	EB	C	16.5	EB

Node	Intersection	AM Peak								PM Peak							
		Existing	Delay	Worst Movement	2045 NO Improvement	Delay	Worst Movement	2045 With Improvements	Delay	Worst Movement	Existing	Delay	Worst Movement	2045 NO Improvement	Delay	Worst Movement	2045 With Improvements	Delay	Worst Movement
35	US 287 & LCR 6	F	243.7	EB	F	3100.6	EB	F	3100.6	EB	E	45.3	EB	F	549	EB	F	549	EB
36	US 287 & LCR 4E	D	30.8	WB	F	699.2	WB	D	36.4		F	51.4	WB	F	1805	WB	B	10.3	
37	Berthoud Pkwy & LCR 4E	A	9.7	EB	B	14.7	EB	B	10.2		A	9.7	EB	C	17.4	EB	B	10.5	
38	LCR 15 & LCR 15A	A	9.2	WB	A	9.8	WB	A	9.8	WB	A	8.7	EB	B	10.1	EB	B	10.1	EB
39	US 287 & LCR 4	F	559.5	EB	F	3757.1	EB	F	3757.1	EB	E	45.5	EB	F	274.1	EB	F	1274.1	EB
40	US 287 & LCR 2E	B	10.2	WB	B	11.6	WB	F	168	WB	C	18.9	WB	E	33.1	WB	F	526.9	WB
41	LCR 15 & LCR 2E	A	8.9	EB	A	9.2	EB	A	9.2	EB	A	9.5	EB	B	10.4	EB	B	10.4	EB
42	WCR 38 & WCR 7	A	9	EB	C	20.8	WB	B	12.6	WB	A	9.7	EB	F	168.6	WB	C	24.8	WB

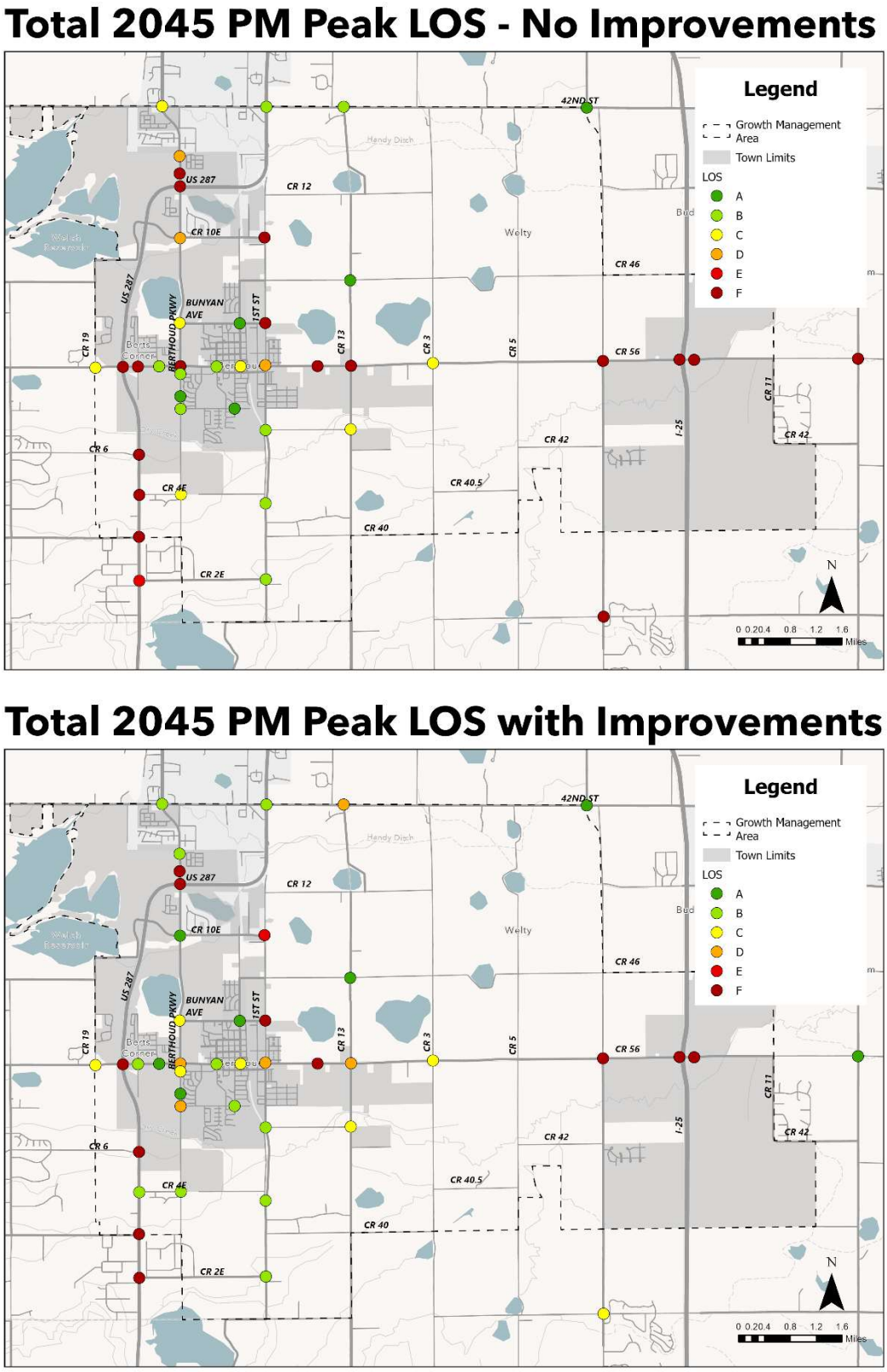
Source: Fehr and Peers.

Figure 7. Map of Future AM Peak LOS without Improvements vs. with Improvements



Source: Fehr and Peers.

Figure 8. Map of Future AM Peak LOS without Improvements vs. with Improvements



Source: Fehr and Peers.

Key Findings

Intersection operations were evaluated for existing conditions, 2045 Future Conditions without improvements, and 2045 Future Conditions with recommended improvements during both the AM and PM peak periods. Overall, the results indicate that while many intersections operate acceptably under existing conditions, several locations are projected to experience significant operational degradation under future traffic volumes if no improvements are implemented. Incorporating the recommended improvements substantially improves intersection performance at many key locations.

Existing Conditions Summary

Under existing conditions, most study intersections operate at LOS A–C during both the AM and PM peak periods, indicating generally acceptable operations across the network. A few intersections along major corridors, particularly US-287 and CO-56, experience moderate delays with LOS C or D, reflecting higher traffic volumes on these regional routes. Several minor-street stop-controlled intersections along US-287 already exhibit higher delays for the side-street movements, although the overall intersections remain operationally manageable.

2045 Future with No Improvements Summary

When future traffic growth and development traffic are applied without any intersection improvements, operational performance declines at several locations. Multiple intersections are projected to operate at LOS E or F, particularly during the PM peak period. The most significant congestion is forecast at intersections along US-287 and CO-56, including:

- US-287 & Berthoud Parkway
- US-287 & CO-56
- CO-56 & Meadowlark Drive
- CO-56 & County Line Road
- US-287 & LCR 4E
- US-287 & LCR 6
- US-287 & LCR 4

These intersections show substantial increases in delay, particularly for minor-street movements at two-way stop-controlled intersections. Several locations along the CO-56 corridor also experience worsening operations as development traffic increases along the east–west corridor.

2045 Future Conditions with Improvements Summary

When the intersection control changes and lane configuration improvements recommended in the TIS and refined in this study are incorporated, intersection performance improves notably at many key locations. Improvements such as signalization, roundabout conversions, and additional turn lanes significantly reduce delays and improve traffic flow at several intersections.

For example:

- Berthoud Parkway & LCR 10E improves from LOS D to LOS A with signal control in both AM and PM.
- CO-56 & Meadowlark Drive improves from LOS F without improvements to LOS A (AM) and LOS B (PM) with signalization.
- CO-56 & County Line Road improves from LOS F to LOS B (AM) and LOS D (PM) with a roundabout.
- WCR 13 & WCR 44 improve from LOS E (AM) and LOS F (PM) to LOS A with signalization.

While several intersections still experience higher delays under future conditions due to increased traffic demand, the recommended improvements substantially mitigate many of the most severe operational deficiencies.

Appendix A. Divider Page

Phase I Memo

Fehr & Peers

Memo

Date: May 22, 2025

To: Town of Berthoud

From: Nick VanderKwaak, Maggie Ostwald, and Lindsay Gips; Fehr & Peers

Subject: Town of Berthoud Travel Model: Method of Modeling Recommendation

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Introduction

In recent years, the Town of Berthoud has experienced significant growth, prompting the need for a more comprehensive understanding of traffic impacts across the community. As new and overlapping developments are introduced, the Town recognizes the importance of evaluating these impacts holistically to support informed data-driven planning and decision making. A town-wide travel model will allow Town leadership to comprehensively assess the cumulative impacts of development on the roadway network and make informed decisions.

This memorandum documents existing data relevant to traffic modeling and investigates best practices for developing a town-wide travel model. The two modeling approaches explored include travel demand modeling utilizing the North Front Range Metropolitan Planning Organization (NFRMPO) Travel Demand Model as a base model, and traffic simulation modeling, using Synchro.

NFRMPO Travel Demand Model Assessment

The NFRMPO Travel demand Model (TDM) provides a regional forecast of land use and traffic volumes and includes current and future horizon years with varying land use growth and roadway improvement assumptions. To validate and evaluate how well the model forecasts vehicle volumes on the roads in Berthoud, the demographic inputs and traffic volumes from three scenarios (2019, 2022, and 2040) were evaluated. By comparing the housing and employment model inputs for the existing model scenario with existing observed and reported demographics as well as the resulting traffic forecast, it can be determined how well the model is forecasting existing travel in Berthoud. For future year horizons, comparing assumptions on land use changes in the model with growth defined in the Berthoud Comprehensive Plan can help with resulting forecasted traffic. To validate how well the TDM forecasts town-wide travel in Berthoud, inputs and outputs from the NFRMPO TDM were compared to existing field collected data and Berthoud's comprehensive plan.

For all horizon years, the TDM uses Traffic Analysis Zones (TAZs) as the geographic unit of analysis for demographic data as shown in **Figure 1.**

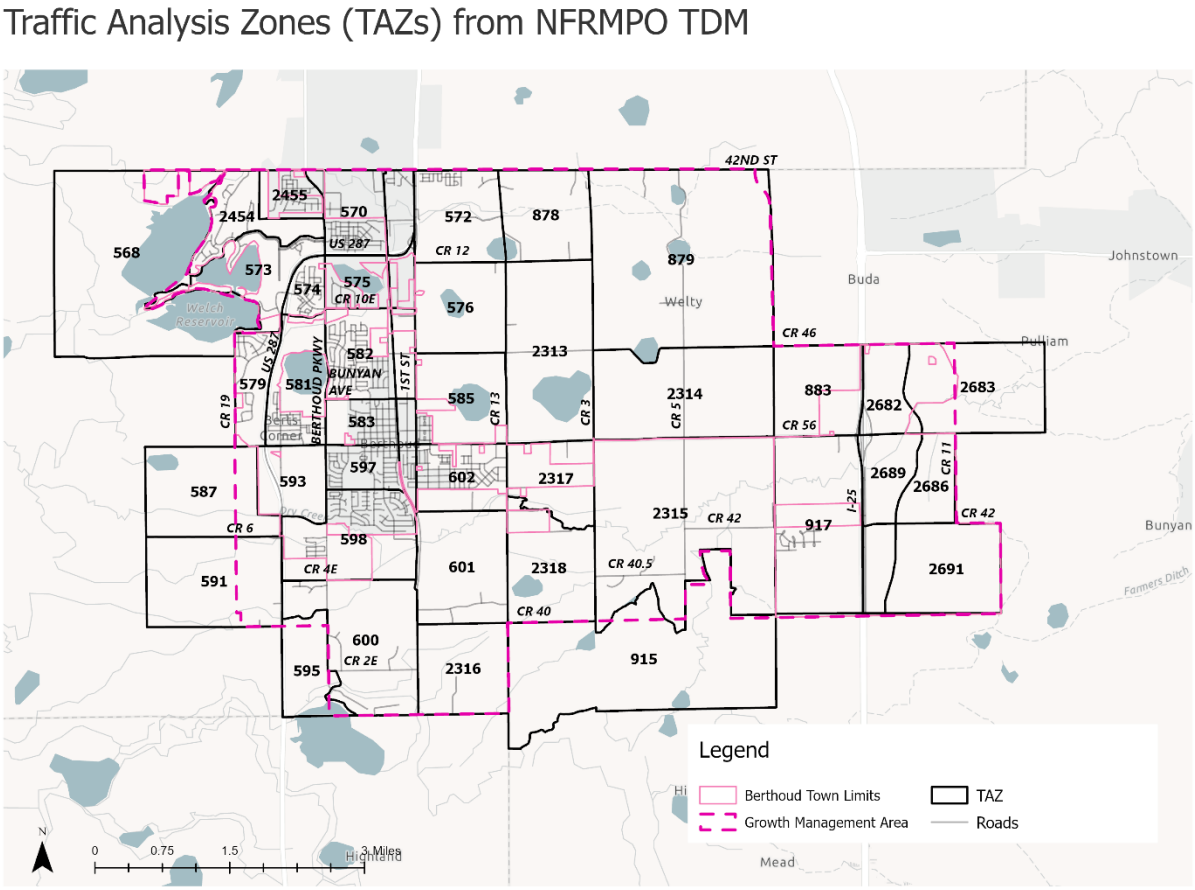


Figure 1: Traffic Analysis Zones from NFRMPO TDM

Existing Year (2022) Model Validation

To validate how well the TDM calculates traffic on Berthoud roads, model inputs and outputs were compared with existing measured land use and traffic data. For the purposes of defining existing conditions, the following assumptions were used:

- 2022 horizon year model used to assume existing conditions
- Available field collected traffic counts from 2023 used to reflect current observed traffic counts
- 2020 decennial Census block data used to define existing population and households
- 2022 employment data used to define existing employment calculations

Housing and Jobs Comparison

For the TAZs in Berthoud, the housing and employment data inputs used by the NFRMPO TDM were compared with the 2020 Census and 2022 Longitudinal Employer-Household Dynamics (LEHD) data.

DATA PREPARATION METHODS

1. Collected the 2020 Decennial Census Block Shapefile data from the Census website for Weld and Larimer counties. Population and Household counts were included in the Shapefile.
2. Collected 2022 LEHD data from the Census OnTheMap tool. Captured work area data for all workers at the Census Block level in the study area, then exported the Shapefile.
3. Extracted the Traffic Analysis Zone (TAZ) Geographies Shapefile from the TDM model.
4. In GIS, clipped the TAZ layer to the study area boundary (Berthoud Growth Management Area [GMA]). TAZs bisected by the GMA boundaries were included in the study area.
5. Collected 2019 TAZ demographic characteristics from the TDM into an Excel spreadsheet and summarized them by TAZ.
6. Compared the Census Block geography with the TAZ geography by overlaying the Census Block Shapefile with the TAZ Shapefile. **Figure 2** shows the overlay.

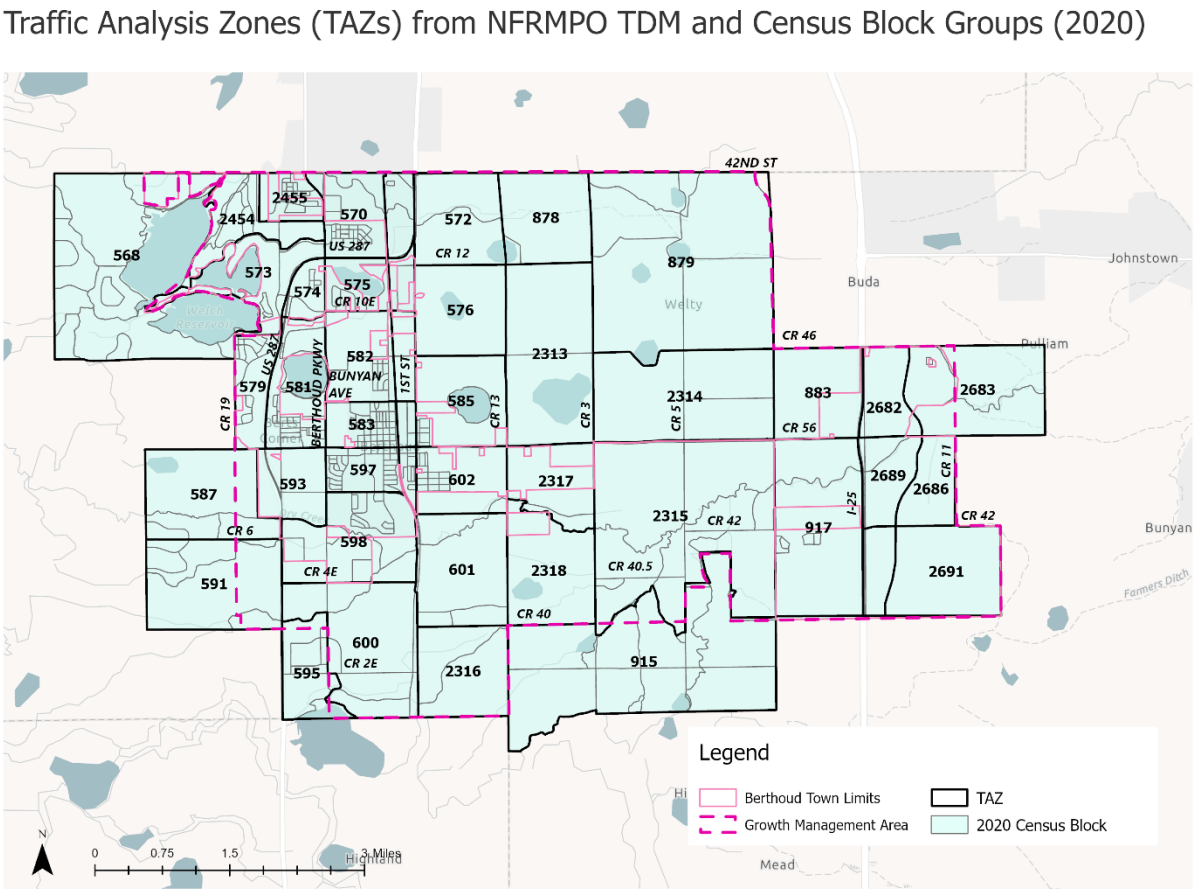


Figure 2: Census Blocks and Traffic Analysis Zones from NFRMPO TDM

Comparing the Census Block geography with the TAZs confirmed that the Census Blocks are completely contained at their boundaries within the TAZs. The only exception is Block 1034, which spans four TAZs: 2686, 2689, 2690, and 2691. However, both the Census Block and TAZ datasets show no population or households within the defined area, which alleviates any potential data discrepancies.

POPULATION AND HOUSEHOLD COMPARISON

Existing (2019) Population and Household inputs from the TDM were compared with existing 2020 Census population and household data. The methodology of data comparison is as follows:

1. Converted the 2020 Census Block Shapefile into a point data layer to join to the TAZ layer.
2. Joined the point data layer to the TAZ layer; summed the 2019 total population field and 2019 total households field so that the join would sum the attributes for the Census Blocks corresponding to each TAZ.
3. Exported the table data (Census data summed by TAZ) into Excel to compare to the TDM data. Calculated the percent difference and raw value difference between the datasets using the formula (Census Data – TAZ Data) / Census Data.
4. Re-imported the data into GIS for visualization.

Figure 3 shows the comparison of Census and TAZ population count data. The map shows the discrepancies between data sources as the percent difference between Census and TAZ counts. For discrepancies greater than 10% within each TAZ, the value of the difference between data points is shown. Some of these percentage discrepancies can be accounted for due to low population counts, for which a small value discrepancy would appear exaggerated by the percentage difference. However, a few of these areas show both significant percentage and value discrepancies.

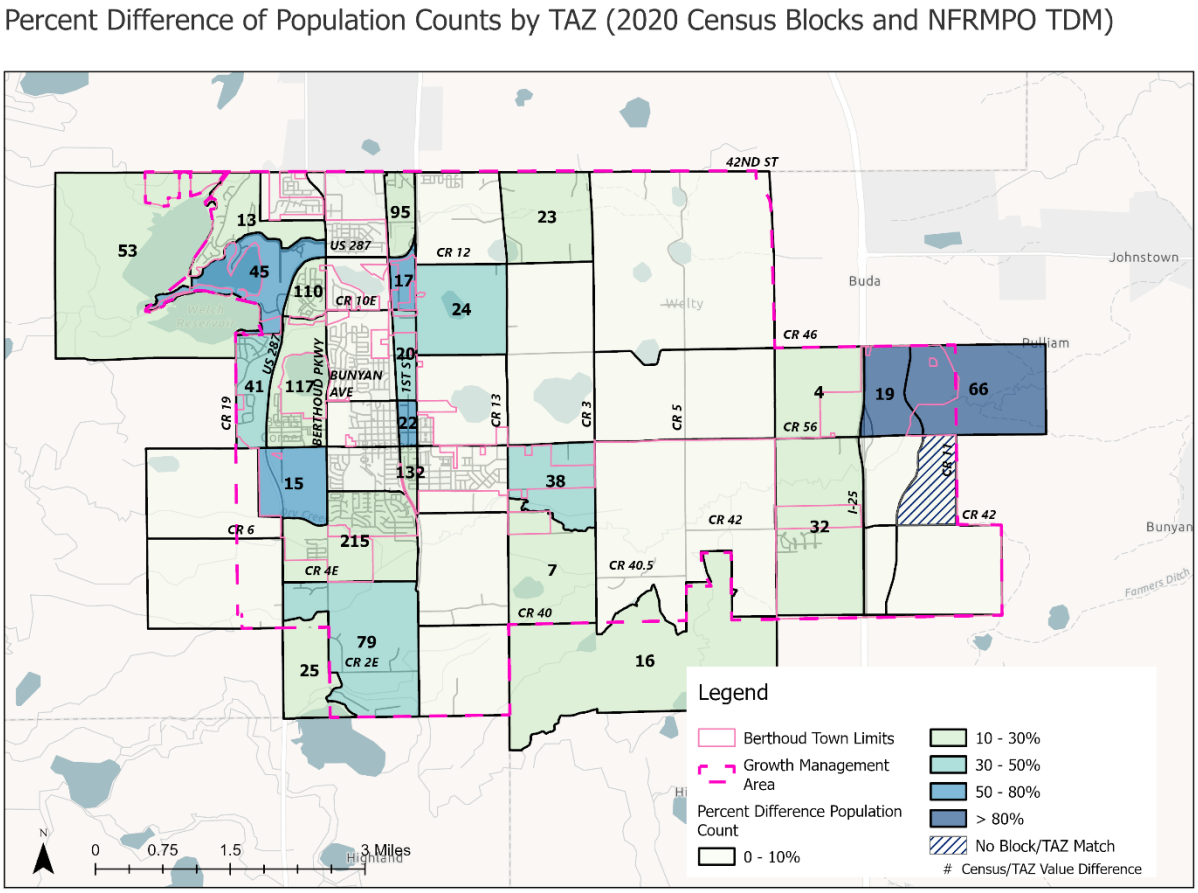


Figure 3: Percent Difference of Population Counts by TAZ

Figure 4 shows the comparison of Census and TAZ household count data. As with the population counts map, this map shows the discrepancies between data sources as the percent difference between Census and TAZ counts. For discrepancies greater than 10% within each TAZ, the value of the difference between data points is shown. The data is highly accurate across data sources with a few outliers. Only one outlier with a greater than 10% difference has a considerable count discrepancy (135).

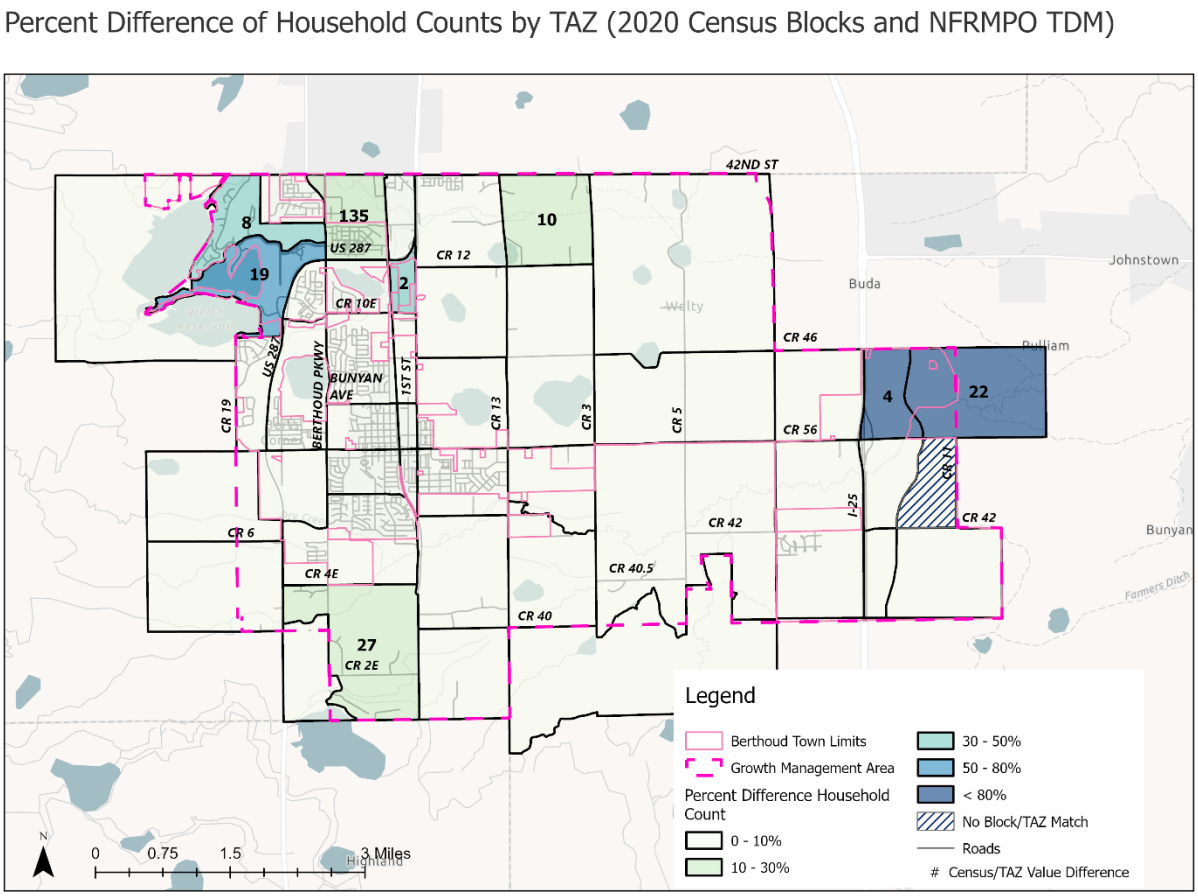


Figure 4: Percent Difference of Household Counts by TAZ

JOBS COMPARISON

2022 LEHD primary workplace data was compared to the 2019 TAZ jobs data. The methodology of data comparison is as follows:

1. Joined the LEHD point Shapefile to the TAZ layer; summed the total population field and total households field so that the join would sum the attributes for the blocks corresponding to each TAZ.
2. Exported the table data (LEHD data summed by TAZ) into Excel to compare to the TDM data. Calculated the percent difference and raw value difference between the datasets using the formulas *(LEHD Data – TAZ Data) / LEHD Data* and *LEHD Data – TAZ Data* respectively.
3. Re-imported the data into GIS for visualization.

Figure 5 shows the comparison of LEHD and TAZ job count data. The joined layer revealed that there was no LEHD job data for six different TAZs: 572, 883, 2686, 2689, 2690, and 2691. However, the TAZ dataset shows 1 job in one TAZ, 4 jobs in one TAZ, and 0 jobs in the remaining four TAZs, so data discrepancies are minimal.

There are discrepancies between datasets for reported jobs at the Census Block level (both percentage and value), with the most notable TAZ level difference of 841 jobs; the LEHD dataset reports 7 jobs in the TAZ while the TDM reports 848. There are only a few small employers located within this zone, so this difference shows increased trip generation in the model from what would be calculated using other employment data.

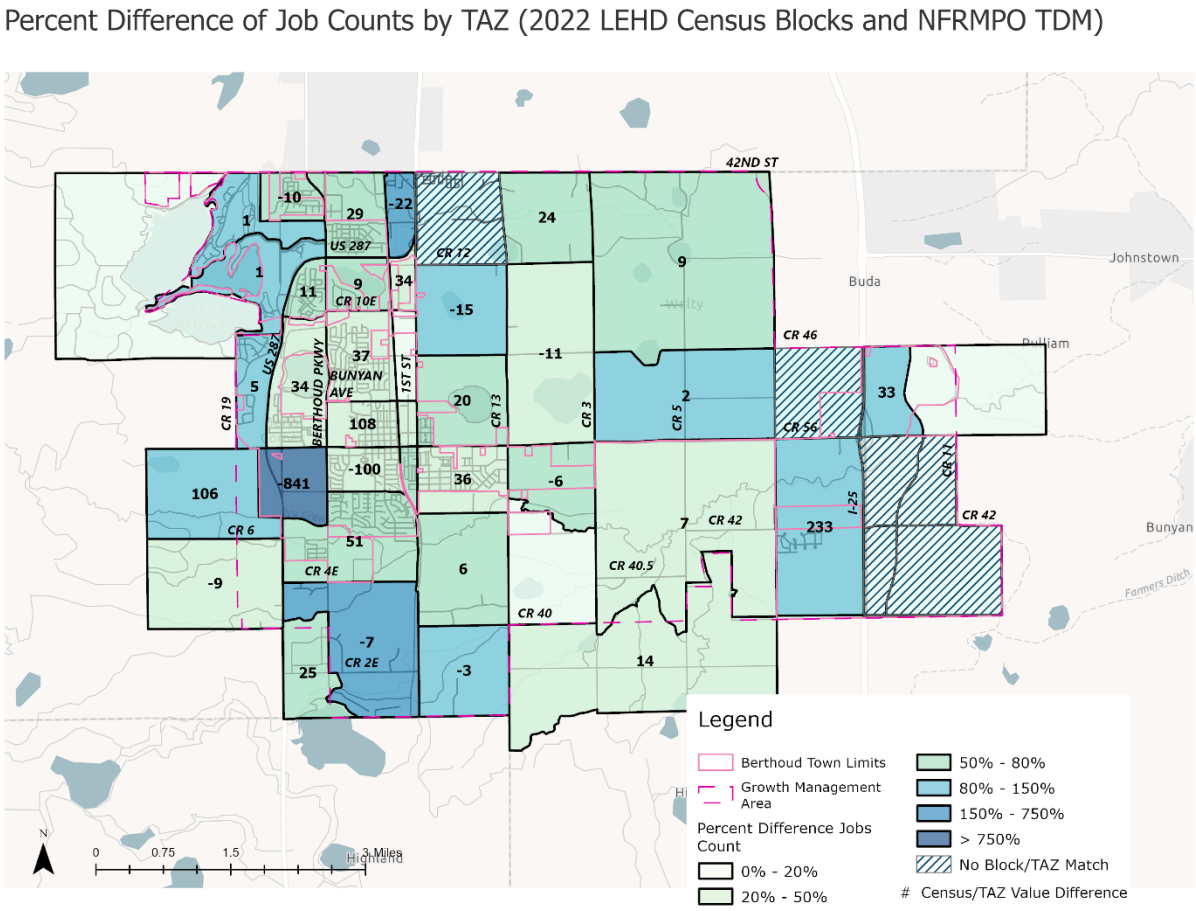


Figure 5: Percent Difference of Job Counts by TAZ

Daily Traffic Comparison

To validate the NFRMPO TDM traffic assignment, daily traffic volume data forecasted by the 2022 NFRMPO travel demand model was compared to known daily traffic volumes as compiled by CDOT in 2023 and shown in **Figure 6**. The daily traffic volumes from the 2022 unexpanded NFRMPO travel demand model are shown in **Figure 7**. A map showing the difference in daily volumes is shown in **Figure 8**, and Table 1 includes all of the values reflected in this comparison analysis.

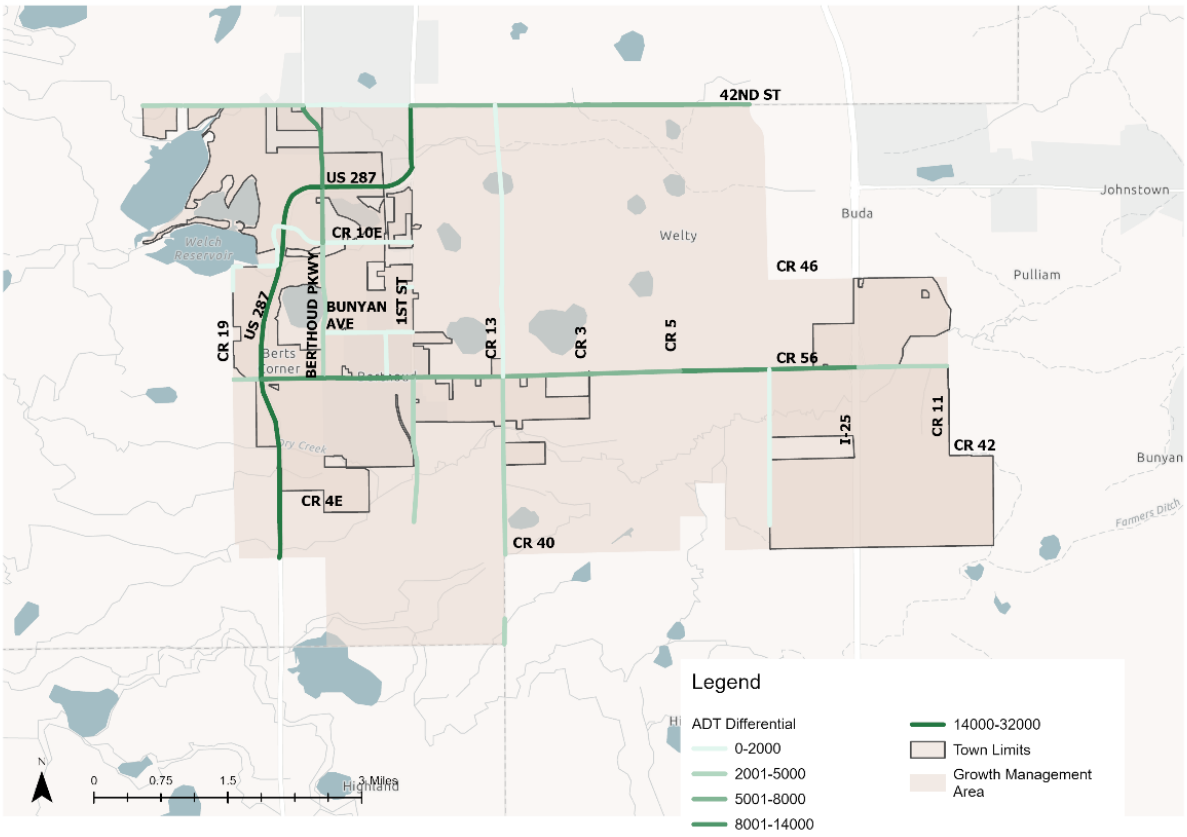


Figure 6: 2023 Daily Traffic (CDOT)

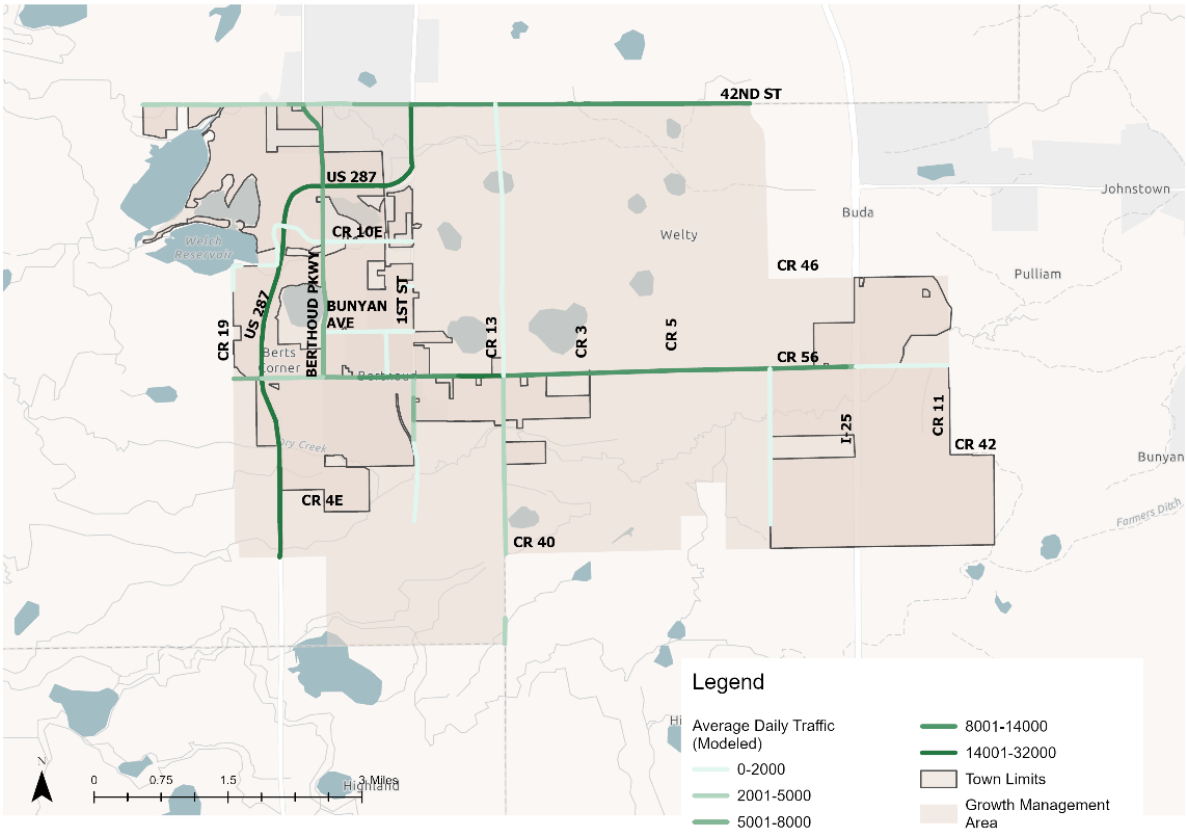


Figure 7: 2022 Modeled Traffic Volumes

In the map shown in Figure 8, a red line or negative number indicates that the 2023 observed traffic count is higher than the 2022 model volumes, and a green line or positive number indicates that the 2023 observed daily traffic count is lower. Out of 37 miles of roads studied, 19 miles of road have a difference of less than 2,000 ADT and 18 miles of roads have a more significant discrepancy.

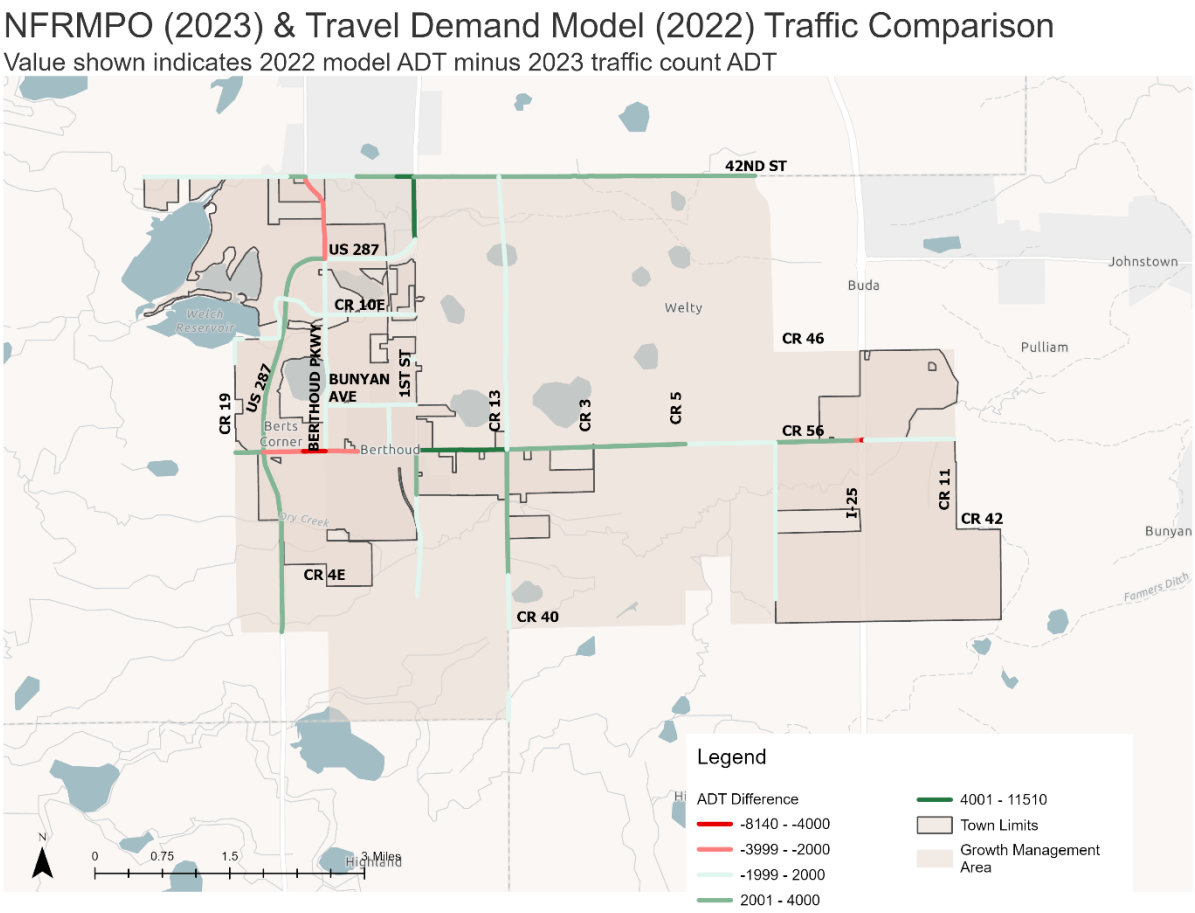


Figure 8: Daily Traffic Volume Comparison

Figure 9 shows the same differential comparison by percentage. Typically, it is acceptable to have a higher percentage difference on lower volume roads than higher volume roads. The average % difference of the various volumes of observed daily traffic counts are as follows:

- 0–5,000 vehicles per day, 42 locations had an average % difference of 24%
- 5,001–10,000 vehicles per day, 26 locations had an average % difference of 20%
- 10,000–25,000 vehicles per day, 17 locations had an average % difference of 9%

To determine the overall variance between observed daily traffic and modeled daily traffic in Berthoud, the coefficient of determination, R2, was calculated which can be interpreted as the variance between the two values. The observed traffic volumes and modeled traffic volumes are not dependent upon each other, but this calculation assesses the linear relationship between the two values. The calculated R2 for observed and modeled daily traffic volumes in Berthoud is 0.86 which means the two values are well correlated with each other. To visualize this, the values were plotted on a scatterplot, shown in Figure 10, to show the amount of error in the modeled volumes versus observed volumes.

A detailed listing of the observed AADT, modeled daily volume, differences, and percent differences are shown in Table 1.

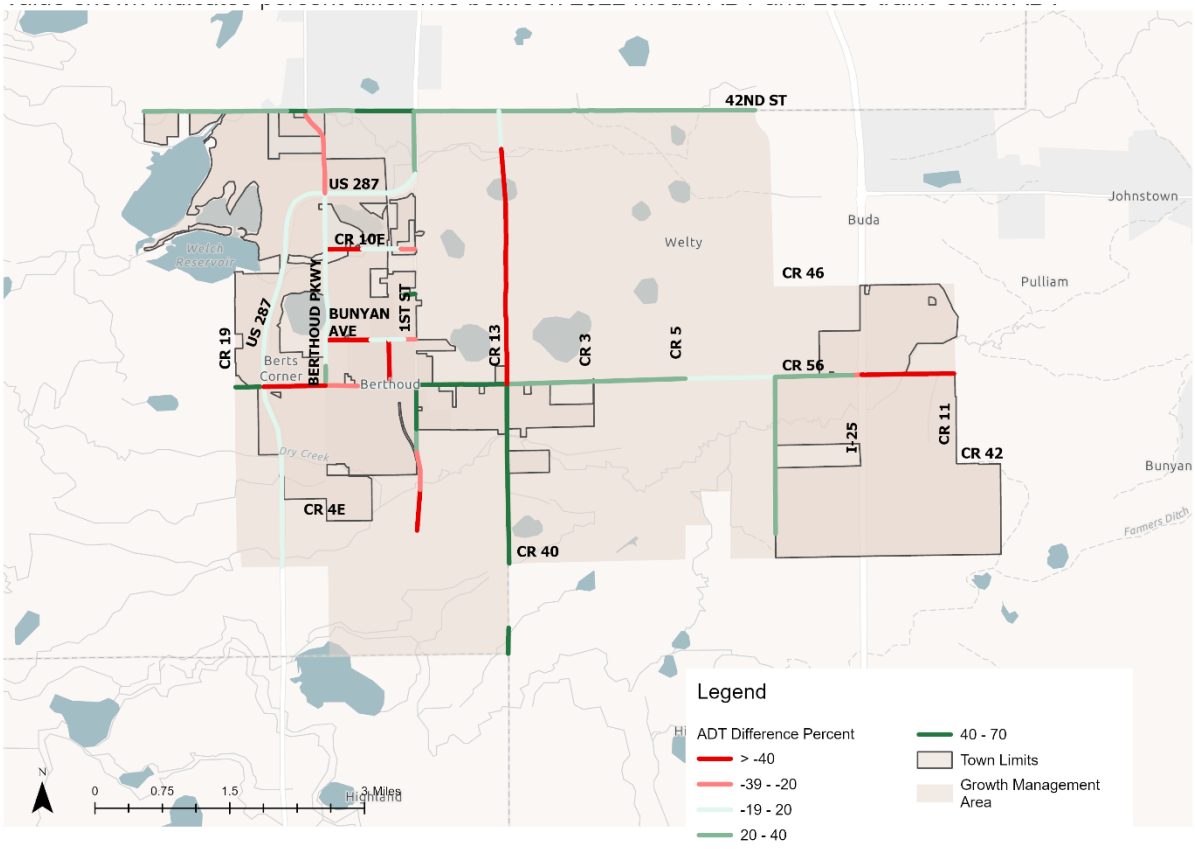


Figure 9: Observed versus model daily traffic % difference

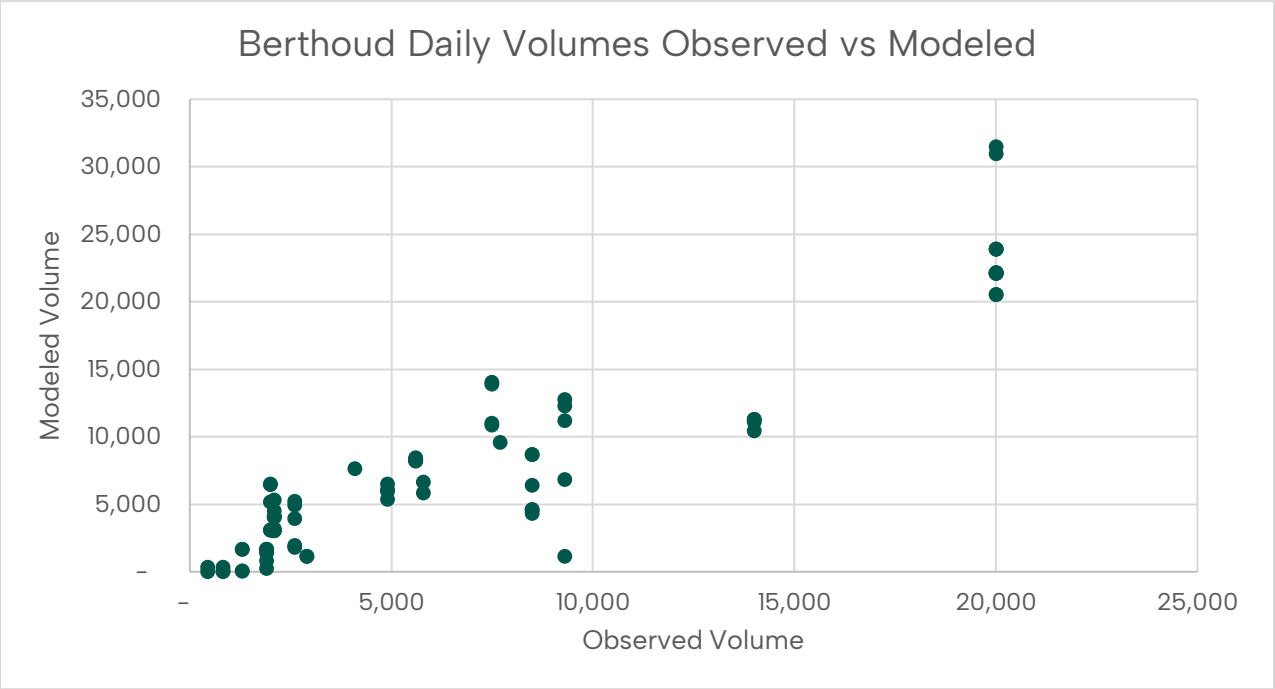


Figure 10: Berthoud Daily Volumes Observed vs Modeled

Table 1: Comparison of Observed and Modeled Daily Volumes

County / Local Road Name	Length (Miles)	Observed 2023 AADT (CDOT)	Observed AADT Range	NFRMPO Model (2022) Daily Volume	Modeled – Observed	% Difference
County Rd 1 / County Line Rd	0.7	2,100	0–5,000	4,520	2,420	115%
County Rd 1 / County Line Rd	0.7	2,100	0–5,000	4,160	2,060	98%
County Rd 1 / County Line Rd	0.5	2,100	0–5,000	4,050	1,950	93%
County Rd 1 / County Line Rd	0.4	450	0–5,000	380	(70)	-16%
County Rd 1 / County Line Rd	1	820	0–5,000	100	(720)	-88%
County Rd 1 / County Line Rd	0.1	820	0–5,000	340	(480)	-59%
County Rd 1 / County Line Rd	0.6	450	0–5,000	10	(440)	-98%
County Rd 1 / County Line Rd	0.6	2,100	0–5,000	4,060	1,960	93%
County Rd 1 / County Line Rd	0.9	820	0–5,000	10	(810)	-99%
County Rd 10E	0.4	1,900	0–5,000	820	(1,080)	-57%
County Rd 10E	0.4	1,900	0–5,000	1,690	(210)	-11%
County Rd 10E	0.2	1,900	0–5,000	1,570	(330)	-17%
County Rd 14 / 42nd St	0.2	2,000	0–5,000	6,460	4,460	223%
County Rd 14 / 42nd St	0.4	5,600	5,001–10,000	8,360	2,760	49%
County Rd 14 / 42nd St	0.4	2,000	0–5,000	3,100	1,100	55%
County Rd 14 /42nd St	0.2	5,600	5,001–10,000	8,450	2,850	51%
County Rd 14 / 42nd St	0.1	2,000	0–5,000	3,100	1,100	55%
County Rd 14 / 42nd St	0.2	2,100	0–5,000	5,350	3,250	155%
County Rd 14 / 42nd St	0.5	2,100	0–5,000	3,070	970	46%
County Rd 14 / 42nd St	0.5	2,100	0–5,000	3,070	970	46%
County Rd 14 / 42nd St	0.4	5,600	5,001–10,000	8,310	2,710	48%
County Rd 14 / 42nd St	0.5	2,100	0–5,000	3,200	1,100	52%
County Rd 14 / 42nd St	0.3	2,100	0–5,000	3,130	1,030	49%
County Rd 14 / 42nd St	0.5	2,000	0–5,000	5,180	3,180	159%
County Rd 14 / 42nd St	0	2,000	0–5,000	6,520	4,520	226%
County Rd 15 / 4th St	0.2	1,300	0–5,000	70	(1,230)	-95%
County Rd 15 / 4th St	0.3	1,300	0–5,000	70	(1,230)	-95%
County Rd 15 / 1st St	0.2	2,600	0–5,000	4,950	2,350	90%
County Rd 15 / 1st St	0.5	2,600	0–5,000	1,840	(760)	-29%
County Rd 15 / 1st St	0.3	2,600	0–5,000	3,950	1,350	52%
County Rd 15 / 1st St	0.3	2,600	0–5,000	5,250	2,650	102%
County Rd 15 / 1st St	0.4	2,600	0–5,000	1,990	(610)	-23%

County / Local Road Name	Length (Miles)	Observed 2023 AADT (CDOT)	Observed AADT Range	NFRMPO Model (2022) Daily Volume	Modeled – Observed	% Difference
County Rd 17 / Taft Ave	0.4	14,000	10,001–25,000	10,460	(3,540)	-25%
County Rd 17 / Taft Ave	0.3	4,900	0–5,000	5,990	1,090	22%
County Rd 17 / Taft Ave	0.3	4,900	0–5,000	6,100	1,200	24%
County Rd 17 / Taft Ave	0.2	4,900	0–5,000	6,520	1,620	33%
County Rd 17 / Taft Ave	0.3	14,000	10,001–25,000	11,110	(2,890)	-21%
County Rd 17 / Taft Ave	0.8	4,900	0–5,000	5,380	480	10%
County Rd 17 / Taft Ave	0.3	5,800	5,001–10,000	6,650	850	15%
County Rd 17 / Taft Ave	0.1	14,000	10,001–25,000	11,290	(2,710)	-19%
County Rd 17 / Taft Ave	0.1	14,000	10,001–25,000	11,310	(2,690)	-19%
County Rd 17 / Taft Ave	0.3	5,800	5,001–10,000	5,840	40	1%
County Rd 8E / Bunyan Ave	0.1	1,900	0–5,000	1,400	(500)	-26%
County Rd 8E / Bunyan Ave	0.5	1,900	0–5,000	260	(1,640)	-86%
County Rd 8E / Bunyan Ave	0.2	1,900	0–5,000	1,690	(210)	-11%
County Rd 8E / Bunyan Ave	0.2	1,900	0–5,000	1,700	(200)	-11%
SH-56	0.4	9,300	5,001–10,000	12,760	3,460	37%
SH-56	0.5	7,500	5,001–10,000	13,910	6,410	85%
SH-56	1	7,500	5,001–10,000	10,870	3,370	45%
SH-56	0.5	9,300	5,001–10,000	12,300	3,000	32%
SH-56	0.5	7,500	5,001–10,000	14,070	6,570	88%
SH-56	1	9,300	5,001–10,000	11,200	1,900	20%
SH-56	1	7,500	5,001–10,000	11,050	3,550	47%
SH-56	0.3	8,500	5,001–10,000	4,630	(3,870)	-46%
SH-56	0.3	4,100	0–5,000	7,680	3,580	87%
SH-56	0.3	8,500	5,001–10,000	4,320	(4,180)	-49%
SH-56	0.2	8,500	5,001–10,000	4,630	(3,870)	-46%
SH-56 / Mountain Ave	0.4	8,500	5,001–10,000	8,710	210	2%
SH-56 / Mountain Ave	0.2	8,500	5,001–10,000	8,700	200	2%
SH-56 / Mountain Ave	0.4	8,500	5,001–10,000	6,420	(2,080)	-24%
SH-60 / 42nd St	1	5,600	5,001–10,000	8,230	2,630	47%
SH-60 / 42nd St	0.9	5,600	5,001–10,000	8,310	2,710	48%
SH-60 / 42nd St	0.4	5,600	5,001–10,000	8,310	2,710	48%
SH-60 / 42nd St	0.2	5,600	5,001–10,000	8,240	2,640	47%
SH-60 / 42nd St	0.5	5,600	5,001–10,000	8,270	2,670	48%

County / Local Road Name	Length (Miles)	Observed 2023 AADT (CDOT)	Observed AADT Range	NFRMPO Model (2022) Daily Volume	Modeled – Observed	% Difference
SH-56 / Mountain Ave	0.1	7,700	5,001–10,000	9,600	1,900	25%
US-287 / Lincoln Ave	0.6	20,000	10,001–25,000	31,510	11,510	58%
US-287	0.4	20,000	10,001–25,000	22,190	2,190	11%
US-287	0.3	20,000	10,001–25,000	22,190	2,190	11%
US-287	0.1	20,000	10,001–25,000	22,190	2,190	11%
US-287	0.1	20,000	10,001–25,000	30,970	10,970	55%
US-287	0.2	20,000	10,001–25,000	22,130	2,130	11%
US-287	0.2	20,000	10,001–25,000	22,190	2,190	11%
US-287 / US-287 Bypass	0.4	20,000	10,001–25,000	20,570	570	3%
US-287 / US-287 Bypass	0.7	20,000	10,001–25,000	20,570	570	3%
US-287 / US-287 Bypass	1	20,000	10,001–25,000	23,940	3,940	20%
US-287 / US-287 Bypass	0.8	20,000	10,001–25,000	23,940	3,940	20%
US-287 / US-287 Bypass	0.8	20,000	10,001–25,000	22,130	2,130	11%
US-287 / US-287 Bypass	0.7	20,000	10,001–25,000	23,940	3,940	20%
WCR-44	0.1	9,300	5,001–10,000	6,850	(2,450)	-26%
WCR-44	0	9,300	5,001–10,000	1,160	(8,140)	-88%
WCR-44	0.1	2,900	0–5,000	1,160	(1,740)	-60%
WCR-44	0.9	2,900	0–5,000	1,160	(1,740)	-60%
WCR-7	0.5	1,300	0–5,000	1,710	410	32%
WCR-7	1.2	1,300	0–5,000	1,710	410	32%

Future Model Scenario Assessment

Based on the 2022 TDM validating well with existing daily traffic counts, an exercise was conducted to determine how aligned future land use assumptions are in the TDM versus what is planned in the Berthoud Future Lane Use Map (FLUM) published in Berthoud's 2021 Comprehensive Plan. The FLUM was compared with the 2040 NFRMPO travel demand model results, and the annual traffic growth forecasted by the model horizon years was calculated. Determining if land use forecast assumptions in the model are consistent with Berthoud's planned growth help to assess whether the future traffic volumes forecast by the model reflect expected development patterns. The methodology of comparing the data was as follows:

1. Pulled the demographic data assumptions (population, households, jobs) from the TAZ for 2026 and 2040 into an Excel spreadsheet.
2. Added the FLUM Shapefile into ArcGIS and visualized based on future land use.
3. Overlaid the TAZ layer with the FLUM layer.
4. Joined the demographic data assumptions to the TAZ layer and labeled the TAZs by 2040 population, household, and job counts.
5. Compared the demographic, household, and job projections to future land uses by TAZ.
6. Spot-checked using Google Maps aerial imagery to further support whether assumptions seem accurate.
7. Once verified, compared the traffic volume data Shapefile to the FLUM.

Figure 10 shows the labeled TAZs overlaying the FLUM from the Berthoud 2021 Comprehensive Plan. Refer to **Table 1** for both 2019 and 2040 demographic growth from the TDM by TAZ.

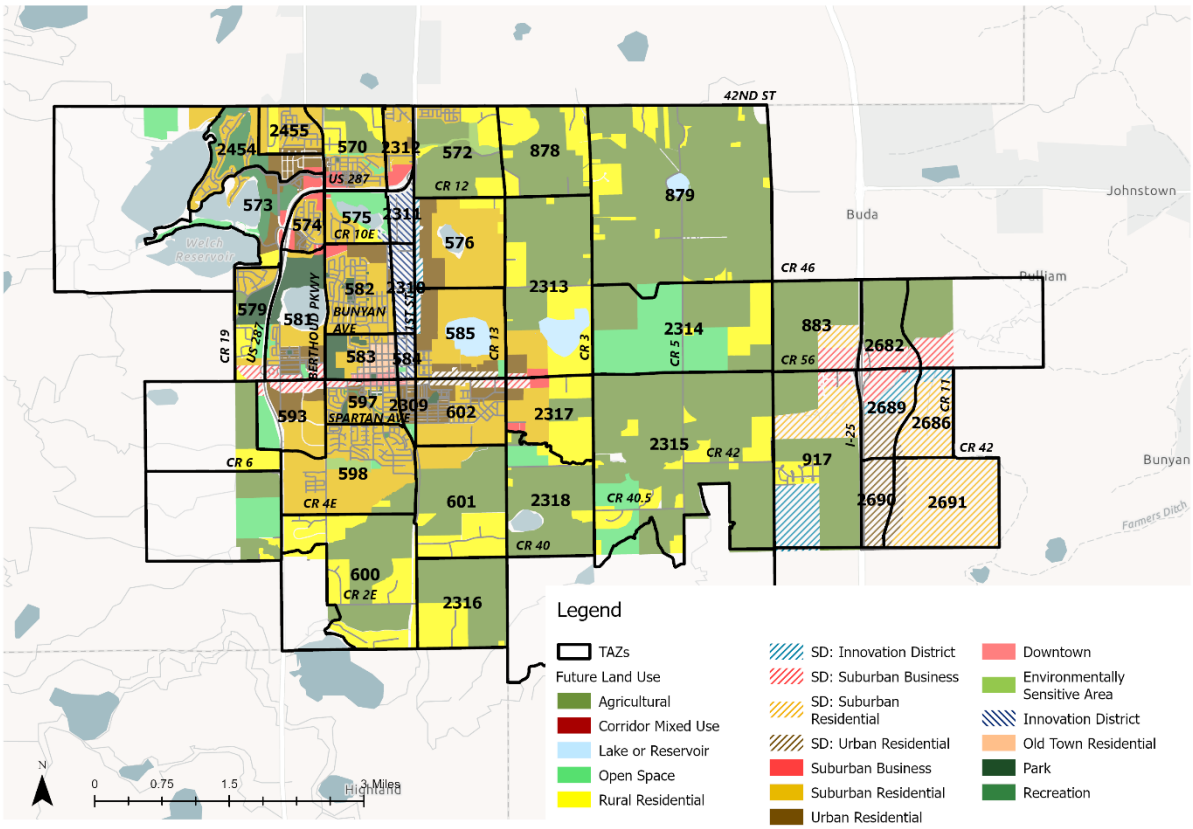


Figure 11: Future Land Use (2021 Comprehensive Plan) and TAZs (NFRMPO TDM)

Table 2. Demographic Changes by TAZ from NFRMPO TDM

TAZ	2019 Population	2040 Population	Population Percent Growth	2019 Households	2040 Households	Household Percent Growth	2019 Jobs	2040 Jobs	Jobs Percent Growth
570	1,278	2,720	113%	473	1,084	129%	25	32	28%
572	94	529	463%	30	202	573%	4	4	0%
573	16	147	819%	6	64	967%	0	229	-
574	515	1,274	147%	207	537	159%	3	46	1,433%
575	294	309	5%	104	116	12%	5	38	660%
576	37	1,234	3,235%	15	508	3,287%	28	58	107%
579	74	404	446%	23	155	574%	0	19	-
581	860	1,259	46%	328	501	53%	41	123	200%
582	690	2,373	244%	298	999	235%	67	115	72%
583	1,155	1167	1%	458	472	3%	308	296	-4%
584	17	19	12%	5	6	20%	281	256	-9%
585	405	849	110%	149	331	122%	15	58	287%
593	10	2,995	29,850%	3	1,137	37,800%	848	41	-95%
597	1,364	1,758	29%	537	687	28%	558	560	0%
598	1,525	4,829	217%	554	1,851	234%	13	17	31%
600	153	179	17%	64	74	16%	8	19	138%
601	104	149	43%	42	58	38%	3	3	0%
602	705	1650	134%	269	658	145%	68	144	112%
878	113	142	26%	43	50	16%	19	18	-5%
879	137	156	14%	47	54	15%	7	17	143%
883	26	176	577%	9	68	656%	1	42	4,100%
917	178	225	26%	61	85	39%	3	69	2,200%
2309	620	641	3%	258	270	5%	73	121	66%
2310	24	162	575%	13	71	446%	259	289	12%
2311	8	84	950%	4	36	800%	39	258	562%
2312	417	462	11%	164	181	10%	25	45	80%
2313	140	641	358%	52	247	375%	62	0	-100%
2314	48	59	23%	19	22	16%	0	0	0%
2315	151	219	45%	57	81	42%	7	22	214%

TAZ	2019 Population	2040 Population	Population Percent Growth	2019 Households	2040 Households	Household Percent Growth	2019 Jobs	2040 Jobs	Jobs Percent Growth
2316	69	101	46%	31	40	29%	5	8	60%
2317	64	316	394%	25	135	440%	15	50	233%
2318	27	43	59%	11	14	27%	10	10	0%
2454	86	2,345	2,627%	33	958	2,803%	0	7	-
2455	1,080	1,566	45%	404	624	54%	28	36	29%
2549	0	328	0%	0	128	0%	8	39	388%
2682	0	16	0%	0	7	0%	0	0	0%
2686	0	553	0%	0	227	0%	0	32	-
2689	0	9	0%	0	3	0%	0	12	-
2690	0	2	0%	0	1	0%	0	0	0%
2691	0	1,030	0%	0	384	0%	0	11	-
Total	**12484**	**33120**	**165%**	**4796**	**13126**	**174%**	**2836**	**3144**	**11%**

The 2021 Comprehensive Plan describes the future land use character districts in general terms of density and intensity, character development, and scale, without providing concrete numbers. Therefore, the team relied on population, household, and job projections within each TAZ, as well as cross-TAZ estimate comparisons, to determine if the projections appropriately matched the future land uses. For example, higher population counts are expected in Suburban Residential Areas than in Rural Residential areas, and even higher population counts are expected in Urban Residential areas; and few to no population counts are expected in areas that are exclusively characterized as Agricultural or Business.

It was determined that the vast majority of demographic estimates match the FLUM. However, a few projections do not match future land uses in their respective TAZs. The largest discrepancies are in the eastern portion of Berthoud where heavier development is up-and-coming:

- TAZ 2682 – zoned for Suburban Business in the south portion, but projecting 0 jobs by 2040.
- TAZ 2689 – zoned for Suburban Business, Innovation District, Urban Residential, and Suburban Residential, but only projecting 9 residents, 3 households, and 12 jobs by 2040.
- TAZ 2690 – zoned for Urban Residential, but only projecting 2 residents, 1 household, and 0 jobs by 2040.

Additionally, there are 0 jobs included in TAZ 2313 in 2040, and this is not consistent with the zoned Suburban Business in the southwest corner. Job estimates for TAZ 2317 and TAZ 593, which also have areas of Suburban Business zoning, may also be undercounted.

Overall, the demographic assumptions included in the TDM are consistent with future land use in Berthoud. However, underreporting in the TAZs in the eastern portion of Berthoud should be

considered when reviewing the future traffic analysis outputs. Updating these projections in the model will more accurately reflect forecasted travel demand.

Figure 11 shows forecatsed average daily traffic volumes in 2040 based on the NFRMPO travel demand model. The volumes reported by the model are reflective of the changes in the demographic inputs used by the model. Additionally, Table 3 shows the forecasted average daily traffic volumes on Berthoud's road over the next 25 years.

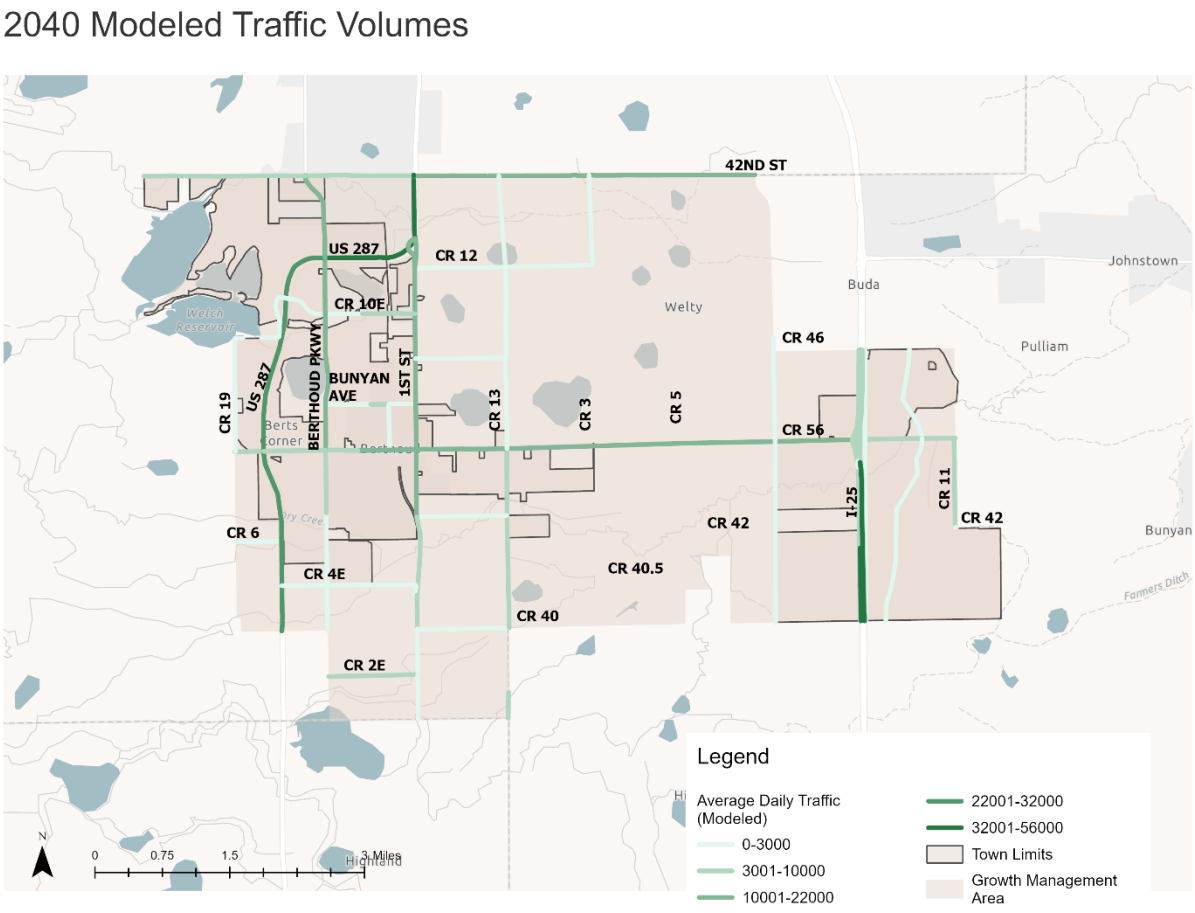


Figure 12: 2040 Travel Demand Model Traffic Volumes

Table 3: 2022-2050 Forecasted Traffic Volumes

County / Local Road Name	Length (Miles)	NFRMPO Model Daily Volumes					Forecasted Annual Traffic Growth 2023-2050
		2022	2026	2030	2040	2050	
1st St	0.3	8,510	9,900	10,680	12,330	13,520	1.7%
1st St	0.5	9,630	11,140	11,790	14,270	15,700	1.8%
1st St	0.4	11,460	13,610	14,560	19,960	23,220	2.6%
1st St	0.5	10,090	11,370	12,070	15,940	18,640	2.2%
1st St	0.1	11,650	13,920	14,580	21,440	24,730	2.7%
1st St	0.2	5,680	6,880	7,240	10,630	12,360	2.8%
1st St	0.2	5,960	7,040	7,320	10,810	12,370	2.6%
1st St	0.3	8,120	9,720	10,660	12,200	13,440	1.8%
County Rd 1 / County Line Rd	0.7	4,520	5,110	5,250	6,350	7,980	2.1%
County Rd 1 / County Line Rd	0.7	4,160	4,500	4,610	5,350	6,460	1.6%
County Rd 1 / County Line Rd	0.5	4,050	4,470	4,700	5,210	6,060	1.4%
County Rd 1 / County Line Rd	0.4	380	390	350	540	820	2.8%
County Rd 1 / County Line Rd	1	100	40	100	1,150	2,870	12.7%
County Rd 1 / County Line Rd	0.1	340	60	80	930	1,170	4.5%
County Rd 1 / County Line Rd	0.6	10	40	70	120	410	14.2%
County Rd 1 / County Line Rd	0.6	4,060	4,390	4,530	5,170	6,170	1.5%
County Rd 1 / County Line Rd	0.9	10	40	70	120	410	14.2%
County Rd 10	0.5	240	10	30	1,460	2,830	9.2%
County Rd 10	0.5	240	10	30	1,460	2,830	9.2%
County Rd 10E	0.4	820	1,260	1,300	2,680	4,030	5.9%
County Rd 10E	0.4	1,690	2,770	2,900	5,100	6,910	5.2%
County Rd 10E	0.2	1,570	2,580	2,600	4,930	6,690	5.3%
County Rd 11	0.9	30	40	20	110	290	8.4%
County Rd 13	0.7	240	330	380	2,130	2,470	8.7%
County Rd 14 / 42nd St	0.2	6,460	7,460	6,980	9,760	11,240	2.0%
County Rd 14 / 42nd St	0.4	8,360	10,700	11,380	14,060	18,290	2.8%
County Rd 14 / 42nd St	0.4	3,100	3,250	3,250	3,200	3,760	0.7%

County / Local Road Name	Length (Miles)	NFRMPO Model Daily Volumes					Forecasted Annual Traffic Growth 2023-2050
		2022	2026	2030	2040	2050	
County Rd 14 /42nd St	0.2	8,450	10,820	11,660	15,800	19,200	3.0%
County Rd 14 / 42nd St	0.1	3,100	3,250	3,250	3,330	3,910	0.8%
County Rd 14 / 42nd St	0.2	5,350	6,340	6,960	8,310	10,500	2.4%
County Rd 14 / 42nd St	0.5	3,070	3,310	3,190	4,350	4,580	1.4%
County Rd 14 / 42nd St	0.5	3,070	3,310	3,190	3,660	4,190	1.1%
County Rd 14 / 42nd St	0.4	8,310	10,660	11,340	14,200	18,300	2.9%
County Rd 14 / 42nd St	0.5	3,200	3,930	4,210	5,720	7,710	3.2%
County Rd 14 / 42nd St	0.3	3,130	3,380	3,250	4,560	5,300	1.9%
County Rd 14 / 42nd St	0.5	5,180	6,090	6,520	7,700	8,530	1.8%
County Rd 14 / 42nd St	0	6,520	7,550	7,010	9,650	10,770	1.8%
County Rd 15 / 4th St	0.2	70	180	240	380	600	8.0%
County Rd 15 / 4th St	0.3	70	180	240	380	600	8.0%
County Rd 15 / 1st St	0.2	4,950	7,690	8,920	12,400	14,410	3.9%
County Rd 15 / 1st St	0.5	1,510	1,770	2,160	2,920	3,720	3.3%
County Rd 15 / 1st St	0.5	1,840	2,210	2,650	3,440	4,360	3.1%
County Rd 15 / 1st St	0.4	1,840	2,210	2,650	3,440	4,360	3.1%
County Rd 15 / 1st St	0.3	3,950	6,350	7,380	10,580	12,240	4.1%
County Rd 15 / Garfield Ave	0.5	1,620	1,800	490	2,430	2,780	1.9%
County Rd 15 / 1st St	0.3	5,250	8,160	9,540	13,080	15,320	3.9%
County Rd 15 / 1st St	0.4	1,990	2,350	2,790	3,620	4,700	3.1%
County Rd 15	0.5	1,240	1,400	1,530	2,480	3,260	3.5%
County Rd 17 / Taft Ave	0.4	11,300	12,770	15,220	16,950	20,490	2.1%
County Rd 17 / Taft Ave	0.4	10,460	11,310	13,080	14,660	16,790	1.7%
County Rd 17 / Taft Ave	0.3	5,990	6,740	7,980	12,300	14,380	3.2%
County Rd 17 / Taft Ave	0.3	6,100	6,840	8,230	12,590	14,670	3.2%
County Rd 17 / Taft Ave	0.3	5,250	1,750	2,650	8,530	11,430	2.8%
County Rd 17 / Taft Ave	0.4	1,170	910	1,060	2,400	3,460	3.9%

County / Local Road Name	Length (Miles)	NFRMPO Model Daily Volumes					Forecasted Annual Traffic Growth 2023-2050
		2022	2026	2030	2040	2050	
County Rd 17 / Taft Ave	0.2	6,520	6,660	8,260	12,590	14,860	3.0%
County Rd 17 / Taft Ave	0.3	11,110	12,080	13,560	15,400	17,550	1.6%
County Rd 17 / Taft Ave	0.4	2,320	2,460	3,560	4,860	5,980	3.4%
County Rd 17 / Taft Ave	0.4	1,170	910	1,060	2,400	3,460	3.9%
County Rd 17 / Taft Ave	0.8	5,380	5,870	7,040	10,980	12,860	3.2%
County Rd 17 / Taft Ave	0.3	6,650	8,210	9,760	14,540	17,380	3.5%
County Rd 17 / Taft Ave	0.5	1,160	890	1,040	2,360	3,410	3.9%
County Rd 17 / Taft Ave	0.1	11,290	13,570	15,940	19,090	20,320	2.1%
County Rd 17 / Taft Ave	0.1	11,310	13,940	16,310	19,650	21,060	2.2%
County Rd 17 / Taft Ave	0.3	5,840	6,750	8,090	12,330	14,960	3.4%
County Rd 19	0.5	210	500	640	1,140	1,360	6.9%
County Rd 2E	0.5	2,730	3,140	3,630	5,370	6,890	3.4%
County Rd 2E	0.5	2,740	3,160	3,640	5,420	6,970	3.4%
County Rd 4	0.4	190	290	310	610	1,100	6.5%
County Rd 4	0.6	190	290	310	610	1,090	6.4%
County Rd 4E	0.5	10	20	20	50	90	8.2%
County Rd 6	0.8	60	70	60	90	630	8.8%
County Rd 6c	0.4	600	940	1,000	1,470	2,240	4.8%
County Rd 8E / Bunyan Ave	0.1	1,400	1,860	1,720	2,550	2,990	2.7%
County Rd 8E / Bunyan Ave	0.5	260	290	280	590	790	4.0%
County Rd 8E / Bunyan Ave	0.2	1,690	2,210	2,220	3,110	3,680	2.8%
County Rd 8E / Bunyan Ave	0.2	1,700	2,150	2,160	2,940	3,550	2.7%
I-25	1	41,110	45,740	47,080	51,650	56,200	1.1%
I-25	0.4	38,410	42,620	43,930	47,670	51,420	1.0%
I-25	0.4	38,000	42,160	43,200	47,660	50,960	1.1%
I-25	0.1	41,740	46,800	47,590	55,680	60,660	1.3%
I-25	0.8	42,380	47,640	48,680	55,620	61,200	1.3%

County / Local Road Name	Length (Miles)	NFRMPO Model Daily Volumes					Forecasted Annual Traffic Growth 2023-2050
		2022	2026	2030	2040	2050	
I-25	0.8	41,740	46,800	47,590	55,680	60,660	1.3%
I-25	0.1	42,380	47,640	48,680	55,620	61,200	1.3%
I-25	1.5	41,110	45,740	47,080	51,650	56,200	1.1%
I-25	2.5	40,760	45,290	46,460	51,580	55,360	1.1%
I-25 Express Lane	1.3			1,260	4,700	7,280	-
I-25 Express Lane	2.4			1,610	5,050	7,700	-
I-25 Express Lane	1.3			1,660	4,710	7,690	-
I-25 Express Lane	2.4			2,020	5,160	8,160	-
I-25 Express Lane / Connector 40	0.1			350	350	420	-
I-25 Express Lane / Connector 40	0.1			360	450	470	-
I-25 Ramp	0.3	2,710	3,130	3,500	4,340	5,200	2.4%
I-25 Ramp	0.2	3,970	5,030	4,760	7,960	9,780	3.3%
I-25 Ramp	0.2	3,730	4,650	4,390	8,020	9,700	3.5%
I-25 Ramp	0.3	2,760	3,130	3,620	4,370	4,860	2.0%
SH-56	0.4	12,760	14,500	14,270	21,840	26,550	2.7%
SH-56	0.5	13,910	15,490	16,500	20,240	21,760	1.6%
SH-56	1	10,870	12,640	13,480	18,680	22,660	2.7%
SH-56	0.5	12,300	13,960	13,620	20,600	24,950	2.6%
SH-56	0.5	14,070	15,690	16,630	20,750	22,560	1.7%
SH-56	1	11,200	12,820	13,590	19,490	23,540	2.7%
SH-56	1	11,050	12,650	13,460	19,240	23,130	2.7%
SH-56	0.3	4,630	4,980	5,390	5,780	6,570	1.3%
SH-56	0.5	7,470	7,090	7,120	8,370	9,210	0.8%
SH-56	0.3	7,680	7,550	7,730	9,430	10,450	1.1%
SH-56	0.3	4,320	4,560	5,090	5,240	5,890	1.1%
SH-56	0.2	4,630	4,980	5,390	5,780	6,570	1.3%
SH-56 / Mountain Ave	0.4	8,710	8,750	9,830	10,640	12,760	1.4%

County / Local Road Name	Length (Miles)	NFRMPO Model Daily Volumes					Forecasted Annual Traffic Growth 2023-2050
		2022	2026	2030	2040	2050	
SH-56 / Mountain Ave	0.2	8,700	8,810	9,890	10,810	12,890	1.4%
SH-56 / Mountain Ave	0.4	6,420	6,800	7,590	9,260	10,610	1.8%
SH-60 / 42nd St	1	8,230	10,590	11,440	15,370	18,380	2.9%
SH-60 / 42nd St	0.9	8,310	10,690	11,520	15,460	18,530	2.9%
SH-60 / 42nd St	0.4	8,310	10,660	11,480	15,520	18,660	2.9%
SH-60 / 42nd St	0.2	8,240	10,590	11,440	15,450	18,480	2.9%
SH-60 / 42nd St	0.5	8,270	10,610	11,460	15,470	18,600	2.9%
SH-56 / Mountain Ave	0.1	9,600	9,940	10,580	11,910	14,100	1.4%
US-287 / Lincoln Ave	0.6	31,510	36,970	39,130	52,900	59,160	2.3%
US-287 / Lincoln Ave	0.3	29,150	33,610	35,960	47,250	53,040	2.2%
US-287	0.4	22,190	25,100	26,340	29,800	32,500	1.4%
US-287	0.3	22,190	25,120	26,360	29,840	32,550	1.4%
US-287	0.1	22,190	25,100	26,340	29,800	32,500	1.4%
US-287	0.1	30,970	36,480	38,500	52,810	59,410	2.4%
US-287	0.2	22,130	25,030	26,280	29,710	32,930	1.4%
US-287	0.2	22,190	25,120	26,360	29,840	32,550	1.4%
US-287 / US-287 Bypass	0.4	20,570	23,350	24,580	32,770	35,850	2.0%
US-287 / US-287 Bypass	0.7	20,570	23,350	24,580	32,770	35,850	2.0%
US-287 / US-287 Bypass	1	23,940	26,130	27,100	31,510	35,100	1.4%
US-287 / US-287 Bypass	0.8	23,940	26,130	27,100	31,510	35,100	1.4%
US-287 / US-287 Bypass	0.8	22,130	25,030	26,280	29,710	32,930	1.4%
US-287 / US-287 Bypass	0.7	23,940	26,130	27,100	31,510	35,100	1.4%
US-287 Ramp	0.1	5,680	6,880	7,240	10,630	12,360	2.8%
US-287 Ramp	0.1	5,680	6,880	7,240	10,630	12,360	2.8%
US-287 Ramp	0.2	5,960	7,040	7,320	10,810	12,370	2.6%
WCR-11	1	310	1,290	1,620	5,060	5,690	11.0%
WCR-3	1	50			380	600	9.3%

County / Local Road Name	Length (Miles)	NFRMPO Model Daily Volumes					Forecasted Annual Traffic Growth 2023-2050
		2022	2026	2030	2040	2050	
WCR-42	1	290	560	490	1,860	2,520	8.0%
WCR-44	0.1	6,850	8,550	8,920	15,560	18,970	3.7%
WCR-44	0	1,160	2,840	3,900	9,140	11,330	8.5%
WCR-44	0.1	1,160	2,840	3,900	9,140	11,330	8.5%
WCR-44	0.7	850	1,470	2,250	3,850	5,360	6.8%
WCR-44	0.9	1,160	2,760	3,870	8,900	11,040	8.4%
WCR-7	1.3	1,590	1,560	400	1,560	1,760	0.4%
WCR-7	1	70	120	70	290	550	7.6%
WCR-7	1	70	160	100	410	840	9.3%
WCR-7	0.5	1,710	1,670	470	1,710	2,100	0.7%
WCR-7	1.2	1,710	1,670	470	1,710	2,100	0.7%

Traffic Simulation Modeling

Another Town-wide modeling strategy that is being considered is building a Townwide Synchro model that can provide detailed intersection level assessments of existing traffic operations and impact of planned future development. To understand what level of modeling has been conducted in Berthoud as part of development applications, this exercise included an assessment of existing traffic counts and review of recent Traffic Impact Studies conducted as part of recent development applications.

Review of Existing Traffic Studies

The six Traffic Impact Studies (TIS) conducted between 2021 and 2024 in the Berthoud Growth Management Area are shown in **Table 2.** They were reviewed to better understand what traffic modeling has been conducted and what traffic volumes have been collected. Peak period Turning Movement Counts (TMCs) and Average Daily Traffic (ADT) were assembled from the six traffic impact studies. The locations of these counts are shown in Figure 5. Counts from 2020 were excluded due to variability during the Covid pandemic. No traffic counts have been documented thus far in 2025.

Table 4. Traffic Impact Studies Reviewed

Development Name	Year	Developer	Traffic Analyst	Daily Trip Generation
Turion	2021	Front Range Investment Holdings	LSC	90,615
Revere	2022	The Landhuis Company	Rollins	5,074
Ludlow Farm (Legacy Park)	2022	Ludlow Farms LLC	Rollins	18,836
Heron Lakes	2022	Heron Lakes Investments	Delich	19,134
River Trails	2024	River Trails LLC	Rollins	2,856
Farmstead	2024	Post Modern Development	Delich	18,938

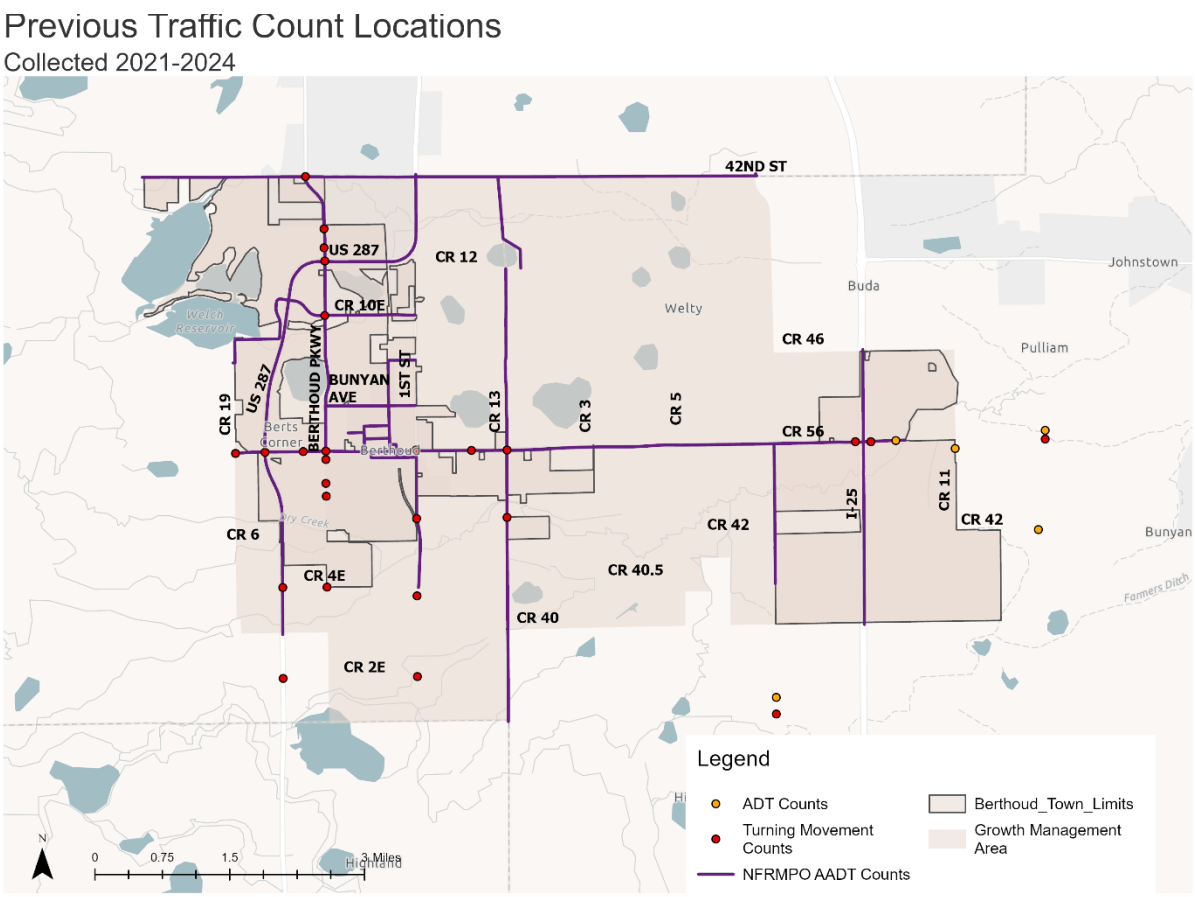


Figure 13: Traffic Count Locations from Previous Traffic Impact Studies

The traffic impact studies combine existing volume, background volume growth, and new trips generated by the development to evaluate the impact on roadway and intersection analysis. These assumptions could be integrated into a town-wide Synchro model as new developments are proposed and constructed. The traffic impact studies that have been completed recently in Berthoud have not included other planned developments in their forecasts consistently, so a Town-wide Synchro model could improve the accuracy of these assessments and could improve the comprehensive understanding of impacts throughout Berthoud.

Assessment of Traffic Count Data

To complete a Synchro model for the Town, existing count data could be integrated but new traffic counts would also be needed. Several relatively major roads do not have sufficient recent turning movement counts documented, including County Road 14, 1st Street north of Mountain Avenue, Weld County Road 7, and collectors in the downtown area. Additional turning movement counts during peak morning and evening hours would be needed at approximately ten key intersections. Further verification from Town leadership would be helpful in establishing key intersections, and the exact locations can be determined during the next phase of the Town wide modeling assessment.

Summary and Recommendations

Based on this assessment, the next step is to review with Town staff and determine which method is desired to advance a Town wide model. A useful step will be to revisit the goals of developing a model to make sure the modeling approach can answer the questions being asked. Two options are being considered as a strategy to advance a Town-wide model:

Option A: Develop a town-wide Travel Demand Model

- Within this option, the Town could choose to update population and employment land use assumptions in the model to develop more refined existing and future scenarios that can more accurately forecast traffic on Berthoud's roads.
- In coordination with NFRMPO, specific scenarios could be developed that more accurately forecast traffic volumes on the roads in Berthoud
- This option will not produce detailed intersection statistics but would allow for an understanding of how traffic is forecast to grow within the Town.

Option B: Develop a town-wide Synchro network

- This option would provide an analysis of identified intersections within the Town of Berthoud. Through an exercise of integrating existing counts and collecting new ones, the full network could be setup in the Town.
- A Town Synchro network could be shared with developers to update as part of their development applications. They could update and integrate into their development applications.

Either option would provide valuable insight for the town. Both options would require regular maintenance and upkeep based on changing development patterns and changing roadway volumes. The models would require significant training for internal use.

After further coordination with Town staff, a direction will be selected. Fehr & Peers will create a scope amendment to advance the preferred option.

Appendix B. Divider Page

Turning Movement Counts – Ridgeview Data Collection

Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
Berthoud Pkwy and Grand Market Ave

File Name : 4 Berthoud Pkwy and Grand Market Ave AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 1

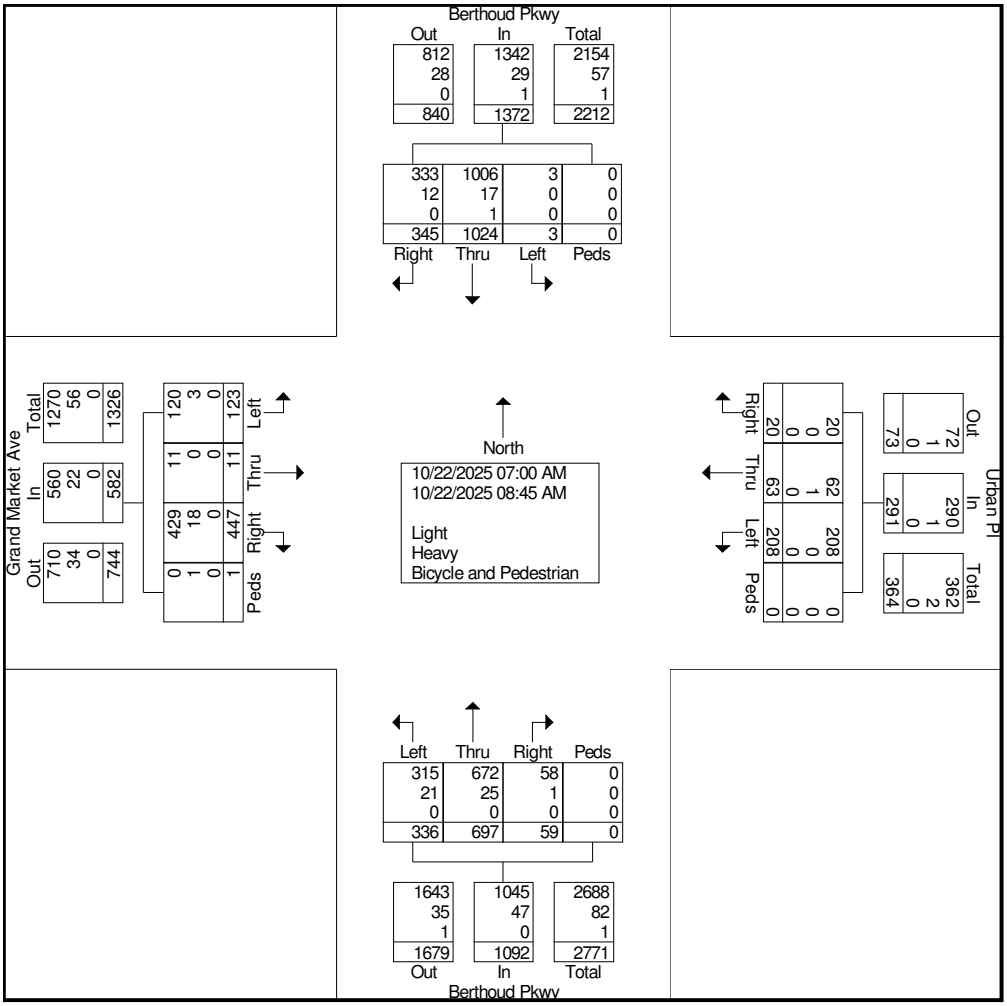
Groups Printed- Light - Heavy - Bicycle and Pedestrian

	Grand Market Ave Eastbound					Urban Pl Westbound					Berthoud Pkwy Northbound					Berthoud Pkwy Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	14	1	48	0	63	36	5	1	0	42	32	68	3	0	103	0	147	37	0	184	392
07:15 AM	13	3	44	0	60	24	11	2	0	37	40	92	8	0	140	0	151	42	0	193	430
07:30 AM	17	1	75	0	93	39	12	4	0	55	45	76	7	0	128	1	132	49	0	182	458
07:45 AM	14	0	55	1	70	31	9	2	0	42	50	71	4	0	125	0	126	56	0	182	419
Total	58	5	222	1	286	130	37	9	0	176	167	307	22	0	496	1	556	184	0	741	1699
08:00 AM	17	2	73	0	92	20	4	4	0	28	42	95	10	0	147	1	115	46	0	162	429
08:15 AM	7	1	50	0	58	25	8	1	0	34	40	93	9	0	142	0	121	37	0	158	392
08:30 AM	19	2	51	0	72	15	10	4	0	29	53	104	10	0	167	0	131	41	0	172	440
08:45 AM	22	1	51	0	74	18	4	2	0	24	34	98	8	0	140	1	101	37	0	139	377
Total	65	6	225	0	296	78	26	11	0	115	169	390	37	0	596	2	468	161	0	631	1638
Grand Total	123	11	447	1	582	208	63	20	0	291	336	697	59	0	1092	3	1024	345	0	1372	3337
Apprch %	21.1	1.9	76.8	0.2		71.5	21.6	6.9	0		30.8	63.8	5.4	0		0.2	74.6	25.1	0		
Total %	3.7	0.3	13.4	0	17.4	6.2	1.9	0.6	0	8.7	10.1	20.9	1.8	0	32.7	0.1	30.7	10.3	0	41.1	
Light	120	11	429	0	560	208	62	20	0	290	315	672	58	0	1045	3	1006	333	0	1342	3237
% Light	97.6	100	96	0	96.2	100	98.4	100	0	99.7	93.8	96.4	98.3	0	95.7	100	98.2	96.5	0	97.8	97
Heavy	3	0	18	1	22	0	1	0	0	1	21	25	1	0	47	0	17	12	0	29	99
% Heavy	2.4	0	4	100	3.8	0	1.6	0	0	0.3	6.2	3.6	1.7	0	4.3	0	1.7	3.5	0	2.1	3
Bicycle and Pedestrian	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
% Bicycle and Pedestrian	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0.1	0

Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
Berthoud Pkwy and Grand Market Ave

File Name : 4 Berthoud Pkwy and Grand Market Ave AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 2

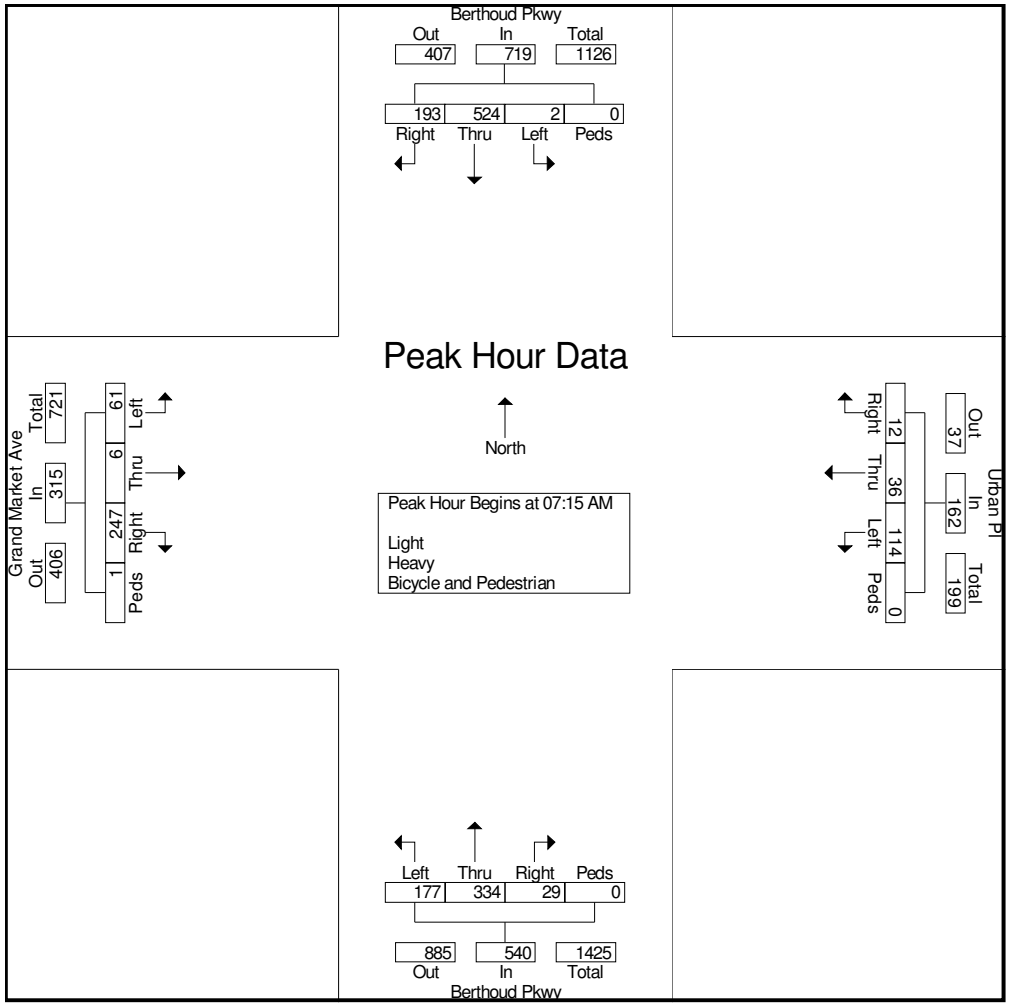


Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
Berthoud Pkwy and Grand Market Ave

File Name : 4 Berthoud Pkwy and Grand Market Ave AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 3

	Grand Market Ave Eastbound					Urban Pl Westbound					Berthoud Pkwy Northbound					Berthoud Pkwy Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	13	**3**	44	0	60	24	11	2	0	37	40	92	8	0	140	0	**151**	42	0	**193**	430
07:30 AM	**17**	1	**75**	0	**93**	**39**	**12**	**4**	0	**55**	45	76	7	0	128	**1**	132	49	0	182	**458**
07:45 AM	14	0	55	**1**	70	31	9	2	0	42	**50**	71	4	0	125	0	126	**56**	0	182	419
08:00 AM	17	2	73	0	92	20	4	4	0	28	42	**95**	**10**	0	**147**	1	115	46	0	162	429
Total Volume	61	6	247	1	315	114	36	12	0	162	177	334	29	0	540	2	524	193	0	719	1736
% App. Total	19.4	1.9	78.4	0.3		70.4	22.2	7.4	0		32.8	61.9	5.4	0		0.3	72.9	26.8	0		
PHF	.897	.500	.823	.250	.847	.731	.750	.750	.000	.736	.885	.879	.725	.000	.918	.500	.868	.862	.000	.931	.948



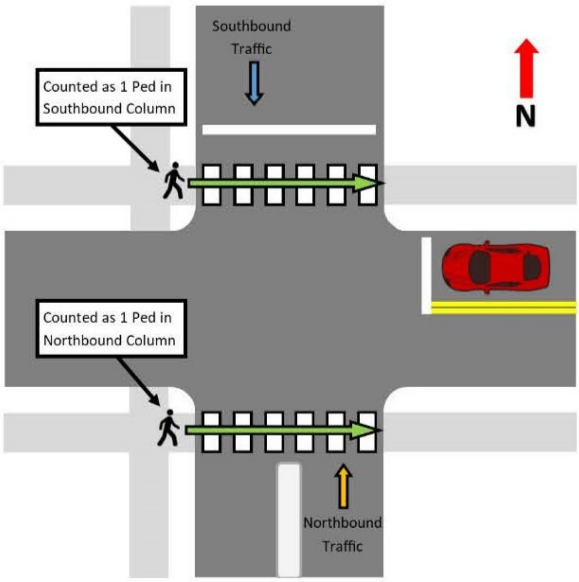
Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
Berthoud Pkwy and Grand Market Ave

File Name : 4 Berthoud Pkwy and Grand Market Ave AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 4

Image 1

The number of pedestrians shown on this report is representative of the crossing on the approaching leg, i.e. pedestrians crossing the north side of the intersection are counted as pedestrians in the southbound crosswalk, as that is the approaching leg that they are crossing (see figure below). Diagonal crossings are counted on the two legs that will get the pedestrian to the same end point. Diagonals can be counted separately if discussed prior to count.



Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
Berthoud Pkwy and Grand Market Ave

File Name : 4 Berthoud Pkwy and Grand Market Ave PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 1

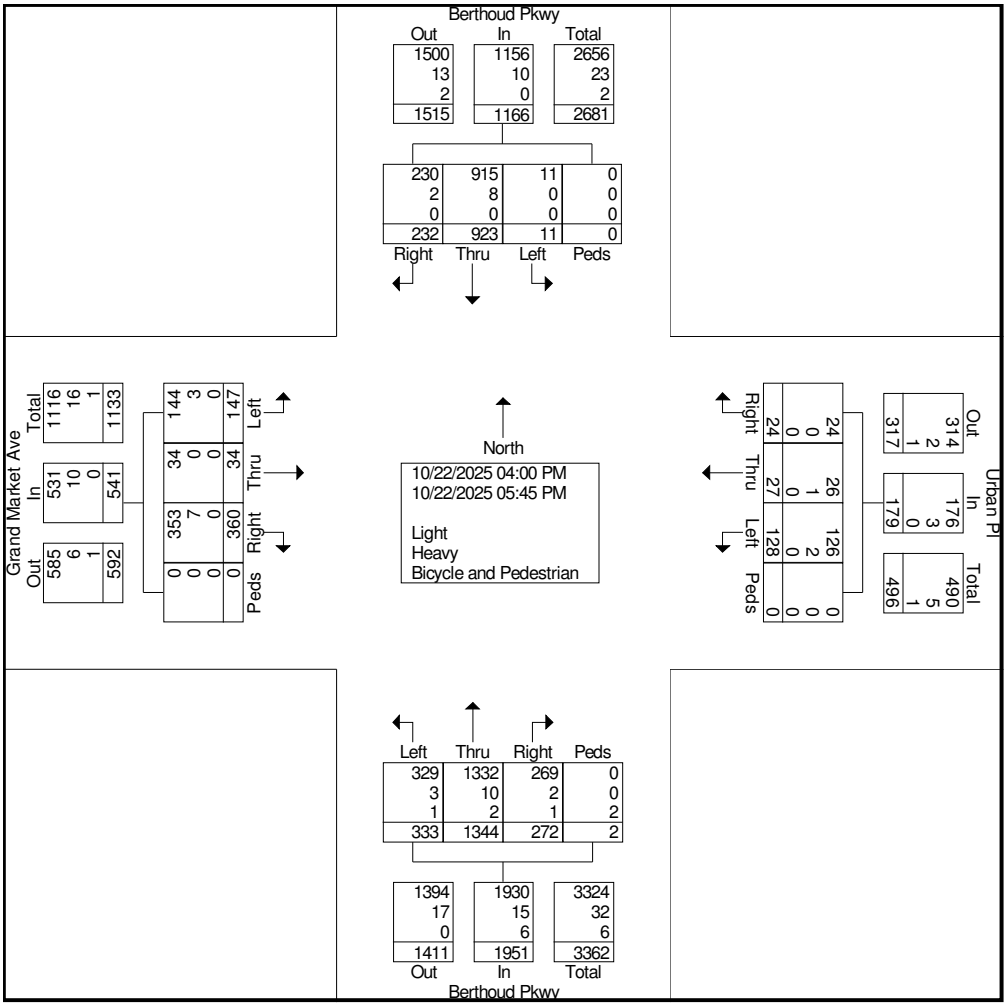
Groups Printed- Light - Heavy - Bicycle and Pedestrian

	Grand Market Ave Eastbound					Urban Pl Westbound					Berthoud Pkwy Northbound					Berthoud Pkwy Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
04:00 PM	15	3	46	0	64	14	4	3	0	21	34	171	22	0	227	1	103	27	0	131	443
04:15 PM	16	3	45	0	64	20	1	1	0	22	38	165	40	1	244	0	122	25	0	147	477
04:30 PM	22	3	38	0	63	18	4	4	0	26	43	169	35	0	247	1	115	30	0	146	482
04:45 PM	11	3	44	0	58	13	2	3	0	18	43	145	35	0	223	1	119	29	0	149	448
Total	64	12	173	0	249	65	11	11	0	87	158	650	132	1	941	3	459	111	0	573	1850
05:00 PM	21	4	49	0	74	14	2	3	0	19	42	177	40	0	259	2	152	28	0	182	534
05:15 PM	23	5	42	0	70	15	6	0	0	21	41	171	34	1	247	2	112	25	0	139	477
05:30 PM	19	10	43	0	72	13	6	4	0	23	54	196	41	0	291	4	97	38	0	139	525
05:45 PM	20	3	53	0	76	21	2	6	0	29	38	150	25	0	213	0	103	30	0	133	451
Total	83	22	187	0	292	63	16	13	0	92	175	694	140	1	1010	8	464	121	0	593	1987
Grand Total	147	34	360	0	541	128	27	24	0	179	333	1344	272	2	1951	11	923	232	0	1166	3837
Apprch %	27.2	6.3	66.5	0		71.5	15.1	13.4	0		17.1	68.9	13.9	0.1		0.9	79.2	19.9	0		
Total %	3.8	0.9	9.4	0	14.1	3.3	0.7	0.6	0	4.7	8.7	35	7.1	0.1	50.8	0.3	24.1	6	0	30.4	
Light	144	34	353	0	531	126	26	24	0	176	329	1332	269	0	1930	11	915	230	0	1156	3793
% Light	98	100	98.1	0	98.2	98.4	96.3	100	0	98.3	98.8	99.1	98.9	0	98.9	100	99.1	99.1	0	99.1	98.9
Heavy	3	0	7	0	10	2	1	0	0	3	3	10	2	0	15	0	8	2	0	10	38
% Heavy	2	0	1.9	0	1.8	1.6	3.7	0	0	1.7	0.9	0.7	0.7	0	0.8	0	0.9	0.9	0	0.9	1
Bicycle and Pedestrian	0	0	0	0	0	0	0	0	0	0	1	2	1	2	6	0	0	0	0	0	6
% Bicycle and Pedestrian	0	0	0	0	0	0	0	0	0	0	0.3	0.1	0.4	100	0.3	0	0	0	0	0	0.2

Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
Berthoud Pkwy and Grand Market Ave

File Name : 4 Berthoud Pkwy and Grand Market Ave PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 2

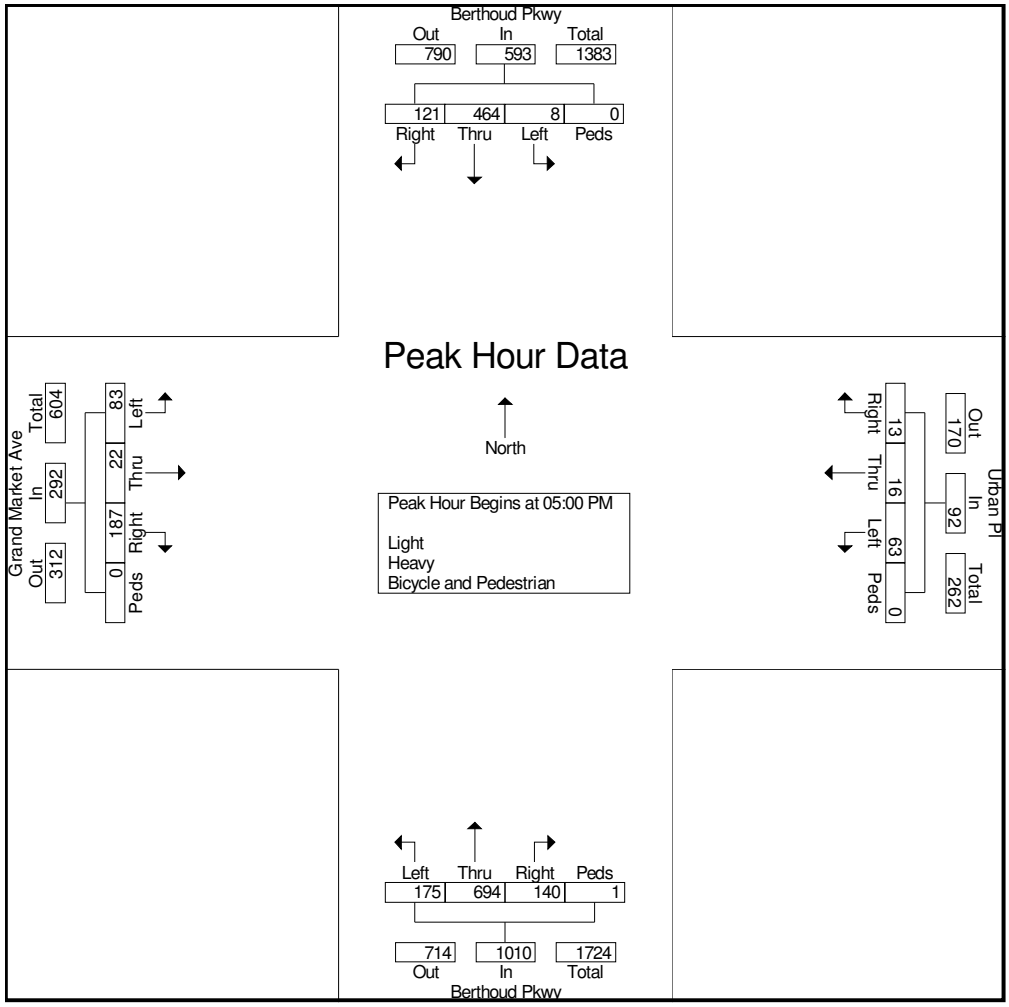


Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
Berthoud Pkwy and Grand Market Ave

File Name : 4 Berthoud Pkwy and Grand Market Ave PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 3

	Grand Market Ave Eastbound					Urban Pl Westbound					Berthoud Pkwy Northbound					Berthoud Pkwy Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	21	4	49	0	74	14	2	3	0	19	42	177	40	0	259	2	**152**	28	0	**182**	**534**
05:15 PM	**23**	5	42	0	70	15	**6**	0	0	21	41	171	34	**1**	247	2	112	25	0	139	477
05:30 PM	19	**10**	43	0	72	13	6	4	0	23	**54**	**196**	**41**	0	**291**	**4**	97	**38**	0	139	525
05:45 PM	20	3	**53**	0	**76**	**21**	2	**6**	0	**29**	38	150	25	0	213	0	103	30	0	133	451
Total Volume	83	22	187	0	292	63	16	13	0	92	175	694	140	1	1010	8	464	121	0	593	1987
% App. Total	28.4	7.5	64	0		68.5	17.4	14.1	0		17.3	68.7	13.9	0.1		1.3	78.2	20.4	0		
PHF	.902	.550	.882	.000	.961	.750	.667	.542	.000	.793	.810	.885	.854	.250	.868	.500	.763	.796	.000	.815	.930



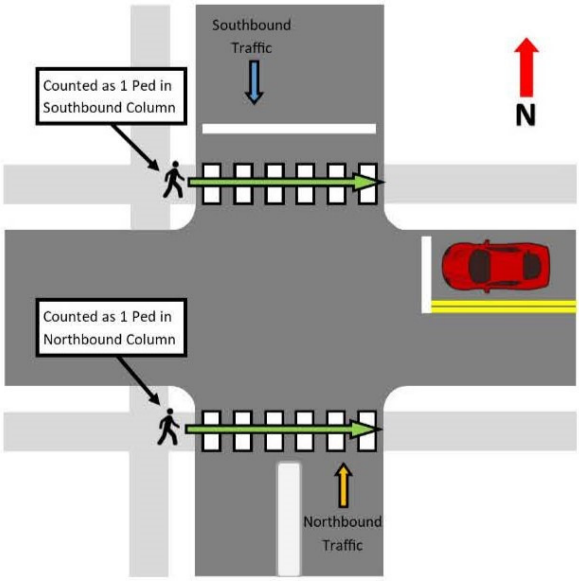
Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
Berthoud Pkwy and Grand Market Ave

File Name : 4 Berthoud Pkwy and Grand Market Ave PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 4

Image 1

The number of pedestrians shown on this report is representative of the crossing on the approaching leg, i.e. pedestrians crossing the north side of the intersection are counted as pedestrians in the southbound crosswalk, as that is the approaching leg that they are crossing (see figure below). Diagonal crossings are counted on the two legs that will get the pedestrian to the same end point. Diagonals can be counted separately if discussed prior to count.



Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
Berthoud Pkwy and CR 10E

File Name : 3 Berthoud Pkwy and CR 10E AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 1

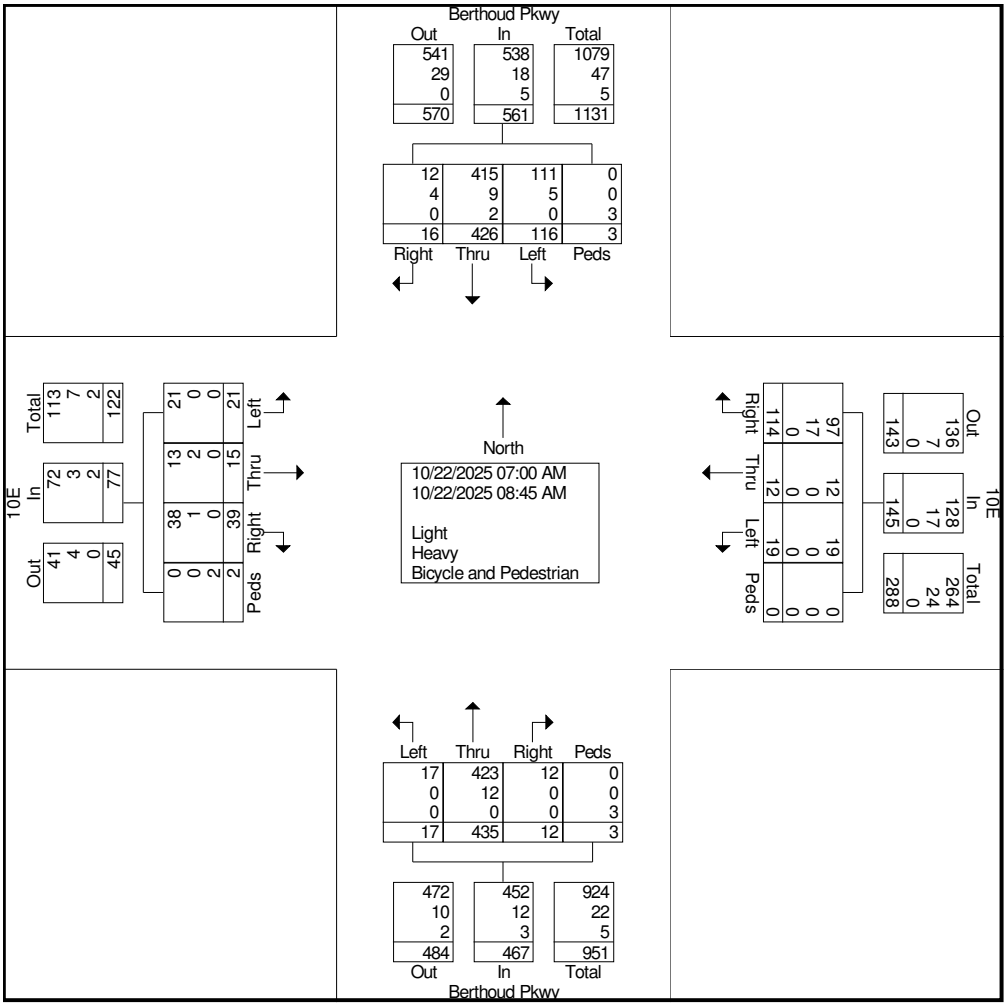
Groups Printed- Light - Heavy - Bicycle and Pedestrian

	10E Eastbound					10E Westbound					Berthoud Pkwy Northbound					Berthoud Pkwy Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	3	2	2	0	7	1	0	5	0	6	0	48	2	1	51	14	40	3	1	58	122
07:15 AM	4	2	7	0	13	3	0	18	0	21	1	55	0	0	56	15	49	0	0	64	154
07:30 AM	5	5	1	1	12	2	1	11	0	14	1	51	0	2	54	19	44	0	0	63	143
07:45 AM	3	0	4	0	7	1	1	11	0	13	2	52	2	0	56	16	65	4	0	85	161
Total	15	9	14	1	39	7	2	45	0	54	4	206	4	3	217	64	198	7	1	270	580
08:00 AM	4	2	0	0	6	3	3	14	0	20	2	65	3	0	70	14	60	4	0	78	174
08:15 AM	2	1	5	0	8	2	2	12	0	16	1	51	0	0	52	14	54	1	0	69	145
08:30 AM	0	1	10	1	12	4	1	15	0	20	3	62	1	0	66	9	60	3	0	72	170
08:45 AM	0	2	10	0	12	3	4	28	0	35	7	51	4	0	62	15	54	1	2	72	181
Total	6	6	25	1	38	12	10	69	0	91	13	229	8	0	250	52	228	9	2	291	670
Grand Total	21	15	39	2	77	19	12	114	0	145	17	435	12	3	467	116	426	16	3	561	1250
Apprch %	27.3	19.5	50.6	2.6		13.1	8.3	78.6	0		3.6	93.1	2.6	0.6		20.7	75.9	2.9	0.5		
Total %	1.7	1.2	3.1	0.2	6.2	1.5	1	9.1	0	11.6	1.4	34.8	1	0.2	37.4	9.3	34.1	1.3	0.2	44.9	
Light	21	13	38	0	72	19	12	97	0	128	17	423	12	0	452	111	415	12	0	538	1190
% Light	100	86.7	97.4	0	93.5	100	100	85.1	0	88.3	100	97.2	100	0	96.8	95.7	97.4	75	0	95.9	95.2
Heavy	0	2	1	0	3	0	0	17	0	17	0	12	0	0	12	5	9	4	0	18	50
% Heavy	0	13.3	2.6	0	3.9	0	0	14.9	0	11.7	0	2.8	0	0	2.6	4.3	2.1	25	0	3.2	4
Bicycle and Pedestrian	0	0	0	2	2	0	0	0	0	0	0	0	0	3	3	0	2	0	3	5	10
% Bicycle and Pedestrian	0	0	0	100	2.6	0	0	0	0	0	0	0	0	100	0.6	0	0.5	0	100	0.9	0.8

Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
Berthoud Pkwy and CR 10E

File Name : 3 Berthoud Pkwy and CR 10E AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 2

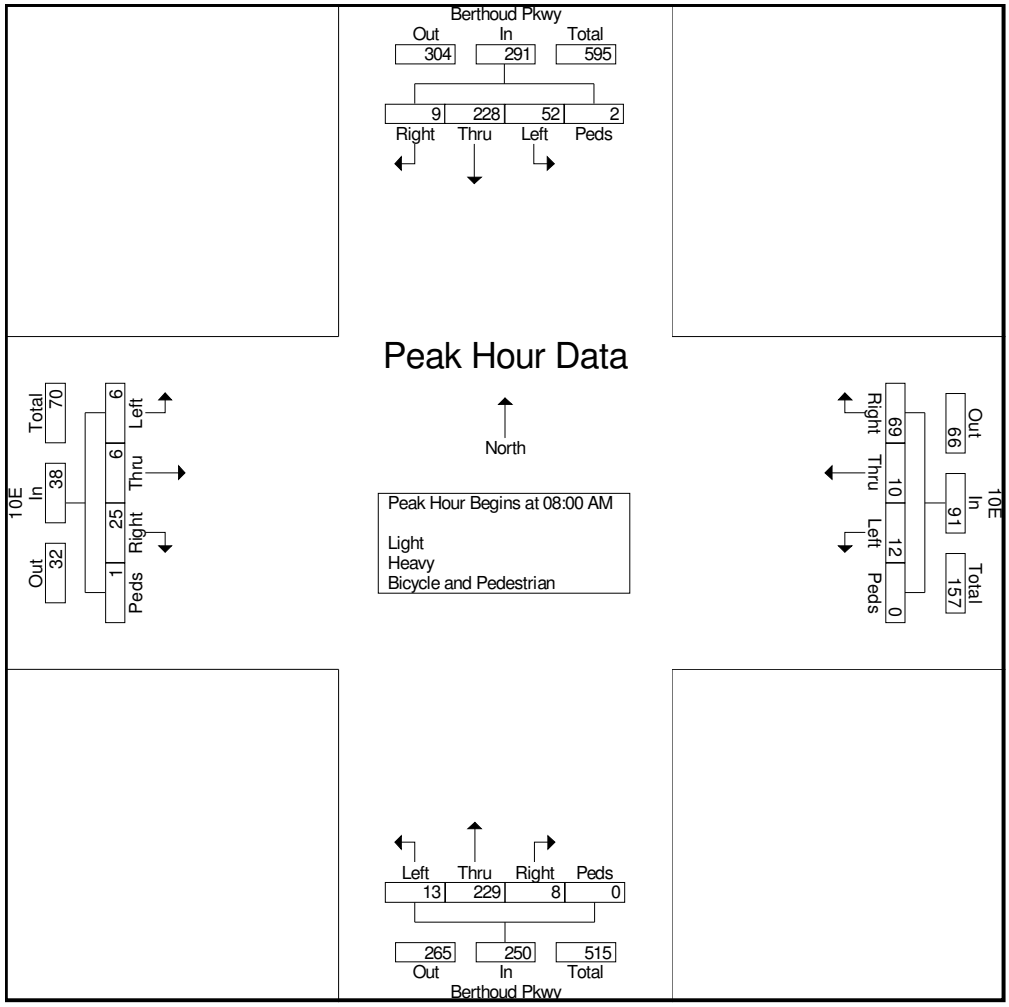


Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
Berthoud Pkwy and CR 10E

File Name : 3 Berthoud Pkwy and CR 10E AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 3

	10E Eastbound					10E Westbound					Berthoud Pkwy Northbound					Berthoud Pkwy Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	**4**	**2**	0	0	6	3	3	14	0	20	2	**65**	3	0	**70**	14	**60**	**4**	0	**78**	174
08:15 AM	2	1	5	0	8	2	2	12	0	16	1	51	0	0	52	14	54	1	0	69	145
08:30 AM	0	1	**10**	**1**	**12**	**4**	1	15	0	20	3	62	1	0	66	9	60	3	0	72	170
08:45 AM	0	2	10	0	12	3	**4**	**28**	0	**35**	**7**	51	**4**	0	62	**15**	54	1	**2**	72	**181**
Total Volume	6	6	25	1	38	12	10	69	0	91	13	229	8	0	250	52	228	9	2	291	670
% App. Total	15.8	15.8	65.8	2.6		13.2	11	75.8	0		5.2	91.6	3.2	0		17.9	78.4	3.1	0.7		
PHF	.375	.750	.625	.250	.792	.750	.625	.616	.000	.650	.464	.881	.500	.000	.893	.867	.950	.563	.250	.933	.925



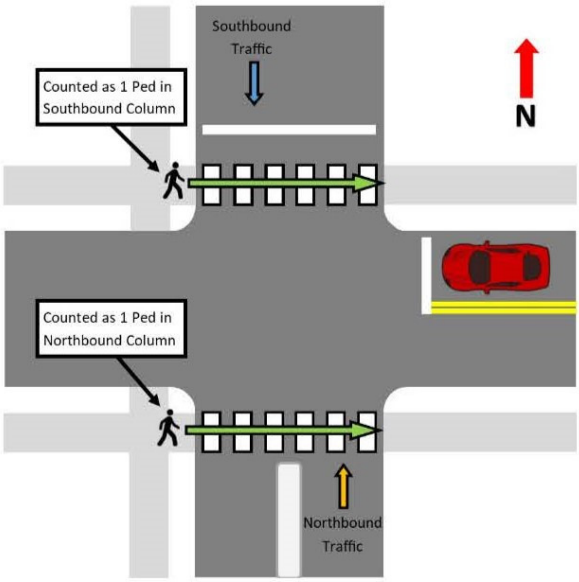
Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
Berthoud Pkwy and CR 10E

File Name : 3 Berthoud Pkwy and CR 10E AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 4

Image 1

The number of pedestrians shown on this report is representative of the crossing on the approaching leg, i.e. pedestrians crossing the north side of the intersection are counted as pedestrians in the southbound crosswalk, as that is the approaching leg that they are crossing (see figure below). Diagonal crossings are counted on the two legs that will get the pedestrian to the same end point. Diagonals can be counted separately if discussed prior to count.



Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
Berthoud Pkwy and CR 10E

File Name : 3 Berthoud Pkwy and CR 10E PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 1

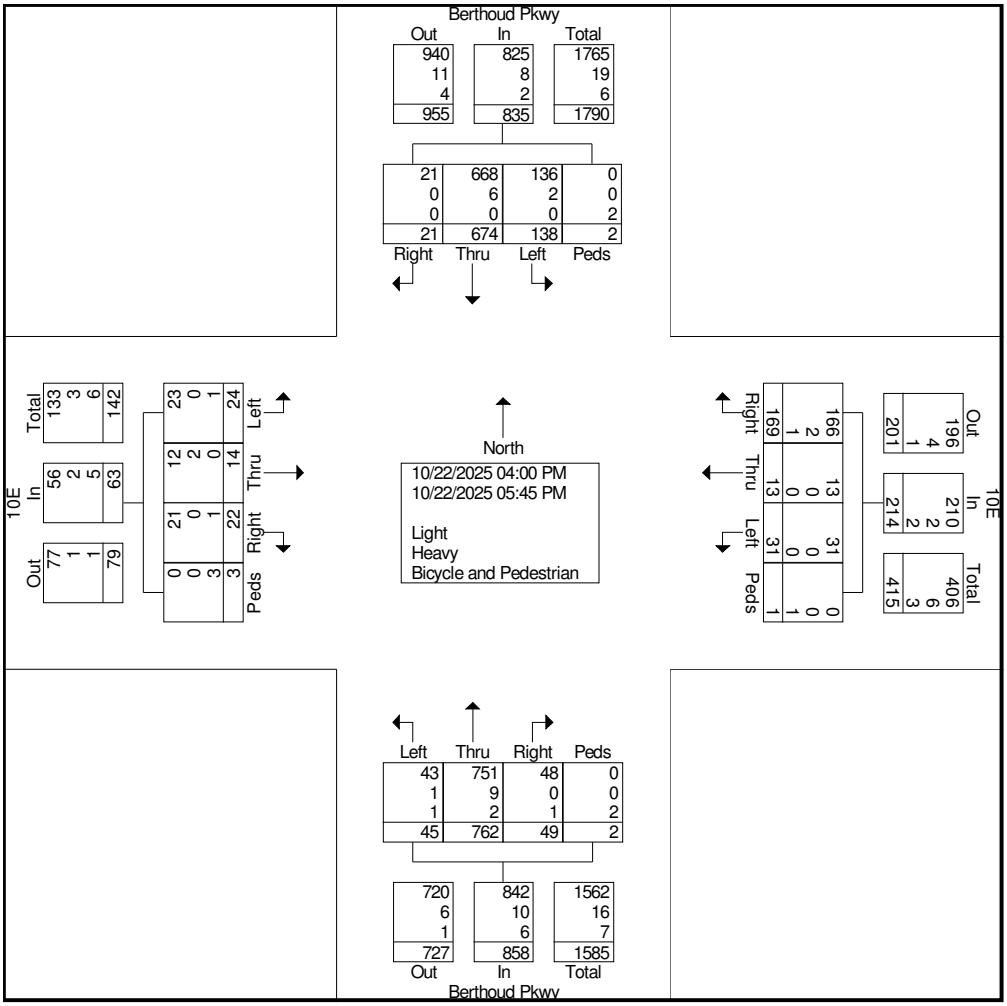
Groups Printed- Light - Heavy - Bicycle and Pedestrian

	10E Eastbound					10E Westbound					Berthoud Pkwy Northbound					Berthoud Pkwy Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
04:00 PM	1	3	4	0	8	3	4	20	1	28	8	109	5	0	122	16	70	3	0	89	247
04:15 PM	5	2	3	1	11	4	1	24	0	29	4	99	2	1	106	13	94	1	0	108	254
04:30 PM	1	0	3	1	5	5	2	23	0	30	5	91	6	1	103	21	69	5	0	95	233
04:45 PM	2	3	2	0	7	5	0	23	0	28	8	80	5	0	93	14	89	1	0	104	232
Total	9	8	12	2	31	17	7	90	1	115	25	379	18	2	424	64	322	10	0	396	966
05:00 PM	6	2	3	0	11	5	2	21	0	28	9	113	12	0	134	17	85	4	0	106	279
05:15 PM	3	2	2	1	8	2	2	19	0	23	4	99	8	0	111	24	89	5	1	119	261
05:30 PM	4	0	3	0	7	2	2	20	0	24	4	111	5	0	120	13	77	1	0	91	242
05:45 PM	2	2	2	0	6	5	0	19	0	24	3	60	6	0	69	20	101	1	1	123	222
Total	15	6	10	1	32	14	6	79	0	99	20	383	31	0	434	74	352	11	2	439	1004
Grand Total	24	14	22	3	63	31	13	169	1	214	45	762	49	2	858	138	674	21	2	835	1970
Apprch %	38.1	22.2	34.9	4.8		14.5	6.1	79	0.5		5.2	88.8	5.7	0.2		16.5	80.7	2.5	0.2		
Total %	1.2	0.7	1.1	0.2	3.2	1.6	0.7	8.6	0.1	10.9	2.3	38.7	2.5	0.1	43.6	7	34.2	1.1	0.1	42.4	
Light	23	12	21	0	56	31	13	166	0	210	43	751	48	0	842	136	668	21	0	825	1933
% Light	95.8	85.7	95.5	0	88.9	100	100	98.2	0	98.1	95.6	98.6	98	0	98.1	98.6	99.1	100	0	98.8	98.1
Heavy	0	2	0	0	2	0	0	2	0	2	1	9	0	0	10	2	6	0	0	8	22
% Heavy	0	14.3	0	0	3.2	0	0	1.2	0	0.9	2.2	1.2	0	0	1.2	1.4	0.9	0	0	1	1.1
Bicycle and Pedestrian	1	0	1	3	5	0	0	1	1	2	1	2	1	2	6	0	0	0	2	2	15
% Bicycle and Pedestrian	4.2	0	4.5	100	7.9	0	0	0.6	100	0.9	2.2	0.3	2	100	0.7	0	0	0	100	0.2	0.8

Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
Berthoud Pkwy and CR 10E

File Name : 3 Berthoud Pkwy and CR 10E PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 2

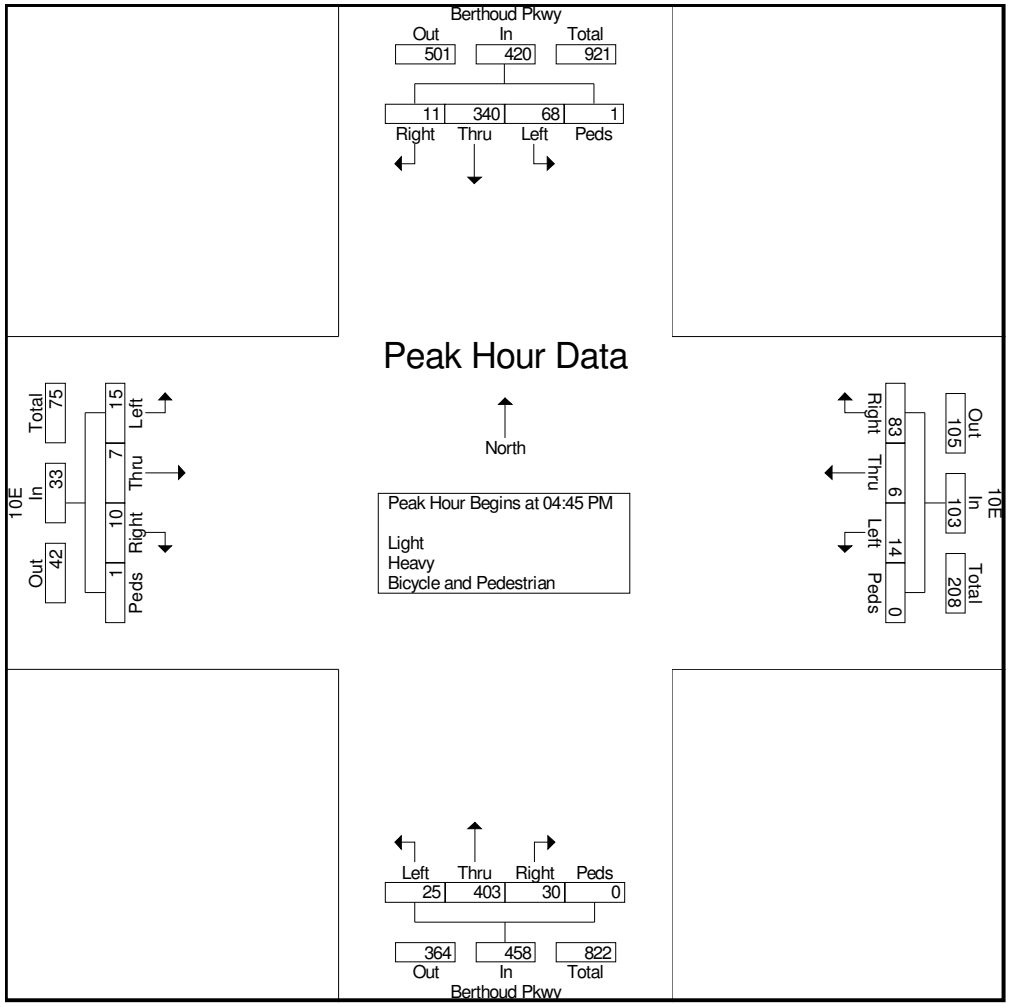


Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
Berthoud Pkwy and CR 10E

File Name : 3 Berthoud Pkwy and CR 10E PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 3

	10E Eastbound					10E Westbound					Berthoud Pkwy Northbound					Berthoud Pkwy Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	2	**3**	2	0	7	**5**	0	**23**	0	**28**	8	80	5	0	93	14	**89**	1	0	104	232
05:00 PM	**6**	2	**3**	0	**11**	5	**2**	21	0	28	**9**	**113**	**12**	0	**134**	17	85	4	0	106	**279**
05:15 PM	3	2	2	**1**	8	2	2	19	0	23	4	99	8	0	111	**24**	89	**5**	**1**	**119**	261
05:30 PM	4	0	3	0	7	2	2	20	0	24	4	111	5	0	120	13	77	1	0	91	242
Total Volume	15	7	10	1	33	14	6	83	0	103	25	403	30	0	458	68	340	11	1	420	1014
% App. Total	45.5	21.2	30.3	3		13.6	5.8	80.6	0		5.5	88	6.6	0		16.2	81	2.6	0.2		
PHF	.625	.583	.833	.250	.750	.700	.750	.902	.000	.920	.694	.892	.625	.000	.854	.708	.955	.550	.250	.882	.909



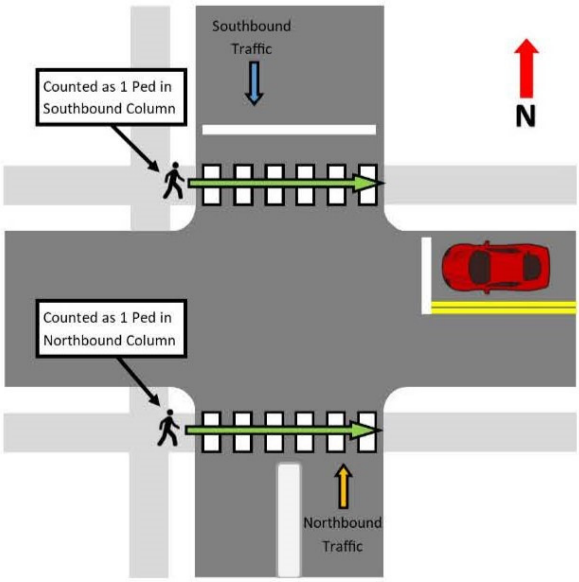
Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
Berthoud Pkwy and CR 10E

File Name : 3 Berthoud Pkwy and CR 10E PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 4

Image 1

The number of pedestrians shown on this report is representative of the crossing on the approaching leg, i.e. pedestrians crossing the north side of the intersection are counted as pedestrians in the southbound crosswalk, as that is the approaching leg that they are crossing (see figure below). Diagonal crossings are counted on the two legs that will get the pedestrian to the same end point. Diagonals can be counted separately if discussed prior to count.



Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
1st St and CR 10E

File Name : 6 1st St and CR 10E AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 1

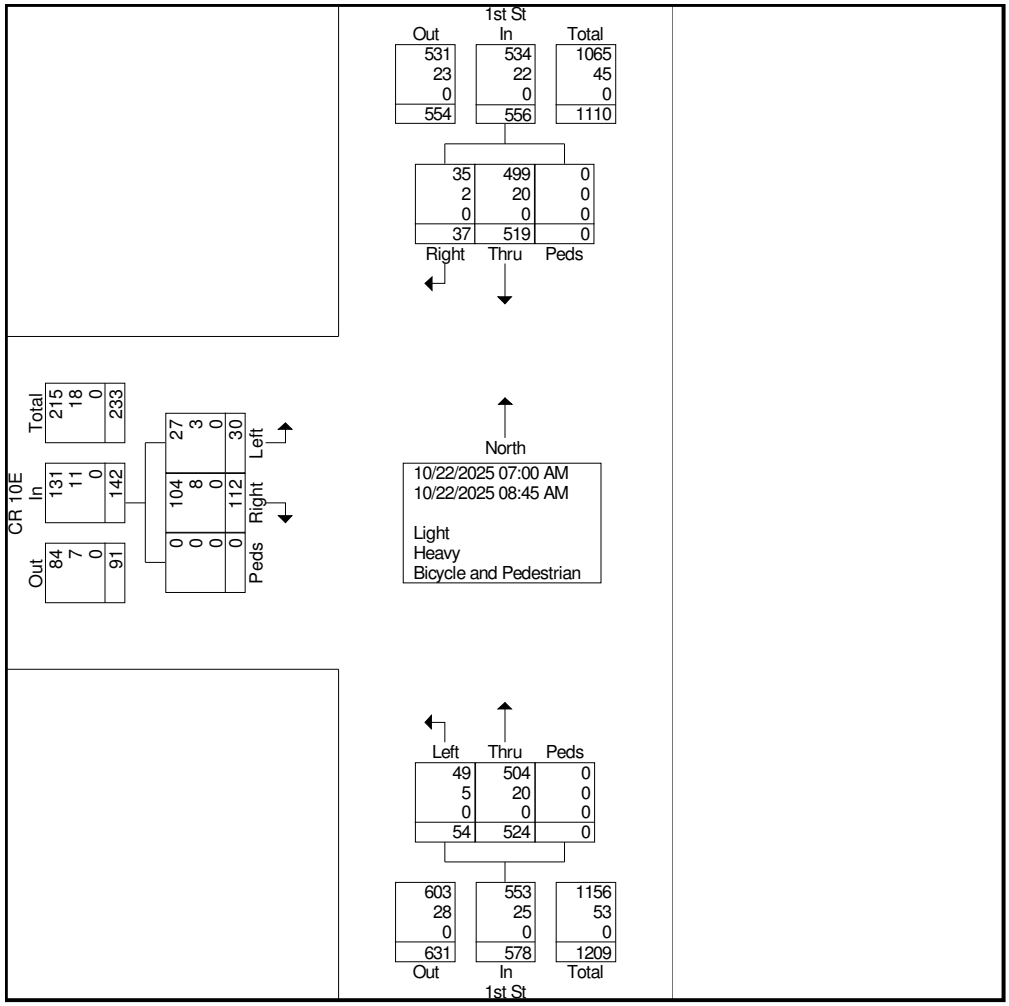
Groups Printed- Light - Heavy - Bicycle and Pedestrian

	CR 10E Eastbound				1st St Northbound				1st St Southbound				
Start Time	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	4	15	0	19	7	52	0	59	63	2	0	65	143
07:15 AM	3	15	0	18	8	56	0	64	81	6	0	87	169
07:30 AM	4	20	0	24	2	78	0	80	56	7	0	63	167
07:45 AM	4	9	0	13	3	69	0	72	82	4	0	86	171
Total	15	59	0	74	20	255	0	275	282	19	0	301	650
08:00 AM	3	13	0	16	6	53	0	59	62	5	0	67	142
08:15 AM	3	11	0	14	4	79	0	83	43	6	0	49	146
08:30 AM	4	11	0	15	10	55	0	65	63	4	0	67	147
08:45 AM	5	18	0	23	14	82	0	96	69	3	0	72	191
Total	15	53	0	68	34	269	0	303	237	18	0	255	626
Grand Total	30	112	0	142	54	524	0	578	519	37	0	556	1276
Apprch %	21.1	78.9	0		9.3	90.7	0		93.3	6.7	0		
Total %	2.4	8.8	0	11.1	4.2	41.1	0	45.3	40.7	2.9	0	43.6	
Light	27	104	0	131	49	504	0	553	499	35	0	534	1218
% Light	90	92.9	0	92.3	90.7	96.2	0	95.7	96.1	94.6	0	96	95.5
Heavy	3	8	0	11	5	20	0	25	20	2	0	22	58
% Heavy	10	7.1	0	7.7	9.3	3.8	0	4.3	3.9	5.4	0	4	4.5
Bicycle and Pedestrian	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycle and Pedestrian	0	0	0	0	0	0	0	0	0	0	0	0	0

Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
1st St and CR 10E

File Name : 6 1st St and CR 10E AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 2

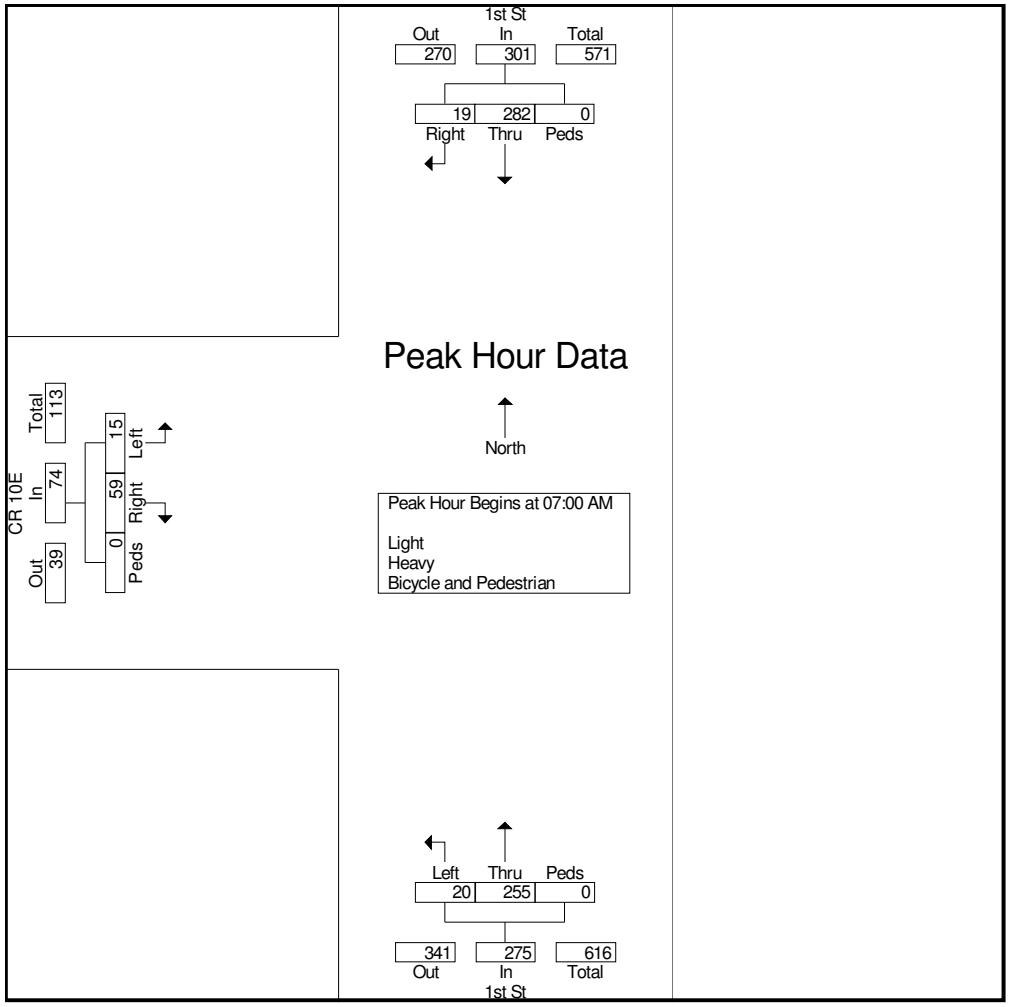


Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
1st St and CR 10E

File Name : 6 1st St and CR 10E AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 3

	CR 10E Eastbound				1st St Northbound				1st St Southbound				
Start Time	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:00 AM													
07:00 AM	**4**	15	0	19	7	52	0	59	63	2	0	65	143
07:15 AM	3	15	0	18	**8**	56	0	64	81	6	0	**87**	169
07:30 AM	4	**20**	0	**24**	2	**78**	0	**80**	56	**7**	0	63	167
07:45 AM	4	9	0	13	3	69	0	72	**82**	4	0	86	**171**
Total Volume	15	59	0	74	20	255	0	275	282	19	0	301	650
% App. Total	20.3	79.7	0		7.3	92.7	0		93.7	6.3	0		
PHF	.938	.738	.000	.771	.625	.817	.000	.859	.860	.679	.000	.865	.950



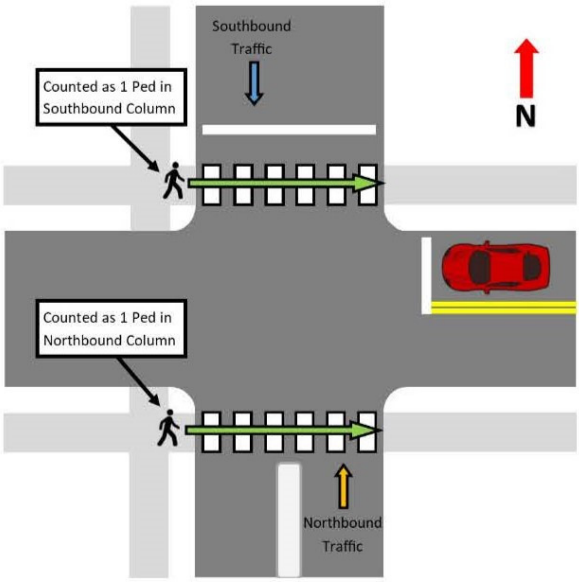
Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
1st St and CR 10E

File Name : 6 1st St and CR 10E AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 4

Image 1

The number of pedestrians shown on this report is representative of the crossing on the approaching leg, i.e. pedestrians crossing the north side of the intersection are counted as pedestrians in the southbound crosswalk, as that is the approaching leg that they are crossing (see figure below). Diagonal crossings are counted on the two legs that will get the pedestrian to the same end point. Diagonals can be counted separately if discussed prior to count.



Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
1st St and CR 10E

File Name : 6 1st St and CR 10E PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 1

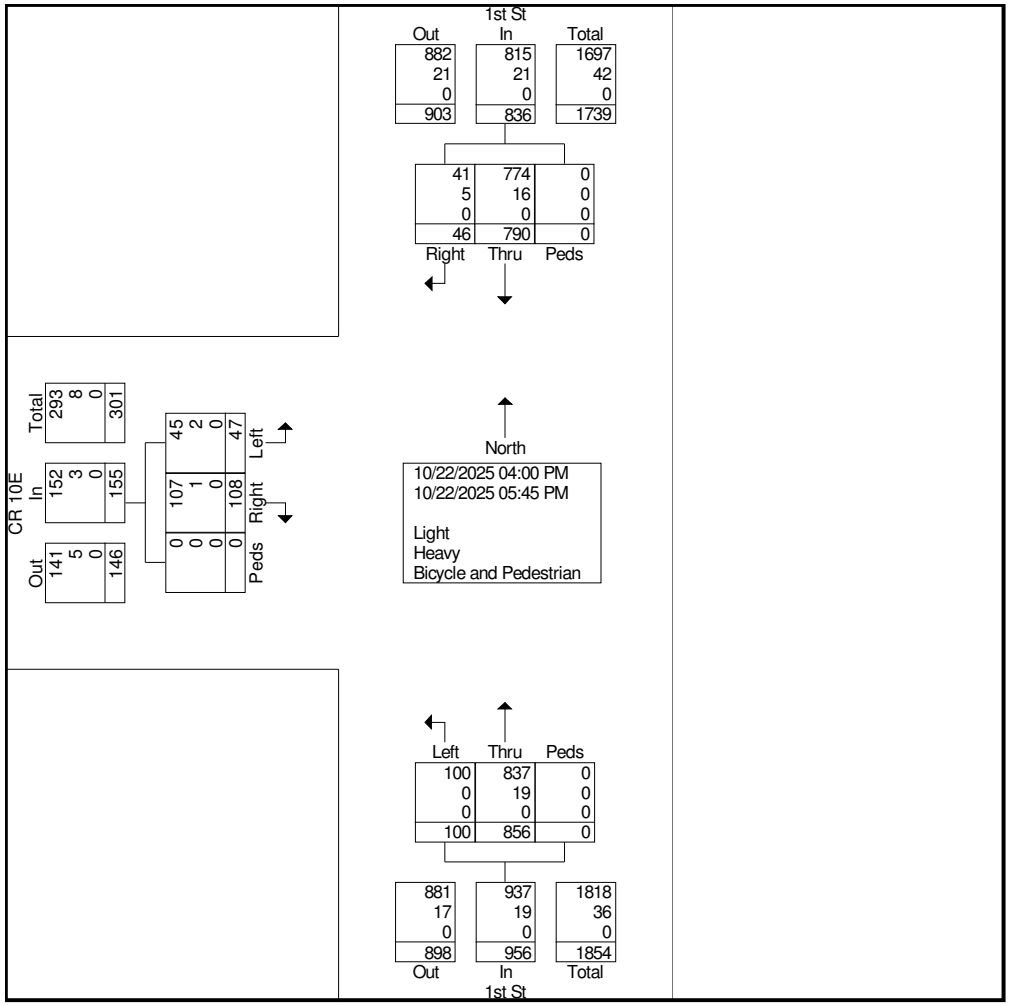
Groups Printed- Light - Heavy - Bicycle and Pedestrian

	CR 10E Eastbound				1st St Northbound				1st St Southbound				
Start Time	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Int. Total
04:00 PM	11	16	0	27	8	117	0	125	115	6	0	121	273
04:15 PM	10	8	0	18	18	118	0	136	123	6	0	129	283
04:30 PM	7	12	0	19	15	140	0	155	119	5	0	124	298
04:45 PM	3	15	0	18	12	104	0	116	92	10	0	102	236
Total	31	51	0	82	53	479	0	532	449	27	0	476	1090
05:00 PM	6	16	0	22	13	123	0	136	100	4	0	104	262
05:15 PM	3	13	0	16	14	100	0	114	101	3	0	104	234
05:30 PM	4	12	0	16	12	76	0	88	72	9	0	81	185
05:45 PM	3	16	0	19	8	78	0	86	68	3	0	71	176
Total	16	57	0	73	47	377	0	424	341	19	0	360	857
Grand Total	47	108	0	155	100	856	0	956	790	46	0	836	1947
Apprch %	30.3	69.7	0		10.5	89.5	0		94.5	5.5	0		
Total %	2.4	5.5	0	8	5.1	44	0	49.1	40.6	2.4	0	42.9	
Light	45	107	0	152	100	837	0	937	774	41	0	815	1904
% Light	95.7	99.1	0	98.1	100	97.8	0	98	98	89.1	0	97.5	97.8
Heavy	2	1	0	3	0	19	0	19	16	5	0	21	43
% Heavy	4.3	0.9	0	1.9	0	2.2	0	2	2	10.9	0	2.5	2.2
Bicycle and Pedestrian	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycle and Pedestrian	0	0	0	0	0	0	0	0	0	0	0	0	0

Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
1st St and CR 10E

File Name : 6 1st St and CR 10E PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 2

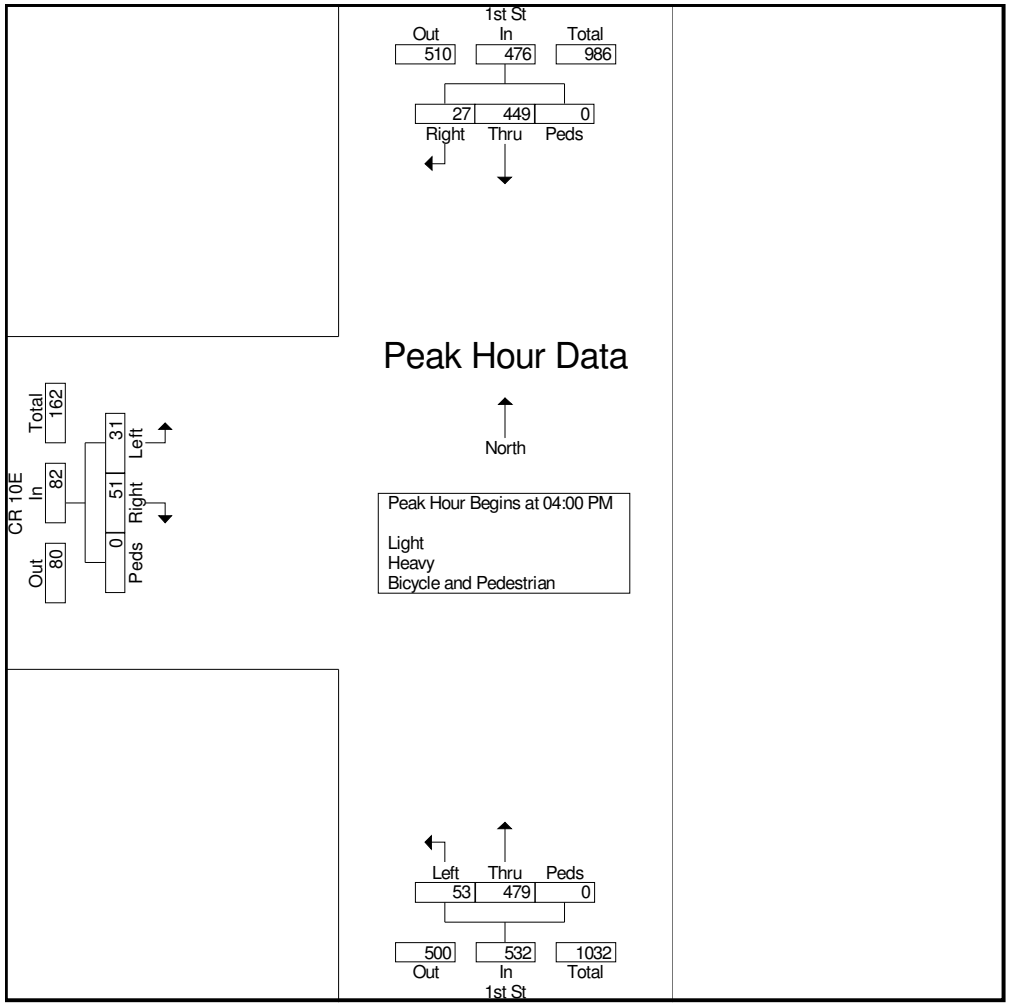


Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
1st St and CR 10E

File Name : 6 1st St and CR 10E PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 3

	CR 10E Eastbound				1st St Northbound				1st St Southbound				
Start Time	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:00 PM													
04:00 PM	**11**	**16**	0	**27**	8	117	0	125	115	6	0	121	273
04:15 PM	10	8	0	18	**18**	118	0	136	**123**	6	0	**129**	283
04:30 PM	7	12	0	19	15	**140**	0	**155**	119	5	0	124	**298**
04:45 PM	3	15	0	18	12	104	0	116	92	**10**	0	102	236
Total Volume	31	51	0	82	53	479	0	532	449	27	0	476	1090
% App. Total	37.8	62.2	0		10	90	0		94.3	5.7	0		
PHF	.705	.797	.000	.759	.736	.855	.000	.858	.913	.675	.000	.922	.914



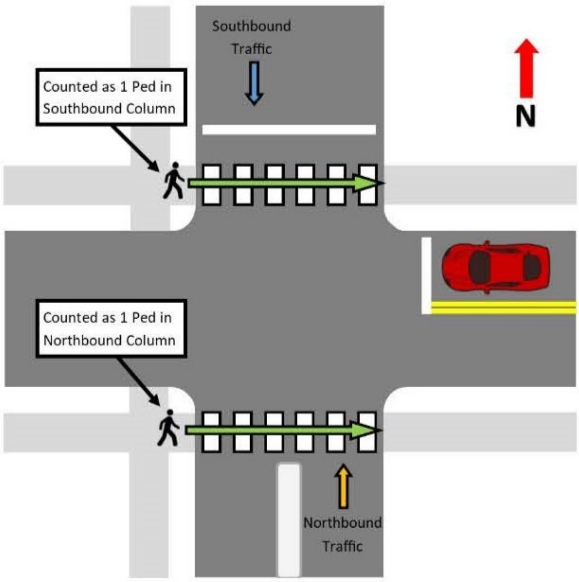
Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
1st St and CR 10E

File Name : 6 1st St and CR 10E PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 4

Image 1

The number of pedestrians shown on this report is representative of the crossing on the approaching leg, i.e. pedestrians crossing the north side of the intersection are counted as pedestrians in the southbound crosswalk, as that is the approaching leg that they are crossing (see figure below). Diagonal crossings are counted on the two legs that will get the pedestrian to the same end point. Diagonals can be counted separately if discussed prior to count.



Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
Berthoud Pkwy and Bunyan Ave

File Name : 7 Berthoud Pkwy and Bunyan Ave AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 1

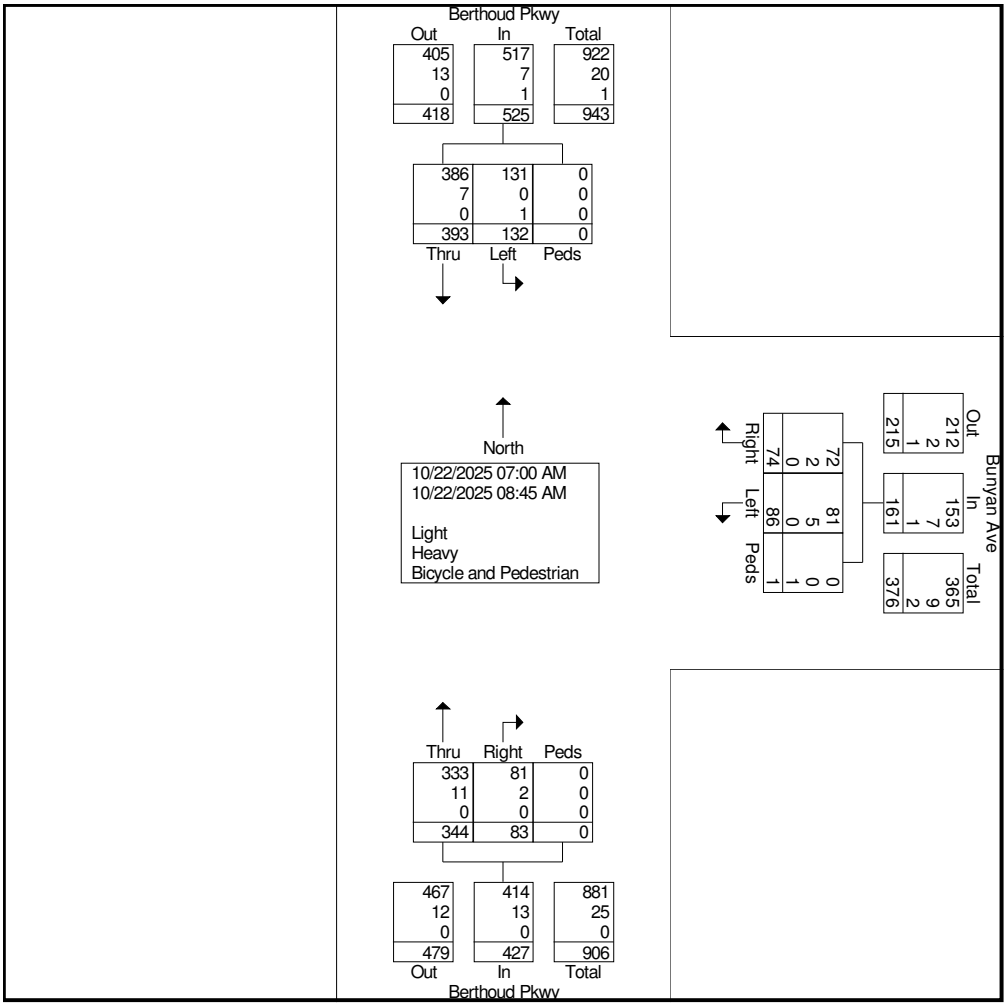
Groups Printed- Light - Heavy - Bicycle and Pedestrian

	Bunyan Ave Westbound				Berthoud Pkwy Northbound				Berthoud Pkwy Southbound				
Start Time	Left	Right	Peds	App. Total	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Int. Total
07:00 AM	7	8	0	15	43	8	0	51	9	42	0	51	117
07:15 AM	7	3	0	10	42	6	0	48	16	48	0	64	122
07:30 AM	9	5	0	14	36	0	0	36	12	51	0	63	113
07:45 AM	8	8	0	16	38	4	0	42	15	50	0	65	123
Total	31	24	0	55	159	18	0	177	52	191	0	243	475
08:00 AM	10	14	0	24	55	4	0	59	17	47	0	64	147
08:15 AM	10	7	0	17	46	7	0	53	16	57	0	73	143
08:30 AM	17	12	1	30	45	29	0	74	24	52	0	76	180
08:45 AM	18	17	0	35	39	25	0	64	23	46	0	69	168
Total	55	50	1	106	185	65	0	250	80	202	0	282	638
Grand Total	86	74	1	161	344	83	0	427	132	393	0	525	1113
Apprch %	53.4	46	0.6		80.6	19.4	0		25.1	74.9	0		
Total %	7.7	6.6	0.1	14.5	30.9	7.5	0	38.4	11.9	35.3	0	47.2	
Light	81	72	0	153	333	81	0	414	131	386	0	517	1084
% Light	94.2	97.3	0	95	96.8	97.6	0	97	99.2	98.2	0	98.5	97.4
Heavy	5	2	0	7	11	2	0	13	0	7	0	7	27
% Heavy	5.8	2.7	0	4.3	3.2	2.4	0	3	0	1.8	0	1.3	2.4
Bicycle and Pedestrian	0	0	1	1	0	0	0	0	1	0	0	1	2
% Bicycle and Pedestrian	0	0	100	0.6	0	0	0	0	0.8	0	0	0.2	0.2

Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
Berthoud Pkwy and Bunyan Ave

File Name : 7 Berthoud Pkwy and Bunyan Ave AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 2

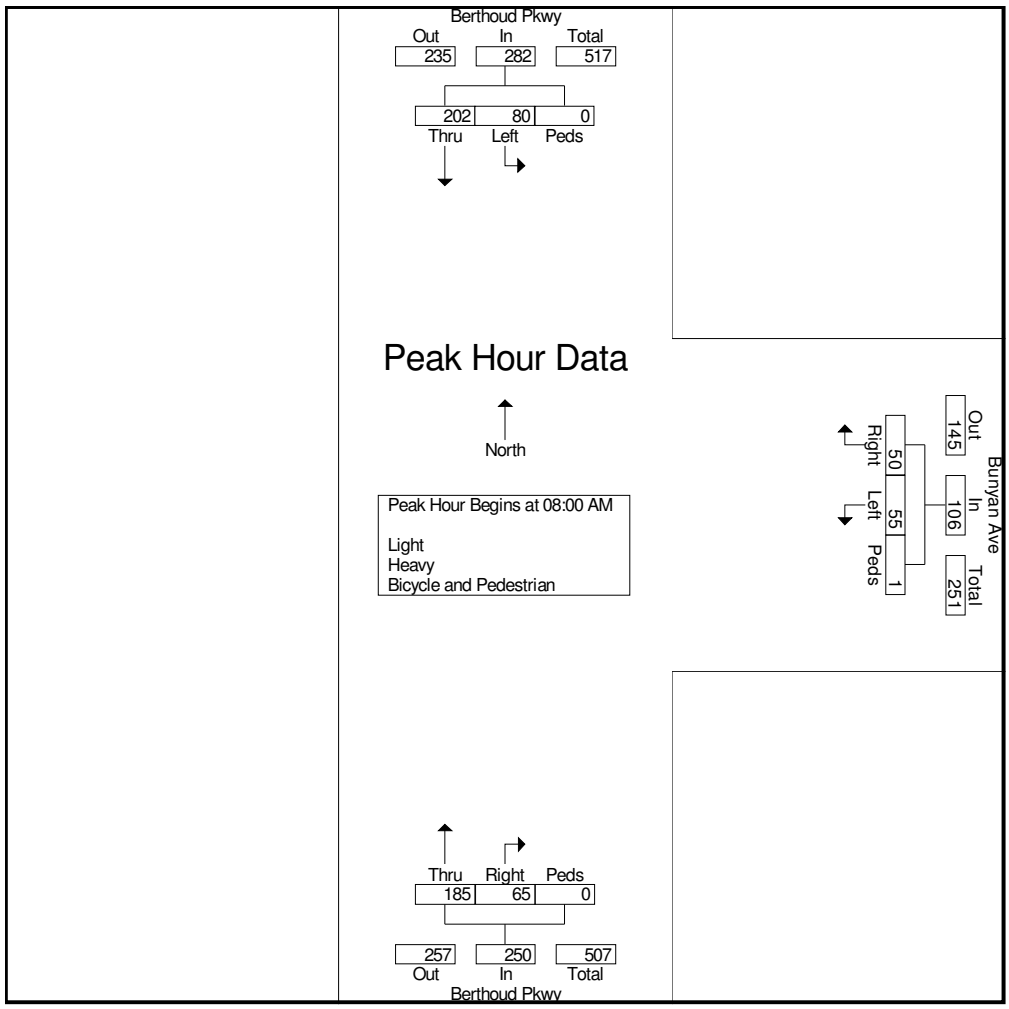


Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
Berthoud Pkwy and Bunyan Ave

File Name : 7 Berthoud Pkwy and Bunyan Ave AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 3

	Bunyan Ave Westbound				Berthoud Pkwy Northbound				Berthoud Pkwy Southbound				
Start Time	Left	Right	Peds	App. Total	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 08:00 AM													
08:00 AM	10	14	0	24	**55**	4	0	59	17	47	0	64	147
08:15 AM	10	7	0	17	46	7	0	53	16	**57**	0	73	143
08:30 AM	17	12	**1**	30	45	**29**	0	**74**	**24**	52	0	**76**	**180**
08:45 AM	**18**	**17**	0	**35**	39	25	0	64	23	46	0	69	168
Total Volume	55	50	1	106	185	65	0	250	80	202	0	282	638
% App. Total	51.9	47.2	0.9		74	26	0		28.4	71.6	0		
PHF	.764	.735	.250	.757	.841	.560	.000	.845	.833	.886	.000	.928	.886



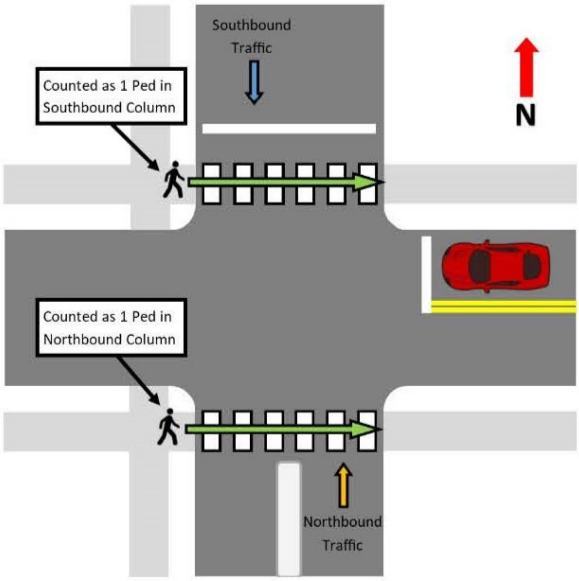
Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
Berthoud Pkwy and Bunyan Ave

File Name : 7 Berthoud Pkwy and Bunyan Ave AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 4

Image 1

The number of pedestrians shown on this report is representative of the crossing on the approaching leg, i.e. pedestrians crossing the north side of the intersection are counted as pedestrians in the southbound crosswalk, as that is the approaching leg that they are crossing (see figure below). Diagonal crossings are counted on the two legs that will get the pedestrian to the same end point. Diagonals can be counted separately if discussed prior to count.



Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
Berthoud Pkwy and Bunyan Ave

File Name : 7 Berthoud Pkwy and Bunyan Ave PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 1

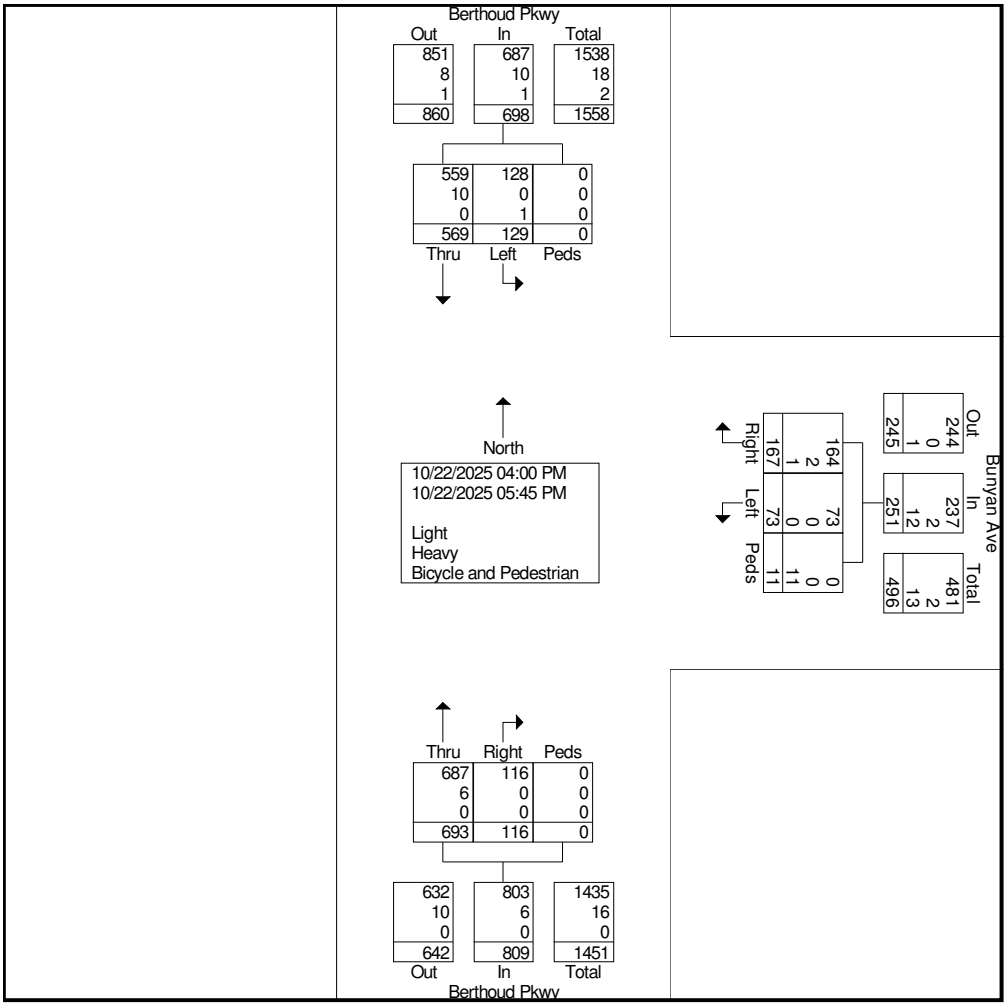
Groups Printed- Light - Heavy - Bicycle and Pedestrian

	Bunyan Ave Westbound				Berthoud Pkwy Northbound				Berthoud Pkwy Southbound				
Start Time	Left	Right	Peds	App. Total	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Int. Total
04:00 PM	13	22	0	35	107	17	0	124	26	62	0	88	247
04:15 PM	11	23	3	37	84	15	0	99	14	74	0	88	224
04:30 PM	8	21	2	31	74	9	0	83	13	59	0	72	186
04:45 PM	10	13	3	26	78	16	0	94	13	78	0	91	211
Total	42	79	8	129	343	57	0	400	66	273	0	339	868
05:00 PM	17	28	0	45	106	15	0	121	24	73	0	97	263
05:15 PM	4	23	1	28	97	21	0	118	15	79	0	94	240
05:30 PM	5	22	1	28	93	10	0	103	9	62	0	71	202
05:45 PM	5	15	1	21	54	13	0	67	15	82	0	97	185
Total	31	88	3	122	350	59	0	409	63	296	0	359	890
Grand Total	73	167	11	251	693	116	0	809	129	569	0	698	1758
Apprch %	29.1	66.5	4.4		85.7	14.3	0		18.5	81.5	0		
Total %	4.2	9.5	0.6	14.3	39.4	6.6	0	46	7.3	32.4	0	39.7	
Light	73	164	0	237	687	116	0	803	128	559	0	687	1727
% Light	100	98.2	0	94.4	99.1	100	0	99.3	99.2	98.2	0	98.4	98.2
Heavy	0	2	0	2	6	0	0	6	0	10	0	10	18
% Heavy	0	1.2	0	0.8	0.9	0	0	0.7	0	1.8	0	1.4	1
Bicycle and Pedestrian	0	1	11	12	0	0	0	0	1	0	0	1	13
% Bicycle and Pedestrian	0	0.6	100	4.8	0	0	0	0	0.8	0	0	0.1	0.7

Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
Berthoud Pkwy and Bunyan Ave

File Name : 7 Berthoud Pkwy and Bunyan Ave PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 2

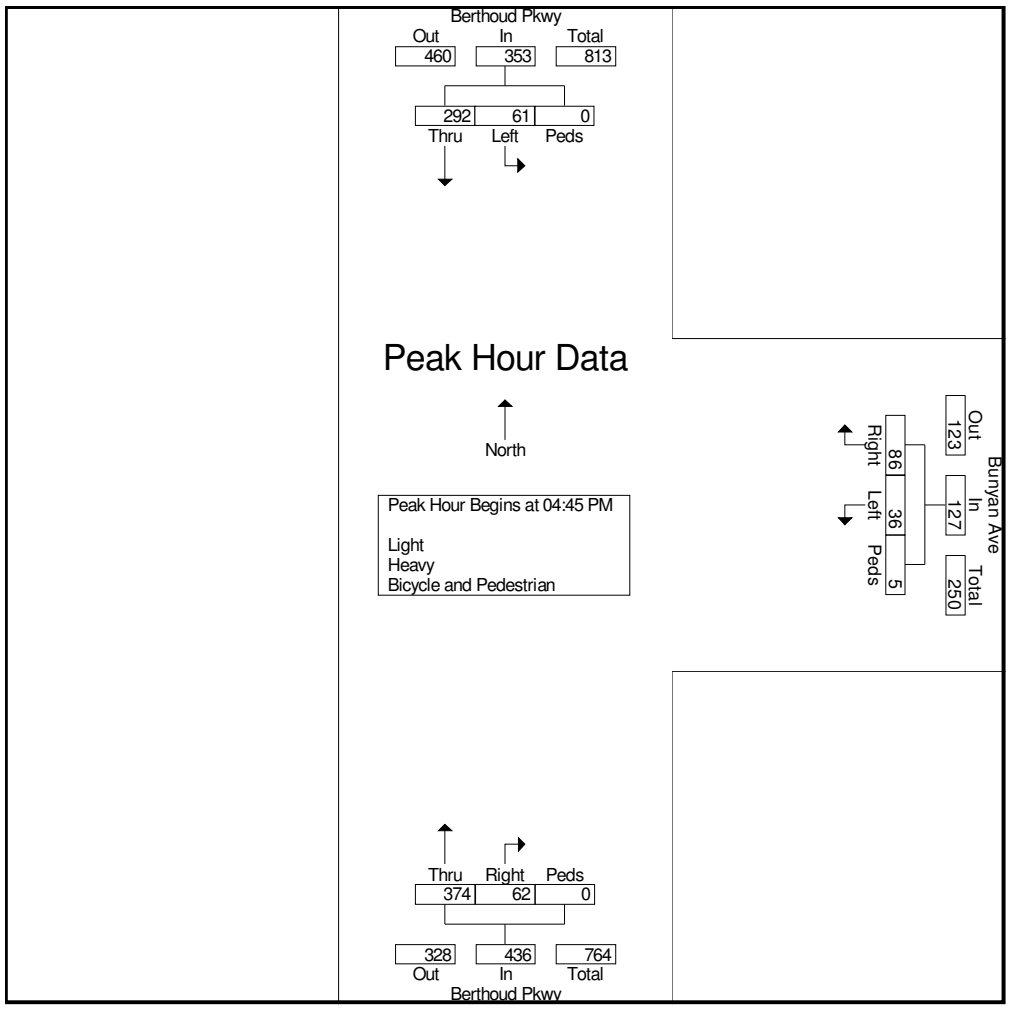


Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
Berthoud Pkwy and Bunyan Ave

File Name : 7 Berthoud Pkwy and Bunyan Ave PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 3

	Bunyan Ave Westbound				Berthoud Pkwy Northbound				Berthoud Pkwy Southbound				
Start Time	Left	Right	Peds	App. Total	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:45 PM													
04:45 PM	10	13	**3**	26	78	16	0	94	13	78	0	91	211
05:00 PM	**17**	**28**	0	**45**	**106**	15	0	**121**	**24**	73	0	**97**	**263**
05:15 PM	4	23	1	28	97	**21**	0	118	15	**79**	0	94	240
05:30 PM	5	22	1	28	93	10	0	103	9	62	0	71	202
Total Volume	36	86	5	127	374	62	0	436	61	292	0	353	916
% App. Total	28.3	67.7	3.9		85.8	14.2	0		17.3	82.7	0		
PHF	.529	.768	.417	.706	.882	.738	.000	.901	.635	.924	.000	.910	.871



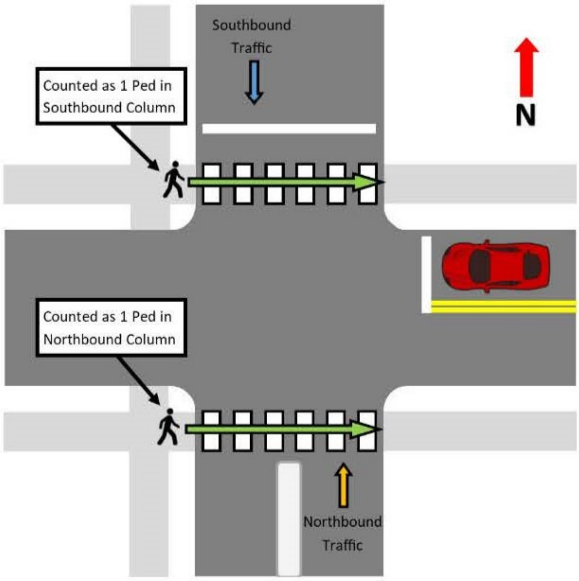
Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
Berthoud Pkwy and Bunyan Ave

File Name : 7 Berthoud Pkwy and Bunyan Ave PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 4

Image 1

The number of pedestrians shown on this report is representative of the crossing on the approaching leg, i.e. pedestrians crossing the north side of the intersection are counted as pedestrians in the southbound crosswalk, as that is the approaching leg that they are crossing (see figure below). Diagonal crossings are counted on the two legs that will get the pedestrian to the same end point. Diagonals can be counted separately if discussed prior to count.



Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
4th St and Bunyan Ave

File Name : 8 4th St and Bunyan Ave AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 1

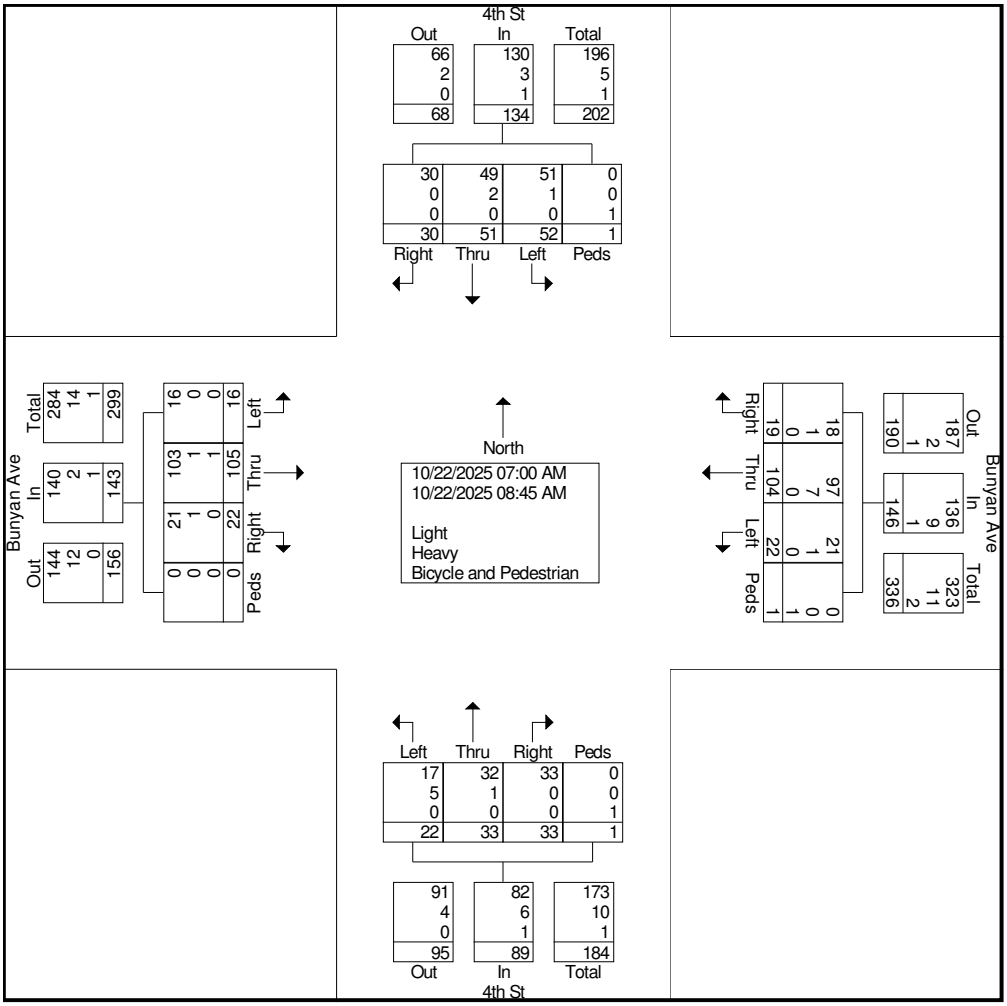
Groups Printed- Light - Heavy - Bicycle and Pedestrian

	Bunyan Ave Eastbound					Bunyan Ave Westbound					4th St Northbound					4th St Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	1	14	1	0	16	0	7	2	0	9	2	2	3	1	8	4	4	4	0	12	45
07:15 AM	0	14	3	0	17	1	14	0	1	16	0	1	1	0	2	5	4	3	0	12	47
07:30 AM	0	6	1	0	7	2	10	0	0	12	0	4	3	0	7	10	2	3	0	15	41
07:45 AM	1	8	0	0	9	3	9	4	0	16	1	6	7	0	14	4	7	4	0	15	54
Total	2	42	5	0	49	6	40	6	1	53	3	13	14	1	31	23	17	14	0	54	187
08:00 AM	3	9	1	0	13	2	10	1	0	13	3	4	4	0	11	8	7	3	1	19	56
08:15 AM	1	14	1	0	16	5	13	2	0	20	3	3	5	0	11	5	5	3	0	13	60
08:30 AM	1	22	3	0	26	3	20	3	0	26	8	8	3	0	19	5	8	3	0	16	87
08:45 AM	9	18	12	0	39	6	21	7	0	34	5	5	7	0	17	11	14	7	0	32	122
Total	14	63	17	0	94	16	64	13	0	93	19	20	19	0	58	29	34	16	1	80	325
Grand Total	16	105	22	0	143	22	104	19	1	146	22	33	33	1	89	52	51	30	1	134	512
Apprch %	11.2	73.4	15.4	0		15.1	71.2	13	0.7		24.7	37.1	37.1	1.1		38.8	38.1	22.4	0.7		
Total %	3.1	20.5	4.3	0	27.9	4.3	20.3	3.7	0.2	28.5	4.3	6.4	6.4	0.2	17.4	10.2	10	5.9	0.2	26.2	
Light	16	103	21	0	140	21	97	18	0	136	17	32	33	0	82	51	49	30	0	130	488
% Light	100	98.1	95.5	0	97.9	95.5	93.3	94.7	0	93.2	77.3	97	100	0	92.1	98.1	96.1	100	0	97	95.3
Heavy	0	1	1	0	2	1	7	1	0	9	5	1	0	0	6	1	2	0	0	3	20
% Heavy	0	1	4.5	0	1.4	4.5	6.7	5.3	0	6.2	22.7	3	0	0	6.7	1.9	3.9	0	0	2.2	3.9
Bicycle and Pedestrian	0	1	0	0	1	0	0	0	1	1	0	0	0	1	1	0	0	0	1	1	4
% Bicycle and Pedestrian	0	1	0	0	0.7	0	0	0	100	0.7	0	0	0	100	1.1	0	0	0	100	0.7	0.8

Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
4th St and Bunyan Ave

File Name : 8 4th St and Bunyan Ave AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 2

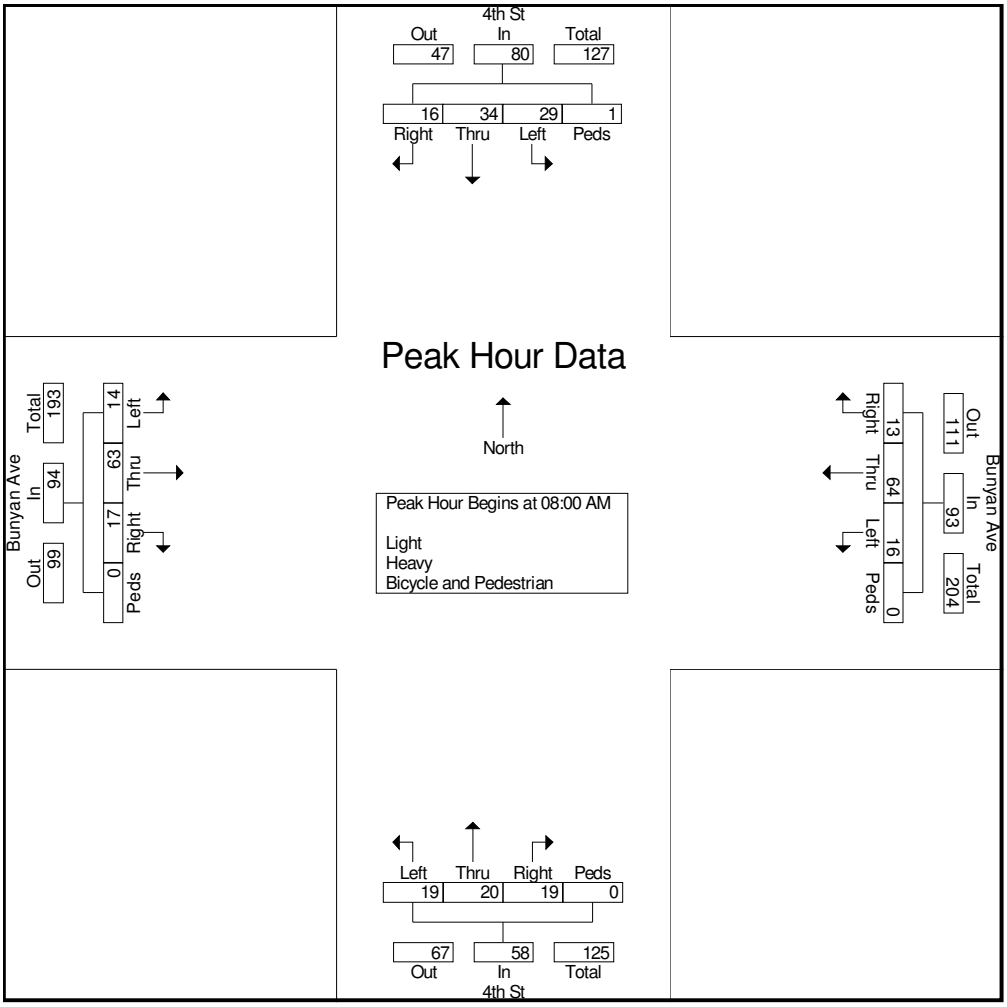


Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
4th St and Bunyan Ave

File Name : 8 4th St and Bunyan Ave AM
Site Code : F&P
Start Date : 10/22/2025

	Bunyan Ave Eastbound					Bunyan Ave Westbound					4th St Northbound					4th St Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	3	9	1	0	13	2	10	1	0	13	3	4	4	0	11	8	7	3	**1**	19	56
08:15 AM	1	14	1	0	16	5	13	2	0	20	3	3	5	0	11	5	5	3	0	13	60
08:30 AM	1	**22**	3	0	26	3	20	3	0	26	**8**	**8**	3	0	**19**	5	8	3	0	16	87
08:45 AM	**9**	18	**12**	0	**39**	**6**	**21**	**7**	0	**34**	5	5	**7**	0	17	**11**	**14**	**7**	0	**32**	**122**
Total Volume	14	63	17	0	94	16	64	13	0	93	19	20	19	0	58	29	34	16	1	80	325
% App. Total	14.9	67	18.1	0		17.2	68.8	14	0		32.8	34.5	32.8	0		36.2	42.5	20	1.2		
PHF	.389	.716	.354	.000	.603	.667	.762	.464	.000	.684	.594	.625	.679	.000	.763	.659	.607	.571	.250	.625	.666



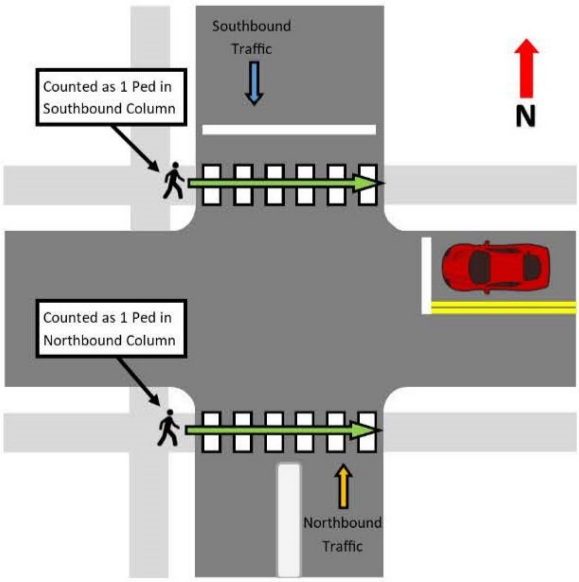
Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
4th St and Bunyan Ave

File Name : 8 4th St and Bunyan Ave AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 4

Image 1

The number of pedestrians shown on this report is representative of the crossing on the approaching leg, i.e. pedestrians crossing the north side of the intersection are counted as pedestrians in the southbound crosswalk, as that is the approaching leg that they are crossing (see figure below). Diagonal crossings are counted on the two legs that will get the pedestrian to the same end point. Diagonals can be counted separately if discussed prior to count.



Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
4th St and Bunyan Ave

File Name : 8 4th St and Bunyan Ave PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 1

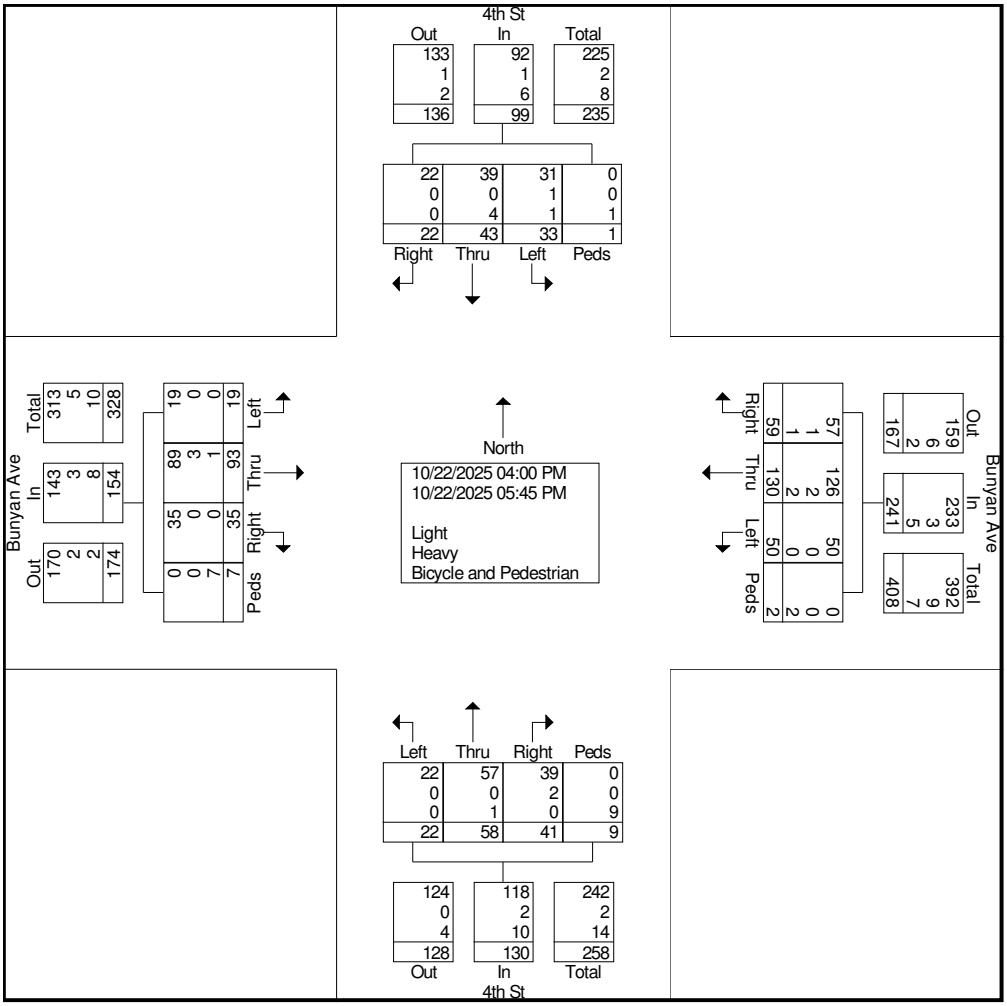
Groups Printed- Light - Heavy - Bicycle and Pedestrian

	Bunyan Ave Eastbound					Bunyan Ave Westbound					4th St Northbound					4th St Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
04:00 PM	3	5	7	0	15	5	13	13	1	32	2	11	8	0	21	7	7	7	0	21	89
04:15 PM	2	21	4	0	27	7	19	6	0	32	1	8	10	0	19	4	5	3	0	12	90
04:30 PM	3	9	4	0	16	7	22	7	0	36	3	4	2	0	9	5	4	2	0	11	72
04:45 PM	0	8	2	4	14	7	26	9	1	43	2	7	3	8	20	5	9	1	0	15	92
Total	8	43	17	4	72	26	80	35	2	143	8	30	23	8	69	21	25	13	0	59	343
05:00 PM	3	13	3	1	20	5	20	10	0	35	5	7	5	1	18	2	3	1	0	6	79
05:15 PM	1	14	5	2	22	10	12	6	0	28	4	5	3	0	12	2	5	4	0	11	73
05:30 PM	6	12	5	0	23	3	8	3	0	14	3	10	4	0	17	4	6	2	0	12	66
05:45 PM	1	11	5	0	17	6	10	5	0	21	2	6	6	0	14	4	4	2	1	11	63
Total	11	50	18	3	82	24	50	24	0	98	14	28	18	1	61	12	18	9	1	40	281
Grand Total	19	93	35	7	154	50	130	59	2	241	22	58	41	9	130	33	43	22	1	99	624
Apprch %	12.3	60.4	22.7	4.5		20.7	53.9	24.5	0.8		16.9	44.6	31.5	6.9		33.3	43.4	22.2	1		
Total %	3	14.9	5.6	1.1	24.7	8	20.8	9.5	0.3	38.6	3.5	9.3	6.6	1.4	20.8	5.3	6.9	3.5	0.2	15.9	
Light	19	89	35	0	143	50	126	57	0	233	22	57	39	0	118	31	39	22	0	92	586
% Light	100	95.7	100	0	92.9	100	96.9	96.6	0	96.7	100	98.3	95.1	0	90.8	93.9	90.7	100	0	92.9	93.9
Heavy	0	3	0	0	3	0	2	1	0	3	0	0	2	0	2	1	0	0	0	1	9
% Heavy	0	3.2	0	0	1.9	0	1.5	1.7	0	1.2	0	0	4.9	0	1.5	3	0	0	0	1	1.4
Bicycle and Pedestrian	0	1	0	7	8	0	2	1	2	5	0	1	0	9	10	1	4	0	1	6	29
% Bicycle and Pedestrian	0	1.1	0	100	5.2	0	1.5	1.7	100	2.1	0	1.7	0	100	7.7	3	9.3	0	100	6.1	4.6

Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
4th St and Bunyan Ave

File Name : 8 4th St and Bunyan Ave PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 2

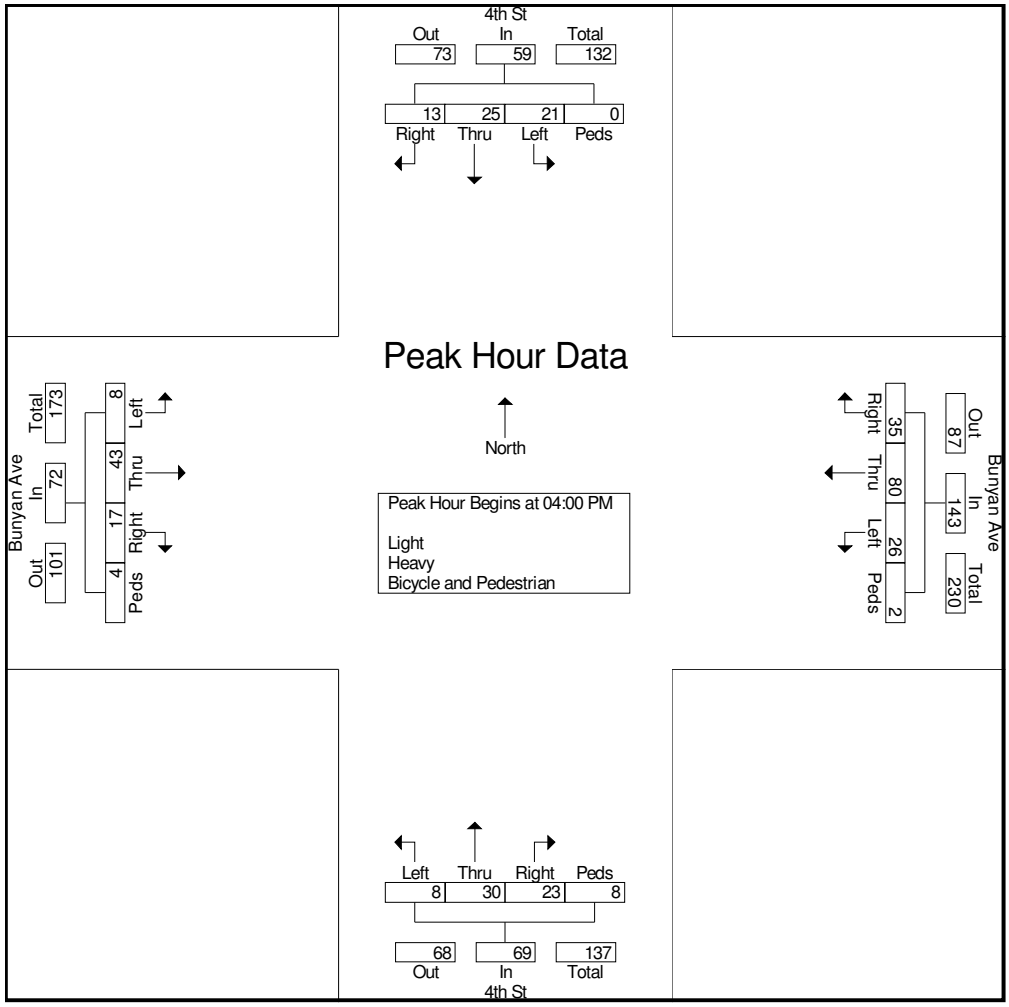


Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
4th St and Bunyan Ave

File Name : 8 4th St and Bunyan Ave PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 3

	Bunyan Ave Eastbound					Bunyan Ave Westbound					4th St Northbound					4th St Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	**3**	5	**7**	0	15	5	13	**13**	**1**	32	2	**11**	8	0	**21**	**7**	7	**7**	0	**21**	89
04:15 PM	2	**21**	4	0	**27**	**7**	19	6	0	32	1	8	**10**	0	19	4	5	3	0	12	90
04:30 PM	3	9	4	0	16	7	22	7	0	36	**3**	4	2	0	9	5	4	2	0	11	72
04:45 PM	0	8	2	**4**	14	7	**26**	9	1	**43**	2	7	3	**8**	20	5	**9**	1	0	15	**92**
Total Volume	8	43	17	4	72	26	80	35	2	143	8	30	23	8	69	21	25	13	0	59	343
% App. Total	11.1	59.7	23.6	5.6		18.2	55.9	24.5	1.4		11.6	43.5	33.3	11.6		35.6	42.4	22	0		
PHF	.667	.512	.607	.250	.667	.929	.769	.673	.500	.831	.667	.682	.575	.250	.821	.750	.694	.464	.000	.702	.932



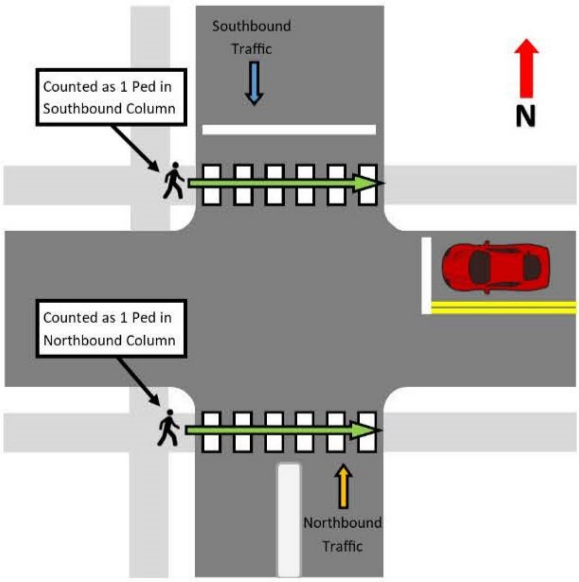
Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
4th St and Bunyan Ave

File Name : 8 4th St and Bunyan Ave PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 4

Image 1

The number of pedestrians shown on this report is representative of the crossing on the approaching leg, i.e. pedestrians crossing the north side of the intersection are counted as pedestrians in the southbound crosswalk, as that is the approaching leg that they are crossing (see figure below). Diagonal crossings are counted on the two legs that will get the pedestrian to the same end point. Diagonals can be counted separately if discussed prior to count.



Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
1st St and Bunyan Ave

File Name : 9 1st St and Bunyan Ave AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 1

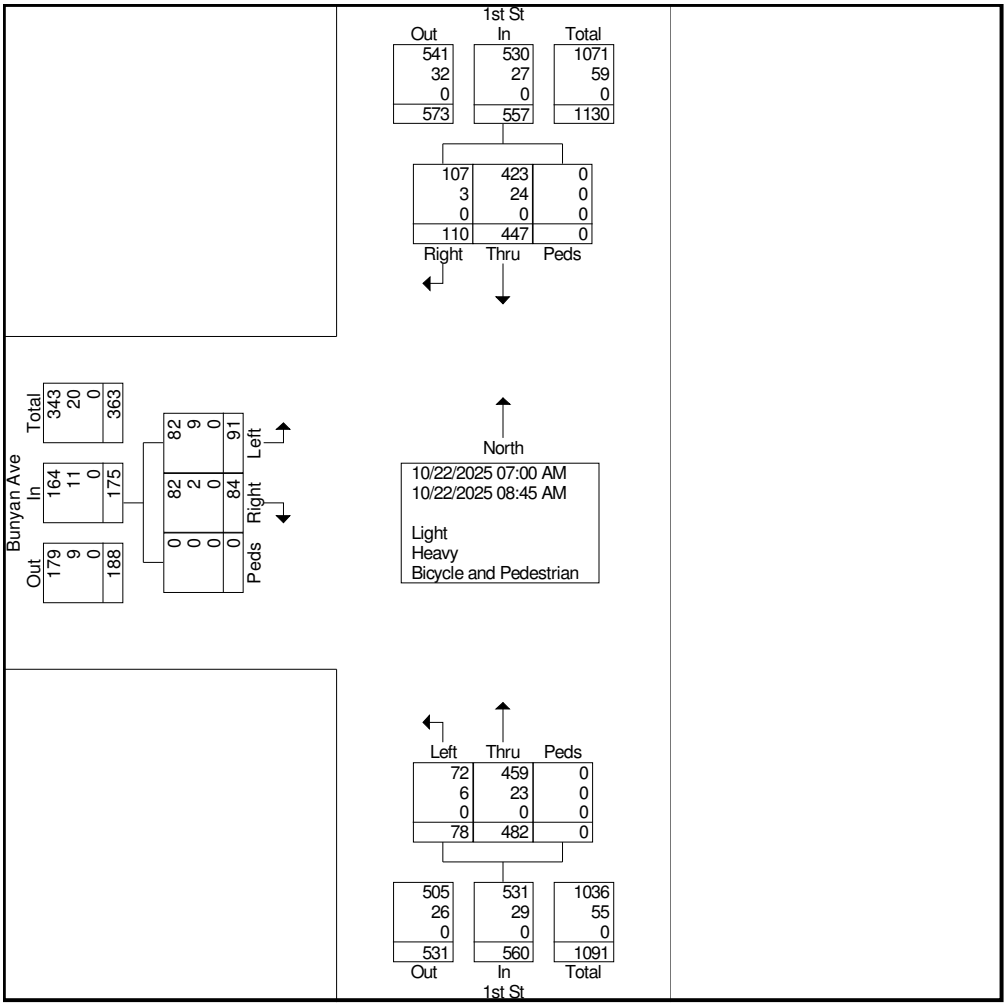
Groups Printed- Light - Heavy - Bicycle and Pedestrian

	Bunyan Ave Eastbound				1st St Northbound				1st St Southbound				
Start Time	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	9	8	0	17	6	43	0	49	54	9	0	63	129
07:15 AM	8	12	0	20	9	60	0	69	71	16	0	87	176
07:30 AM	9	11	0	20	5	68	0	73	59	14	0	73	166
07:45 AM	10	4	0	14	7	65	0	72	69	10	0	79	165
Total	36	35	0	71	27	236	0	263	253	49	0	302	636
08:00 AM	8	7	0	15	6	48	0	54	51	13	0	64	133
08:15 AM	10	15	0	25	9	64	0	73	40	12	0	52	150
08:30 AM	16	7	0	23	15	54	0	69	48	19	0	67	159
08:45 AM	21	20	0	41	21	80	0	101	55	17	0	72	214
Total	55	49	0	104	51	246	0	297	194	61	0	255	656
Grand Total	91	84	0	175	78	482	0	560	447	110	0	557	1292
Apprch %	52	48	0		13.9	86.1	0		80.3	19.7	0		
Total %	7	6.5	0	13.5	6	37.3	0	43.3	34.6	8.5	0	43.1	
Light	82	82	0	164	72	459	0	531	423	107	0	530	1225
% Light	90.1	97.6	0	93.7	92.3	95.2	0	94.8	94.6	97.3	0	95.2	94.8
Heavy	9	2	0	11	6	23	0	29	24	3	0	27	67
% Heavy	9.9	2.4	0	6.3	7.7	4.8	0	5.2	5.4	2.7	0	4.8	5.2
Bicycle and Pedestrian	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycle and Pedestrian	0	0	0	0	0	0	0	0	0	0	0	0	0

Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
1st St and Bunyan Ave

File Name : 9 1st St and Bunyan Ave AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 2

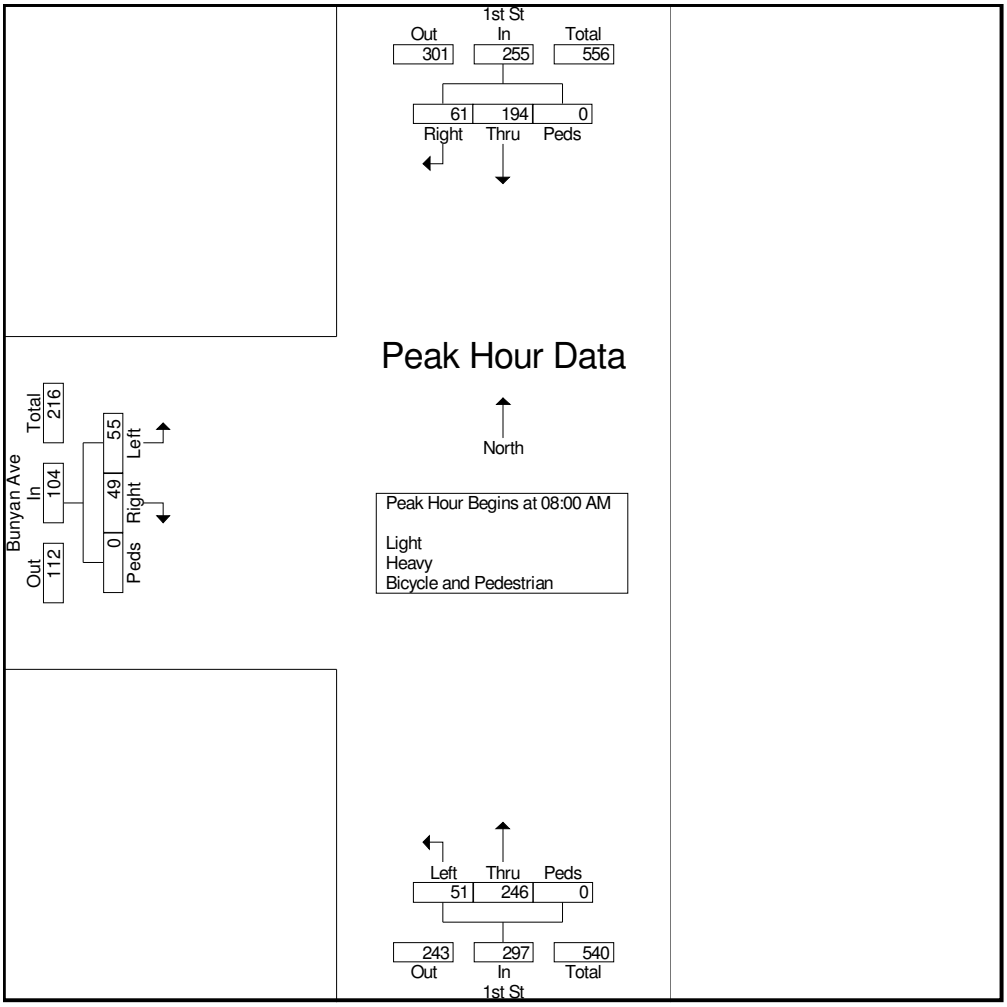


Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
1st St and Bunyan Ave

File Name : 9 1st St and Bunyan Ave AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 3

	Bunyan Ave Eastbound				1st St Northbound				1st St Southbound				
Start Time	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 08:00 AM													
08:00 AM	8	7	0	15	6	48	0	54	51	13	0	64	133
08:15 AM	10	15	0	25	9	64	0	73	40	12	0	52	150
08:30 AM	16	7	0	23	15	54	0	69	48	**19**	0	67	159
08:45 AM	**21**	**20**	0	**41**	**21**	**80**	0	**101**	**55**	17	0	**72**	**214**
Total Volume	55	49	0	104	51	246	0	297	194	61	0	255	656
% App. Total	52.9	47.1	0		17.2	82.8	0		76.1	23.9	0		
PHF	.655	.613	.000	.634	.607	.769	.000	.735	.882	.803	.000	.885	.766



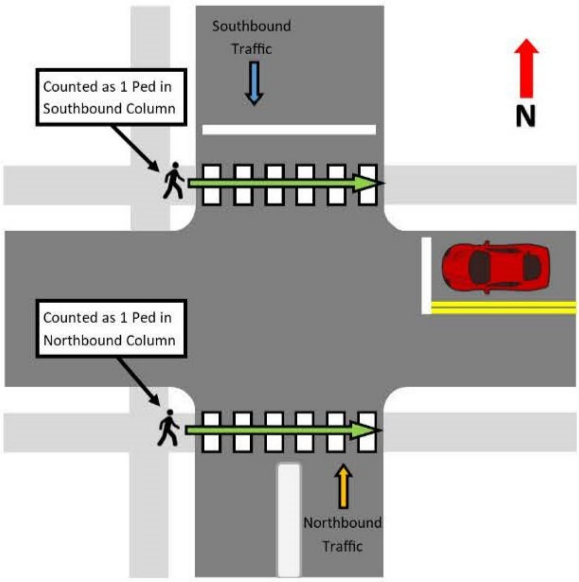
Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
1st St and Bunyan Ave

File Name : 9 1st St and Bunyan Ave AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 4

Image 1

The number of pedestrians shown on this report is representative of the crossing on the approaching leg, i.e. pedestrians crossing the north side of the intersection are counted as pedestrians in the southbound crosswalk, as that is the approaching leg that they are crossing (see figure below). Diagonal crossings are counted on the two legs that will get the pedestrian to the same end point. Diagonals can be counted separately if discussed prior to count.



Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
1st St and Bunyan Ave

File Name : 9 1st St and Bunyan Ave PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 1

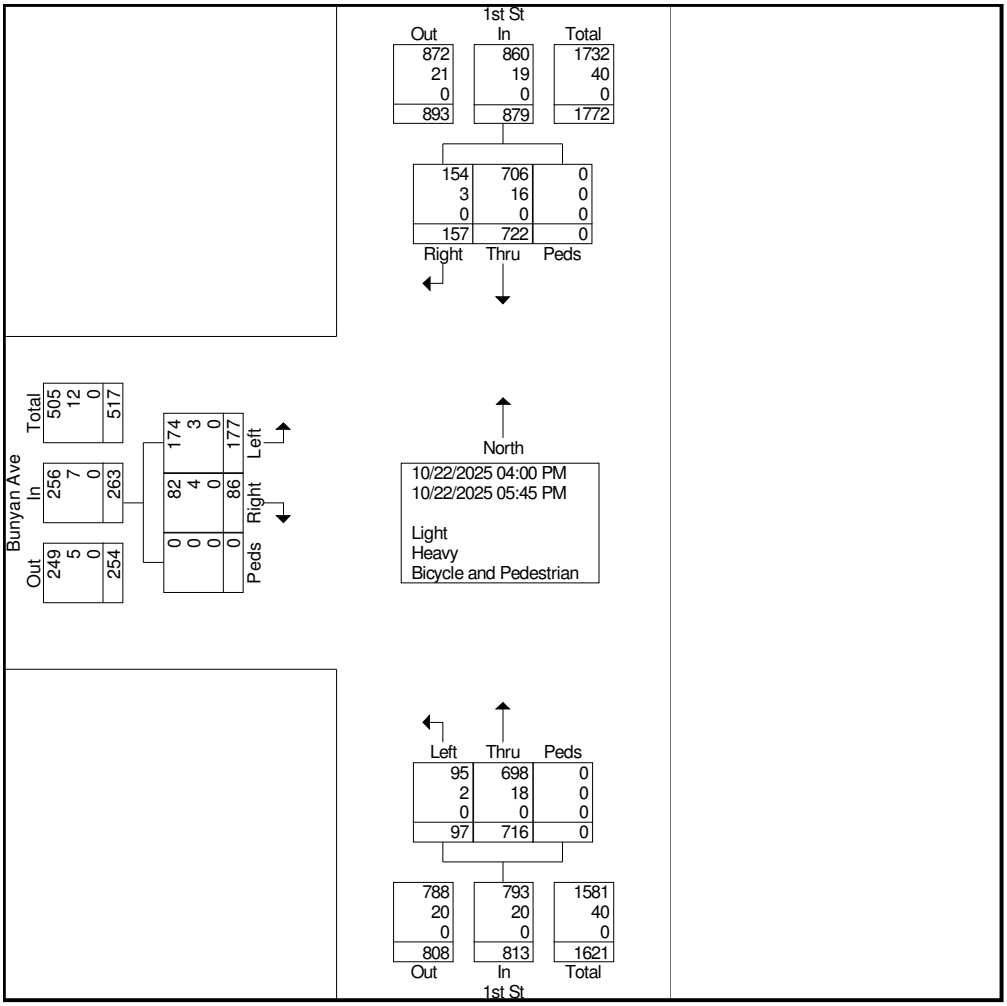
Groups Printed- Light - Heavy - Bicycle and Pedestrian

	Bunyan Ave Eastbound				1st St Northbound				1st St Southbound				
Start Time	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Int. Total
04:00 PM	19	9	0	28	15	94	0	109	99	28	0	127	264
04:15 PM	39	12	0	51	14	97	0	111	103	21	0	124	286
04:30 PM	30	9	0	39	14	99	0	113	112	22	0	134	286
04:45 PM	13	12	0	25	16	101	0	117	88	21	0	109	251
Total	101	42	0	143	59	391	0	450	402	92	0	494	1087
05:00 PM	22	13	0	35	8	111	0	119	90	23	0	113	267
05:15 PM	21	5	0	26	15	83	0	98	89	16	0	105	229
05:30 PM	12	12	0	24	4	73	0	77	79	9	0	88	189
05:45 PM	21	14	0	35	11	58	0	69	62	17	0	79	183
Total	76	44	0	120	38	325	0	363	320	65	0	385	868
Grand Total	177	86	0	263	97	716	0	813	722	157	0	879	1955
Apprch %	67.3	32.7	0		11.9	88.1	0		82.1	17.9	0		
Total %	9.1	4.4	0	13.5	5	36.6	0	41.6	36.9	8	0	45	
Light	174	82	0	256	95	698	0	793	706	154	0	860	1909
% Light	98.3	95.3	0	97.3	97.9	97.5	0	97.5	97.8	98.1	0	97.8	97.6
Heavy	3	4	0	7	2	18	0	20	16	3	0	19	46
% Heavy	1.7	4.7	0	2.7	2.1	2.5	0	2.5	2.2	1.9	0	2.2	2.4
Bicycle and Pedestrian	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycle and Pedestrian	0	0	0	0	0	0	0	0	0	0	0	0	0

Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
1st St and Bunyan Ave

File Name : 9 1st St and Bunyan Ave PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 2

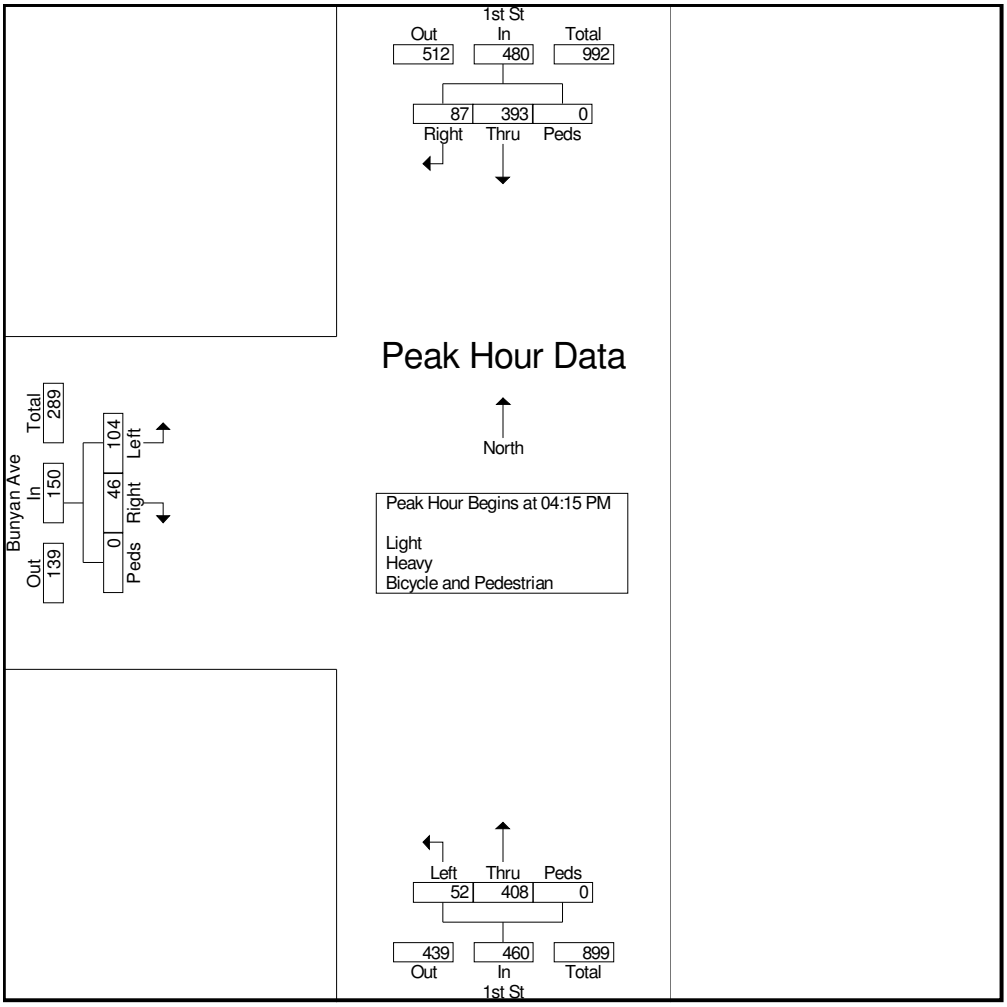


Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
1st St and Bunyan Ave

File Name : 9 1st St and Bunyan Ave PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 3

	Bunyan Ave Eastbound				1st St Northbound				1st St Southbound				
Start Time	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:15 PM													
04:15 PM	**39**	12	0	**51**	14	97	0	111	103	21	0	124	**286**
04:30 PM	30	9	0	39	14	99	0	113	**112**	22	0	**134**	286
04:45 PM	13	12	0	25	**16**	101	0	117	88	21	0	109	251
05:00 PM	22	**13**	0	35	8	**111**	0	**119**	90	**23**	0	113	267
Total Volume	104	46	0	150	52	408	0	460	393	87	0	480	1090
% App. Total	69.3	30.7	0		11.3	88.7	0		81.9	18.1	0		
PHF	.667	.885	.000	.735	.813	.919	.000	.966	.877	.946	.000	.896	.953



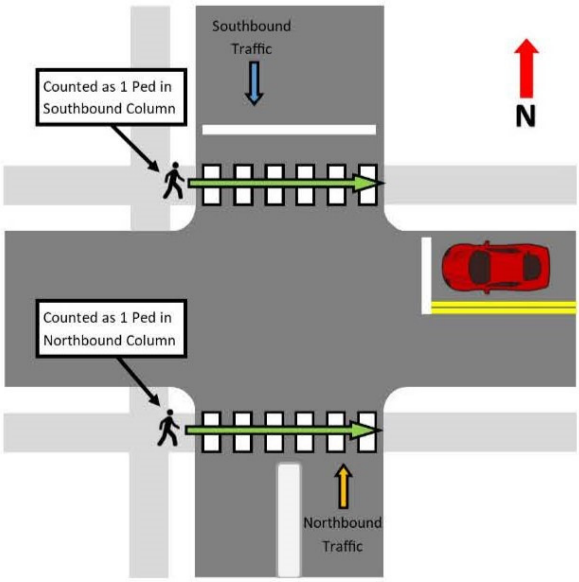
Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
1st St and Bunyan Ave

File Name : 9 1st St and Bunyan Ave PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 4

Image 1

The number of pedestrians shown on this report is representative of the crossing on the approaching leg, i.e. pedestrians crossing the north side of the intersection are counted as pedestrians in the southbound crosswalk, as that is the approaching leg that they are crossing (see figure below). Diagonal crossings are counted on the two legs that will get the pedestrian to the same end point. Diagonals can be counted separately if discussed prior to count.



Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
CO 56 and 8th St

File Name : 10 CO 56 and 8th St AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 1

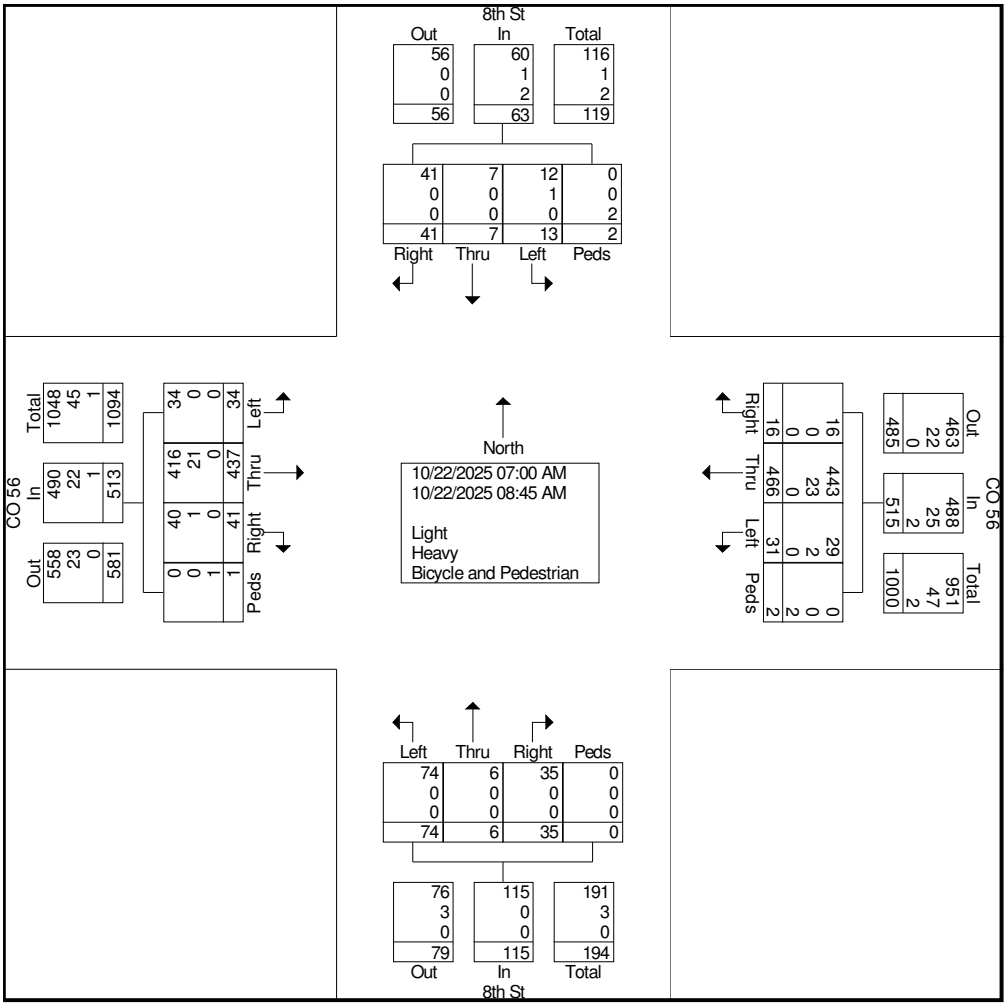
Groups Printed- Light - Heavy - Bicycle and Pedestrian

	CO 56 Eastbound					CO 56 Westbound					8th St Northbound					8th St Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	3	42	5	0	50	3	40	1	0	44	12	1	5	0	18	0	0	6	0	6	118
07:15 AM	1	52	5	0	58	1	54	1	0	56	8	0	4	0	12	4	0	2	0	6	132
07:30 AM	2	44	4	0	50	1	63	3	0	67	6	1	4	0	11	2	0	3	0	5	133
07:45 AM	3	66	6	0	75	6	64	2	0	72	6	1	5	0	12	2	1	7	1	11	170
Total	9	204	20	0	233	11	221	7	0	239	32	3	18	0	53	8	1	18	1	28	553
08:00 AM	5	57	5	0	67	2	65	3	0	70	8	2	4	0	14	0	3	7	0	10	161
08:15 AM	7	53	5	0	65	4	60	4	1	69	7	0	2	0	9	2	2	9	0	13	156
08:30 AM	8	56	4	0	68	7	48	1	1	57	14	1	4	0	19	1	1	4	1	7	151
08:45 AM	5	67	7	1	80	7	72	1	0	80	13	0	7	0	20	2	0	3	0	5	185
Total	25	233	21	1	280	20	245	9	2	276	42	3	17	0	62	5	6	23	1	35	653
Grand Total	34	437	41	1	513	31	466	16	2	515	74	6	35	0	115	13	7	41	2	63	1206
Apprch %	6.6	85.2	8	0.2		6	90.5	3.1	0.4		64.3	5.2	30.4	0		20.6	11.1	65.1	3.2		
Total %	2.8	36.2	3.4	0.1	42.5	2.6	38.6	1.3	0.2	42.7	6.1	0.5	2.9	0	9.5	1.1	0.6	3.4	0.2	5.2	
Light	34	416	40	0	490	29	443	16	0	488	74	6	35	0	115	12	7	41	0	60	1153
% Light	100	95.2	97.6	0	95.5	93.5	95.1	100	0	94.8	100	100	100	0	100	92.3	100	100	0	95.2	95.6
Heavy	0	21	1	0	22	2	23	0	0	25	0	0	0	0	0	1	0	0	0	1	48
% Heavy	0	4.8	2.4	0	4.3	6.5	4.9	0	0	4.9	0	0	0	0	0	7.7	0	0	0	1.6	4
Bicycle and Pedestrian	0	0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	2	2	5
% Bicycle and Pedestrian	0	0	0	100	0.2	0	0	0	100	0.4	0	0	0	0	0	0	0	0	100	3.2	0.4

Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
CO 56 and 8th St

File Name : 10 CO 56 and 8th St AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 2

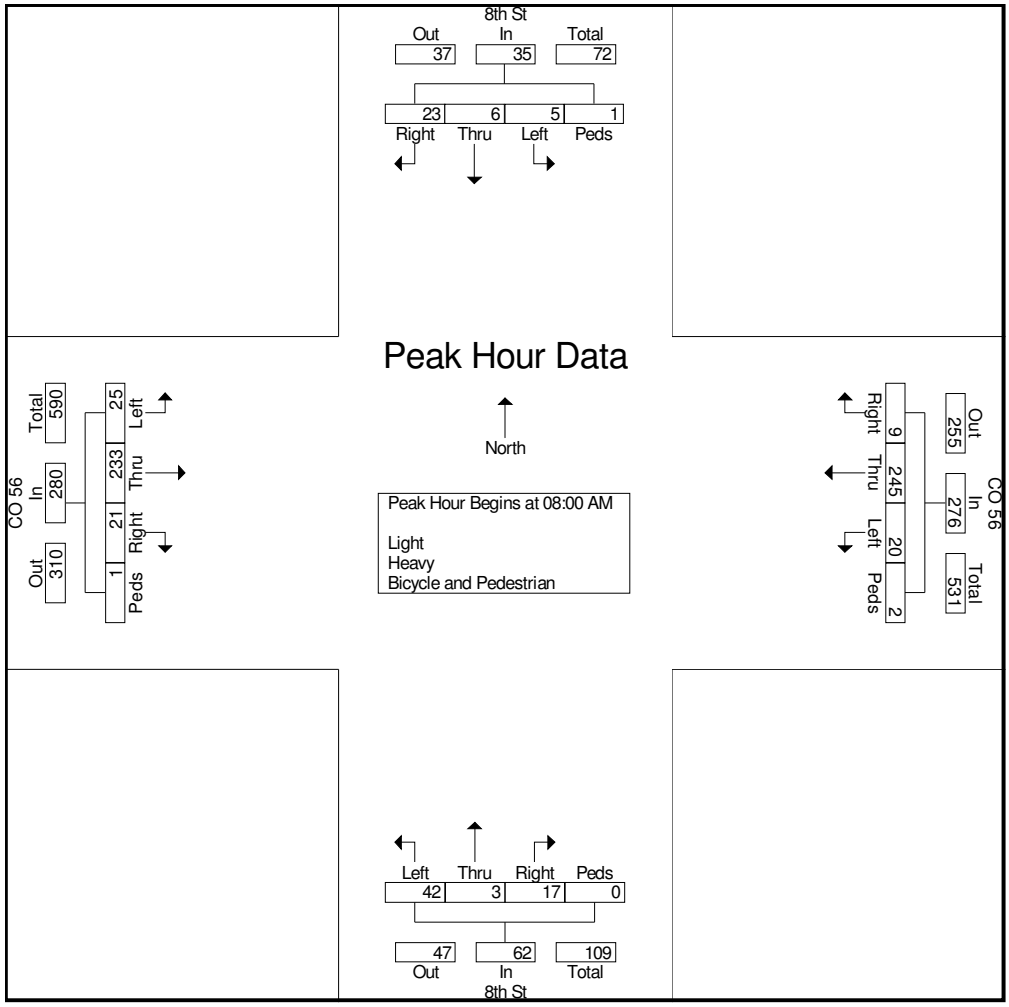


Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
CO 56 and 8th St

File Name : 10 CO 56 and 8th St AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 3

	CO 56 Eastbound					CO 56 Westbound					8th St Northbound					8th St Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	5	57	5	0	67	2	65	3	0	70	8	**2**	4	0	14	0	**3**	7	0	10	161
08:15 AM	7	53	5	0	65	4	60	**4**	**1**	69	7	0	2	0	9	**2**	2	**9**	0	**13**	156
08:30 AM	**8**	56	4	0	68	**7**	48	1	1	57	**14**	1	4	0	19	1	1	4	**1**	7	151
08:45 AM	5	**67**	**7**	**1**	**80**	7	**72**	1	0	**80**	13	0	**7**	0	**20**	2	0	3	0	5	**185**
Total Volume	25	233	21	1	280	20	245	9	2	276	42	3	17	0	62	5	6	23	1	35	653
% App. Total	8.9	83.2	7.5	0.4		7.2	88.8	3.3	0.7		67.7	4.8	27.4	0		14.3	17.1	65.7	2.9		
PHF	.781	.869	.750	.250	.875	.714	.851	.563	.500	.863	.750	.375	.607	.000	.775	.625	.500	.639	.250	.673	.882



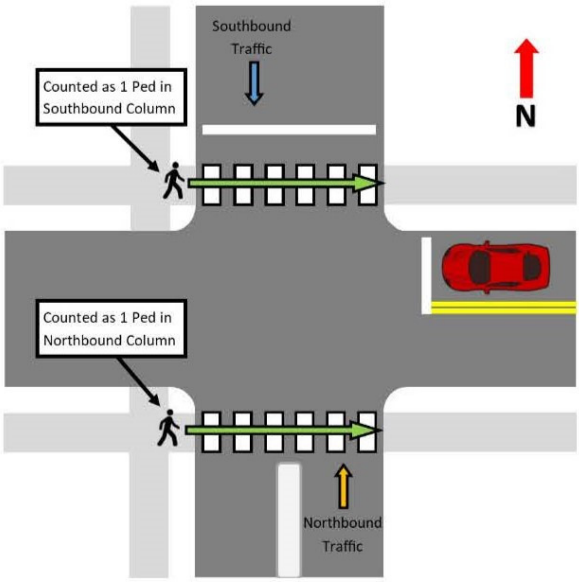
Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
CO 56 and 8th St

File Name : 10 CO 56 and 8th St AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 4

Image 1

The number of pedestrians shown on this report is representative of the crossing on the approaching leg, i.e. pedestrians crossing the north side of the intersection are counted as pedestrians in the southbound crosswalk, as that is the approaching leg that they are crossing (see figure below). Diagonal crossings are counted on the two legs that will get the pedestrian to the same end point. Diagonals can be counted separately if discussed prior to count.



Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
CO 56 and 8th St

File Name : 10 CO 56 and 8th St PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 1

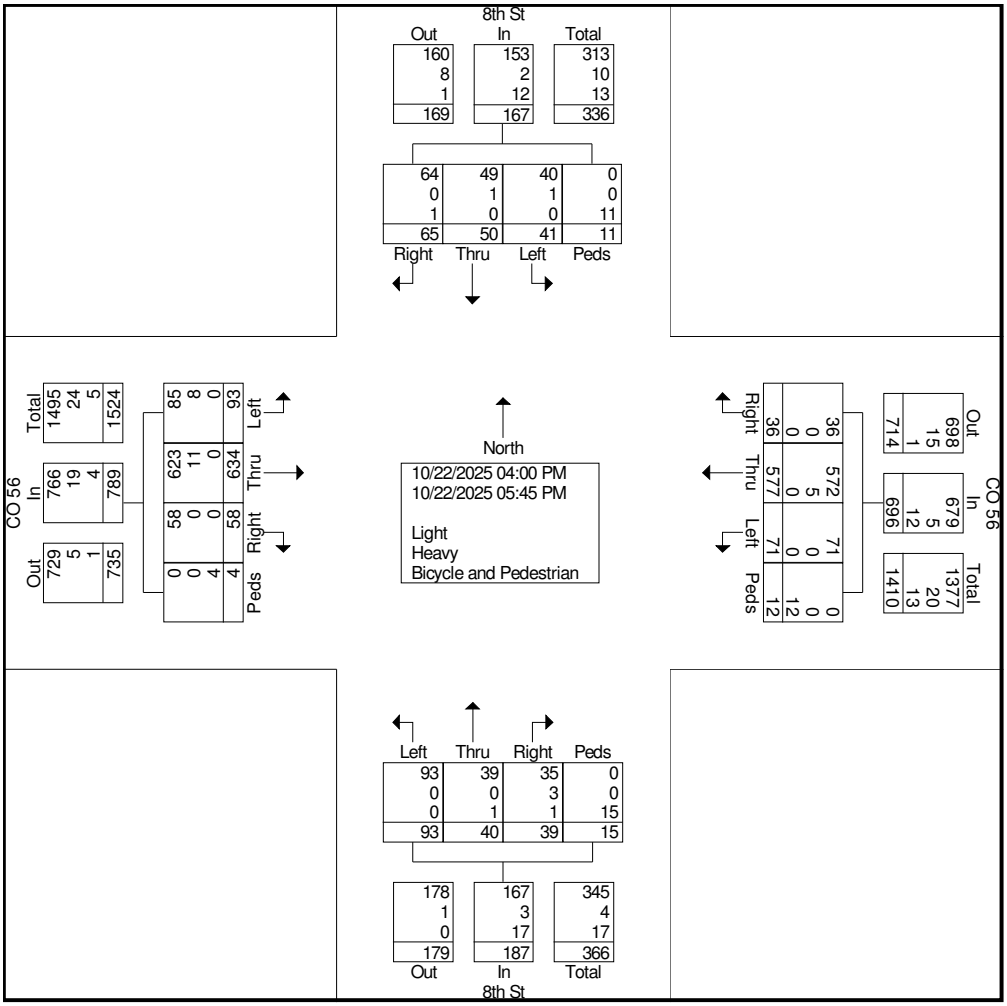
Groups Printed- Light - Heavy - Bicycle and Pedestrian

	CO 56 Eastbound					CO 56 Westbound					8th St Northbound					8th St Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
04:00 PM	31	85	12	2	130	15	63	11	3	92	9	15	5	2	31	5	15	23	4	47	300
04:15 PM	8	90	5	1	104	8	77	1	3	89	9	4	6	5	24	10	15	8	0	33	250
04:30 PM	8	65	5	0	78	7	79	7	1	94	12	5	5	3	25	3	7	5	0	15	212
04:45 PM	5	84	9	0	98	14	86	4	2	106	11	6	7	3	27	4	1	2	0	7	238
Total	52	324	31	3	410	44	305	23	9	381	41	30	23	13	107	22	38	38	4	102	1000
05:00 PM	10	94	4	0	108	4	78	2	1	85	15	4	3	0	22	4	6	7	2	19	234
05:15 PM	14	64	8	0	86	6	72	9	1	88	15	3	3	1	22	7	1	6	0	14	210
05:30 PM	9	91	6	0	106	10	69	0	1	80	18	2	5	0	25	4	4	9	3	20	231
05:45 PM	8	61	9	1	79	7	53	2	0	62	4	1	5	1	11	4	1	5	2	12	164
Total	41	310	27	1	379	27	272	13	3	315	52	10	16	2	80	19	12	27	7	65	839
Grand Total	93	634	58	4	789	71	577	36	12	696	93	40	39	15	187	41	50	65	11	167	1839
Apprch %	11.8	80.4	7.4	0.5		10.2	82.9	5.2	1.7		49.7	21.4	20.9	8		24.6	29.9	38.9	6.6		
Total %	5.1	34.5	3.2	0.2	42.9	3.9	31.4	2	0.7	37.8	5.1	2.2	2.1	0.8	10.2	2.2	2.7	3.5	0.6	9.1	
Light	85	623	58	0	766	71	572	36	0	679	93	39	35	0	167	40	49	64	0	153	1765
% Light	91.4	98.3	100	0	97.1	100	99.1	100	0	97.6	100	97.5	89.7	0	89.3	97.6	98	98.5	0	91.6	96
Heavy	8	11	0	0	19	0	5	0	0	5	0	0	3	0	3	1	1	0	0	2	29
% Heavy	8.6	1.7	0	0	2.4	0	0.9	0	0	0.7	0	0	7.7	0	1.6	2.4	2	0	0	1.2	1.6
Bicycle and Pedestrian	0	0	0	4	4	0	0	0	12	12	0	1	1	15	17	0	0	1	11	12	45
% Bicycle and Pedestrian	0	0	0	100	0.5	0	0	0	100	1.7	0	2.5	2.6	100	9.1	0	0	1.5	100	7.2	2.4

Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
CO 56 and 8th St

File Name : 10 CO 56 and 8th St PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 2

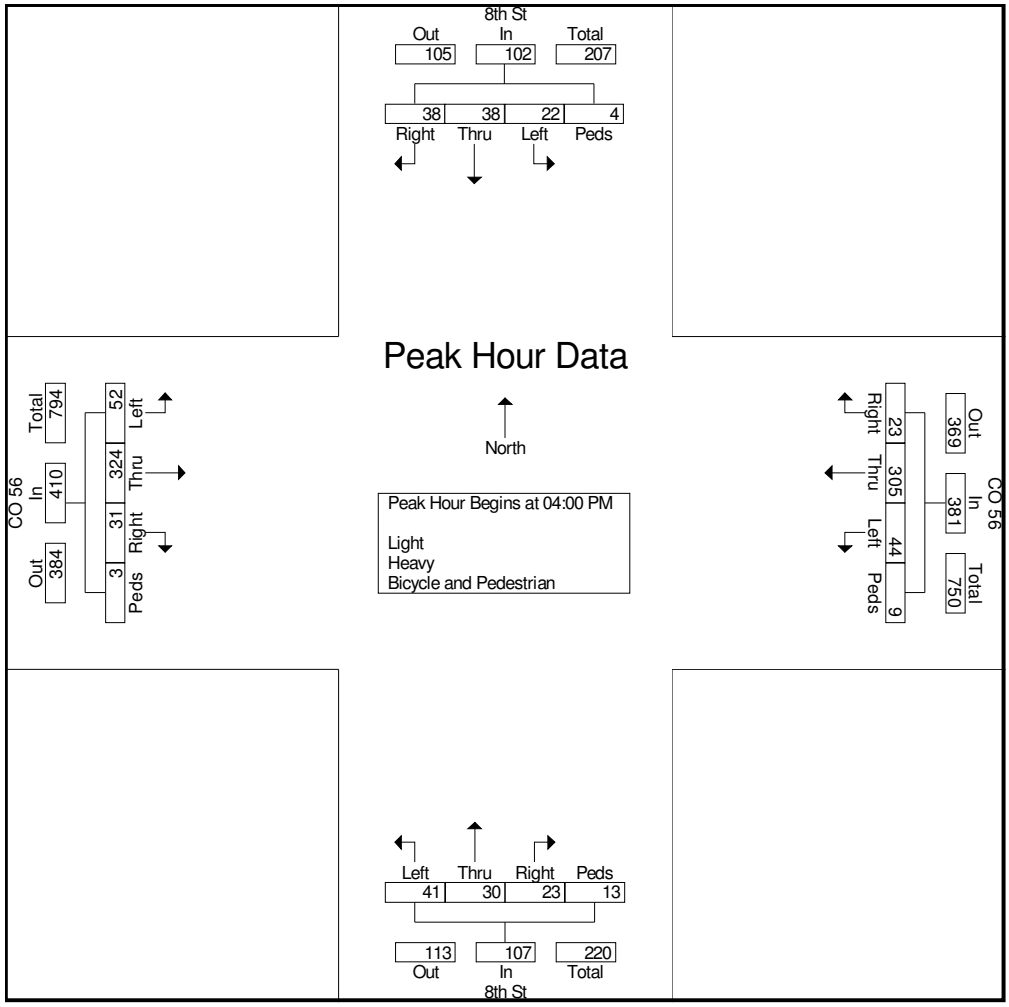


Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
CO 56 and 8th St

File Name : 10 CO 56 and 8th St PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 3

	CO 56 Eastbound					CO 56 Westbound					8th St Northbound					8th St Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	**31**	85	**12**	**2**	**130**	**15**	63	**11**	**3**	92	9	**15**	5	2	**31**	5	**15**	**23**	**4**	**47**	**300**
04:15 PM	8	**90**	5	1	104	8	77	1	3	89	9	4	6	**5**	24	**10**	15	8	0	33	250
04:30 PM	8	65	5	0	78	7	79	7	1	94	**12**	5	5	3	25	3	7	5	0	15	212
04:45 PM	5	84	9	0	98	14	**86**	4	2	**106**	11	6	**7**	3	27	4	1	2	0	7	238
Total Volume	52	324	31	3	410	44	305	23	9	381	41	30	23	13	107	22	38	38	4	102	1000
% App. Total	12.7	79	7.6	0.7		11.5	80.1	6	2.4		38.3	28	21.5	12.1		21.6	37.3	37.3	3.9		
PHF	.419	.900	.646	.375	.788	.733	.887	.523	.750	.899	.854	.500	.821	.650	.863	.550	.633	.413	.250	.543	.833



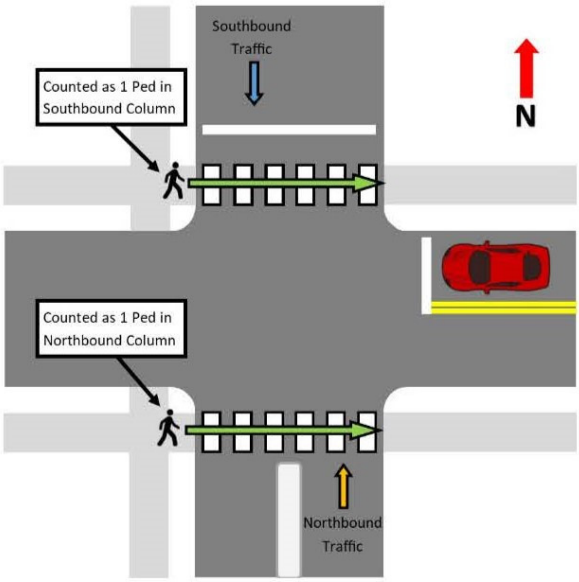
Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
CO 56 and 8th St

File Name : 10 CO 56 and 8th St PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 4

Image 1

The number of pedestrians shown on this report is representative of the crossing on the approaching leg, i.e. pedestrians crossing the north side of the intersection are counted as pedestrians in the southbound crosswalk, as that is the approaching leg that they are crossing (see figure below). Diagonal crossings are counted on the two legs that will get the pedestrian to the same end point. Diagonals can be counted separately if discussed prior to count.



Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
CO 56 and 4th St

File Name : 11 CO 56 and 4th St AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 1

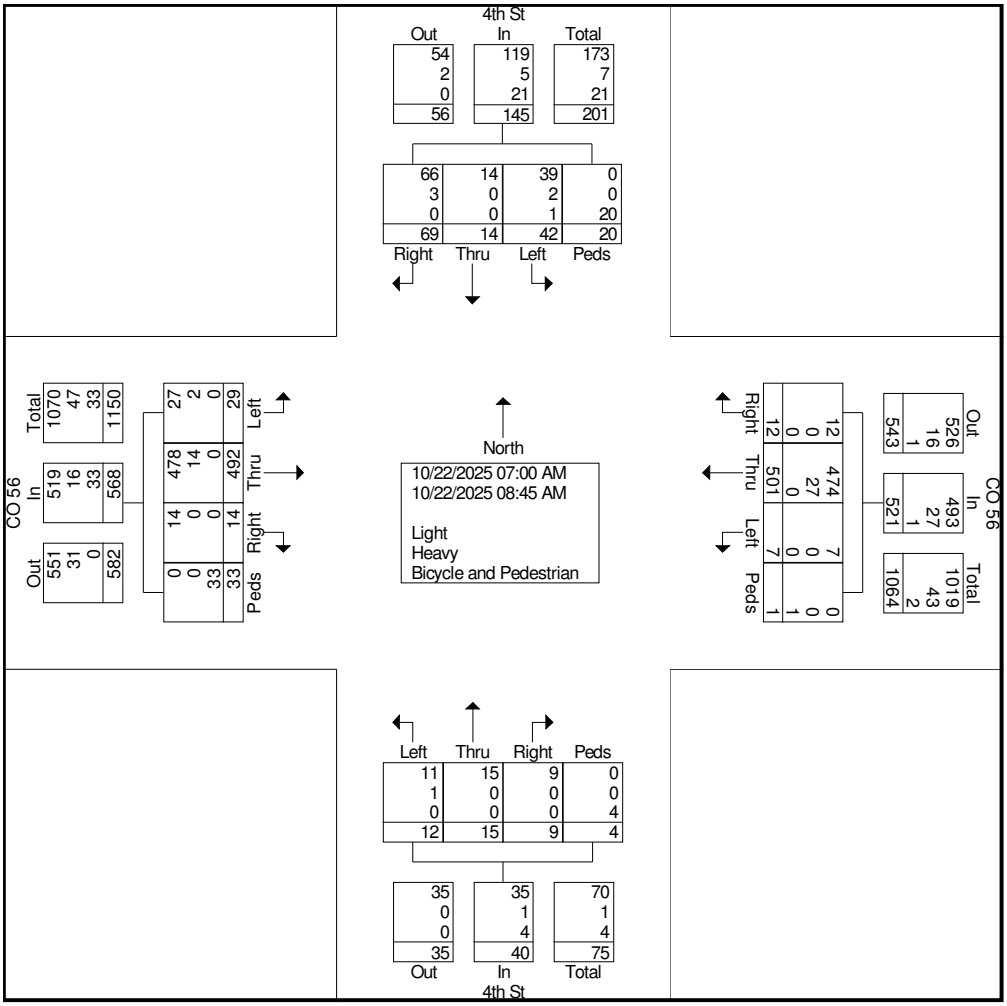
Groups Printed- Light - Heavy - Bicycle and Pedestrian

	CO 56 Eastbound					CO 56 Westbound					4th St Northbound					4th St Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	2	57	3	5	67	0	49	2	0	51	0	2	1	1	4	9	0	3	0	12	134
07:15 AM	2	56	1	5	64	1	59	0	1	61	1	0	1	1	3	6	2	8	2	18	146
07:30 AM	5	61	0	2	68	1	68	2	0	71	0	1	0	1	2	2	3	9	1	15	156
07:45 AM	6	73	1	3	83	1	71	0	0	72	1	3	3	0	7	4	1	7	5	17	179
Total	15	247	5	15	282	3	247	4	1	255	2	6	5	3	16	21	6	27	8	62	615
08:00 AM	4	58	2	6	70	0	68	3	0	71	3	2	2	0	7	4	2	10	7	23	171
08:15 AM	1	61	1	3	66	2	63	3	0	68	5	0	0	0	5	6	0	3	5	14	153
08:30 AM	8	49	1	1	59	1	63	1	0	65	1	2	1	1	5	3	4	5	0	12	141
08:45 AM	1	77	5	8	91	1	60	1	0	62	1	5	1	0	7	8	2	24	0	34	194
Total	14	245	9	18	286	4	254	8	0	266	10	9	4	1	24	21	8	42	12	83	659
Grand Total	29	492	14	33	568	7	501	12	1	521	12	15	9	4	40	42	14	69	20	145	1274
Apprch %	5.1	86.6	2.5	5.8		1.3	96.2	2.3	0.2		30	37.5	22.5	10		29	9.7	47.6	13.8		
Total %	2.3	38.6	1.1	2.6	44.6	0.5	39.3	0.9	0.1	40.9	0.9	1.2	0.7	0.3	3.1	3.3	1.1	5.4	1.6	11.4	
Light	27	478	14	0	519	7	474	12	0	493	11	15	9	0	35	39	14	66	0	119	1166
% Light	93.1	97.2	100	0	91.4	100	94.6	100	0	94.6	91.7	100	100	0	87.5	92.9	100	95.7	0	82.1	91.5
Heavy	2	14	0	0	16	0	27	0	0	27	1	0	0	0	1	2	0	3	0	5	49
% Heavy	6.9	2.8	0	0	2.8	0	5.4	0	0	5.2	8.3	0	0	0	2.5	4.8	0	4.3	0	3.4	3.8
Bicycle and Pedestrian	0	0	0	33	33	0	0	0	1	1	0	0	0	4	4	1	0	0	20	21	59
% Bicycle and Pedestrian	0	0	0	100	5.8	0	0	0	100	0.2	0	0	0	100	10	2.4	0	0	100	14.5	4.6

Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
CO 56 and 4th St

File Name : 11 CO 56 and 4th St AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 2

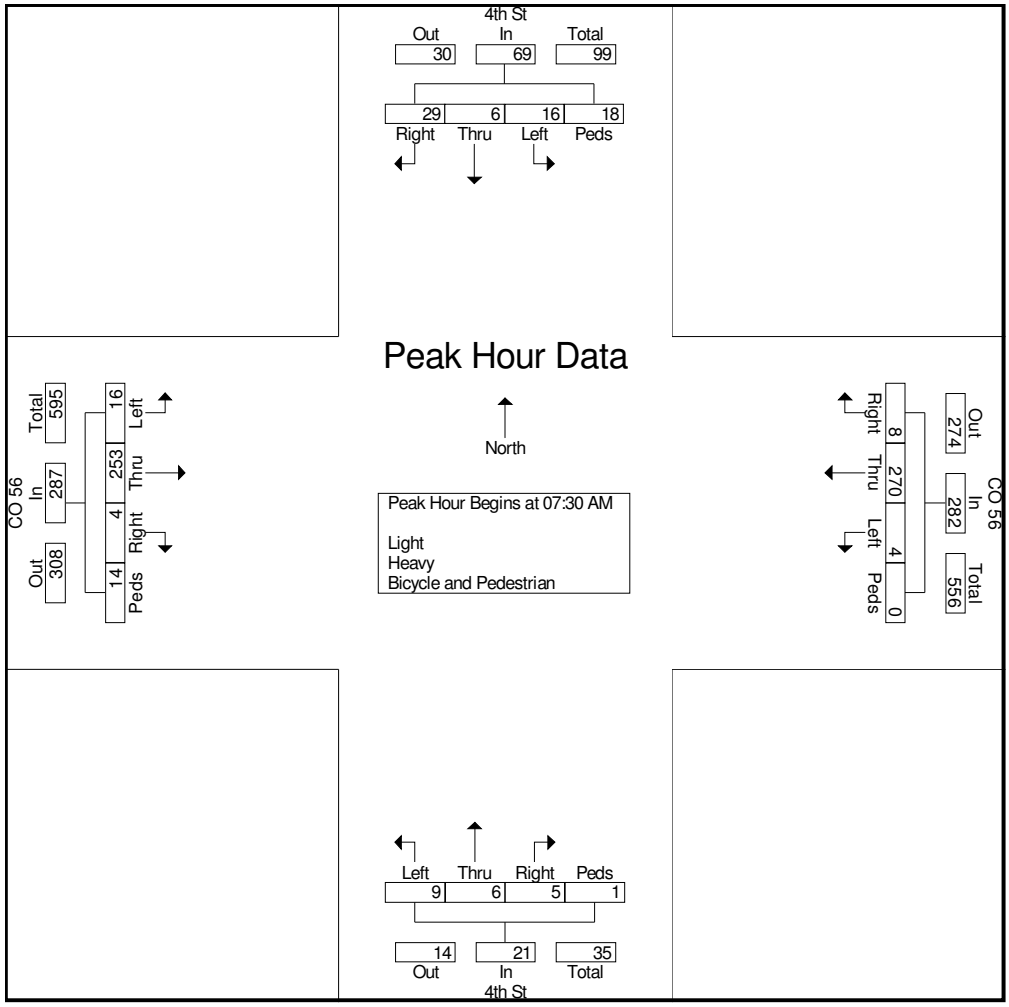


Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
CO 56 and 4th St

File Name : 11 CO 56 and 4th St AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 3

	CO 56 Eastbound					CO 56 Westbound					4th St Northbound					4th St Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	5	61	0	2	68	1	68	2	0	71	0	1	0	**1**	2	2	**3**	9	1	15	156
07:45 AM	**6**	**73**	1	3	**83**	1	**71**	0	0	**72**	1	**3**	**3**	0	**7**	4	1	7	5	17	**179**
08:00 AM	4	58	**2**	**6**	70	0	68	**3**	0	71	3	2	2	0	7	4	2	**10**	**7**	**23**	171
08:15 AM	1	61	1	3	66	**2**	63	3	0	68	**5**	0	0	0	5	**6**	0	3	5	14	153
Total Volume	16	253	4	14	287	4	270	8	0	282	9	6	5	1	21	16	6	29	18	69	659
% App. Total	5.6	88.2	1.4	4.9		1.4	95.7	2.8	0		42.9	28.6	23.8	4.8		23.2	8.7	42	26.1		
PHF	.667	.866	.500	.583	.864	.500	.951	.667	.000	.979	.450	.500	.417	.250	.750	.667	.500	.725	.643	.750	.920



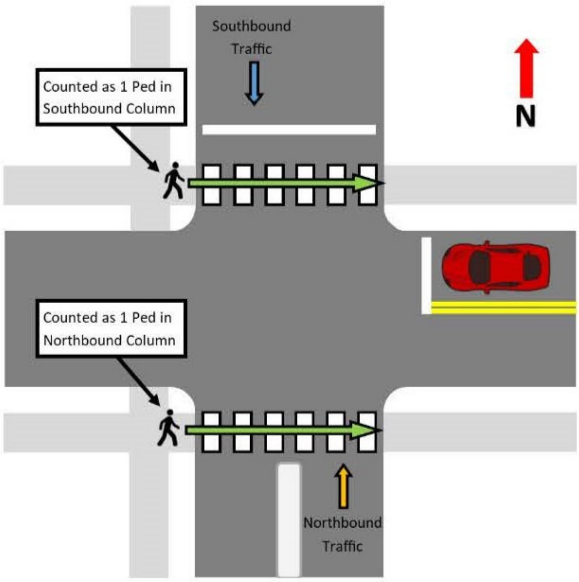
Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
CO 56 and 4th St

File Name : 11 CO 56 and 4th St AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 4

Image 1

The number of pedestrians shown on this report is representative of the crossing on the approaching leg, i.e. pedestrians crossing the north side of the intersection are counted as pedestrians in the southbound crosswalk, as that is the approaching leg that they are crossing (see figure below). Diagonal crossings are counted on the two legs that will get the pedestrian to the same end point. Diagonals can be counted separately if discussed prior to count.



Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
CO 56 and 4th St

File Name : 11 CO 56 and 4th St PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 1

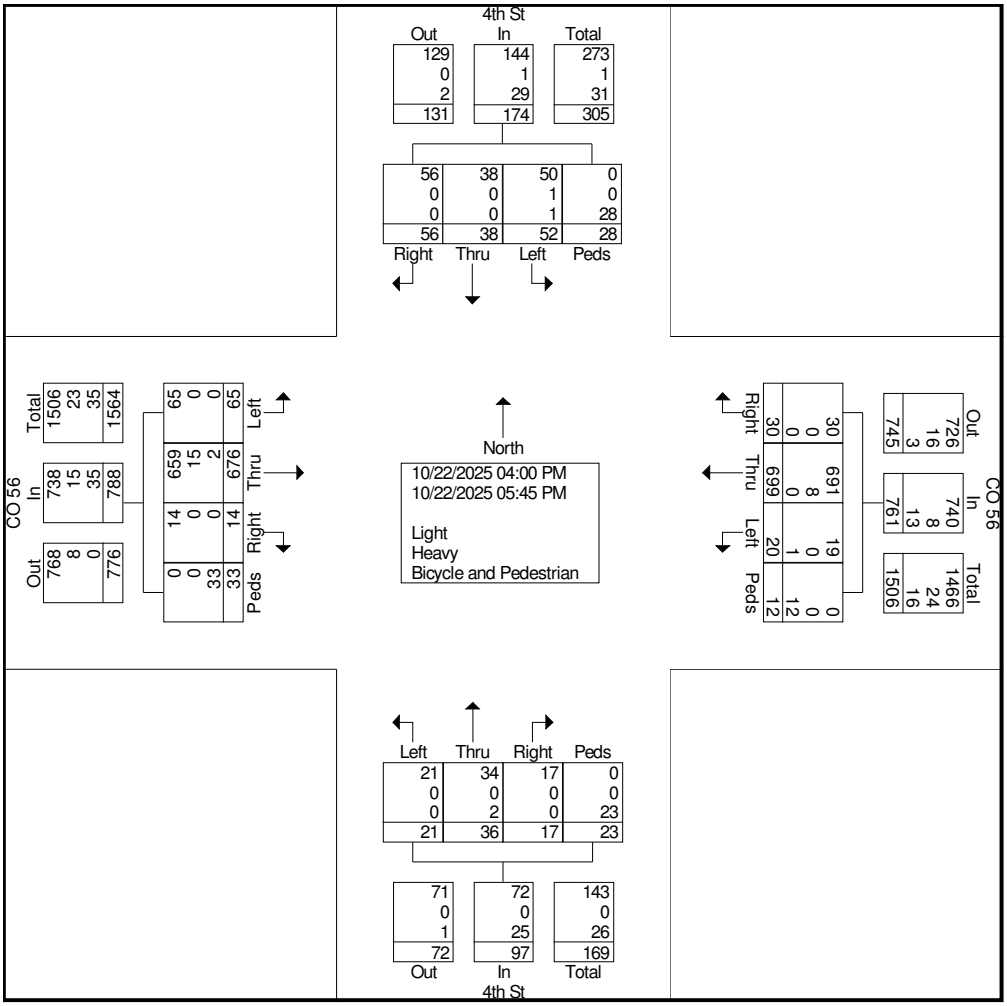
Groups Printed- Light - Heavy - Bicycle and Pedestrian

	CO 56 Eastbound					CO 56 Westbound					4th St Northbound					4th St Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
04:00 PM	10	93	0	6	109	4	94	4	0	102	1	4	2	3	10	19	10	3	2	34	255
04:15 PM	8	115	5	3	131	3	86	0	0	89	4	4	6	3	17	11	7	3	3	24	261
04:30 PM	8	78	1	4	91	2	96	1	5	104	3	3	1	3	10	2	1	8	9	20	225
04:45 PM	8	85	2	6	101	2	101	4	2	109	3	7	2	3	15	2	3	7	5	17	242
Total	34	371	8	19	432	11	377	9	7	404	11	18	11	12	52	34	21	21	19	95	983
05:00 PM	5	97	3	5	110	4	90	3	2	99	3	4	3	1	11	7	4	7	2	20	240
05:15 PM	4	68	0	3	75	2	91	6	1	100	2	5	1	4	12	5	6	9	4	24	211
05:30 PM	10	81	3	3	97	2	82	4	1	89	1	2	0	1	4	4	6	12	1	23	213
05:45 PM	12	59	0	3	74	1	59	8	1	69	4	7	2	5	18	2	1	7	2	12	173
Total	31	305	6	14	356	9	322	21	5	357	10	18	6	11	45	18	17	35	9	79	837
Grand Total	65	676	14	33	788	20	699	30	12	761	21	36	17	23	97	52	38	56	28	174	1820
Apprch %	8.2	85.8	1.8	4.2		2.6	91.9	3.9	1.6		21.6	37.1	17.5	23.7		29.9	21.8	32.2	16.1		
Total %	3.6	37.1	0.8	1.8	43.3	1.1	38.4	1.6	0.7	41.8	1.2	2	0.9	1.3	5.3	2.9	2.1	3.1	1.5	9.6	
Light	65	659	14	0	738	19	691	30	0	740	21	34	17	0	72	50	38	56	0	144	1694
% Light	100	97.5	100	0	93.7	95	98.9	100	0	97.2	100	94.4	100	0	74.2	96.2	100	100	0	82.8	93.1
Heavy	0	15	0	0	15	0	8	0	0	8	0	0	0	0	0	1	0	0	0	1	24
% Heavy	0	2.2	0	0	1.9	0	1.1	0	0	1.1	0	0	0	0	0	1.9	0	0	0	0.6	1.3
Bicycle and Pedestrian	0	2	0	33	35	1	0	0	12	13	0	2	0	23	25	1	0	0	28	29	102
% Bicycle and Pedestrian	0	0.3	0	100	4.4	5	0	0	100	1.7	0	5.6	0	100	25.8	1.9	0	0	100	16.7	5.6

Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
CO 56 and 4th St

File Name : 11 CO 56 and 4th St PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 2

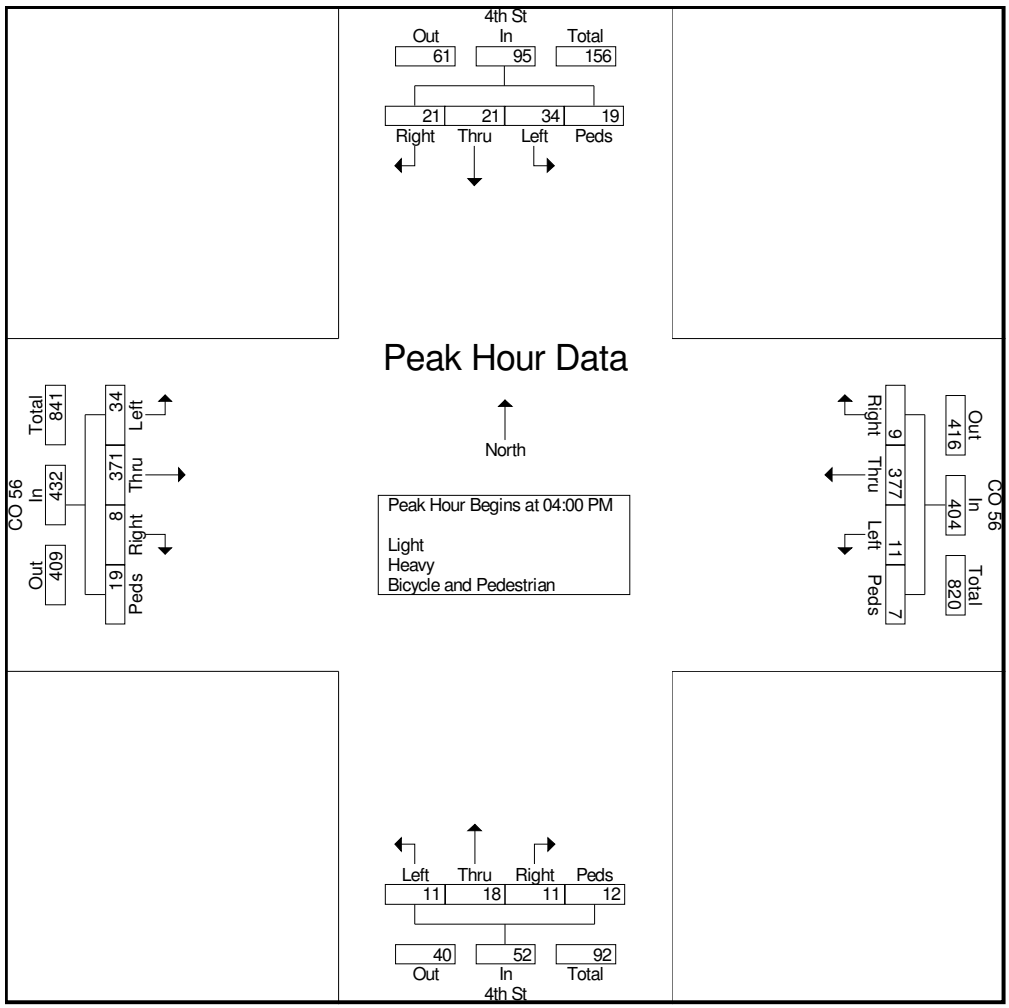


Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
CO 56 and 4th St

File Name : 11 CO 56 and 4th St PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 3

	CO 56 Eastbound					CO 56 Westbound					4th St Northbound					4th St Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	**10**	93	0	**6**	109	**4**	94	**4**	0	102	1	4	2	**3**	10	**19**	**10**	3	2	**34**	255
04:15 PM	8	**115**	**5**	3	**131**	3	86	0	0	89	**4**	4	**6**	3	**17**	11	7	3	3	24	**261**
04:30 PM	8	78	1	4	91	2	96	1	**5**	104	3	3	1	3	10	2	1	**8**	**9**	20	225
04:45 PM	8	85	2	6	101	2	**101**	4	2	**109**	3	**7**	2	3	15	2	3	7	5	17	242
Total Volume	34	371	8	19	432	11	377	9	7	404	11	18	11	12	52	34	21	21	19	95	983
% App. Total	7.9	85.9	1.9	4.4		2.7	93.3	2.2	1.7		21.2	34.6	21.2	23.1		35.8	22.1	22.1	20		
PHF	.850	.807	.400	.792	.824	.688	.933	.563	.350	.927	.688	.643	.458	1.00	.765	.447	.525	.656	.528	.699	.942



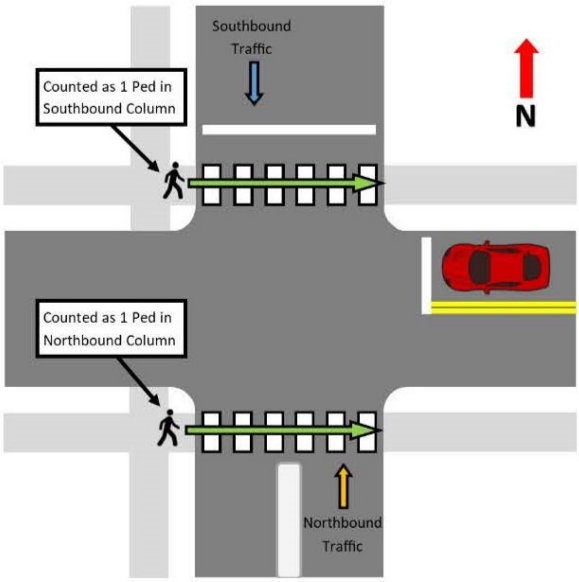
Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
CO 56 and 4th St

File Name : 11 CO 56 and 4th St PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 4

Image 1

The number of pedestrians shown on this report is representative of the crossing on the approaching leg, i.e. pedestrians crossing the north side of the intersection are counted as pedestrians in the southbound crosswalk, as that is the approaching leg that they are crossing (see figure below). Diagonal crossings are counted on the two legs that will get the pedestrian to the same end point. Diagonals can be counted separately if discussed prior to count.



Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
CO 56 and WCR 7

File Name : 13 CO 56 and WCR 7 AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 1

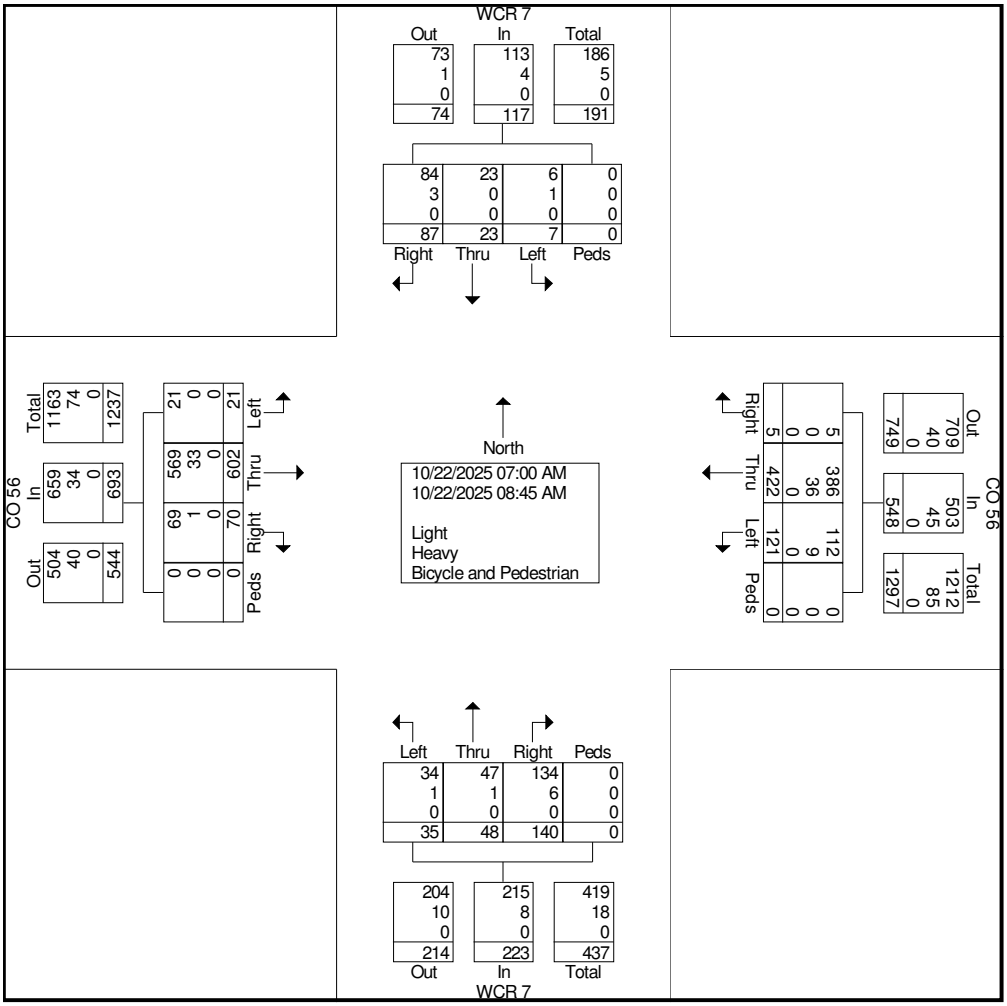
Groups Printed- Light - Heavy - Bicycle and Pedestrian

	CO 56 Eastbound					CO 56 Westbound					WCR 7 Northbound					WCR 7 Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	3	77	3	0	83	6	46	1	0	53	4	5	5	0	14	0	3	10	0	13	163
07:15 AM	2	94	5	0	101	10	47	1	0	58	2	5	6	0	13	1	2	18	0	21	193
07:30 AM	2	92	11	0	105	11	53	0	0	64	2	2	9	0	13	4	3	14	0	21	203
07:45 AM	4	91	11	0	106	19	53	0	0	72	5	3	13	0	21	2	3	8	0	13	212
Total	11	354	30	0	395	46	199	2	0	247	13	15	33	0	61	7	11	50	0	68	771
08:00 AM	2	72	10	0	84	23	63	1	0	87	5	13	40	0	58	0	5	8	0	13	242
08:15 AM	2	62	10	0	74	18	54	0	0	72	7	14	48	0	69	0	2	10	0	12	227
08:30 AM	2	60	11	0	73	20	52	0	0	72	8	2	14	0	24	0	1	14	0	15	184
08:45 AM	4	54	9	0	67	14	54	2	0	70	2	4	5	0	11	0	4	5	0	9	157
Total	10	248	40	0	298	75	223	3	0	301	22	33	107	0	162	0	12	37	0	49	810
Grand Total	21	602	70	0	693	121	422	5	0	548	35	48	140	0	223	7	23	87	0	117	1581
Apprch %	3	86.9	10.1	0		22.1	77	0.9	0		15.7	21.5	62.8	0		6	19.7	74.4	0		
Total %	1.3	38.1	4.4	0	43.8	7.7	26.7	0.3	0	34.7	2.2	3	8.9	0	14.1	0.4	1.5	5.5	0	7.4	
Light	21	569	69	0	659	112	386	5	0	503	34	47	134	0	215	6	23	84	0	113	1490
% Light	100	94.5	98.6	0	95.1	92.6	91.5	100	0	91.8	97.1	97.9	95.7	0	96.4	85.7	100	96.6	0	96.6	94.2
Heavy	0	33	1	0	34	9	36	0	0	45	1	1	6	0	8	1	0	3	0	4	91
% Heavy	0	5.5	1.4	0	4.9	7.4	8.5	0	0	8.2	2.9	2.1	4.3	0	3.6	14.3	0	3.4	0	3.4	5.8
Bicycle and Pedestrian	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycle and Pedestrian	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
CO 56 and WCR 7

File Name : 13 CO 56 and WCR 7 AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 2

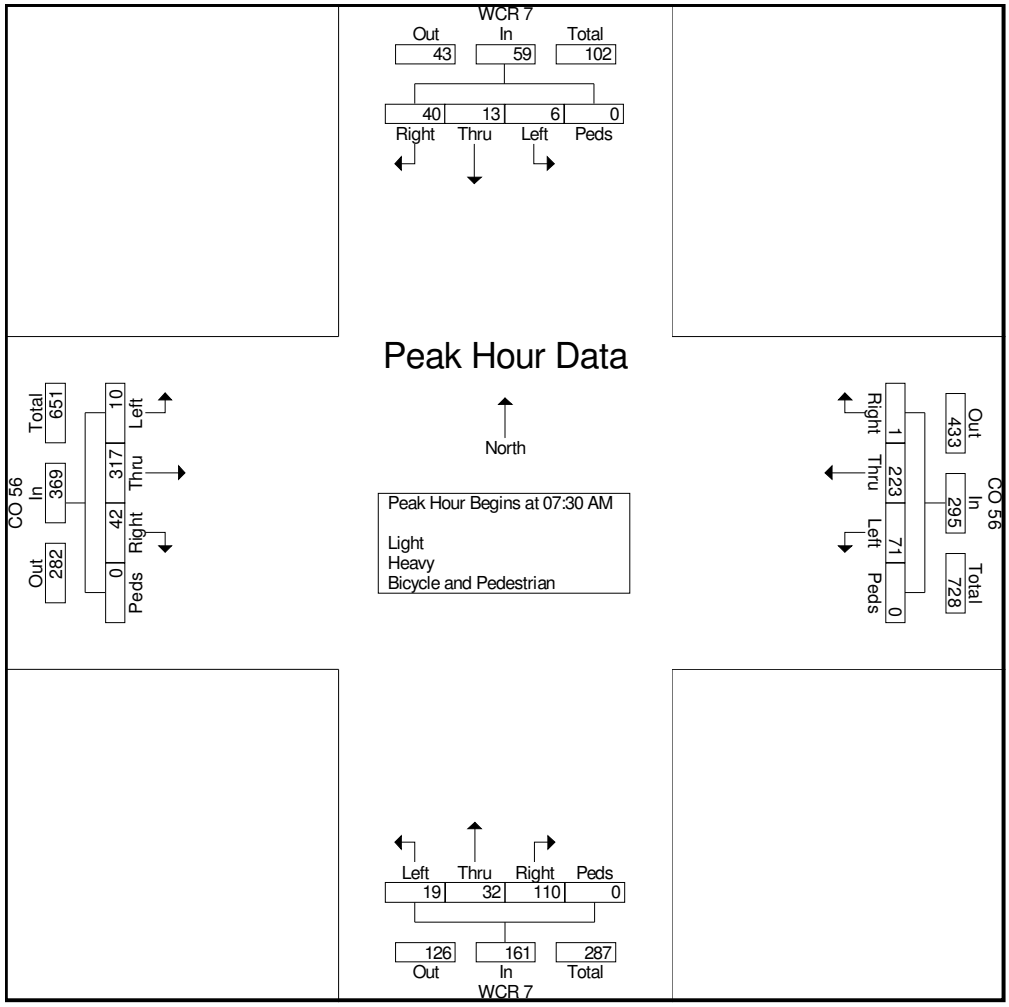


Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
CO 56 and WCR 7

File Name : 13 CO 56 and WCR 7 AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 3

	CO 56 Eastbound					CO 56 Westbound					WCR 7 Northbound					WCR 7 Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	2	**92**	**11**	0	105	11	53	0	0	64	2	2	9	0	13	**4**	3	**14**	0	**21**	203
07:45 AM	**4**	91	11	0	**106**	19	53	0	0	72	5	3	13	0	21	2	3	8	0	13	212
08:00 AM	2	72	10	0	84	**23**	**63**	**1**	0	**87**	5	13	40	0	58	0	**5**	8	0	13	**242**
08:15 AM	2	62	10	0	74	18	54	0	0	72	**7**	**14**	**48**	0	**69**	0	2	10	0	12	227
Total Volume	10	317	42	0	369	71	223	1	0	295	19	32	110	0	161	6	13	40	0	59	884
% App. Total	2.7	85.9	11.4	0		24.1	75.6	0.3	0		11.8	19.9	68.3	0		10.2	22	67.8	0		
PHF	.625	.861	.955	.000	.870	.772	.885	.250	.000	.848	.679	.571	.573	.000	.583	.375	.650	.714	.000	.702	.913



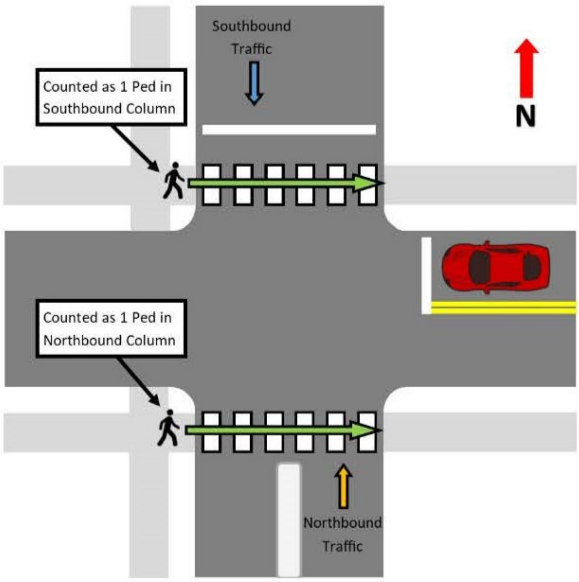
Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
CO 56 and WCR 7

File Name : 13 CO 56 and WCR 7 AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 4

Image 1

The number of pedestrians shown on this report is representative of the crossing on the approaching leg, i.e. pedestrians crossing the north side of the intersection are counted as pedestrians in the southbound crosswalk, as that is the approaching leg that they are crossing (see figure below). Diagonal crossings are counted on the two legs that will get the pedestrian to the same end point. Diagonals can be counted separately if discussed prior to count.



Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
CO 56 and WCR 7

File Name : 13 CO 56 and WCR 7 PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 1

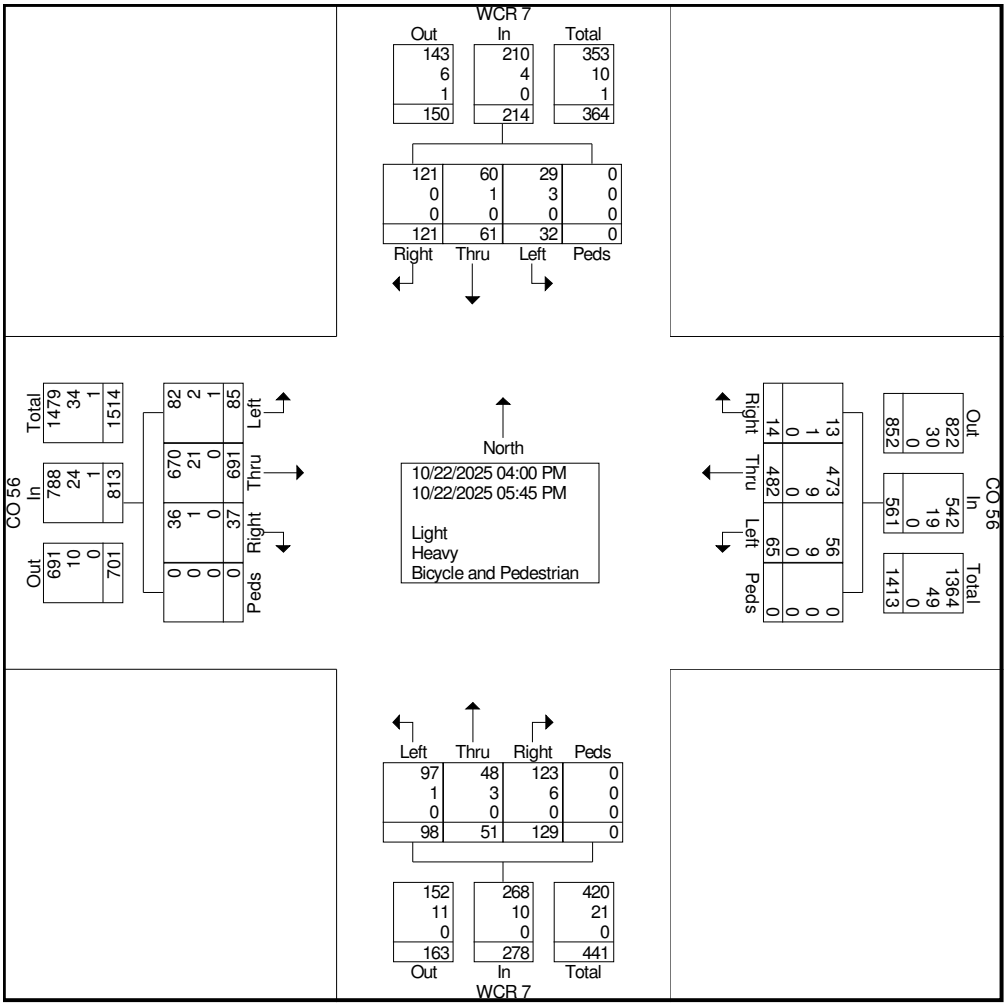
Groups Printed- Light - Heavy - Bicycle and Pedestrian

	CO 56 Eastbound					CO 56 Westbound					WCR 7 Northbound					WCR 7 Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
04:00 PM	9	92	5	0	106	11	63	1	0	75	10	7	18	0	35	3	5	14	0	22	238
04:15 PM	18	98	9	0	125	8	67	0	0	75	14	4	18	0	36	12	11	19	0	42	278
04:30 PM	17	99	4	0	120	10	49	5	0	64	9	13	8	0	30	3	15	16	0	34	248
04:45 PM	7	90	5	0	102	9	67	1	0	77	19	4	21	0	44	5	2	16	0	23	246
Total	51	379	23	0	453	38	246	7	0	291	52	28	65	0	145	23	33	65	0	121	1010
05:00 PM	7	98	2	0	107	10	61	0	0	71	14	6	24	0	44	3	8	20	0	31	253
05:15 PM	10	71	6	0	87	4	62	1	0	67	17	3	17	0	37	2	2	12	0	16	207
05:30 PM	10	78	5	0	93	6	57	3	0	66	10	9	13	0	32	1	8	14	0	23	214
05:45 PM	7	65	1	0	73	7	56	3	0	66	5	5	10	0	20	3	10	10	0	23	182
Total	34	312	14	0	360	27	236	7	0	270	46	23	64	0	133	9	28	56	0	93	856
Grand Total	85	691	37	0	813	65	482	14	0	561	98	51	129	0	278	32	61	121	0	214	1866
Apprch %	10.5	85	4.6	0		11.6	85.9	2.5	0		35.3	18.3	46.4	0		15	28.5	56.5	0		
Total %	4.6	37	2	0	43.6	3.5	25.8	0.8	0	30.1	5.3	2.7	6.9	0	14.9	1.7	3.3	6.5	0	11.5	
Light	82	670	36	0	788	56	473	13	0	542	97	48	123	0	268	29	60	121	0	210	1808
% Light	96.5	97	97.3	0	96.9	86.2	98.1	92.9	0	96.6	99	94.1	95.3	0	96.4	90.6	98.4	100	0	98.1	96.9
Heavy	2	21	1	0	24	9	9	1	0	19	1	3	6	0	10	3	1	0	0	4	57
% Heavy	2.4	3	2.7	0	3	13.8	1.9	7.1	0	3.4	1	5.9	4.7	0	3.6	9.4	1.6	0	0	1.9	3.1
Bicycle and Pedestrian	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Bicycle and Pedestrian	1.2	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1

Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
CO 56 and WCR 7

File Name : 13 CO 56 and WCR 7 PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 2

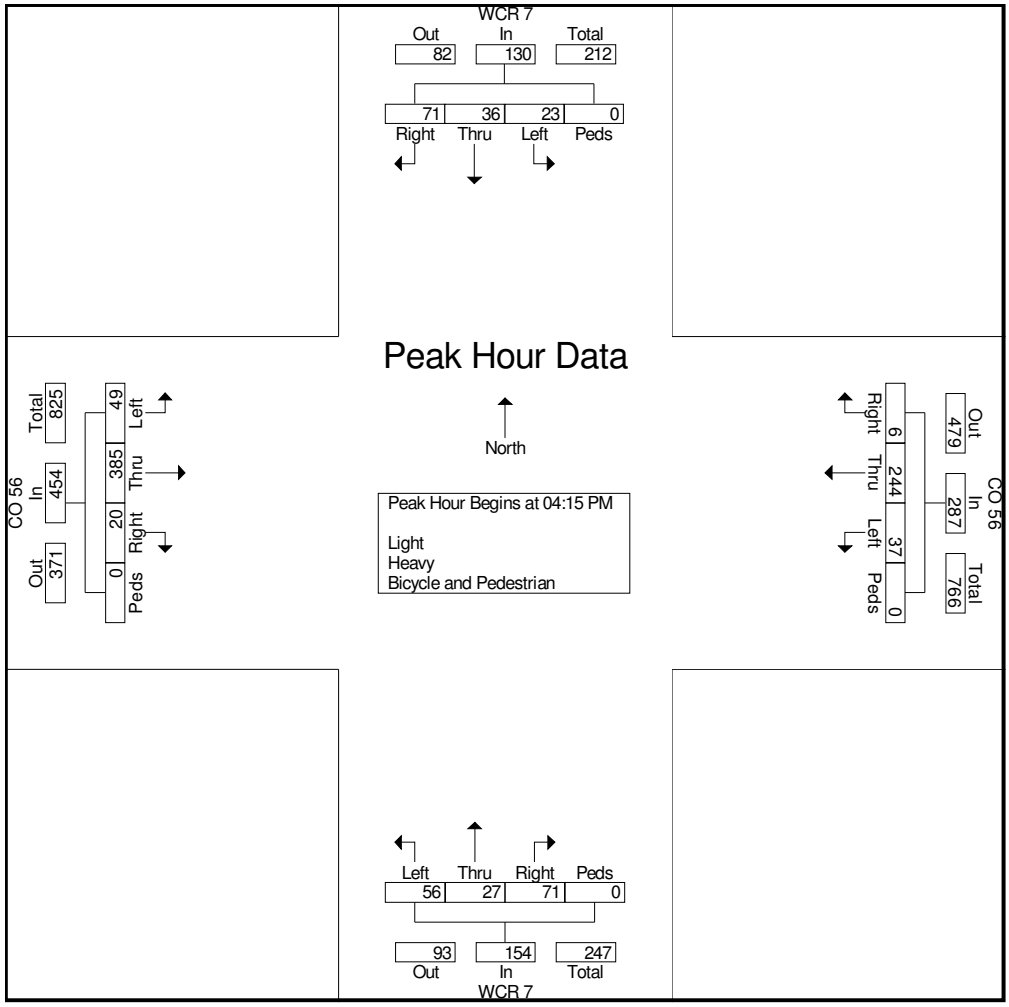


Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
CO 56 and WCR 7

File Name : 13 CO 56 and WCR 7 PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 3

	CO 56 Eastbound					CO 56 Westbound					WCR 7 Northbound					WCR 7 Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	**18**	98	**9**	0	**125**	8	**67**	0	0	75	14	4	18	0	36	**12**	11	19	0	**42**	**278**
04:30 PM	17	**99**	4	0	120	**10**	49	**5**	0	64	9	**13**	8	0	30	3	**15**	16	0	34	248
04:45 PM	7	90	5	0	102	9	67	1	0	**77**	**19**	4	21	0	**44**	5	2	16	0	23	246
05:00 PM	7	98	2	0	107	10	61	0	0	71	14	6	**24**	0	44	3	8	**20**	0	31	253
Total Volume	49	385	20	0	454	37	244	6	0	287	56	27	71	0	154	23	36	71	0	130	1025
% App. Total	10.8	84.8	4.4	0		12.9	85	2.1	0		36.4	17.5	46.1	0		17.7	27.7	54.6	0		
PHF	.681	.972	.556	.000	.908	.925	.910	.300	.000	.932	.737	.519	.740	.000	.875	.479	.600	.888	.000	.774	.922



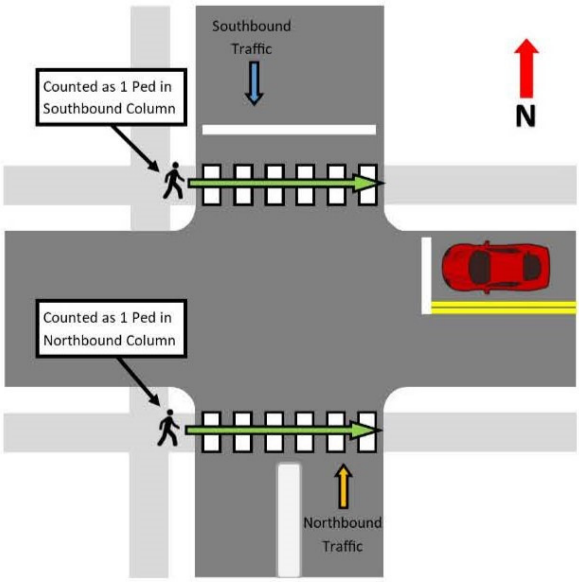
Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
CO 56 and WCR 7

File Name : 13 CO 56 and WCR 7 PM
Site Code : F&P
Start Date : 10/22/2025
Page No : 4

Image 1

The number of pedestrians shown on this report is representative of the crossing on the approaching leg, i.e. pedestrians crossing the north side of the intersection are counted as pedestrians in the southbound crosswalk, as that is the approaching leg that they are crossing (see figure below). Diagonal crossings are counted on the two legs that will get the pedestrian to the same end point. Diagonals can be counted separately if discussed prior to count.



Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
5th St and Spartan Ave

File Name : 15 5th St and Spartan Ave AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 1

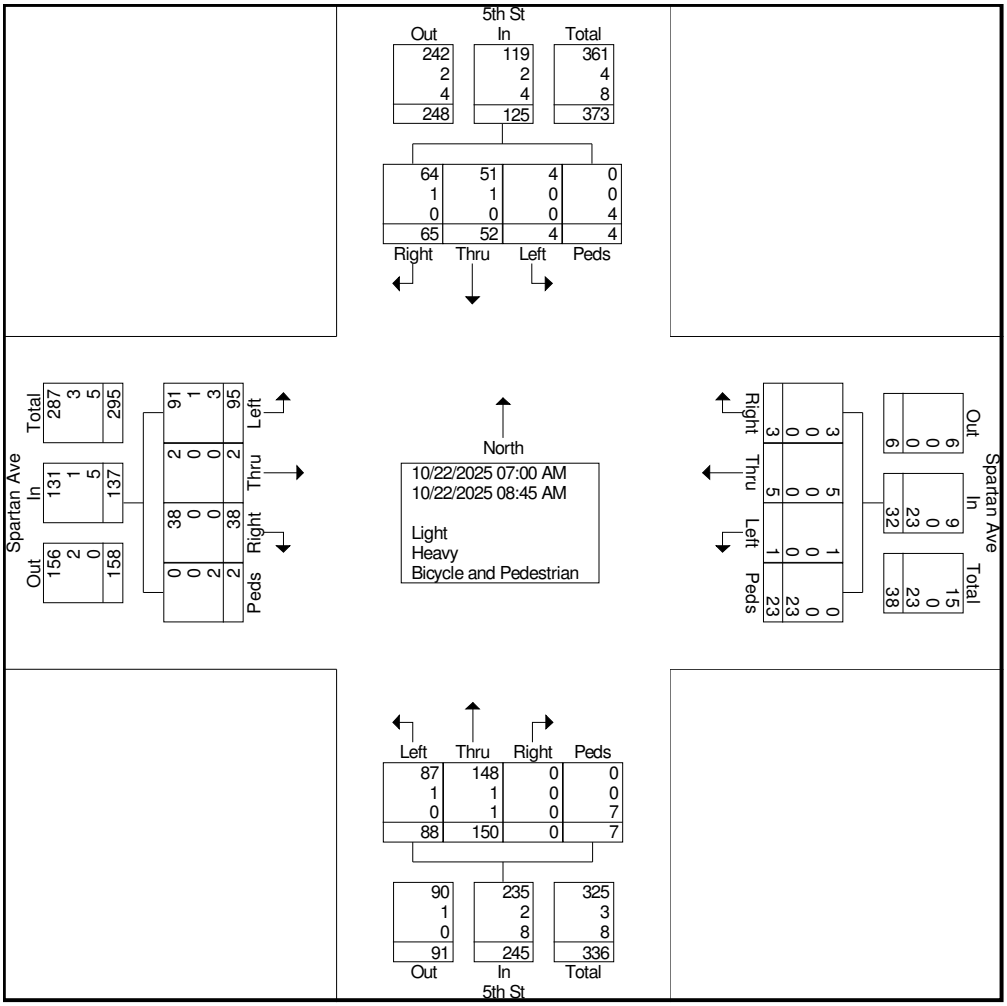
Groups Printed- Light - Heavy - Bicycle and Pedestrian

	Spartan Ave Eastbound					Spartan Ave Westbound					5th St Northbound					5th St Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	10	0	6	0	16	0	0	0	2	2	10	15	0	0	25	0	1	6	0	7	50
07:15 AM	10	0	3	0	13	0	1	0	2	3	7	17	0	0	24	1	8	7	2	18	58
07:30 AM	10	0	5	0	15	1	1	1	0	3	12	14	0	0	26	1	3	4	0	8	52
07:45 AM	9	0	2	0	11	0	1	0	1	2	9	11	0	0	20	0	0	4	0	4	37
Total	39	0	16	0	55	1	3	1	5	10	38	57	0	0	95	2	12	21	2	37	197
08:00 AM	4	0	2	0	6	0	1	1	0	2	14	13	0	0	27	0	5	5	0	10	45
08:15 AM	7	2	8	0	17	0	0	0	1	1	10	7	0	0	17	1	8	3	0	12	47
08:30 AM	14	0	6	1	21	0	1	0	9	10	14	30	0	7	51	1	8	8	1	18	100
08:45 AM	31	0	6	1	38	0	0	1	8	9	12	43	0	0	55	0	19	28	1	48	150
Total	56	2	22	2	82	0	2	2	18	22	50	93	0	7	150	2	40	44	2	88	342
Grand Total	95	2	38	2	137	1	5	3	23	32	88	150	0	7	245	4	52	65	4	125	539
Apprch %	69.3	1.5	27.7	1.5		3.1	15.6	9.4	71.9		35.9	61.2	0	2.9		3.2	41.6	52	3.2		
Total %	17.6	0.4	7.1	0.4	25.4	0.2	0.9	0.6	4.3	5.9	16.3	27.8	0	1.3	45.5	0.7	9.6	12.1	0.7	23.2	
Light	91	2	38	0	131	1	5	3	0	9	87	148	0	0	235	4	51	64	0	119	494
% Light	95.8	100	100	0	95.6	100	100	100	0	28.1	98.9	98.7	0	0	95.9	100	98.1	98.5	0	95.2	91.7
Heavy	1	0	0	0	1	0	0	0	0	0	1	1	0	0	2	0	1	1	0	2	5
% Heavy	1.1	0	0	0	0.7	0	0	0	0	0	1.1	0.7	0	0	0.8	0	1.9	1.5	0	1.6	0.9
Bicycle and Pedestrian	3	0	0	2	5	0	0	0	23	23	0	1	0	7	8	0	0	0	4	4	40
% Bicycle and Pedestrian	3.2	0	0	100	3.6	0	0	0	100	71.9	0	0.7	0	100	3.3	0	0	0	100	3.2	7.4

Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
5th St and Spartan Ave

File Name : 15 5th St and Spartan Ave AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 2

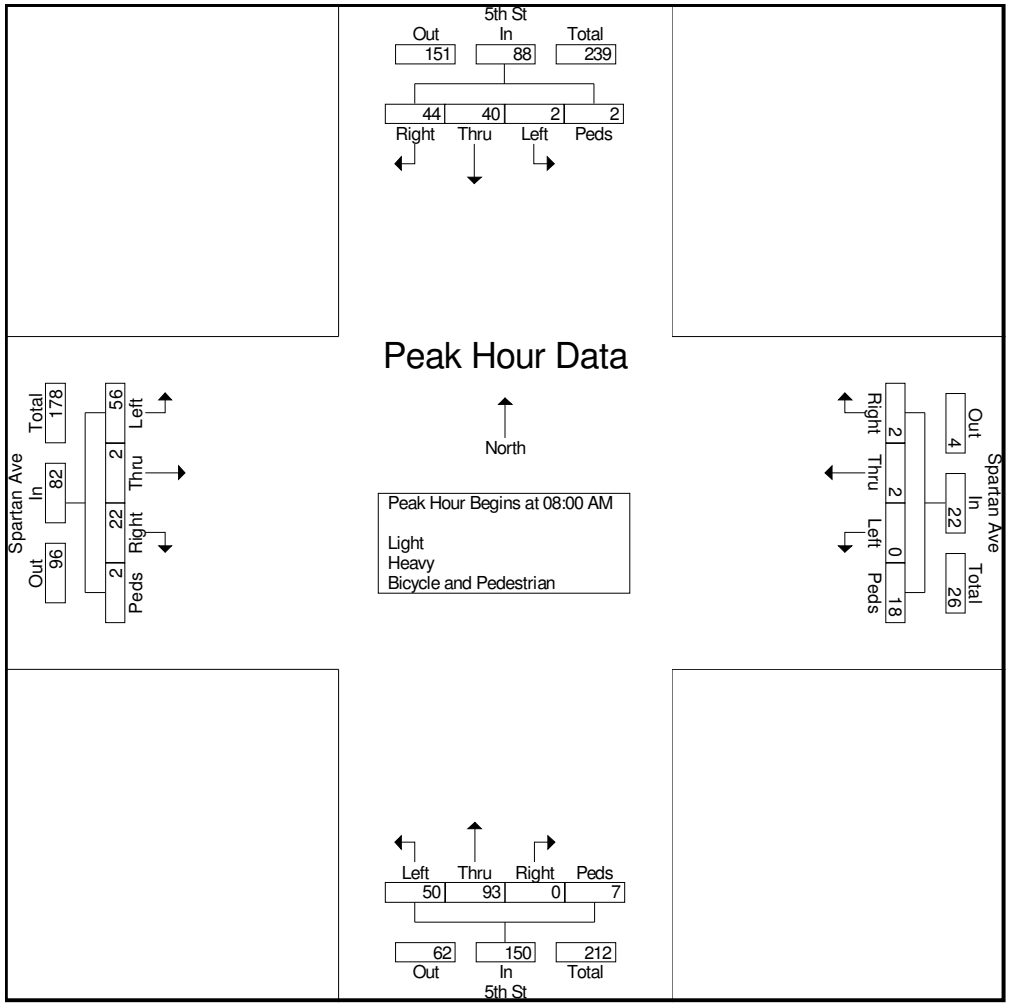


Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
5th St and Spartan Ave

File Name : 15 5th St and Spartan Ave AM
Site Code : F&P
Start Date : 10/22/2025
Page No : 3

	Spartan Ave Eastbound					Spartan Ave Westbound					5th St Northbound					5th St Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	4	0	2	0	6	0	**1**	**1**	0	2	**14**	13	0	0	27	0	5	5	0	10	45
08:15 AM	7	**2**	**8**	0	17	0	0	0	1	1	10	7	0	0	17	**1**	8	3	0	12	47
08:30 AM	14	0	6	**1**	21	0	1	0	**9**	**10**	14	30	0	**7**	51	1	8	8	**1**	18	100
08:45 AM	**31**	0	6	1	**38**	0	0	1	8	9	12	**43**	0	0	**55**	0	**19**	**28**	1	**48**	**150**
Total Volume	56	2	22	2	82	0	2	2	18	22	50	93	0	7	150	2	40	44	2	88	342
% App. Total	68.3	2.4	26.8	2.4		0	9.1	9.1	81.8		33.3	62	0	4.7		2.3	45.5	50	2.3		
PHF	.452	.250	.688	.500	.539	.000	.500	.500	.500	.550	.893	.541	.000	.250	.682	.500	.526	.393	.500	.458	.570



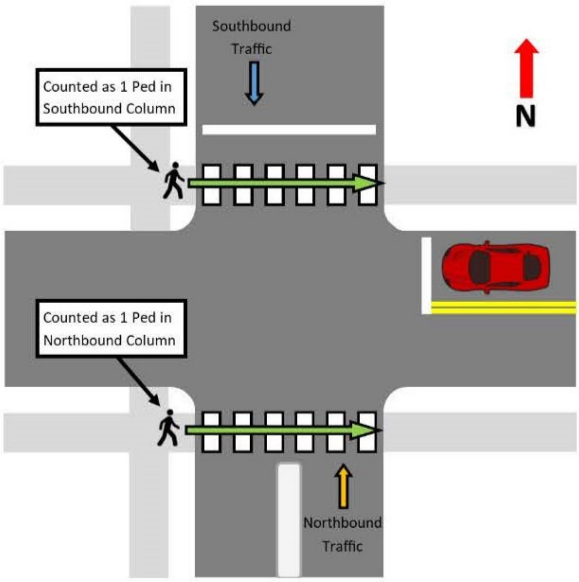
Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
AM Peak
5th St and Spartan Ave

File Name : 15 5th St and Spartan Ave AM
Site Code : F&P
Start Date : 10/22/2025
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Image 1

The number of pedestrians shown on this report is representative of the crossing on the approaching leg, i.e. pedestrians crossing the north side of the intersection are counted as pedestrians in the southbound crosswalk, as that is the approaching leg that they are crossing (see figure below). Diagonal crossings are counted on the two legs that will get the pedestrian to the same end point. Diagonals can be counted separately if discussed prior to count.



Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
5th St and Spartan Ave

File Name : 15 5th St and Spartan Ave PM
Site Code : F&P
Start Date : 10/22/2025
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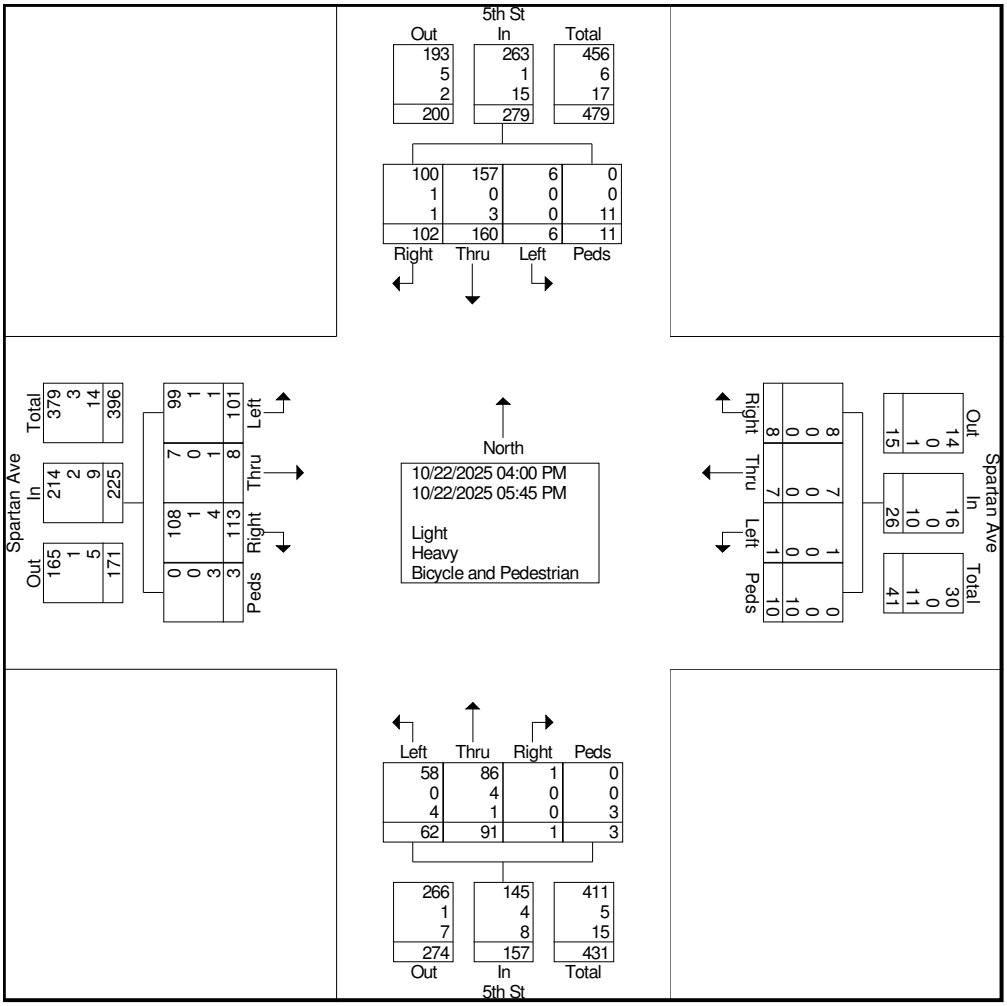
Groups Printed- Light - Heavy - Bicycle and Pedestrian

	Spartan Ave Eastbound					Spartan Ave Westbound					5th St Northbound					5th St Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
04:00 PM	27	1	15	0	43	0	0	1	0	1	10	18	0	0	28	0	12	8	6	26	98
04:15 PM	14	1	19	0	34	0	1	1	1	3	6	13	0	2	21	2	30	18	0	50	108
04:30 PM	8	0	10	0	18	0	0	2	0	2	10	15	0	0	25	0	14	20	0	34	79
04:45 PM	14	1	12	0	27	0	1	0	0	1	8	9	0	0	17	0	17	14	1	32	77
Total	63	3	56	0	122	0	2	4	1	7	34	55	0	2	91	2	73	60	7	142	362
05:00 PM	9	3	16	0	28	0	0	1	3	4	6	10	0	0	16	1	16	13	2	32	80
05:15 PM	11	0	15	2	28	0	1	0	1	2	6	17	0	0	23	1	24	5	0	30	83
05:30 PM	7	2	13	1	23	0	0	0	2	2	10	4	0	0	14	1	25	8	1	35	74
05:45 PM	11	0	13	0	24	1	4	3	3	11	6	5	1	1	13	1	22	16	1	40	88
Total	38	5	57	3	103	1	5	4	9	19	28	36	1	1	66	4	87	42	4	137	325
Grand Total	101	8	113	3	225	1	7	8	10	26	62	91	1	3	157	6	160	102	11	279	687
Apprch %	44.9	3.6	50.2	1.3		3.8	26.9	30.8	38.5		39.5	58	0.6	1.9		2.2	57.3	36.6	3.9		
Total %	14.7	1.2	16.4	0.4	32.8	0.1	1	1.2	1.5	3.8	9	13.2	0.1	0.4	22.9	0.9	23.3	14.8	1.6	40.6	
Light	99	7	108	0	214	1	7	8	0	16	58	86	1	0	145	6	157	100	0	263	638
% Light	98	87.5	95.6	0	95.1	100	100	100	0	61.5	93.5	94.5	100	0	92.4	100	98.1	98	0	94.3	92.9
Heavy	1	0	1	0	2	0	0	0	0	0	0	4	0	0	4	0	0	1	0	1	7
% Heavy	1	0	0.9	0	0.9	0	0	0	0	0	0	4.4	0	0	2.5	0	0	1	0	0.4	1
Bicycle and Pedestrian	1	1	4	3	9	0	0	0	10	10	4	1	0	3	8	0	3	1	11	15	42
% Bicycle and Pedestrian	1	12.5	3.5	100	4	0	0	0	100	38.5	6.5	1.1	0	100	5.1	0	1.9	1	100	5.4	6.1

Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
5th St and Spartan Ave

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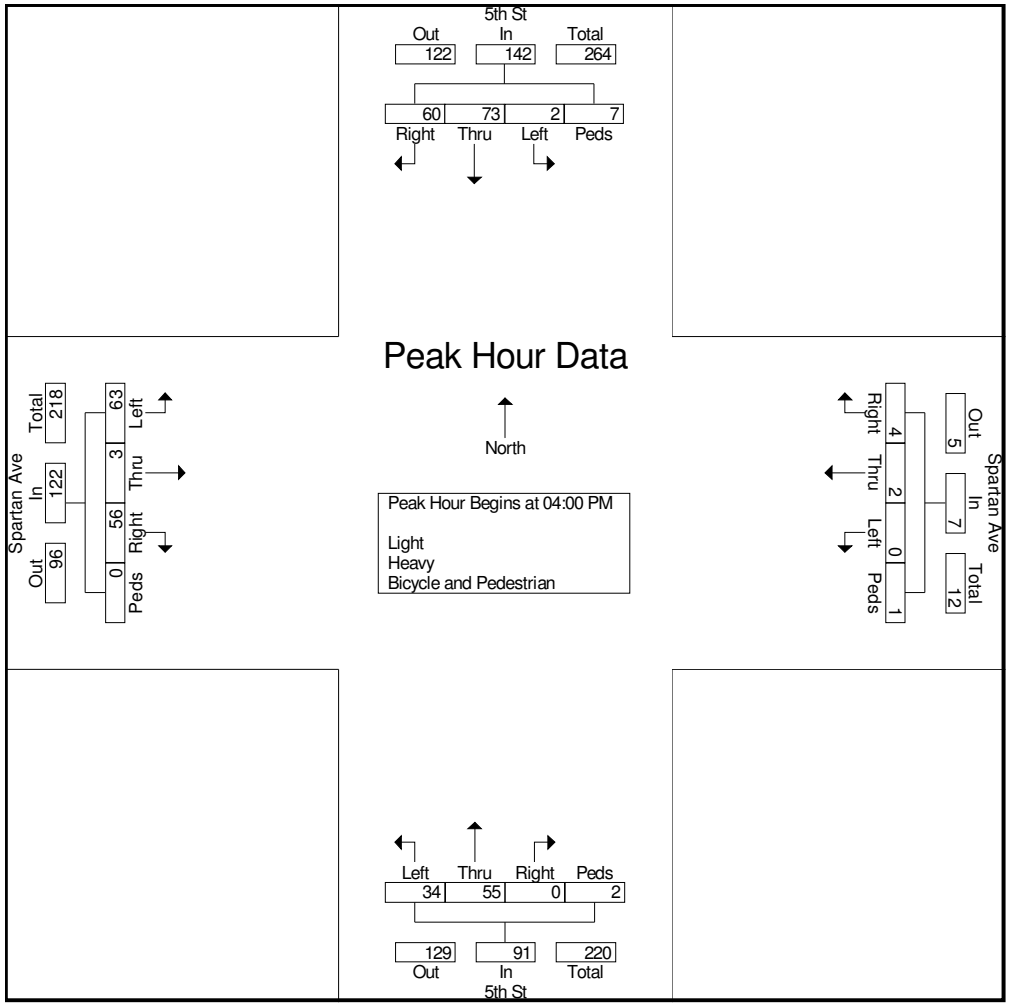


Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
5th St and Spartan Ave

File Name : 15 5th St and Spartan Ave PM
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	Spartan Ave Eastbound					Spartan Ave Westbound					5th St Northbound					5th St Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	**27**	**1**	15	0	**43**	0	0	1	0	1	**10**	**18**	0	0	**28**	0	12	8	**6**	26	98
04:15 PM	14	1	**19**	0	34	0	**1**	1	**1**	**3**	6	13	0	**2**	21	**2**	**30**	18	0	**50**	**108**
04:30 PM	8	0	10	0	18	0	0	**2**	0	2	10	15	0	0	25	0	14	**20**	0	34	79
04:45 PM	14	1	12	0	27	0	1	0	0	1	8	9	0	0	17	0	17	14	1	32	77
Total Volume	63	3	56	0	122	0	2	4	1	7	34	55	0	2	91	2	73	60	7	142	362
% App. Total	51.6	2.5	45.9	0		0	28.6	57.1	14.3		37.4	60.4	0	2.2		1.4	51.4	42.3	4.9		
PHF	.583	.750	.737	.000	.709	.000	.500	.500	.250	.583	.850	.764	.000	.250	.813	.250	.608	.750	.292	.710	.838



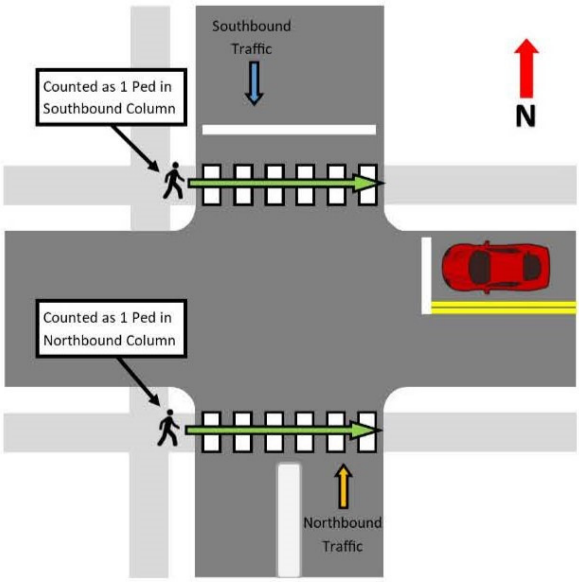
Ridgeview Data Collection

Berthoud, CO
Berthoud Counts
PM Peak
5th St and Spartan Ave

File Name : 15 5th St and Spartan Ave PM
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Image 1

The number of pedestrians shown on this report is representative of the crossing on the approaching leg, i.e. pedestrians crossing the north side of the intersection are counted as pedestrians in the southbound crosswalk, as that is the approaching leg that they are crossing (see figure below). Diagonal crossings are counted on the two legs that will get the pedestrian to the same end point. Diagonals can be counted separately if discussed prior to count.



Appendix C. Divider Page

Synchro Reports

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	46	51	5	30	37	29	376	6	55	560	23
Future Volume (veh/h)	55	46	51	5	30	37	29	376	6	55	560	23
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	60	50	0	5	33	0	32	409	0	60	609	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	575	621	0	560	621	527	322	900	0	462	900	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.33	0.33	0.00	0.33	0.33	0.00	0.48	0.48	0.00	0.48	0.48	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	13.1	12.4	0.0	12.7	12.2	0.0	16.8	10.0	0.0	12.9	12.6	0.0
Ln Grp LOS	B	B		B	B		B	A		B	B	
Approach Vol, veh/h		110			38			441			669	
Approach Delay, s/veh		12.8			12.3			10.5			12.6	
Approach LOS		B			B			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		6.0		5.0
Phs Duration (G+Y+Rc), s		30.7		22.8		30.7		22.8
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green (Gmax), s		65.0		40.0		65.0		40.0
Max Allow Headway (MAH), s		6.9		6.5		7.0		7.1
Max Q Clear (g_c+I1), s		17.1		4.3		15.4		3.1
Green Ext Time (g_e), s		5.8		0.9		10.3		0.3
Prob of Phs Call (p_c)		1.00		0.89		1.00		0.89
Prob of Max Out (p_x)		0.00		0.00		0.02		0.00

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		812		1376		977		1355

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1870		1870		1870		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		0		0		0		1585

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3

Lane Assignment		L		L		L		L
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	32	0	60	0	60	0	5
Grp Sat Flow (s), veh/h/ln	0	812	0	1376	0	977	0	1355
Q Serve Time (g_s), s	0.0	1.7	0.0	1.7	0.0	2.3	0.0	0.1
Cycle Q Clear Time (g_c), s	0.0	15.1	0.0	2.3	0.0	10.1	0.0	1.1
Perm LT Sat Flow (s_l), veh/h/ln	0	812	0	1376	0	977	0	1355
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	25.7	0.0	17.8	0.0	25.7	0.0	17.8
Perm LT Serve Time (g_u), s	0.0	12.3	0.0	17.1	0.0	18.0	0.0	16.8
Perm LT Q Serve Time (g_ps), s	0.0	1.7	0.0	1.7	0.0	2.3	0.0	0.1
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	322	0	575	0	462	0	560
V/C Ratio (X)	0.00	0.10	0.00	0.10	0.00	0.13	0.00	0.01
Avail Cap (c_a), veh/h	0	917	0	1146	0	1178	0	1122
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.5	0.0	12.9	0.0	12.6	0.0	12.6
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.2	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	16.8	0.0	13.1	0.0	12.9	0.0	12.7
1st-Term Q (Q1), veh/ln	0.0	0.3	0.0	0.5	0.0	0.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.3	0.0	0.5	0.0	0.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.03	0.00	0.03	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	409	0	50	0	609	0	33
Grp Sat Flow (s), veh/h/ln	0	1870	0	1870	0	1870	0	1870
Q Serve Time (g_s), s	0.0	7.8	0.0	1.0	0.0	13.4	0.0	0.6
Cycle Q Clear Time (g_c), s	0.0	7.8	0.0	1.0	0.0	13.4	0.0	0.6
Lane Grp Cap (c), veh/h	0	900	0	621	0	900	0	621
V/C Ratio (X)	0.00	0.45	0.00	0.08	0.00	0.68	0.00	0.05
Avail Cap (c_a), veh/h	0	2271	0	1398	0	2271	0	1398
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	9.2	0.0	12.3	0.0	10.7	0.0	12.1
Incr Delay (d2), s/veh	0.0	0.8	0.0	0.1	0.0	1.9	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.0	0.0	12.4	0.0	12.6	0.0	12.2
1st-Term Q (Q1), veh/ln	0.0	2.2	0.0	0.4	0.0	3.9	0.0	0.2

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.5	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.4	0.0	0.4	0.0	4.4	0.0	0.2
%ile Storage Ratio (RQ%)	0.00	0.10	0.00	0.01	0.00	0.28	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment								R
Lanes in Grp	0	0	0	0	0	0	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	1585
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	527
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	1184
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	11.9
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	137	14	41	29	54	509	15	779	470	17	944	50
Future Volume (veh/h)	137	14	41	29	54	509	15	779	470	17	944	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	149	15	0	32	59	0	16	847	0	18	1026	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	315	317		351	317		270	1529		327	1537	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.17	0.17	0.00	0.17	0.17	0.00	0.02	0.43	0.00	0.02	0.43	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	24.4	20.2	0.0	20.9	20.8	0.0	10.4	12.5	0.0	9.8	13.3	0.0
Ln Grp LOS	C	C		C	C		B	B		A	B	
Approach Vol, veh/h		164			91			863			1044	
Approach Delay, s/veh		24.1			20.8			12.5			13.3	
Approach LOS		C			C			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	1.1	3.0		5.0	1.1	3.0		5.0
Phs Duration (G+Y+Rc), s	9.3	33.0		15.8	9.1	33.1		15.8
Change Period (Y+Rc), s	8.0	8.0		6.0	8.0	8.0		6.0
Max Green (Gmax), s	7.0	57.0		24.0	7.0	57.0		24.0
Max Allow Headway (MAH), s	2.6	3.7		3.0	2.6	3.7		3.7
Max Q Clear (g_c+I1), s	2.3	12.4		9.8	2.3	15.4		3.6
Green Ext Time (g_e), s	0.0	3.4		0.2	0.0	4.4		0.2
Prob of Phs Call (p_c)	0.25	1.00		0.98	0.23	1.00		0.98
Prob of Max Out (p_x)	0.01	0.00		0.00	0.00	0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1781			1344	1781			1398

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		3554		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1585		1585		1585

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3

Lane Assignment	L (Pr/Pm)			LL (Pr/Pm)				L
Lanes in Grp	1	0	0	1	1	0	0	1
Grp Vol (v), veh/h	18	0	0	149	16	0	0	32
Grp Sat Flow (s), veh/h/ln	1781	0	0	1344	1781	0	0	1398
Q Serve Time (g_s), s	0.3	0.0	0.0	6.2	0.3	0.0	0.0	1.1
Cycle Q Clear Time (g_c), s	0.3	0.0	0.0	7.8	0.3	0.0	0.0	1.5
Perm LT Sat Flow (s_l), veh/h/ln	650	0	0	1344	550	0	0	1398
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	25.0	0.0	0.0	9.8	25.1	0.0	0.0	9.8
Perm LT Serve Time (g_u), s	14.6	0.0	0.0	8.3	11.7	0.0	0.0	9.4
Perm LT Q Serve Time (g_ps), s	0.3	0.0	0.0	6.2	0.4	0.0	0.0	1.1
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	327	0	0	315	270	0	0	351
V/C Ratio (X)	0.06	0.00	0.00	0.47	0.06	0.00	0.00	0.09
Avail Cap (c_a), veh/h	503	0	0	643	450	0	0	692
Upstream Filter (I)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	9.8	0.0	0.0	24.0	10.4	0.0	0.0	20.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	9.8	0.0	0.0	24.4	10.4	0.0	0.0	20.9
1st-Term Q (Q1), veh/ln	0.1	0.0	0.0	1.8	0.1	0.0	0.0	0.3
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.1	0.0	0.0	1.9	0.1	0.0	0.0	0.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.16	0.01	0.00	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	847	0	15	0	1026	0	59
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	10.4	0.0	0.4	0.0	13.4	0.0	1.6
Cycle Q Clear Time (g_c), s	0.0	10.4	0.0	0.4	0.0	13.4	0.0	1.6
Lane Grp Cap (c), veh/h	0	1529	0	317	0	1537	0	317
V/C Ratio (X)	0.00	0.55	0.00	0.05	0.00	0.67	0.00	0.19
Avail Cap (c_a), veh/h	0	3487	0	773	0	3487	0	773
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.4	0.0	20.2	0.0	13.2	0.0	20.7
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	12.5	0.0	20.2	0.0	13.3	0.0	20.8
1st-Term Q (Q1), veh/ln	0.0	2.9	0.0	0.2	0.0	3.7	0.0	0.6

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.9	0.0	0.2	0.0	3.8	0.0	0.6
%ile Storage Ratio (RQ%)	0.00	0.09	0.00	0.01	0.00	0.11	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1585	0	1585	0	1585	0	1585
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	682	0	268	0	685	0	268
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1555	0	655	0	1555	0	655
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	14.1
HCM 7th LOS	B

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	27	5	4	45	10	7
Future Vol, veh/h	27	5	4	45	10	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	5	4	49	11	8

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	35	0	90	32
Stage 1	-	-	-	-	32	-
Stage 2	-	-	-	-	58	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1577	-	911	1042
Stage 1	-	-	-	-	990	-
Stage 2	-	-	-	-	965	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1577	-	908	1042
Mov Cap-2 Maneuver	-	-	-	-	908	-
Stage 1	-	-	-	-	990	-
Stage 2	-	-	-	-	962	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.6	8.83
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	959	-	-	147	-
HCM Lane V/C Ratio	0.019	-	-	0.003	-
HCM Control Delay (s/veh)	8.8	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	12	39	2	5	1	6	5	0	0	4	7
Future Vol, veh/h	13	12	39	2	5	1	6	5	0	0	4	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	None	-	-	None	-	-	None
Storage Length	-	-	260	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	13	42	2	5	1	7	5	0	0	4	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	7	0	0	13	0	0	53	52	13	54	52	6
Stage 1	-	-	-	-	-	-	41	41	-	10	10	-
Stage 2	-	-	-	-	-	-	12	11	-	44	41	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1614	-	-	1605	-	-	945	839	1067	944	840	1077
Stage 1	-	-	-	-	-	-	973	861	-	1011	887	-
Stage 2	-	-	-	-	-	-	1009	887	-	970	861	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1614	-	-	1605	-	-	924	830	1067	928	831	1077
Mov Cap-2 Maneuver	-	-	-	-	-	-	924	830	-	928	831	-
Stage 1	-	-	-	-	-	-	964	853	-	1009	886	-
Stage 2	-	-	-	-	-	-	995	885	-	955	853	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	1.47	1.81	9.15	8.75
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	879	936	-	-	435	-	-	972
HCM Lane V/C Ratio	0.014	0.009	-	-	0.001	-	-	0.012
HCM Control Delay (s/veh)	9.2	7.2	0	-	7.2	0	-	8.7
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	13	63	301	4	27	622
Future Vol, veh/h	13	63	301	4	27	622
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	80	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	68	327	4	29	676

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1062	327	0	0	332	0
Stage 1	327	-	-	-	-	-
Stage 2	735	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	247	714	-	-	1228	-
Stage 1	731	-	-	-	-	-
Stage 2	474	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	242	714	-	-	1228	-
Mov Cap-2 Maneuver	360	-	-	-	-	-
Stage 1	731	-	-	-	-	-
Stage 2	463	-	-	-	-	-

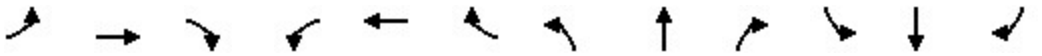
Approach	WB	NB	SB
HCM Control Delay, s/v	11.81	0	0.33
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	611	1228	-
HCM Lane V/C Ratio	-	-	0.135	0.024	-
HCM Control Delay (s/veh)	-	-	11.8	8	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.5	0.1	-

Intersection	
Intersection Delay, s/veh	5.6
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	330	171	569	757
Demand Flow Rate, veh/h	340	176	587	780
Vehicles Circulating, veh/h	695	621	74	355
Vehicles Exiting, veh/h	231	40	693	442
Ped Vol Crossing Leg, #/h	1	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	1.2	6.7	7.2	6.1
Approach LOS	A	A	A	A

Lane	Left	Bypass	Left	Left	Right	Left	Right	Bypass
Designated Moves	LT	R	LTR	LT	R	LT	TR	R
Assumed Moves	LT		LTR	LT	R	LT	TR	
RT Channelized		Free						Yield
Lane Util	1.000		1.000	0.945	0.055	0.469	0.531	
Follow-Up Headway, s	2.535		2.535	2.667	2.535	2.667	2.535	2.609
Critical Headway, s	4.328		4.328	4.645	4.328	4.645	4.328	4.976
A (Intercept)	1420		1420	1350	1420	1350	1420	1380
B (Slope)	8.501e-4		8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4	1.02e-3
Entry Flow, veh/h	72	268	176	555	32	268	303	209
Cap Entry Lane, veh/h	787	1957	838	1261	1334	974	1050	1090
Entry HV Adj Factor	0.970	0.971	0.971	0.970	0.969	0.972	0.970	0.971
Flow Entry, veh/h	70	260	171	538	31	261	294	203
Cap Entry, veh/h	763	1900	813	1223	1292	947	1018	1058
V/C Ratio	0.092	0.137	0.210	0.440	0.024	0.275	0.289	0.192
Control Delay, s/veh	5.7	0.0	6.7	7.4	3.0	6.6	6.4	5.2
LOS	A	A	A	A	A	A	A	A
95th %tile Queue, veh	0	0	1	2	0	1	1	1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	147	347	1	40	600	30	28	108	79	39	132	661
Future Volume (veh/h)	147	347	1	40	600	30	28	108	79	39	132	661
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	160	377	0	43	652	0	30	117	0	42	143	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	249	1546		70	1430		55	200		69	215	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.43	0.00	0.04	0.40	0.00	0.03	0.11	0.00	0.04	0.11	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	34.7	13.6	0.0	38.4	17.1	0.0	38.7	32.7	0.0	38.4	32.9	0.0
Ln Grp LOS	C	B		D	B		D	C		D	C	
Approach Vol, veh/h		537			695			147			185	
Approach Delay, s/veh		19.9			18.5			33.9			34.2	
Approach LOS		B			B			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	11.1	39.4	9.1	14.9	13.6	37.0	9.7	14.3
Change Period (Y+Rc), s	8.2	7.0	6.8	* 6.3	8.2	7.0	6.8	* 6.3
Max Green (Gmax), s	12.0	55.0	10.0	* 25	25.0	55.0	10.0	* 25
Max Allow Headway (MAH), s	2.6	7.7	1.7	3.9	2.6	7.7	2.7	3.9
Max Q Clear (g_c+I1), s	3.8	7.0	3.2	7.5	5.4	12.0	3.7	6.4
Green Ext Time (g_e), s	0.0	6.2	0.0	0.3	0.2	11.6	0.0	0.3
Prob of Phs Call (p_c)	0.59	1.00	0.46	1.00	0.96	1.00	0.58	1.00
Prob of Max Out (p_x)	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		3456		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		3554		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1585		1585		1585

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0

Lane Assignment	L (Prot)		L (Prot)		L (Prot)		L (Prot)	
Lanes in Grp	1	0	1	0	2	0	1	0
Grp Vol (v), veh/h	43	0	30	0	160	0	42	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1728	0	1781	0
Q Serve Time (g_s), s	1.8	0.0	1.2	0.0	3.4	0.0	1.7	0.0
Cycle Q Clear Time (g_c), s	1.8	0.0	1.2	0.0	3.4	0.0	1.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	70	0	55	0	249	0	69	0
V/C Ratio (X)	0.61	0.00	0.54	0.00	0.64	0.00	0.61	0.00
Avail Cap (c_a), veh/h	287	0	239	0	1159	0	239	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	35.2	0.0	35.6	0.0	33.7	0.0	35.3	0.0
Incr Delay (d2), s/veh	3.2	0.0	3.0	0.0	1.0	0.0	3.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	38.4	0.0	38.7	0.0	34.7	0.0	38.4	0.0
1st-Term Q (Q1), veh/ln	0.7	0.0	0.5	0.0	1.3	0.0	0.7	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.8	0.0	0.6	0.0	1.3	0.0	0.8	0.0
%ile Storage Ratio (RQ%)	0.02	0.00	0.05	0.00	0.03	0.00	0.03	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	377	0	143	0	652	0	117
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	5.0	0.0	5.5	0.0	10.0	0.0	4.4
Cycle Q Clear Time (g_c), s	0.0	5.0	0.0	5.5	0.0	10.0	0.0	4.4
Lane Grp Cap (c), veh/h	0	1546	0	215	0	1430	0	200
V/C Ratio (X)	0.00	0.24	0.00	0.67	0.00	0.46	0.00	0.58
Avail Cap (c_a), veh/h	0	2621	0	627	0	2621	0	627
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	13.3	0.0	31.6	0.0	16.3	0.0	31.7
Incr Delay (d2), s/veh	0.0	0.3	0.0	1.3	0.0	0.8	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	13.6	0.0	32.9	0.0	17.1	0.0	32.7
1st-Term Q (Q1), veh/ln	0.0	1.6	0.0	2.3	0.0	3.3	0.0	1.9

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.2	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.7	0.0	2.4	0.0	3.5	0.0	1.9
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.09	0.00	0.07	0.00	0.12
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1585	0	1585	0	1585	0	1585
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	689	0	182	0	638	0	170
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1169	0	531	0	1169	0	531
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	22.3
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	6	25	12	10	69	13	229	8	52	228	9
Future Vol, veh/h	6	6	25	12	10	69	13	229	8	52	228	9
Conflicting Peds, #/hr	2	0	0	0	0	2	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Free	-	-	None	-	-	Yield
Storage Length	-	-	100	-	-	-	150	-	-	240	-	245
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	6	6	27	13	11	74	14	246	9	56	245	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	640	641	246	639	636	-	246	0	0	255	0	0
Stage 1	358	358	-	278	278	-	-	-	-	-	-	-
Stage 2	282	283	-	360	358	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.15	6.55	-	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.545	4.045	-	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	384	389	785	385	391	0	1302	-	-	1293	-	-
Stage 1	654	622	-	722	675	0	-	-	-	-	-	-
Stage 2	719	672	-	652	622	0	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	353	368	785	346	370	-	1301	-	-	1293	-	-
Mov Cap-2 Maneuver	353	368	-	346	370	-	-	-	-	-	-	-
Stage 1	625	595	-	714	667	-	-	-	-	-	-	-
Stage 2	698	665	-	596	595	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	10.76	15.02	0.41	1.42
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1301	-	-	368	785	370	1293	-	-
HCM Lane V/C Ratio	0.011	-	-	0.018	0.034	0.029	0.043	-	-
HCM Control Delay (s/veh)	7.8	-	-	15	9.8	15	7.9	-	-
HCM Lane LOS	A	-	-	B	A	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0.1	0.1	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	15	59	20	255	282	19
Future Vol, veh/h	15	59	20	255	282	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	240	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	16	62	21	268	297	20

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	617	307	317	0	-	0
Stage 1	307	-	-	-	-	-
Stage 2	311	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	450	728	1232	-	-	-
Stage 1	742	-	-	-	-	-
Stage 2	739	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	441	728	1232	-	-	-
Mov Cap-2 Maneuver	441	-	-	-	-	-
Stage 1	727	-	-	-	-	-
Stage 2	739	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	11.02	0.58	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	131	-	441	728	-	-
HCM Lane V/C Ratio	0.017	-	0.036	0.085	-	-
HCM Control Delay (s/veh)	8	0	13.5	10.4	-	-
HCM Lane LOS	A	A	B	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	0.3	-	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	2	1	2	14	0	0	2	0	0	5	4
Future Vol, veh/h	0	2	1	2	14	0	0	2	0	0	5	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	2	1	2	15	0	0	2	0	0	5	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	15	0	0	3	0	0	25	22	3	23	23	15
Stage 1	-	-	-	-	-	-	3	3	-	20	20	-
Stage 2	-	-	-	-	-	-	22	20	-	3	3	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1603	-	-	1619	-	-	986	871	1081	989	871	1064
Stage 1	-	-	-	-	-	-	1020	894	-	999	879	-
Stage 2	-	-	-	-	-	-	996	879	-	1019	893	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1603	-	-	1619	-	-	974	870	1081	985	870	1064
Mov Cap-2 Maneuver	-	-	-	-	-	-	974	870	-	985	870	-
Stage 1	-	-	-	-	-	-	1020	894	-	998	878	-
Stage 2	-	-	-	-	-	-	984	878	-	1017	893	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0.9	9.15	8.84
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	870	1603	-	-	225	-	-	946
HCM Lane V/C Ratio	0.002	-	-	-	0.001	-	-	0.01
HCM Control Delay (s/veh)	9.1	0	-	-	7.2	0	-	8.8
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	3.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	55	50	185	65	80	202
Future Vol, veh/h	55	50	185	65	80	202
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	58	53	195	68	84	213

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	611	230	0	0	264	0
Stage 1	230	-	-	-	-	-
Stage 2	381	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	455	807	-	-	1294	-
Stage 1	806	-	-	-	-	-
Stage 2	688	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	421	806	-	-	1293	-
Mov Cap-2 Maneuver	421	-	-	-	-	-
Stage 1	805	-	-	-	-	-
Stage 2	638	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	12.46	0	2.26
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	421	806	511	-
HCM Lane V/C Ratio	-	-	0.137	0.065	0.065	-
HCM Control Delay (s/veh)	-	-	14.9	9.8	8	0
HCM Lane LOS	-	-	B	A	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.2	0.2	-

Intersection	
Intersection Delay, s/veh	8.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	63	17	16	64	13	19	20	19	29	34	16
Future Vol, veh/h	14	63	17	16	64	13	19	20	19	29	34	16
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	21	95	26	24	97	20	29	30	29	44	52	24
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	8.6	8.6	8.3	8.6
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	33%	15%	17%	37%
Vol Thru, %	34%	67%	69%	43%
Vol Right, %	33%	18%	14%	20%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	58	94	93	79
LT Vol	19	14	16	29
Through Vol	20	63	64	34
RT Vol	19	17	13	16
Lane Flow Rate	88	142	141	120
Geometry Grp	1	1	1	1
Degree of Util (X)	0.113	0.18	0.179	0.156
Departure Headway (Hd)	4.641	4.547	4.576	4.683
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	771	789	783	765
Service Time	2.677	2.577	2.608	2.717
HCM Lane V/C Ratio	0.114	0.18	0.18	0.157
HCM Control Delay, s/veh	8.3	8.6	8.6	8.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.4	0.7	0.6	0.6

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	55	49	51	246	194	61
Future Vol, veh/h	55	49	51	246	194	61
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	6	6	6	6	6	6
Mvmt Flow	71	64	66	319	252	79

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	744	292	331	0	-	0
Stage 1	292	-	-	-	-	-
Stage 2	452	-	-	-	-	-
Critical Hdwy	6.46	6.26	4.16	-	-	-
Critical Hdwy Stg 1	5.46	-	-	-	-	-
Critical Hdwy Stg 2	5.46	-	-	-	-	-
Follow-up Hdwy	3.554	3.354	2.254	-	-	-
Pot Cap-1 Maneuver	377	738	1206	-	-	-
Stage 1	749	-	-	-	-	-
Stage 2	633	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	351	738	1206	-	-	-
Mov Cap-2 Maneuver	351	-	-	-	-	-
Stage 1	699	-	-	-	-	-
Stage 2	633	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	15.83	1.4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	309	-	467	-	-
HCM Lane V/C Ratio	0.055	-	0.289	-	-
HCM Control Delay (s/veh)	8.2	0	15.8	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.2	-	1.2	-	-

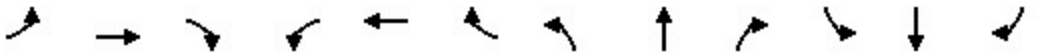
Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	233	163	3	14	0
Future Vol, veh/h	1	233	163	3	14	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	253	177	3	15	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	180	0	-	0	434	179
Stage 1	-	-	-	-	179	-
Stage 2	-	-	-	-	255	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1395	-	-	-	579	864
Stage 1	-	-	-	-	852	-
Stage 2	-	-	-	-	787	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1395	-	-	-	578	864
Mov Cap-2 Maneuver	-	-	-	-	578	-
Stage 1	-	-	-	-	851	-
Stage 2	-	-	-	-	787	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.03	0	11.39
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	8	-	-	-	578
HCM Lane V/C Ratio	0.001	-	-	-	0.026
HCM Control Delay (s/veh)	7.6	0	-	-	11.4
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	197	84	262	88	50	21	428	104	54	1181	42
Future Volume (veh/h)	58	197	84	262	88	50	21	428	104	54	1181	42
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	63	214	0	285	96	0	23	465	0	59	1284	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	81	256		269	316		121	769		612	1549	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.14	0.00	0.08	0.17	0.00	0.02	0.22	0.00	0.26	0.44	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	49.6	43.9	0.0	113.9	33.8	0.0	35.1	35.4	0.0	21.8	27.9	0.0
Ln Grp LOS	D	D		F	C		D	D		C	C	
Approach Vol, veh/h		277			381			488			1343	
Approach Delay, s/veh		45.2			93.8			35.4			27.6	
Approach LOS		D			F			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	2	1	3	4	5	6	7	8
Case No	3.0	1.3	2.0	3.0	1.2	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	27.0	32.5	14.0	18.9	10.7	48.8	11.0	21.9
Change Period (Y+Rc), s	7.0	8.5	6.8	* 6.3	8.5	* 8.5	6.8	* 6.3
Max Green (Gmax), s	41.0	13.5	7.2	* 20	12.5	* 42	7.2	* 20
Max Allow Headway (MAH), s	7.7	2.6	2.6	3.7	2.6	7.7	2.6	3.7
Max Q Clear (g_c+I1), s	12.9	2.0	9.2	12.3	3.0	31.5	5.2	6.2
Green Ext Time (g_e), s	6.8	0.0	0.0	0.3	0.0	8.8	0.0	0.2
Prob of Phs Call (p_c)	1.00	0.78	1.00	1.00	0.45	1.00	0.80	1.00
Prob of Max Out (p_x)	0.06	0.00	1.00	0.06	0.00	0.94	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		1	3		5		7	
Mvmt Sat Flow, veh/h		1781	3456		1781		1781	

Through Movement Data								
Assigned Mvmt	2			4		6		8
Mvmt Sat Flow, veh/h	3554			1870		3554		1870

Right-Turn Movement Data								
Assigned Mvmt	12			14		16		18
Mvmt Sat Flow, veh/h	1585			1585		1585		1585

Left Lane Group Data								
Assigned Mvmt	0	1	3	0	5	0	7	0

Lane Assignment	L (Pr/Pm)	L (Prot)		L (Pr/Pm)		L (Prot)		
Lanes in Grp	0	1	2	0	1	0	1	0
Grp Vol (v), veh/h	0	59	285	0	23	0	63	0
Grp Sat Flow (s), veh/h/ln	0	1781	1728	0	1781	0	1781	0
Q Serve Time (g_s), s	0.0	0.0	7.2	0.0	1.0	0.0	3.2	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	7.2	0.0	1.0	0.0	3.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	928	0	0	430	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	7.3	0.0	0.0	11.3	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	7.1	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	612	269	0	121	0	81	0
V/C Ratio (X)	0.00	0.10	1.06	0.00	0.19	0.00	0.78	0.00
Avail Cap (c_a), veh/h	0	612	269	0	319	0	139	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	21.7	42.6	0.0	34.8	0.0	43.7	0.0
Incr Delay (d2), s/veh	0.0	0.0	71.3	0.0	0.3	0.0	5.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	21.8	113.9	0.0	35.1	0.0	49.6	0.0
1st-Term Q (Q1), veh/ln	0.0	0.8	2.9	0.0	0.4	0.0	1.3	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	2.7	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.8	5.5	0.0	0.4	0.0	1.5	0.0
%ile Storage Ratio (RQ%)	0.00	0.02	0.61	0.00	0.01	0.00	0.07	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	2	0	0	4	0	6	0	8
Lane Assignment	T			T		T		T
Lanes in Grp	2	0	0	1	0	2	0	1
Grp Vol (v), veh/h	465	0	0	214	0	1284	0	96
Grp Sat Flow (s), veh/h/ln	1777	0	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	10.9	0.0	0.0	10.3	0.0	29.5	0.0	4.2
Cycle Q Clear Time (g_c), s	10.9	0.0	0.0	10.3	0.0	29.5	0.0	4.2
Lane Grp Cap (c), veh/h	769	0	0	256	0	1549	0	316
V/C Ratio (X)	0.60	0.00	0.00	0.84	0.00	0.83	0.00	0.30
Avail Cap (c_a), veh/h	1576	0	0	398	0	1614	0	398
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	32.7	0.0	0.0	38.9	0.0	23.0	0.0	33.6
Incr Delay (d2), s/veh	2.8	0.0	0.0	5.0	0.0	4.8	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	35.4	0.0	0.0	43.9	0.0	27.9	0.0	33.8
1st-Term Q (Q1), veh/ln	4.3	0.0	0.0	4.4	0.0	10.5	0.0	1.8

2nd-Term Q (Q2), veh/ln	0.3	0.0	0.0	0.4	0.0	1.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	4.6	0.0	0.0	4.7	0.0	11.6	0.0	1.8
%ile Storage Ratio (RQ%)	0.06	0.00	0.00	0.07	0.00	0.17	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	12	0	0	14	0	16	0	18
Lane Assignment	R			R		R		R
Lanes in Grp	1	0	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1585	0	0	1585	0	1585	0	1585
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	343	0	0	217	0	691	0	268
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	703	0	0	338	0	720	0	338
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	41.2
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	318	21	17	321	8	38	2	12	45	5	49
Future Vol, veh/h	16	318	21	17	321	8	38	2	12	45	5	49
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	180	-	-	300	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	346	23	18	349	9	41	2	13	49	5	53

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	358	0	0	368	0	0	780	786	357	772	793	353
Stage 1	-	-	-	-	-	-	392	392	-	390	390	-
Stage 2	-	-	-	-	-	-	389	395	-	382	403	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1201	-	-	1190	-	-	312	324	687	317	321	690
Stage 1	-	-	-	-	-	-	633	607	-	634	608	-
Stage 2	-	-	-	-	-	-	635	605	-	641	600	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1201	-	-	1190	-	-	275	314	687	299	311	690
Mov Cap-2 Maneuver	-	-	-	-	-	-	275	314	-	299	311	-
Stage 1	-	-	-	-	-	-	624	598	-	624	598	-
Stage 2	-	-	-	-	-	-	572	595	-	617	591	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.36	0.4	18.6	15.02
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	321	1201	-	-	1190	-	-	299	621
HCM Lane V/C Ratio	0.176	0.014	-	-	0.016	-	-	0.163	0.095
HCM Control Delay (s/veh)	18.6	8	-	-	8.1	-	-	19.4	11.4
HCM Lane LOS	C	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0.6	0	-	-	0	-	-	0.6	0.3

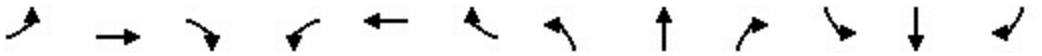
Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↱		↱
Traffic Vol, veh/h	0	319	396	11	0	12
Future Vol, veh/h	0	319	396	11	0	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	0	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	347	430	12	0	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	430
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	625
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	625
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	10.88
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	625
HCM Lane V/C Ratio	-	-	-	0.021
HCM Control Delay (s/veh)	-	-	-	10.9
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	175	41	18	207	81	88	122	10	100	132	97
Future Volume (veh/h)	56	175	41	18	207	81	88	122	10	100	132	97
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	61	190	0	20	225	0	96	133	0	109	143	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	345	457	0	352	380	322	155	214	319	132	173	264
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.24	0.00	0.04	0.20	0.00	0.20	0.20	0.00	0.17	0.17	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	20.6	25.6	0.0	21.7	31.8	0.0	27.5	0.0	0.0	31.9	0.0	0.0
Ln Grp LOS	C	C		C	C		C			C		
Approach Vol, veh/h		251			245			229			252	
Approach Delay, s/veh		24.4			31.0			27.5			31.9	
Approach LOS		C			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8	4	5	6		
Case No	1.1	4.0	11.0	11.0	1.1	3.0		
Phs Duration (G+Y+Rc), s	9.6	24.0	18.8	21.4	12.6	21.0		
Change Period (Y+Rc), s	6.9	6.0	6.5	6.5	6.9	6.0		
Max Green (Gmax), s	15.0	50.0	30.0	30.0	15.0	50.0		
Max Allow Headway (MAH), s	4.7	7.7	3.4	3.7	4.6	8.0		
Max Q Clear (g_c+I1), s	2.6	8.3	11.8	10.4	3.9	10.0		
Green Ext Time (g_e), s	0.0	2.6	0.5	0.6	0.1	3.4		
Prob of Phs Call (p_c)	0.34	1.00	0.99	0.99	0.71	1.00		
Prob of Max Out (p_x)	0.00	0.00	0.00	0.00	0.00	0.00		

Left-Turn Movement Data								
Assigned Mvmt	1		3	7	5			
Mvmt Sat Flow, veh/h	1781		792	768	1781			

Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		1870	1039	1064		1870		

Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		0	1585	1585		1585		

Left Lane Group Data								
Assigned Mvmt	1	0	3	7	5	0	0	0

Lane Assignment	L (Pr/Pm)		L+T	L+TL (Pr/Pm)				
Lanes in Grp	1	0	1	1	1	0	0	0
Grp Vol (v), veh/h	20	0	252	229	61	0	0	0
Grp Sat Flow (s), veh/h/ln	1781	0	1831	1832	1781	0	0	0
Q Serve Time (g_s), s	0.6	0.0	9.8	8.4	1.9	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.6	0.0	9.8	8.4	1.9	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1193	0	0	0	1156	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	15.0	0.0	0.0	0.0	15.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	11.7	0.0	0.0	0.0	7.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.1	0.0	0.0	0.0	0.4	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.43	0.42	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	352	0	305	369	345	0	0	0
V/C Ratio (X)	0.06	0.00	0.83	0.62	0.18	0.00	0.00	0.00
Avail Cap (c_a), veh/h	650	0	745	745	569	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	21.6	0.0	29.7	26.9	20.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	2.2	0.6	0.3	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	21.7	0.0	31.9	27.5	20.6	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.2	0.0	3.9	3.5	0.7	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.3	0.0	4.1	3.5	0.7	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.03	0.00	0.04	0.21	0.07	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	190	0	0	0	225	0	0
Grp Sat Flow (s), veh/h/ln	0	1870	0	0	0	1870	0	0
Q Serve Time (g_s), s	0.0	6.3	0.0	0.0	0.0	8.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	6.3	0.0	0.0	0.0	8.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	457	0	0	0	380	0	0
V/C Ratio (X)	0.00	0.42	0.00	0.00	0.00	0.59	0.00	0.00
Avail Cap (c_a), veh/h	0	1268	0	0	0	1268	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	23.4	0.0	0.0	0.0	26.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.2	0.0	0.0	0.0	5.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.6	0.0	0.0	0.0	31.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.4	0.0	0.0	0.0	3.3	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.6	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	2.7	0.0	0.0	0.0	3.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.06	0.00	0.00	0.00	0.16	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment			R	R		R		
Lanes in Grp	0	0	1	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1585	1585	0	1585	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	264	319	0	322	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	645	645	0	1075	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	28.7
HCM 7th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	233	21	20	245	9	42	3	17	5	6	23
Future Volume (veh/h)	25	233	21	20	245	9	42	3	17	5	6	23
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	0.99		1.00	0.99		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	28	265	0	23	278	0	48	3	0	6	7	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	569	746	632	576	736	0	368	17	0	207	170	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.41	0.00	0.03	0.40	0.00	0.14	0.14	0.00	0.14	0.14	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	6.3	8.3	0.0	6.2	8.6	0.0	14.6	0.0	0.0	14.0	0.0	0.0
Ln Grp LOS	A	A		A	A		B			B		
Approach Vol, veh/h		293			301			51			13	
Approach Delay, s/veh		8.1			8.4			14.6			14.0	
Approach LOS		A			A			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	1.1	3.0		8.0	1.1	4.0		8.0
Phs Duration (G+Y+Rc), s	5.1	21.4		11.0	5.3	21.2		11.0
Change Period (Y+Rc), s	4.0	6.1		5.7	4.0	6.1		5.7
Max Green (Gmax), s	5.0	35.0		30.0	5.0	35.0		30.0
Max Allow Headway (MAH), s	1.7	7.0		7.4	1.7	7.0		7.4
Max Q Clear (g_c+I1), s	2.3	5.8		2.2	2.3	6.0		3.2
Green Ext Time (g_e), s	0.0	2.9		0.1	0.0	3.1		0.4
Prob of Phs Call (p_c)	0.21	1.00		0.50	0.25	1.00		0.50
Prob of Max Out (p_x)	0.04	0.00		0.00	0.06	0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1739			472	1739			1281

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1826		1198		1826		123

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1547		0		0		0

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3

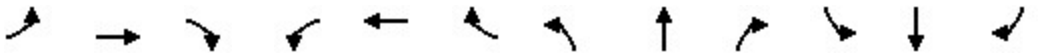
Lane Assignment	L (Pr/Pm)			L+TL (Pr/Pm)				L+T
Lanes in Grp	1	0	0	1	1	0	0	1
Grp Vol (v), veh/h	23	0	0	13	28	0	0	51
Grp Sat Flow (s), veh/h/ln	1739	0	0	1670	1739	0	0	1404
Q Serve Time (g_s), s	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.9
Cycle Q Clear Time (g_c), s	0.3	0.0	0.0	0.2	0.3	0.0	0.0	1.2
Perm LT Sat Flow (s_l), veh/h/ln	1087	0	0	1427	1074	0	0	1421
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	1779	0	0	0	1733
Perm LT Eff Green (g_p), s	15.3	0.0	0.0	5.3	15.1	0.0	0.0	5.3
Perm LT Serve Time (g_u), s	11.6	0.0	0.0	4.1	11.1	0.0	0.0	5.1
Perm LT Q Serve Time (g_ps), s	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.9
Time to First Blk (g_f), s	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.1
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.46	1.00	0.00	0.00	0.94
Lane Grp Cap (c), veh/h	576	0	0	377	569	0	0	385
V/C Ratio (X)	0.04	0.00	0.00	0.03	0.05	0.00	0.00	0.13
Avail Cap (c_a), veh/h	759	0	0	1420	742	0	0	1298
Upstream Filter (I)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	6.2	0.0	0.0	13.9	6.3	0.0	0.0	14.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	6.2	0.0	0.0	14.0	6.3	0.0	0.0	14.6
1st-Term Q (Q1), veh/ln	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.3
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.4
%ile Storage Ratio (RQ%)	0.02	0.00	0.00	0.01	0.02	0.00	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	265	0	0	0	278	0	0
Grp Sat Flow (s), veh/h/ln	0	1826	0	0	0	1826	0	0
Q Serve Time (g_s), s	0.0	3.8	0.0	0.0	0.0	4.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	3.8	0.0	0.0	0.0	4.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	746	0	0	0	736	0	0
V/C Ratio (X)	0.00	0.36	0.00	0.00	0.00	0.38	0.00	0.00
Avail Cap (c_a), veh/h	0	1705	0	0	0	1705	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	7.7	0.0	0.0	0.0	7.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.0	0.0	0.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.3	0.0	0.0	0.0	8.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.9	0.0	0.0	0.0	0.9	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.0	0.0	0.0	0.0	1.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.00	0.00	0.02	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R						
Lanes in Grp	0	1	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1547	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	632	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1445	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	8.8
HCM 7th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	245	9	4	254	8	10	9	4	20	8	42
Future Volume (veh/h)	14	245	9	4	254	8	10	9	4	20	8	42
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	0.99		1.00	0.99		1.00	0.96		1.00	0.96		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	16	288	0	5	299	0	12	11	0	24	9	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	561	825	0	569	825	0	289	213	0	380	115	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.45	0.45	0.00	0.45	0.45	0.00	0.22	0.22	0.00	0.22	0.22	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	7.9	7.3	0.0	7.7	7.4	0.0	11.2	0.0	0.0	11.3	0.0	0.0
Ln Grp LOS	A	A		A	A		B			B		
Approach Vol, veh/h		304			304			23			33	
Approach Delay, s/veh		7.4			7.4			11.2			11.3	
Approach LOS		A			A			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		8.0		6.0		8.0
Phs Duration (G+Y+Rc), s		22.4		13.6		22.4		13.6
Change Period (Y+Rc), s		6.1		5.7		6.1		5.7
Max Green (Gmax), s		34.5		30.5		34.5		30.5
Max Allow Headway (MAH), s		8.0		8.5		8.0		8.5
Max Q Clear (g_c+I1), s		6.2		2.5		5.9		2.4
Green Ext Time (g_e), s		4.3		0.3		4.4		0.2
Prob of Phs Call (p_c)		1.00		0.52		1.00		0.52
Prob of Max Out (p_x)		0.02		0.00		0.02		0.00

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		1046		939		1057		620

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1826		524		1826		968

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		0		0		0		0

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3

Lane Assignment		L		L+T		L		L+T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	16	0	33	0	5	0	23
Grp Sat Flow (s), veh/h/ln	0	1046	0	1462	0	1057	0	1588
Q Serve Time (g_s), s	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.2	0.0	0.5	0.0	3.8	0.0	0.4
Perm LT Sat Flow (s_l), veh/h/ln	0	1046	0	1370	0	1057	0	1373
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	1710	0	0	0	1742
Perm LT Eff Green (g_p), s	0.0	16.3	0.0	7.9	0.0	16.3	0.0	7.9
Perm LT Serve Time (g_u), s	0.0	12.4	0.0	7.6	0.0	12.6	0.0	7.4
Perm LT Q Serve Time (g_ps), s	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.7	0.0	0.0	0.0	1.7
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.4
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.73	0.00	1.00	0.00	0.52
Lane Grp Cap (c), veh/h	0	561	0	495	0	569	0	502
V/C Ratio (X)	0.00	0.03	0.00	0.07	0.00	0.01	0.00	0.05
Avail Cap (c_a), veh/h	0	1091	0	1388	0	1104	0	1456
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	7.9	0.0	11.1	0.0	7.7	0.0	11.1
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	7.9	0.0	11.3	0.0	7.7	0.0	11.2
1st-Term Q (Q1), veh/ln	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.00	0.00	0.01	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	288	0	0	0	299	0	0
Grp Sat Flow (s), veh/h/ln	0	1826	0	0	0	1826	0	0
Q Serve Time (g_s), s	0.0	3.7	0.0	0.0	0.0	3.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	3.7	0.0	0.0	0.0	3.9	0.0	0.0
Lane Grp Cap (c), veh/h	0	825	0	0	0	825	0	0
V/C Ratio (X)	0.00	0.35	0.00	0.00	0.00	0.36	0.00	0.00
Avail Cap (c_a), veh/h	0	1750	0	0	0	1750	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	6.4	0.0	0.0	0.0	6.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.9	0.0	0.0	0.0	1.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	7.3	0.0	0.0	0.0	7.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.7	0.0	0.0	0.0	0.8	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.9	0.0	0.0	0.0	1.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.00	0.00	0.02	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment								
Lanes in Grp	0	0	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	7.7
HCM 7th LOS	A

Intersection	
Intersection Delay, s/veh	6.1
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	334	408	137	284
Demand Flow Rate, veh/h	340	416	140	290
Vehicles Circulating, veh/h	205	168	478	257
Vehicles Exiting, veh/h	342	409	67	327
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.2	6.7	3.9	6.1
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Bypass	Left
Designated Moves	LTR	LTR	LT	R	LTR
Assumed Moves	LTR	LTR	LT		LTR
RT Channelized				Free	
Lane Util	1.000	1.000	1.000		1.000
Follow-Up Headway, s	2.609	2.609	2.609		2.609
Critical Headway, s	4.976	4.976	4.976		4.976
A (Intercept)	1380	1380	1380		1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3		1.02e-3
Entry Flow, veh/h	340	416	99	41	290
Cap Entry Lane, veh/h	1120	1163	847	1938	1062
Entry HV Adj Factor	0.982	0.980	0.984	0.980	0.980
Flow Entry, veh/h	334	408	97	40	284
Cap Entry, veh/h	1100	1139	834	1900	1041
V/C Ratio	0.304	0.358	0.117	0.021	0.273
Control Delay, s/veh	6.2	6.7	5.5	0.0	6.1
LOS	A	A	A	A	A
95th %tile Queue, veh	1	2	0	0	1

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	498	10	18	385	25	49
Future Vol, veh/h	498	10	18	385	25	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	250	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	541	11	20	418	27	53

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	552	0	999	541
Stage 1	-	-	-	-	541	-
Stage 2	-	-	-	-	458	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1018	-	270	541
Stage 1	-	-	-	-	583	-
Stage 2	-	-	-	-	637	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1018	-	265	541
Mov Cap-2 Maneuver	-	-	-	-	265	-
Stage 1	-	-	-	-	583	-
Stage 2	-	-	-	-	625	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.38	16.25
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	400	-	-	1018	-
HCM Lane V/C Ratio	0.201	-	-	0.019	-
HCM Control Delay (s/veh)	16.3	-	-	8.6	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.7	-	-	0.1	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	352	105	38	278	19	44	26	23	5	16	9
Future Vol, veh/h	3	352	105	38	278	19	44	26	23	5	16	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	383	114	41	302	21	48	28	25	5	17	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	323	0	0	497	0	0	840	852	440	798	898	313
Stage 1	-	-	-	-	-	-	446	446	-	395	395	-
Stage 2	-	-	-	-	-	-	393	405	-	403	503	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1237	-	-	1067	-	-	285	297	617	304	279	728
Stage 1	-	-	-	-	-	-	591	574	-	630	605	-
Stage 2	-	-	-	-	-	-	631	598	-	624	541	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1237	-	-	1067	-	-	250	282	617	250	265	728
Mov Cap-2 Maneuver	-	-	-	-	-	-	250	282	-	250	265	-
Stage 1	-	-	-	-	-	-	589	572	-	600	576	-
Stage 2	-	-	-	-	-	-	576	570	-	567	539	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.05	0.97	22.59	17.38
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	305	11	-	-	202	-	-	323
HCM Lane V/C Ratio	0.332	0.003	-	-	0.039	-	-	0.101
HCM Control Delay (s/veh)	22.6	7.9	0	-	8.5	0	-	17.4
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	1.4	0	-	-	0.1	-	-	0.3

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	1	403	1	1	241	0	19	1	13	2	1	3
Future Vol, veh/h	1	403	1	1	241	0	19	1	13	2	1	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	438	1	1	262	0	21	1	14	2	1	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	262	0	0	439	0	0	705	705	439	705	705	262
Stage 1	-	-	-	-	-	-	441	441	-	264	264	-
Stage 2	-	-	-	-	-	-	265	264	-	441	441	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1302	-	-	1121	-	-	351	361	618	351	361	777
Stage 1	-	-	-	-	-	-	595	577	-	741	690	-
Stage 2	-	-	-	-	-	-	741	690	-	595	577	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1302	-	-	1121	-	-	348	360	618	341	360	777
Mov Cap-2 Maneuver	-	-	-	-	-	-	348	360	-	341	360	-
Stage 1	-	-	-	-	-	-	595	576	-	740	689	-
Stage 2	-	-	-	-	-	-	735	689	-	580	576	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.02	0.03	14.36	12.6
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	421	4	-	-	7	-	-	480
HCM Lane V/C Ratio	0.085	0.001	-	-	0.001	-	-	0.014
HCM Control Delay (s/veh)	14.4	7.8	0	-	8.2	0	-	12.6
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	10	317	42	71	223	1	19	32	110	6	13	40
Future Vol, veh/h	10	317	42	71	223	1	19	32	110	6	13	40
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	6	6	6	6	6	6	6	6	6	6	6	6
Mvmt Flow	11	348	46	78	245	1	21	35	121	7	14	44

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	246	0	0	395	0	0	802	796	371	790	818	246
Stage 1	-	-	-	-	-	-	393	393	-	402	402	-
Stage 2	-	-	-	-	-	-	408	402	-	388	416	-
Critical Hdwy	4.16	-	-	4.16	-	-	7.16	6.56	6.26	7.16	6.56	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-	6.16	5.56	-	6.16	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.16	5.56	-	6.16	5.56	-
Follow-up Hdwy	2.254	-	-	2.254	-	-	3.554	4.054	3.354	3.554	4.054	3.354
Pot Cap-1 Maneuver	1297	-	-	1143	-	-	298	315	666	303	306	783
Stage 1	-	-	-	-	-	-	624	599	-	617	594	-
Stage 2	-	-	-	-	-	-	612	593	-	628	585	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1297	-	-	1143	-	-	244	287	666	201	279	783
Mov Cap-2 Maneuver	-	-	-	-	-	-	244	287	-	201	279	-
Stage 1	-	-	-	-	-	-	617	592	-	568	547	-
Stage 2	-	-	-	-	-	-	518	546	-	478	578	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.21	2.02	17.9	14.05
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	454	48	-	-	433	-	-	462
HCM Lane V/C Ratio	0.39	0.008	-	-	0.068	-	-	0.14
HCM Control Delay (s/veh)	17.9	7.8	0	-	8.4	0	-	14.1
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	1.8	0	-	-	0.2	-	-	0.5

Intersection	
Intersection Delay, s/veh	2.6
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	2	2	0	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	470	300	0	170
Demand Flow Rate, veh/h	480	306	0	173
Vehicles Circulating, veh/h	47	0	201	306
Vehicles Exiting, veh/h	432	201	37	0
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	1.3	3.5	0.0	4.6
Approach LOS	A	A	-	A

Lane	Left	Right	Bypass	Left	Right	Left	Right
Designated Moves	LT	TR	R	LT	TR	LT	R
Assumed Moves	LT	TR		LT	TR	LT	R
RT Channelized			Free				
Lane Util	0.471	0.529		0.471	0.529	0.069	0.931
Follow-Up Headway, s	2.667	2.535		2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328		4.645	4.328	4.645	4.328
A (Intercept)	1350	1420		1350	1420	1350	1420
B (Slope)	9.199e-4	8.501e-4		9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	90	101	289	144	162	12	161
Cap Entry Lane, veh/h	1293	1364	1938	1350	1420	1019	1095
Entry HV Adj Factor	0.978	0.983	0.980	0.978	0.980	0.997	0.981
Flow Entry, veh/h	88	99	283	141	159	12	158
Cap Entry, veh/h	1264	1341	1900	1320	1392	1015	1074
V/C Ratio	0.070	0.074	0.149	0.107	0.114	0.012	0.147
Control Delay, s/veh	3.4	3.3	0.0	3.6	3.5	3.6	4.7
LOS	A	A	A	A	A	A	A
95th %tile Queue, veh	0	0	1	0	0	0	1

Intersection	
Intersection Delay, s/veh	4.0
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	2	3	2	0
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	170	0	219	0
Demand Flow Rate, veh/h	173	0	223	0
Vehicles Circulating, veh/h	0	309	173	241
Vehicles Exiting, veh/h	241	87	0	204
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	3.2	0.0	4.6	0.0
Approach LOS	A	-	A	-

Lane	Left	Right	Left	Right
Designated Moves	LT	TR	LT	R
Assumed Moves	L	TR	LT	R
RT Channelized				
Lane Util	0.613	0.387	0.910	0.090
Follow-Up Headway, s	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328
A (Intercept)	1350	1420	1350	1420
B (Slope)	9.199e-4	4.501e-4	9.199e-4	4.501e-4
Entry Flow, veh/h	106	67	203	20
Cap Entry Lane, veh/h	1350	1420	1151	1226
Entry HV Adj Factor	0.981	0.980	0.981	1.000
Flow Entry, veh/h	104	66	199	20
Cap Entry, veh/h	1324	1392	1130	1226
V/C Ratio	0.079	0.047	0.176	0.016
Control Delay, s/veh	3.3	2.9	4.7	3.1
LOS	A	A	A	A
95th %tile Queue, veh	0	0	1	0

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	51	6	2	0	7	0	2	1	0	8	1	94
Future Vol, veh/h	51	6	2	0	7	0	2	1	0	8	1	94
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	55	7	2	0	8	0	2	1	0	9	1	102

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	79	75	52	27	126	1	103	0	0	1	0	0
Stage 1	70	70	-	5	5	-	-	-	-	-	-	-
Stage 2	9	5	-	22	121	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	910	815	1015	983	764	1083	1489	-	-	1622	-	-
Stage 1	940	837	-	1017	891	-	-	-	-	-	-	-
Stage 2	1012	891	-	997	796	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	894	809	1015	966	759	1083	1489	-	-	1622	-	-
Mov Cap-2 Maneuver	894	809	-	966	759	-	-	-	-	-	-	-
Stage 1	935	832	-	1015	890	-	-	-	-	-	-	-
Stage 2	1002	890	-	981	791	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.37	9.79	4.95	0.56
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1200	-	-	888	759	117	-	-
HCM Lane V/C Ratio	0.001	-	-	0.072	0.01	0.005	-	-
HCM Control Delay (s/veh)	7.4	0	-	9.4	9.8	7.2	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0	0	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	28	143	9	16	221
Future Vol, veh/h	8	28	143	9	16	221
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	30	155	10	17	240

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	435	160	0	0	165	0
Stage 1	160	-	-	-	-	-
Stage 2	275	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	578	885	-	-	1413	-
Stage 1	868	-	-	-	-	-
Stage 2	771	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	570	885	-	-	1413	-
Mov Cap-2 Maneuver	570	-	-	-	-	-
Stage 1	868	-	-	-	-	-
Stage 2	760	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.81	0	0.51
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	788	1413	-
HCM Lane V/C Ratio	-	-	0.05	0.012	-
HCM Control Delay (s/veh)	-	-	9.8	7.6	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	10	141	3	4	224
Future Vol, veh/h	1	10	141	3	4	224
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	11	153	3	4	243

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	407	155	0	0	157	0
Stage 1	155	-	-	-	-	-
Stage 2	252	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	600	891	-	-	1423	-
Stage 1	873	-	-	-	-	-
Stage 2	790	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	598	891	-	-	1423	-
Mov Cap-2 Maneuver	598	-	-	-	-	-
Stage 1	873	-	-	-	-	-
Stage 2	787	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.28	0	0.13
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	853	32	-
HCM Lane V/C Ratio	-	-	0.014	0.003	-
HCM Control Delay (s/veh)	-	-	9.3	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	7.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	87	107	36	53	183	43
Future Vol, veh/h	87	107	36	53	183	43
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	200	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	95	116	39	58	199	47

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	484	39	0	0	97	0
Stage 1	39	-	-	-	-	-
Stage 2	445	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	542	1032	-	-	1497	-
Stage 1	983	-	-	-	-	-
Stage 2	646	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	468	1032	-	-	1497	-
Mov Cap-2 Maneuver	468	-	-	-	-	-
Stage 1	983	-	-	-	-	-
Stage 2	558	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	12.82	0	6.29
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	670	1497	-
HCM Lane V/C Ratio	-	-	0.315	0.133	-
HCM Control Delay (s/veh)	-	-	12.8	7.8	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	1.3	0.5	-

Intersection	
Intersection Delay, s/veh	10.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	53	2	22	0	2	2	50	92	0	2	40	44
Future Vol, veh/h	53	2	22	0	2	2	50	92	0	2	40	44
Peak Hour Factor	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	96	4	40	0	4	4	91	167	0	4	73	80
Number of Lanes	0	1	1	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	2
HCM Control Delay, s/veh	9.5	8.7	11.2	9.4
HCM LOS	A	A	B	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	35%	0%	96%	0%	0%	2%
Vol Thru, %	65%	100%	4%	0%	50%	47%
Vol Right, %	0%	0%	0%	100%	50%	51%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	142	0	55	22	4	86
LT Vol	50	0	53	0	0	2
Through Vol	92	0	2	0	2	40
RT Vol	0	0	0	22	2	44
Lane Flow Rate	258	0	100	40	7	156
Geometry Grp	5	5	5	5	4b	4b
Degree of Util (X)	0.378	0	0.169	0.054	0.011	0.216
Departure Headway (Hd)	5.267	5.09	6.093	4.899	5.532	4.978
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	682	0	587	728	643	719
Service Time	3.006	2.829	3.846	2.652	3.603	3.022
HCM Lane V/C Ratio	0.378	0	0.17	0.055	0.011	0.217
HCM Control Delay, s/veh	11.2	7.8	10.1	7.9	8.7	9.4
HCM Lane LOS	B	N	B	A	A	A
HCM 95th-tile Q	1.8	0	0.6	0.2	0	0.8

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	5	34	113	4	72
Future Vol, veh/h	2	5	34	113	4	72
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	5	37	123	4	78

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	185	98	0	0	160	0
Stage 1	98	-	-	-	-	-
Stage 2	87	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	804	958	-	-	1419	-
Stage 1	926	-	-	-	-	-
Stage 2	936	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	801	958	-	-	1419	-
Mov Cap-2 Maneuver	801	-	-	-	-	-
Stage 1	926	-	-	-	-	-
Stage 2	933	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9	0	0.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	907	95	-
HCM Lane V/C Ratio	-	-	0.008	0.003	-
HCM Control Delay (s/veh)	-	-	9	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	4	0	5	0	0	1	5	111	0	0	163	3
Future Vol, veh/h	4	0	5	0	0	1	5	111	0	0	163	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	0	5	0	0	1	5	121	0	0	177	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	310	310	179	309	312	121	180	0	0	121	0	0
Stage 1	179	179	-	132	132	-	-	-	-	-	-	-
Stage 2	132	132	-	177	180	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	642	604	864	644	603	931	1395	-	-	1467	-	-
Stage 1	823	751	-	872	787	-	-	-	-	-	-	-
Stage 2	872	787	-	825	750	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	639	602	864	637	601	931	1395	-	-	1467	-	-
Mov Cap-2 Maneuver	639	602	-	637	601	-	-	-	-	-	-	-
Stage 1	823	751	-	868	784	-	-	-	-	-	-	-
Stage 2	867	784	-	819	750	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.88	8.87	0.33	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	78	-	-	747	931	1467	-	-
HCM Lane V/C Ratio	0.004	-	-	0.013	0.001	-	-	-
HCM Control Delay (s/veh)	7.6	0	-	9.9	8.9	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	8	1	1093	1838	3
Future Vol, veh/h	12	8	1	1093	1838	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	700	-	-	700
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	9	1	1188	1998	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2594	999	2001	0	-	0
Stage 1	1998	-	-	-	-	-
Stage 2	596	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	20	242	283	-	-	-
Stage 1	91	-	-	-	-	-
Stage 2	513	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	20	242	283	-	-	-
Mov Cap-2 Maneuver	20	-	-	-	-	-
Stage 1	91	-	-	-	-	-
Stage 2	513	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/veh	243.74	0.02	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	283	-	32	-	-
HCM Lane V/C Ratio	0.004	-	0.678	-	-
HCM Control Delay (s/veh)	17.8	-	243.7	-	-
HCM Lane LOS	C	-	F	-	-
HCM 95th %tile Q(veh)	0	-	2.3	-	-

Intersection	
Int Delay, s/veh	1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	88	2	548	22	1	1734
Future Vol, veh/h	88	2	548	22	1	1734
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	600	720	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	96	2	596	24	1	1885

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1540	298	0	0	620	0
Stage 1	596	-	-	-	-	-
Stage 2	945	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	106	698	-	-	957	-
Stage 1	513	-	-	-	-	-
Stage 2	338	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	106	698	-	-	957	-
Mov Cap-2 Maneuver	232	-	-	-	-	-
Stage 1	513	-	-	-	-	-
Stage 2	338	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	30.79	0	0.01
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	235	957	-
HCM Lane V/C Ratio	-	-	0.416	0.001	-
HCM Control Delay (s/veh)	-	-	30.8	8.8	-
HCM Lane LOS	-	-	D	A	-
HCM 95th %tile Q(veh)	-	-	1.9	0	-

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	34	6	5	0	4	8	2	34	1	5	44	72
Future Vol, veh/h	34	6	5	0	4	8	2	34	1	5	44	72
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	37	7	5	0	4	9	2	37	1	5	48	78

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	141	140	87	104	179	37	126	0	0	38	0	0
Stage 1	98	98	-	42	42	-	-	-	-	-	-	-
Stage 2	43	42	-	62	137	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	828	751	972	876	715	1035	1460	-	-	1572	-	-
Stage 1	909	814	-	973	860	-	-	-	-	-	-	-
Stage 2	971	860	-	949	783	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	812	747	972	859	711	1035	1460	-	-	1572	-	-
Mov Cap-2 Maneuver	812	747	-	859	711	-	-	-	-	-	-	-
Stage 1	905	811	-	971	859	-	-	-	-	-	-	-
Stage 2	956	858	-	933	780	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.68	9.07	0.4	0.3
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	97	-	-	818	898	66	-	-
HCM Lane V/C Ratio	0.001	-	-	0.06	0.015	0.003	-	-
HCM Control Delay (s/veh)	7.5	0	-	9.7	9.1	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0	0	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	0	5	1	0	0	1	30	0	0	72	0
Future Vol, veh/h	4	0	5	1	0	0	1	30	0	0	72	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	0	5	1	0	0	1	33	0	0	78	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	113	113	78	113	113	33	78	0	0	33	0	0
Stage 1	78	78	-	35	35	-	-	-	-	-	-	-
Stage 2	35	35	-	78	78	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	864	777	982	864	777	1041	1520	-	-	1579	-	-
Stage 1	931	830	-	981	866	-	-	-	-	-	-	-
Stage 2	981	866	-	931	830	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	864	777	982	859	777	1041	1520	-	-	1579	-	-
Mov Cap-2 Maneuver	864	777	-	859	777	-	-	-	-	-	-	-
Stage 1	931	830	-	980	865	-	-	-	-	-	-	-
Stage 2	980	865	-	925	830	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	8.93	9.2	0.24	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	58	-	-	926	859	1579	-	-
HCM Lane V/C Ratio	0.001	-	-	0.011	0.001	-	-	-
HCM Control Delay (s/veh)	7.4	0	-	8.9	9.2	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	40.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	128	99	2	992	1910	14
Future Vol, veh/h	128	99	2	992	1910	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	Yield
Storage Length	0	-	150	-	-	600
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	139	108	2	1078	2076	15

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2620	1038	2076	0	-	0
Stage 1	2076	-	-	-	-	-
Stage 2	543	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 20	228	264	-	-	-
Stage 1	~ 82	-	-	-	-	-
Stage 2	546	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 19	228	264	-	-	-
Mov Cap-2 Maneuver	~ 69	-	-	-	-	-
Stage 1	~ 82	-	-	-	-	-
Stage 2	546	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	$559.48	0.04	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	264	-	120	-	-
HCM Lane V/C Ratio	0.008	-	2.049	-	-
HCM Control Delay (s/veh)	18.7	-	$ 559.5	-	-
HCM Lane LOS	C	-	F	-	-
HCM 95th %tile Q(veh)	0	-	20.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	89	7	551	31	6	1753
Future Vol, veh/h	89	7	551	31	6	1753
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	Yield	-	None
Storage Length	-	0	-	0	160	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	97	8	599	34	7	1905

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1374	299	0	0	599	0
Stage 1	599	-	-	-	-	-
Stage 2	775	-	-	-	-	-
Critical Hdwy	6.29	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.67	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	165	697	-	-	974	-
Stage 1	496	-	-	-	-	-
Stage 2	386	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	164	697	-	-	974	-
Mov Cap-2 Maneuver	271	-	-	-	-	-
Stage 1	496	-	-	-	-	-
Stage 2	384	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	10.22	0	0.03
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	697	974	-
HCM Lane V/C Ratio	-	-	0.011	0.007	-
HCM Control Delay (s/veh)	-	-	10.2	8.7	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	22	20	12	4	13	55
Future Vol, veh/h	22	20	12	4	13	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	22	13	4	14	60

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	74	44	74	0	-	0
Stage 1	44	-	-	-	-	-
Stage 2	30	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	929	1026	1526	-	-	-
Stage 1	978	-	-	-	-	-
Stage 2	992	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	921	1026	1526	-	-	-
Mov Cap-2 Maneuver	921	-	-	-	-	-
Stage 1	970	-	-	-	-	-
Stage 2	992	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	8.9	5.53	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1350	-	968	-	-
HCM Lane V/C Ratio	0.009	-	0.047	-	-
HCM Control Delay (s/veh)	7.4	0	8.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	6.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	3	1	27	9	10	0	10	6	6	8	1
Future Vol, veh/h	1	3	1	27	9	10	0	10	6	6	8	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	3	1	29	10	11	0	11	7	7	9	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	38	40	9	38	37	14	10	0	0	17	0	0
Stage 1	22	22	-	14	14	-	-	-	-	-	-	-
Stage 2	16	17	-	23	23	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	967	852	1072	968	855	1066	1610	-	-	1600	-	-
Stage 1	996	877	-	1006	884	-	-	-	-	-	-	-
Stage 2	1004	881	-	995	876	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	942	849	1072	959	852	1066	1610	-	-	1600	-	-
Mov Cap-2 Maneuver	942	849	-	959	852	-	-	-	-	-	-	-
Stage 1	992	873	-	1006	884	-	-	-	-	-	-	-
Stage 2	983	881	-	986	873	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9	8.97	0	2.9
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1610	-	-	905	956	704	-	-
HCM Lane V/C Ratio	-	-	-	0.006	0.052	0.004	-	-
HCM Control Delay (s/veh)	0	-	-	9	9	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	25	15	13	45	52	27	581	9	31	348	33
Future Volume (veh/h)	25	25	15	13	45	52	27	581	9	31	348	33
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	27	0	14	49	0	29	632	0	34	378	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	540	588	0	560	588	498	505	921	0	325	921	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.31	0.31	0.00	0.31	0.31	0.00	0.49	0.49	0.00	0.49	0.49	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	13.2	12.4	0.0	12.7	12.6	0.0	10.9	12.0	0.0	16.2	9.0	0.0
Ln Grp LOS	B	B		B	B		B	B		B	A	
Approach Vol, veh/h		54			63			661			412	
Approach Delay, s/veh		12.8			12.6			12.0			9.6	
Approach LOS		B			B			B			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		6.0		5.0
Phs Duration (G+Y+Rc), s		30.5		21.3		30.5		21.3
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green (Gmax), s		65.0		40.0		65.0		40.0
Max Allow Headway (MAH), s		6.9		6.6		7.1		6.9
Max Q Clear (g_c+I1), s		15.4		3.7		17.2		3.0
Green Ext Time (g_e), s		10.1		0.4		5.5		0.5
Prob of Phs Call (p_c)		1.00		0.81		1.00		0.81
Prob of Max Out (p_x)		0.02		0.00		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		1005		1356		795		1383

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1870		1870		1870		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		0		0		0		1585

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3

Lane Assignment		L		L		L		L
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	29	0	27	0	34	0	14
Grp Sat Flow (s), veh/h/ln	0	1005	0	1356	0	795	0	1383
Q Serve Time (g_s), s	0.0	1.0	0.0	0.7	0.0	1.8	0.0	0.4
Cycle Q Clear Time (g_c), s	0.0	7.6	0.0	1.7	0.0	15.2	0.0	0.9
Perm LT Sat Flow (s_l), veh/h/ln	0	1005	0	1356	0	795	0	1383
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	25.5	0.0	16.3	0.0	25.5	0.0	16.3
Perm LT Serve Time (g_u), s	0.0	18.9	0.0	15.3	0.0	12.1	0.0	15.8
Perm LT Q Serve Time (g_ps), s	0.0	1.0	0.0	0.7	0.0	1.8	0.0	0.4
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	505	0	540	0	325	0	560
V/C Ratio (X)	0.00	0.06	0.00	0.05	0.00	0.10	0.00	0.02
Avail Cap (c_a), veh/h	0	1271	0	1161	0	931	0	1194
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	10.8	0.0	13.1	0.0	15.9	0.0	12.7
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.1	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.9	0.0	13.2	0.0	16.2	0.0	12.7
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.2	0.0	0.3	0.0	0.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	0.2	0.0	0.3	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.01	0.00	0.02	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	632	0	27	0	378	0	49
Grp Sat Flow (s), veh/h/ln	0	1870	0	1870	0	1870	0	1870
Q Serve Time (g_s), s	0.0	13.4	0.0	0.5	0.0	6.7	0.0	1.0
Cycle Q Clear Time (g_c), s	0.0	13.4	0.0	0.5	0.0	6.7	0.0	1.0
Lane Grp Cap (c), veh/h	0	921	0	588	0	921	0	588
V/C Ratio (X)	0.00	0.69	0.00	0.05	0.00	0.41	0.00	0.08
Avail Cap (c_a), veh/h	0	2347	0	1444	0	2347	0	1444
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	10.1	0.0	12.4	0.0	8.4	0.0	12.5
Incr Delay (d2), s/veh	0.0	1.9	0.0	0.1	0.0	0.6	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	12.0	0.0	12.4	0.0	9.0	0.0	12.6
1st-Term Q (Q1), veh/ln	0.0	3.6	0.0	0.2	0.0	1.9	0.0	0.4

2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.1	0.0	0.2	0.0	2.0	0.0	0.4
%ile Storage Ratio (RQ%)	0.00	0.17	0.00	0.01	0.00	0.12	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment								R
Lanes in Grp	0	0	0	0	0	0	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	1585
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	498
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	1224
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	11.2
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	44	47	8	30	435	15	908	431	31	1353	147
Future Volume (veh/h)	70	44	47	8	30	435	15	908	431	31	1353	147
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	48	0	9	33	0	16	987	0	34	1471	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	248	204		236	204		211	1737		351	1796	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.11	0.11	0.00	0.11	0.11	0.00	0.02	0.49	0.00	0.04	0.51	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	26.4	24.7	0.0	25.3	24.4	0.0	10.7	11.0	0.0	8.2	12.9	0.0
Ln Grp LOS	C	C		C	C		B	B		A	B	
Approach Vol, veh/h		124			42			1003			1505	
Approach Delay, s/veh		25.8			24.6			11.0			12.8	
Approach LOS		C			C			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	1.1	3.0		5.0	1.1	3.0		5.0
Phs Duration (G+Y+Rc), s	10.2	37.4		12.6	9.2	38.4		12.6
Change Period (Y+Rc), s	8.0	8.0		6.0	8.0	8.0		6.0
Max Green (Gmax), s	7.0	57.0		24.0	7.0	57.0		24.0
Max Allow Headway (MAH), s	2.6	3.7		3.4	2.6	3.7		3.9
Max Q Clear (g_c+I1), s	2.6	13.8		6.1	2.3	23.0		3.8
Green Ext Time (g_e), s	0.0	4.2		0.2	0.0	7.4		0.1
Prob of Phs Call (p_c)	0.43	1.00		0.94	0.23	1.00		0.94
Prob of Max Out (p_x)	0.02	0.00		0.00	0.00	0.01		0.00

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1781			1376	1781			1357

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		3554		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1585		1585		1585

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3

Lane Assignment	L (Pr/Pm)			LL (Pr/Pm)				L
Lanes in Grp	1	0	0	1	1	0	0	1
Grp Vol (v), veh/h	34	0	0	76	16	0	0	9
Grp Sat Flow (s), veh/h/ln	1781	0	0	1376	1781	0	0	1357
Q Serve Time (g_s), s	0.6	0.0	0.0	3.2	0.3	0.0	0.0	0.4
Cycle Q Clear Time (g_c), s	0.6	0.0	0.0	4.1	0.3	0.0	0.0	1.8
Perm LT Sat Flow (s_l), veh/h/ln	570	0	0	1376	360	0	0	1357
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	29.4	0.0	0.0	6.6	30.4	0.0	0.0	6.6
Perm LT Serve Time (g_u), s	17.6	0.0	0.0	5.6	9.4	0.0	0.0	5.2
Perm LT Q Serve Time (g_ps), s	0.7	0.0	0.0	3.2	1.0	0.0	0.0	0.4
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	351	0	0	248	211	0	0	236
V/C Ratio (X)	0.10	0.00	0.00	0.31	0.08	0.00	0.00	0.04
Avail Cap (c_a), veh/h	494	0	0	647	383	0	0	630
Upstream Filter (I)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	8.2	0.0	0.0	26.2	10.7	0.0	0.0	25.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.3	0.1	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	8.2	0.0	0.0	26.4	10.7	0.0	0.0	25.3
1st-Term Q (Q1), veh/ln	0.1	0.0	0.0	1.0	0.1	0.0	0.0	0.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.1	0.0	0.0	1.0	0.1	0.0	0.0	0.1
%ile Storage Ratio (RQ%)	0.01	0.00	0.00	0.08	0.00	0.00	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	987	0	48	0	1471	0	33
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	11.8	0.0	1.4	0.0	21.0	0.0	1.0
Cycle Q Clear Time (g_c), s	0.0	11.8	0.0	1.4	0.0	21.0	0.0	1.0
Lane Grp Cap (c), veh/h	0	1737	0	204	0	1796	0	204
V/C Ratio (X)	0.00	0.57	0.00	0.24	0.00	0.82	0.00	0.16
Avail Cap (c_a), veh/h	0	3370	0	747	0	3370	0	747
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	10.9	0.0	24.5	0.0	12.5	0.0	24.3
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.2	0.0	0.4	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.0	0.0	24.7	0.0	12.9	0.0	24.4
1st-Term Q (Q1), veh/ln	0.0	3.1	0.0	0.6	0.0	5.3	0.0	0.4

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.1	0.0	0.6	0.0	5.4	0.0	0.4
%ile Storage Ratio (RQ%)	0.00	0.10	0.00	0.04	0.00	0.16	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1585	0	1585	0	1585	0	1585
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	775	0	173	0	801	0	173
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1503	0	633	0	1503	0	633
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	12.9
HCM 7th LOS	B

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	38	12	2	43	14	2
Future Vol, veh/h	38	12	2	43	14	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	41	13	2	47	15	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	54	0	99	48
Stage 1	-	-	-	-	48	-
Stage 2	-	-	-	-	51	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1551	-	900	1021
Stage 1	-	-	-	-	975	-
Stage 2	-	-	-	-	971	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1551	-	899	1021
Mov Cap-2 Maneuver	-	-	-	-	899	-
Stage 1	-	-	-	-	975	-
Stage 2	-	-	-	-	970	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.33	9.02
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	912	-	-	80	-
HCM Lane V/C Ratio	0.019	-	-	0.001	-
HCM Control Delay (s/veh)	9	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	5.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	12	4	3	18	1	16	1	0	1	3	24
Future Vol, veh/h	7	12	4	3	18	1	16	1	0	1	3	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	None	-	-	None	-	-	None
Storage Length	-	-	260	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	13	4	3	20	1	17	1	0	1	3	26

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	21	0	0	13	0	0	56	55	13	55	55	20
Stage 1	-	-	-	-	-	-	28	28	-	27	27	-
Stage 2	-	-	-	-	-	-	28	27	-	29	28	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1595	-	-	1605	-	-	941	836	1067	942	836	1058
Stage 1	-	-	-	-	-	-	989	872	-	991	873	-
Stage 2	-	-	-	-	-	-	989	873	-	988	872	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1595	-	-	1605	-	-	908	830	1067	934	831	1058
Mov Cap-2 Maneuver	-	-	-	-	-	-	908	830	-	934	831	-
Stage 1	-	-	-	-	-	-	984	867	-	989	871	-
Stage 2	-	-	-	-	-	-	959	871	-	982	867	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	2.21	0.99	9.07	8.63
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	903	663	-	-	243	-	-	1023
HCM Lane V/C Ratio	0.02	0.005	-	-	0.002	-	-	0.03
HCM Control Delay (s/veh)	9.1	7.3	0	-	7.2	0	-	8.6
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	28	594	19	35	313
Future Vol, veh/h	6	28	594	19	35	313
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	80	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	30	646	21	38	340

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1062	646	0	0	666	0
Stage 1	646	-	-	-	-	-
Stage 2	416	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	247	472	-	-	923	-
Stage 1	522	-	-	-	-	-
Stage 2	666	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	237	472	-	-	923	-
Mov Cap-2 Maneuver	369	-	-	-	-	-
Stage 1	522	-	-	-	-	-
Stage 2	638	-	-	-	-	-

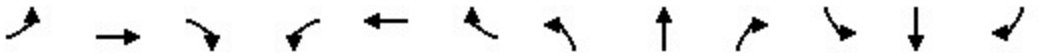
Approach	WB	NB	SB
HCM Control Delay, s/v	13.72	0	0.91
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	450	923	-
HCM Lane V/C Ratio	-	-	0.082	0.041	-
HCM Control Delay (s/veh)	-	-	13.7	9.1	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Intersection	
Intersection Delay, s/veh	10.3
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	1	1	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	291	81	1070	555
Demand Flow Rate, veh/h	294	82	1081	560
Vehicles Circulating, veh/h	8	1007	103	254
Vehicles Exiting, veh/h	254	177	7	835
Ped Vol Crossing Leg, #/h	0	0	1	0
Ped Cap Adj	1.000	1.000	0.999	1.000
Approach Delay, s/veh	1.1	7.6	13.4	9.5
Approach LOS	A	A	B	A

Lane	Left	Bypass	Left	Left	Right	Left	Right	Bypass
Designated Moves	LT	R	LTR	LT	R	LT	TR	R
Assumed Moves	LT		LTR	LT	R	LT	TR	
RT Channelized		Free						Yield
Lane Util	1.000		1.000	0.852	0.148	0.500	0.500	
Follow-Up Headway, s	2.535		2.535	2.667	2.535	2.667	2.535	2.609
Critical Headway, s	4.328		4.328	4.645	4.328	4.645	4.328	4.976
A (Intercept)	1420		1420	1350	1420	1350	1420	1380
B (Slope)	8.501e-4		8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4	1.02e-3
Entry Flow, veh/h	102	192	82	921	160	4	4	552
Cap Entry Lane, veh/h	1410	1919	603	1228	1301	1069	1144	1065
Entry HV Adj Factor	0.989	0.990	0.992	0.990	0.988	0.932	1.051	0.990
Flow Entry, veh/h	101	190	81	912	158	4	4	547
Cap Entry, veh/h	1394	1900	598	1214	1283	996	1202	1054
V/C Ratio	0.072	0.100	0.136	0.751	0.123	0.004	0.003	0.519
Control Delay, s/veh	3.1	0.0	7.6	15.0	3.8	3.6	3.0	9.6
LOS	A	A	A	C	A	A	A	A
95th %tile Queue, veh	0	0	0	8	0	0	0	3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	595	705	13	98	384	63	7	240	99	33	207	258
Future Volume (veh/h)	595	705	13	98	384	63	7	240	99	33	207	258
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	647	766	0	107	417	0	8	261	0	36	225	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	652	1886		130	1475		17	290		49	323	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.19	0.53	0.00	0.07	0.42	0.00	0.01	0.15	0.00	0.03	0.17	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	86.8	19.2	0.0	80.1	26.1	0.0	72.4	75.3	0.0	71.3	55.6	0.0
Ln Grp LOS	F	B		F	C		E	E		E	E	
Approach Vol, veh/h		1413			524			269			261	
Approach Delay, s/veh		50.2			37.2			75.2			57.8	
Approach LOS		D			D			E			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	17.9	77.3	8.1	29.2	33.2	62.0	10.5	26.8
Change Period (Y+Rc), s	8.2	7.0	6.8	* 6.3	8.2	7.0	6.8	* 6.3
Max Green (Gmax), s	12.0	55.0	10.0	* 25	25.0	55.0	10.0	* 25
Max Allow Headway (MAH), s	2.6	7.7	1.7	3.9	2.6	7.7	2.7	3.9
Max Q Clear (g_c+I1), s	9.8	19.1	2.6	17.0	26.8	12.3	4.7	20.2
Green Ext Time (g_e), s	0.0	13.3	0.0	0.4	0.0	6.8	0.0	0.4
Prob of Phs Call (p_c)	0.98	1.00	0.26	1.00	1.00	1.00	0.73	1.00
Prob of Max Out (p_x)	1.00	0.00	0.00	0.05	1.00	0.00	0.00	0.54

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		3456		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		3554		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1585		1585		1585

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0

Lane Assignment	L (Prot)		L (Prot)		L (Prot)		L (Prot)	
Lanes in Grp	1	0	1	0	2	0	1	0
Grp Vol (v), veh/h	107	0	8	0	647	0	36	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1728	0	1781	0
Q Serve Time (g_s), s	7.8	0.0	0.6	0.0	24.8	0.0	2.7	0.0
Cycle Q Clear Time (g_c), s	7.8	0.0	0.6	0.0	24.8	0.0	2.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	130	0	17	0	652	0	49	0
V/C Ratio (X)	0.82	0.00	0.47	0.00	0.99	0.00	0.73	0.00
Avail Cap (c_a), veh/h	161	0	134	0	652	0	134	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	60.6	0.0	65.3	0.0	53.6	0.0	63.9	0.0
Incr Delay (d2), s/veh	19.6	0.0	7.1	0.0	33.1	0.0	7.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	80.1	0.0	72.4	0.0	86.8	0.0	71.3	0.0
1st-Term Q (Q1), veh/ln	3.4	0.0	0.3	0.0	10.3	0.0	1.2	0.0
2nd-Term Q (Q2), veh/ln	0.7	0.0	0.0	0.0	3.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	4.1	0.0	0.3	0.0	13.3	0.0	1.3	0.0
%ile Storage Ratio (RQ%)	0.11	0.00	0.03	0.00	0.34	0.00	0.05	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	766	0	225	0	417	0	261
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	17.1	0.0	15.0	0.0	10.3	0.0	18.2
Cycle Q Clear Time (g_c), s	0.0	17.1	0.0	15.0	0.0	10.3	0.0	18.2
Lane Grp Cap (c), veh/h	0	1886	0	323	0	1475	0	290
V/C Ratio (X)	0.00	0.41	0.00	0.70	0.00	0.28	0.00	0.90
Avail Cap (c_a), veh/h	0	1886	0	353	0	1475	0	353
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	18.6	0.0	51.5	0.0	25.7	0.0	55.0
Incr Delay (d2), s/veh	0.0	0.7	0.0	4.1	0.0	0.5	0.0	20.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.2	0.0	55.6	0.0	26.1	0.0	75.3
1st-Term Q (Q1), veh/ln	0.0	6.5	0.0	6.9	0.0	4.1	0.0	8.4

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.4	0.0	0.1	0.0	1.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	6.6	0.0	7.2	0.0	4.2	0.0	10.0
%ile Storage Ratio (RQ%)	0.00	0.12	0.00	0.27	0.00	0.08	0.00	0.64
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1585	0	1585	0	1585	0	1585
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	841	0	274	0	658	0	245
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	841	0	299	0	658	0	299
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	50.9
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱		↱		↰	↱		↰	↑	↱
Traffic Vol, veh/h	14	7	10	1	14	6	24	403	30	0	68	340
Future Vol, veh/h	14	7	10	1	14	6	24	403	30	0	68	340
Conflicting Peds, #/hr	1	0	0	0	0	1	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Free	-	-	None	-	-	Yield
Storage Length	-	-	100	-	-	-	150	-	-	240	-	245
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	15	8	11	1	15	7	26	443	33	0	75	374

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	580	604	76	591	588	-	76	0	0	476	0	0
Stage 1	76	76	-	512	512	-	-	-	-	-	-	-
Stage 2	504	529	-	79	76	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	-	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	-	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	427	414	988	420	423	0	1530	-	-	1092	-	-
Stage 1	936	834	-	546	538	0	-	-	-	-	-	-
Stage 2	552	529	-	933	834	0	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	404	406	987	401	415	-	1528	-	-	1092	-	-
Mov Cap-2 Maneuver	404	406	-	401	415	-	-	-	-	-	-	-
Stage 1	935	833	-	537	529	-	-	-	-	-	-	-
Stage 2	526	520	-	914	833	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	10.89	14.01	0.39	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1528	-	-	406	987	415	1092	-	-
HCM Lane V/C Ratio	0.017	-	-	0.019	0.011	0.037	-	-	-
HCM Control Delay (s/veh)	7.4	-	-	14	8.7	14	0	-	-
HCM Lane LOS	A	-	-	B	A	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	31	51	53	479	449	27
Future Vol, veh/h	31	51	53	479	449	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	240	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	56	58	526	493	30

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1151	508	523	0	-	0
Stage 1	508	-	-	-	-	-
Stage 2	643	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	219	565	1043	-	-	-
Stage 1	604	-	-	-	-	-
Stage 2	524	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	202	565	1043	-	-	-
Mov Cap-2 Maneuver	202	-	-	-	-	-
Stage 1	556	-	-	-	-	-
Stage 2	524	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	17.51	0.86	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	179	-	202	565	-	-
HCM Lane V/C Ratio	0.056	-	0.169	0.099	-	-
HCM Control Delay (s/veh)	8.7	0	26.5	12.1	-	-
HCM Lane LOS	A	A	D	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.6	0.3	-	-

Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	4	3	0	1	0	0	5	2	1	4	0
Future Vol, veh/h	4	4	3	0	1	0	0	5	2	1	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	4	3	0	1	0	0	5	2	1	4	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1	0	0	8	0	0	18	16	6	17	17	1
Stage 1	-	-	-	-	-	-	15	15	-	1	1	-
Stage 2	-	-	-	-	-	-	3	1	-	16	16	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1622	-	-	1613	-	-	996	878	1077	998	877	1083
Stage 1	-	-	-	-	-	-	1005	883	-	1022	895	-
Stage 2	-	-	-	-	-	-	1019	895	-	1004	882	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1622	-	-	1613	-	-	989	876	1077	987	874	1083
Mov Cap-2 Maneuver	-	-	-	-	-	-	989	876	-	987	874	-
Stage 1	-	-	-	-	-	-	1003	881	-	1022	895	-
Stage 2	-	-	-	-	-	-	1014	895	-	993	879	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	2.63	0	8.92	9.05
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	925	603	-	-	1613	-	-	895
HCM Lane V/C Ratio	0.008	0.003	-	-	-	-	-	0.006
HCM Control Delay (s/veh)	8.9	7.2	0	-	0	-	-	9
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	36	86	374	62	0	61
Future Vol, veh/h	36	86	374	62	0	61
Conflicting Peds, #/hr	0	0	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	41	99	430	71	0	70

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	541	471	0	0	506	0
Stage 1	471	-	-	-	-	-
Stage 2	70	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	504	595	-	-	1064	-
Stage 1	631	-	-	-	-	-
Stage 2	955	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	502	592	-	-	1059	-
Mov Cap-2 Maneuver	502	-	-	-	-	-
Stage 1	628	-	-	-	-	-
Stage 2	955	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	12.45	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	502	592	1059	-
HCM Lane V/C Ratio	-	-	0.082	0.167	-	-
HCM Control Delay (s/veh)	-	-	12.8	12.3	0	-
HCM Lane LOS	-	-	B	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0.6	0	-

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	43	17	4	26	78	8	29	23	8	20	22
Future Vol, veh/h	8	43	17	4	26	78	8	29	23	8	20	22
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	47	19	4	29	86	9	32	25	9	22	24
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	7.6	7.4	7.5	7.4
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	13%	12%	4%	16%
Vol Thru, %	48%	63%	24%	40%
Vol Right, %	38%	25%	72%	44%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	60	68	108	50
LT Vol	8	8	4	8
Through Vol	29	43	26	20
RT Vol	23	17	78	22
Lane Flow Rate	66	75	119	55
Geometry Grp	1	1	1	1
Degree of Util (X)	0.075	0.085	0.124	0.062
Departure Headway (Hd)	4.105	4.11	3.775	4.086
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	860	862	938	863
Service Time	2.19	2.184	1.848	2.174
HCM Lane V/C Ratio	0.077	0.087	0.127	0.064
HCM Control Delay, s/veh	7.5	7.6	7.4	7.4
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.3	0.4	0.2

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	104	46	52	408	393	87
Future Vol, veh/h	104	46	52	408	393	87
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	109	48	55	429	414	92

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	998	459	505	0	-	0
Stage 1	459	-	-	-	-	-
Stage 2	539	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	269	600	1054	-	-	-
Stage 1	634	-	-	-	-	-
Stage 2	583	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	251	600	1054	-	-	-
Mov Cap-2 Maneuver	251	-	-	-	-	-
Stage 1	591	-	-	-	-	-
Stage 2	583	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	28.8	0.97	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	203	-	305	-	-
HCM Lane V/C Ratio	0.052	-	0.518	-	-
HCM Control Delay (s/veh)	8.6	0	28.8	-	-
HCM Lane LOS	A	A	D	-	-
HCM 95th %tile Q(veh)	0.2	-	2.8	-	-

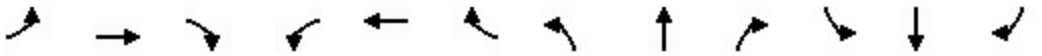
Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	278	315	10	10	1
Future Vol, veh/h	4	278	315	10	10	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	302	342	11	11	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	353	0	-	0	659	348
Stage 1	-	-	-	-	348	-
Stage 2	-	-	-	-	311	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1205	-	-	-	429	695
Stage 1	-	-	-	-	715	-
Stage 2	-	-	-	-	743	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1205	-	-	-	427	695
Mov Cap-2 Maneuver	-	-	-	-	427	-
Stage 1	-	-	-	-	712	-
Stage 2	-	-	-	-	743	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.11	0	13.36
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	26	-	-	-	442
HCM Lane V/C Ratio	0.004	-	-	-	0.027
HCM Control Delay (s/veh)	8	0	-	-	13.4
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	166	48	157	173	28	98	1289	299	42	714	62
Future Volume (veh/h)	71	166	48	157	173	28	98	1289	299	42	714	62
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	77	180	0	171	188	0	107	1401	0	46	776	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	99	223		228	243		295	1680		185	1554	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.12	0.00	0.07	0.13	0.00	0.06	0.47	0.00	0.04	0.44	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	63.5	42.9	0.0	54.6	41.5	0.0	19.8	26.2	0.0	39.2	19.9	0.0
Ln Grp LOS	E	D		D	D		B	C		D	B	
Approach Vol, veh/h		257			359			1508			822	
Approach Delay, s/veh		49.1			47.7			25.7			21.0	
Approach LOS		D			D			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	2	1	3	4	5	6	7	8
Case No	3.0	1.3	2.0	3.0	1.2	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	51.4	12.0	13.0	17.5	13.8	49.6	12.0	18.5
Change Period (Y+Rc), s	7.0	8.5	6.8	* 6.3	8.5	* 8.5	6.8	* 6.3
Max Green (Gmax), s	46.0	12.5	6.2	* 27	25.5	* 33	6.2	* 27
Max Allow Headway (MAH), s	7.7	2.6	2.6	3.7	2.6	7.7	2.6	3.7
Max Q Clear (g_c+I1), s	34.2	2.0	6.6	10.8	5.6	16.8	6.0	11.1
Green Ext Time (g_e), s	10.2	0.0	0.0	0.4	0.1	8.6	0.0	0.4
Prob of Phs Call (p_c)	1.00	0.70	0.99	1.00	0.94	1.00	0.87	1.00
Prob of Max Out (p_x)	0.93	0.00	1.00	0.00	0.00	0.57	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		1	3		5		7	
Mvmt Sat Flow, veh/h		1781	3456		1781		1781	

Through Movement Data								
Assigned Mvmt	2			4		6		8
Mvmt Sat Flow, veh/h	3554			1870		3554		1870

Right-Turn Movement Data								
Assigned Mvmt	12			14		16		18
Mvmt Sat Flow, veh/h	1585			1585		1585		1585

Left Lane Group Data								
Assigned Mvmt	0	1	3	0	5	0	7	0

Lane Assignment	L (Pr/Pm)	L (Prot)		L (Pr/Pm)		L (Prot)		
Lanes in Grp	0	1	2	0	1	0	1	0
Grp Vol (v), veh/h	0	46	171	0	107	0	77	0
Grp Sat Flow (s), veh/h/ln	0	1781	1728	0	1781	0	1781	0
Q Serve Time (g_s), s	0.0	0.0	4.6	0.0	3.6	0.0	4.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	4.6	0.0	3.6	0.0	4.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	385	0	0	695	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	28.6	0.0	0.0	32.6	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	10.2	0.0	0.0	15.8	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	10.2	0.0	0.0	3.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	185	228	0	295	0	99	0
V/C Ratio (X)	0.00	0.25	0.75	0.00	0.36	0.00	0.78	0.00
Avail Cap (c_a), veh/h	0	356	228	0	677	0	118	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	38.9	43.1	0.0	19.5	0.0	43.8	0.0
Incr Delay (d2), s/veh	0.0	0.3	11.5	0.0	0.3	0.0	19.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	39.2	54.6	0.0	19.8	0.0	63.5	0.0
1st-Term Q (Q1), veh/ln	0.0	1.0	1.8	0.0	1.3	0.0	1.7	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.4	0.0	0.0	0.0	0.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	1.0	2.2	0.0	1.3	0.0	2.2	0.0
%ile Storage Ratio (RQ%)	0.00	0.02	0.24	0.00	0.03	0.00	0.10	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	2	0	0	4	0	6	0	8
Lane Assignment	T			T		T		T
Lanes in Grp	2	0	0	1	0	2	0	1
Grp Vol (v), veh/h	1401	0	0	180	0	776	0	188
Grp Sat Flow (s), veh/h/ln	1777	0	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	32.2	0.0	0.0	8.8	0.0	14.8	0.0	9.1
Cycle Q Clear Time (g_c), s	32.2	0.0	0.0	8.8	0.0	14.8	0.0	9.1
Lane Grp Cap (c), veh/h	1680	0	0	223	0	1554	0	243
V/C Ratio (X)	0.83	0.00	0.00	0.81	0.00	0.50	0.00	0.77
Avail Cap (c_a), veh/h	1741	0	0	532	0	1554	0	532
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	21.5	0.0	0.0	40.3	0.0	19.0	0.0	39.5
Incr Delay (d2), s/veh	4.6	0.0	0.0	2.6	0.0	0.9	0.0	2.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	26.2	0.0	0.0	42.9	0.0	19.9	0.0	41.5
1st-Term Q (Q1), veh/ln	11.3	0.0	0.0	3.8	0.0	5.3	0.0	3.9

2nd-Term Q (Q2), veh/ln	1.1	0.0	0.0	0.2	0.0	0.2	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	12.4	0.0	0.0	3.9	0.0	5.5	0.0	4.0
%ile Storage Ratio (RQ%)	0.12	0.00	0.00	0.06	0.00	0.07	0.00	0.12
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	12	0	0	14	0	16	0	18
Lane Assignment	R			R		R		R
Lanes in Grp	1	0	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1585	0	0	1585	0	1585	0	1585
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	749	0	0	189	0	693	0	206
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	777	0	0	451	0	693	0	451
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	29.1
HCM 7th LOS	C

Notes

* HCM 7th Edition computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	63	422	22	20	311	19	39	2	29	21	1	22
Future Vol, veh/h	63	422	22	20	311	19	39	2	29	21	1	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	Yield
Storage Length	180	-	-	300	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	68	459	24	22	338	21	42	2	32	23	1	24

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	359	0	-	459	0	0	978	998	459	989	988	348
Stage 1	-	-	-	-	-	-	596	596	-	392	392	-
Stage 2	-	-	-	-	-	-	382	402	-	597	596	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1200	-	0	1102	-	-	230	244	602	226	247	695
Stage 1	-	-	0	-	-	-	490	492	-	633	607	-
Stage 2	-	-	0	-	-	-	640	600	-	490	492	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	1200	-	-	1102	-	-	204	225	602	196	229	695
Mov Cap-2 Maneuver	-	-	-	-	-	-	204	225	-	196	229	-
Stage 1	-	-	-	-	-	-	462	464	-	620	595	-
Stage 2	-	-	-	-	-	-	605	588	-	436	464	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	1.06	0.48	22.4	20.08
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	282	1200	-	1102	-	-	196	389
HCM Lane V/C Ratio	0.27	0.057	-	0.02	-	-	0.116	0.064
HCM Control Delay (s/veh)	22.4	8.2	-	8.3	-	-	25.8	14.9
HCM Lane LOS	C	A	-	A	-	-	D	B
HCM 95th %tile Q(veh)	1.1	0.2	-	0.1	-	-	0.4	0.2

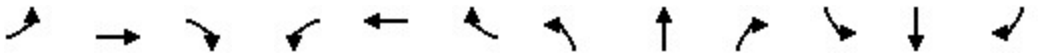
Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↱		↱
Traffic Vol, veh/h	0	470	355	14	0	7
Future Vol, veh/h	0	470	355	14	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	0	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	511	386	15	0	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	386
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	662
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	662
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	10.5
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	662
HCM Lane V/C Ratio	-	-	-	0.011
HCM Control Delay (s/veh)	-	-	-	10.5
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	321	47	13	225	134	76	121	22	170	90	68
Future Volume (veh/h)	98	321	47	13	225	134	76	121	22	170	90	68
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	107	349	0	14	245	0	83	132	0	185	98	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	344	490	0	237	367	311	136	216	304	218	116	292
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.09	0.26	0.00	0.03	0.20	0.00	0.19	0.19	0.00	0.18	0.18	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	22.0	32.7	0.0	24.1	36.2	0.0	29.3	0.0	0.0	32.8	0.0	0.0
Ln Grp LOS	C	C		C	D		C			C		
Approach Vol, veh/h		456			259			215			283	
Approach Delay, s/veh		30.2			35.5			29.3			32.8	
Approach LOS		C			D			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8	4	5	6		
Case No	1.1	4.0	11.0	11.0	1.1	3.0		
Phs Duration (G+Y+Rc), s	9.0	26.3	20.8	21.4	14.1	21.2		
Change Period (Y+Rc), s	6.9	6.0	6.5	6.5	6.9	6.0		
Max Green (Gmax), s	15.0	50.0	30.0	30.0	15.0	50.0		
Max Allow Headway (MAH), s	4.7	7.7	3.5	3.7	4.6	8.0		
Max Q Clear (g_c+I1), s	2.5	15.1	13.7	10.3	5.5	11.4		
Green Ext Time (g_e), s	0.0	5.2	0.6	0.5	0.2	3.7		
Prob of Phs Call (p_c)	0.26	1.00	1.00	0.99	0.90	1.00		
Prob of Max Out (p_x)	0.00	0.01	0.00	0.00	0.02	0.00		

Left-Turn Movement Data								
Assigned Mvmt	1		3	7	5			
Mvmt Sat Flow, veh/h	1781		1184	708	1781			

Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		1870	627	1127		1870		

Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		0	1585	1585		1585		

Left Lane Group Data								
Assigned Mvmt	1	0	3	7	5	0	0	0

Lane Assignment	L (Pr/Pm)		L+T	L+TL (Pr/Pm)				
Lanes in Grp	1	0	1	1	1	0	0	0
Grp Vol (v), veh/h	14	0	283	215	107	0	0	0
Grp Sat Flow (s), veh/h/ln	1781	0	1811	1835	1781	0	0	0
Q Serve Time (g_s), s	0.5	0.0	11.7	8.3	3.5	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.5	0.0	11.7	8.3	3.5	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1032	0	0	0	1135	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	15.2	0.0	0.0	0.0	15.4	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	7.2	0.0	0.0	0.0	5.8	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.1	0.0	0.0	0.0	1.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.65	0.39	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	237	0	334	352	344	0	0	0
V/C Ratio (X)	0.06	0.00	0.85	0.61	0.31	0.00	0.00	0.00
Avail Cap (c_a), veh/h	534	0	702	711	523	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	24.0	0.0	30.5	28.6	21.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	2.3	0.6	0.7	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	24.1	0.0	32.8	29.3	22.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.2	0.0	4.7	3.5	1.3	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.2	0.1	0.1	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.2	0.0	4.9	3.5	1.3	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.02	0.00	0.05	0.21	0.14	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	349	0	0	0	245	0	0
Grp Sat Flow (s), veh/h/ln	0	1870	0	0	0	1870	0	0
Q Serve Time (g_s), s	0.0	13.1	0.0	0.0	0.0	9.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	13.1	0.0	0.0	0.0	9.4	0.0	0.0
Lane Grp Cap (c), veh/h	0	490	0	0	0	367	0	0
V/C Ratio (X)	0.00	0.71	0.00	0.00	0.00	0.67	0.00	0.00
Avail Cap (c_a), veh/h	0	1209	0	0	0	1209	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	25.9	0.0	0.0	0.0	28.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	6.8	0.0	0.0	0.0	7.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.7	0.0	0.0	0.0	36.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.1	0.0	0.0	0.0	3.9	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	0.0	0.0	0.8	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	6.0	0.0	0.0	0.0	4.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.12	0.00	0.00	0.00	0.19	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment			R	R		R		
Lanes in Grp	0	0	1	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1585	1585	0	1585	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	292	304	0	311	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	615	615	0	1024	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	31.8
HCM 7th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	324	31	3	44	305	41	30	23	13	22	38
Future Volume (veh/h)	52	324	31	3	44	305	41	30	23	13	22	38
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	0.98		1.00	0.99		1.00	0.98		1.00	0.98		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	62	386	0	4	52	0	49	36	0	15	26	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	730	788	668	438	687	0	291	181	0	199	283	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.42	0.00	0.01	0.37	0.00	0.22	0.22	0.00	0.22	0.22	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	7.6	10.4	0.0	7.9	9.3	0.0	14.8	0.0	0.0	14.2	0.0	0.0
Ln Grp LOS	A	B		A	A		B			B		
Approach Vol, veh/h		448			56			85			41	
Approach Delay, s/veh		10.0			9.2			14.8			14.2	
Approach LOS		B			A			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	1.1	3.0		8.0	1.1	4.0		8.0
Phs Duration (G+Y+Rc), s	4.2	25.2		15.6	6.7	22.8		15.6
Change Period (Y+Rc), s	4.0	6.1		5.7	4.0	6.1		5.7
Max Green (Gmax), s	5.0	35.0		30.0	5.0	35.0		30.0
Max Allow Headway (MAH), s	1.7	7.0		7.4	1.7	7.0		7.4
Max Q Clear (g_c+I1), s	2.1	8.8		2.8	2.9	2.8		3.7
Green Ext Time (g_e), s	0.0	4.4		0.3	0.0	0.4		0.8
Prob of Phs Call (p_c)	0.05	1.00		0.82	0.54	1.00		0.82
Prob of Max Out (p_x)	0.01	0.03		0.00	0.43	0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1767			408	1767			750

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1856		1289		1856		823

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1572		0		0		0

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3

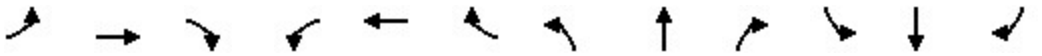
Lane Assignment	L (Pr/Pm)			L+TL (Pr/Pm)				L+T
Lanes in Grp	1	0	0	1	1	0	0	1
Grp Vol (v), veh/h	4	0	0	41	62	0	0	85
Grp Sat Flow (s), veh/h/ln	1767	0	0	1697	1767	0	0	1573
Q Serve Time (g_s), s	0.1	0.0	0.0	0.0	0.9	0.0	0.0	0.3
Cycle Q Clear Time (g_c), s	0.1	0.0	0.0	0.8	0.9	0.0	0.0	1.7
Perm LT Sat Flow (s_l), veh/h/ln	982	0	0	1369	1320	0	0	1380
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	1810	0	0	0	1783
Perm LT Eff Green (g_p), s	19.1	0.0	0.0	9.9	16.7	0.0	0.0	9.9
Perm LT Serve Time (g_u), s	12.3	0.0	0.0	8.2	15.9	0.0	0.0	9.1
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Time to First Blk (g_f), s	0.0	0.0	0.0	3.1	0.0	0.0	0.0	1.4
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.8	0.0	0.0	0.0	1.4
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.37	1.00	0.00	0.00	0.58
Lane Grp Cap (c), veh/h	438	0	0	482	730	0	0	471
V/C Ratio (X)	0.01	0.00	0.00	0.09	0.08	0.00	0.00	0.18
Avail Cap (c_a), veh/h	624	0	0	1206	820	0	0	1151
Upstream Filter (I)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	7.9	0.0	0.0	14.0	7.6	0.0	0.0	14.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	7.9	0.0	0.0	14.2	7.6	0.0	0.0	14.8
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.3	0.2	0.0	0.0	0.6
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.3	0.2	0.0	0.0	0.7
%ile Storage Ratio (RQ%)	0.01	0.00	0.00	0.02	0.06	0.00	0.00	0.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	386	0	0	0	52	0	0
Grp Sat Flow (s), veh/h/ln	0	1856	0	0	0	1856	0	0
Q Serve Time (g_s), s	0.0	6.8	0.0	0.0	0.0	0.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	6.8	0.0	0.0	0.0	0.8	0.0	0.0
Lane Grp Cap (c), veh/h	0	788	0	0	0	687	0	0
V/C Ratio (X)	0.00	0.49	0.00	0.00	0.00	0.08	0.00	0.00
Avail Cap (c_a), veh/h	0	1441	0	0	0	1441	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	9.4	0.0	0.0	0.0	9.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.0	0.0	0.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.4	0.0	0.0	0.0	9.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.9	0.0	0.0	0.0	0.2	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.1	0.0	0.0	0.0	0.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R						
Lanes in Grp	0	1	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1572	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	668	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1221	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	10.9
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	369	8	19	10	377	11	17	11	12	33	21
Future Volume (veh/h)	34	369	8	19	10	377	11	17	11	12	33	21
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	0.98		1.00	0.99		1.00	0.96		1.00	0.96		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	401	0	21	11	0	12	18	0	13	36	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	795	832	0	474	832	0	244	303	0	180	377	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.44	0.44	0.00	0.44	0.44	0.00	0.25	0.25	0.00	0.25	0.25	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	6.2	9.1	0.0	9.9	6.0	0.0	11.2	0.0	0.0	11.4	0.0	0.0
Ln Grp LOS	A	A		A	A		B			B		
Approach Vol, veh/h		438			32			30			49	
Approach Delay, s/veh		8.8			8.6			11.2			11.4	
Approach LOS		A			A			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		8.0		6.0		8.0
Phs Duration (G+Y+Rc), s		23.2		15.2		23.2		15.2
Change Period (Y+Rc), s		6.1		5.7		6.1		5.7
Max Green (Gmax), s		34.5		30.5		34.5		30.5
Max Allow Headway (MAH), s		7.9		8.4		7.9		8.5
Max Q Clear (g_c+I1), s		7.8		2.8		8.4		2.5
Green Ext Time (g_e), s		6.4		0.5		0.2		0.2
Prob of Phs Call (p_c)		1.00		0.65		1.00		0.65
Prob of Max Out (p_x)		0.09		0.00		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		1374		248		974		457

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1870		1526		1870		1225

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		0		0		0		0

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3

Lane Assignment		L		L+T		L		L+T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	37	0	49	0	21	0	30
Grp Sat Flow (s), veh/h/ln	0	1374	0	1773	0	974	0	1682
Q Serve Time (g_s), s	0.0	0.6	0.0	0.0	0.0	0.6	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.7	0.0	0.8	0.0	6.4	0.0	0.5
Perm LT Sat Flow (s_l), veh/h/ln	0	1374	0	1365	0	974	0	1345
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	1827	0	0	0	1807
Perm LT Eff Green (g_p), s	0.0	17.1	0.0	9.5	0.0	17.1	0.0	9.5
Perm LT Serve Time (g_u), s	0.0	16.9	0.0	9.0	0.0	11.2	0.0	8.7
Perm LT Q Serve Time (g_ps), s	0.0	0.6	0.0	0.0	0.0	0.6	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	4.3	0.0	0.0	0.0	2.7
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.5
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.27	0.00	1.00	0.00	0.40
Lane Grp Cap (c), veh/h	0	795	0	557	0	474	0	547
V/C Ratio (X)	0.00	0.05	0.00	0.09	0.00	0.04	0.00	0.05
Avail Cap (c_a), veh/h	0	1420	0	1487	0	917	0	1428
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	6.1	0.0	11.2	0.0	9.8	0.0	11.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.2	0.0	0.1	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	6.2	0.0	11.4	0.0	9.9	0.0	11.2
1st-Term Q (Q1), veh/ln	0.0	0.1	0.0	0.3	0.0	0.1	0.0	0.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	0.3	0.0	0.1	0.0	0.2
%ile Storage Ratio (RQ%)	0.00	0.04	0.00	0.00	0.00	0.04	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	401	0	0	0	11	0	0
Grp Sat Flow (s), veh/h/ln	0	1870	0	0	0	1870	0	0
Q Serve Time (g_s), s	0.0	5.8	0.0	0.0	0.0	0.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	5.8	0.0	0.0	0.0	0.1	0.0	0.0
Lane Grp Cap (c), veh/h	0	832	0	0	0	832	0	0
V/C Ratio (X)	0.00	0.48	0.00	0.00	0.00	0.01	0.00	0.00
Avail Cap (c_a), veh/h	0	1684	0	0	0	1684	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	7.5	0.0	0.0	0.0	5.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.1	0.0	0.0	0.0	6.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment								
Lanes in Grp	0	0	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	9.2
HCM 7th LOS	A

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	448	572	195	334
Demand Flow Rate, veh/h	457	583	199	341
Vehicles Circulating, veh/h	219	248	546	378
Vehicles Exiting, veh/h	500	451	130	453
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.7	10.2	5.2	8.0
Approach LOS	A	B	A	A

Lane	Left	Left	Left	Bypass	Left
Designated Moves	LTR	LTR	LT	R	LTR
Assumed Moves	LTR	LTR	LT		LTR
RT Channelized				Free	
Lane Util	1.000	1.000	1.000		1.000
Follow-Up Headway, s	2.609	2.609	2.609		2.609
Critical Headway, s	4.976	4.976	4.976		4.976
A (Intercept)	1380	1380	1380		1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3		1.02e-3
Entry Flow, veh/h	457	583	153	46	341
Cap Entry Lane, veh/h	1104	1071	791	1938	938
Entry HV Adj Factor	0.980	0.981	0.979	0.980	0.979
Flow Entry, veh/h	448	572	150	45	334
Cap Entry, veh/h	1082	1051	774	1900	918
V/C Ratio	0.414	0.544	0.194	0.024	0.363
Control Delay, s/veh	7.7	10.2	6.7	0.0	8.0
LOS	A	B	A	A	A
95th %tile Queue, veh	2	3	1	0	2

Intersection	
Int Delay, s/veh	1.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	439	29	45	498	26	23
Future Vol, veh/h	439	29	45	498	26	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	250	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	477	32	49	541	28	25

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	509	0	1116	477
Stage 1	-	-	-	-	477	-
Stage 2	-	-	-	-	639	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1056	-	230	588
Stage 1	-	-	-	-	624	-
Stage 2	-	-	-	-	526	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1056	-	219	588
Mov Cap-2 Maneuver	-	-	-	-	219	-
Stage 1	-	-	-	-	624	-
Stage 2	-	-	-	-	501	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.71	18.98
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	310	-	-	1056	-
HCM Lane V/C Ratio	0.172	-	-	0.046	-
HCM Control Delay (s/veh)	19	-	-	8.6	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.6	-	-	0.1	-

Intersection	
Int Delay, s/veh	18

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	420	99	30	424	12	105	48	60	5	11	11
Future Vol, veh/h	2	420	99	30	424	12	105	48	60	5	11	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	457	108	33	461	13	114	52	65	5	12	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	474	0	0	564	0	0	1047	1054	510	1020	1101	467
Stage 1	-	-	-	-	-	-	515	515	-	533	533	-
Stage 2	-	-	-	-	-	-	532	539	-	487	568	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1088	-	-	1007	-	-	206	226	563	215	212	596
Stage 1	-	-	-	-	-	-	543	535	-	531	525	-
Stage 2	-	-	-	-	-	-	531	522	-	562	506	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1088	-	-	1007	-	-	182	215	563	139	202	596
Mov Cap-2 Maneuver	-	-	-	-	-	-	182	215	-	139	202	-
Stage 1	-	-	-	-	-	-	541	533	-	507	502	-
Stage 2	-	-	-	-	-	-	486	499	-	447	505	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.03	0.56	99.78	21.46
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	235	7	-	-	115	-	-	248
HCM Lane V/C Ratio	0.986	0.002	-	-	0.032	-	-	0.118
HCM Control Delay (s/veh)	99.8	8.3	0	-	8.7	0	-	21.5
HCM Lane LOS	F	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	9.1	0	-	-	0.1	-	-	0.4

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	342	6	13	428	1	4	0	6	0	0	0
Future Vol, veh/h	8	342	6	13	428	1	4	0	6	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	372	7	14	465	1	4	0	7	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	466	0	0	378	0	0	886	887	375	883	890	466
Stage 1	-	-	-	-	-	-	392	392	-	494	494	-
Stage 2	-	-	-	-	-	-	493	495	-	389	396	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1095	-	-	1180	-	-	265	283	671	266	282	597
Stage 1	-	-	-	-	-	-	632	606	-	557	546	-
Stage 2	-	-	-	-	-	-	557	546	-	635	604	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1095	-	-	1180	-	-	258	276	671	257	275	597
Mov Cap-2 Maneuver	-	-	-	-	-	-	258	276	-	257	275	-
Stage 1	-	-	-	-	-	-	626	600	-	548	538	-
Stage 2	-	-	-	-	-	-	548	537	-	622	598	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.19	0.24	14.03	0
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	409	40	-	-	53	-	-	-
HCM Lane V/C Ratio	0.027	0.008	-	-	0.012	-	-	-
HCM Control Delay (s/veh)	14	8.3	0	-	8.1	0	-	0
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	48	385	20	0	37	244	56	27	71	0	23	36
Future Vol, veh/h	48	385	20	0	37	244	56	27	71	0	23	36
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	52	418	22	0	40	265	61	29	77	0	25	39

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	305	0	0	440	0	0	586	839	429	710	717	173
Stage 1	-	-	-	-	-	-	534	534	-	173	173	-
Stage 2	-	-	-	-	-	-	53	305	-	538	545	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1250	-	-	1114	-	-	420	301	624	347	354	868
Stage 1	-	-	-	-	-	-	528	523	-	827	754	-
Stage 2	-	-	-	-	-	-	957	660	-	526	517	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1250	-	-	1114	-	-	352	284	624	259	334	868
Mov Cap-2 Maneuver	-	-	-	-	-	-	352	284	-	259	334	-
Stage 1	-	-	-	-	-	-	499	494	-	827	754	-
Stage 2	-	-	-	-	-	-	884	660	-	409	488	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.85	0	19.22	12.64
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	418	189	-	-	1114	-	-	535
HCM Lane V/C Ratio	0.4	0.042	-	-	-	-	-	0.12
HCM Control Delay (s/veh)	19.2	8	0	-	0	-	-	12.6
HCM Lane LOS	C	A	A	-	A	-	-	B
HCM 95th %tile Q(veh)	1.9	0.1	-	-	0	-	-	0.4

Intersection	
Intersection Delay, s/veh	3.5
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	2	2	0	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	478	398	0	218
Demand Flow Rate, veh/h	487	406	0	222
Vehicles Circulating, veh/h	49	0	336	406
Vehicles Exiting, veh/h	579	336	29	0
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	2.4	3.8	0.0	5.4
Approach LOS	A	A	-	A

Lane	Left	Right	Bypass	Left	Right	Left	Right
Designated Moves	LT	TR	R	LT	TR	LT	R
Assumed Moves	LT	TR		LT	TR	LT	R
RT Channelized			Free				
Lane Util	0.472	0.528		0.470	0.530	0.099	0.901
Follow-Up Headway, s	2.667	2.535		2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328		4.645	4.328	4.645	4.328
A (Intercept)	1350	1420		1350	1420	1350	1420
B (Slope)	9.199e-4	8.501e-4		9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	149	167	171	191	215	22	200
Cap Entry Lane, veh/h	1290	1362	1938	1350	1420	929	1006
Entry HV Adj Factor	0.977	0.983	0.980	0.978	0.980	0.998	0.980
Flow Entry, veh/h	146	164	168	187	211	22	196
Cap Entry, veh/h	1261	1339	1900	1321	1392	927	985
V/C Ratio	0.115	0.123	0.088	0.141	0.151	0.024	0.199
Control Delay, s/veh	3.8	3.7	0.0	3.9	3.8	4.1	5.6
LOS	A	A	A	A	A	A	A
95th %tile Queue, veh	0	0	0	0	1	0	1

Intersection	
Intersection Delay, s/veh	4.9
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	2	3	2	0
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	331	0	318	0
Demand Flow Rate, veh/h	338	0	325	0
Vehicles Circulating, veh/h	0	479	338	386
Vehicles Exiting, veh/h	386	184	0	218
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	3.7	0.0	6.2	0.0
Approach LOS	A	-	A	-

Lane	Left	Right	Left	Right
Designated Moves	LT	TR	LT	R
Assumed Moves	L	TR	LT	R
RT Channelized				
Lane Util	0.583	0.417	0.868	0.132
Follow-Up Headway, s	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328
A (Intercept)	1350	1420	1350	1420
B (Slope)	9.199e-4	4.501e-4	9.199e-4	4.501e-4
Entry Flow, veh/h	197	141	282	43
Cap Entry Lane, veh/h	1350	1420	989	1065
Entry HV Adj Factor	0.980	0.980	0.979	0.977
Flow Entry, veh/h	193	138	276	42
Cap Entry, veh/h	1322	1392	968	1041
V/C Ratio	0.146	0.099	0.285	0.040
Control Delay, s/veh	3.9	3.4	6.6	3.8
LOS	A	A	A	A
95th %tile Queue, veh	1	0	1	0

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	13	1	15	7	10	2	23	30	13	21	0
Future Vol, veh/h	0	13	1	15	7	10	2	23	30	13	21	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	14	1	16	8	11	2	25	33	14	23	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	84	113	23	104	97	41	23	0	0	58	0	0
Stage 1	51	51	-	46	46	-	-	-	-	-	-	-
Stage 2	33	62	-	58	51	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	902	777	1054	876	793	1030	1592	-	-	1547	-	-
Stage 1	962	852	-	968	857	-	-	-	-	-	-	-
Stage 2	983	843	-	954	852	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	875	769	1054	850	785	1030	1592	-	-	1547	-	-
Mov Cap-2 Maneuver	875	769	-	850	785	-	-	-	-	-	-	-
Stage 1	953	844	-	967	856	-	-	-	-	-	-	-
Stage 2	963	842	-	928	844	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.68	9.25	0.26	2.81
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	59	-	-	784	882	688	-	-
HCM Lane V/C Ratio	0.001	-	-	0.019	0.039	0.009	-	-
HCM Control Delay (s/veh)	7.3	0	-	9.7	9.2	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	29	172	12	40	108
Future Vol, veh/h	8	29	172	12	40	108
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	32	187	13	43	117

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	398	193	0	0	200	0
Stage 1	193	-	-	-	-	-
Stage 2	204	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	608	848	-	-	1372	-
Stage 1	839	-	-	-	-	-
Stage 2	830	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	587	848	-	-	1372	-
Mov Cap-2 Maneuver	587	-	-	-	-	-
Stage 1	839	-	-	-	-	-
Stage 2	802	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.91	0	2.08
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	774	1372	-
HCM Lane V/C Ratio	-	-	0.052	0.032	-
HCM Control Delay (s/veh)	-	-	9.9	7.7	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

Intersection	
Int Delay, s/veh	3.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	4	175	5	117	4
Future Vol, veh/h	2	4	175	5	117	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	4	190	5	127	4

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	452	193	0	0	196	0
Stage 1	193	-	-	-	-	-
Stage 2	259	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	566	849	-	-	1377	-
Stage 1	840	-	-	-	-	-
Stage 2	785	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	513	849	-	-	1377	-
Mov Cap-2 Maneuver	513	-	-	-	-	-
Stage 1	840	-	-	-	-	-
Stage 2	712	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	10.21	0	7.62
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	697	1374	-
HCM Lane V/C Ratio	-	-	0.009	0.092	-
HCM Control Delay (s/veh)	-	-	10.2	7.9	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0	0.3	-

Intersection	
Int Delay, s/veh	4.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	38	116	63	89	72	47
Future Vol, veh/h	38	116	63	89	72	47
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	200	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	41	126	68	97	78	51

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	276	68	0	0	165	0
Stage 1	68	-	-	-	-	-
Stage 2	208	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	714	995	-	-	1413	-
Stage 1	954	-	-	-	-	-
Stage 2	827	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	673	995	-	-	1413	-
Mov Cap-2 Maneuver	673	-	-	-	-	-
Stage 1	954	-	-	-	-	-
Stage 2	780	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.98	0	4.66
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	890	1413	-
HCM Lane V/C Ratio	-	-	0.188	0.055	-
HCM Control Delay (s/veh)	-	-	10	7.7	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.7	0.2	-

Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	62	3	53	0	0	2	32	54	0	2	2	72
Future Vol, veh/h	62	3	53	0	0	2	32	54	0	2	2	72
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	73	4	62	0	0	2	38	64	0	2	2	85
Number of Lanes	0	1	1	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	2
HCM Control Delay, s/veh	8.2	7.6	8.7	8
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	37%	0%	95%	0%	0%	3%
Vol Thru, %	63%	100%	5%	0%	0%	3%
Vol Right, %	0%	0%	0%	100%	100%	95%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	86	0	65	53	2	76
LT Vol	32	0	62	0	0	2
Through Vol	54	0	3	0	0	2
RT Vol	0	0	0	53	2	72
Lane Flow Rate	101	0	76	62	2	89
Geometry Grp	5	5	5	5	4b	4b
Degree of Util (X)	0.144	0	0.116	0.074	0.003	0.11
Departure Headway (Hd)	5.13	4.943	5.472	4.291	4.559	4.43
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	701	0	657	837	786	812
Service Time	2.842	2.656	3.188	2.006	2.579	2.443
HCM Lane V/C Ratio	0.144	0	0.116	0.074	0.003	0.11
HCM Control Delay, s/veh	8.7	7.7	8.9	7.3	7.6	8
HCM Lane LOS	A	N	A	A	A	A
HCM 95th-tile Q	0.5	0	0.4	0.2	0	0.4

Intersection	
Int Delay, s/veh	1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	32	113	3	4	36
Future Vol, veh/h	3	32	113	3	4	36
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	35	123	3	4	39

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	172	124	0	0	126	0
Stage 1	124	-	-	-	-	-
Stage 2	48	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	818	926	-	-	1460	-
Stage 1	901	-	-	-	-	-
Stage 2	975	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	815	926	-	-	1460	-
Mov Cap-2 Maneuver	815	-	-	-	-	-
Stage 1	901	-	-	-	-	-
Stage 2	972	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.1	0	0.75
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	916	180	-
HCM Lane V/C Ratio	-	-	0.042	0.003	-
HCM Control Delay (s/veh)	-	-	9.1	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	0	5	0	0	2	23	252	0	0	156	3
Future Vol, veh/h	4	0	5	0	0	2	23	252	0	0	156	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	0	5	0	0	2	25	274	0	0	170	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	495	495	171	493	497	274	173	0	0	274	0	0
Stage 1	171	171	-	324	324	-	-	-	-	-	-	-
Stage 2	324	324	-	170	173	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	485	476	873	486	475	765	1404	-	-	1289	-	-
Stage 1	831	757	-	688	650	-	-	-	-	-	-	-
Stage 2	688	650	-	832	756	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	473	466	873	473	465	765	1404	-	-	1289	-	-
Mov Cap-2 Maneuver	473	466	-	473	465	-	-	-	-	-	-	-
Stage 1	831	757	-	674	636	-	-	-	-	-	-	-
Stage 2	672	636	-	827	756	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	10.76	9.72	0.64	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	151	-	-	635	765	1289	-	-
HCM Lane V/C Ratio	0.018	-	-	0.015	0.003	-	-	-
HCM Control Delay (s/veh)	7.6	0	-	10.8	9.7	0	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	9	3	1910	1615	12
Future Vol, veh/h	1	9	3	1910	1615	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	700	-	-	700
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	10	3	2076	1755	13

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2800	878	1768	0	-	0
Stage 1	1755	-	-	-	-	-
Stage 2	1045	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	15	291	349	-	-	-
Stage 1	124	-	-	-	-	-
Stage 2	300	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	15	291	349	-	-	-
Mov Cap-2 Maneuver	15	-	-	-	-	-
Stage 1	123	-	-	-	-	-
Stage 2	300	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	45.26	0.02	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	349	-	100	-	-
HCM Lane V/C Ratio	0.009	-	0.108	-	-
HCM Control Delay (s/veh)	15.4	-	45.3	-	-
HCM Lane LOS	C	-	E	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	31	3	1582	86	1	849
Future Vol, veh/h	31	3	1582	86	1	849
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	600	720	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	3	1720	93	1	923

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2183	860	0	0	1813	0
Stage 1	1720	-	-	-	-	-
Stage 2	464	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	39	299	-	-	335	-
Stage 1	130	-	-	-	-	-
Stage 2	600	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	39	299	-	-	335	-
Mov Cap-2 Maneuver	107	-	-	-	-	-
Stage 1	130	-	-	-	-	-
Stage 2	598	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	51.42	0	0.02
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	113	335	-
HCM Lane V/C Ratio	-	-	0.326	0.003	-
HCM Control Delay (s/veh)	-	-	51.4	15.8	-
HCM Lane LOS	-	-	F	C	-
HCM 95th %tile Q(veh)	-	-	1.3	0	-

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	34	4	2	0	1	5	1	69	1	5	37	36
Future Vol, veh/h	34	4	2	0	1	5	1	69	1	5	37	36
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	37	4	2	0	1	5	1	75	1	5	40	39

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	148	149	60	131	168	76	79	0	0	76	0	0
Stage 1	71	71	-	78	78	-	-	-	-	-	-	-
Stage 2	78	78	-	53	90	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	820	743	1006	841	725	986	1519	-	-	1523	-	-
Stage 1	939	836	-	931	830	-	-	-	-	-	-	-
Stage 2	931	830	-	959	820	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	810	739	1006	831	722	986	1519	-	-	1523	-	-
Mov Cap-2 Maneuver	810	739	-	831	722	-	-	-	-	-	-	-
Stage 1	936	833	-	930	830	-	-	-	-	-	-	-
Stage 2	924	829	-	949	817	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.69	8.9	0.1	0.47
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	25	-	-	810	929	105	-	-
HCM Lane V/C Ratio	0.001	-	-	0.054	0.007	0.004	-	-
HCM Control Delay (s/veh)	7.4	0	-	9.7	8.9	7.4	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0	0	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	6	0	0	0	8	127	0	0	30	2
Future Vol, veh/h	1	0	6	0	0	0	8	127	0	0	30	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	7	0	0	0	9	138	0	0	33	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	189	189	34	188	190	138	35	0	0	138	0	0
Stage 1	34	34	-	155	155	-	-	-	-	-	-	-
Stage 2	155	155	-	33	35	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	771	706	1040	772	705	910	1577	-	-	1446	-	-
Stage 1	982	867	-	847	769	-	-	-	-	-	-	-
Stage 2	847	769	-	984	866	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	766	701	1040	763	700	910	1577	-	-	1446	-	-
Mov Cap-2 Maneuver	766	701	-	763	700	-	-	-	-	-	-	-
Stage 1	982	867	-	842	764	-	-	-	-	-	-	-
Stage 2	842	764	-	977	866	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	8.67	0	0.43	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	107	-	-	989	-	1446	-	-
HCM Lane V/C Ratio	0.006	-	-	0.008	-	-	-	-
HCM Control Delay (s/veh)	7.3	0	-	8.7	0	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	0	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	30	50	90	1963	1556	125
Future Vol, veh/h	30	50	90	1963	1556	125
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	Yield
Storage Length	0	-	150	-	-	600
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	54	98	2134	1691	136

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2954	846	1691	0	-	0
Stage 1	1691	-	-	-	-	-
Stage 2	1263	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 11	306	373	-	-	-
Stage 1	135	-	-	-	-	-
Stage 2	230	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 8	306	373	-	-	-
Mov Cap-2 Maneuver	66	-	-	-	-	-
Stage 1	99	-	-	-	-	-
Stage 2	230	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	45.46	0.79	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	373	-	172	-	-
HCM Lane V/C Ratio	0.262	-	0.505	-	-
HCM Control Delay (s/veh)	18	-	45.5	-	-
HCM Lane LOS	C	-	E	-	-
HCM 95th %tile Q(veh)	1	-	2.5	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	32	15	1685	140	4	849
Future Vol, veh/h	32	15	1685	140	4	849
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	Yield	-	None
Storage Length	-	0	-	0	160	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	35	16	1832	152	4	923

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2209	916	0	0	1832	0
Stage 1	1832	-	-	-	-	-
Stage 2	378	-	-	-	-	-
Critical Hdwy	6.29	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.67	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	52	275	-	-	329	-
Stage 1	111	-	-	-	-	-
Stage 2	627	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	51	275	-	-	329	-
Mov Cap-2 Maneuver	96	-	-	-	-	-
Stage 1	111	-	-	-	-	-
Stage 2	619	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	18.92	0	0.08
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	275	329	-
HCM Lane V/C Ratio	-	-	0.059	0.013	-
HCM Control Delay (s/veh)	-	-	18.9	16.1	-
HCM Lane LOS	-	-	C	C	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	6.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	96	12	21	22	10	16
Future Vol, veh/h	96	12	21	22	10	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	104	13	23	24	11	17

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	89	20	28	0	-	0
Stage 1	20	-	-	-	-	-
Stage 2	70	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	911	1058	1585	-	-	-
Stage 1	1003	-	-	-	-	-
Stage 2	953	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	898	1058	1585	-	-	-
Mov Cap-2 Maneuver	898	-	-	-	-	-
Stage 1	988	-	-	-	-	-
Stage 2	953	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.52	3.57	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	879	-	914	-	-
HCM Lane V/C Ratio	0.014	-	0.128	-	-
HCM Control Delay (s/veh)	7.3	0	9.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-

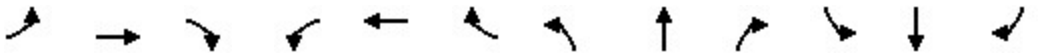
Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	13	1	15	7	10	2	23	30	13	21	0
Future Vol, veh/h	0	13	1	15	7	10	2	23	30	13	21	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	14	1	16	8	11	2	25	33	14	23	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	84	113	23	104	97	41	23	0	0	58	0	0
Stage 1	51	51	-	46	46	-	-	-	-	-	-	-
Stage 2	33	62	-	58	51	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	902	777	1054	876	793	1030	1592	-	-	1547	-	-
Stage 1	962	852	-	968	857	-	-	-	-	-	-	-
Stage 2	983	843	-	954	852	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	875	769	1054	850	785	1030	1592	-	-	1547	-	-
Mov Cap-2 Maneuver	875	769	-	850	785	-	-	-	-	-	-	-
Stage 1	953	844	-	967	856	-	-	-	-	-	-	-
Stage 2	963	842	-	928	844	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.68	9.25	0.26	2.81
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	59	-	-	784	882	688	-	-
HCM Lane V/C Ratio	0.001	-	-	0.019	0.039	0.009	-	-
HCM Control Delay (s/veh)	7.3	0	-	9.7	9.2	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	124	94	106	24	55	56	56	754	19	88	977	51
Future Volume (veh/h)	124	94	106	24	55	56	56	754	19	88	977	51
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	135	102	60	26	60	21	61	820	14	96	1062	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	334	242	142	250	410	348	184	1230	21	346	1215	34
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.67	0.67	0.67	0.67	0.67	0.67
Unsig. Movement Delay												
Ln Grp Delay, s/veh	34.7	0.0	32.2	34.9	29.1	28.3	35.0	0.0	10.6	19.8	0.0	19.1
Ln Grp LOS	C		C	C	C	C	C		B	B		B
Approach Vol, veh/h		297			107			895			1188	
Approach Delay, s/veh		33.4			30.3			12.3			19.2	
Approach LOS		C			C			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		6.0		5.0
Phs Duration (G+Y+Rc), s		66.2		25.0		66.2		25.0
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green (Gmax), s		65.0		40.0		65.0		40.0
Max Allow Headway (MAH), s		7.1		6.7		7.1		6.7
Max Q Clear (g_c+I1), s		54.3		12.8		44.6		11.0
Green Ext Time (g_e), s		6.9		2.9		15.3		0.9
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.83		0.00		0.74		0.00

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		516		1317		658		1224

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1833		1104		1810		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		31		649		51		1585

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3

Lane Assignment		L		L		L		L
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	61	0	135	0	96	0	26
Grp Sat Flow (s), veh/h/ln	0	516	0	1317	0	658	0	1224
Q Serve Time (g_s), s	0.0	9.7	0.0	8.4	0.0	9.3	0.0	1.7
Cycle Q Clear Time (g_c), s	0.0	52.3	0.0	10.8	0.0	33.5	0.0	9.0
Perm LT Sat Flow (s_l), veh/h/ln	0	516	0	1317	0	658	0	1224
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	61.2	0.0	20.0	0.0	61.2	0.0	20.0
Perm LT Serve Time (g_u), s	0.0	18.6	0.0	17.6	0.0	36.9	0.0	12.8
Perm LT Q Serve Time (g_ps), s	0.0	9.7	0.0	8.4	0.0	9.3	0.0	1.7
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	184	0	334	0	346	0	250
V/C Ratio (X)	0.00	0.33	0.00	0.40	0.00	0.28	0.00	0.10
Avail Cap (c_a), veh/h	0	206	0	623	0	373	0	518
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	32.8	0.0	33.1	0.0	18.9	0.0	34.5
Incr Delay (d2), s/veh	0.0	2.2	0.0	1.7	0.0	0.9	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	35.0	0.0	34.7	0.0	19.8	0.0	34.9
1st-Term Q (Q1), veh/ln	0.0	1.1	0.0	2.6	0.0	1.3	0.0	0.5
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.2	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.3	0.0	2.8	0.0	1.4	0.0	0.5
%ile Storage Ratio (RQ%)	0.00	0.12	0.00	0.19	0.00	0.09	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment								T
Lanes in Grp	0	0	0	0	0	0	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	60
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	1870
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	410
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	820
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.1
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	834	0	162	0	1092	0	21
Grp Sat Flow (s), veh/h/ln	0	1865	0	1753	0	1861	0	1585
Q Serve Time (g_s), s	0.0	24.3	0.0	7.2	0.0	42.6	0.0	1.0
Cycle Q Clear Time (g_c), s	0.0	24.3	0.0	7.2	0.0	42.6	0.0	1.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.02	0.00	0.37	0.00	0.03	0.00	1.00
Lane Grp Cap (c), veh/h	0	1251	0	384	0	1249	0	348
V/C Ratio (X)	0.00	0.67	0.00	0.42	0.00	0.87	0.00	0.06
Avail Cap (c_a), veh/h	0	1329	0	769	0	1326	0	695
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.9	0.0	30.6	0.0	11.9	0.0	28.2
Incr Delay (d2), s/veh	0.0	1.7	0.0	1.6	0.0	7.2	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.6	0.0	32.2	0.0	19.1	0.0	28.3
1st-Term Q (Q1), veh/ln	0.0	7.2	0.0	3.0	0.0	13.2	0.0	0.4
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.2	0.0	2.5	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.8	0.0	3.2	0.0	15.7	0.0	0.4
%ile Storage Ratio (RQ%)	0.00	0.32	0.00	0.11	0.00	1.00	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	18.9
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	206	21	62	44	81	764	21	1091	658	24	1322	70
Future Volume (veh/h)	206	21	62	44	81	764	21	1091	658	24	1322	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	224	23	0	48	88	0	23	1186	0	26	1437	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	344	434		398	434		175	1659		233	1668	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.23	0.23	0.00	0.23	0.23	0.00	0.02	0.47	0.00	0.03	0.47	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	32.6	24.0	0.0	25.2	25.0	0.0	16.1	17.4	0.0	13.5	20.4	0.0
Ln Grp LOS	C	C		C	C		B	B		B	C	
Approach Vol, veh/h		247			136			1209			1463	
Approach Delay, s/veh		31.8			25.1			17.3			20.3	
Approach LOS		C			C			B			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	1.1	3.0		5.0	1.1	3.0		5.0
Phs Duration (G+Y+Rc), s	10.2	45.5		24.6	10.0	45.7		24.6
Change Period (Y+Rc), s	8.0	8.0		6.0	8.0	8.0		6.0
Max Green (Gmax), s	7.0	57.0		24.0	7.0	57.0		24.0
Max Allow Headway (MAH), s	2.6	3.7		3.1	2.6	3.7		3.7
Max Q Clear (g_c+I1), s	2.6	23.5		18.4	2.5	31.0		5.0
Green Ext Time (g_e), s	0.0	5.3		0.2	0.0	6.8		0.3
Prob of Phs Call (p_c)	0.44	1.00		1.00	0.40	1.00		1.00
Prob of Max Out (p_x)	0.02	0.00		0.10	0.01	0.04		0.00

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1781			1309	1781			1388

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		3554		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1585		1585		1585

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3

Lane Assignment	L (Pr/Pm)			LL (Pr/Pm)				L
Lanes in Grp	1	0	0	1	1	0	0	1
Grp Vol (v), veh/h	26	0	0	224	23	0	0	48
Grp Sat Flow (s), veh/h/ln	1781	0	0	1309	1781	0	0	1388
Q Serve Time (g_s), s	0.6	0.0	0.0	13.4	0.5	0.0	0.0	2.2
Cycle Q Clear Time (g_c), s	0.6	0.0	0.0	16.4	0.5	0.0	0.0	3.0
Perm LT Sat Flow (s_l), veh/h/ln	472	0	0	1309	372	0	0	1388
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	37.5	0.0	0.0	18.6	37.7	0.0	0.0	18.6
Perm LT Serve Time (g_u), s	16.1	0.0	0.0	15.6	8.8	0.0	0.0	17.9
Perm LT Q Serve Time (g_ps), s	1.2	0.0	0.0	13.4	1.9	0.0	0.0	2.2
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	233	0	0	344	175	0	0	398
V/C Ratio (X)	0.11	0.00	0.00	0.65	0.13	0.00	0.00	0.12
Avail Cap (c_a), veh/h	339	0	0	431	285	0	0	491
Upstream Filter (I)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	13.5	0.0	0.0	31.5	16.0	0.0	0.0	25.2
Incr Delay (d2), s/veh	0.1	0.0	0.0	1.1	0.1	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	13.5	0.0	0.0	32.6	16.1	0.0	0.0	25.2
1st-Term Q (Q1), veh/ln	0.2	0.0	0.0	4.1	0.2	0.0	0.0	0.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.2	0.0	0.0	4.2	0.2	0.0	0.0	0.7
%ile Storage Ratio (RQ%)	0.01	0.00	0.00	0.35	0.01	0.00	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1186	0	23	0	1437	0	88
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	21.5	0.0	0.8	0.0	29.0	0.0	3.0
Cycle Q Clear Time (g_c), s	0.0	21.5	0.0	0.8	0.0	29.0	0.0	3.0
Lane Grp Cap (c), veh/h	0	1659	0	434	0	1668	0	434
V/C Ratio (X)	0.00	0.71	0.00	0.05	0.00	0.86	0.00	0.20
Avail Cap (c_a), veh/h	0	2520	0	558	0	2520	0	558
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	17.1	0.0	24.0	0.0	19.0	0.0	24.9
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	1.4	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	17.4	0.0	24.0	0.0	20.4	0.0	25.0
1st-Term Q (Q1), veh/ln	0.0	7.0	0.0	0.3	0.0	9.5	0.0	1.3

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.1	0.0	0.3	0.0	9.8	0.0	1.3
%ile Storage Ratio (RQ%)	0.00	0.22	0.00	0.02	0.00	0.30	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1585	0	1585	0	1585	0	1585
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	740	0	368	0	744	0	368
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1124	0	473	0	1124	0	473
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	20.2
HCM 7th LOS	C

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	43	8	6	72	15	11
Future Vol, veh/h	43	8	6	72	15	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	47	9	7	78	16	12

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	55	0	142	51
Stage 1	-	-	-	-	51	-
Stage 2	-	-	-	-	91	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1549	-	850	1017
Stage 1	-	-	-	-	971	-
Stage 2	-	-	-	-	932	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1549	-	847	1017
Mov Cap-2 Maneuver	-	-	-	-	847	-
Stage 1	-	-	-	-	971	-
Stage 2	-	-	-	-	928	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.56	9.08
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	911	-	-	138	-
HCM Lane V/C Ratio	0.031	-	-	0.004	-
HCM Control Delay (s/veh)	9.1	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	19	62	3	8	2	9	8	0	0	6	11
Future Vol, veh/h	21	19	62	3	8	2	9	8	0	0	6	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	None	-	-	None	-	-	None
Storage Length	-	-	260	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	21	67	3	9	2	10	9	0	0	7	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	11	0	0	21	0	0	85	84	21	87	83	10
Stage 1	-	-	-	-	-	-	66	66	-	16	16	-
Stage 2	-	-	-	-	-	-	18	17	-	71	66	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1608	-	-	1595	-	-	902	806	1057	899	808	1072
Stage 1	-	-	-	-	-	-	944	840	-	1003	882	-
Stage 2	-	-	-	-	-	-	1001	881	-	939	840	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1608	-	-	1595	-	-	869	793	1057	874	794	1072
Mov Cap-2 Maneuver	-	-	-	-	-	-	869	793	-	874	794	-
Stage 1	-	-	-	-	-	-	930	827	-	1001	880	-
Stage 2	-	-	-	-	-	-	980	879	-	915	827	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	1.5	1.68	9.43	8.85
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	832	945	-	-	399	-	-	954
HCM Lane V/C Ratio	0.022	0.014	-	-	0.002	-	-	0.019
HCM Control Delay (s/veh)	9.4	7.3	0	-	7.3	0	-	8.8
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	1.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	95	653	6	43	1105
Future Vol, veh/h	20	95	653	6	43	1105
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	80	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	103	710	7	47	1201

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2004	710	0	0	716	0
Stage 1	710	-	-	-	-	-
Stage 2	1295	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	65	434	-	-	884	-
Stage 1	487	-	-	-	-	-
Stage 2	257	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	62	434	-	-	884	-
Mov Cap-2 Maneuver	173	-	-	-	-	-
Stage 1	487	-	-	-	-	-
Stage 2	243	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	21.37	0	0.35
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	343	884	-
HCM Lane V/C Ratio	-	-	0.364	0.053	-
HCM Control Delay (s/veh)	-	-	21.4	9.3	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	1.6	0.2	-

Intersection	
Intersection Delay, s/veh	14.1
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	1	1	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	642	270	985	1329
Demand Flow Rate, veh/h	662	278	1014	1369
Vehicles Circulating, veh/h	1191	1129	188	602
Vehicles Exiting, veh/h	417	73	1188	805
Ped Vol Crossing Leg, #/h	1	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	3.6	16.3	21.7	13.2
Approach LOS	A	C	C	B

Lane	Left	Bypass	Left	Left	Right	Left	Right	Bypass
Designated Moves	LT	R	LTR	LT	R	LT	TR	R
Assumed Moves	LT		LTR	LT	R	LT	TR	
RT Channelized		Free						Yield
Lane Util	1.000		1.000	0.952	0.048	0.470	0.530	
Follow-Up Headway, s	2.535		2.535	2.667	2.535	2.667	2.535	2.609
Critical Headway, s	4.328		4.328	4.645	4.328	4.645	4.328	4.976
A (Intercept)	1420		1420	1350	1420	1350	1420	1380
B (Slope)	8.501e-4		8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4	1.02e-3
Entry Flow, veh/h	185	477	278	965	49	473	533	363
Cap Entry Lane, veh/h	516	1957	544	1135	1210	776	851	902
Entry HV Adj Factor	0.970	0.971	0.971	0.971	0.980	0.971	0.971	0.971
Flow Entry, veh/h	179	463	270	937	48	459	518	352
Cap Entry, veh/h	500	1900	528	1102	1186	753	827	876
V/C Ratio	0.359	0.244	0.511	0.850	0.040	0.610	0.626	0.402
Control Delay, s/veh	13.0	0.0	16.3	22.6	3.4	15.0	14.5	8.9
LOS	B	A	C	C	A	C	B	A
95th %tile Queue, veh	2	1	3	11	0	4	5	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	236	488	1	56	885	85	45	246	189	191	284	1168
Future Volume (veh/h)	236	488	1	56	885	85	45	246	189	191	284	1168
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	257	530	0	61	962	0	49	267	0	208	309	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	327	1557		79	1378		64	304		165	411	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.09	0.44	0.00	0.04	0.39	0.00	0.04	0.16	0.00	0.09	0.22	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	49.4	20.5	0.0	57.0	30.1	0.0	58.7	54.6	0.0	205.6	45.3	0.0
Ln Grp LOS	D	C		E	C		E	D		F	D	
Approach Vol, veh/h		787			1023			316			517	
Approach Delay, s/veh		29.9			31.7			55.2			109.8	
Approach LOS		C			C			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	13.0	54.3	10.6	30.0	18.4	48.9	16.8	23.9
Change Period (Y+Rc), s	8.2	7.0	6.8	* 6.3	8.2	7.0	6.8	* 6.3
Max Green (Gmax), s	12.0	55.0	10.0	* 25	25.0	55.0	10.0	* 25
Max Allow Headway (MAH), s	2.6	7.7	1.7	3.9	2.6	7.7	2.7	3.9
Max Q Clear (g_c+I1), s	5.7	12.6	4.9	18.7	9.9	26.5	12.0	17.0
Green Ext Time (g_e), s	0.0	9.0	0.0	0.5	0.4	15.3	0.0	0.5
Prob of Phs Call (p_c)	0.84	1.00	0.77	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	0.02	0.00	0.24	0.00	0.40	1.00	0.07

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		3456		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		3554		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1585		1585		1585

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0

Lane Assignment	L (Prot)		L (Prot)		L (Prot)		L (Prot)	
Lanes in Grp	1	0	1	0	2	0	1	0
Grp Vol (v), veh/h	61	0	49	0	257	0	208	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1728	0	1781	0
Q Serve Time (g_s), s	3.7	0.0	2.9	0.0	7.9	0.0	10.0	0.0
Cycle Q Clear Time (g_c), s	3.7	0.0	2.9	0.0	7.9	0.0	10.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	79	0	64	0	327	0	165	0
V/C Ratio (X)	0.78	0.00	0.77	0.00	0.79	0.00	1.26	0.00
Avail Cap (c_a), veh/h	198	0	165	0	800	0	165	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	51.0	0.0	51.6	0.0	47.8	0.0	49.0	0.0
Incr Delay (d2), s/veh	6.0	0.0	7.1	0.0	1.6	0.0	156.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	57.0	0.0	58.7	0.0	49.4	0.0	205.6	0.0
1st-Term Q (Q1), veh/ln	1.6	0.0	1.3	0.0	3.2	0.0	4.3	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.1	0.0	0.1	0.0	7.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	1.7	0.0	1.4	0.0	3.3	0.0	11.5	0.0
%ile Storage Ratio (RQ%)	0.04	0.00	0.12	0.00	0.08	0.00	0.44	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	10.7	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	530	0	309	0	962	0	267
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	10.6	0.0	16.7	0.0	24.5	0.0	15.0
Cycle Q Clear Time (g_c), s	0.0	10.6	0.0	16.7	0.0	24.5	0.0	15.0
Lane Grp Cap (c), veh/h	0	1557	0	411	0	1378	0	304
V/C Ratio (X)	0.00	0.34	0.00	0.75	0.00	0.70	0.00	0.88
Avail Cap (c_a), veh/h	0	1811	0	433	0	1811	0	433
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	20.0	0.0	39.4	0.0	27.7	0.0	44.1
Incr Delay (d2), s/veh	0.0	0.5	0.0	6.0	0.0	2.4	0.0	10.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.5	0.0	45.3	0.0	30.1	0.0	54.6
1st-Term Q (Q1), veh/ln	0.0	4.0	0.0	7.3	0.0	9.4	0.0	6.7

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.7	0.0	0.5	0.0	0.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.1	0.0	8.0	0.0	9.9	0.0	7.6
%ile Storage Ratio (RQ%)	0.00	0.07	0.00	0.31	0.00	0.18	0.00	0.49
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1585	0	1585	0	1585	0	1585
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	695	0	348	0	615	0	258
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	808	0	367	0	808	0	367
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	49.3
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱		↳		↰	↳		↰	↑	↱
Traffic Vol, veh/h	65	24	60	18	28	109	47	374	13	93	385	21
Future Vol, veh/h	65	24	60	18	28	109	47	374	13	93	385	21
Conflicting Peds, #/hr	2	0	0	0	0	2	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Free	-	-	None	-	-	Yield
Storage Length	-	-	100	-	-	-	150	-	-	240	-	245
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	70	26	65	19	30	117	51	402	14	100	414	23

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1135	1132	415	1137	1125	-	415	0	0	416	0	0
Stage 1	615	615	-	510	510	-	-	-	-	-	-	-
Stage 2	520	517	-	627	615	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.15	6.55	-	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.545	4.045	-	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	177	200	631	176	202	0	1128	-	-	1127	-	-
Stage 1	473	478	-	540	533	0	-	-	-	-	-	-
Stage 2	534	529	-	466	478	0	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	130	174	630	120	176	-	1127	-	-	1127	-	-
Mov Cap-2 Maneuver	130	174	-	120	176	-	-	-	-	-	-	-
Stage 1	431	435	-	516	509	-	-	-	-	-	-	-
Stage 2	479	505	-	359	435	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	16.46	29.62	0.9	1.59
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1127	-	-	174	630	176	1127	-	-
HCM Lane V/C Ratio	0.045	-	-	0.148	0.102	0.171	0.089	-	-
HCM Control Delay (s/veh)	8.3	-	-	29.2	11.4	29.6	8.5	-	-
HCM Lane LOS	A	-	-	D	B	D	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.3	0.6	0.3	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	23	89	30	383	423	29
Future Vol, veh/h	23	89	30	383	423	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	240	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	24	94	32	403	445	31

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	927	461	476	0	-	0
Stage 1	461	-	-	-	-	-
Stage 2	466	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	295	597	1076	-	-	-
Stage 1	631	-	-	-	-	-
Stage 2	627	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	284	597	1076	-	-	-
Mov Cap-2 Maneuver	284	-	-	-	-	-
Stage 1	607	-	-	-	-	-
Stage 2	627	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	13.53	0.61	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	131	-	284	597	-	-
HCM Lane V/C Ratio	0.029	-	0.085	0.157	-	-
HCM Control Delay (s/veh)	8.4	0	18.8	12.2	-	-
HCM Lane LOS	A	A	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	0.6	-	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	3	2	3	21	0	0	3	0	0	8	6
Future Vol, veh/h	0	3	2	3	21	0	0	3	0	0	8	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	3	2	3	23	0	0	3	0	0	9	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	23	0	0	5	0	0	38	34	4	34	35	23
Stage 1	-	-	-	-	-	-	4	4	-	29	29	-
Stage 2	-	-	-	-	-	-	34	29	-	5	5	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1592	-	-	1616	-	-	967	859	1079	972	858	1054
Stage 1	-	-	-	-	-	-	1018	892	-	988	871	-
Stage 2	-	-	-	-	-	-	982	871	-	1017	891	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1592	-	-	1616	-	-	949	857	1079	967	856	1054
Mov Cap-2 Maneuver	-	-	-	-	-	-	949	857	-	967	856	-
Stage 1	-	-	-	-	-	-	1018	892	-	986	869	-
Stage 2	-	-	-	-	-	-	965	869	-	1014	891	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0.9	9.22	8.93
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	857	1592	-	-	225	-	-	931
HCM Lane V/C Ratio	0.004	-	-	-	0.002	-	-	0.016
HCM Control Delay (s/veh)	9.2	0	-	-	7.2	0	-	8.9
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	4.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	83	75	296	104	128	323
Future Vol, veh/h	83	75	296	104	128	323
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	87	79	312	109	135	340

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	977	367	0	0	422	0
Stage 1	367	-	-	-	-	-
Stage 2	609	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	277	676	-	-	1132	-
Stage 1	698	-	-	-	-	-
Stage 2	541	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	236	675	-	-	1131	-
Mov Cap-2 Maneuver	236	-	-	-	-	-
Stage 1	698	-	-	-	-	-
Stage 2	461	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	20.44	0	2.44
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	236	675	511	-
HCM Lane V/C Ratio	-	-	0.37	0.117	0.119	-
HCM Control Delay (s/veh)	-	-	28.9	11	8.6	0
HCM Lane LOS	-	-	D	B	A	A
HCM 95th %tile Q(veh)	-	-	1.6	0.4	0.4	-

Intersection	
Intersection Delay, s/veh	10
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	95	26	24	96	20	29	30	29	44	51	24
Future Vol, veh/h	21	95	26	24	96	20	29	30	29	44	51	24
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	32	144	39	36	145	30	44	45	44	67	77	36
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	10.2	10.2	9.5	10.1
HCM LOS	B	B	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	33%	15%	17%	37%
Vol Thru, %	34%	67%	69%	43%
Vol Right, %	33%	18%	14%	20%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	88	142	140	119
LT Vol	29	21	24	44
Through Vol	30	95	96	51
RT Vol	29	26	20	24
Lane Flow Rate	133	215	212	180
Geometry Grp	1	1	1	1
Degree of Util (X)	0.194	0.296	0.294	0.263
Departure Headway (Hd)	5.234	5.066	5.097	5.245
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	689	714	708	689
Service Time	3.24	3.066	3.097	3.245
HCM Lane V/C Ratio	0.193	0.301	0.299	0.261
HCM Control Delay, s/veh	9.5	10.2	10.2	10.1
HCM Lane LOS	A	B	B	B
HCM 95th-tile Q	0.7	1.2	1.2	1.1

Intersection	
Int Delay, s/veh	7.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	83	74	77	369	291	92
Future Vol, veh/h	83	74	77	369	291	92
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	6	6	6	6	6	6
Mvmt Flow	108	96	100	479	378	119

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1117	438	497	0	-	0
Stage 1	438	-	-	-	-	-
Stage 2	679	-	-	-	-	-
Critical Hdwy	6.46	6.26	4.16	-	-	-
Critical Hdwy Stg 1	5.46	-	-	-	-	-
Critical Hdwy Stg 2	5.46	-	-	-	-	-
Follow-up Hdwy	3.554	3.354	2.254	-	-	-
Pot Cap-1 Maneuver	225	611	1046	-	-	-
Stage 1	642	-	-	-	-	-
Stage 2	496	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	196	611	1046	-	-	-
Mov Cap-2 Maneuver	196	-	-	-	-	-
Stage 1	559	-	-	-	-	-
Stage 2	496	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	42.82	1.52	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	311	-	288	-	-
HCM Lane V/C Ratio	0.096	-	0.707	-	-
HCM Control Delay (s/veh)	8.8	0	42.8	-	-
HCM Lane LOS	A	A	E	-	-
HCM 95th %tile Q(veh)	0.3	-	4.9	-	-

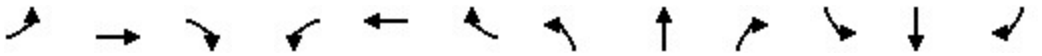
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	336	235	4	22	1
Future Vol, veh/h	1	336	235	4	22	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	365	255	4	24	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	260	0	-	0	625	258
Stage 1	-	-	-	-	258	-
Stage 2	-	-	-	-	367	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1305	-	-	-	449	781
Stage 1	-	-	-	-	785	-
Stage 2	-	-	-	-	701	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1305	-	-	-	448	781
Mov Cap-2 Maneuver	-	-	-	-	448	-
Stage 1	-	-	-	-	785	-
Stage 2	-	-	-	-	701	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.02	0	13.34
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	5	-	-	-	457
HCM Lane V/C Ratio	0.001	-	-	-	0.055
HCM Control Delay (s/veh)	7.8	0	-	-	13.3
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	108	367	166	432	205	173	81	651	231	129	1687	92
Future Volume (veh/h)	108	367	166	432	205	173	81	651	231	129	1687	92
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	117	399	0	470	223	0	88	708	0	140	1834	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	122	352		237	352		167	1011		465	1424	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.19	0.00	0.07	0.19	0.00	0.06	0.28	0.00	0.19	0.40	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	115.6	132.3	0.0	504.4	42.1	0.0	35.8	36.7	0.0	32.7	166.3	0.0
Ln Grp LOS	F	F		F	D		D	D		C	F	
Approach Vol, veh/h		516			693			796			1974	
Approach Delay, s/veh		128.5			355.6			36.6			156.8	
Approach LOS		F			F			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	2	1	3	4	5	6	7	8
Case No	3.0	1.3	2.0	3.0	1.2	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	36.8	28.0	14.0	26.0	14.3	50.5	14.0	26.0
Change Period (Y+Rc), s	7.0	8.5	6.8	* 6.3	8.5	* 8.5	6.8	* 6.3
Max Green (Gmax), s	41.0	13.5	7.2	* 20	12.5	* 42	7.2	* 20
Max Allow Headway (MAH), s	7.7	2.6	2.6	3.7	2.6	7.7	2.6	3.7
Max Q Clear (g_c+I1), s	20.7	2.0	9.2	21.7	6.2	44.0	8.9	13.5
Green Ext Time (g_e), s	9.1	0.1	0.0	0.0	0.0	0.0	0.0	0.3
Prob of Phs Call (p_c)	1.00	0.98	1.00	1.00	0.92	1.00	0.97	1.00
Prob of Max Out (p_x)	0.38	0.00	1.00	1.00	0.00	1.00	1.00	0.16

Left-Turn Movement Data								
Assigned Mvmt		1	3		5		7	
Mvmt Sat Flow, veh/h		1781	3456		1781		1781	

Through Movement Data								
Assigned Mvmt	2			4		6		8
Mvmt Sat Flow, veh/h	3554			1870		3554		1870

Right-Turn Movement Data								
Assigned Mvmt	12			14		16		18
Mvmt Sat Flow, veh/h	1585			1585		1585		1585

Left Lane Group Data								
Assigned Mvmt	0	1	3	0	5	0	7	0

Lane Assignment	L (Pr/Pm)		L (Prot)	L (Pr/Pm)		L (Prot)		
Lanes in Grp	0	1	2	0	1	0	1	0
Grp Vol (v), veh/h	0	140	470	0	88	0	117	0
Grp Sat Flow (s), veh/h/ln	0	1781	1728	0	1781	0	1781	0
Q Serve Time (g_s), s	0.0	0.0	7.2	0.0	4.2	0.0	6.9	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	7.2	0.0	4.2	0.0	6.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	741	0	0	253	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	13.5	0.0	0.0	17.5	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	9.1	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	9.1	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	465	237	0	167	0	122	0
V/C Ratio (X)	0.00	0.30	1.98	0.00	0.53	0.00	0.96	0.00
Avail Cap (c_a), veh/h	0	465	237	0	281	0	122	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	32.6	48.8	0.0	34.8	0.0	48.6	0.0
Incr Delay (d2), s/veh	0.0	0.1	455.6	0.0	1.0	0.0	67.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.7	504.4	0.0	35.8	0.0	115.6	0.0
1st-Term Q (Q1), veh/ln	0.0	2.8	2.9	0.0	1.7	0.0	2.9	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	15.0	0.0	0.0	0.0	2.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	2.8	18.0	0.0	1.8	0.0	5.2	0.0
%ile Storage Ratio (RQ%)	0.00	0.07	1.98	0.00	0.04	0.00	0.24	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	58.1	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	2	0	0	4	0	6	0	8
Lane Assignment	T			T		T		T
Lanes in Grp	2	0	0	1	0	2	0	1
Grp Vol (v), veh/h	708	0	0	399	0	1834	0	223
Grp Sat Flow (s), veh/h/ln	1777	0	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	18.7	0.0	0.0	19.7	0.0	42.0	0.0	11.5
Cycle Q Clear Time (g_c), s	18.7	0.0	0.0	19.7	0.0	42.0	0.0	11.5
Lane Grp Cap (c), veh/h	1011	0	0	352	0	1424	0	352
V/C Ratio (X)	0.70	0.00	0.00	1.13	0.00	1.29	0.00	0.63
Avail Cap (c_a), veh/h	1390	0	0	352	0	1424	0	352
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	33.5	0.0	0.0	42.5	0.0	31.4	0.0	39.2
Incr Delay (d2), s/veh	3.2	0.0	0.0	89.8	0.0	134.9	0.0	2.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	36.7	0.0	0.0	132.3	0.0	166.3	0.0	42.1
1st-Term Q (Q1), veh/ln	7.4	0.0	0.0	8.5	0.0	16.0	0.0	5.0

2nd-Term Q (Q2), veh/ln	0.5	0.0	0.0	8.8	0.0	26.7	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	7.9	0.0	0.0	17.3	0.0	42.6	0.0	5.2
%ile Storage Ratio (RQ%)	0.11	0.00	0.00	0.27	0.00	0.61	0.00	0.16
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	11.8	0.0	102.4	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	12	0	0	14	0	16	0	18
Lane Assignment	R			R		R		R
Lanes in Grp	1	0	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1585	0	0	1585	0	1585	0	1585
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	451	0	0	298	0	635	0	298
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	620	0	0	298	0	635	0	298
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	163.7
HCM 7th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	313.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	175	502	52	33	524	75	121	16	46	171	20	166
Future Vol, veh/h	175	502	52	33	524	75	121	16	46	171	20	166
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	180	-	-	300	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	190	546	57	36	570	82	132	17	50	186	22	180

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	651	0	0	602	0	0	1607	1677	574	1617	1665	610
Stage 1	-	-	-	-	-	-	954	954	-	682	682	-
Stage 2	-	-	-	-	-	-	652	723	-	935	983	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	935	-	-	975	-	-	~ 85	95	518	~ 83	97	494
Stage 1	-	-	-	-	-	-	311	337	-	440	450	-
Stage 2	-	-	-	-	-	-	457	431	-	319	327	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	935	-	-	975	-	-	~ 31	73	518	~ 47	74	494
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 31	73	-	~ 47	74	-
Stage 1	-	-	-	-	-	-	247	269	-	424	433	-
Stage 2	-	-	-	-	-	-	265	415	-	214	260	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	2.36	0.46	$ 1779.82	$ 750.76
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	44	935	-	-	975	-	-	47	307
HCM Lane V/C Ratio	4.541	0.203	-	-	0.037	-	-	3.997	0.658
HCM Control Delay (s/veh)	$ 1779.8	9.8	-	-	8.8	-	-	$ 1527.5	36.7
HCM Lane LOS	F	A	-	-	A	-	-	F	E
HCM 95th %tile Q(veh)	22.7	0.8	-	-	0.1	-	-	20.8	4.3

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↱		↱
Traffic Vol, veh/h	0	476	565	15	0	18
Future Vol, veh/h	0	476	565	15	0	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	0	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	517	614	16	0	20

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	614
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	492
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	492
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	12.62
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	492
HCM Lane V/C Ratio	-	-	-	0.04
HCM Control Delay (s/veh)	-	-	-	12.6
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	96	280	58	76	325	113	134	275	116	150	212	189
Future Volume (veh/h)	96	280	58	76	325	113	134	275	116	150	212	189
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	104	304	18	83	353	35	146	299	115	163	230	100
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	237	423	25	258	448	380	151	309	396	175	247	365
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.24	0.24	0.06	0.24	0.24	0.25	0.25	0.25	0.23	0.23	0.23
Unsig. Movement Delay												
Ln Grp Delay, s/veh	34.8	0.0	49.4	33.3	53.3	35.9	77.9	0.0	36.5	69.5	0.0	38.1
Ln Grp LOS	C		D	C	D	D	E		D	E		D
Approach Vol, veh/h		426			471			560			493	
Approach Delay, s/veh		45.8			48.5			69.4			63.1	
Approach LOS		D			D			E			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8	4	5	6		
Case No	1.1	4.0	11.0	11.0	1.1	3.0		
Phs Duration (G+Y+Rc), s	14.4	35.0	34.1	36.5	14.7	34.8		
Change Period (Y+Rc), s	6.9	6.0	6.5	6.5	6.9	6.0		
Max Green (Gmax), s	15.0	50.0	30.0	30.0	15.0	50.0		
Max Allow Headway (MAH), s	4.7	7.7	3.2	3.4	4.6	7.9		
Max Q Clear (g_c+I1), s	6.1	21.2	27.2	30.7	7.2	23.2		
Green Ext Time (g_e), s	0.2	4.5	0.4	0.0	0.2	5.5		
Prob of Phs Call (p_c)	0.94	1.00	1.00	1.00	0.97	1.00		
Prob of Max Out (p_x)	0.03	0.02	1.00	1.00	0.08	0.06		

Left-Turn Movement Data								
Assigned Mvmt	1		3	7	5			
Mvmt Sat Flow, veh/h	1781		760	604	1781			

Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		1748	1072	1236		1870		

Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		104	1585	1585		1585		

Left Lane Group Data								
Assigned Mvmt	1	0	3	7	5	0	0	0

Lane Assignment	L (Pr/Pm)		L+T	L+TL (Pr/Pm)				
Lanes in Grp	1	0	1	1	1	0	0	0
Grp Vol (v), veh/h	83	0	393	445	104	0	0	0
Grp Sat Flow (s), veh/h/ln	1781	0	1832	1840	1781	0	0	0
Q Serve Time (g_s), s	4.1	0.0	25.2	28.7	5.2	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	4.1	0.0	25.2	28.7	5.2	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1058	0	0	0	996	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	28.8	0.0	0.0	0.0	28.8	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	9.9	0.0	0.0	0.0	7.5	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	1.6	0.0	0.0	0.0	2.5	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.41	0.33	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	258	0	422	460	237	0	0	0
V/C Ratio (X)	0.32	0.00	0.93	0.97	0.44	0.00	0.00	0.00
Avail Cap (c_a), veh/h	369	0	458	460	345	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	32.3	0.0	45.3	44.5	33.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	24.2	33.4	1.8	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	33.3	0.0	69.5	77.9	34.8	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	1.7	0.0	11.1	12.9	2.1	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	2.8	4.3	0.1	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	1.8	0.0	13.9	17.1	2.2	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.19	0.00	0.14	1.00	0.23	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment						T		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	353	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1870	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	21.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	21.2	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	448	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.79	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	779	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	42.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	10.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	53.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	9.6	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	10.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment		T+R	R	R		R		
Lanes in Grp	0	1	1	1	0	1	0	0
Grp Vol (v), veh/h	0	322	100	115	0	35	0	0
Grp Sat Flow (s), veh/h/ln	0	1852	1585	1585	0	1585	0	0
Q Serve Time (g_s), s	0.0	19.2	6.2	7.0	0.0	2.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	19.2	6.2	7.0	0.0	2.1	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.06	1.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	448	365	396	0	380	0	0
V/C Ratio (X)	0.00	0.72	0.27	0.29	0.00	0.09	0.00	0.00
Avail Cap (c_a), veh/h	0	771	396	396	0	660	0	0
Upstream Filter (I)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	41.8	38.0	36.4	0.0	35.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	7.6	0.1	0.1	0.0	0.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	49.4	38.1	36.5	0.0	35.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	8.3	2.4	2.7	0.0	0.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	9.2	2.4	2.7	0.0	0.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.19	0.26	0.16	0.00	0.03	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	57.6
HCM 7th LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	326	29	28	343	13	63	5	26	8	9	35
Future Volume (veh/h)	35	326	29	28	343	13	63	5	26	8	9	35
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	40	370	9	32	390	5	72	6	11	9	10	14
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	446	693	587	459	669	9	368	35	34	155	139	134
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.38	0.38	0.04	0.37	0.37	0.19	0.19	0.19	0.19	0.19	0.19
Unsig. Movement Delay												
Ln Grp Delay, s/veh	7.7	11.2	7.9	7.6	0.0	11.9	14.5	0.0	0.0	13.6	0.0	0.0
Ln Grp LOS	A	B	A	A		B	B			B		
Approach Vol, veh/h		419			427			89			33	
Approach Delay, s/veh		10.8			11.6			14.5			13.6	
Approach LOS		B			B			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	1.1	3.0		8.0	1.1	4.0		8.0
Phs Duration (G+Y+Rc), s	5.5	21.5		13.6	5.8	21.2		13.6
Change Period (Y+Rc), s	4.0	6.1		5.7	4.0	6.1		5.7
Max Green (Gmax), s	5.0	35.0		30.0	5.0	35.0		30.0
Max Allow Headway (MAH), s	1.7	7.0		7.6	1.7	7.0		7.5
Max Q Clear (g_c+I1), s	2.4	8.4		2.7	2.6	9.1		4.0
Green Ext Time (g_e), s	0.0	4.3		0.2	0.0	4.6		0.8
Prob of Phs Call (p_c)	0.30	1.00		0.75	0.36	1.00		0.75
Prob of Max Out (p_x)	0.09	0.02		0.00	0.14	0.03		0.00

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1739			219	1739			1067

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1826		715		1799		182

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1545		688		23		176

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3

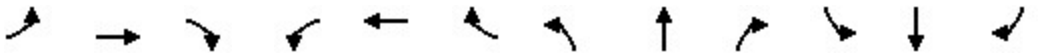
Lane Assignment	L (Pr/Pm)			L+T+R	L (Pr/Pm)			L+T+R
Lanes in Grp	1	0	0	1	1	0	0	1
Grp Vol (v), veh/h	32	0	0	33	40	0	0	89
Grp Sat Flow (s), veh/h/ln	1739	0	0	1623	1739	0	0	1425
Q Serve Time (g_s), s	0.4	0.0	0.0	0.0	0.6	0.0	0.0	1.4
Cycle Q Clear Time (g_c), s	0.4	0.0	0.0	0.7	0.6	0.0	0.0	2.0
Perm LT Sat Flow (s_l), veh/h/ln	979	0	0	1412	965	0	0	1402
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	1799	0	0	0	1748
Perm LT Eff Green (g_p), s	15.4	0.0	0.0	7.9	15.1	0.0	0.0	7.9
Perm LT Serve Time (g_u), s	9.0	0.0	0.0	5.9	8.1	0.0	0.0	7.2
Perm LT Q Serve Time (g_ps), s	0.2	0.0	0.0	0.0	0.3	0.0	0.0	1.4
Time to First Blk (g_f), s	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.5
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.5
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.27	1.00	0.00	0.00	0.81
Lane Grp Cap (c), veh/h	459	0	0	428	446	0	0	437
V/C Ratio (X)	0.07	0.00	0.00	0.08	0.09	0.00	0.00	0.20
Avail Cap (c_a), veh/h	608	0	0	1275	583	0	0	1195
Upstream Filter (I)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	7.6	0.0	0.0	13.5	7.7	0.0	0.0	14.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	7.6	0.0	0.0	13.6	7.7	0.0	0.0	14.5
1st-Term Q (Q1), veh/ln	0.1	0.0	0.0	0.2	0.1	0.0	0.0	0.6
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.1	0.0	0.0	0.2	0.1	0.0	0.0	0.7
%ile Storage Ratio (RQ%)	0.04	0.00	0.00	0.02	0.04	0.00	0.00	0.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T						
Lanes in Grp	0	1	0	0	0	0	0	0
Grp Vol (v), veh/h	0	370	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1826	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	6.4	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	6.4	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	693	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1572	0	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	9.8	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.2	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R				T+R		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	9	0	0	0	395	0	0
Grp Sat Flow (s), veh/h/ln	0	1545	0	0	0	1822	0	0
Q Serve Time (g_s), s	0.0	0.1	0.0	0.0	0.0	7.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.1	0.0	0.0	0.0	7.1	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.42	0.00	0.01	0.00	0.12
Lane Grp Cap (c), veh/h	0	587	0	0	0	678	0	0
V/C Ratio (X)	0.00	0.02	0.00	0.00	0.00	0.58	0.00	0.00
Avail Cap (c_a), veh/h	0	1331	0	0	0	1569	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	7.9	0.0	0.0	0.0	10.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	7.9	0.0	0.0	0.0	11.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	2.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	11.6
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	343	13	6	356	11	15	14	6	30	12	63
Future Volume (veh/h)	20	343	13	6	356	11	15	14	6	30	12	63
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	0.99		0.99	0.99		0.99	0.97		0.97	0.97		0.97
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	24	404	4	7	419	4	18	16	2	35	14	25
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	429	783	8	440	783	7	300	229	23	280	120	135
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.27	0.27	0.27	0.27	0.27	0.27
Unsig. Movement Delay												
Ln Grp Delay, s/veh	11.2	0.0	10.0	10.6	0.0	10.2	11.0	0.0	0.0	11.5	0.0	0.0
Ln Grp LOS	B		B	B		B	B			B		
Approach Vol, veh/h		432			430			36			74	
Approach Delay, s/veh		10.1			10.2			11.0			11.5	
Approach LOS		B			B			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		8.0		6.0		8.0
Phs Duration (G+Y+Rc), s		23.2		16.1		23.2		16.1
Change Period (Y+Rc), s		6.1		5.7		6.1		5.7
Max Green (Gmax), s		34.5		30.5		34.5		30.5
Max Allow Headway (MAH), s		8.0		8.6		8.0		8.5
Max Q Clear (g_c+I1), s		9.5		3.3		8.7		2.6
Green Ext Time (g_e), s		6.3		0.9		6.4		0.3
Prob of Phs Call (p_c)		1.00		0.75		1.00		0.75
Prob of Max Out (p_x)		0.12		0.00		0.11		0.00

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		935		546		948		610

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1805		450		1805		860

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		18		508		17		87

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3

Lane Assignment		L		L+T+R		L		L+T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	24	0	74	0	7	0	36
Grp Sat Flow (s), veh/h/ln	0	935	0	1503	0	948	0	1557
Q Serve Time (g_s), s	0.0	0.8	0.0	0.0	0.0	0.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	7.5	0.0	1.3	0.0	6.6	0.0	0.6
Perm LT Sat Flow (s_l), veh/h/ln	0	935	0	1371	0	948	0	1348
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	1755	0	0	0	1754
Perm LT Eff Green (g_p), s	0.0	17.1	0.0	10.4	0.0	17.1	0.0	10.4
Perm LT Serve Time (g_u), s	0.0	10.3	0.0	9.9	0.0	10.6	0.0	9.1
Perm LT Q Serve Time (g_ps), s	0.0	0.8	0.0	0.0	0.0	0.2	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	2.1	0.0	0.0	0.0	1.9
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.6
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.47	0.00	1.00	0.00	0.50
Lane Grp Cap (c), veh/h	0	429	0	534	0	440	0	551
V/C Ratio (X)	0.00	0.06	0.00	0.14	0.00	0.02	0.00	0.07
Avail Cap (c_a), veh/h	0	844	0	1276	0	861	0	1317
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.0	0.0	11.1	0.0	10.5	0.0	10.8
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.4	0.0	0.1	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.2	0.0	11.5	0.0	10.6	0.0	11.0
1st-Term Q (Q1), veh/ln	0.0	0.1	0.0	0.4	0.0	0.0	0.0	0.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	0.5	0.0	0.0	0.0	0.2
%ile Storage Ratio (RQ%)	0.00	0.05	0.00	0.00	0.00	0.01	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment								
Lanes in Grp	0	0	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R				T+R		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	408	0	0	0	423	0	0
Grp Sat Flow (s), veh/h/ln	0	1822	0	0	0	1823	0	0
Q Serve Time (g_s), s	0.0	6.4	0.0	0.0	0.0	6.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	6.4	0.0	0.0	0.0	6.7	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.01	0.00	0.34	0.00	0.01	0.00	0.06
Lane Grp Cap (c), veh/h	0	791	0	0	0	791	0	0
V/C Ratio (X)	0.00	0.52	0.00	0.00	0.00	0.53	0.00	0.00
Avail Cap (c_a), veh/h	0	1600	0	0	0	1600	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	8.1	0.0	0.0	0.0	8.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.9	0.0	0.0	0.0	2.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.0	0.0	0.0	0.0	10.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.5	0.0	0.0	0.0	1.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.9	0.0	0.0	0.0	2.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.00	0.00	0.04	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	10.3
HCM 7th LOS	B

Intersection	
Intersection Delay, s/veh	10.1
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	477	573	285	444
Demand Flow Rate, veh/h	487	584	290	454
Vehicles Circulating, veh/h	328	322	686	389
Vehicles Exiting, veh/h	515	588	129	517
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	9.8	11.8	7.4	10.1
Approach LOS	A	B	A	B

Lane	Left	Left	Left	Bypass	Left
Designated Moves	LTR	LTR	LT	R	LTR
Assumed Moves	LTR	LTR	LT		LTR
RT Channelized				Free	
Lane Util	1.000	1.000	1.000		1.000
Follow-Up Headway, s	2.609	2.609	2.609		2.609
Critical Headway, s	4.976	4.976	4.976		4.976
A (Intercept)	1380	1380	1380		1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3		1.02e-3
Entry Flow, veh/h	487	584	224	66	454
Cap Entry Lane, veh/h	988	994	685	1938	928
Entry HV Adj Factor	0.979	0.981	0.981	0.980	0.979
Flow Entry, veh/h	477	573	220	65	444
Cap Entry, veh/h	967	975	672	1900	908
V/C Ratio	0.493	0.588	0.327	0.034	0.489
Control Delay, s/veh	9.8	11.8	9.6	0.0	10.1
LOS	A	B	A	A	B
95th %tile Queue, veh	3	4	1	0	3

Intersection	
Int Delay, s/veh	20.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	848	25	27	783	76	81
Future Vol, veh/h	848	25	27	783	76	81
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	250	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	922	27	29	851	83	88

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	949	0	1832	922
Stage 1	-	-	-	-	922	-
Stage 2	-	-	-	-	910	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	724	-	84	328
Stage 1	-	-	-	-	388	-
Stage 2	-	-	-	-	393	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	724	-	~ 80	328
Mov Cap-2 Maneuver	-	-	-	-	~ 80	-
Stage 1	-	-	-	-	388	-
Stage 2	-	-	-	-	377	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.34	241.37
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	132	-	-	724	-
HCM Lane V/C Ratio	1.295	-	-	0.041	-
HCM Control Delay (s/veh)	241.4	-	-	10.2	-
HCM Lane LOS	F	-	-	B	-
HCM 95th %tile Q(veh)	10.8	-	-	0.1	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1619.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	9	506	270	149	402	27	384	65	210	8	34	21
Future Vol, veh/h	9	506	270	149	402	27	384	65	210	8	34	21
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	550	293	162	437	29	417	71	228	9	37	23

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	466	0	0	843	0	0	1496	1507	697	1380	1639	452
Stage 1	-	-	-	-	-	-	716	716	-	776	776	-
Stage 2	-	-	-	-	-	-	779	790	-	605	863	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1095	-	-	793	-	-	~ 101	121	441	122	100	608
Stage 1	-	-	-	-	-	-	421	434	-	391	408	-
Stage 2	-	-	-	-	-	-	~ 389	401	-	485	372	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1095	-	-	793	-	-	~ 39	86	441	10	71	608
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 39	86	-	10	71	-
Stage 1	-	-	-	-	-	-	~ 414	426	-	282	295	-
Stage 2	-	-	-	-	-	-	~ 237	290	-	192	365	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.1	2.76	$ 5080.65	$ 429.34
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	60	19	-	-	458	-	-	47
HCM Lane V/C Ratio	12.001	0.009	-	-	0.204	-	-	1.454
HCM Control Delay (s/veh)	$ 5080.6	8.3	0	-	10.7	0	-	$ 429.3
HCM Lane LOS	F	A	A	-	B	A	-	F
HCM 95th %tile Q(veh)	85.2	0	-	-	0.8	-	-	6.6

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	564	1	1	337	0	29	2	20	3	2	5
Future Vol, veh/h	1	564	1	1	337	0	29	2	20	3	2	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	613	1	1	366	0	32	2	22	3	2	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	366	0	0	614	0	0	985	984	614	985	985	366
Stage 1	-	-	-	-	-	-	616	616	-	368	368	-
Stage 2	-	-	-	-	-	-	370	368	-	616	616	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1192	-	-	965	-	-	227	248	492	227	248	679
Stage 1	-	-	-	-	-	-	478	482	-	651	621	-
Stage 2	-	-	-	-	-	-	650	621	-	478	482	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1192	-	-	965	-	-	223	248	492	215	247	679
Mov Cap-2 Maneuver	-	-	-	-	-	-	223	248	-	215	247	-
Stage 1	-	-	-	-	-	-	477	481	-	650	620	-
Stage 2	-	-	-	-	-	-	642	620	-	454	481	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.01	0.03	20.66	15.94
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	285	3	-	-	5	-	-	340
HCM Lane V/C Ratio	0.195	0.001	-	-	0.001	-	-	0.032
HCM Control Delay (s/veh)	20.7	8	0	-	8.7	0	-	15.9
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.7	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	15.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	14	444	59	99	312	1	29	48	165	9	20	60
Future Vol, veh/h	14	444	59	99	312	1	29	48	165	9	20	60
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	6	6	6	6	6	6	6	6	6	6	6	6
Mvmt Flow	15	488	65	109	343	1	32	53	181	10	22	66

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	344	0	0	553	0	0	1123	1113	520	1106	1145	343
Stage 1	-	-	-	-	-	-	551	551	-	561	561	-
Stage 2	-	-	-	-	-	-	571	562	-	545	584	-
Critical Hdwy	4.16	-	-	4.16	-	-	7.16	6.56	6.26	7.16	6.56	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-	6.16	5.56	-	6.16	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.16	5.56	-	6.16	5.56	-
Follow-up Hdwy	2.254	-	-	2.254	-	-	3.554	4.054	3.354	3.554	4.054	3.354
Pot Cap-1 Maneuver	1193	-	-	998	-	-	180	205	548	184	196	690
Stage 1	-	-	-	-	-	-	512	509	-	505	504	-
Stage 2	-	-	-	-	-	-	499	503	-	515	492	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1193	-	-	998	-	-	122	174	548	77	167	690
Mov Cap-2 Maneuver	-	-	-	-	-	-	122	174	-	77	167	-
Stage 1	-	-	-	-	-	-	502	499	-	437	436	-
Stage 2	-	-	-	-	-	-	370	435	-	303	483	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.22	2.17	67.12	25.23
HCM LOS			F	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	297	48	-	-	432	-	-	274
HCM Lane V/C Ratio	0.895	0.013	-	-	0.109	-	-	0.357
HCM Control Delay (s/veh)	67.1	8.1	0	-	9.1	0	-	25.2
HCM Lane LOS	F	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	8.2	0	-	-	0.4	-	-	1.6

Intersection	
Intersection Delay, s/veh	19.6
Intersection LOS	C

Approach	EB	WB	NB	SB
Entry Lanes	2	2	0	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	1046	1269	0	641
Demand Flow Rate, veh/h	1066	1294	0	653
Vehicles Circulating, veh/h	782	0	1059	1294
Vehicles Exiting, veh/h	1165	1059	357	0
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.1	7.3	0.0	64.2
Approach LOS	A	A	-	F

Lane	Left	Right	Bypass	Left	Right	Left	Right
Designated Moves	LT	TR	R	LT	TR	LT	R
Assumed Moves	LT	TR		LT	TR	LT	R
RT Channelized			Free				
Lane Util	0.470	0.530		0.470	0.530	0.655	0.345
Follow-Up Headway, s	2.667	2.535		2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328		4.645	4.328	4.645	4.328
A (Intercept)	1350	1420		1350	1420	1350	1420
B (Slope)	9.199e-4	8.501e-4		9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	298	336	432	608	686	428	225
Cap Entry Lane, veh/h	657	730	1938	1350	1420	411	473
Entry HV Adj Factor	0.980	0.980	0.980	0.981	0.980	0.981	0.982
Flow Entry, veh/h	292	329	424	596	672	420	221
Cap Entry, veh/h	645	716	1900	1324	1392	403	464
V/C Ratio	0.453	0.460	0.223	0.450	0.483	1.043	0.476
Control Delay, s/veh	12.4	11.5	0.0	7.2	7.4	89.0	17.0
LOS	B	B	A	A	A	F	C
95th %tile Queue, veh	2	2	1	2	3	14	3

Intersection	
Intersection Delay, s/veh	9.8
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	2	3	2	0
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	1002	0	579	0
Demand Flow Rate, veh/h	1022	0	590	0
Vehicles Circulating, veh/h	0	444	1022	1179
Vehicles Exiting, veh/h	1179	1168	0	841
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.0	0.0	16.2	0.0
Approach LOS	A	-	C	-

Lane	Left	Right	Left	Right
Designated Moves	LT	TR	LT	R
Assumed Moves	LT	TR	LT	R
RT Channelized				
Lane Util	0.470	0.530	0.481	0.519
Follow-Up Headway, s	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328
A (Intercept)	1350	1420	1350	1420
B (Slope)	9.199e-4	4.501e-4	9.199e-4	4.501e-4
Entry Flow, veh/h	480	542	284	306
Cap Entry Lane, veh/h	1350	1420	527	596
Entry HV Adj Factor	0.981	0.980	0.982	0.980
Flow Entry, veh/h	471	531	279	300
Cap Entry, veh/h	1324	1392	518	584
V/C Ratio	0.356	0.382	0.539	0.514
Control Delay, s/veh	6.0	6.1	17.5	15.1
LOS	A	A	C	C
95th %tile Queue, veh	2	2	3	3

Intersection	
Int Delay, s/veh	10.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	204	66	12	8	98	0	10	68	24	8	33	352
Future Vol, veh/h	204	66	12	8	98	0	10	68	24	8	33	352
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	222	72	13	9	107	0	11	74	26	9	36	383

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	393	366	227	198	545	87	418	0	0	100	0	0
Stage 1	245	245	-	109	109	-	-	-	-	-	-	-
Stage 2	149	122	-	89	436	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	566	562	812	761	446	972	1141	-	-	1493	-	-
Stage 1	759	704	-	897	805	-	-	-	-	-	-	-
Stage 2	854	795	-	918	580	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	422	552	812	641	438	972	1141	-	-	1493	-	-
Mov Cap-2 Maneuver	422	552	-	641	438	-	-	-	-	-	-	-
Stage 1	753	698	-	888	797	-	-	-	-	-	-	-
Stage 2	732	787	-	804	575	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	27.5	15.78	0.8	0.15
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	168	-	-	457	449	31	-	-
HCM Lane V/C Ratio	0.01	-	-	0.671	0.257	0.006	-	-
HCM Control Delay (s/veh)	8.2	0	-	27.5	15.8	7.4	0	-
HCM Lane LOS	A	A	-	D	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	4.9	1	0	-	-

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	12	42	369	14	26	430
Future Vol, veh/h	12	42	369	14	26	430
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	46	401	15	28	467

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	933	409	0	0	416	0
Stage 1	409	-	-	-	-	-
Stage 2	524	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	296	643	-	-	1143	-
Stage 1	671	-	-	-	-	-
Stage 2	594	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	286	643	-	-	1143	-
Mov Cap-2 Maneuver	286	-	-	-	-	-
Stage 1	671	-	-	-	-	-
Stage 2	574	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	13.1	0	0.47
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	503	1143	-
HCM Lane V/C Ratio	-	-	0.117	0.025	-
HCM Control Delay (s/veh)	-	-	13.1	8.2	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.4	0.1	-

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	15	336	5	6	425
Future Vol, veh/h	2	15	336	5	6	425
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	16	365	5	7	462

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	843	368	0	0	371	0
Stage 1	368	-	-	-	-	-
Stage 2	475	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	334	677	-	-	1188	-
Stage 1	700	-	-	-	-	-
Stage 2	626	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	332	677	-	-	1188	-
Mov Cap-2 Maneuver	332	-	-	-	-	-
Stage 1	700	-	-	-	-	-
Stage 2	621	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	11.15	0	0.11
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	603	25	-
HCM Lane V/C Ratio	-	-	0.031	0.005	-
HCM Control Delay (s/veh)	-	-	11.2	8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	14.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	132	161	96	87	293	91
Future Vol, veh/h	132	161	96	87	293	91
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	200	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	143	175	104	95	318	99

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	840	104	0	0	199	0
Stage 1	104	-	-	-	-	-
Stage 2	736	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	335	950	-	-	1373	-
Stage 1	920	-	-	-	-	-
Stage 2	474	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	253	950	-	-	1373	-
Mov Cap-2 Maneuver	253	-	-	-	-	-
Stage 1	920	-	-	-	-	-
Stage 2	358	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	35	0	6.42
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	424	1373	-
HCM Lane V/C Ratio	-	-	0.751	0.232	-
HCM Control Delay (s/veh)	-	-	35	8.4	-
HCM Lane LOS	-	-	D	A	-
HCM 95th %tile Q(veh)	-	-	6.2	0.9	-

Intersection	
Intersection Delay, s/veh	14.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	80	3	33	0	3	3	75	138	0	3	60	66
Future Vol, veh/h	80	3	33	0	3	3	75	138	0	3	60	66
Peak Hour Factor	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	145	5	60	0	5	5	136	251	0	5	109	120
Number of Lanes	0	1	1	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	2
HCM Control Delay, s/veh	11.3	9.7	17.3	11.7
HCM LOS	B	A	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	35%	0%	96%	0%	0%	2%
Vol Thru, %	65%	100%	4%	0%	50%	47%
Vol Right, %	0%	0%	0%	100%	50%	51%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	213	0	83	33	6	129
LT Vol	75	0	80	0	0	3
Through Vol	138	0	3	0	3	60
RT Vol	0	0	0	33	3	66
Lane Flow Rate	387	0	151	60	11	235
Geometry Grp	5	5	5	5	4b	4b
Degree of Util (X)	0.618	0	0.285	0.093	0.02	0.361
Departure Headway (Hd)	5.741	5.563	6.788	5.587	6.485	5.542
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	631	0	530	641	551	650
Service Time	3.441	3.263	4.525	3.323	4.536	3.574
HCM Lane V/C Ratio	0.613	0	0.285	0.094	0.02	0.362
HCM Control Delay, s/veh	17.3	8.3	12.2	8.9	9.7	11.7
HCM Lane LOS	C	N	B	A	A	B
HCM 95th-tile Q	4.3	0	1.2	0.3	0.1	1.6

Intersection	
Int Delay, s/veh	3.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	82	74	1	32	117
Future Vol, veh/h	5	82	74	1	32	117
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	89	80	1	35	127

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	278	81	0	0	82	0
Stage 1	81	-	-	-	-	-
Stage 2	197	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	712	979	-	-	1516	-
Stage 1	942	-	-	-	-	-
Stage 2	836	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	694	979	-	-	1516	-
Mov Cap-2 Maneuver	694	-	-	-	-	-
Stage 1	942	-	-	-	-	-
Stage 2	816	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.18	0	1.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	956	387	-
HCM Lane V/C Ratio	-	-	0.099	0.023	-
HCM Control Delay (s/veh)	-	-	9.2	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	40	0	10	0	0	2	9	167	0	0	245	18
Future Vol, veh/h	40	0	10	0	0	2	9	167	0	0	245	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	43	0	11	0	0	2	10	182	0	0	266	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	477	477	276	467	487	182	286	0	0	182	0	0
Stage 1	276	276	-	201	201	-	-	-	-	-	-	-
Stage 2	201	201	-	266	286	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	498	487	763	506	481	861	1276	-	-	1394	-	-
Stage 1	730	682	-	801	735	-	-	-	-	-	-	-
Stage 2	801	735	-	739	675	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	493	483	763	494	477	861	1276	-	-	1394	-	-
Mov Cap-2 Maneuver	493	483	-	494	477	-	-	-	-	-	-	-
Stage 1	730	682	-	794	729	-	-	-	-	-	-	-
Stage 2	792	729	-	729	675	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	12.56	9.19	0.4	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	92	-	-	530	861	1394	-	-
HCM Lane V/C Ratio	0.008	-	-	0.102	0.003	-	-	-
HCM Control Delay (s/veh)	7.8	0	-	12.6	9.2	0	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0	0	-	-

Intersection	
Int Delay, s/veh	22.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	18	12	1	1530	2573	4
Future Vol, veh/h	18	12	1	1530	2573	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	700	-	-	700
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	13	1	1663	2797	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3630	1398	2801	0	-	0
Stage 1	2797	-	-	-	-	-
Stage 2	834	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 4	130	136	-	-	-
Stage 1	32	-	-	-	-	-
Stage 2	387	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 4	130	136	-	-	-
Mov Cap-2 Maneuver	~ 4	-	-	-	-	-
Stage 1	32	-	-	-	-	-
Stage 2	387	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	$ 3100.56	0.02	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	136	-	6	-	-
HCM Lane V/C Ratio	0.008	-	5.325	-	-
HCM Control Delay (s/veh)	31.7	-	$ 3100.6	-	-
HCM Lane LOS	D	-	F	-	-
HCM 95th %tile Q(veh)	0	-	5.5	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	51.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	252	32	863	71	10	2634
Future Vol, veh/h	252	32	863	71	10	2634
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	600	720	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	274	35	938	77	11	2863

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2391	469	0	0	1015	0
Stage 1	938	-	-	-	-	-
Stage 2	1453	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 28	541	-	-	679	-
Stage 1	341	-	-	-	-	-
Stage 2	~ 181	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 28	541	-	-	679	-
Mov Cap-2 Maneuver	~ 118	-	-	-	-	-
Stage 1	341	-	-	-	-	-
Stage 2	~ 178	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, $/s	$ 699.21	0	0.04
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	130	679	-
HCM Lane V/C Ratio	-	-	2.382	0.016	-
HCM Control Delay (s/veh)	-	-	$ 699.2	10.4	-
HCM Lane LOS	-	-	F	B	-
HCM 95th %tile Q(veh)	-	-	26.7	0	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	86	18	8	3	44	15	3	94	4	16	128	213
Future Vol, veh/h	86	18	8	3	44	15	3	94	4	16	128	213
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	93	20	9	3	48	16	3	102	4	17	139	232

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	422	403	255	295	516	104	371	0	0	107	0	0
Stage 1	290	290	-	111	111	-	-	-	-	-	-	-
Stage 2	133	113	-	184	405	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	542	536	784	658	463	950	1188	-	-	1484	-	-
Stage 1	718	673	-	894	804	-	-	-	-	-	-	-
Stage 2	871	802	-	818	598	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	469	527	784	615	454	950	1188	-	-	1484	-	-
Mov Cap-2 Maneuver	469	527	-	615	454	-	-	-	-	-	-	-
Stage 1	707	662	-	892	801	-	-	-	-	-	-	-
Stage 2	802	800	-	773	589	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	14.72	12.82	0.24	0.33
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	53	-	-	492	528	72	-	-
HCM Lane V/C Ratio	0.003	-	-	0.248	0.128	0.012	-	-
HCM Control Delay (s/veh)	8	0	-	14.7	12.8	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1	0.4	0	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	15	0	20	2	0	0	7	47	0	0	114	15
Future Vol, veh/h	15	0	20	2	0	0	7	47	0	0	114	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	0	22	2	0	0	8	51	0	0	124	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	198	198	132	190	207	51	140	0	0	51	0	0
Stage 1	132	132	-	66	66	-	-	-	-	-	-	-
Stage 2	66	66	-	124	140	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	760	697	917	770	690	1017	1443	-	-	1555	-	-
Stage 1	871	787	-	944	840	-	-	-	-	-	-	-
Stage 2	944	840	-	880	781	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	756	694	917	747	686	1017	1443	-	-	1555	-	-
Mov Cap-2 Maneuver	756	694	-	747	686	-	-	-	-	-	-	-
Stage 1	871	787	-	939	835	-	-	-	-	-	-	-
Stage 2	939	835	-	859	781	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.49	9.83	0.97	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	233	-	-	841	747	1555	-	-
HCM Lane V/C Ratio	0.005	-	-	0.045	0.003	-	-	-
HCM Control Delay (s/veh)	7.5	0	-	9.5	9.8	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-

Intersection	
Int Delay, s/veh	289.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	192	149	3	1389	2674	20
Future Vol, veh/h	192	149	3	1389	2674	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	Yield
Storage Length	0	-	150	-	-	600
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	209	162	3	1510	2907	22

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3668	1453	2907	0	-	0
Stage 1	2907	-	-	-	-	-
Stage 2	761	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 4	~ 120	123	-	-	-
Stage 1	~ 28	-	-	-	-	-
Stage 2	422	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 3	~ 120	123	-	-	-
Mov Cap-2 Maneuver	~ 23	-	-	-	-	-
Stage 1	~ 27	-	-	-	-	-
Stage 2	422	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 3757.12	0.08	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	123	-	41	-	-
HCM Lane V/C Ratio	0.026	-	8.934	-	-
HCM Control Delay (s/veh)	35	-	$ 3757.1	-	-
HCM Lane LOS	D	-	F	-	-
HCM 95th %tile Q(veh)	0.1	-	44.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	140	11	779	45	8	2477
Future Vol, veh/h	140	11	779	45	8	2477
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	Yield	-	None
Storage Length	-	0	-	0	160	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	152	12	847	49	9	2692

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1941	423	0	0	847	0
Stage 1	847	-	-	-	-	-
Stage 2	1094	-	-	-	-	-
Critical Hdwy	6.29	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.67	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 76	579	-	-	786	-
Stage 1	371	-	-	-	-	-
Stage 2	260	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 75	579	-	-	786	-
Mov Cap-2 Maneuver	171	-	-	-	-	-
Stage 1	371	-	-	-	-	-
Stage 2	257	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	11.35	0	0.03
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	579	786	-
HCM Lane V/C Ratio	-	-	0.021	0.011	-
HCM Control Delay (s/veh)	-	-	11.3	9.6	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	35	30	18	6	20	89
Future Vol, veh/h	35	30	18	6	20	89
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	33	20	7	22	97

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	116	70	118	0	-	0
Stage 1	70	-	-	-	-	-
Stage 2	46	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	880	993	1470	-	-	-
Stage 1	953	-	-	-	-	-
Stage 2	977	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	869	993	1470	-	-	-
Mov Cap-2 Maneuver	869	-	-	-	-	-
Stage 1	940	-	-	-	-	-
Stage 2	977	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.23	5.61	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1350	-	922	-	-
HCM Lane V/C Ratio	0.013	-	0.077	-	-
HCM Control Delay (s/veh)	7.5	0	9.2	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	13.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	70	2	294	101	21	0	22	156	22	15	3
Future Vol, veh/h	3	70	2	294	101	21	0	22	156	22	15	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	76	2	320	110	23	0	24	170	24	16	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	145	259	18	211	176	109	20	0	0	193	0	0
Stage 1	66	66	-	109	109	-	-	-	-	-	-	-
Stage 2	79	193	-	102	67	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	824	645	1061	746	717	945	1597	-	-	1380	-	-
Stage 1	945	840	-	897	805	-	-	-	-	-	-	-
Stage 2	930	740	-	904	839	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	669	634	1061	645	705	945	1597	-	-	1380	-	-
Mov Cap-2 Maneuver	669	634	-	645	705	-	-	-	-	-	-	-
Stage 1	928	825	-	897	805	-	-	-	-	-	-	-
Stage 2	784	740	-	804	824	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	11.42	20.81	0	4.21
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1597	-	-	642	670	958	-	-
HCM Lane V/C Ratio	-	-	-	0.127	0.675	0.017	-	-
HCM Control Delay (s/veh)	0	-	-	11.4	20.8	7.7	0	-
HCM Lane LOS	A	-	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	5.2	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	52	37	41	87	78	64	1050	33	50	704	82
Future Volume (veh/h)	59	52	37	41	87	78	64	1050	33	50	704	82
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	64	57	24	45	95	28	70	1141	26	54	765	53
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	292	265	111	306	396	336	364	1242	28	148	1179	82
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.68	0.68	0.68	0.68	0.68	0.68
Unsig. Movement Delay												
Ln Grp Delay, s/veh	35.0	0.0	31.3	33.8	31.5	30.1	17.7	0.0	23.8	41.7	0.0	10.2
Ln Grp LOS	D		C	C	C	C	B		C	D		B
Approach Vol, veh/h		145			168			1237			872	
Approach Delay, s/veh		33.0			31.9			23.5			12.1	
Approach LOS		C			C			C			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		6.0		5.0
Phs Duration (G+Y+Rc), s		69.4		25.0		69.4		25.0
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green (Gmax), s		65.0		40.0		65.0		40.0
Max Allow Headway (MAH), s		7.0		6.8		7.2		6.7
Max Q Clear (g_c+I1), s		52.3		10.1		62.5		8.3
Green Ext Time (g_e), s		10.5		1.3		1.9		1.6
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.90		0.00		1.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		668		1268		481		1317

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1821		1250		1729		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		42		526		120		1585

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3

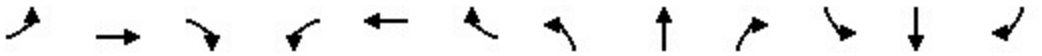
Lane Assignment		L		L		L		L
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	70	0	64	0	54	0	45
Grp Sat Flow (s), veh/h/ln	0	668	0	1268	0	481	0	1317
Q Serve Time (g_s), s	0.0	6.3	0.0	4.2	0.0	10.2	0.0	2.8
Cycle Q Clear Time (g_c), s	0.0	30.1	0.0	8.1	0.0	60.5	0.0	6.3
Perm LT Sat Flow (s_l), veh/h/ln	0	668	0	1268	0	481	0	1317
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	64.4	0.0	20.0	0.0	64.4	0.0	20.0
Perm LT Serve Time (g_u), s	0.0	40.6	0.0	16.0	0.0	14.1	0.0	16.4
Perm LT Q Serve Time (g_ps), s	0.0	6.3	0.0	4.2	0.0	10.2	0.0	2.8
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	364	0	292	0	148	0	306
V/C Ratio (X)	0.00	0.19	0.00	0.22	0.00	0.36	0.00	0.15
Avail Cap (c_a), veh/h	0	368	0	560	0	151	0	585
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	17.1	0.0	34.2	0.0	38.5	0.0	33.3
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.8	0.0	3.2	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	17.7	0.0	35.0	0.0	41.7	0.0	33.8
1st-Term Q (Q1), veh/ln	0.0	0.9	0.0	1.3	0.0	1.2	0.0	0.9
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.9	0.0	1.3	0.0	1.3	0.0	0.9
%ile Storage Ratio (RQ%)	0.00	0.09	0.00	0.09	0.00	0.09	0.00	0.07
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment								T
Lanes in Grp	0	0	0	0	0	0	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	95
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	1870
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	396
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	793
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	1167	0	81	0	818	0	28
Grp Sat Flow (s), veh/h/ln	0	1863	0	1776	0	1849	0	1585
Q Serve Time (g_s), s	0.0	50.3	0.0	3.6	0.0	23.8	0.0	1.3
Cycle Q Clear Time (g_c), s	0.0	50.3	0.0	3.6	0.0	23.8	0.0	1.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.02	0.00	0.30	0.00	0.06	0.00	1.00
Lane Grp Cap (c), veh/h	0	1271	0	376	0	1261	0	336
V/C Ratio (X)	0.00	0.92	0.00	0.22	0.00	0.65	0.00	0.08
Avail Cap (c_a), veh/h	0	1283	0	753	0	1274	0	672
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.8	0.0	30.7	0.0	8.6	0.0	29.8
Incr Delay (d2), s/veh	0.0	11.1	0.0	0.6	0.0	1.6	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	23.8	0.0	31.3	0.0	10.2	0.0	30.1
1st-Term Q (Q1), veh/ln	0.0	14.9	0.0	1.5	0.0	7.3	0.0	0.5
2nd-Term Q (Q2), veh/ln	0.0	3.9	0.0	0.1	0.0	0.6	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	18.8	0.0	1.6	0.0	7.9	0.0	0.5
%ile Storage Ratio (RQ%)	0.00	0.78	0.00	0.05	0.00	0.46	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	20.5
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	66	71	12	45	653	21	1271	603	43	1894	206
Future Volume (veh/h)	105	66	71	12	45	653	21	1271	603	43	1894	206
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	114	72	0	13	49	0	23	1382	0	47	2059	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	223	243		205	243		134	2105		277	2155	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.13	0.13	0.00	0.13	0.13	0.00	0.02	0.59	0.00	0.04	0.61	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	40.7	36.4	0.0	38.0	35.9	0.0	21.8	13.0	0.0	10.1	27.3	0.0
Ln Grp LOS	D	D		D	D		C	B		B	C	
Approach Vol, veh/h		186			62			1405			2106	
Approach Delay, s/veh		39.0			36.3			13.1			26.9	
Approach LOS		D			D			B			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	1.1	3.0		5.0	1.1	3.0		5.0
Phs Duration (G+Y+Rc), s	11.5	62.4		18.0	10.2	63.7		18.0
Change Period (Y+Rc), s	8.0	8.0		6.0	8.0	8.0		6.0
Max Green (Gmax), s	7.0	57.0		24.0	7.0	57.0		24.0
Max Allow Headway (MAH), s	2.6	3.7		3.4	2.6	3.7		4.0
Max Q Clear (g_c+I1), s	2.9	25.8		11.7	2.4	51.8		6.0
Green Ext Time (g_e), s	0.0	6.6		0.3	0.0	3.9		0.1
Prob of Phs Call (p_c)	0.70	1.00		1.00	0.44	1.00		1.00
Prob of Max Out (p_x)	0.06	0.01		0.00	0.01	0.91		0.00

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1781			1356	1781			1328

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		3554		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1585		1585		1585

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3

Lane Assignment	L (Pr/Pm)			LL (Pr/Pm)				L
Lanes in Grp	1	0	0	1	1	0	0	1
Grp Vol (v), veh/h	47	0	0	114	23	0	0	13
Grp Sat Flow (s), veh/h/ln	1781	0	0	1356	1781	0	0	1328
Q Serve Time (g_s), s	0.9	0.0	0.0	7.5	0.4	0.0	0.0	0.8
Cycle Q Clear Time (g_c), s	0.9	0.0	0.0	9.7	0.4	0.0	0.0	4.0
Perm LT Sat Flow (s_l), veh/h/ln	392	0	0	1356	203	0	0	1328
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	54.4	0.0	0.0	12.0	55.7	0.0	0.0	12.0
Perm LT Serve Time (g_u), s	30.6	0.0	0.0	9.8	5.9	0.0	0.0	8.8
Perm LT Q Serve Time (g_ps), s	3.2	0.0	0.0	7.5	5.9	0.0	0.0	0.8
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	277	0	0	223	134	0	0	205
V/C Ratio (X)	0.17	0.00	0.00	0.51	0.17	0.00	0.00	0.06
Avail Cap (c_a), veh/h	345	0	0	401	227	0	0	379
Upstream Filter (I)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	10.0	0.0	0.0	40.0	21.6	0.0	0.0	38.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.7	0.2	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	10.1	0.0	0.0	40.7	21.8	0.0	0.0	38.0
1st-Term Q (Q1), veh/ln	0.3	0.0	0.0	2.5	0.3	0.0	0.0	0.3
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.3	0.0	0.0	2.5	0.3	0.0	0.0	0.3
%ile Storage Ratio (RQ%)	0.01	0.00	0.00	0.21	0.02	0.00	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1382	0	72	0	2059	0	49
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	23.8	0.0	3.2	0.0	49.8	0.0	2.2
Cycle Q Clear Time (g_c), s	0.0	23.8	0.0	3.2	0.0	49.8	0.0	2.2
Lane Grp Cap (c), veh/h	0	2105	0	243	0	2155	0	243
V/C Ratio (X)	0.00	0.66	0.00	0.30	0.00	0.96	0.00	0.20
Avail Cap (c_a), veh/h	0	2204	0	488	0	2204	0	488
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.5	0.0	36.2	0.0	16.9	0.0	35.7
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.2	0.0	10.4	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	13.0	0.0	36.4	0.0	27.3	0.0	35.9
1st-Term Q (Q1), veh/ln	0.0	7.2	0.0	1.4	0.0	14.8	0.0	1.0

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	3.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.4	0.0	1.5	0.0	17.9	0.0	1.0
%ile Storage Ratio (RQ%)	0.00	0.23	0.00	0.10	0.00	0.54	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1585	0	1585	0	1585	0	1585
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	939	0	206	0	961	0	206
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	983	0	414	0	983	0	414
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	22.5
HCM 7th LOS	C

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	41	8	6	68	21	3
Future Vol, veh/h	41	8	6	68	21	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	45	9	7	74	23	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	53	0	136	49
Stage 1	-	-	-	-	49	-
Stage 2	-	-	-	-	87	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1552	-	858	1020
Stage 1	-	-	-	-	974	-
Stage 2	-	-	-	-	936	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1552	-	854	1020
Mov Cap-2 Maneuver	-	-	-	-	854	-
Stage 1	-	-	-	-	974	-
Stage 2	-	-	-	-	932	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.59	9.26
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	872	-	-	146	-
HCM Lane V/C Ratio	0.03	-	-	0.004	-
HCM Control Delay (s/veh)	9.3	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	18	59	3	8	2	24	2	0	2	0	0
Future Vol, veh/h	20	18	59	3	8	2	24	2	0	2	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	None	-	-	None	-	-	None
Storage Length	-	-	260	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	20	64	3	9	2	26	2	0	2	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	11	0	0	20	0	0	78	80	20	80	79	10
Stage 1	-	-	-	-	-	-	63	63	-	16	16	-
Stage 2	-	-	-	-	-	-	15	17	-	64	63	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1608	-	-	1597	-	-	911	810	1058	908	811	1072
Stage 1	-	-	-	-	-	-	948	842	-	1003	882	-
Stage 2	-	-	-	-	-	-	1005	881	-	947	842	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1608	-	-	1597	-	-	896	797	1058	890	798	1072
Mov Cap-2 Maneuver	-	-	-	-	-	-	896	797	-	890	798	-
Stage 1	-	-	-	-	-	-	934	830	-	1001	880	-
Stage 2	-	-	-	-	-	-	1003	879	-	931	830	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	1.5	1.68	9.19	9.05
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	887	947	-	-	399	-	-	890
HCM Lane V/C Ratio	0.032	0.014	-	-	0.002	-	-	0.002
HCM Control Delay (s/veh)	9.2	7.3	0	-	7.3	0	-	9.1
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	9	42	1110	30	56	649
Future Vol, veh/h	9	42	1110	30	56	649
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	80	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	46	1207	33	61	705

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2034	1207	0	0	1239	0
Stage 1	1207	-	-	-	-	-
Stage 2	827	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	63	224	-	-	562	-
Stage 1	283	-	-	-	-	-
Stage 2	429	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	56	224	-	-	562	-
Mov Cap-2 Maneuver	173	-	-	-	-	-
Stage 1	283	-	-	-	-	-
Stage 2	383	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	27.78	0	0.97
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	213	562	-
HCM Lane V/C Ratio	-	-	0.261	0.108	-
HCM Control Delay (s/veh)	-	-	27.8	12.2	-
HCM Lane LOS	-	-	D	B	-
HCM 95th %tile Q(veh)	-	-	1	0.4	-

Intersection	
Intersection Delay, s/veh	126.7
Intersection LOS	F

Approach	EB	WB	NB	SB
Entry Lanes	1	1	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	561	126	1847	998
Demand Flow Rate, veh/h	566	127	1866	1008
Vehicles Circulating, veh/h	78	1803	225	482
Vehicles Exiting, veh/h	482	288	76	1448
Ped Vol Crossing Leg, #/h	0	0	1	0
Ped Cap Adj	1.000	1.000	0.999	1.000
Approach Delay, s/veh	1.6	22.0	198.3	77.8
Approach LOS	A	C	F	F

Lane	Left	Bypass	Left	Left	Right	Left	Right	Bypass
Designated Moves	LT	R	LTR	LT	R	LT	TR	R
Assumed Moves	LT		LTR	LT	R	LT	TR	
RT Channelized		Free						Yield
Lane Util	1.000		1.000	0.863	0.137	0.474	0.526	
Follow-Up Headway, s	2.535		2.535	2.667	2.535	2.667	2.535	2.609
Critical Headway, s	4.328		4.328	4.645	4.328	4.645	4.328	4.976
A (Intercept)	1420		1420	1350	1420	1350	1420	1380
B (Slope)	8.501e-4		8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4	1.02e-3
Entry Flow, veh/h	223	343	127	1610	256	37	41	930
Cap Entry Lane, veh/h	1329	1919	307	1097	1173	866	943	844
Entry HV Adj Factor	0.990	0.990	0.992	0.990	0.988	0.981	0.999	0.990
Flow Entry, veh/h	221	340	126	1594	253	36	41	921
Cap Entry, veh/h	1315	1900	304	1085	1158	850	941	836
V/C Ratio	0.168	0.179	0.414	1.468	0.218	0.043	0.043	1.102
Control Delay, s/veh	4.1	0.0	22.0	229.0	5.1	4.6	4.2	83.9
LOS	A	A	C	F	A	A	A	F
95th %tile Queue, veh	1	1	2	72	1	0	0	25

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	880	1009	18	137	612	182	11	488	228	127	397	487
Future Volume (veh/h)	880	1009	18	137	612	182	11	488	228	127	397	487
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	957	1097	0	149	665	0	12	530	0	138	432	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	603	1686		149	1364		24	326		124	432	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.17	0.47	0.00	0.08	0.38	0.00	0.01	0.17	0.00	0.07	0.23	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	331.3	30.6	0.0	139.0	34.7	0.0	76.4	353.8	0.0	180.0	98.4	0.0
Ln Grp LOS	F	C		F	C		E	F		F	F	
Approach Vol, veh/h		2054			814			542			570	
Approach Delay, s/veh		170.7			53.8			347.6			118.1	
Approach LOS		F			D			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	20.2	75.0	8.7	39.4	33.2	62.0	16.8	31.3
Change Period (Y+Rc), s	8.2	7.0	6.8	* 6.3	8.2	7.0	6.8	* 6.3
Max Green (Gmax), s	12.0	55.0	10.0	* 25	25.0	55.0	10.0	* 25
Max Allow Headway (MAH), s	2.6	7.7	1.7	3.9	2.6	7.7	2.7	3.9
Max Q Clear (g_c+I1), s	14.0	35.6	3.0	35.1	27.0	22.3	12.0	27.0
Green Ext Time (g_e), s	0.0	13.3	0.0	0.0	0.0	10.8	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	0.38	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		3456		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		3554		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1585		1585		1585

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0

Lane Assignment	L (Prot)		L (Prot)		L (Prot)		L (Prot)	
Lanes in Grp	1	0	1	0	2	0	1	0
Grp Vol (v), veh/h	149	0	12	0	957	0	138	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1728	0	1781	0
Q Serve Time (g_s), s	12.0	0.0	1.0	0.0	25.0	0.0	10.0	0.0
Cycle Q Clear Time (g_c), s	12.0	0.0	1.0	0.0	25.0	0.0	10.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	149	0	24	0	603	0	124	0
V/C Ratio (X)	1.00	0.00	0.51	0.00	1.59	0.00	1.11	0.00
Avail Cap (c_a), veh/h	149	0	124	0	603	0	124	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	65.6	0.0	70.2	0.0	59.1	0.0	66.6	0.0
Incr Delay (d2), s/veh	73.3	0.0	6.1	0.0	272.2	0.0	113.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	139.0	0.0	76.4	0.0	331.3	0.0	180.0	0.0
1st-Term Q (Q1), veh/ln	5.3	0.0	0.4	0.0	10.5	0.0	4.5	0.0
2nd-Term Q (Q2), veh/ln	3.0	0.0	0.0	0.0	22.8	0.0	3.9	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	8.3	0.0	0.5	0.0	33.3	0.0	8.4	0.0
%ile Storage Ratio (RQ%)	0.21	0.00	0.04	0.00	0.85	0.00	0.32	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	88.5	0.0	3.4	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.4	0.0	0.3	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1097	0	432	0	665	0	530
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	33.6	0.0	33.1	0.0	20.3	0.0	25.0
Cycle Q Clear Time (g_c), s	0.0	33.6	0.0	33.1	0.0	20.3	0.0	25.0
Lane Grp Cap (c), veh/h	0	1686	0	432	0	1364	0	326
V/C Ratio (X)	0.00	0.65	0.00	1.00	0.00	0.49	0.00	1.62
Avail Cap (c_a), veh/h	0	1686	0	432	0	1364	0	326
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.6	0.0	55.1	0.0	33.5	0.0	59.1
Incr Delay (d2), s/veh	0.0	2.0	0.0	43.3	0.0	1.2	0.0	294.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.6	0.0	98.4	0.0	34.7	0.0	353.8
1st-Term Q (Q1), veh/ln	0.0	13.4	0.0	15.2	0.0	8.4	0.0	11.6

2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	5.2	0.0	0.2	0.0	26.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	13.9	0.0	20.4	0.0	8.6	0.0	38.3
%ile Storage Ratio (RQ%)	0.00	0.24	0.00	0.77	0.00	0.16	0.00	2.45
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.9
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1585	0	1585	0	1585	0	1585
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	752	0	366	0	608	0	277
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	752	0	366	0	608	0	277
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	163.4
HCM 7th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱		↳		↰	↳		↰	↑	↱
Traffic Vol, veh/h	84	25	45	2	39	18	72	662	49	7	118	562
Future Vol, veh/h	84	25	45	2	39	18	72	662	49	7	118	562
Conflicting Peds, #/hr	1	0	0	0	0	1	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Free	-	-	None	-	-	Yield
Storage Length	-	-	100	-	-	-	150	-	-	240	-	245
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	92	27	49	2	43	20	79	727	54	8	130	618

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1054	1086	131	1071	1059	-	131	0	0	781	0	0
Stage 1	146	146	-	913	913	-	-	-	-	-	-	-
Stage 2	908	940	-	159	146	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.11	6.51	-	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.509	4.009	-	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	205	217	922	199	225	0	1461	-	-	841	-	-
Stage 1	859	778	-	329	354	0	-	-	-	-	-	-
Stage 2	331	344	-	846	778	0	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	155	203	921	154	211	-	1459	-	-	841	-	-
Mov Cap-2 Maneuver	155	203	-	154	211	-	-	-	-	-	-	-
Stage 1	850	770	-	311	335	-	-	-	-	-	-	-
Stage 2	273	325	-	765	770	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	14.96	26.35	0.7	0.09
HCM LOS	B	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1459	-	-	203	921	211	841	-	-
HCM Lane V/C Ratio	0.054	-	-	0.135	0.054	0.203	0.009	-	-
HCM Control Delay (s/veh)	7.6	-	-	25.4	9.1	26.4	9.3	-	-
HCM Lane LOS	A	-	-	D	A	D	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.5	0.2	0.7	0	-	-

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	47	77	80	719	674	41
Future Vol, veh/h	47	77	80	719	674	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	240	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	52	85	88	790	741	45

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1729	763	786	0	-	0
Stage 1	763	-	-	-	-	-
Stage 2	966	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	97	404	833	-	-	-
Stage 1	460	-	-	-	-	-
Stage 2	369	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	79	404	833	-	-	-
Mov Cap-2 Maneuver	79	-	-	-	-	-
Stage 1	374	-	-	-	-	-
Stage 2	369	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	52.78	0.98	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	180	-	79	404	-	-
HCM Lane V/C Ratio	0.106	-	0.655	0.209	-	-
HCM Control Delay (s/veh)	9.8	0	112.6	16.2	-	-
HCM Lane LOS	A	A	F	C	-	-
HCM 95th %tile Q(veh)	0.4	-	3	0.8	-	-

Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	6	5	0	2	0	0	8	3	2	6	0
Future Vol, veh/h	6	6	5	0	2	0	0	8	3	2	6	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	7	5	0	2	0	0	9	3	2	7	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2	0	0	12	0	0	28	24	9	26	27	2
Stage 1	-	-	-	-	-	-	22	22	-	2	2	-
Stage 2	-	-	-	-	-	-	5	2	-	24	25	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1620	-	-	1607	-	-	982	869	1072	984	866	1082
Stage 1	-	-	-	-	-	-	996	877	-	1021	894	-
Stage 2	-	-	-	-	-	-	1017	894	-	994	874	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1620	-	-	1607	-	-	971	865	1072	968	862	1082
Mov Cap-2 Maneuver	-	-	-	-	-	-	971	865	-	968	862	-
Stage 1	-	-	-	-	-	-	992	873	-	1021	894	-
Stage 2	-	-	-	-	-	-	1009	894	-	977	871	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	2.55	0	8.99	9.1
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	913	582	-	-	1607	-	-	887
HCM Lane V/C Ratio	0.013	0.004	-	-	-	-	-	0.01
HCM Control Delay (s/veh)	9	7.2	0	-	0	-	-	9.1
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	3.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	54	129	598	99	0	98
Future Vol, veh/h	54	129	598	99	0	98
Conflicting Peds, #/hr	0	0	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	62	148	687	114	0	113

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	862	749	0	0	806	0
Stage 1	749	-	-	-	-	-
Stage 2	113	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	327	413	-	-	823	-
Stage 1	469	-	-	-	-	-
Stage 2	915	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	325	411	-	-	819	-
Mov Cap-2 Maneuver	325	-	-	-	-	-
Stage 1	467	-	-	-	-	-
Stage 2	915	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	18.62	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	325	411	819	-
HCM Lane V/C Ratio	-	-	0.191	0.36	-	-
HCM Control Delay (s/veh)	-	-	18.7	18.6	0	-
HCM Lane LOS	-	-	C	C	A	-
HCM 95th %tile Q(veh)	-	-	0.7	1.6	0	-

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	65	26	6	39	117	12	44	35	12	30	33
Future Vol, veh/h	12	65	26	6	39	117	12	44	35	12	30	33
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	71	29	7	43	129	13	48	38	13	33	36
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	8.1	8.1	8.1	8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	13%	12%	4%	16%
Vol Thru, %	48%	63%	24%	40%
Vol Right, %	38%	25%	72%	44%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	91	103	162	75
LT Vol	12	12	6	12
Through Vol	44	65	39	30
RT Vol	35	26	117	33
Lane Flow Rate	100	113	178	82
Geometry Grp	1	1	1	1
Degree of Util (X)	0.124	0.138	0.2	0.102
Departure Headway (Hd)	4.45	4.404	4.049	4.443
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	806	815	887	807
Service Time	2.475	2.428	2.07	2.469
HCM Lane V/C Ratio	0.124	0.139	0.201	0.102
HCM Control Delay, s/veh	8.1	8.1	8.1	8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.4	0.5	0.7	0.3

Intersection	
Int Delay, s/veh	49.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	156	69	78	612	590	131
Future Vol, veh/h	156	69	78	612	590	131
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	164	73	82	644	621	138

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1498	690	759	0	-	0
Stage 1	690	-	-	-	-	-
Stage 2	808	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	~ 134	443	848	-	-	-
Stage 1	496	-	-	-	-	-
Stage 2	437	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 114	443	848	-	-	-
Mov Cap-2 Maneuver	~ 114	-	-	-	-	-
Stage 1	421	-	-	-	-	-
Stage 2	437	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 356.6	1.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	203	-	147	-	-
HCM Lane V/C Ratio	0.097	-	1.607	-	-
HCM Control Delay (s/veh)	9.7	0	$ 356.6	-	-
HCM Lane LOS	A	A	F	-	-
HCM 95th %tile Q(veh)	0.3	-	16.5	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	410	463	15	16	3
Future Vol, veh/h	7	410	463	15	16	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	446	503	16	17	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	520	0	-	0	972	511
Stage 1	-	-	-	-	511	-
Stage 2	-	-	-	-	461	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1047	-	-	-	280	562
Stage 1	-	-	-	-	602	-
Stage 2	-	-	-	-	635	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1047	-	-	-	277	562
Mov Cap-2 Maneuver	-	-	-	-	277	-
Stage 1	-	-	-	-	596	-
Stage 2	-	-	-	-	635	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.14	0	17.82
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	30	-	-	-	301
HCM Lane V/C Ratio	0.007	-	-	-	0.069
HCM Control Delay (s/veh)	8.5	0	-	-	17.8
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	168	416	162	298	418	119	233	1850	582	177	1056	156
Future Volume (veh/h)	168	416	162	298	418	119	233	1850	582	177	1056	156
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	183	452	0	324	454	0	253	2011	0	192	1148	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	94	423		182	423		291	1385		219	1198	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.23	0.00	0.05	0.23	0.00	0.13	0.39	0.00	0.09	0.34	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	522.0	108.6	0.0	430.1	110.2	0.0	40.4	243.3	0.0	74.8	55.9	0.0
Ln Grp LOS	F	F		F	F		D	F		E	E	
Approach Vol, veh/h		635			778			2264			1340	
Approach Delay, s/veh		227.8			243.4			220.6			58.6	
Approach LOS		F			F			F			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	2	1	3	4	5	6	7	8
Case No	3.0	1.3	2.0	3.0	1.2	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	53.0	19.0	13.0	33.0	23.7	48.3	13.0	33.0
Change Period (Y+Rc), s	7.0	8.5	6.8	* 6.3	8.5	* 8.5	6.8	* 6.3
Max Green (Gmax), s	46.0	12.5	6.2	* 27	25.5	* 33	6.2	* 27
Max Allow Headway (MAH), s	7.7	2.6	2.6	3.7	2.6	7.7	2.6	3.7
Max Q Clear (g_c+I1), s	48.0	10.5	8.2	28.7	15.0	39.3	8.2	28.7
Green Ext Time (g_e), s	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt		1	3		5		7	
Mvmt Sat Flow, veh/h		1781	3456		1781		1781	

Through Movement Data								
Assigned Mvmt	2			4		6		8
Mvmt Sat Flow, veh/h	3554			1870		3554		1870

Right-Turn Movement Data								
Assigned Mvmt	12			14		16		18
Mvmt Sat Flow, veh/h	1585			1585		1585		1585

Left Lane Group Data								
Assigned Mvmt	0	1	3	0	5	0	7	0

Lane Assignment	L (Pr/Pm)	L (Prot)		L (Pr/Pm)		L (Prot)		
Lanes in Grp	0	1	2	0	1	0	1	0
Grp Vol (v), veh/h	0	192	324	0	253	0	183	0
Grp Sat Flow (s), veh/h/ln	0	1781	1728	0	1781	0	1781	0
Q Serve Time (g_s), s	0.0	8.5	6.2	0.0	13.0	0.0	6.2	0.0
Cycle Q Clear Time (g_c), s	0.0	8.5	6.2	0.0	13.0	0.0	6.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	213	0	0	490	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	20.3	0.0	0.0	24.3	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	219	182	0	291	0	94	0
V/C Ratio (X)	0.00	0.88	1.78	0.00	0.87	0.00	1.96	0.00
Avail Cap (c_a), veh/h	0	250	182	0	446	0	94	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	51.5	55.9	0.0	32.9	0.0	55.9	0.0
Incr Delay (d2), s/veh	0.0	23.4	374.2	0.0	7.5	0.0	466.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	74.8	430.1	0.0	40.4	0.0	522.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.1	2.6	0.0	5.2	0.0	2.7	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.4	9.4	0.0	0.6	0.0	12.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	6.5	12.0	0.0	5.8	0.0	14.8	0.0
%ile Storage Ratio (RQ%)	0.00	0.16	1.33	0.00	0.15	0.00	0.70	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	35.6	0.0	0.0	0.0	22.3	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.4	0.0	0.0	0.0	0.5	0.0

Middle Lane Group Data								
Assigned Mvmt	2	0	0	4	0	6	0	8
Lane Assignment	T			T		T		T
Lanes in Grp	2	0	0	1	0	2	0	1
Grp Vol (v), veh/h	2011	0	0	452	0	1148	0	454
Grp Sat Flow (s), veh/h/ln	1777	0	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	46.0	0.0	0.0	26.7	0.0	37.3	0.0	26.7
Cycle Q Clear Time (g_c), s	46.0	0.0	0.0	26.7	0.0	37.3	0.0	26.7
Lane Grp Cap (c), veh/h	1385	0	0	423	0	1198	0	423
V/C Ratio (X)	1.45	0.00	0.00	1.07	0.00	0.96	0.00	1.07
Avail Cap (c_a), veh/h	1385	0	0	423	0	1198	0	423
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	36.0	0.0	0.0	45.6	0.0	38.3	0.0	45.6
Incr Delay (d2), s/veh	207.3	0.0	0.0	63.0	0.0	17.6	0.0	64.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	243.3	0.0	0.0	108.6	0.0	55.9	0.0	110.2
1st-Term Q (Q1), veh/ln	18.1	0.0	0.0	11.7	0.0	15.0	0.0	11.7

2nd-Term Q (Q2), veh/ln	39.9	0.0	0.0	7.4	0.0	2.9	0.0	7.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	58.0	0.0	0.0	19.1	0.0	17.9	0.0	19.2
%ile Storage Ratio (RQ%)	0.58	0.00	0.00	0.30	0.00	0.24	0.00	0.57
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	156.4	0.0	0.0	7.2	0.0	0.0	0.0	7.7
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.4	0.0	0.0	0.3	0.0	0.0	0.0	0.3

Right Lane Group Data								
Assigned Mvmt	12	0	0	14	0	16	0	18
Lane Assignment	R			R		R		R
Lanes in Grp	1	0	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1585	0	0	1585	0	1585	0	1585
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	618	0	0	359	0	534	0	359
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	618	0	0	359	0	534	0	359
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	181.8
HCM 7th LOS	F

Notes

* HCM 7th Edition computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1626.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	241	695	95	55	528	84	100	23	60	182	19	167
Future Vol, veh/h	241	695	95	55	528	84	100	23	60	182	19	167
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	Yield
Storage Length	180	-	-	300	-	-	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	262	755	103	60	574	91	109	25	65	198	21	182

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	665	0	-	755	0	0	1983	2064	755	2031	2018	620
Stage 1	-	-	-	-	-	-	1279	1279	-	739	739	-
Stage 2	-	-	-	-	-	-	704	785	-	1292	1279	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	924	-	0	855	-	-	~ 46	55	408	~ 42	58	488
Stage 1	-	-	0	-	-	-	204	237	-	409	424	-
Stage 2	-	-	0	-	-	-	428	404	-	200	237	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	924	-	-	855	-	-	~ 11	36	408	~ 10	39	488
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 11	36	-	~ 10	39	-
Stage 1	-	-	-	-	-	-	146	170	-	380	394	-
Stage 2	-	-	-	-	-	-	237	376	-	~ 103	170	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	2.69	0.79	$ 4811.66	$ 7120.13
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	18	924	-	855	-	-	10	19
HCM Lane V/C Ratio	10.791	0.284	-	0.07	-	-	20.549	10.655
HCM Control Delay (s/veh)	$ 4811.7	10.4	-	9.5	-	-	$ 9552.9	$ 4739.7
HCM Lane LOS	F	B	-	A	-	-	F	F
HCM 95th %tile Q(veh)	25.5	1.2	-	0.2	-	-	26.3	25.8

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↱		↱
Traffic Vol, veh/h	0	676	525	20	0	11
Future Vol, veh/h	0	676	525	20	0	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	0	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	735	571	22	0	12

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	571
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	521
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	521
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	12.08
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	521
HCM Lane V/C Ratio	-	-	-	0.023
HCM Control Delay (s/veh)	-	-	-	12.1
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	519	69	137	384	188	115	248	122	255	231	131
Future Volume (veh/h)	164	519	69	137	384	188	115	248	122	255	231	131
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	178	564	24	149	417	58	125	270	109	277	251	68
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	315	597	25	198	607	515	121	261	329	198	180	329
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.34	0.34	0.07	0.32	0.32	0.21	0.21	0.21	0.21	0.21	0.21
Unsig. Movement Delay												
Ln Grp Delay, s/veh	34.0	0.0	70.8	46.7	47.7	34.6	112.4	0.0	49.0	251.1	0.0	47.6
Ln Grp LOS	C		E	D	D	C	F		D	F		D
Approach Vol, veh/h		766			624			504			596	
Approach Delay, s/veh		62.2			46.3			98.7			227.9	
Approach LOS		E			D			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8	4	5	6		
Case No	1.1	4.0	11.0	11.0	1.1	3.0		
Phs Duration (G+Y+Rc), s	17.1	54.5	36.5	36.5	18.6	53.0		
Change Period (Y+Rc), s	6.9	6.0	6.5	6.5	6.9	6.0		
Max Green (Gmax), s	15.0	50.0	30.0	30.0	15.0	50.0		
Max Allow Headway (MAH), s	4.7	7.7	3.3	3.4	4.6	7.9		
Max Q Clear (g_c+I1), s	10.0	46.5	32.0	32.0	11.5	30.0		
Green Ext Time (g_e), s	0.2	2.0	0.0	0.0	0.2	6.0		
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00		
Prob of Max Out (p_x)	0.83	1.00	1.00	1.00	1.00	0.24		

Left-Turn Movement Data												
Assigned Mvmt		1		3	7	5						
Mvmt Sat Flow, veh/h		1781		956	583	1781						

Through Movement Data												
Assigned Mvmt			2	8	4		6					
Mvmt Sat Flow, veh/h			1781	866	1259		1870					

Right-Turn Movement Data												
Assigned Mvmt			12	18	14		16					
Mvmt Sat Flow, veh/h			76	1585	1585		1585					

Left Lane Group Data												
Assigned Mvmt		1	0	3	7	5	0	0	0			

Lane Assignment	L (Pr/Pm)		L+T	L+TL (Pr/Pm)				
Lanes in Grp	1	0	1	1	1	0	0	0
Grp Vol (v), veh/h	149	0	528	395	178	0	0	0
Grp Sat Flow (s), veh/h/ln	1781	0	1823	1841	1781	0	0	0
Q Serve Time (g_s), s	8.0	0.0	30.0	30.0	9.5	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	8.0	0.0	30.0	30.0	9.5	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	828	0	0	0	919	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	47.0	0.0	0.0	0.0	47.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	4.0	0.0	0.0	0.0	18.9	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	4.0	0.0	0.0	0.0	6.7	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.52	0.32	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	198	0	378	382	315	0	0	0
V/C Ratio (X)	0.75	0.00	1.40	1.03	0.57	0.00	0.00	0.00
Avail Cap (c_a), veh/h	257	0	378	382	355	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	36.2	0.0	57.3	57.3	31.7	0.0	0.0	0.0
Incr Delay (d2), s/veh	10.5	0.0	193.8	55.1	2.3	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	46.7	0.0	251.1	112.4	34.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	3.4	0.0	13.5	13.8	3.9	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.6	0.0	20.4	5.8	0.2	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	4.0	0.0	33.8	19.7	4.1	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.42	0.00	0.33	1.15	0.42	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	37.5	3.3	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment						T		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	417	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1870	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	28.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	28.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	607	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.69	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	647	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	42.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	5.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	47.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	12.8	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	13.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.57	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment		T+R	R	R		R		
Lanes in Grp	0	1	1	1	0	1	0	0
Grp Vol (v), veh/h	0	588	68	109	0	58	0	0
Grp Sat Flow (s), veh/h/ln	0	1857	1585	1585	0	1585	0	0
Q Serve Time (g_s), s	0.0	44.5	5.1	8.5	0.0	3.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	44.5	5.1	8.5	0.0	3.7	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.04	1.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	623	329	329	0	515	0	0
V/C Ratio (X)	0.00	0.94	0.21	0.33	0.00	0.11	0.00	0.00
Avail Cap (c_a), veh/h	0	642	329	329	0	548	0	0
Upstream Filter (I)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	46.7	47.4	48.8	0.0	34.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	24.0	0.1	0.2	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	70.8	47.6	49.0	0.0	34.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	19.5	2.0	3.3	0.0	1.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	23.7	2.0	3.3	0.0	1.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.48	0.22	0.19	0.00	0.06	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	105.3
HCM 7th LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	454	43	4	62	427	62	45	35	20	33	57
Future Volume (veh/h)	73	454	43	4	62	427	62	45	35	20	33	57
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	0.99		0.98	0.99		0.98	0.98		0.98	0.99		0.98
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	87	540	14	5	74	145	74	54	15	24	39	23
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	578	795	664	325	201	394	268	175	39	160	222	105
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.43	0.43	0.01	0.36	0.36	0.24	0.24	0.24	0.24	0.24	0.24
Unsig. Movement Delay												
Ln Grp Delay, s/veh	8.4	13.3	8.0	9.1	0.0	12.1	16.0	0.0	0.0	15.1	0.0	0.0
Ln Grp LOS	A	B	A	A		B	B			B		
Approach Vol, veh/h		641			224			143			86	
Approach Delay, s/veh		12.5			12.0			16.0			15.1	
Approach LOS		B			B			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	1.1	3.0		8.0	1.1	4.0		8.0
Phs Duration (G+Y+Rc), s	4.3	26.8		17.1	7.4	23.7		17.1
Change Period (Y+Rc), s	4.0	6.1		5.7	4.0	6.1		5.7
Max Green (Gmax), s	5.0	35.0		30.0	5.0	35.0		30.0
Max Allow Headway (MAH), s	1.7	7.0		7.5	1.7	7.3		7.5
Max Q Clear (g_c+I1), s	2.1	13.3		3.9	3.4	6.7		5.4
Green Ext Time (g_e), s	0.0	6.3		0.8	0.0	2.5		1.5
Prob of Phs Call (p_c)	0.06	1.00		0.96	0.69	1.00		0.96
Prob of Max Out (p_x)	0.01	0.17		0.00	1.00	0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1767			273	1767			652

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1856		936		553		737

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1549		441		1084		163

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3

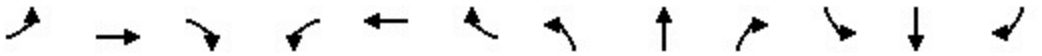
Lane Assignment	L (Pr/Pm)			L+T+R	L (Pr/Pm)			L+T+R
Lanes in Grp	1	0	0	1	1	0	0	1
Grp Vol (v), veh/h	5	0	0	86	87	0	0	143
Grp Sat Flow (s), veh/h/ln	1767	0	0	1650	1767	0	0	1552
Q Serve Time (g_s), s	0.1	0.0	0.0	0.0	1.4	0.0	0.0	1.5
Cycle Q Clear Time (g_c), s	0.1	0.0	0.0	1.9	1.4	0.0	0.0	3.4
Perm LT Sat Flow (s_l), veh/h/ln	843	0	0	1333	1140	0	0	1340
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	1822	0	0	0	1793
Perm LT Eff Green (g_p), s	20.7	0.0	0.0	11.4	17.6	0.0	0.0	11.4
Perm LT Serve Time (g_u), s	9.4	0.0	0.0	8.0	12.8	0.0	0.0	9.6
Perm LT Q Serve Time (g_ps), s	0.1	0.0	0.0	0.0	0.4	0.0	0.0	1.5
Time to First Blk (g_f), s	0.0	0.0	0.0	4.4	0.0	0.0	0.0	1.8
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	1.9	0.0	0.0	0.0	1.8
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.28	1.00	0.00	0.00	0.52
Lane Grp Cap (c), veh/h	325	0	0	487	578	0	0	481
V/C Ratio (X)	0.02	0.00	0.00	0.18	0.15	0.00	0.00	0.30
Avail Cap (c_a), veh/h	496	0	0	1095	635	0	0	1058
Upstream Filter (I)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	9.0	0.0	0.0	14.8	8.3	0.0	0.0	15.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	9.1	0.0	0.0	15.1	8.4	0.0	0.0	16.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.7	0.4	0.0	0.0	1.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.7	0.4	0.0	0.0	1.3
%ile Storage Ratio (RQ%)	0.01	0.00	0.00	0.06	0.10	0.00	0.00	0.11
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T						
Lanes in Grp	0	1	0	0	0	0	0	0
Grp Vol (v), veh/h	0	540	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1856	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	11.3	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	11.3	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	795	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.68	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1346	0	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	11.1	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.2	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	13.3	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R				T+R		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	14	0	0	0	219	0	0
Grp Sat Flow (s), veh/h/ln	0	1549	0	0	0	1637	0	0
Q Serve Time (g_s), s	0.0	0.3	0.0	0.0	0.0	4.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.3	0.0	0.0	0.0	4.7	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.27	0.00	0.66	0.00	0.10
Lane Grp Cap (c), veh/h	0	664	0	0	0	596	0	0
V/C Ratio (X)	0.00	0.02	0.00	0.00	0.00	0.37	0.00	0.00
Avail Cap (c_a), veh/h	0	1124	0	0	0	1188	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	7.9	0.0	0.0	0.0	11.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.0	0.0	0.0	0.0	12.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.1	0.0	0.0	0.0	1.3	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	0.0	0.0	1.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	13.1
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	517	11	27	14	528	17	26	17	18	50	32
Future Volume (veh/h)	48	517	11	27	14	528	17	26	17	18	50	32
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	0.99		0.98	0.99		0.98	0.97		0.96	0.97		0.96
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	52	562	3	29	15	164	18	28	6	20	54	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	648	894	5	371	64	695	208	283	50	154	334	64
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.26	0.26	0.26	0.26	0.26	0.26
Unsig. Movement Delay												
Ln Grp Delay, s/veh	8.5	0.0	11.5	13.6	0.0	7.6	13.2	0.0	0.0	13.6	0.0	0.0
Ln Grp LOS	A		B	B		A	B			B		
Approach Vol, veh/h		617			208			52			86	
Approach Delay, s/veh		11.3			8.4			13.2			13.6	
Approach LOS		B			A			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		8.0		6.0		8.0
Phs Duration (G+Y+Rc), s		28.4		17.9		28.4		17.9
Change Period (Y+Rc), s		6.1		5.7		6.1		5.7
Max Green (Gmax), s		34.5		30.5		34.5		30.5
Max Allow Headway (MAH), s		7.9		8.5		8.4		8.5
Max Q Clear (g_c+I1), s		12.4		3.7		13.6		3.0
Green Ext Time (g_e), s		8.8		1.0		2.6		0.5
Prob of Phs Call (p_c)		1.00		0.87		1.00		0.87
Prob of Max Out (p_x)		0.33		0.00		0.05		0.00

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		1188		219		840		392

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1858		1267		132		1071

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		10		241		1444		191

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3

Lane Assignment		L		L+T+R		L		L+T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	52	0	86	0	29	0	52
Grp Sat Flow (s), veh/h/ln	0	1188	0	1727	0	840	0	1653
Q Serve Time (g_s), s	0.0	1.2	0.0	0.0	0.0	1.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.3	0.0	1.7	0.0	11.6	0.0	1.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1188	0	1350	0	840	0	1315
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	1834	0	0	0	1818
Perm LT Eff Green (g_p), s	0.0	22.3	0.0	12.2	0.0	22.3	0.0	12.2
Perm LT Serve Time (g_u), s	0.0	19.2	0.0	11.2	0.0	11.9	0.0	10.5
Perm LT Q Serve Time (g_ps), s	0.0	1.2	0.0	0.0	0.0	1.2	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	5.3	0.0	0.0	0.0	3.5
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	1.7	0.0	0.0	0.0	1.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.23	0.00	1.00	0.00	0.35
Lane Grp Cap (c), veh/h	0	648	0	552	0	371	0	541
V/C Ratio (X)	0.00	0.08	0.00	0.16	0.00	0.08	0.00	0.10
Avail Cap (c_a), veh/h	0	962	0	1208	0	593	0	1168
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.3	0.0	13.2	0.0	13.3	0.0	12.9
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.5	0.0	0.3	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.5	0.0	13.6	0.0	13.6	0.0	13.2
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.6	0.0	0.2	0.0	0.4
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.3	0.0	0.7	0.0	0.2	0.0	0.4
%ile Storage Ratio (RQ%)	0.00	0.09	0.00	0.01	0.00	0.07	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment								
Lanes in Grp	0	0	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R				T+R		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	565	0	0	0	179	0	0
Grp Sat Flow (s), veh/h/ln	0	1868	0	0	0	1576	0	0
Q Serve Time (g_s), s	0.0	10.4	0.0	0.0	0.0	3.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	10.4	0.0	0.0	0.0	3.1	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.01	0.00	0.14	0.00	0.92	0.00	0.12
Lane Grp Cap (c), veh/h	0	899	0	0	0	758	0	0
V/C Ratio (X)	0.00	0.63	0.00	0.00	0.00	0.24	0.00	0.00
Avail Cap (c_a), veh/h	0	1393	0	0	0	1175	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	8.9	0.0	0.0	0.0	7.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.6	0.0	0.0	0.0	0.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.5	0.0	0.0	0.0	7.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.7	0.0	0.0	0.0	0.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.7	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.4	0.0	0.0	0.0	0.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.06	0.00	0.00	0.00	0.01	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	11.0
HCM 7th LOS	B

Intersection	
Intersection Delay, s/veh	26.0
Intersection LOS	D

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	652	846	370	553
Demand Flow Rate, veh/h	666	863	378	564
Vehicles Circulating, veh/h	425	414	777	597
Vehicles Exiting, veh/h	736	644	314	680
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	18.8	41.5	9.6	21.9
Approach LOS	C	E	A	C

Lane	Left	Left	Left	Bypass	Left
Designated Moves	LTR	LTR	LT	R	LTR
Assumed Moves	LTR	LTR	LT		LTR
RT Channelized				Free	
Lane Util	1.000	1.000	1.000		1.000
Follow-Up Headway, s	2.609	2.609	2.609		2.609
Critical Headway, s	4.976	4.976	4.976		4.976
A (Intercept)	1380	1380	1380		1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3		1.02e-3
Entry Flow, veh/h	666	863	281	97	564
Cap Entry Lane, veh/h	895	905	625	1938	751
Entry HV Adj Factor	0.980	0.981	0.979	0.980	0.980
Flow Entry, veh/h	652	846	275	95	553
Cap Entry, veh/h	876	887	612	1900	736
V/C Ratio	0.745	0.954	0.450	0.050	0.751
Control Delay, s/veh	18.8	41.5	12.9	0.0	21.9
LOS	C	E	B	A	C
95th %tile Queue, veh	7	15	2	0	7

Intersection	
Int Delay, s/veh	15.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	876	69	67	871	61	38
Future Vol, veh/h	876	69	67	871	61	38
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	250	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	952	75	73	947	66	41

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1027	0	2045	952
Stage 1	-	-	-	-	952	-
Stage 2	-	-	-	-	1092	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	676	-	~ 62	315
Stage 1	-	-	-	-	375	-
Stage 2	-	-	-	-	321	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	676	-	~ 55	315
Mov Cap-2 Maneuver	-	-	-	-	~ 55	-
Stage 1	-	-	-	-	375	-
Stage 2	-	-	-	-	287	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.78	$ 305.52
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	81	-	-	676	-
HCM Lane V/C Ratio	1.335	-	-	0.108	-
HCM Control Delay (s/veh)	$ 305.5	-	-	11	-
HCM Lane LOS	F	-	-	B	-
HCM 95th %tile Q(veh)	8.3	-	-	0.4	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2950.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	609	329	190	637	17	403	88	196	8	42	17
Future Vol, veh/h	8	609	329	190	637	17	403	88	196	8	42	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	662	358	207	692	18	438	96	213	9	46	18

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	711	0	0	1020	0	0	1986	1982	841	1842	2152	702
Stage 1	-	-	-	-	-	-	858	858	-	1115	1115	-
Stage 2	-	-	-	-	-	-	1128	1124	-	727	1037	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	889	-	-	681	-	-	~ 46	~ 61	365	58	48	438
Stage 1	-	-	-	-	-	-	~ 351	374	-	253	283	-
Stage 2	-	-	-	-	-	-	~ 248	281	-	415	308	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	889	-	-	681	-	-	~ 21	~ 30	365	12	~ 23	438
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 21	~ 30	-	12	~ 23	-
Stage 1	-	-	-	-	-	-	~ 343	364	-	125	141	-
Stage 2	-	-	-	-	-	-	~ 80	139	-	124	301	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.08	2.83	$ 10815.71	$ 1103.64
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	30	14	-	-	403	-	-	26
HCM Lane V/C Ratio	24.491	0.01	-	-	0.303	-	-	2.751
HCM Control Delay (s/veh)	$ 10815.7	9.1	0	-	12.6	0		$ 1103.6
HCM Lane LOS	F	A	A	-	B	A	-	F
HCM 95th %tile Q(veh)	92.6	0	-	-	1.3	-	-	8.9

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	11	479	8	18	599	1	6	0	9	0	0	0
Future Vol, veh/h	11	479	8	18	599	1	6	0	9	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	521	9	20	651	1	7	0	10	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	652	0	0	529	0	0	1239	1240	525	1235	1244	652
Stage 1	-	-	-	-	-	-	549	549	-	691	691	-
Stage 2	-	-	-	-	-	-	690	691	-	545	553	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	934	-	-	1038	-	-	152	175	552	153	174	468
Stage 1	-	-	-	-	-	-	520	516	-	435	446	-
Stage 2	-	-	-	-	-	-	435	445	-	523	514	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	934	-	-	1038	-	-	145	167	552	143	166	468
Mov Cap-2 Maneuver	-	-	-	-	-	-	145	167	-	143	166	-
Stage 1	-	-	-	-	-	-	511	507	-	422	432	-
Stage 2	-	-	-	-	-	-	422	432	-	504	505	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.2	0.25	19.76	0
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	260	40	-	-	52	-	-	-
HCM Lane V/C Ratio	0.063	0.013	-	-	0.019	-	-	-
HCM Control Delay (s/veh)	19.8	8.9	0	-	8.5	0	-	0
HCM Lane LOS	C	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	-

Intersection	
Int Delay, s/veh	15.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	67	539	28	0	52	342	84	41	107	0	35	54
Future Vol, veh/h	67	539	28	0	52	342	84	41	107	0	35	54
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	73	586	30	0	57	372	91	45	116	0	38	59

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	428	0	0	616	0	0	822	1175	601	996	1004	242
Stage 1	-	-	-	-	-	-	747	747	-	242	242	-
Stage 2	-	-	-	-	-	-	76	428	-	754	762	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1126	-	-	959	-	-	292	191	498	222	241	794
Stage 1	-	-	-	-	-	-	404	419	-	759	703	-
Stage 2	-	-	-	-	-	-	931	583	-	400	412	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1126	-	-	959	-	-	204	172	498	117	217	794
Mov Cap-2 Maneuver	-	-	-	-	-	-	204	172	-	117	217	-
Stage 1	-	-	-	-	-	-	364	377	-	759	703	-
Stage 2	-	-	-	-	-	-	816	583	-	244	371	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.89	0	81.4	17.33
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	268	188	-	-	959	-	-	388
HCM Lane V/C Ratio	0.94	0.065	-	-	-	-	-	0.249
HCM Control Delay (s/veh)	81.4	8.4	0	-	0	-	-	17.3
HCM Lane LOS	F	A	A	-	A	-	-	C
HCM 95th %tile Q(veh)	8.8	0.2	-	-	0	-	-	1

Intersection	
Intersection Delay, s/veh	161.0
Intersection LOS	F

Approach	EB	WB	NB	SB
Entry Lanes	2	2	0	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	1376	1552	0	994
Demand Flow Rate, veh/h	1403	1583	0	1013
Vehicles Circulating, veh/h	1198	0	1876	1583
Vehicles Exiting, veh/h	1398	1876	467	0
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	108.3	9.0	0.0	471.3
Approach LOS	F	A	-	F

Lane	Left	Right	Bypass	Left	Right	Left	Right
Designated Moves	LT	TR	R	LT	TR	LT	R
Assumed Moves	LT	TR		LT	TR	LT	R
RT Channelized			Free				
Lane Util	0.470	0.530		0.470	0.530	0.725	0.275
Follow-Up Headway, s	2.667	2.535		2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328		4.645	4.328	4.645	4.328
A (Intercept)	1350	1420		1350	1420	1350	1420
B (Slope)	9.199e-4	8.501e-4		9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	538	607	258	744	839	734	279
Cap Entry Lane, veh/h	448	513	1938	1350	1420	315	370
Entry HV Adj Factor	0.981	0.980	0.980	0.980	0.980	0.981	0.982
Flow Entry, veh/h	528	595	253	729	823	720	274
Cap Entry, veh/h	440	503	1900	1323	1392	309	363
V/C Ratio	1.200	1.184	0.133	0.551	0.591	2.332	0.755
Control Delay, s/veh	138.4	127.7	0.0	8.8	9.2	636.0	38.6
LOS	F	F	A	A	A	F	E
95th %tile Queue, veh	21	22	0	4	4	56	6

Intersection	
Intersection Delay, s/veh	119.2
Intersection LOS	F

Approach	EB	WB	NB	SB
Entry Lanes	2	3	2	0
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	1845	0	859	0
Demand Flow Rate, veh/h	1882	0	876	0
Vehicles Circulating, veh/h	0	691	1882	1526
Vehicles Exiting, veh/h	1526	2067	0	969
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	11.5	0.0	350.4	0.0
Approach LOS	B	-	F	-

Lane	Left	Right	Left	Right
Designated Moves	LT	TR	LT	R
Assumed Moves	LT	TR	LT	R
RT Channelized				
Lane Util	0.470	0.530	0.451	0.549
Follow-Up Headway, s	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328
A (Intercept)	1350	1420	1350	1420
B (Slope)	9.199e-4	4.501e-4	9.199e-4	4.501e-4
Entry Flow, veh/h	885	997	395	481
Cap Entry Lane, veh/h	1350	1420	239	287
Entry HV Adj Factor	0.980	0.981	0.980	0.981
Flow Entry, veh/h	867	978	387	472
Cap Entry, veh/h	1323	1393	234	281
V/C Ratio	0.656	0.702	1.653	1.678
Control Delay, s/veh	11.0	11.9	348.8	351.6
LOS	B	B	F	F
95th %tile Queue, veh	5	6	25	30

Intersection	
Int Delay, s/veh	228.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	551	139	17	28	99	9	19	42	18	12	78	340
Future Vol, veh/h	551	139	17	28	99	9	19	42	18	12	78	340
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	599	151	18	30	108	10	21	46	20	13	85	370

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	436	402	270	283	577	55	454	0	0	65	0	0
Stage 1	296	296	-	97	97	-	-	-	-	-	-	-
Stage 2	141	107	-	186	480	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 530	537	769	669	427	1011	1106	-	-	1537	-	-
Stage 1	713	668	-	910	815	-	-	-	-	-	-	-
Stage 2	862	807	-	815	554	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 380	520	769	453	414	1011	1106	-	-	1537	-	-
Mov Cap-2 Maneuver	~ 380	520	-	453	414	-	-	-	-	-	-	-
Stage 1	704	660	-	892	799	-	-	-	-	-	-	-
Stage 2	725	791	-	606	547	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, $/#	433.46	17.31	2	0.21
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	408	-	-	406	439	43	-	-
HCM Lane V/C Ratio	0.019	-	-	1.892	0.337	0.008	-	-
HCM Control Delay (s/veh)	8.3	0	-	$ 433.5	17.3	7.4	0	-
HCM Lane LOS	A	A	-	F	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	51	1.5	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	12	44	400	19	64	337
Future Vol, veh/h	12	44	400	19	64	337
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	48	435	21	70	366

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	951	445	0	0	455	0
Stage 1	445	-	-	-	-	-
Stage 2	505	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	288	613	-	-	1105	-
Stage 1	646	-	-	-	-	-
Stage 2	606	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	266	613	-	-	1105	-
Mov Cap-2 Maneuver	266	-	-	-	-	-
Stage 1	646	-	-	-	-	-
Stage 2	558	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	13.61	0	1.35
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	479	1105	-
HCM Lane V/C Ratio	-	-	0.127	0.063	-
HCM Control Delay (s/veh)	-	-	13.6	8.5	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.4	0.2	-

Intersection	
Int Delay, s/veh	2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	6	396	8	187	144
Future Vol, veh/h	3	6	396	8	187	144
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	7	430	9	203	157

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	998	435	0	0	439	0
Stage 1	435	-	-	-	-	-
Stage 2	563	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	270	621	-	-	1121	-
Stage 1	653	-	-	-	-	-
Stage 2	570	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	217	621	-	-	1121	-
Mov Cap-2 Maneuver	217	-	-	-	-	-
Stage 1	653	-	-	-	-	-
Stage 2	457	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	14.65	0	5.04
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	383	1017	-
HCM Lane V/C Ratio	-	-	0.026	0.181	-
HCM Control Delay (s/veh)	-	-	14.6	8.9	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0.7	-

Intersection	
Int Delay, s/veh	5.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	60	174	138	143	115	122
Future Vol, veh/h	60	174	138	143	115	122
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	200	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	65	189	150	155	125	133

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	533	150	0	0	305	0
Stage 1	150	-	-	-	-	-
Stage 2	383	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	508	896	-	-	1255	-
Stage 1	878	-	-	-	-	-
Stage 2	689	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	453	896	-	-	1255	-
Mov Cap-2 Maneuver	453	-	-	-	-	-
Stage 1	878	-	-	-	-	-
Stage 2	615	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	12.76	0	3.97
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	717	1255	-
HCM Lane V/C Ratio	-	-	0.355	0.1	-
HCM Control Delay (s/veh)	-	-	12.8	8.2	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	1.6	0.3	-

Intersection	
Intersection Delay, s/veh	9.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	93	5	80	0	0	3	48	81	0	3	3	108
Future Vol, veh/h	93	5	80	0	0	3	48	81	0	3	3	108
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	109	6	94	0	0	4	56	95	0	4	4	127
Number of Lanes	0	1	1	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	2
HCM Control Delay, s/veh	8.9	8	9.7	8.7
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	37%	0%	95%	0%	0%	3%
Vol Thru, %	63%	100%	5%	0%	0%	3%
Vol Right, %	0%	0%	0%	100%	100%	95%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	129	0	98	80	3	114
LT Vol	48	0	93	0	0	3
Through Vol	81	0	5	0	0	3
RT Vol	0	0	0	80	3	108
Lane Flow Rate	152	0	115	94	4	134
Geometry Grp	5	5	5	5	4b	4b
Degree of Util (X)	0.226	0	0.183	0.119	0.005	0.175
Departure Headway (Hd)	5.371	5.184	5.726	4.544	4.922	4.69
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	668	0	626	788	724	764
Service Time	3.104	2.917	3.462	2.279	2.972	2.723
HCM Lane V/C Ratio	0.228	0	0.184	0.119	0.006	0.175
HCM Control Delay, s/veh	9.7	7.9	9.7	7.9	8	8.7
HCM Lane LOS	A	N	A	A	A	A
HCM 95th-tile Q	0.9	0	0.7	0.4	0	0.6

Intersection	
Int Delay, s/veh	3.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	96	186	7	83	78
Future Vol, veh/h	7	96	186	7	83	78
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	104	202	8	90	85

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	471	206	0	0	210	0
Stage 1	206	-	-	-	-	-
Stage 2	265	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	551	835	-	-	1361	-
Stage 1	829	-	-	-	-	-
Stage 2	779	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	513	835	-	-	1361	-
Mov Cap-2 Maneuver	513	-	-	-	-	-
Stage 1	829	-	-	-	-	-
Stage 2	725	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	10.23	0	4.04
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	800	928	-
HCM Lane V/C Ratio	-	-	0.14	0.066	-
HCM Control Delay (s/veh)	-	-	10.2	7.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.2	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	29	0	9	0	0	3	37	378	0	0	234	40
Future Vol, veh/h	29	0	9	0	0	3	37	378	0	0	234	40
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	32	0	10	0	0	3	40	411	0	0	254	43

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	767	767	276	746	789	411	298	0	0	411	0	0
Stage 1	276	276	-	491	491	-	-	-	-	-	-	-
Stage 2	491	491	-	254	298	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	319	332	763	330	323	641	1263	-	-	1148	-	-
Stage 1	730	682	-	559	548	-	-	-	-	-	-	-
Stage 2	559	548	-	750	667	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	304	319	763	312	309	641	1263	-	-	1148	-	-
Mov Cap-2 Maneuver	304	319	-	312	309	-	-	-	-	-	-	-
Stage 1	730	682	-	536	525	-	-	-	-	-	-	-
Stage 2	533	525	-	740	667	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	16.48	10.65	0.71	0
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	160	-	-	355	641	1148	-	-
HCM Lane V/C Ratio	0.032	-	-	0.116	0.005	-	-	-
HCM Control Delay (s/veh)	7.9	0	-	16.5	10.6	0	-	-
HCM Lane LOS	A	A	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0	0	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	14	4	2674	2261	17
Future Vol, veh/h	2	14	4	2674	2261	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	700	-	-	700
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	15	4	2907	2458	18

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3920	1229	2476	0	-	0
Stage 1	2458	-	-	-	-	-
Stage 2	1462	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	2	170	183	-	-	-
Stage 1	50	-	-	-	-	-
Stage 2	179	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	2	170	183	-	-	-
Mov Cap-2 Maneuver	2	-	-	-	-	-
Stage 1	49	-	-	-	-	-
Stage 2	179	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	$ 548.98	0.04	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	183	-	17	-	-
HCM Lane V/C Ratio	0.024	-	1.043	-	-
HCM Control Delay (s/veh)	25.1	-	$ 549	-	-
HCM Lane LOS	D	-	F	-	-
HCM 95th %tile Q(veh)	0.1	-	2.6	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	64.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	126	24	2443	254	34	1351
Future Vol, veh/h	126	24	2443	254	34	1351
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	600	720	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	137	26	2655	276	37	1468

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	3464	1328	0	0	2932	0
Stage 1	2655	-	-	-	-	-
Stage 2	808	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 5	145	-	-	120	-
Stage 1	~ 39	-	-	-	-	-
Stage 2	399	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 3	145	-	-	120	-
Mov Cap-2 Maneuver	~ 32	-	-	-	-	-
Stage 1	~ 39	-	-	-	-	-
Stage 2	276	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	$ 1804.97	0	1.17
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	36	120	-
HCM Lane V/C Ratio	-	-	4.514	0.307	-
HCM Control Delay (s/veh)	-	-	$ 1805	47.6	-
HCM Lane LOS	-	-	F	E	-
HCM 95th %tile Q(veh)	-	-	19.1	1.2	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	6.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	161	6	46	2	30	17	2	183	7	13	124	119
Future Vol, veh/h	161	6	46	2	30	17	2	183	7	13	124	119
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	175	7	50	2	33	18	2	199	8	14	135	129

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	447	439	199	373	499	203	264	0	0	207	0	0
Stage 1	228	228	-	207	207	-	-	-	-	-	-	-
Stage 2	220	211	-	166	292	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	522	512	842	584	473	838	1300	-	-	1365	-	-
Stage 1	775	716	-	795	731	-	-	-	-	-	-	-
Stage 2	783	728	-	836	671	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	468	505	842	534	466	838	1300	-	-	1365	-	-
Mov Cap-2 Maneuver	468	505	-	534	466	-	-	-	-	-	-	-
Stage 1	765	707	-	793	729	-	-	-	-	-	-	-
Stage 2	730	726	-	769	662	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	17.41	12.18	0.08	0.39
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	19	-	-	519	555	83	-	-
HCM Lane V/C Ratio	0.002	-	-	0.446	0.096	0.01	-	-
HCM Control Delay (s/veh)	7.8	0	-	17.4	12.2	7.7	0	-
HCM Lane LOS	A	A	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	2.3	0.3	0	-	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	19	0	17	0	0	0	26	197	0	0	49	17
Future Vol, veh/h	19	0	17	0	0	0	26	197	0	0	49	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	21	0	18	0	0	0	28	214	0	0	53	18

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	333	333	63	324	342	214	72	0	0	214	0	0
Stage 1	63	63	-	271	271	-	-	-	-	-	-	-
Stage 2	271	271	-	53	72	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	620	587	1002	629	580	826	1528	-	-	1356	-	-
Stage 1	949	843	-	735	685	-	-	-	-	-	-	-
Stage 2	735	685	-	959	835	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	607	574	1002	605	568	826	1528	-	-	1356	-	-
Mov Cap-2 Maneuver	607	574	-	605	568	-	-	-	-	-	-	-
Stage 1	949	843	-	720	671	-	-	-	-	-	-	-
Stage 2	720	671	-	942	835	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	10.09	0	0.86	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	210	-	-	746	-	1356	-	-
HCM Lane V/C Ratio	0.018	-	-	0.052	-	-	-	-
HCM Control Delay (s/veh)	7.4	0	-	10.1	0	0	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	-	0	-	-

Intersection	
Int Delay, s/veh	29.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	45	75	126	2748	2178	175
Future Vol, veh/h	45	75	126	2748	2178	175
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	Yield
Storage Length	0	-	150	-	-	600
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	49	82	137	2987	2367	190

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	4135	1184	2367	0	-	0
Stage 1	2367	-	-	-	-	-
Stage 2	1767	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 2	182	203	-	-	-
Stage 1	56	-	-	-	-	-
Stage 2	122	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 1	182	203	-	-	-
Mov Cap-2 Maneuver	~ 15	-	-	-	-	-
Stage 1	~ 18	-	-	-	-	-
Stage 2	122	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	$ 1274.1	2.34	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	203	-	39	-	-
HCM Lane V/C Ratio	0.676	-	3.351	-	-
HCM Control Delay (s/veh)	53.4	-	$ 1274.1	-	-
HCM Lane LOS	F	-	F	-	-
HCM 95th %tile Q(veh)	4.2	-	14.8	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	52	23	2383	202	6	1204
Future Vol, veh/h	52	23	2383	202	6	1204
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	Yield	-	None
Storage Length	-	0	-	0	160	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	57	25	2590	220	7	1309

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	3127	1295	0	0	2590	0
Stage 1	2590	-	-	-	-	-
Stage 2	537	-	-	-	-	-
Critical Hdwy	6.29	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.67	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 14	153	-	-	165	-
Stage 1	~ 42	-	-	-	-	-
Stage 2	518	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 13	153	-	-	165	-
Mov Cap-2 Maneuver	~ 37	-	-	-	-	-
Stage 1	~ 42	-	-	-	-	-
Stage 2	497	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	33.07	0	0.14
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	153	165	-
HCM Lane V/C Ratio	-	-	0.163	0.039	-
HCM Control Delay (s/veh)	-	-	33.1	27.7	-
HCM Lane LOS	-	-	D	D	-
HCM 95th %tile Q(veh)	-	-	0.6	0.1	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	7.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	150	18	32	33	15	28
Future Vol, veh/h	150	18	32	33	15	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	163	20	35	36	16	30

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	137	32	47	0	-	0
Stage 1	32	-	-	-	-	-
Stage 2	105	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	856	1042	1561	-	-	-
Stage 1	991	-	-	-	-	-
Stage 2	919	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	837	1042	1561	-	-	-
Mov Cap-2 Maneuver	837	-	-	-	-	-
Stage 1	968	-	-	-	-	-
Stage 2	919	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	10.35	3.62	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	886	-	855	-	-
HCM Lane V/C Ratio	0.022	-	0.214	-	-
HCM Control Delay (s/veh)	7.4	0	10.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.8	-	-

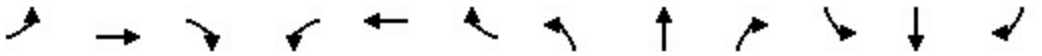
Intersection	
Int Delay, s/veh	69.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	127	2	260	108	54	3	55	344	55	48	3
Future Vol, veh/h	3	127	2	260	108	54	3	55	344	55	48	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	138	2	283	117	59	3	60	374	60	52	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	298	614	54	494	428	247	55	0	0	434	0	0
Stage 1	173	173	-	253	253	-	-	-	-	-	-	-
Stage 2	125	440	-	241	175	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	654	407	1013	486	519	792	1549	-	-	1126	-	-
Stage 1	828	755	-	751	698	-	-	-	-	-	-	-
Stage 2	879	577	-	763	754	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	440	384	1013	299	489	792	1549	-	-	1126	-	-
Mov Cap-2 Maneuver	440	384	-	299	489	-	-	-	-	-	-	-
Stage 1	783	714	-	749	696	-	-	-	-	-	-	-
Stage 2	674	576	-	580	713	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	19.58	168.62	0.05	4.35
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	11	-	-	389	364	923	-	-
HCM Lane V/C Ratio	0.002	-	-	0.369	1.26	0.053	-	-
HCM Control Delay (s/veh)	7.3	0	-	19.6	168.6	8.4	0	-
HCM Lane LOS	A	A	-	C	F	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1.7	20.3	0.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	124	94	106	24	55	56	56	754	19	88	977	51
Future Volume (veh/h)	124	94	106	24	55	56	56	754	19	88	977	51
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	135	102	60	26	60	21	61	820	14	96	1062	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	444	313	184	360	530	449	305	2043	911	397	2043	911
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.57	0.57	0.57	0.57	0.57	0.57
Unsig. Movement Delay												
Ln Grp Delay, s/veh	22.4	0.0	20.8	22.6	18.9	18.4	15.4	8.6	6.4	13.3	9.5	6.5
Ln Grp LOS	C		C	C	B	B	B	A	A	B	A	A
Approach Vol, veh/h		297			107			895			1188	
Approach Delay, s/veh		21.5			19.7			9.0			9.8	
Approach LOS		C			B			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		6.0		5.0		5.0
Phs Duration (G+Y+Rc), s		45.6		25.0		45.6		25.0
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green (Gmax), s		71.0		34.0		71.0		34.0
Max Allow Headway (MAH), s		7.1		6.7		7.1		6.7
Max Q Clear (g_c+I1), s		20.5		9.6		17.7		8.4
Green Ext Time (g_e), s		15.1		2.8		22.9		0.8
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.06		0.01		0.18		0.00

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		516		1317		658		1224

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1104		3554		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		649		1585		1585

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3

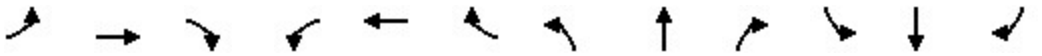
Lane Assignment		L		L		L		L
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	61	0	135	0	96	0	26
Grp Sat Flow (s), veh/h/ln	0	516	0	1317	0	658	0	1224
Q Serve Time (g_s), s	0.0	5.7	0.0	6.0	0.0	6.7	0.0	1.2
Cycle Q Clear Time (g_c), s	0.0	18.5	0.0	7.6	0.0	15.7	0.0	6.4
Perm LT Sat Flow (s_l), veh/h/ln	0	516	0	1317	0	658	0	1224
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	40.6	0.0	20.0	0.0	40.6	0.0	20.0
Perm LT Serve Time (g_u), s	0.0	27.8	0.0	18.3	0.0	31.6	0.0	14.8
Perm LT Q Serve Time (g_ps), s	0.0	5.7	0.0	6.0	0.0	6.7	0.0	1.2
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	305	0	444	0	397	0	360
V/C Ratio (X)	0.00	0.20	0.00	0.30	0.00	0.24	0.00	0.07
Avail Cap (c_a), veh/h	0	528	0	706	0	681	0	603
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	14.7	0.0	21.5	0.0	12.6	0.0	22.5
Incr Delay (d2), s/veh	0.0	0.7	0.0	0.8	0.0	0.7	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	15.4	0.0	22.4	0.0	13.3	0.0	22.6
1st-Term Q (Q1), veh/ln	0.0	0.6	0.0	1.7	0.0	0.8	0.0	0.3
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.6	0.0	1.8	0.0	0.9	0.0	0.4
%ile Storage Ratio (RQ%)	0.00	0.06	0.00	0.13	0.00	0.06	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	2	0	0	0	2	0	1
Grp Vol (v), veh/h	0	820	0	0	0	1062	0	60
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	1870
Q Serve Time (g_s), s	0.0	9.0	0.0	0.0	0.0	12.8	0.0	1.7
Cycle Q Clear Time (g_c), s	0.0	9.0	0.0	0.0	0.0	12.8	0.0	1.7
Lane Grp Cap (c), veh/h	0	2043	0	0	0	2043	0	530
V/C Ratio (X)	0.00	0.40	0.00	0.00	0.00	0.52	0.00	0.11
Avail Cap (c_a), veh/h	0	3577	0	0	0	3577	0	901
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.3	0.0	0.0	0.0	9.1	0.0	18.7
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.0	0.4	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.6	0.0	0.0	0.0	9.5	0.0	18.9
1st-Term Q (Q1), veh/ln	0.0	2.5	0.0	0.0	0.0	3.8	0.0	0.7

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.6	0.0	0.0	0.0	3.9	0.0	0.7
%ile Storage Ratio (RQ%)	0.00	0.11	0.00	0.00	0.00	0.25	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	14	0	162	0	30	0	21
Grp Sat Flow (s), veh/h/ln	0	1585	0	1753	0	1585	0	1585
Q Serve Time (g_s), s	0.0	0.3	0.0	5.1	0.0	0.6	0.0	0.7
Cycle Q Clear Time (g_c), s	0.0	0.3	0.0	5.1	0.0	0.6	0.0	0.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.37	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	911	0	497	0	911	0	449
V/C Ratio (X)	0.00	0.02	0.00	0.33	0.00	0.03	0.00	0.05
Avail Cap (c_a), veh/h	0	1595	0	845	0	1595	0	764
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	6.4	0.0	20.0	0.0	6.5	0.0	18.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	6.4	0.0	20.8	0.0	6.5	0.0	18.4
1st-Term Q (Q1), veh/ln	0.0	0.1	0.0	2.0	0.0	0.2	0.0	0.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	2.1	0.0	0.2	0.0	0.2
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.07	0.00	0.03	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	11.3
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	206	21	62	44	81	764	21	1091	658	24	1322	70
Future Volume (veh/h)	206	21	62	44	81	764	21	1091	658	24	1322	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	224	23	0	48	88	0	23	1186	0	26	1437	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	351	439		406	439		170	1610		227	1619	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.23	0.23	0.00	0.23	0.23	0.00	0.03	0.45	0.00	0.03	0.46	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	30.8	22.9	0.0	24.1	23.8	0.0	32.7	18.4	0.0	13.7	23.8	0.0
Ln Grp LOS	C	C		C	C		C	B		B	C	
Approach Vol, veh/h		247			136			1209			1463	
Approach Delay, s/veh		30.1			23.9			18.6			23.6	
Approach LOS		C			C			B			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	6	5		8
Case No	1.2	3.0		5.0	3.0	1.3		5.0
Phs Duration (G+Y+Rc), s	10.1	43.0		24.2	43.2	9.9		24.2
Change Period (Y+Rc), s	8.0	8.0		6.0	8.0	8.0		6.0
Max Green (Gmax), s	5.0	41.0		42.0	41.0	5.0		42.0
Max Allow Headway (MAH), s	2.6	3.7		3.1	3.7	2.6		3.7
Max Q Clear (g_c+I1), s	2.6	23.2		17.7	30.6	2.0		4.9
Green Ext Time (g_e), s	0.0	4.7		0.4	4.6	0.0		0.4
Prob of Phs Call (p_c)	0.43	1.00		1.00	1.00	0.39		1.00
Prob of Max Out (p_x)	1.00	0.06		0.00	0.37	0.43		0.00

Left-Turn Movement Data								
Assigned Mvmt	1			7		5		3
Mvmt Sat Flow, veh/h	1781			1309		1781		1388

Through Movement Data								
Assigned Mvmt		2		4	6			8
Mvmt Sat Flow, veh/h		3554		1870	3554			1870

Right-Turn Movement Data								
Assigned Mvmt		12		14	16			18
Mvmt Sat Flow, veh/h		1585		1585	1585			1585

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	0	5	0	3

Lane Assignment	L (Pr/Pm)			L		L (Pr/Pm)		L
Lanes in Grp	1	0	0	1	0	1	0	1
Grp Vol (v), veh/h	26	0	0	224	0	23	0	48
Grp Sat Flow (s), veh/h/ln	1781	0	0	1309	0	1781	0	1388
Q Serve Time (g_s), s	0.6	0.0	0.0	12.8	0.0	0.0	0.0	2.1
Cycle Q Clear Time (g_c), s	0.6	0.0	0.0	15.7	0.0	0.0	0.0	2.9
Perm LT Sat Flow (s_l), veh/h/ln	472	0	0	1309	0	372	0	1388
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	35.0	0.0	0.0	18.2	0.0	35.2	0.0	18.2
Perm LT Serve Time (g_u), s	13.8	0.0	0.0	15.2	0.0	6.6	0.0	17.4
Perm LT Q Serve Time (g_ps), s	1.2	0.0	0.0	12.8	0.0	4.5	0.0	2.1
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	227	0	0	351	0	170	0	406
V/C Ratio (X)	0.11	0.00	0.00	0.64	0.00	0.14	0.00	0.12
Avail Cap (c_a), veh/h	293	0	0	755	0	240	0	834
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	13.7	0.0	0.0	30.1	0.0	32.6	0.0	24.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.7	0.0	0.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	13.7	0.0	0.0	30.8	0.0	32.7	0.0	24.1
1st-Term Q (Q1), veh/ln	0.2	0.0	0.0	3.9	0.0	0.4	0.0	0.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.2	0.0	0.0	3.9	0.0	0.4	0.0	0.7
%ile Storage Ratio (RQ%)	0.01	0.00	0.00	0.33	0.00	0.02	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	6	0	0	8
Lane Assignment		T		T	T			T
Lanes in Grp	0	2	0	1	2	0	0	1
Grp Vol (v), veh/h	0	1186	0	23	1437	0	0	88
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	1777	0	0	1870
Q Serve Time (g_s), s	0.0	21.2	0.0	0.7	28.6	0.0	0.0	2.9
Cycle Q Clear Time (g_c), s	0.0	21.2	0.0	0.7	28.6	0.0	0.0	2.9
Lane Grp Cap (c), veh/h	0	1610	0	439	1619	0	0	439
V/C Ratio (X)	0.00	0.74	0.00	0.05	0.89	0.00	0.00	0.20
Avail Cap (c_a), veh/h	0	1884	0	1016	1884	0	0	1016
Upstream Filter (I)	0.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	17.4	0.0	22.9	19.2	0.0	0.0	23.8
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.0	4.5	0.0	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.4	0.0	22.9	23.8	0.0	0.0	23.8
1st-Term Q (Q1), veh/ln	0.0	6.9	0.0	0.3	9.3	0.0	0.0	1.3

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	1.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.1	0.0	0.3	10.3	0.0	0.0	1.3
%ile Storage Ratio (RQ%)	0.00	0.23	0.00	0.02	0.31	0.00	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	16	0	0	18
Lane Assignment		R		R	R			R
Lanes in Grp	0	1	0	1	1	0	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1585	0	1585	1585	0	0	1585
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	718	0	372	722	0	0	372
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	840	0	861	840	0	0	861
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	22.2
HCM 7th LOS	C

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	43	8	6	72	15	11
Future Vol, veh/h	43	8	6	72	15	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	47	9	7	78	16	12

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	55	0	142	51
Stage 1	-	-	-	-	51	-
Stage 2	-	-	-	-	91	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1549	-	850	1017
Stage 1	-	-	-	-	971	-
Stage 2	-	-	-	-	932	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1549	-	847	1017
Mov Cap-2 Maneuver	-	-	-	-	847	-
Stage 1	-	-	-	-	971	-
Stage 2	-	-	-	-	928	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.56	9.08
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	911	-	-	138	-
HCM Lane V/C Ratio	0.031	-	-	0.004	-
HCM Control Delay (s/veh)	9.1	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	19	62	3	8	2	9	8	0	0	6	11
Future Vol, veh/h	21	19	62	3	8	2	9	8	0	0	6	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	None	-	-	None	-	-	None
Storage Length	-	-	260	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	21	67	3	9	2	10	9	0	0	7	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	11	0	0	21	0	0	85	84	21	87	83	10
Stage 1	-	-	-	-	-	-	66	66	-	16	16	-
Stage 2	-	-	-	-	-	-	18	17	-	71	66	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1608	-	-	1595	-	-	902	806	1057	899	808	1072
Stage 1	-	-	-	-	-	-	944	840	-	1003	882	-
Stage 2	-	-	-	-	-	-	1001	881	-	939	840	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1608	-	-	1595	-	-	869	793	1057	874	794	1072
Mov Cap-2 Maneuver	-	-	-	-	-	-	869	793	-	874	794	-
Stage 1	-	-	-	-	-	-	930	827	-	1001	880	-
Stage 2	-	-	-	-	-	-	980	879	-	915	827	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	1.5	1.68	9.43	8.85
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	832	945	-	-	399	-	-	954
HCM Lane V/C Ratio	0.022	0.014	-	-	0.002	-	-	0.019
HCM Control Delay (s/veh)	9.4	7.3	0	-	7.3	0	-	8.8
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Intersection	
Intersection Delay, s/veh	11.8
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	1	1	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	372	125	757	1289
Demand Flow Rate, veh/h	380	127	772	1315
Vehicles Circulating, veh/h	1205	909	192	217
Vehicles Exiting, veh/h	327	55	1393	819
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	29.2	7.9	6.3	10.3
Approach LOS	D	A	A	B

Lane	Left	Left	Left	Right	Left	Right
Designated Moves	LTR	LTR	LT	TR	LT	TR
Assumed Moves	LTR	LTR	LT	TR	LT	TR
RT Channelized						
Lane Util	1.000	1.000	0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1420	1420	1350	1420	1350	1420
B (Slope)	8.501e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	380	127	363	409	618	697
Cap Entry Lane, veh/h	510	656	1131	1206	1106	1181
Entry HV Adj Factor	0.979	0.984	0.980	0.981	0.980	0.980
Flow Entry, veh/h	372	125	356	401	606	683
Cap Entry, veh/h	499	645	1109	1183	1084	1157
V/C Ratio	0.745	0.194	0.321	0.339	0.559	0.590
Control Delay, s/veh	29.2	7.9	6.4	6.3	10.2	10.4
LOS	D	A	A	A	B	B
95th %tile Queue, veh	6	1	1	2	4	4

Intersection	
Intersection Delay, s/veh	11.1
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	2	3	3	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	636	0	0	1344
Demand Flow Rate, veh/h	655	0	0	1384
Vehicles Circulating, veh/h	1216	1208	141	661
Vehicles Exiting, veh/h	478	63	1213	812
Ped Vol Crossing Leg, #/h	1	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	2.1	0.0	0.0	15.3
Approach LOS	A	-	-	C

Lane	Left	Right	Bypass	Left	Right	Bypass
Designated Moves	L	LTR	R	LT	TR	R
Assumed Moves	L	LTR		LT	TR	
RT Channelized			Free			Yield
Lane Util	0.529	0.471		0.470	0.530	
Follow-Up Headway, s	2.667	2.535		2.667	2.535	2.609
Critical Headway, s	4.645	4.328		4.645	4.328	4.976
A (Intercept)	1350	1420		1350	1420	1380
B (Slope)	9.199e-4	4.501e-4		9.199e-4	4.501e-4	1.02e-3
Entry Flow, veh/h	73	65	517	486	547	351
Cap Entry Lane, veh/h	441	505	1957	735	810	847
Entry HV Adj Factor	0.970	0.966	0.971	0.970	0.972	0.971
Flow Entry, veh/h	71	63	502	471	532	341
Cap Entry, veh/h	428	488	1900	713	787	823
V/C Ratio	0.166	0.129	0.264	0.661	0.676	0.414
Control Delay, s/veh	10.9	9.1	0.0	17.7	16.9	9.5
LOS	B	A	A	C	C	A
95th %tile Queue, veh	1	0	1	5	5	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	236	488	1	56	885	85	45	246	189	191	284	1168
Future Volume (veh/h)	236	488	1	56	885	85	45	246	189	191	284	1168
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	257	530	0	61	962	0	49	267	0	208	309	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	272	1262		79	1182		67	313		242	498	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.36	0.00	0.04	0.33	0.00	0.04	0.17	0.00	0.14	0.27	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	85.1	25.1	0.0	53.0	35.9	0.0	58.6	42.7	0.0	45.3	32.5	0.0
Ln Grp LOS	F	C		D	D		E	D		D	C	
Approach Vol, veh/h		787			1023			316			517	
Approach Delay, s/veh		44.7			36.9			45.2			37.6	
Approach LOS		D			D			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	6	5	7	8
Case No	2.0	3.0	2.0	3.0	3.0	2.0	2.0	3.0
Phs Duration (G+Y+Rc), s	12.6	43.4	10.5	32.7	40.0	16.0	20.3	22.9
Change Period (Y+Rc), s	8.2	* 8.2	6.8	* 6.3	7.0	8.2	6.8	* 6.3
Max Green (Gmax), s	8.7	* 35	5.0	* 67	35.5	7.8	27.0	* 45
Max Allow Headway (MAH), s	2.6	7.7	1.7	3.9	7.7	2.6	2.7	3.9
Max Q Clear (g_c+I1), s	5.4	13.2	4.7	16.4	26.6	9.3	13.3	15.8
Green Ext Time (g_e), s	0.0	6.9	0.0	1.0	6.4	0.0	0.2	0.8
Prob of Phs Call (p_c)	0.81	1.00	0.74	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.28	0.20	1.00	0.00	0.95	1.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3			5	7	
Mvmt Sat Flow, veh/h	1781		1781			3456	1781	

Through Movement Data								
Assigned Mvmt		2		4	6			8
Mvmt Sat Flow, veh/h		3554		1870	3554			1870

Right-Turn Movement Data								
Assigned Mvmt		12		14	16			18
Mvmt Sat Flow, veh/h		1585		1585	1585			1585

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	0	5	7	0

Lane Assignment	L (Prot)		L (Prot)			L (Prot)	L (Prot)	
Lanes in Grp	1	0	1	0	0	2	1	0
Grp Vol (v), veh/h	61	0	49	0	0	257	208	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	0	1728	1781	0
Q Serve Time (g_s), s	3.4	0.0	2.7	0.0	0.0	7.3	11.3	0.0
Cycle Q Clear Time (g_c), s	3.4	0.0	2.7	0.0	0.0	7.3	11.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	79	0	67	0	0	272	242	0
V/C Ratio (X)	0.78	0.00	0.74	0.00	0.00	0.95	0.86	0.00
Avail Cap (c_a), veh/h	156	0	90	0	0	272	485	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d1), s/veh	46.9	0.0	47.3	0.0	0.0	45.5	41.9	0.0
Incr Delay (d2), s/veh	6.0	0.0	11.3	0.0	0.0	39.6	3.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	53.0	0.0	58.6	0.0	0.0	85.1	45.3	0.0
1st-Term Q (Q1), veh/ln	1.4	0.0	1.2	0.0	0.0	3.0	4.8	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.2	0.0	0.0	1.5	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	1.5	0.0	1.4	0.0	0.0	4.5	5.0	0.0
%ile Storage Ratio (RQ%)	0.04	0.00	0.12	0.00	0.00	0.11	0.19	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	6	0	0	8
Lane Assignment		T		T	T			T
Lanes in Grp	0	2	0	1	2	0	0	1
Grp Vol (v), veh/h	0	530	0	309	962	0	0	267
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	1777	0	0	1870
Q Serve Time (g_s), s	0.0	11.2	0.0	14.4	24.6	0.0	0.0	13.8
Cycle Q Clear Time (g_c), s	0.0	11.2	0.0	14.4	24.6	0.0	0.0	13.8
Lane Grp Cap (c), veh/h	0	1262	0	498	1182	0	0	313
V/C Ratio (X)	0.00	0.42	0.00	0.62	0.81	0.00	0.00	0.85
Avail Cap (c_a), veh/h	0	1262	0	1258	1272	0	0	843
Upstream Filter (I)	0.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.2	0.0	32.0	30.3	0.0	0.0	40.1
Incr Delay (d2), s/veh	0.0	0.8	0.0	0.5	5.6	0.0	0.0	2.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.1	0.0	32.5	35.9	0.0	0.0	42.7
1st-Term Q (Q1), veh/ln	0.0	4.3	0.0	6.2	9.5	0.0	0.0	6.0

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.9	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.4	0.0	6.2	10.4	0.0	0.0	6.3
%ile Storage Ratio (RQ%)	0.00	0.08	0.00	0.24	0.19	0.00	0.00	0.40
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	16	0	0	18
Lane Assignment		R		R	R			R
Lanes in Grp	0	1	0	1	1	0	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1585	0	1585	1585	0	0	1585
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	563	0	422	527	0	0	265
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	563	0	1066	567	0	0	714
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	40.3
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	24	60	18	28	109	47	374	13	93	385	21
Future Volume (veh/h)	65	24	60	18	28	109	47	374	13	93	385	21
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	0.99		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	70	26	65	19	30	0	51	402	14	100	414	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	527	310	262	518	310		571	791	670	576	791	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.00	0.43	0.43	0.43	0.43	0.43	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	8.6	8.0	8.6	8.2	8.1	0.0	6.5	5.2	3.7	6.8	5.2	0.0
Ln Grp LOS	A	A	A	A	A		A	A	A	A	A	
Approach Vol, veh/h		161			49			467			514	
Approach Delay, s/veh		8.5			8.1			5.3			5.6	
Approach LOS		A			A			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		5.0		5.0		5.0
Phs Duration (G+Y+Rc), s		14.3		8.4		14.3		8.4
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green (Gmax), s		18.0		18.0		18.0		18.0
Max Allow Headway (MAH), s		4.7		4.1		5.1		4.7
Max Q Clear (g_c+I1), s		6.7		3.4		7.6		2.6
Green Ext Time (g_e), s		1.8		0.4		2.2		0.1
Prob of Phs Call (p_c)		1.00		0.74		1.00		0.74
Prob of Max Out (p_x)		0.12		0.00		0.25		0.00

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		949		1342		947		1268

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1826		1826		1826		1826

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1546		1540		1547		1547

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3

Lane Assignment		L		L		L		L
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	51	0	70	0	100	0	19
Grp Sat Flow (s), veh/h/ln	0	949	0	1342	0	947	0	1268
Q Serve Time (g_s), s	0.0	0.9	0.0	1.1	0.0	1.9	0.0	0.3
Cycle Q Clear Time (g_c), s	0.0	4.7	0.0	1.4	0.0	5.6	0.0	0.6
Perm LT Sat Flow (s_l), veh/h/ln	0	949	0	1342	0	947	0	1268
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	9.8	0.0	3.9	0.0	9.8	0.0	3.9
Perm LT Serve Time (g_u), s	0.0	6.1	0.0	3.5	0.0	6.2	0.0	3.6
Perm LT Q Serve Time (g_ps), s	0.0	0.9	0.0	1.1	0.0	1.9	0.0	0.3
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	571	0	527	0	576	0	518
V/C Ratio (X)	0.00	0.09	0.00	0.13	0.00	0.17	0.00	0.04
Avail Cap (c_a), veh/h	0	913	0	1365	0	918	0	1309
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	6.4	0.0	8.5	0.0	6.7	0.0	8.2
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	6.5	0.0	8.6	0.0	6.8	0.0	8.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.2	0.0	0.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.2	0.0	0.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.03	0.00	0.02	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	402	0	26	0	414	0	30
Grp Sat Flow (s), veh/h/ln	0	1826	0	1826	0	1826	0	1826
Q Serve Time (g_s), s	0.0	3.6	0.0	0.3	0.0	3.8	0.0	0.3
Cycle Q Clear Time (g_c), s	0.0	3.6	0.0	0.3	0.0	3.8	0.0	0.3
Lane Grp Cap (c), veh/h	0	791	0	310	0	791	0	310
V/C Ratio (X)	0.00	0.51	0.00	0.08	0.00	0.52	0.00	0.10
Avail Cap (c_a), veh/h	0	1449	0	1449	0	1449	0	1449
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	4.7	0.0	7.9	0.0	4.7	0.0	7.9
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.1	0.0	0.5	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	5.2	0.0	8.0	0.0	5.2	0.0	8.1
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.1	0.0	0.2	0.0	0.1

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	0.1	0.0	0.4	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	14	0	65	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1546	0	1540	0	1547	0	1547
Q Serve Time (g_s), s	0.0	0.1	0.0	0.8	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.1	0.0	0.8	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	670	0	262	0	670	0	263
V/C Ratio (X)	0.00	0.02	0.00	0.25	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1227	0	1223	0	1228	0	1228
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	3.7	0.0	8.2	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	3.7	0.0	8.6	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	6.0
HCM 7th LOS	A

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	23	89	30	383	423	29
Future Vol, veh/h	23	89	30	383	423	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	240	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	24	94	32	403	445	31

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	927	461	476	0	-	0
Stage 1	461	-	-	-	-	-
Stage 2	466	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	295	597	1076	-	-	-
Stage 1	631	-	-	-	-	-
Stage 2	627	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	284	597	1076	-	-	-
Mov Cap-2 Maneuver	284	-	-	-	-	-
Stage 1	607	-	-	-	-	-
Stage 2	627	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	13.53	0.61	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	131	-	284	597	-	-
HCM Lane V/C Ratio	0.029	-	0.085	0.157	-	-
HCM Control Delay (s/veh)	8.4	0	18.8	12.2	-	-
HCM Lane LOS	A	A	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	0.6	-	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	3	2	3	21	0	0	3	0	0	8	6
Future Vol, veh/h	0	3	2	3	21	0	0	3	0	0	8	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	3	2	3	23	0	0	3	0	0	9	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	23	0	0	5	0	0	38	34	4	34	35	23
Stage 1	-	-	-	-	-	-	4	4	-	29	29	-
Stage 2	-	-	-	-	-	-	34	29	-	5	5	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1592	-	-	1616	-	-	967	859	1079	972	858	1054
Stage 1	-	-	-	-	-	-	1018	892	-	988	871	-
Stage 2	-	-	-	-	-	-	982	871	-	1017	891	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1592	-	-	1616	-	-	949	857	1079	967	856	1054
Mov Cap-2 Maneuver	-	-	-	-	-	-	949	857	-	967	856	-
Stage 1	-	-	-	-	-	-	1018	892	-	986	869	-
Stage 2	-	-	-	-	-	-	965	869	-	1014	891	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0.9	9.22	8.93
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	857	1592	-	-	225	-	-	931
HCM Lane V/C Ratio	0.004	-	-	-	0.002	-	-	0.016
HCM Control Delay (s/veh)	9.2	0	-	-	7.2	0	-	8.9
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	4.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	83	75	296	104	128	323
Future Vol, veh/h	83	75	296	104	128	323
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	87	79	312	109	135	340

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	977	367	0	0	422	0
Stage 1	367	-	-	-	-	-
Stage 2	609	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	277	676	-	-	1132	-
Stage 1	698	-	-	-	-	-
Stage 2	541	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	236	675	-	-	1131	-
Mov Cap-2 Maneuver	236	-	-	-	-	-
Stage 1	698	-	-	-	-	-
Stage 2	461	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	20.44	0	2.44
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	236	675	511	-
HCM Lane V/C Ratio	-	-	0.37	0.117	0.119	-
HCM Control Delay (s/veh)	-	-	28.9	11	8.6	0
HCM Lane LOS	-	-	D	B	A	A
HCM 95th %tile Q(veh)	-	-	1.6	0.4	0.4	-

Intersection	
Intersection Delay, s/veh	10
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	95	26	24	96	20	29	30	29	44	51	24
Future Vol, veh/h	21	95	26	24	96	20	29	30	29	44	51	24
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	32	144	39	36	145	30	44	45	44	67	77	36
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	10.2	10.2	9.5	10.1
HCM LOS	B	B	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	33%	15%	17%	37%
Vol Thru, %	34%	67%	69%	43%
Vol Right, %	33%	18%	14%	20%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	88	142	140	119
LT Vol	29	21	24	44
Through Vol	30	95	96	51
RT Vol	29	26	20	24
Lane Flow Rate	133	215	212	180
Geometry Grp	1	1	1	1
Degree of Util (X)	0.194	0.296	0.294	0.263
Departure Headway (Hd)	5.234	5.066	5.097	5.245
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	689	714	708	689
Service Time	3.24	3.066	3.097	3.245
HCM Lane V/C Ratio	0.193	0.301	0.299	0.261
HCM Control Delay, s/veh	9.5	10.2	10.2	10.1
HCM Lane LOS	A	B	B	B
HCM 95th-tile Q	0.7	1.2	1.2	1.1

Intersection	
Int Delay, s/veh	7.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	83	74	77	369	291	92
Future Vol, veh/h	83	74	77	369	291	92
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	6	6	6	6	6	6
Mvmt Flow	108	96	100	479	378	119

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1117	438	497	0	-	0
Stage 1	438	-	-	-	-	-
Stage 2	679	-	-	-	-	-
Critical Hdwy	6.46	6.26	4.16	-	-	-
Critical Hdwy Stg 1	5.46	-	-	-	-	-
Critical Hdwy Stg 2	5.46	-	-	-	-	-
Follow-up Hdwy	3.554	3.354	2.254	-	-	-
Pot Cap-1 Maneuver	225	611	1046	-	-	-
Stage 1	642	-	-	-	-	-
Stage 2	496	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	196	611	1046	-	-	-
Mov Cap-2 Maneuver	196	-	-	-	-	-
Stage 1	559	-	-	-	-	-
Stage 2	496	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	42.82	1.52	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	311	-	288	-	-
HCM Lane V/C Ratio	0.096	-	0.707	-	-
HCM Control Delay (s/veh)	8.8	0	42.8	-	-
HCM Lane LOS	A	A	E	-	-
HCM 95th %tile Q(veh)	0.3	-	4.9	-	-

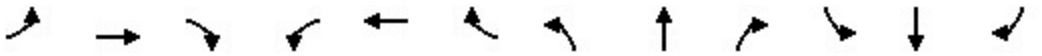
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	336	235	4	22	1
Future Vol, veh/h	1	336	235	4	22	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	365	255	4	24	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	260	0	-	0	625	258
Stage 1	-	-	-	-	258	-
Stage 2	-	-	-	-	367	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1305	-	-	-	449	781
Stage 1	-	-	-	-	785	-
Stage 2	-	-	-	-	701	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1305	-	-	-	448	781
Mov Cap-2 Maneuver	-	-	-	-	448	-
Stage 1	-	-	-	-	785	-
Stage 2	-	-	-	-	701	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.02	0	13.34
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	5	-	-	-	457
HCM Lane V/C Ratio	0.001	-	-	-	0.055
HCM Control Delay (s/veh)	7.8	0	-	-	13.3
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	108	367	166	432	205	173	81	651	231	129	1687	92
Future Volume (veh/h)	108	367	166	432	205	173	81	651	231	129	1687	92
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	117	399	0	470	223	0	88	708	0	140	1834	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	179	502		362	672		309	1456		699	1469	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.14	0.00	0.10	0.19	0.00	0.05	0.41	0.00	0.05	0.41	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	46.7	41.5	0.0	196.1	34.2	0.0	23.1	22.1	0.0	16.0	146.3	0.0
Ln Grp LOS	D	D		F	C		C	C		B	F	
Approach Vol, veh/h		516			693			796			1974	
Approach Delay, s/veh		42.7			144.0			22.2			137.0	
Approach LOS		D			F			C			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	4	3	5	6	7	8
Case No	1.1	3.0	3.0	2.0	1.1	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	13.4	46.8	20.0	17.0	13.0	47.2	11.8	25.2
Change Period (Y+Rc), s	8.5	7.0	6.3	* 6.8	8.5	7.0	6.8	* 6.8
Max Green (Gmax), s	5.1	40.1	26.0	* 10	5.0	40.2	8.1	* 28
Max Allow Headway (MAH), s	2.6	7.7	3.7	2.6	2.6	7.7	2.6	3.7
Max Q Clear (g_c+I1), s	4.2	16.3	12.6	12.2	3.4	42.2	5.2	7.3
Green Ext Time (g_e), s	0.0	10.0	1.2	0.0	0.0	0.0	0.0	0.7
Prob of Phs Call (p_c)	0.98	1.00	1.00	1.00	0.91	1.00	0.96	1.00
Prob of Max Out (p_x)	1.00	0.29	0.00	1.00	1.00	1.00	0.67	0.00

Left-Turn Movement Data								
Assigned Mvmt	1			3	5		7	
Mvmt Sat Flow, veh/h	3456			3456	3456		3456	

Through Movement Data								
Assigned Mvmt		2	4			6		8
Mvmt Sat Flow, veh/h		3554	3554			3554		3647

Right-Turn Movement Data								
Assigned Mvmt		12	14			16		18
Mvmt Sat Flow, veh/h		1585	1585			1585		0

Left Lane Group Data								
Assigned Mvmt	1	0	0	3	5	0	7	0

Lane Assignment	L (Pr/Pm)			L (Prot)	L (Pr/Pm)		L (Prot)	
Lanes in Grp	2	0	0	2	2	0	2	0
Grp Vol (v), veh/h	140	0	0	470	88	0	117	0
Grp Sat Flow (s), veh/h/ln	1728	0	0	1728	1728	0	1728	0
Q Serve Time (g_s), s	2.2	0.0	0.0	10.2	1.4	0.0	3.2	0.0
Cycle Q Clear Time (g_c), s	2.2	0.0	0.0	10.2	1.4	0.0	3.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	718	0	0	0	246	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	39.8	0.0	0.0	0.0	39.8	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	25.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	699	0	0	362	309	0	179	0
V/C Ratio (X)	0.20	0.00	0.00	1.30	0.28	0.00	0.65	0.00
Avail Cap (c_a), veh/h	707	0	0	362	326	0	288	0
Upstream Filter (I)	1.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	15.9	0.0	0.0	43.5	22.9	0.0	45.2	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	152.6	0.2	0.0	1.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	16.0	0.0	0.0	196.1	23.1	0.0	46.7	0.0
1st-Term Q (Q1), veh/ln	0.8	0.0	0.0	4.1	0.5	0.0	1.3	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	7.7	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.8	0.0	0.0	11.8	0.5	0.0	1.3	0.0
%ile Storage Ratio (RQ%)	0.02	0.00	0.00	1.30	0.01	0.00	0.06	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	26.9	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	4	0	0	6	0	8
Lane Assignment		T	T			T		T
Lanes in Grp	0	2	2	0	0	2	0	2
Grp Vol (v), veh/h	0	708	399	0	0	1834	0	223
Grp Sat Flow (s), veh/h/ln	0	1777	1777	0	0	1777	0	1777
Q Serve Time (g_s), s	0.0	14.3	10.6	0.0	0.0	40.2	0.0	5.3
Cycle Q Clear Time (g_c), s	0.0	14.3	10.6	0.0	0.0	40.2	0.0	5.3
Lane Grp Cap (c), veh/h	0	1456	502	0	0	1469	0	672
V/C Ratio (X)	0.00	0.49	0.80	0.00	0.00	1.25	0.00	0.33
Avail Cap (c_a), veh/h	0	1465	950	0	0	1469	0	1027
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	21.2	40.4	0.0	0.0	28.5	0.0	34.1
Incr Delay (d2), s/veh	0.0	0.9	1.1	0.0	0.0	117.8	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	22.1	41.5	0.0	0.0	146.3	0.0	34.2
1st-Term Q (Q1), veh/ln	0.0	5.3	4.3	0.0	0.0	14.8	0.0	2.1

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.1	0.0	0.0	24.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.5	4.4	0.0	0.0	38.8	0.0	2.1
%ile Storage Ratio (RQ%)	0.00	0.07	0.14	0.00	0.00	0.56	0.00	0.16
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	91.3	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	14	0	0	16	0	18
Lane Assignment		R	R			R		
Lanes in Grp	0	1	1	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1585	1585	0	0	1585	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	649	224	0	0	655	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	653	424	0	0	655	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	103.1
HCM 7th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	502	52	33	524	75	121	16	46	171	20	166
Future Volume (veh/h)	175	502	52	33	524	75	121	16	46	171	20	166
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	190	546	57	36	570	82	132	17	50	186	22	180
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	425	942	799	446	942	799	479	102	300	485	456	387
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.50	0.50	0.50	0.50	0.50	0.50	0.24	0.24	0.24	0.24	0.24	0.24
Unsig. Movement Delay												
Ln Grp Delay, s/veh	12.7	7.1	4.6	9.2	7.4	4.7	12.1	0.0	10.8	13.4	10.4	12.4
Ln Grp LOS	B	A	A	A	A	A	B		B	B	B	B
Approach Vol, veh/h		793			688			199			388	
Approach Delay, s/veh		8.3			7.2			11.6			12.7	
Approach LOS		A			A			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		5.0		5.0		5.0
Phs Duration (G+Y+Rc), s		13.2		22.5		13.2		22.5
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green (Gmax), s		18.0		18.0		18.0		18.0
Max Allow Headway (MAH), s		4.6		4.9		4.1		4.7
Max Q Clear (g_c+I1), s		5.8		18.0		7.7		10.5
Green Ext Time (g_e), s		0.6		0.0		1.0		2.2
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.01		1.00		0.05		0.53

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		1180		780		1334		816

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		418		1870		1870		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1230		1585		1585		1585

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3

Lane Assignment		L		L		L		L
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	132	0	190	0	186	0	36
Grp Sat Flow (s), veh/h/ln	0	1180	0	780	0	1334	0	816
Q Serve Time (g_s), s	0.0	3.4	0.0	8.2	0.0	4.6	0.0	1.2
Cycle Q Clear Time (g_c), s	0.0	3.8	0.0	16.0	0.0	5.7	0.0	8.5
Perm LT Sat Flow (s_l), veh/h/ln	0	1180	0	780	0	1334	0	816
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	8.7	0.0	18.0	0.0	8.7	0.0	18.0
Perm LT Serve Time (g_u), s	0.0	8.4	0.0	10.2	0.0	7.6	0.0	10.7
Perm LT Q Serve Time (g_ps), s	0.0	3.4	0.0	8.2	0.0	4.6	0.0	1.2
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	479	0	425	0	485	0	446
V/C Ratio (X)	0.00	0.28	0.00	0.45	0.00	0.38	0.00	0.08
Avail Cap (c_a), veh/h	0	786	0	426	0	832	0	447
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.8	0.0	12.0	0.0	12.9	0.0	9.2
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.7	0.0	0.5	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	12.1	0.0	12.7	0.0	13.4	0.0	9.2
1st-Term Q (Q1), veh/ln	0.0	0.7	0.0	0.8	0.0	1.1	0.0	0.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.7	0.0	0.9	0.0	1.2	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.12	0.00	0.12	0.00	0.30	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T		T		T
Lanes in Grp	0	0	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	546	0	22	0	570
Grp Sat Flow (s), veh/h/ln	0	0	0	1870	0	1870	0	1870
Q Serve Time (g_s), s	0.0	0.0	0.0	7.3	0.0	0.3	0.0	7.8
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	7.3	0.0	0.3	0.0	7.8
Lane Grp Cap (c), veh/h	0	0	0	942	0	456	0	942
V/C Ratio (X)	0.00	0.00	0.00	0.58	0.00	0.05	0.00	0.60
Avail Cap (c_a), veh/h	0	0	0	943	0	943	0	943
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	6.2	0.0	10.3	0.0	6.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.9	0.0	0.0	0.0	1.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	7.1	0.0	10.4	0.0	7.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.7	0.0	0.1	0.0	0.7

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.9	0.0	0.1	0.0	1.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.05	0.00	0.01	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	67	0	57	0	180	0	82
Grp Sat Flow (s), veh/h/ln	0	1649	0	1585	0	1585	0	1585
Q Serve Time (g_s), s	0.0	1.1	0.0	0.7	0.0	3.5	0.0	1.0
Cycle Q Clear Time (g_c), s	0.0	1.1	0.0	0.7	0.0	3.5	0.0	1.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.75	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	402	0	799	0	387	0	799
V/C Ratio (X)	0.00	0.17	0.00	0.07	0.00	0.47	0.00	0.10
Avail Cap (c_a), veh/h	0	832	0	800	0	800	0	800
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	10.6	0.0	4.6	0.0	11.5	0.0	4.6
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	0.9	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.8	0.0	4.6	0.0	12.4	0.0	4.7
1st-Term Q (Q1), veh/ln	0.0	0.3	0.0	0.1	0.0	1.0	0.0	0.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.3	0.0	0.1	0.0	1.1	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.01	0.00	0.18	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	9.1
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	476	57	40	565	15	72	1	25	0	2	18
Future Volume (veh/h)	0	476	57	40	565	15	72	1	25	0	2	18
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	517	62	43	614	16	78	1	27	0	2	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	283	840	712	482	840	712	541	11	302	283	29	288
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.45	0.45	0.45	0.45	0.45	0.20	0.20	0.20	0.00	0.20	0.20
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	6.1	4.1	7.8	7.0	3.9	9.0	0.0	8.5	0.0	0.0	8.4
Ln Grp LOS		A	A	A	A	A	A		A			A
Approach Vol, veh/h		579			673			106			22	
Approach Delay, s/veh		5.9			7.0			8.9			8.4	
Approach LOS		A			A			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		5.0		6.0		5.0
Phs Duration (G+Y+Rc), s		9.5		15.9		9.5		15.9
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green (Gmax), s		18.0		18.0		18.0		18.0
Max Allow Headway (MAH), s		4.3		4.6		5.7		4.7
Max Q Clear (g_c+I1), s		3.5		7.3		2.3		8.8
Green Ext Time (g_e), s		0.3		2.2		0.0		2.6
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.20		0.00		0.39

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		1390		796		1382		835

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		57		1870		146		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1537		1585		1461		1585

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3

Lane Assignment		L		L		L		L
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	78	0	0	0	0	0	43
Grp Sat Flow (s), veh/h/ln	0	1390	0	796	0	1382	0	835
Q Serve Time (g_s), s	0.0	1.2	0.0	0.0	0.0	0.0	0.0	1.1
Cycle Q Clear Time (g_c), s	0.0	1.5	0.0	0.0	0.0	0.0	0.0	6.4
Perm LT Sat Flow (s_l), veh/h/ln	0	1390	0	796	0	1382	0	835
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	5.0	0.0	0.0	0.0	0.0	0.0	11.4
Perm LT Serve Time (g_u), s	0.0	4.7	0.0	0.0	0.0	0.0	0.0	6.1
Perm LT Q Serve Time (g_ps), s	0.0	1.2	0.0	0.0	0.0	0.0	0.0	1.1
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	541	0	283	0	283	0	482
V/C Ratio (X)	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.09
Avail Cap (c_a), veh/h	0	1252	0	490	0	991	0	699
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.9	0.0	0.0	0.0	0.0	0.0	7.8
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.0	0.0	0.0	0.0	0.0	0.0	7.8
1st-Term Q (Q1), veh/ln	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	517	0	0	0	614
Grp Sat Flow (s), veh/h/ln	0	0	0	1870	0	0	0	1870
Q Serve Time (g_s), s	0.0	0.0	0.0	5.3	0.0	0.0	0.0	6.8
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	5.3	0.0	0.0	0.0	6.8
Lane Grp Cap (c), veh/h	0	0	0	840	0	0	0	840
V/C Ratio (X)	0.00	0.00	0.00	0.62	0.00	0.00	0.00	0.73
Avail Cap (c_a), veh/h	0	0	0	1325	0	0	0	1325
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	5.3	0.0	0.0	0.0	5.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.7	0.0	0.0	0.0	1.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	6.1	0.0	0.0	0.0	7.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	28	0	62	0	22	0	16
Grp Sat Flow (s), veh/h/ln	0	1594	0	1585	0	1607	0	1585
Q Serve Time (g_s), s	0.0	0.4	0.0	0.6	0.0	0.3	0.0	0.1
Cycle Q Clear Time (g_c), s	0.0	0.4	0.0	0.6	0.0	0.3	0.0	0.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.96	0.00	1.00	0.00	0.91	0.00	1.00
Lane Grp Cap (c), veh/h	0	314	0	712	0	316	0	712
V/C Ratio (X)	0.00	0.09	0.00	0.09	0.00	0.07	0.00	0.02
Avail Cap (c_a), veh/h	0	1129	0	1123	0	1139	0	1123
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.3	0.0	4.0	0.0	8.3	0.0	3.9
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.5	0.0	4.1	0.0	8.4	0.0	3.9
1st-Term Q (Q1), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	6.7
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	96	280	58	76	325	113	134	275	116	150	212	189
Future Volume (veh/h)	96	280	58	76	325	113	134	275	116	150	212	189
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	104	304	18	83	353	35	146	299	115	163	230	100
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	308	482	408	231	492	417	338	355	301	269	283	239
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.09	0.26	0.26	0.08	0.26	0.26	0.19	0.19	0.19	0.15	0.15	0.15
Unsig. Movement Delay												
Ln Grp Delay, s/veh	34.0	32.5	23.5	29.8	35.0	23.6	30.3	34.8	29.9	34.0	36.6	32.6
Ln Grp LOS	C	C	C	C	C	C	C	C	C	C	D	C
Approach Vol, veh/h		426			471			560			493	
Approach Delay, s/veh		32.4			33.2			32.6			34.9	
Approach LOS		C			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8	4	6	5		
Case No	1.2	3.0	9.0	9.0	3.0	1.3		
Phs Duration (G+Y+Rc), s	13.7	28.5	19.2	22.4	28.0	14.2		
Change Period (Y+Rc), s	6.9	* 6.9	6.5	6.5	6.0	6.9		
Max Green (Gmax), s	8.1	* 47	31.5	38.5	44.9	10.1		
Max Allow Headway (MAH), s	4.7	7.7	2.8	3.0	7.9	4.6		
Max Q Clear (g_c+I1), s	5.3	14.1	12.0	14.9	16.4	2.0		
Green Ext Time (g_e), s	0.1	4.5	0.7	1.0	5.7	0.2		
Prob of Phs Call (p_c)	0.86	1.00	1.00	1.00	1.00	0.91		
Prob of Max Out (p_x)	1.00	0.01	0.00	0.00	0.05	0.06		

Left-Turn Movement Data												
Assigned Mvmt		1		3	7		5					
Mvmt Sat Flow, veh/h		1781		1781	1781		1781					

Through Movement Data												
Assigned Mvmt			2	8	4	6						
Mvmt Sat Flow, veh/h			1870	1870	1870	1870						

Right-Turn Movement Data												
Assigned Mvmt			12	18	14	16						
Mvmt Sat Flow, veh/h			1585	1585	1585	1585						

Left Lane Group Data												
Assigned Mvmt		1	0	3	7	0	5	0	0			

Lane Assignment	L (Pr/Pm)		L	L	L (Pr/Pm)			
Lanes in Grp	1	0	1	1	0	1	0	0
Grp Vol (v), veh/h	83	0	163	146	0	104	0	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	1781	0	1781	0	0
Q Serve Time (g_s), s	3.3	0.0	7.2	6.1	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	3.3	0.0	7.2	6.1	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1058	0	1781	1781	0	996	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	10.3	0.0	0.0	0.0	0.0	6.3	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	5.7	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	5.7	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	231	0	269	338	0	308	0	0
V/C Ratio (X)	0.36	0.00	0.61	0.43	0.00	0.34	0.00	0.00
Avail Cap (c_a), veh/h	258	0	670	819	0	368	0	0
Upstream Filter (I)	1.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	28.4	0.0	33.2	30.0	0.0	33.1	0.0	0.0
Incr Delay (d2), s/veh	1.3	0.0	0.8	0.3	0.0	0.9	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	29.8	0.0	34.0	30.3	0.0	34.0	0.0	0.0
1st-Term Q (Q1), veh/ln	1.3	0.0	2.9	2.5	0.0	1.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	1.4	0.0	3.0	2.5	0.0	1.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.15	0.00	0.50	0.40	0.00	0.19	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	6	0	0	0
Lane Assignment		T	T	T	T			
Lanes in Grp	0	1	1	1	1	0	0	0
Grp Vol (v), veh/h	0	304	230	299	353	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1870	1870	1870	1870	0	0	0
Q Serve Time (g_s), s	0.0	12.1	10.0	12.9	14.4	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	12.1	10.0	12.9	14.4	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	482	283	355	492	0	0	0
V/C Ratio (X)	0.00	0.63	0.81	0.84	0.72	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1047	703	860	1003	0	0	0
Upstream Filter (I)	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	27.6	34.4	32.7	28.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	4.9	2.2	2.1	6.9	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.5	36.6	34.8	35.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.8	4.2	5.6	6.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.7	0.2	0.2	0.9	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	5.5	4.4	5.8	7.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.11	0.04	0.34	0.29	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	16	0	0	0
Lane Assignment		R	R	R	R			
Lanes in Grp	0	1	1	1	1	0	0	0
Grp Vol (v), veh/h	0	18	100	115	35	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1585	1585	1585	1585	0	0	0
Q Serve Time (g_s), s	0.0	0.7	4.8	5.3	1.4	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.7	4.8	5.3	1.4	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	408	239	301	417	0	0	0
V/C Ratio (X)	0.00	0.04	0.42	0.38	0.08	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	887	596	729	850	0	0	0
Upstream Filter (I)	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	23.4	32.2	29.6	23.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.4	0.3	0.3	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	23.5	32.6	29.9	23.6	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.2	1.7	1.9	0.5	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.3	1.8	1.9	0.5	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.04	0.19	0.32	0.02	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	33.3
HCM 7th LOS	C

Notes

* HCM 7th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	326	29	28	343	13	63	5	26	8	9	35
Future Volume (veh/h)	35	326	29	28	343	13	63	5	26	8	9	35
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	40	370	9	32	390	5	72	6	11	9	10	14
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	410	744	630	483	632	8	353	34	33	148	134	130
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.41	0.41	0.04	0.35	0.35	0.19	0.19	0.19	0.19	0.19	0.19
Unsig. Movement Delay												
Ln Grp Delay, s/veh	13.8	10.6	7.6	7.3	0.0	13.6	15.5	0.0	0.0	14.6	0.0	0.0
Ln Grp LOS	B	B	A	A		B	B			B		
Approach Vol, veh/h		419			427			89			33	
Approach Delay, s/veh		10.8			13.2			15.5			14.6	
Approach LOS		B			B			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	6	5		8
Case No	1.2	3.0		8.0	4.0	1.3		8.0
Phs Duration (G+Y+Rc), s	5.6	23.6		13.8	21.2	8.0		13.8
Change Period (Y+Rc), s	4.0	6.1		5.7	* 6.1	6.1		5.7
Max Green (Gmax), s	5.0	37.7		27.3	* 38	5.0		27.3
Max Allow Headway (MAH), s	1.7	7.0		7.6	7.0	1.7		7.5
Max Q Clear (g_c+I1), s	2.4	8.5		2.7	9.7	2.0		4.2
Green Ext Time (g_e), s	0.0	4.4		0.2	4.7	0.0		0.8
Prob of Phs Call (p_c)	0.32	1.00		0.77	1.00	0.38		0.77
Prob of Max Out (p_x)	0.09	0.01		0.00	0.02	0.03		0.00

Left-Turn Movement Data								
Assigned Mvmt	1			7		5		3
Mvmt Sat Flow, veh/h	1739			222		1739		1070

Through Movement Data								
Assigned Mvmt		2		4	6			8
Mvmt Sat Flow, veh/h		1826		711	1799			180

Right-Turn Movement Data								
Assigned Mvmt		12		14	16			18
Mvmt Sat Flow, veh/h		1545		688	23			176

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	0	5	0	3

Lane Assignment	L (Pr/Pm)			L+T+R	L (Pr/Pm)			L+T+R
Lanes in Grp	1	0	0	1	0	1	0	1
Grp Vol (v), veh/h	32	0	0	33	0	40	0	89
Grp Sat Flow (s), veh/h/ln	1739	0	0	1622	0	1739	0	1426
Q Serve Time (g_s), s	0.4	0.0	0.0	0.0	0.0	0.0	0.0	1.5
Cycle Q Clear Time (g_c), s	0.4	0.0	0.0	0.7	0.0	0.0	0.0	2.2
Perm LT Sat Flow (s_l), veh/h/ln	979	0	0	1412	0	965	0	1402
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	1799	0	0	0	1748
Perm LT Eff Green (g_p), s	17.5	0.0	0.0	8.1	0.0	15.1	0.0	8.1
Perm LT Serve Time (g_u), s	11.1	0.0	0.0	5.9	0.0	7.4	0.0	7.4
Perm LT Q Serve Time (g_ps), s	0.2	0.0	0.0	0.0	0.0	1.5	0.0	1.5
Time to First Blk (g_f), s	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.5
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.5
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.27	0.00	1.00	0.00	0.81
Lane Grp Cap (c), veh/h	483	0	0	412	0	410	0	420
V/C Ratio (X)	0.07	0.00	0.00	0.08	0.00	0.10	0.00	0.21
Avail Cap (c_a), veh/h	621	0	0	1106	0	535	0	1041
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	7.3	0.0	0.0	14.5	0.0	13.8	0.0	15.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	7.3	0.0	0.0	14.6	0.0	13.8	0.0	15.5
1st-Term Q (Q1), veh/ln	0.1	0.0	0.0	0.2	0.0	0.3	0.0	0.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.1	0.0	0.0	0.3	0.0	0.3	0.0	0.7
%ile Storage Ratio (RQ%)	0.04	0.00	0.00	0.02	0.00	0.07	0.00	0.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	6	0	0	8
Lane Assignment		T						
Lanes in Grp	0	1	0	0	0	0	0	0
Grp Vol (v), veh/h	0	370	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1826	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	6.5	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	6.5	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	744	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1599	0	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	9.5	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.6	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0

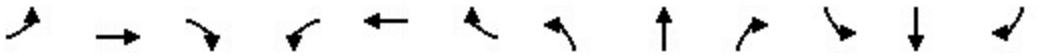
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	16	0	0	18
Lane Assignment		R			T+R			
Lanes in Grp	0	1	0	0	1	0	0	0
Grp Vol (v), veh/h	0	9	0	0	395	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1545	0	0	1822	0	0	0
Q Serve Time (g_s), s	0.0	0.1	0.0	0.0	7.7	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.1	0.0	0.0	7.7	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.42	0.01	0.00	0.00	0.12
Lane Grp Cap (c), veh/h	0	630	0	0	640	0	0	0
V/C Ratio (X)	0.00	0.01	0.00	0.00	0.62	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1353	0	0	1595	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	7.6	0.0	0.0	11.6	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	2.1	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	7.6	0.0	0.0	13.6	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	2.2	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	12.4
HCM 7th LOS	B

Notes

* HCM 7th Edition computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	343	13	6	356	11	15	14	6	30	12	63
Future Volume (veh/h)	20	343	13	6	356	11	15	14	6	30	12	63
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	0.99		0.99	0.99		0.99	0.97		0.97	0.97		0.97
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	24	404	4	7	419	4	18	16	2	35	14	25
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	431	788	8	442	788	8	298	228	23	279	119	135
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.27	0.27	0.27	0.27	0.27	0.27
Unsig. Movement Delay												
Ln Grp Delay, s/veh	11.1	0.0	9.9	10.5	0.0	10.2	11.1	0.0	0.0	11.6	0.0	0.0
Ln Grp LOS	B		A	B		B	B			B		
Approach Vol, veh/h		432			430			36			74	
Approach Delay, s/veh		10.0			10.2			11.1			11.6	
Approach LOS		B			B			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		8.0		6.0		8.0
Phs Duration (G+Y+Rc), s		23.4		16.2		23.4		16.2
Change Period (Y+Rc), s		6.1		5.7		6.1		5.7
Max Green (Gmax), s		36.7		28.3		36.7		28.3
Max Allow Headway (MAH), s		8.0		8.6		8.0		8.5
Max Q Clear (g_c+I1), s		9.5		3.3		8.7		2.6
Green Ext Time (g_e), s		6.5		0.8		6.6		0.3
Prob of Phs Call (p_c)		1.00		0.76		1.00		0.76
Prob of Max Out (p_x)		0.09		0.00		0.08		0.00

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		935		546		948		611

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1805		449		1805		859

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		18		508		17		86

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3

Lane Assignment		L		L+T+R		L		L+T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	24	0	74	0	7	0	36
Grp Sat Flow (s), veh/h/ln	0	935	0	1503	0	948	0	1557
Q Serve Time (g_s), s	0.0	0.8	0.0	0.0	0.0	0.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	7.5	0.0	1.3	0.0	6.6	0.0	0.6
Perm LT Sat Flow (s_l), veh/h/ln	0	935	0	1371	0	948	0	1348
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	1755	0	0	0	1753
Perm LT Eff Green (g_p), s	0.0	17.3	0.0	10.5	0.0	17.3	0.0	10.5
Perm LT Serve Time (g_u), s	0.0	10.5	0.0	9.9	0.0	10.8	0.0	9.2
Perm LT Q Serve Time (g_ps), s	0.0	0.8	0.0	0.0	0.0	0.2	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	2.2	0.0	0.0	0.0	1.9
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.6
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.47	0.00	1.00	0.00	0.50
Lane Grp Cap (c), veh/h	0	431	0	532	0	442	0	549
V/C Ratio (X)	0.00	0.06	0.00	0.14	0.00	0.02	0.00	0.07
Avail Cap (c_a), veh/h	0	891	0	1187	0	908	0	1225
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	10.9	0.0	11.2	0.0	10.5	0.0	10.9
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.4	0.0	0.1	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.1	0.0	11.6	0.0	10.5	0.0	11.1
1st-Term Q (Q1), veh/ln	0.0	0.1	0.0	0.4	0.0	0.0	0.0	0.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	0.5	0.0	0.0	0.0	0.2
%ile Storage Ratio (RQ%)	0.00	0.05	0.00	0.00	0.00	0.01	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment								
Lanes in Grp	0	0	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R				T+R		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	408	0	0	0	423	0	0
Grp Sat Flow (s), veh/h/ln	0	1822	0	0	0	1823	0	0
Q Serve Time (g_s), s	0.0	6.4	0.0	0.0	0.0	6.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	6.4	0.0	0.0	0.0	6.7	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.01	0.00	0.34	0.00	0.01	0.00	0.06
Lane Grp Cap (c), veh/h	0	796	0	0	0	796	0	0
V/C Ratio (X)	0.00	0.51	0.00	0.00	0.00	0.53	0.00	0.00
Avail Cap (c_a), veh/h	0	1691	0	0	0	1691	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	8.1	0.0	0.0	0.0	8.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.9	0.0	0.0	0.0	2.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.9	0.0	0.0	0.0	10.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.5	0.0	0.0	0.0	1.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.9	0.0	0.0	0.0	2.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.00	0.00	0.04	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	10.2
HCM 7th LOS	B

Intersection	
Intersection Delay, s/veh	10.1
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	477	573	285	444
Demand Flow Rate, veh/h	487	584	290	454
Vehicles Circulating, veh/h	328	322	686	389
Vehicles Exiting, veh/h	515	588	129	517
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	9.8	11.8	7.4	10.1
Approach LOS	A	B	A	B

Lane	Left	Left	Left	Bypass	Left
Designated Moves	LTR	LTR	LT	R	LTR
Assumed Moves	LTR	LTR	LT		LTR
RT Channelized				Free	
Lane Util	1.000	1.000	1.000		1.000
Follow-Up Headway, s	2.609	2.609	2.609		2.609
Critical Headway, s	4.976	4.976	4.976		4.976
A (Intercept)	1380	1380	1380		1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3		1.02e-3
Entry Flow, veh/h	487	584	224	66	454
Cap Entry Lane, veh/h	988	994	685	1938	928
Entry HV Adj Factor	0.979	0.981	0.981	0.980	0.979
Flow Entry, veh/h	477	573	220	65	444
Cap Entry, veh/h	967	975	672	1900	908
V/C Ratio	0.493	0.588	0.327	0.034	0.489
Control Delay, s/veh	9.8	11.8	9.6	0.0	10.1
LOS	A	B	A	A	B
95th %tile Queue, veh	3	4	1	0	3

Intersection	
Int Delay, s/veh	6.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	848	25	27	783	76	81
Future Vol, veh/h	848	25	27	783	76	81
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	250	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	922	27	29	851	83	88

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	949	0	1406	461
Stage 1	-	-	-	-	922	-
Stage 2	-	-	-	-	484	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	719	-	130	547
Stage 1	-	-	-	-	348	-
Stage 2	-	-	-	-	585	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	719	-	125	547
Mov Cap-2 Maneuver	-	-	-	-	125	-
Stage 1	-	-	-	-	348	-
Stage 2	-	-	-	-	561	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.34	71.96
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	207	-	-	719	-
HCM Lane V/C Ratio	0.823	-	-	0.041	-
HCM Control Delay (s/veh)	72	-	-	10.2	-
HCM Lane LOS	F	-	-	B	-
HCM 95th %tile Q(veh)	6	-	-	0.1	-

Intersection	
Intersection Delay, s/veh	9.5
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	2	2	2	1
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	853	628	716	69
Demand Flow Rate, veh/h	870	641	730	70
Vehicles Circulating, veh/h	212	507	580	1036
Vehicles Exiting, veh/h	894	803	502	112
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	8.0	8.3	12.7	7.6
Approach LOS	A	A	B	A

Lane	Left	Right	Left	Right	Left	Right	Left
Designated Moves	LT	R	LT	TR	LT	R	LTR
Assumed Moves	LT	R	LT	TR	LT	R	LTR
RT Channelized							
Lane Util	0.656	0.344	0.470	0.530	0.681	0.319	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1350	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	571	299	301	340	497	233	70
Cap Entry Lane, veh/h	1111	1186	847	923	792	867	589
Entry HV Adj Factor	0.981	0.980	0.981	0.979	0.981	0.979	0.989
Flow Entry, veh/h	560	293	295	333	488	228	69
Cap Entry, veh/h	1089	1162	831	904	777	849	582
V/C Ratio	0.514	0.252	0.355	0.368	0.628	0.269	0.119
Control Delay, s/veh	9.3	5.4	8.5	8.1	15.3	7.1	7.6
LOS	A	A	A	A	C	A	A
95th %tile Queue, veh	3	1	2	2	4	1	0

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	1	564	1	1	337	0	29	2	20	3	2	5
Future Vol, veh/h	1	564	1	1	337	0	29	2	20	3	2	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	613	1	1	366	0	32	2	22	3	2	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	366	0	0	614	0	0	985	984	614	985	985	366
Stage 1	-	-	-	-	-	-	616	616	-	368	368	-
Stage 2	-	-	-	-	-	-	370	368	-	616	616	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1192	-	-	965	-	-	227	248	492	227	248	679
Stage 1	-	-	-	-	-	-	478	482	-	651	621	-
Stage 2	-	-	-	-	-	-	650	621	-	478	482	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1192	-	-	965	-	-	223	248	492	215	247	679
Mov Cap-2 Maneuver	-	-	-	-	-	-	223	248	-	215	247	-
Stage 1	-	-	-	-	-	-	477	481	-	650	620	-
Stage 2	-	-	-	-	-	-	642	620	-	454	481	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.01	0.03	20.66	15.94
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	285	3	-	-	5	-	-	340
HCM Lane V/C Ratio	0.195	0.001	-	-	0.001	-	-	0.032
HCM Control Delay (s/veh)	20.7	8	0	-	8.7	0	-	15.9
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.7	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	15.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	14	444	59	99	312	1	29	48	165	9	20	60
Future Vol, veh/h	14	444	59	99	312	1	29	48	165	9	20	60
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	6	6	6	6	6	6	6	6	6	6	6	6
Mvmt Flow	15	488	65	109	343	1	32	53	181	10	22	66

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	344	0	0	553	0	0	1123	1113	520	1106	1145	343
Stage 1	-	-	-	-	-	-	551	551	-	561	561	-
Stage 2	-	-	-	-	-	-	571	562	-	545	584	-
Critical Hdwy	4.16	-	-	4.16	-	-	7.16	6.56	6.26	7.16	6.56	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-	6.16	5.56	-	6.16	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.16	5.56	-	6.16	5.56	-
Follow-up Hdwy	2.254	-	-	2.254	-	-	3.554	4.054	3.354	3.554	4.054	3.354
Pot Cap-1 Maneuver	1193	-	-	998	-	-	180	205	548	184	196	690
Stage 1	-	-	-	-	-	-	512	509	-	505	504	-
Stage 2	-	-	-	-	-	-	499	503	-	515	492	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1193	-	-	998	-	-	122	174	548	77	167	690
Mov Cap-2 Maneuver	-	-	-	-	-	-	122	174	-	77	167	-
Stage 1	-	-	-	-	-	-	502	499	-	437	436	-
Stage 2	-	-	-	-	-	-	370	435	-	303	483	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.22	2.17	67.12	25.23
HCM LOS			F	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	297	48	-	-	432	-	-	274
HCM Lane V/C Ratio	0.895	0.013	-	-	0.109	-	-	0.357
HCM Control Delay (s/veh)	67.1	8.1	0	-	9.1	0	-	25.2
HCM Lane LOS	F	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	8.2	0	-	-	0.4	-	-	1.6

Intersection	
Intersection Delay, s/veh	13.4
Intersection LOS	B

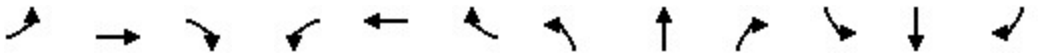
Approach	EB	WB	NB	SB
Entry Lanes	2	2	0	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	1046	1269	0	641
Demand Flow Rate, veh/h	1066	1294	0	653
Vehicles Circulating, veh/h	782	0	1059	1294
Vehicles Exiting, veh/h	1165	1059	357	0
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.1	7.3	0.0	35.7
Approach LOS	A	A	-	E

Lane	Left	Right	Bypass	Left	Right	Left	Right
Designated Moves	LT	TR	R	LT	TR	L	LTR
Assumed Moves	LT	TR		LT	TR	L	LTR
RT Channelized			Free				
Lane Util	0.470	0.530		0.470	0.530	0.530	0.470
Follow-Up Headway, s	2.667	2.535		2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328		4.645	4.328	4.645	4.328
A (Intercept)	1350	1420		1350	1420	1350	1420
B (Slope)	9.199e-4	8.501e-4		9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	298	336	432	608	686	346	307
Cap Entry Lane, veh/h	657	730	1938	1350	1420	411	473
Entry HV Adj Factor	0.980	0.980	0.980	0.981	0.980	0.982	0.981
Flow Entry, veh/h	292	329	424	596	672	340	301
Cap Entry, veh/h	645	716	1900	1324	1392	403	464
V/C Ratio	0.453	0.460	0.223	0.450	0.483	0.843	0.649
Control Delay, s/veh	12.4	11.5	0.0	7.2	7.4	45.9	24.3
LOS	B	B	A	A	A	E	C
95th %tile Queue, veh	2	2	1	2	3	8	5

Intersection	
Intersection Delay, s/veh	9.8
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	2	3	2	0
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	1002	0	579	0
Demand Flow Rate, veh/h	1022	0	590	0
Vehicles Circulating, veh/h	0	444	1022	1179
Vehicles Exiting, veh/h	1179	1168	0	841
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.0	0.0	16.2	0.0
Approach LOS	A	-	C	-

Lane	Left	Right	Left	Right
Designated Moves	LT	TR	LT	R
Assumed Moves	LT	TR	LT	R
RT Channelized				
Lane Util	0.470	0.530	0.481	0.519
Follow-Up Headway, s	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328
A (Intercept)	1350	1420	1350	1420
B (Slope)	9.199e-4	4.501e-4	9.199e-4	4.501e-4
Entry Flow, veh/h	480	542	284	306
Cap Entry Lane, veh/h	1350	1420	527	596
Entry HV Adj Factor	0.981	0.980	0.982	0.980
Flow Entry, veh/h	471	531	279	300
Cap Entry, veh/h	1324	1392	518	584
V/C Ratio	0.356	0.382	0.539	0.514
Control Delay, s/veh	6.0	6.1	17.5	15.1
LOS	A	A	C	C
95th %tile Queue, veh	2	2	3	3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	204	66	12	8	98	0	10	68	24	8	33	352
Future Volume (veh/h)	204	66	12	8	98	0	10	68	24	8	33	352
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	222	72	13	9	107	0	11	74	26	9	36	383
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	1169	802	358	608	802	358	673	1273	568	779	1273	568
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.00	0.36	0.36	0.36	0.36	0.36	0.36
Unsig. Movement Delay												
Ln Grp Delay, s/veh	7.6	6.7	6.6	6.8	6.8	0.0	4.6	4.6	4.6	4.7	4.5	7.3
Ln Grp LOS	A	A	A	A	A		A	A	A	A	A	A
Approach Vol, veh/h		307			116			111			428	
Approach Delay, s/veh		7.4			6.8			4.6			7.0	
Approach LOS		A			A			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		5.0		5.0		5.0
Phs Duration (G+Y+Rc), s		12.3		9.4		12.3		9.4
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green (Gmax), s		18.0		18.0		18.0		18.0
Max Allow Headway (MAH), s		5.0		4.3		4.2		5.0
Max Q Clear (g_c+I1), s		2.3		4.2		6.4		2.5
Green Ext Time (g_e), s		0.4		1.1		1.3		0.5
Prob of Phs Call (p_c)		1.00		0.92		1.00		0.92
Prob of Max Out (p_x)		0.00		0.00		0.04		0.00

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		968		2496		1295		1313

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		3554		3554		3554

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1585		1585		1585

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3

Lane Assignment		L		L		L		L
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	11	0	222	0	9	0	9
Grp Sat Flow (s), veh/h/ln	0	968	0	1248	0	1295	0	1313
Q Serve Time (g_s), s	0.0	0.2	0.0	1.7	0.0	0.1	0.0	0.1
Cycle Q Clear Time (g_c), s	0.0	0.3	0.0	2.2	0.0	0.4	0.0	0.5
Perm LT Sat Flow (s_l), veh/h/ln	0	968	0	1248	0	1295	0	1313
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	7.8	0.0	4.9	0.0	7.8	0.0	4.9
Perm LT Serve Time (g_u), s	0.0	7.6	0.0	4.4	0.0	7.5	0.0	4.5
Perm LT Q Serve Time (g_ps), s	0.0	0.2	0.0	1.7	0.0	0.1	0.0	0.1
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	673	0	1169	0	779	0	608
V/C Ratio (X)	0.00	0.02	0.00	0.19	0.00	0.01	0.00	0.01
Avail Cap (c_a), veh/h	0	1131	0	2682	0	1392	0	1404
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	4.6	0.0	7.6	0.0	4.7	0.0	6.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	4.6	0.0	7.6	0.0	4.7	0.0	6.8
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	2
Grp Vol (v), veh/h	0	74	0	72	0	36	0	107
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	0.3	0.0	0.3	0.0	0.1	0.0	0.5
Cycle Q Clear Time (g_c), s	0.0	0.3	0.0	0.3	0.0	0.1	0.0	0.5
Lane Grp Cap (c), veh/h	0	1273	0	802	0	1273	0	802
V/C Ratio (X)	0.00	0.06	0.00	0.09	0.00	0.03	0.00	0.13
Avail Cap (c_a), veh/h	0	2956	0	2956	0	2956	0	2956
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	4.6	0.0	6.6	0.0	4.5	0.0	6.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	4.6	0.0	6.7	0.0	4.5	0.0	6.8
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	26	0	13	0	383	0	0
Grp Sat Flow (s), veh/h/ln	0	1585	0	1585	0	1585	0	1585
Q Serve Time (g_s), s	0.0	0.2	0.0	0.1	0.0	4.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.2	0.0	0.1	0.0	4.4	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	568	0	358	0	568	0	358
V/C Ratio (X)	0.00	0.05	0.00	0.04	0.00	0.67	0.00	0.00
Avail Cap (c_a), veh/h	0	1319	0	1319	0	1319	0	1319
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	4.5	0.0	6.5	0.0	5.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	4.6	0.0	6.6	0.0	7.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.00	0.00	0.10	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	6.8
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	55	0	4	12	0	42	7	369	14	26	430	18
Future Vol, veh/h	55	0	4	12	0	42	7	369	14	26	430	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	100	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	60	0	4	13	0	46	8	401	15	28	467	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	940	955	467	948	967	409	487	0	0	416	0	0
Stage 1	524	524	-	424	424	-	-	-	-	-	-	-
Stage 2	416	432	-	524	543	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	244	258	596	241	254	643	1076	-	-	1143	-	-
Stage 1	537	530	-	608	587	-	-	-	-	-	-	-
Stage 2	614	583	-	537	519	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	219	250	596	231	246	643	1076	-	-	1143	-	-
Mov Cap-2 Maneuver	219	250	-	231	246	-	-	-	-	-	-	-
Stage 1	523	517	-	604	583	-	-	-	-	-	-	-
Stage 2	566	578	-	519	507	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	26.73	13.95	0.15	0.45
HCM LOS	D	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1076	-	-	229	461	1143	-	-
HCM Lane V/C Ratio	0.007	-	-	0.28	0.127	0.025	-	-
HCM Control Delay (s/veh)	8.4	-	-	26.7	14	8.2	-	-
HCM Lane LOS	A	-	-	D	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1.1	0.4	0.1	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	0	8	2	0	15	3	336	5	6	425	14
Future Vol, veh/h	37	0	8	2	0	15	3	336	5	6	425	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	100	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	40	0	9	2	0	16	3	365	5	7	462	15

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	847	852	462	849	865	368	477	0	0	371	0	0
Stage 1	475	475	-	374	374	-	-	-	-	-	-	-
Stage 2	372	377	-	475	490	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	282	297	600	281	292	677	1085	-	-	1188	-	-
Stage 1	570	557	-	647	617	-	-	-	-	-	-	-
Stage 2	649	616	-	570	549	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	273	294	600	274	289	677	1085	-	-	1188	-	-
Mov Cap-2 Maneuver	273	294	-	274	289	-	-	-	-	-	-	-
Stage 1	567	554	-	645	615	-	-	-	-	-	-	-
Stage 2	631	614	-	559	546	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	19.21	11.44	0.07	0.11
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1085	-	-	302	578	1188	-	-
HCM Lane V/C Ratio	0.003	-	-	0.162	0.032	0.005	-	-
HCM Control Delay (s/veh)	8.3	-	-	19.2	11.4	8	-	-
HCM Lane LOS	A	-	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.6	0.1	0	-	-

Intersection	
Int Delay, s/veh	45.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	75	11	33	132	10	161	25	96	87	293	91	53
Future Vol, veh/h	75	11	33	132	10	161	25	96	87	293	91	53
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	200	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	82	12	36	143	11	175	27	104	95	318	99	58

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	929	1018	128	948	999	152	157	0	0	199	0	0
Stage 1	765	765	-	206	206	-	-	-	-	-	-	-
Stage 2	164	253	-	742	793	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	248	237	922	241	243	895	1423	-	-	1373	-	-
Stage 1	396	412	-	796	731	-	-	-	-	-	-	-
Stage 2	838	698	-	408	400	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	144	179	922	165	183	895	1423	-	-	1373	-	-
Mov Cap-2 Maneuver	144	179	-	165	183	-	-	-	-	-	-	-
Stage 1	304	317	-	781	717	-	-	-	-	-	-	-
Stage 2	651	684	-	290	307	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	55.59	128.16	0.91	5.64
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1423	-	-	192	293	1373	-	-
HCM Lane V/C Ratio	0.019	-	-	0.674	1.122	0.232	-	-
HCM Control Delay (s/veh)	7.6	-	-	55.6	128.2	8.4	-	-
HCM Lane LOS	A	-	-	F	F	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	4.1	13.6	0.9	-	-

Intersection	
Intersection Delay, s/veh	14.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	80	3	33	0	3	3	75	138	0	3	60	66
Future Vol, veh/h	80	3	33	0	3	3	75	138	0	3	60	66
Peak Hour Factor	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	145	5	60	0	5	5	136	251	0	5	109	120
Number of Lanes	0	1	1	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	2
HCM Control Delay, s/veh	11.3	9.7	17.3	11.7
HCM LOS	B	A	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	35%	0%	96%	0%	0%	2%
Vol Thru, %	65%	100%	4%	0%	50%	47%
Vol Right, %	0%	0%	0%	100%	50%	51%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	213	0	83	33	6	129
LT Vol	75	0	80	0	0	3
Through Vol	138	0	3	0	3	60
RT Vol	0	0	0	33	3	66
Lane Flow Rate	387	0	151	60	11	235
Geometry Grp	5	5	5	5	4b	4b
Degree of Util (X)	0.618	0	0.285	0.093	0.02	0.361
Departure Headway (Hd)	5.741	5.563	6.788	5.587	6.485	5.542
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	631	0	530	641	551	650
Service Time	3.441	3.263	4.525	3.323	4.536	3.574
HCM Lane V/C Ratio	0.613	0	0.285	0.094	0.02	0.362
HCM Control Delay, s/veh	17.3	8.3	12.2	8.9	9.7	11.7
HCM Lane LOS	C	N	B	A	A	B
HCM 95th-tile Q	4.3	0	1.2	0.3	0.1	1.6

Intersection	
Int Delay, s/veh	3.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	82	74	1	32	117
Future Vol, veh/h	5	82	74	1	32	117
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	89	80	1	35	127

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	278	81	0	0	82	0
Stage 1	81	-	-	-	-	-
Stage 2	197	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	712	979	-	-	1516	-
Stage 1	942	-	-	-	-	-
Stage 2	836	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	694	979	-	-	1516	-
Mov Cap-2 Maneuver	694	-	-	-	-	-
Stage 1	942	-	-	-	-	-
Stage 2	816	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.18	0	1.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	956	387	-
HCM Lane V/C Ratio	-	-	0.099	0.023	-
HCM Control Delay (s/veh)	-	-	9.2	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	40	0	10	0	0	2	9	167	0	0	245	18
Future Vol, veh/h	40	0	10	0	0	2	9	167	0	0	245	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	43	0	11	0	0	2	10	182	0	0	266	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	477	477	276	467	487	182	286	0	0	182	0	0
Stage 1	276	276	-	201	201	-	-	-	-	-	-	-
Stage 2	201	201	-	266	286	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	498	487	763	506	481	861	1276	-	-	1394	-	-
Stage 1	730	682	-	801	735	-	-	-	-	-	-	-
Stage 2	801	735	-	739	675	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	493	483	763	494	477	861	1276	-	-	1394	-	-
Mov Cap-2 Maneuver	493	483	-	494	477	-	-	-	-	-	-	-
Stage 1	730	682	-	794	729	-	-	-	-	-	-	-
Stage 2	792	729	-	729	675	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	12.56	9.19	0.4	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	92	-	-	530	861	1394	-	-
HCM Lane V/C Ratio	0.008	-	-	0.102	0.003	-	-	-
HCM Control Delay (s/veh)	7.8	0	-	12.6	9.2	0	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0	0	-	-

Intersection	
Int Delay, s/veh	22.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	18	12	1	1530	2573	4
Future Vol, veh/h	18	12	1	1530	2573	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	700	-	-	700
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	13	1	1663	2797	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3630	1398	2801	0	-	0
Stage 1	2797	-	-	-	-	-
Stage 2	834	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 4	130	136	-	-	-
Stage 1	32	-	-	-	-	-
Stage 2	387	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 4	130	136	-	-	-
Mov Cap-2 Maneuver	~ 4	-	-	-	-	-
Stage 1	32	-	-	-	-	-
Stage 2	387	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	$ 3100.56	0.02	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	136	-	6	-	-
HCM Lane V/C Ratio	0.008	-	5.325	-	-
HCM Control Delay (s/veh)	31.7	-	$ 3100.6	-	-
HCM Lane LOS	D	-	F	-	-
HCM 95th %tile Q(veh)	0	-	5.5	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	252	32	863	71	10	2634
Future Volume (veh/h)	252	32	863	71	10	2634
Number	3	18	2	12	1	6
Initial Q, veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	274	35	938	77	11	2863
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	274	244	2793	1246	442	2793
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.15	0.15	0.79	0.79	0.79	0.79
Unsig. Movement Delay						
Ln Grp Delay, s/veh	117.4	55.2	4.7	3.6	6.5	39.8
Ln Grp LOS	F	E	A	A	A	F
Approach Vol, veh/h	309		1015			2874
Approach Delay, s/veh	110.4		4.7			39.7
Approach LOS	F		A			D

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8			6		
Case No		7.0	9.0			6.0		
Phs Duration (G+Y+Rc), s		122.4	27.6			122.4		
Change Period (Y+Rc), s		4.5	4.5			4.5		
Max Green (Gmax), s		117.9	23.1			117.9		
Max Allow Headway (MAH), s		4.7	3.8			4.7		
Max Q Clear (g_c+I1), s		13.5	25.1			119.9		
Green Ext Time (g_e), s		7.2	0.0			0.0		
Prob of Phs Call (p_c)		1.00	1.00			1.00		
Prob of Max Out (p_x)		0.00	1.00			1.00		
Left-Turn Movement Data								
Assigned Mvmt		5	3			1		
Mvmt Sat Flow, veh/h		0	1781			555		
Through Movement Data								
Assigned Mvmt		2	8			6		
Mvmt Sat Flow, veh/h		3647	0			3647		
Right-Turn Movement Data								
Assigned Mvmt		12	18			16		
Mvmt Sat Flow, veh/h		1585	1585			0		
Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	0	0

Lane Assignment			L			L		
Lanes in Grp	0	0	1	0	0	1	0	0
Grp Vol (v), veh/h	0	0	274	0	0	11	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1781	0	0	555	0	0
Q Serve Time (g_s), s	0.0	0.0	23.1	0.0	0.0	0.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	23.1	0.0	0.0	12.4	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1781	0	0	555	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	117.9	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	106.4	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0
Time to First Blk (g_f), s	0.0	117.9	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	274	0	0	442	0	0
V/C Ratio (X)	0.00	0.00	1.00	0.00	0.00	0.02	0.00	0.00
Avail Cap (c_a), veh/h	0	0	274	0	0	442	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	63.4	0.0	0.0	6.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	54.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	117.4	0.0	0.0	6.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	10.4	0.0	0.0	0.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	14.5	0.0	0.0	0.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.72	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	938	0	0	0	2863	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	11.5	0.0	0.0	0.0	117.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	11.5	0.0	0.0	0.0	117.9	0.0	0.0
Lane Grp Cap (c), veh/h	0	2793	0	0	0	2793	0	0
V/C Ratio (X)	0.00	0.34	0.00	0.00	0.00	1.02	0.00	0.00
Avail Cap (c_a), veh/h	0	2793	0	0	0	2793	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	4.7	0.0	0.0	0.0	16.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.0	23.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	4.7	0.0	0.0	0.0	39.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.1	0.0	0.0	0.0	32.1	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	9.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	3.2	0.0	0.0	0.0	41.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.00	0.00	1.17	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	17.5	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	77	35	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1585	1585	0	0	0	0	0
Q Serve Time (g_s), s	0.0	1.6	2.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	1.6	2.9	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	1246	244	0	0	0	0	0
V/C Ratio (X)	0.00	0.06	0.14	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1246	244	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	3.6	54.9	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	3.6	55.2	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.4	1.2	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.4	1.2	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.02	0.20	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	36.4
HCM 7th LOS	D

Intersection	
Intersection Delay, s/veh	10.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	86	18	8	3	44	15	3	94	4	16	128	213
Future Vol, veh/h	86	18	8	3	44	15	3	94	4	16	128	213
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	93	20	9	3	48	16	3	102	4	17	139	232
Number of Lanes	1	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	2
HCM Control Delay, s/veh	9.8	8.8	8.8	10.9
HCM LOS	A	A	A	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	3%	100%	0%	5%	4%
Vol Thru, %	93%	0%	69%	71%	36%
Vol Right, %	4%	0%	31%	24%	60%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	101	86	26	62	357
LT Vol	3	86	0	3	16
Through Vol	94	0	18	44	128
RT Vol	4	0	8	15	213
Lane Flow Rate	110	93	28	67	388
Geometry Grp	2	5	5	4a	2
Degree of Util (X)	0.148	0.161	0.043	0.097	0.458
Departure Headway (Hd)	4.866	6.207	5.484	5.193	4.249
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	732	574	648	683	846
Service Time	2.924	3.984	3.26	3.275	2.286
HCM Lane V/C Ratio	0.15	0.162	0.043	0.098	0.459
HCM Control Delay, s/veh	8.8	10.2	8.5	8.8	10.9
HCM Lane LOS	A	B	A	A	B
HCM 95th-tile Q	0.5	0.6	0.1	0.3	2.4

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	15	0	20	2	0	0	7	47	0	0	114	15
Future Vol, veh/h	15	0	20	2	0	0	7	47	0	0	114	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	0	22	2	0	0	8	51	0	0	124	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	198	198	132	190	207	51	140	0	0	51	0	0
Stage 1	132	132	-	66	66	-	-	-	-	-	-	-
Stage 2	66	66	-	124	140	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	760	697	917	770	690	1017	1443	-	-	1555	-	-
Stage 1	871	787	-	944	840	-	-	-	-	-	-	-
Stage 2	944	840	-	880	781	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	756	694	917	747	686	1017	1443	-	-	1555	-	-
Mov Cap-2 Maneuver	756	694	-	747	686	-	-	-	-	-	-	-
Stage 1	871	787	-	939	835	-	-	-	-	-	-	-
Stage 2	939	835	-	859	781	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.49	9.83	0.97	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	233	-	-	841	747	1555	-	-
HCM Lane V/C Ratio	0.005	-	-	0.045	0.003	-	-	-
HCM Control Delay (s/veh)	7.5	0	-	9.5	9.8	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-

Intersection	
Int Delay, s/veh	289.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	192	149	3	1389	2674	20
Future Vol, veh/h	192	149	3	1389	2674	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	Yield
Storage Length	0	-	150	-	-	600
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	209	162	3	1510	2907	22

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3668	1453	2907	0	-	0
Stage 1	2907	-	-	-	-	-
Stage 2	761	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 4	~ 120	123	-	-	-
Stage 1	~ 28	-	-	-	-	-
Stage 2	422	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 3	~ 120	123	-	-	-
Mov Cap-2 Maneuver	~ 23	-	-	-	-	-
Stage 1	~ 27	-	-	-	-	-
Stage 2	422	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 3757.12	0.08	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	123	-	41	-	-
HCM Lane V/C Ratio	0.026	-	8.934	-	-
HCM Control Delay (s/veh)	35	-	$ 3757.1	-	-
HCM Lane LOS	D	-	F	-	-
HCM 95th %tile Q(veh)	0.1	-	44.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	7.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	140	11	779	45	8	2477
Future Vol, veh/h	140	11	779	45	8	2477
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	Yield	-	None
Storage Length	0	150	-	0	160	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	152	12	847	49	9	2692

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2210	423	0	0	847	0
Stage 1	847	-	-	-	-	-
Stage 2	1364	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 37	579	-	-	786	-
Stage 1	381	-	-	-	-	-
Stage 2	203	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 37	579	-	-	786	-
Mov Cap-2 Maneuver	~ 135	-	-	-	-	-
Stage 1	381	-	-	-	-	-
Stage 2	200	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	168	0	0.03
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	135	579	786	-
HCM Lane V/C Ratio	-	-	1.128	0.021	0.011	-
HCM Control Delay (s/veh)	-	-	180.3	11.3	9.6	-
HCM Lane LOS	-	-	F	B	A	-
HCM 95th %tile Q(veh)	-	-	8.7	0.1	0	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	35	30	18	6	20	89
Future Vol, veh/h	35	30	18	6	20	89
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	33	20	7	22	97

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	116	70	118	0	-	0
Stage 1	70	-	-	-	-	-
Stage 2	46	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	880	993	1470	-	-	-
Stage 1	953	-	-	-	-	-
Stage 2	977	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	869	993	1470	-	-	-
Mov Cap-2 Maneuver	869	-	-	-	-	-
Stage 1	940	-	-	-	-	-
Stage 2	977	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.23	5.61	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1350	-	922	-	-
HCM Lane V/C Ratio	0.013	-	0.077	-	-
HCM Control Delay (s/veh)	7.5	0	9.2	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

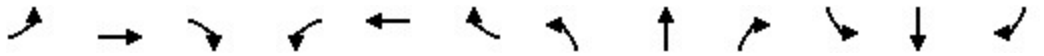
Intersection	
Int Delay, s/veh	8.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	70	2	294	101	21	0	22	156	22	15	3
Future Vol, veh/h	3	70	2	294	101	21	0	22	156	22	15	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	150	150	-	150	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	76	2	320	110	23	0	24	170	24	16	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	145	259	18	126	91	24	20	0	0	193	0	0
Stage 1	66	66	-	24	24	-	-	-	-	-	-	-
Stage 2	79	193	-	102	67	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	824	645	1061	848	799	1053	1597	-	-	1380	-	-
Stage 1	945	840	-	994	875	-	-	-	-	-	-	-
Stage 2	930	740	-	904	839	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	683	634	1061	733	785	1053	1597	-	-	1380	-	-
Mov Cap-2 Maneuver	683	634	-	733	785	-	-	-	-	-	-	-
Stage 1	928	826	-	994	875	-	-	-	-	-	-	-
Stage 2	796	740	-	805	824	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	11.35	12.59	0	4.21
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1597	-	-	683	641	733	785	1053	1380	-	-
HCM Lane V/C Ratio	-	-	-	0.005	0.122	0.436	0.14	0.022	0.017	-	-
HCM Control Delay (s/veh)	0	-	-	10.3	11.4	13.7	10.3	8.5	7.7	-	-
HCM Lane LOS	A	-	-	B	B	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.4	2.2	0.5	0.1	0.1	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	52	37	41	87	78	64	1050	33	50	704	82
Future Volume (veh/h)	59	52	37	41	87	78	64	1050	33	50	704	82
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	64	57	-15	45	95	45	70	1141	29	54	765	64
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	403	524	0	461	524	444	408	2060	919	284	2060	919
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.28	0.28	0.00	0.28	0.28	0.28	0.58	0.58	0.58	0.58	0.58	0.58
Unsig. Movement Delay												
Ln Grp Delay, s/veh	22.0	19.0	0.0	20.2	19.8	19.2	11.8	9.8	6.4	16.1	8.3	6.6
Ln Grp LOS	C	B		C	B	B	B	A	A	B	A	A
Approach Vol, veh/h		106			185			1240			883	
Approach Delay, s/veh		20.8			19.7			9.8			8.6	
Approach LOS		C			B			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		6.0		5.0		5.0
Phs Duration (G+Y+Rc), s		46.3		24.9		46.3		24.9
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green (Gmax), s		78.0		27.0		78.0		27.0
Max Allow Headway (MAH), s		7.0		6.5		7.1		6.6
Max Q Clear (g_c+I1), s		16.2		7.7		21.8		5.0
Green Ext Time (g_e), s		25.1		0.7		15.2		1.5
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.14		0.00		0.04		0.00

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		661		1249		480		1365

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		3554		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		0		1585		1585

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3

Lane Assignment		L		L		L		L
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	70	0	64	0	54	0	45
Grp Sat Flow (s), veh/h/ln	0	661	0	1249	0	480	0	1365
Q Serve Time (g_s), s	0.0	4.5	0.0	2.9	0.0	5.6	0.0	1.8
Cycle Q Clear Time (g_c), s	0.0	12.7	0.0	5.7	0.0	19.8	0.0	3.0
Perm LT Sat Flow (s_l), veh/h/ln	0	661	0	1249	0	480	0	1365
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	41.3	0.0	19.9	0.0	41.3	0.0	19.9
Perm LT Serve Time (g_u), s	0.0	33.1	0.0	17.2	0.0	27.1	0.0	18.8
Perm LT Q Serve Time (g_ps), s	0.0	4.5	0.0	2.9	0.0	5.6	0.0	1.8
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	408	0	403	0	284	0	461
V/C Ratio (X)	0.00	0.17	0.00	0.16	0.00	0.19	0.00	0.10
Avail Cap (c_a), veh/h	0	749	0	526	0	531	0	596
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.4	0.0	21.6	0.0	15.4	0.0	20.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.4	0.0	0.7	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.8	0.0	22.0	0.0	16.1	0.0	20.2
1st-Term Q (Q1), veh/ln	0.0	0.6	0.0	0.8	0.0	0.5	0.0	0.5
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.6	0.0	0.9	0.0	0.6	0.0	0.6
%ile Storage Ratio (RQ%)	0.00	0.06	0.00	0.06	0.00	0.04	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1141	0	42	0	765	0	95
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	14.2	0.0	1.2	0.0	8.2	0.0	2.7
Cycle Q Clear Time (g_c), s	0.0	14.2	0.0	1.2	0.0	8.2	0.0	2.7
Lane Grp Cap (c), veh/h	0	2060	0	524	0	2060	0	524
V/C Ratio (X)	0.00	0.55	0.00	0.08	0.00	0.37	0.00	0.18
Avail Cap (c_a), veh/h	0	3892	0	709	0	3892	0	709
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	9.3	0.0	18.9	0.0	8.0	0.0	19.5
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.1	0.0	0.2	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.8	0.0	19.0	0.0	8.3	0.0	19.8
1st-Term Q (Q1), veh/ln	0.0	4.0	0.0	0.5	0.0	2.4	0.0	1.1

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.1	0.0	0.5	0.0	2.5	0.0	1.2
%ile Storage Ratio (RQ%)	0.00	0.17	0.00	0.02	0.00	0.16	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R				R		R
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	29	0	0	0	64	0	45
Grp Sat Flow (s), veh/h/ln	0	1585	0	0	0	1585	0	1585
Q Serve Time (g_s), s	0.0	0.6	0.0	0.0	0.0	1.3	0.0	1.5
Cycle Q Clear Time (g_c), s	0.0	0.6	0.0	0.0	0.0	1.3	0.0	1.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	919	0	0	0	919	0	444
V/C Ratio (X)	0.00	0.03	0.00	0.00	0.00	0.07	0.00	0.10
Avail Cap (c_a), veh/h	0	1736	0	0	0	1736	0	601
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	6.4	0.0	0.0	0.0	6.6	0.0	19.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	6.4	0.0	0.0	0.0	6.6	0.0	19.2
1st-Term Q (Q1), veh/ln	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.5
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.6
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.00	0.00	0.06	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	10.6
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	66	71	12	45	653	21	1271	603	43	1894	206
Future Volume (veh/h)	105	66	71	12	45	653	21	1271	603	43	1894	206
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	114	72	0	13	49	0	23	1382	0	47	2059	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	231	247		213	247		132	2042		272	2094	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.13	0.13	0.00	0.13	0.13	0.00	0.02	0.57	0.00	0.04	0.59	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	38.1	34.1	0.0	35.7	33.6	0.0	41.2	13.5	0.0	10.3	33.2	0.0
Ln Grp LOS	D	C		D	C		D	B		B	C	
Approach Vol, veh/h		186			62			1405			2106	
Approach Delay, s/veh		36.6			34.0			14.0			32.7	
Approach LOS		D			C			B			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	6	5		8
Case No	1.2	3.0		5.0	3.0	1.3		5.0
Phs Duration (G+Y+Rc), s	11.4	57.7		17.4	59.0	10.1		17.4
Change Period (Y+Rc), s	8.0	8.0		6.0	8.0	8.0		6.0
Max Green (Gmax), s	5.0	51.0		32.0	51.0	5.0		32.0
Max Allow Headway (MAH), s	2.6	3.7		3.4	3.7	2.6		4.0
Max Q Clear (g_c+I1), s	2.9	25.4		11.1	51.0	2.0		5.8
Green Ext Time (g_e), s	0.0	6.4		0.4	0.0	0.0		0.1
Prob of Phs Call (p_c)	0.68	1.00		1.00	1.00	0.42		1.00
Prob of Max Out (p_x)	1.00	0.03		0.00	1.00	0.43		0.00

Left-Turn Movement Data								
Assigned Mvmt	1			7		5		3
Mvmt Sat Flow, veh/h	1781			1356		1781		1328

Through Movement Data								
Assigned Mvmt		2		4	6			8
Mvmt Sat Flow, veh/h		3554		1870	3554			1870

Right-Turn Movement Data								
Assigned Mvmt		12		14	16			18
Mvmt Sat Flow, veh/h		1585		1585	1585			1585

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	0	5	0	3

Lane Assignment	L (Pr/Pm)			L		L (Pr/Pm)		L
Lanes in Grp	1	0	0	1	0	1	0	1
Grp Vol (v), veh/h	47	0	0	114	0	23	0	13
Grp Sat Flow (s), veh/h/ln	1781	0	0	1356	0	1781	0	1328
Q Serve Time (g_s), s	0.9	0.0	0.0	7.1	0.0	0.0	0.0	0.8
Cycle Q Clear Time (g_c), s	0.9	0.0	0.0	9.1	0.0	0.0	0.0	3.8
Perm LT Sat Flow (s_l), veh/h/ln	392	0	0	1356	0	203	0	1328
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	49.7	0.0	0.0	11.4	0.0	51.0	0.0	11.4
Perm LT Serve Time (g_u), s	26.3	0.0	0.0	9.4	0.0	2.0	0.0	8.4
Perm LT Q Serve Time (g_ps), s	3.2	0.0	0.0	7.1	0.0	2.0	0.0	0.8
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	272	0	0	231	0	132	0	213
V/C Ratio (X)	0.17	0.00	0.00	0.49	0.00	0.17	0.00	0.06
Avail Cap (c_a), veh/h	305	0	0	553	0	191	0	528
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	10.2	0.0	0.0	37.5	0.0	41.0	0.0	35.6
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.6	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	10.3	0.0	0.0	38.1	0.0	41.2	0.0	35.7
1st-Term Q (Q1), veh/ln	0.3	0.0	0.0	2.3	0.0	0.4	0.0	0.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.3	0.0	0.0	2.3	0.0	0.5	0.0	0.2
%ile Storage Ratio (RQ%)	0.01	0.00	0.00	0.20	0.00	0.03	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	6	0	0	8
Lane Assignment		T		T	T			T
Lanes in Grp	0	2	0	1	2	0	0	1
Grp Vol (v), veh/h	0	1382	0	72	2059	0	0	49
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	1777	0	0	1870
Q Serve Time (g_s), s	0.0	23.4	0.0	3.0	49.0	0.0	0.0	2.0
Cycle Q Clear Time (g_c), s	0.0	23.4	0.0	3.0	49.0	0.0	0.0	2.0
Lane Grp Cap (c), veh/h	0	2042	0	247	2094	0	0	247
V/C Ratio (X)	0.00	0.68	0.00	0.29	0.98	0.00	0.00	0.20
Avail Cap (c_a), veh/h	0	2094	0	691	2094	0	0	691
Upstream Filter (I)	0.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.8	0.0	33.9	17.4	0.0	0.0	33.5
Incr Delay (d2), s/veh	0.0	0.7	0.0	0.2	15.8	0.0	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	13.5	0.0	34.1	33.2	0.0	0.0	33.6
1st-Term Q (Q1), veh/ln	0.0	7.0	0.0	1.3	14.4	0.0	0.0	0.9

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	4.6	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.2	0.0	1.4	19.0	0.0	0.0	0.9
%ile Storage Ratio (RQ%)	0.00	0.23	0.00	0.09	0.57	0.00	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	16	0	0	18
Lane Assignment		R		R	R			R
Lanes in Grp	0	1	0	1	1	0	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1585	0	1585	1585	0	0	1585
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	911	0	209	934	0	0	209
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	934	0	586	934	0	0	586
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	25.9
HCM 7th LOS	C

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	41	8	6	68	21	3
Future Vol, veh/h	41	8	6	68	21	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	45	9	7	74	23	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	53	0	136	49
Stage 1	-	-	-	-	49	-
Stage 2	-	-	-	-	87	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1552	-	858	1020
Stage 1	-	-	-	-	974	-
Stage 2	-	-	-	-	936	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1552	-	854	1020
Mov Cap-2 Maneuver	-	-	-	-	854	-
Stage 1	-	-	-	-	974	-
Stage 2	-	-	-	-	932	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.59	9.26
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	872	-	-	146	-
HCM Lane V/C Ratio	0.03	-	-	0.004	-
HCM Control Delay (s/veh)	9.3	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	18	59	3	8	2	24	2	0	2	0	0
Future Vol, veh/h	20	18	59	3	8	2	24	2	0	2	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	None	-	-	None	-	-	None
Storage Length	-	-	260	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	20	64	3	9	2	26	2	0	2	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	11	0	0	20	0	0	78	80	20	80	79	10
Stage 1	-	-	-	-	-	-	63	63	-	16	16	-
Stage 2	-	-	-	-	-	-	15	17	-	64	63	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1608	-	-	1597	-	-	911	810	1058	908	811	1072
Stage 1	-	-	-	-	-	-	948	842	-	1003	882	-
Stage 2	-	-	-	-	-	-	1005	881	-	947	842	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1608	-	-	1597	-	-	896	797	1058	890	798	1072
Mov Cap-2 Maneuver	-	-	-	-	-	-	896	797	-	890	798	-
Stage 1	-	-	-	-	-	-	934	830	-	1001	880	-
Stage 2	-	-	-	-	-	-	1003	879	-	931	830	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	1.5	1.68	9.19	9.05
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	887	947	-	-	399	-	-	890
HCM Lane V/C Ratio	0.032	0.014	-	-	0.002	-	-	0.002
HCM Control Delay (s/veh)	9.2	7.3	0	-	7.3	0	-	9.1
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Intersection	
Intersection Delay, s/veh	13.3
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	1	1	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	422	55	1547	890
Demand Flow Rate, veh/h	430	56	1579	907
Vehicles Circulating, veh/h	691	1752	280	394
Vehicles Exiting, veh/h	611	106	841	1414
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	12.8	14.8	15.7	9.3
Approach LOS	B	B	C	A

Lane	Left	Left	Left	Right	Left	Right
Designated Moves	LTR	LTR	LT	TR	LT	TR
Assumed Moves	LTR	LTR	LT	TR	LT	TR
RT Channelized						
Lane Util	1.000	1.000	0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1420	1420	1350	1420	1350	1420
B (Slope)	8.501e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	430	56	742	837	426	481
Cap Entry Lane, veh/h	789	320	1043	1119	939	1016
Entry HV Adj Factor	0.981	0.981	0.980	0.980	0.982	0.981
Flow Entry, veh/h	422	55	727	820	418	472
Cap Entry, veh/h	774	314	1022	1097	922	996
V/C Ratio	0.545	0.175	0.711	0.748	0.453	0.473
Control Delay, s/veh	12.8	14.8	15.2	16.0	9.4	9.2
LOS	B	B	C	C	A	A
95th %tile Queue, veh	3	1	6	7	2	3

Intersection	
Intersection Delay, s/veh	67.0
Intersection LOS	F

Approach	EB	WB	NB	SB
Entry Lanes	2	3	3	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	622	0	0	999
Demand Flow Rate, veh/h	640	0	0	1029
Vehicles Circulating, veh/h	138	1974	219	608
Vehicles Exiting, veh/h	608	278	136	1490
Ped Vol Crossing Leg, #/h	1	0	0	0
Ped Cap Adj	0.999	1.000	1.000	1.000
Approach Delay, s/veh	1.3	0.0	0.0	108.0
Approach LOS	A	-	-	F

Lane	Left	Right	Bypass		Left	Right	Bypass
Designated Moves	L	LTR	R		LT	TR	R
Assumed Moves	L	LTR			LT	TR	
RT Channelized			Free				Yield
Lane Util	0.530	0.470			0.471	0.529	
Follow-Up Headway, s	2.667	2.535			2.667	2.535	2.609
Critical Headway, s	4.645	4.328			4.645	4.328	4.976
A (Intercept)	1350	1420			1350	1420	1380
B (Slope)	9.199e-4	4.501e-4			9.199e-4	4.501e-4	1.02e-3
Entry Flow, veh/h	115	102	423		65	73	891
Cap Entry Lane, veh/h	1189	1263	1959		772	847	742
Entry HV Adj Factor	0.972	0.972	0.971		0.969	0.973	0.971
Flow Entry, veh/h	112	99	411		63	71	865
Cap Entry, veh/h	1155	1226	1900		748	824	721
V/C Ratio	0.097	0.081	0.216		0.084	0.086	1.200
Control Delay, s/veh	3.9	3.6	0.0		5.7	5.2	123.9
LOS	A	A	A		A	A	F
95th %tile Queue, veh	0	0	1		0	0	29

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	880	1009	18	137	612	182	11	488	228	127	397	487
Future Volume (veh/h)	880	1009	18	137	612	182	11	488	228	127	397	487
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	957	1097	0	149	665	0	12	530	0	138	432	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	872	1328		166	762		155	484		128	462	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.25	0.37	0.00	0.09	0.21	0.00	0.09	0.26	0.00	0.07	0.25	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	113.9	45.8	0.0	105.1	66.2	0.0	59.6	122.2	0.0	167.9	72.3	0.0
Ln Grp LOS	F	D		F	E		E	F		F	E	
Approach Vol, veh/h		2054			814			542			570	
Approach Delay, s/veh		77.5			73.3			120.8			95.5	
Approach LOS		E			E			F			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	4	3	5	6	7	8
Case No	2.0	3.0	3.0	2.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	21.4	60.0	41.4	19.1	44.0	37.4	17.0	43.5
Change Period (Y+Rc), s	8.2	7.0	6.3	* 6.8	8.2	7.0	6.8	* 6.8
Max Green (Gmax), s	13.2	54.9	41.9	* 5	35.8	32.3	10.2	* 37
Max Allow Headway (MAH), s	2.6	7.7	3.9	1.7	2.6	7.7	2.7	3.9
Max Q Clear (g_c+I1), s	13.8	41.7	34.1	2.9	37.8	27.7	12.2	38.7
Green Ext Time (g_e), s	0.0	9.8	1.0	0.0	0.0	2.8	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	0.38	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.83	0.17	0.21	1.00	1.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1			3	5		7	
Mvmt Sat Flow, veh/h	1781			1781	3456		1781	

Through Movement Data								
Assigned Mvmt		2	4			6		8
Mvmt Sat Flow, veh/h		3554	1870			3554		1870

Right-Turn Movement Data								
Assigned Mvmt		12	14			16		18
Mvmt Sat Flow, veh/h		1585	1585			1585		1585

Left Lane Group Data								
Assigned Mvmt	1	0	0	3	5	0	7	0

Lane Assignment	L (Prot)			L (Prot)	L (Prot)		L (Prot)	
Lanes in Grp	1	0	0	1	2	0	1	0
Grp Vol (v), veh/h	149	0	0	12	957	0	138	0
Grp Sat Flow (s), veh/h/ln	1781	0	0	1781	1728	0	1781	0
Q Serve Time (g_s), s	11.8	0.0	0.0	0.9	35.8	0.0	10.2	0.0
Cycle Q Clear Time (g_c), s	11.8	0.0	0.0	0.9	35.8	0.0	10.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	166	0	0	155	872	0	128	0
V/C Ratio (X)	0.90	0.00	0.00	0.08	1.10	0.00	1.08	0.00
Avail Cap (c_a), veh/h	166	0	0	155	872	0	128	0
Upstream Filter (I)	1.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	63.7	0.0	0.0	59.6	53.1	0.0	65.9	0.0
Incr Delay (d2), s/veh	41.4	0.0	0.0	0.1	60.8	0.0	102.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	105.1	0.0	0.0	59.6	113.9	0.0	167.9	0.0
1st-Term Q (Q1), veh/ln	5.2	0.0	0.0	0.4	14.8	0.0	4.6	0.0
2nd-Term Q (Q2), veh/ln	1.9	0.0	0.0	0.0	7.4	0.0	3.6	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	7.1	0.0	0.0	0.4	22.2	0.0	8.2	0.0
%ile Storage Ratio (RQ%)	0.18	0.00	0.00	0.03	0.56	0.00	0.31	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	21.3	0.0	2.5	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	4	0	0	6	0	8
Lane Assignment		T	T			T		T
Lanes in Grp	0	2	1	0	0	2	0	1
Grp Vol (v), veh/h	0	1097	432	0	0	665	0	530
Grp Sat Flow (s), veh/h/ln	0	1777	1870	0	0	1777	0	1870
Q Serve Time (g_s), s	0.0	39.7	32.1	0.0	0.0	25.7	0.0	36.7
Cycle Q Clear Time (g_c), s	0.0	39.7	32.1	0.0	0.0	25.7	0.0	36.7
Lane Grp Cap (c), veh/h	0	1328	462	0	0	762	0	484
V/C Ratio (X)	0.00	0.83	0.94	0.00	0.00	0.87	0.00	1.10
Avail Cap (c_a), veh/h	0	1375	552	0	0	809	0	484
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	40.3	52.3	0.0	0.0	53.9	0.0	52.6
Incr Delay (d2), s/veh	0.0	5.5	20.0	0.0	0.0	12.3	0.0	69.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	45.8	72.3	0.0	0.0	66.2	0.0	122.2
1st-Term Q (Q1), veh/ln	0.0	16.4	14.7	0.0	0.0	11.0	0.0	16.7

2nd-Term Q (Q2), veh/ln	0.0	1.0	2.6	0.0	0.0	1.3	0.0	9.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	17.4	17.2	0.0	0.0	12.3	0.0	26.1
%ile Storage Ratio (RQ%)	0.00	0.30	0.65	0.00	0.00	0.23	0.00	1.67
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.6
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3

Right Lane Group Data								
Assigned Mvmt	0	12	14	0	0	16	0	18
Lane Assignment		R	R			R		R
Lanes in Grp	0	1	1	0	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1585	1585	0	0	1585	0	1585
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	592	391	0	0	340	0	410
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	613	468	0	0	361	0	410
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	85.1
HCM 7th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	25	45	2	39	18	72	662	49	7	118	562
Future Volume (veh/h)	84	25	45	2	39	18	72	662	49	7	118	562
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		0.99	0.99		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	90	27	48	2	42	0	77	712	53	8	127	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	455	286	241	458	286		846	917	776	399	917	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.00	0.50	0.50	0.50	0.50	0.50	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	10.7	9.7	10.1	9.7	9.8	0.0	4.1	7.5	3.4	8.9	3.6	0.0
Ln Grp LOS	B	A	B	A	A		A	A	A	A	A	
Approach Vol, veh/h		165			44			842			135	
Approach Delay, s/veh		10.4			9.8			7.0			3.9	
Approach LOS		B			A			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		5.0		5.0		5.0
Phs Duration (G+Y+Rc), s		17.7		8.6		17.7		8.6
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green (Gmax), s		18.0		18.0		18.0		18.0
Max Allow Headway (MAH), s		4.6		4.1		5.2		5.1
Max Q Clear (g_c+I1), s		10.4		4.2		10.6		2.5
Green Ext Time (g_e), s		2.8		0.4		0.3		0.1
Prob of Phs Call (p_c)		1.00		0.79		1.00		0.79
Prob of Max Out (p_x)		0.60		0.00		0.26		0.00

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		1233		1328		685		1286

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1826		1826		1826		1826

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1546		1539		1547		1547

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3

Lane Assignment		L		L		L		L
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	77	0	90	0	8	0	2
Grp Sat Flow (s), veh/h/ln	0	1233	0	1328	0	685	0	1286
Q Serve Time (g_s), s	0.0	0.9	0.0	1.7	0.0	0.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	1.9	0.0	2.2	0.0	8.6	0.0	0.4
Perm LT Sat Flow (s_l), veh/h/ln	0	1233	0	1328	0	685	0	1286
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	13.2	0.0	4.1	0.0	13.2	0.0	4.1
Perm LT Serve Time (g_u), s	0.0	12.2	0.0	3.6	0.0	4.8	0.0	3.8
Perm LT Q Serve Time (g_ps), s	0.0	0.9	0.0	1.7	0.0	0.3	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	846	0	455	0	399	0	458
V/C Ratio (X)	0.00	0.09	0.00	0.20	0.00	0.02	0.00	0.00
Avail Cap (c_a), veh/h	0	1069	0	1154	0	523	0	1135
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	4.0	0.0	10.5	0.0	8.9	0.0	9.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	4.1	0.0	10.7	0.0	8.9	0.0	9.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	712	0	27	0	127	0	42
Grp Sat Flow (s), veh/h/ln	0	1826	0	1826	0	1826	0	1826
Q Serve Time (g_s), s	0.0	8.4	0.0	0.3	0.0	1.0	0.0	0.5
Cycle Q Clear Time (g_c), s	0.0	8.4	0.0	0.3	0.0	1.0	0.0	0.5
Lane Grp Cap (c), veh/h	0	917	0	286	0	917	0	286
V/C Ratio (X)	0.00	0.78	0.00	0.09	0.00	0.14	0.00	0.15
Avail Cap (c_a), veh/h	0	1247	0	1247	0	1247	0	1247
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	5.4	0.0	9.5	0.0	3.5	0.0	9.6
Incr Delay (d2), s/veh	0.0	2.2	0.0	0.1	0.0	0.1	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	7.5	0.0	9.7	0.0	3.6	0.0	9.8
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1

2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.6	0.0	0.1	0.0	0.1	0.0	0.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	53	0	48	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1546	0	1539	0	1547	0	1547
Q Serve Time (g_s), s	0.0	0.5	0.0	0.7	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.5	0.0	0.7	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	776	0	241	0	777	0	242
V/C Ratio (X)	0.00	0.07	0.00	0.20	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1056	0	1051	0	1057	0	1057
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	3.4	0.0	9.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	3.4	0.0	10.1	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	7.2
HCM 7th LOS	A

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	47	77	80	719	674	41
Future Vol, veh/h	47	77	80	719	674	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	240	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	49	81	84	757	709	43

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1656	731	753	0	-	0
Stage 1	731	-	-	-	-	-
Stage 2	925	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	107	418	848	-	-	-
Stage 1	473	-	-	-	-	-
Stage 2	383	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	88	418	848	-	-	-
Mov Cap-2 Maneuver	88	-	-	-	-	-
Stage 1	392	-	-	-	-	-
Stage 2	383	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	43.29	0.97	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	180	-	88	418	-	-
HCM Lane V/C Ratio	0.099	-	0.561	0.194	-	-
HCM Control Delay (s/veh)	9.7	0	88.6	15.7	-	-
HCM Lane LOS	A	A	F	C	-	-
HCM 95th %tile Q(veh)	0.3	-	2.5	0.7	-	-

Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	6	5	0	2	0	0	8	3	2	6	0
Future Vol, veh/h	6	6	5	0	2	0	0	8	3	2	6	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	7	5	0	2	0	0	9	3	2	7	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2	0	0	12	0	0	28	24	9	26	27	2
Stage 1	-	-	-	-	-	-	22	22	-	2	2	-
Stage 2	-	-	-	-	-	-	5	2	-	24	25	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1620	-	-	1607	-	-	982	869	1072	984	866	1082
Stage 1	-	-	-	-	-	-	996	877	-	1021	894	-
Stage 2	-	-	-	-	-	-	1017	894	-	994	874	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1620	-	-	1607	-	-	971	865	1072	968	862	1082
Mov Cap-2 Maneuver	-	-	-	-	-	-	971	865	-	968	862	-
Stage 1	-	-	-	-	-	-	992	873	-	1021	894	-
Stage 2	-	-	-	-	-	-	1009	894	-	977	871	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	2.55	0	8.99	9.1
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	913	582	-	-	1607	-	-	887
HCM Lane V/C Ratio	0.013	0.004	-	-	-	-	-	0.01
HCM Control Delay (s/veh)	9	7.2	0	-	0	-	-	9.1
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	3.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	54	129	598	99	0	98
Future Vol, veh/h	54	129	598	99	0	98
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	57	136	629	104	0	103

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	786	683	0	0	735	0
Stage 1	683	-	-	-	-	-
Stage 2	103	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	360	448	-	-	866	-
Stage 1	500	-	-	-	-	-
Stage 2	919	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	359	447	-	-	865	-
Mov Cap-2 Maneuver	359	-	-	-	-	-
Stage 1	499	-	-	-	-	-
Stage 2	919	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	16.63	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	359	447	865	-
HCM Lane V/C Ratio	-	-	0.158	0.304	-	-
HCM Control Delay (s/veh)	-	-	16.9	16.5	0	-
HCM Lane LOS	-	-	C	C	A	-
HCM 95th %tile Q(veh)	-	-	0.6	1.3	0	-

Intersection	
Intersection Delay, s/veh	9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	65	26	6	39	117	12	44	35	12	30	33
Future Vol, veh/h	12	65	26	6	39	117	12	44	35	12	30	33
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	18	98	39	9	59	177	18	67	53	18	45	50
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	9	9.2	9	8.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	13%	12%	4%	16%
Vol Thru, %	48%	63%	24%	40%
Vol Right, %	38%	25%	72%	44%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	91	103	162	75
LT Vol	12	12	6	12
Through Vol	44	65	39	30
RT Vol	35	26	117	33
Lane Flow Rate	138	156	245	114
Geometry Grp	1	1	1	1
Degree of Util (X)	0.184	0.205	0.296	0.152
Departure Headway (Hd)	4.81	4.722	4.337	4.816
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	742	755	825	740
Service Time	2.871	2.776	2.385	2.878
HCM Lane V/C Ratio	0.186	0.207	0.297	0.154
HCM Control Delay, s/veh	9	9	9.2	8.8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.7	0.8	1.2	0.5

Intersection	
Int Delay, s/veh	179.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	156	69	78	612	590	131
Future Vol, veh/h	156	69	78	612	590	131
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	6	6	6	6	6	6
Mvmt Flow	203	90	101	795	766	170

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1849	851	936	0	-	0
Stage 1	851	-	-	-	-	-
Stage 2	997	-	-	-	-	-
Critical Hdwy	6.46	6.26	4.16	-	-	-
Critical Hdwy Stg 1	5.46	-	-	-	-	-
Critical Hdwy Stg 2	5.46	-	-	-	-	-
Follow-up Hdwy	3.554	3.354	2.254	-	-	-
Pot Cap-1 Maneuver	~ 80	354	715	-	-	-
Stage 1	412	-	-	-	-	-
Stage 2	351	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 60	354	715	-	-	-
Mov Cap-2 Maneuver	~ 60	-	-	-	-	-
Stage 1	307	-	-	-	-	-
Stage 2	351	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	$1301.84	1.23	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	203	-	80	-	-
HCM Lane V/C Ratio	0.142	-	3.651	-	-
HCM Control Delay (s/veh)	10.9	-	$1301.8	-	-
HCM Lane LOS	B	A	F	-	-
HCM 95th %tile Q(veh)	0.5	-	30.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

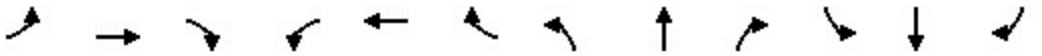
Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	410	463	15	16	3
Future Vol, veh/h	7	410	463	15	16	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	446	503	16	17	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	520	0	-	0	972	511
Stage 1	-	-	-	-	511	-
Stage 2	-	-	-	-	461	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1047	-	-	-	280	562
Stage 1	-	-	-	-	602	-
Stage 2	-	-	-	-	635	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1047	-	-	-	277	562
Mov Cap-2 Maneuver	-	-	-	-	277	-
Stage 1	-	-	-	-	596	-
Stage 2	-	-	-	-	635	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.14	0	17.82
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	30	-	-	-	301
HCM Lane V/C Ratio	0.007	-	-	-	0.069
HCM Control Delay (s/veh)	8.5	0	-	-	17.8
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	168	416	162	298	418	119	233	1850	582	177	1056	156
Future Volume (veh/h)	168	416	162	298	418	119	233	1850	582	177	1056	156
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	183	452	0	324	454	0	253	2011	0	192	1148	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	263	553		249	556		487	1534		317	1502	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.16	0.00	0.07	0.16	0.00	0.06	0.43	0.00	0.05	0.42	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	51.6	42.0	0.0	209.1	42.0	0.0	20.1	173.2	0.0	26.1	28.0	0.0
Ln Grp LOS	D	D		F	D		C	F		C	C	
Approach Vol, veh/h		635			778			2264			1340	
Approach Delay, s/veh		44.8			111.6			156.1			27.7	
Approach LOS		D			F			F			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	8	7
Case No	1.1	3.0	2.0	3.0	1.1	3.0	4.0	2.0
Phs Duration (G+Y+Rc), s	13.5	50.2	14.0	22.4	14.4	49.3	22.0	14.4
Change Period (Y+Rc), s	8.5	7.0	6.8	* 6.8	8.5	7.0	6.3	* 6.8
Max Green (Gmax), s	5.0	43.2	7.2	* 26	5.9	42.3	26.3	* 6.9
Max Allow Headway (MAH), s	2.6	7.7	2.6	3.7	2.6	7.7	3.7	2.6
Max Q Clear (g_c+I1), s	5.1	45.2	9.2	14.3	6.1	29.6	14.4	7.2
Green Ext Time (g_e), s	0.0	0.0	0.0	1.3	0.0	9.8	1.3	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99
Prob of Max Out (p_x)	1.00	1.00	1.00	0.01	1.00	0.86	0.01	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5			7
Mvmt Sat Flow, veh/h	3456		3456		3456			3456

Through Movement Data								
Assigned Mvmt		2		4		6	8	
Mvmt Sat Flow, veh/h		3554		3554		3554	3647	

Right-Turn Movement Data								
Assigned Mvmt		12		14		16	18	
Mvmt Sat Flow, veh/h		1585		1585		1585	0	

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	0	7

Lane Assignment	L (Pr/Pm)		L (Prot)		L (Pr/Pm)			L (Prot)
Lanes in Grp	2	0	2	0	2	0	0	2
Grp Vol (v), veh/h	192	0	324	0	253	0	0	183
Grp Sat Flow (s), veh/h/ln	1728	0	1728	0	1728	0	0	1728
Q Serve Time (g_s), s	3.1	0.0	7.2	0.0	4.1	0.0	0.0	5.2
Cycle Q Clear Time (g_c), s	3.1	0.0	7.2	0.0	4.1	0.0	0.0	5.2
Perm LT Sat Flow (s_l), veh/h/ln	207	0	0	0	475	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	42.3	0.0	0.0	0.0	42.3	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	14.7	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	317	0	249	0	487	0	0	263
V/C Ratio (X)	0.61	0.00	1.30	0.00	0.52	0.00	0.00	0.69
Avail Cap (c_a), veh/h	317	0	249	0	487	0	0	263
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	23.7	0.0	46.4	0.0	19.7	0.0	0.0	45.1
Incr Delay (d2), s/veh	2.4	0.0	162.6	0.0	0.5	0.0	0.0	6.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	26.1	0.0	209.1	0.0	20.1	0.0	0.0	51.6
1st-Term Q (Q1), veh/ln	1.1	0.0	2.9	0.0	1.4	0.0	0.0	2.1
2nd-Term Q (Q2), veh/ln	0.1	0.0	5.6	0.0	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	1.2	0.0	8.5	0.0	1.4	0.0	0.0	2.3
%ile Storage Ratio (RQ%)	0.03	0.00	0.94	0.00	0.04	0.00	0.00	0.11
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	18.9	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	8	0
Lane Assignment		T		T		T	T	
Lanes in Grp	0	2	0	2	0	2	2	0
Grp Vol (v), veh/h	0	2011	0	452	0	1148	454	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	1777	0
Q Serve Time (g_s), s	0.0	43.2	0.0	12.3	0.0	27.6	12.4	0.0
Cycle Q Clear Time (g_c), s	0.0	43.2	0.0	12.3	0.0	27.6	12.4	0.0
Lane Grp Cap (c), veh/h	0	1534	0	553	0	1502	556	0
V/C Ratio (X)	0.00	1.31	0.00	0.82	0.00	0.76	0.82	0.00
Avail Cap (c_a), veh/h	0	1534	0	923	0	1502	934	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	28.4	0.0	40.9	0.0	24.6	40.8	0.0
Incr Delay (d2), s/veh	0.0	144.8	0.0	1.1	0.0	3.4	1.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	173.2	0.0	42.0	0.0	28.0	42.0	0.0
1st-Term Q (Q1), veh/ln	0.0	15.9	0.0	5.0	0.0	10.2	5.1	0.0

2nd-Term Q (Q2), veh/ln	0.0	30.8	0.0	0.1	0.0	0.7	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	46.7	0.0	5.1	0.0	10.9	5.1	0.0
%ile Storage Ratio (RQ%)	0.00	0.64	0.00	0.16	0.00	0.16	0.39	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	119.3	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	18	0
Lane Assignment		R		R		R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1585	0	1585	0	1585	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	684	0	247	0	670	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	684	0	412	0	670	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	100.8
HCM 7th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	241	695	95	55	528	84	100	23	60	182	19	167
Future Volume (veh/h)	241	695	95	55	528	84	100	23	60	182	19	167
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	262	755	103	60	574	91	109	25	65	198	21	182
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	401	918	778	291	918	778	497	121	315	485	493	418
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.49	0.49	0.49	0.49	0.49	0.49	0.26	0.26	0.26	0.26	0.26	0.26
Unsig. Movement Delay												
Ln Grp Delay, s/veh	18.3	14.0	5.2	15.1	8.2	5.1	11.4	0.0	10.7	13.7	10.1	12.0
Ln Grp LOS	B	B	A	B	A	A	B		B	B	B	B
Approach Vol, veh/h		1120			725			199			401	
Approach Delay, s/veh		14.2			8.4			11.1			12.7	
Approach LOS		B			A			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		5.0		5.0		5.0
Phs Duration (G+Y+Rc), s		14.2		22.5		14.2		22.5
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green (Gmax), s		18.0		18.0		18.0		18.0
Max Allow Headway (MAH), s		4.7		4.9		4.1		4.8
Max Q Clear (g_c+I1), s		5.1		20.0		8.7		17.8
Green Ext Time (g_e), s		0.7		0.0		1.0		0.1
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.01		1.00		0.09		1.00

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		1179		771		1307		644

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		460		1870		1870		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1195		1585		1585		1585

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3

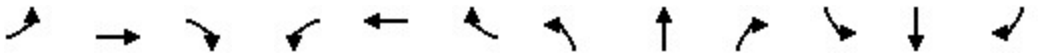
Lane Assignment		L		L		L		L
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	109	0	262	0	198	0	60
Grp Sat Flow (s), veh/h/ln	0	1179	0	771	0	1307	0	644
Q Serve Time (g_s), s	0.0	2.8	0.0	9.7	0.0	5.1	0.0	3.2
Cycle Q Clear Time (g_c), s	0.0	3.1	0.0	18.0	0.0	6.7	0.0	15.8
Perm LT Sat Flow (s_l), veh/h/ln	0	1179	0	771	0	1307	0	644
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	9.7	0.0	18.0	0.0	9.7	0.0	18.0
Perm LT Serve Time (g_u), s	0.0	9.4	0.0	9.7	0.0	8.1	0.0	5.4
Perm LT Q Serve Time (g_ps), s	0.0	2.8	0.0	9.7	0.0	5.1	0.0	3.2
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	497	0	401	0	485	0	291
V/C Ratio (X)	0.00	0.22	0.00	0.65	0.00	0.41	0.00	0.21
Avail Cap (c_a), veh/h	0	766	0	401	0	783	0	291
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.2	0.0	14.5	0.0	13.1	0.0	14.7
Incr Delay (d2), s/veh	0.0	0.2	0.0	3.8	0.0	0.6	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.4	0.0	18.3	0.0	13.7	0.0	15.1
1st-Term Q (Q1), veh/ln	0.0	0.5	0.0	1.4	0.0	1.2	0.0	0.3
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.4	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.6	0.0	1.8	0.0	1.3	0.0	0.3
%ile Storage Ratio (RQ%)	0.00	0.10	0.00	0.25	0.00	0.33	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T		T		T
Lanes in Grp	0	0	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	755	0	21	0	574
Grp Sat Flow (s), veh/h/ln	0	0	0	1870	0	1870	0	1870
Q Serve Time (g_s), s	0.0	0.0	0.0	12.6	0.0	0.3	0.0	8.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	12.6	0.0	0.3	0.0	8.3
Lane Grp Cap (c), veh/h	0	0	0	918	0	493	0	918
V/C Ratio (X)	0.00	0.00	0.00	0.82	0.00	0.04	0.00	0.63
Avail Cap (c_a), veh/h	0	0	0	918	0	918	0	918
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	8.0	0.0	10.1	0.0	6.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	6.1	0.0	0.0	0.0	1.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	14.0	0.0	10.1	0.0	8.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.5	0.0	0.1	0.0	1.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	3.0	0.0	0.1	0.0	1.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	90	0	103	0	182	0	91
Grp Sat Flow (s), veh/h/ln	0	1655	0	1585	0	1585	0	1585
Q Serve Time (g_s), s	0.0	1.6	0.0	1.3	0.0	3.5	0.0	1.1
Cycle Q Clear Time (g_c), s	0.0	1.6	0.0	1.3	0.0	3.5	0.0	1.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.72	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	436	0	778	0	418	0	778
V/C Ratio (X)	0.00	0.21	0.00	0.13	0.00	0.44	0.00	0.12
Avail Cap (c_a), veh/h	0	813	0	778	0	778	0	778
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	10.5	0.0	5.1	0.0	11.2	0.0	5.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.1	0.0	0.7	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.7	0.0	5.2	0.0	12.0	0.0	5.1
1st-Term Q (Q1), veh/ln	0.0	0.4	0.0	0.1	0.0	1.0	0.0	0.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.4	0.0	0.1	0.0	1.1	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.02	0.00	0.18	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	12.0
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	676	120	71	525	20	113	4	82	0	4	11
Future Volume (veh/h)	0	676	120	71	525	20	113	4	82	0	4	11
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	735	130	77	571	22	123	4	89	0	4	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	238	980	831	376	980	831	476	12	272	238	73	220
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.52	0.52	0.52	0.52	0.52	0.18	0.18	0.18	0.00	0.18	0.18
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	8.1	3.8	10.8	5.5	3.5	11.7	0.0	11.5	0.0	0.0	10.4
Ln Grp LOS		A	A	B	A	A	B		B			B
Approach Vol, veh/h		865			670			216			16	
Approach Delay, s/veh		7.5			6.1			11.6			10.4	
Approach LOS		A			A			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		5.0		6.0		5.0
Phs Duration (G+Y+Rc), s		9.9		20.3		9.9		20.3
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green (Gmax), s		18.0		18.0		18.0		18.0
Max Allow Headway (MAH), s		4.6		4.6		5.6		4.9
Max Q Clear (g_c+I1), s		4.7		11.3		2.2		14.6
Green Ext Time (g_e), s		0.7		2.6		0.0		1.3
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.01		0.71		0.00		1.00

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		1397		824		1303		640

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		69		1870		412		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1527		1585		1236		1585

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3

Lane Assignment		L		L		L		L
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	123	0	0	0	0	0	77
Grp Sat Flow (s), veh/h/ln	0	1397	0	824	0	1303	0	640
Q Serve Time (g_s), s	0.0	2.4	0.0	0.0	0.0	0.0	0.0	3.2
Cycle Q Clear Time (g_c), s	0.0	2.7	0.0	0.0	0.0	0.0	0.0	12.6
Perm LT Sat Flow (s_l), veh/h/ln	0	1397	0	824	0	1303	0	640
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	5.4	0.0	0.0	0.0	0.0	0.0	15.8
Perm LT Serve Time (g_u), s	0.0	5.1	0.0	0.0	0.0	0.0	0.0	6.5
Perm LT Q Serve Time (g_ps), s	0.0	2.4	0.0	0.0	0.0	0.0	0.0	3.2
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	476	0	238	0	238	0	376
V/C Ratio (X)	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.20
Avail Cap (c_a), veh/h	0	1059	0	297	0	783	0	422
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.4	0.0	0.0	0.0	0.0	0.0	10.6
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.7	0.0	0.0	0.0	0.0	0.0	10.8
1st-Term Q (Q1), veh/ln	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.3
%ile Storage Ratio (RQ%)	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	735	0	0	0	571
Grp Sat Flow (s), veh/h/ln	0	0	0	1870	0	0	0	1870
Q Serve Time (g_s), s	0.0	0.0	0.0	9.3	0.0	0.0	0.0	6.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	9.3	0.0	0.0	0.0	6.3
Lane Grp Cap (c), veh/h	0	0	0	980	0	0	0	980
V/C Ratio (X)	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.58
Avail Cap (c_a), veh/h	0	0	0	1114	0	0	0	1114
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	5.6	0.0	0.0	0.0	4.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	8.1	0.0	0.0	0.0	5.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	93	0	130	0	16	0	22
Grp Sat Flow (s), veh/h/ln	0	1596	0	1585	0	1648	0	1585
Q Serve Time (g_s), s	0.0	1.5	0.0	1.3	0.0	0.2	0.0	0.2
Cycle Q Clear Time (g_c), s	0.0	1.5	0.0	1.3	0.0	0.2	0.0	0.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.96	0.00	1.00	0.00	0.75	0.00	1.00
Lane Grp Cap (c), veh/h	0	284	0	831	0	293	0	831
V/C Ratio (X)	0.00	0.33	0.00	0.16	0.00	0.05	0.00	0.03
Avail Cap (c_a), veh/h	0	950	0	944	0	982	0	944
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	10.8	0.0	3.7	0.0	10.3	0.0	3.5
Incr Delay (d2), s/veh	0.0	0.7	0.0	0.1	0.0	0.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.5	0.0	3.8	0.0	10.4	0.0	3.5
1st-Term Q (Q1), veh/ln	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.5	0.0	0.0	0.0	0.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	7.5
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	519	69	137	384	188	115	248	122	255	231	131
Future Volume (veh/h)	164	519	69	137	384	188	115	248	122	255	231	131
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	178	564	30	149	417	116	125	270	122	277	251	37
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	354	680	576	261	657	556	294	308	261	312	328	278
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.36	0.36	0.07	0.35	0.35	0.16	0.16	0.16	0.18	0.18	0.18
Unsig. Movement Delay												
Ln Grp Delay, s/veh	24.5	42.9	23.8	28.6	34.7	26.7	43.4	54.9	43.8	55.2	46.6	40.0
Ln Grp LOS	C	D	C	C	C	C	D	D	D	E	D	D
Approach Vol, veh/h		772			682			517			565	
Approach Delay, s/veh		37.9			32.0			49.5			50.4	
Approach LOS		D			C			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8	4	5	6		
Case No	1.1	3.0	9.0	9.0	1.1	3.0		
Phs Duration (G+Y+Rc), s	15.0	47.7	26.6	25.4	16.4	46.2		
Change Period (Y+Rc), s	6.9	6.0	6.5	6.5	6.9	6.0		
Max Green (Gmax), s	10.1	55.9	30.5	28.5	15.1	50.9		
Max Allow Headway (MAH), s	4.7	7.7	2.8	3.0	4.6	7.8		
Max Q Clear (g_c+I1), s	8.1	33.5	19.4	18.2	9.2	23.3		
Green Ext Time (g_e), s	0.1	8.1	0.7	0.8	0.3	7.7		
Prob of Phs Call (p_c)	0.99	1.00	1.00	1.00	1.00	1.00		
Prob of Max Out (p_x)	1.00	0.27	0.00	0.01	0.45	0.12		

Left-Turn Movement Data								
Assigned Mvmt	1		3	7	5			
Mvmt Sat Flow, veh/h	1781		1781	1781	1781			

Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		1870	1870	1870		1870		

Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		1585	1585	1585		1585		

Left Lane Group Data								
Assigned Mvmt	1	0	3	7	5	0	0	0

Lane Assignment	L (Pr/Pm)		L	LL (Pr/Pm)				
Lanes in Grp	1	0	1	1	1	0	0	0
Grp Vol (v), veh/h	149	0	277	125	178	0	0	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	1781	1781	0	0	0
Q Serve Time (g_s), s	6.1	0.0	17.4	7.2	7.2	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	6.1	0.0	17.4	7.2	7.2	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	823	0	1781	1781	871	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	40.2	0.0	0.0	0.0	40.2	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	10.1	0.0	0.0	0.0	18.9	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	6.7	0.0	0.0	0.0	5.5	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	261	0	312	294	354	0	0	0
V/C Ratio (X)	0.57	0.00	0.89	0.43	0.50	0.00	0.00	0.00
Avail Cap (c_a), veh/h	293	0	474	443	441	0	0	0
Upstream Filter (I)	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	25.8	0.0	46.2	43.0	22.9	0.0	0.0	0.0
Incr Delay (d2), s/veh	2.9	0.0	9.1	0.4	1.6	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	28.6	0.0	55.2	43.4	24.5	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	2.4	0.0	7.4	3.2	2.8	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.2	0.0	0.8	0.0	0.2	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	2.7	0.0	8.2	3.2	2.9	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.28	0.00	1.39	0.51	0.30	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment		T	T	T		T		
Lanes in Grp	0	1	1	1	0	1	0	0
Grp Vol (v), veh/h	0	564	251	270	0	417	0	0
Grp Sat Flow (s), veh/h/ln	0	1870	1870	1870	0	1870	0	0
Q Serve Time (g_s), s	0.0	31.5	14.7	16.2	0.0	21.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	31.5	14.7	16.2	0.0	21.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	680	328	308	0	657	0	0
V/C Ratio (X)	0.00	0.83	0.77	0.88	0.00	0.64	0.00	0.00
Avail Cap (c_a), veh/h	0	912	498	465	0	830	0	0
Upstream Filter (I)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	33.3	45.0	46.7	0.0	31.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	9.6	1.6	8.2	0.0	3.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	42.9	46.6	54.9	0.0	34.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	13.1	6.6	7.4	0.0	9.3	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	1.8	0.1	0.7	0.0	0.7	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	14.9	6.7	8.1	0.0	10.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.31	0.07	0.48	0.00	0.42	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment		R	R	R		R		
Lanes in Grp	0	1	1	1	0	1	0	0
Grp Vol (v), veh/h	0	30	37	122	0	116	0	0
Grp Sat Flow (s), veh/h/ln	0	1585	1585	1585	0	1585	0	0
Q Serve Time (g_s), s	0.0	1.4	2.3	8.0	0.0	5.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	1.4	2.3	8.0	0.0	5.9	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	576	278	261	0	556	0	0
V/C Ratio (X)	0.00	0.05	0.13	0.47	0.00	0.21	0.00	0.00
Avail Cap (c_a), veh/h	0	773	422	394	0	704	0	0
Upstream Filter (I)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	23.7	39.9	43.3	0.0	26.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.1	0.5	0.0	0.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	23.8	40.0	43.8	0.0	26.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.5	0.9	3.0	0.0	2.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.5	0.9	3.1	0.0	2.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.09	0.10	0.52	0.00	0.10	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	41.5
HCM 7th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	454	43	4	62	427	62	45	35	20	33	57
Future Volume (veh/h)	73	454	43	4	62	427	62	45	35	20	33	57
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	83	516	25	5	70	475	70	51	21	23	38	39
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	384	720	610	411	91	620	213	139	44	120	150	120
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.39	0.39	0.08	0.45	0.45	0.19	0.19	0.19	0.19	0.19	0.19
Unsig. Movement Delay												
Ln Grp Delay, s/veh	9.2	16.6	10.1	15.7	0.0	16.1	20.4	0.0	0.0	19.5	0.0	0.0
Ln Grp LOS	A	B	B	B		B	C			B		
Approach Vol, veh/h		624			550			142			100	
Approach Delay, s/veh		15.4			16.1			20.4			19.5	
Approach LOS		B			B			C			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	2	1		4	5	6		8
Case No	3.0	1.3		8.0	1.2	4.0		8.0
Phs Duration (G+Y+Rc), s	27.4	10.6		15.9	7.6	30.4		15.9
Change Period (Y+Rc), s	* 6.1	6.1		5.7	4.0	6.1		5.7
Max Green (Gmax), s	* 39	5.0		26.3	5.0	38.7		26.3
Max Allow Headway (MAH), s	7.0	1.7		7.6	1.7	7.3		7.5
Max Q Clear (g_c+I1), s	14.9	2.0		4.7	3.3	17.6		6.0
Green Ext Time (g_e), s	6.3	0.0		0.9	0.0	6.7		1.4
Prob of Phs Call (p_c)	1.00	0.07		0.97	0.71	1.00		0.97
Prob of Max Out (p_x)	0.12	0.01		0.00	1.00	0.21		0.01

Left-Turn Movement Data								
Assigned Mvmt		1		7	5			3
Mvmt Sat Flow, veh/h		1739		198	1739			597

Through Movement Data								
Assigned Mvmt	2			4		6		8
Mvmt Sat Flow, veh/h	1826			793		203		730

Right-Turn Movement Data								
Assigned Mvmt	12			14		16		18
Mvmt Sat Flow, veh/h	1545			634		1374		230

Left Lane Group Data								
Assigned Mvmt	0	1	0	7	5	0	0	3

Lane Assignment	L (Pr/Pm)			L+T+R	L (Pr/Pm)			L+T+R
Lanes in Grp	0	1	0	1	1	0	0	1
Grp Vol (v), veh/h	0	5	0	100	83	0	0	142
Grp Sat Flow (s), veh/h/ln	0	1739	0	1626	1739	0	0	1558
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	1.3	0.0	0.0	1.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	2.7	1.3	0.0	0.0	4.0
Perm LT Sat Flow (s_l), veh/h/ln	0	844	0	1344	841	0	0	1338
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	1803	0	0	0	1778
Perm LT Eff Green (g_p), s	0.0	21.3	0.0	10.2	24.3	0.0	0.0	10.2
Perm LT Serve Time (g_u), s	0.0	8.4	0.0	6.2	8.7	0.0	0.0	7.5
Perm LT Q Serve Time (g_ps), s	0.0	0.2	0.0	0.0	1.7	0.0	0.0	1.3
Time to First Blk (g_f), s	0.0	0.0	0.0	4.6	0.0	0.0	0.0	2.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	2.7	0.0	0.0	0.0	2.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.23	1.00	0.00	0.00	0.49
Lane Grp Cap (c), veh/h	0	411	0	390	384	0	0	395
V/C Ratio (X)	0.00	0.01	0.00	0.26	0.22	0.00	0.00	0.36
Avail Cap (c_a), veh/h	0	426	0	857	431	0	0	836
Upstream Filter (I)	0.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	15.7	0.0	18.8	9.1	0.0	0.0	19.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.7	0.1	0.0	0.0	1.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	15.7	0.0	19.5	9.2	0.0	0.0	20.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.0	0.3	0.0	0.0	1.5
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	1.1	0.3	0.0	0.0	1.6
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.08	0.09	0.00	0.00	0.14
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	2	0	0	4	0	6	0	8
Lane Assignment	T							
Lanes in Grp	1	0	0	0	0	0	0	0
Grp Vol (v), veh/h	516	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1826	0	0	0	0	0	0	0
Q Serve Time (g_s), s	12.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	12.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	720	0	0	0	0	0	0	0
V/C Ratio (X)	0.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	1311	0	0	0	0	0	0	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	13.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	16.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0

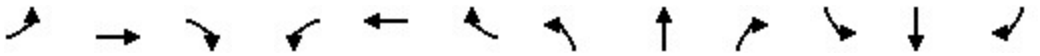
2nd-Term Q (Q2), veh/ln	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	12	0	0	14	0	16	0	18
Lane Assignment	R					T+R		
Lanes in Grp	1	0	0	0	0	1	0	0
Grp Vol (v), veh/h	25	0	0	0	0	545	0	0
Grp Sat Flow (s), veh/h/ln	1545	0	0	0	0	1577	0	0
Q Serve Time (g_s), s	0.5	0.0	0.0	0.0	0.0	15.6	0.0	0.0
Cycle Q Clear Time (g_c), s	0.5	0.0	0.0	0.0	0.0	15.6	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	0.39	0.00	0.87	0.00	0.15
Lane Grp Cap (c), veh/h	610	0	0	0	0	711	0	0
V/C Ratio (X)	0.04	0.00	0.00	0.00	0.00	0.77	0.00	0.00
Avail Cap (c_a), veh/h	1110	0	0	0	0	1132	0	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	10.0	0.0	0.0	0.0	0.0	12.4	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.0	0.0	3.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	10.1	0.0	0.0	0.0	0.0	16.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.1	0.0	0.0	0.0	0.0	4.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.2	0.0	0.0	0.0	0.0	4.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	16.5
HCM 7th LOS	B

Notes

* HCM 7th Edition computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	517	11	27	14	528	17	26	17	18	50	32
Future Volume (veh/h)	48	517	11	27	14	528	17	26	17	18	50	32
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		0.99	1.00		0.99	0.96		0.96	0.97		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	56	608	2	32	16	612	20	31	15	21	59	-11
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	319	1004	3	389	22	827	159	217	86	216	489	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.23	0.23	0.23	0.23	0.23	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	18.0	0.0	10.5	13.4	0.0	14.1	17.4	0.0	0.0	0.0	0.0	0.0
Ln Grp LOS	B		B	B		B	B					
Approach Vol, veh/h		666			660			66			0	
Approach Delay, s/veh		11.1			14.1			17.4			0.0	
Approach LOS		B			B			B				

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		8.0		6.0		8.0
Phs Duration (G+Y+Rc), s		36.7		18.7		36.7		18.7
Change Period (Y+Rc), s		6.1		5.7		6.1		5.7
Max Green (Gmax), s		38.9		26.1		38.9		26.1
Max Allow Headway (MAH), s		8.1		0.0		8.4		8.6
Max Q Clear (g_c+I1), s		22.4		0.0		19.1		3.7
Green Ext Time (g_e), s		8.2		0.0		9.7		0.7
Prob of Phs Call (p_c)		1.00		0.00		1.00		0.91
Prob of Max Out (p_x)		0.57		0.00		0.50		0.00

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		777		344		789		318

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1819		1661		39		923

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		6		-276		1498		365

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3

Lane Assignment		L				L		L+T+R
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	56	0	0	0	32	0	66
Grp Sat Flow (s), veh/h/ln	0	777	0	0	0	789	0	1606
Q Serve Time (g_s), s	0.0	3.3	0.0	0.0	0.0	1.6	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	20.4	0.0	0.0	0.0	14.0	0.0	1.7
Perm LT Sat Flow (s_l), veh/h/ln	0	777	0	1335	0	789	0	1329
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	1778
Perm LT Eff Green (g_p), s	0.0	30.6	0.0	13.0	0.0	30.6	0.0	13.0
Perm LT Serve Time (g_u), s	0.0	13.4	0.0	11.3	0.0	18.1	0.0	13.0
Perm LT Q Serve Time (g_ps), s	0.0	3.3	0.0	0.0	0.0	1.6	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	4.1	0.0	0.0	0.0	4.2
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.30	0.00	1.00	0.00	0.30
Lane Grp Cap (c), veh/h	0	319	0	0	0	389	0	462
V/C Ratio (X)	0.00	0.18	0.00	0.00	0.00	0.08	0.00	0.14
Avail Cap (c_a), veh/h	0	436	0	0	0	507	0	828
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	17.1	0.0	0.0	0.0	13.1	0.0	16.9
Incr Delay (d2), s/veh	0.0	0.9	0.0	0.0	0.0	0.3	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.0	0.0	0.0	0.0	13.4	0.0	17.4
1st-Term Q (Q1), veh/ln	0.0	0.5	0.0	0.0	0.0	0.2	0.0	0.6
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.6	0.0	0.0	0.0	0.3	0.0	0.7
%ile Storage Ratio (RQ%)	0.00	0.20	0.00	0.00	0.00	0.09	0.00	0.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment								
Lanes in Grp	0	0	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R				T+R		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	610	0	0	0	628	0	0
Grp Sat Flow (s), veh/h/ln	0	1825	0	0	0	1537	0	0
Q Serve Time (g_s), s	0.0	12.4	0.0	0.0	0.0	17.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	12.4	0.0	0.0	0.0	17.1	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	-0.16	0.00	0.97	0.00	0.23
Lane Grp Cap (c), veh/h	0	1008	0	0	0	849	0	0
V/C Ratio (X)	0.00	0.61	0.00	0.00	0.00	0.74	0.00	0.00
Avail Cap (c_a), veh/h	0	1282	0	0	0	1080	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	8.3	0.0	0.0	0.0	9.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.1	0.0	0.0	0.0	4.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.5	0.0	0.0	0.0	14.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.2	0.0	0.0	0.0	3.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.0	0.0	1.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.8	0.0	0.0	0.0	4.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.07	0.00	0.00	0.00	0.09	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	12.8
HCM 7th LOS	B

Intersection	
Intersection Delay, s/veh	26.0
Intersection LOS	D

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	652	846	370	553
Demand Flow Rate, veh/h	666	863	378	564
Vehicles Circulating, veh/h	425	414	777	597
Vehicles Exiting, veh/h	736	644	314	680
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	18.8	41.5	9.6	21.9
Approach LOS	C	E	A	C

Lane	Left	Left	Left	Bypass	Left
Designated Moves	LTR	LTR	LT	R	LTR
Assumed Moves	LTR	LTR	LT		LTR
RT Channelized				Free	
Lane Util	1.000	1.000	1.000		1.000
Follow-Up Headway, s	2.609	2.609	2.609		2.609
Critical Headway, s	4.976	4.976	4.976		4.976
A (Intercept)	1380	1380	1380		1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3		1.02e-3
Entry Flow, veh/h	666	863	281	97	564
Cap Entry Lane, veh/h	895	905	625	1938	751
Entry HV Adj Factor	0.980	0.981	0.979	0.980	0.980
Flow Entry, veh/h	652	846	275	95	553
Cap Entry, veh/h	876	887	612	1900	736
V/C Ratio	0.745	0.954	0.450	0.050	0.751
Control Delay, s/veh	18.8	41.5	12.9	0.0	21.9
LOS	C	E	B	A	C
95th %tile Queue, veh	7	15	2	0	7

Intersection	
Int Delay, s/veh	5.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	876	69	67	871	61	38
Future Vol, veh/h	876	69	67	871	61	38
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	250	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	952	75	73	947	66	41

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1027	0	1571	476
Stage 1	-	-	-	-	952	-
Stage 2	-	-	-	-	619	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	672	-	101	535
Stage 1	-	-	-	-	335	-
Stage 2	-	-	-	-	499	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	672	-	90	535
Mov Cap-2 Maneuver	-	-	-	-	90	-
Stage 1	-	-	-	-	335	-
Stage 2	-	-	-	-	445	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.79	98.21
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	132	-	-	672	-
HCM Lane V/C Ratio	0.812	-	-	0.108	-
HCM Control Delay (s/veh)	98.2	-	-	11	-
HCM Lane LOS	F	-	-	B	-
HCM 95th %tile Q(veh)	5	-	-	0.4	-

Intersection	
Intersection Delay, s/veh	13.4
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	2	2	2	1
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	1029	917	747	73
Demand Flow Rate, veh/h	1049	935	762	74
Vehicles Circulating, veh/h	267	554	693	1364
Vehicles Exiting, veh/h	1171	901	623	125
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	10.6	12.2	19.1	10.6
Approach LOS	B	B	C	B

Lane	Left	Right	Left	Right	Left	Right	Left
Designated Moves	LT	R	LT	TR	LT	R	LTR
Assumed Moves	LT	R	LT	TR	LT	R	LTR
RT Channelized							
Lane Util	0.652	0.348	0.470	0.530	0.715	0.285	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	4.328
A (Intercept)	1350	1420	1350	1420	1350	1420	1420
B (Slope)	9.199e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4	8.501e-4
Entry Flow, veh/h	684	365	439	496	545	217	74
Cap Entry Lane, veh/h	1056	1132	811	887	714	788	445
Entry HV Adj Factor	0.981	0.981	0.982	0.980	0.980	0.982	0.988
Flow Entry, veh/h	671	358	431	486	534	213	73
Cap Entry, veh/h	1035	1110	796	869	699	773	440
V/C Ratio	0.648	0.323	0.541	0.559	0.764	0.275	0.166
Control Delay, s/veh	12.9	6.4	12.4	12.1	23.6	7.8	10.6
LOS	B	A	B	B	C	A	B
95th %tile Queue, veh	5	1	3	4	7	1	1

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	11	479	8	18	599	1	6	0	9	0	0	0
Future Vol, veh/h	11	479	8	18	599	1	6	0	9	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	521	9	20	651	1	7	0	10	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	652	0	0	529	0	0	1239	1240	525	1235	1244	652
Stage 1	-	-	-	-	-	-	549	549	-	691	691	-
Stage 2	-	-	-	-	-	-	690	691	-	545	553	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	934	-	-	1038	-	-	152	175	552	153	174	468
Stage 1	-	-	-	-	-	-	520	516	-	435	446	-
Stage 2	-	-	-	-	-	-	435	445	-	523	514	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	934	-	-	1038	-	-	145	167	552	143	166	468
Mov Cap-2 Maneuver	-	-	-	-	-	-	145	167	-	143	166	-
Stage 1	-	-	-	-	-	-	511	507	-	422	432	-
Stage 2	-	-	-	-	-	-	422	432	-	504	505	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.2	0.25	19.76	0
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	260	40	-	-	52	-	-	-
HCM Lane V/C Ratio	0.063	0.013	-	-	0.019	-	-	-
HCM Control Delay (s/veh)	19.8	8.9	0	-	8.5	0	-	0
HCM Lane LOS	C	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	-

Intersection	
Int Delay, s/veh	17.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	67	539	28	0	52	342	84	41	107	0	35	54
Future Vol, veh/h	67	539	28	0	52	342	84	41	107	0	35	54
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	6	6	6	6	6	6	6	6	6	6	6	6
Mvmt Flow	74	592	31	0	57	376	92	45	118	0	38	59

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	433	0	0	623	0	0	831	1188	608	1007	1015	245
Stage 1	-	-	-	-	-	-	755	755	-	245	245	-
Stage 2	-	-	-	-	-	-	76	433	-	762	770	-
Critical Hdwy	4.16	-	-	4.16	-	-	7.16	6.56	6.26	7.16	6.56	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-	6.16	5.56	-	6.16	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.16	5.56	-	6.16	5.56	-
Follow-up Hdwy	2.254	-	-	2.254	-	-	3.554	4.054	3.354	3.554	4.054	3.354
Pot Cap-1 Maneuver	1106	-	-	939	-	-	284	185	489	216	234	784
Stage 1	-	-	-	-	-	-	395	411	-	750	696	-
Stage 2	-	-	-	-	-	-	923	575	-	391	404	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1106	-	-	939	-	-	196	166	489	110	210	784
Mov Cap-2 Maneuver	-	-	-	-	-	-	196	166	-	110	210	-
Stage 1	-	-	-	-	-	-	354	369	-	750	696	-
Stage 2	-	-	-	-	-	-	806	575	-	234	363	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.9	0	93.28	17.81
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	260	188	-	-	939	-	-	378
HCM Lane V/C Ratio	0.982	0.067	-	-	-	-	-	0.259
HCM Control Delay (s/veh)	93.3	8.5	0	-	0	-	-	17.8
HCM Lane LOS	F	A	A	-	A	-	-	C
HCM 95th %tile Q(veh)	9.5	0.2	-	-	0	-	-	1

Intersection	
Intersection Delay, s/veh	111.4
Intersection LOS	F

Approach	EB	WB	NB	SB
Entry Lanes	2	2	0	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	1376	1552	0	994
Demand Flow Rate, veh/h	1403	1583	0	1013
Vehicles Circulating, veh/h	1198	0	1876	1583
Vehicles Exiting, veh/h	1398	1876	467	0
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	108.3	9.0	0.0	275.4
Approach LOS	F	A	-	F

Lane	Left	Right	Bypass	Left	Right		Left	Right
Designated Moves	LT	TR	R	LT	TR		L	LTR
Assumed Moves	LT	TR		LT	TR		L	LTR
RT Channelized			Free					
Lane Util	0.470	0.530		0.470	0.530		0.530	0.470
Follow-Up Headway, s	2.667	2.535		2.667	2.535		2.667	2.535
Critical Headway, s	4.645	4.328		4.645	4.328		4.645	4.328
A (Intercept)	1350	1420		1350	1420		1350	1420
B (Slope)	9.199e-4	8.501e-4		9.199e-4	8.501e-4		9.199e-4	8.501e-4
Entry Flow, veh/h	538	607	258	744	839		537	476
Cap Entry Lane, veh/h	448	513	1938	1350	1420		315	370
Entry HV Adj Factor	0.981	0.980	0.980	0.980	0.980		0.981	0.981
Flow Entry, veh/h	528	595	253	729	823		527	467
Cap Entry, veh/h	440	503	1900	1323	1392		309	363
V/C Ratio	1.200	1.184	0.133	0.551	0.591		1.706	1.287
Control Delay, s/veh	138.4	127.7	0.0	8.8	9.2		360.6	179.3
LOS	F	F	A	A	A		F	F
95th %tile Queue, veh	21	22	0	4	4		33	21

Intersection	
Intersection Delay, s/veh	119.2
Intersection LOS	F

Approach	EB	WB	NB	SB
Entry Lanes	2	3	2	0
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	1845	0	859	0
Demand Flow Rate, veh/h	1882	0	876	0
Vehicles Circulating, veh/h	0	691	1882	1526
Vehicles Exiting, veh/h	1526	2067	0	969
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	11.5	0.0	350.4	0.0
Approach LOS	B	-	F	-

Lane	Left	Right	Left	Right
Designated Moves	LT	TR	LT	R
Assumed Moves	LT	TR	LT	R
RT Channelized				
Lane Util	0.470	0.530	0.451	0.549
Follow-Up Headway, s	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328
A (Intercept)	1350	1420	1350	1420
B (Slope)	9.199e-4	4.501e-4	9.199e-4	4.501e-4
Entry Flow, veh/h	885	997	395	481
Cap Entry Lane, veh/h	1350	1420	239	287
Entry HV Adj Factor	0.980	0.981	0.980	0.981
Flow Entry, veh/h	867	978	387	472
Cap Entry, veh/h	1323	1393	234	281
V/C Ratio	0.656	0.702	1.653	1.678
Control Delay, s/veh	11.0	11.9	348.8	351.6
LOS	B	B	F	F
95th %tile Queue, veh	5	6	25	30

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	551	139	17	28	99	9	19	42	18	12	78	340
Future Volume (veh/h)	551	139	17	28	99	9	19	42	18	12	78	340
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	599	151	18	30	108	10	21	46	20	13	85	370
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	1367	1342	598	666	1342	598	526	1142	509	658	1142	509
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.32	0.32	0.32	0.32	0.32	0.32
Unsig. Movement Delay												
Ln Grp Delay, s/veh	8.4	6.1	5.9	6.5	6.0	5.8	7.4	7.0	7.0	7.1	7.1	11.0
Ln Grp LOS	A	A	A	A	A	A	A	A	A	A	A	B
Approach Vol, veh/h		768			148			87			468	
Approach Delay, s/veh		7.8			6.1			7.1			10.2	
Approach LOS		A			A			A			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		5.0		5.0		5.0
Phs Duration (G+Y+Rc), s		14.1		15.8		14.1		15.8
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green (Gmax), s		18.0		18.0		18.0		18.0
Max Allow Headway (MAH), s		5.0		4.3		4.3		4.8
Max Q Clear (g_c+I1), s		3.0		8.7		8.2		3.3
Green Ext Time (g_e), s		0.3		2.6		1.4		0.6
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.27		0.12		0.00

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		936		2471		1335		1216

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		3554		3554		3554

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1585		1585		1585

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3

Lane Assignment		L		L		L		L
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	21	0	599	0	13	0	30
Grp Sat Flow (s), veh/h/ln	0	936	0	1236	0	1335	0	1216
Q Serve Time (g_s), s	0.0	0.5	0.0	6.1	0.0	0.2	0.0	0.5
Cycle Q Clear Time (g_c), s	0.0	1.0	0.0	6.7	0.0	0.5	0.0	1.3
Perm LT Sat Flow (s_l), veh/h/ln	0	936	0	1236	0	1335	0	1216
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	9.6	0.0	11.3	0.0	9.6	0.0	11.3
Perm LT Serve Time (g_u), s	0.0	9.1	0.0	10.7	0.0	9.3	0.0	10.5
Perm LT Q Serve Time (g_ps), s	0.0	0.5	0.0	6.1	0.0	0.2	0.0	0.5
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	526	0	1367	0	658	0	666
V/C Ratio (X)	0.00	0.04	0.00	0.44	0.00	0.02	0.00	0.05
Avail Cap (c_a), veh/h	0	789	0	1922	0	1033	0	940
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	7.4	0.0	8.1	0.0	7.1	0.0	6.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	7.4	0.0	8.4	0.0	7.1	0.0	6.5
1st-Term Q (Q1), veh/ln	0.0	0.1	0.0	0.9	0.0	0.0	0.0	0.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	0.9	0.0	0.0	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.08	0.00	0.01	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	2
Grp Vol (v), veh/h	0	46	0	151	0	85	0	108
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	0.3	0.0	0.8	0.0	0.5	0.0	0.6
Cycle Q Clear Time (g_c), s	0.0	0.3	0.0	0.8	0.0	0.5	0.0	0.6
Lane Grp Cap (c), veh/h	0	1142	0	1342	0	1142	0	1342
V/C Ratio (X)	0.00	0.04	0.00	0.11	0.00	0.07	0.00	0.08
Avail Cap (c_a), veh/h	0	2140	0	2140	0	2140	0	2140
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	7.0	0.0	6.0	0.0	7.1	0.0	6.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	7.0	0.0	6.1	0.0	7.1	0.0	6.0
1st-Term Q (Q1), veh/ln	0.0	0.1	0.0	0.2	0.0	0.1	0.0	0.1

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	0.2	0.0	0.1	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	20	0	18	0	370	0	10
Grp Sat Flow (s), veh/h/ln	0	1585	0	1585	0	1585	0	1585
Q Serve Time (g_s), s	0.0	0.3	0.0	0.2	0.0	6.2	0.0	0.1
Cycle Q Clear Time (g_c), s	0.0	0.3	0.0	0.2	0.0	6.2	0.0	0.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	509	0	598	0	509	0	598
V/C Ratio (X)	0.00	0.04	0.00	0.03	0.00	0.73	0.00	0.02
Avail Cap (c_a), veh/h	0	954	0	954	0	954	0	954
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	7.0	0.0	5.9	0.0	9.0	0.0	5.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	7.0	0.0	5.9	0.0	11.0	0.0	5.8
1st-Term Q (Q1), veh/ln	0.0	0.1	0.0	0.0	0.0	1.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	0.0	0.0	1.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.01	0.00	0.22	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	8.4
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↰	↑		↰	↑	↱
Traffic Vol, veh/h	32	0	14	12	0	44	12	400	19	64	337	54
Future Vol, veh/h	32	0	14	12	0	44	12	400	19	64	337	54
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	100	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	35	0	15	13	0	48	13	435	21	70	366	59

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	966	987	366	977	1035	445	425	0	0	455	0	0
Stage 1	505	505	-	471	471	-	-	-	-	-	-	-
Stage 2	461	482	-	505	564	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	234	247	679	230	232	613	1134	-	-	1105	-	-
Stage 1	549	540	-	573	559	-	-	-	-	-	-	-
Stage 2	581	554	-	549	508	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	200	229	679	208	215	613	1134	-	-	1105	-	-
Mov Cap-2 Maneuver	200	229	-	208	215	-	-	-	-	-	-	-
Stage 1	515	506	-	567	553	-	-	-	-	-	-	-
Stage 2	529	547	-	503	476	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	22.58	14.67	0.23	1.19
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1134	-	-	254	433	1105	-	-
HCM Lane V/C Ratio	0.011	-	-	0.197	0.141	0.063	-	-
HCM Control Delay (s/veh)	8.2	-	-	22.6	14.7	8.5	-	-
HCM Lane LOS	A	-	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.7	0.5	0.2	-	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	0	5	3	0	6	8	396	8	187	144	41
Future Vol, veh/h	21	0	5	3	0	6	8	396	8	187	144	41
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	100	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	0	5	3	0	7	9	430	9	203	157	45

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1011	1020	157	1015	1060	435	201	0	0	439	0	0
Stage 1	563	563	-	452	452	-	-	-	-	-	-	-
Stage 2	448	457	-	563	608	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	218	237	889	217	224	621	1371	-	-	1121	-	-
Stage 1	511	509	-	587	570	-	-	-	-	-	-	-
Stage 2	590	568	-	511	486	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	176	193	889	175	182	621	1371	-	-	1121	-	-
Mov Cap-2 Maneuver	176	193	-	175	182	-	-	-	-	-	-	-
Stage 1	418	417	-	583	567	-	-	-	-	-	-	-
Stage 2	580	564	-	416	398	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	25.05	16.03	0.15	4.49
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1371	-	-	208	336	1121	-	-
HCM Lane V/C Ratio	0.006	-	-	0.136	0.029	0.181	-	-
HCM Control Delay (s/veh)	7.6	-	-	25.1	16	8.9	-	-
HCM Lane LOS	A	-	-	D	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.5	0.1	0.7	-	-

Intersection	
Int Delay, s/veh	9.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	86	15	36	60	15	174	41	138	143	115	122	95
Future Vol, veh/h	86	15	36	60	15	174	41	138	143	115	122	95
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	200	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	93	16	39	65	16	189	45	150	155	125	133	103

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	682	829	184	708	803	228	236	0	0	305	0	0
Stage 1	434	434	-	317	317	-	-	-	-	-	-	-
Stage 2	247	395	-	391	486	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	364	306	858	350	317	812	1331	-	-	1255	-	-
Stage 1	600	581	-	694	654	-	-	-	-	-	-	-
Stage 2	757	605	-	634	551	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	230	266	858	275	276	812	1331	-	-	1255	-	-
Mov Cap-2 Maneuver	230	266	-	275	276	-	-	-	-	-	-	-
Stage 1	540	523	-	671	632	-	-	-	-	-	-	-
Stage 2	546	585	-	527	496	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	29.72	19.69	0.99	2.84
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1331	-	-	291	511	1255	-	-
HCM Lane V/C Ratio	0.033	-	-	0.512	0.529	0.1	-	-
HCM Control Delay (s/veh)	7.8	-	-	29.7	19.7	8.2	-	-
HCM Lane LOS	A	-	-	D	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	2.7	3.1	0.3	-	-

Intersection	
Intersection Delay, s/veh	11
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	93	5	80	0	0	3	48	81	0	3	3	108
Future Vol, veh/h	93	5	80	0	0	3	48	81	0	3	3	108
Peak Hour Factor	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	169	9	145	0	0	5	87	147	0	5	5	196
Number of Lanes	0	1	1	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	2
HCM Control Delay, s/veh	10.5	8.8	12.2	10.4
HCM LOS	B	A	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	37%	0%	95%	0%	0%	3%
Vol Thru, %	63%	100%	5%	0%	0%	3%
Vol Right, %	0%	0%	0%	100%	100%	95%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	129	0	98	80	3	114
LT Vol	48	0	93	0	0	3
Through Vol	81	0	5	0	0	3
RT Vol	0	0	0	80	3	108
Lane Flow Rate	235	0	178	145	5	207
Geometry Grp	5	5	5	5	4b	4b
Degree of Util (X)	0.379	0	0.306	0.202	0.009	0.297
Departure Headway (Hd)	5.812	5.624	6.182	4.995	5.74	5.155
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	612	0	576	710	627	690
Service Time	3.605	3.417	3.978	2.79	3.74	3.246
HCM Lane V/C Ratio	0.384	0	0.309	0.204	0.008	0.3
HCM Control Delay, s/veh	12.2	8.4	11.7	9.1	8.8	10.4
HCM Lane LOS	B	N	B	A	A	B
HCM 95th-tile Q	1.8	0	1.3	0.8	0	1.2

Intersection	
Int Delay, s/veh	3.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	96	186	7	83	78
Future Vol, veh/h	7	96	186	7	83	78
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	104	202	8	90	85

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	471	206	0	0	210	0
Stage 1	206	-	-	-	-	-
Stage 2	265	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	551	835	-	-	1361	-
Stage 1	829	-	-	-	-	-
Stage 2	779	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	513	835	-	-	1361	-
Mov Cap-2 Maneuver	513	-	-	-	-	-
Stage 1	829	-	-	-	-	-
Stage 2	725	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	10.23	0	4.04
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	800	928	-
HCM Lane V/C Ratio	-	-	0.14	0.066	-
HCM Control Delay (s/veh)	-	-	10.2	7.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.2	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	29	0	9	0	0	3	37	378	0	0	234	40
Future Vol, veh/h	29	0	9	0	0	3	37	378	0	0	234	40
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	32	0	10	0	0	3	40	411	0	0	254	43

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	767	767	276	746	789	411	298	0	0	411	0	0
Stage 1	276	276	-	491	491	-	-	-	-	-	-	-
Stage 2	491	491	-	254	298	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	319	332	763	330	323	641	1263	-	-	1148	-	-
Stage 1	730	682	-	559	548	-	-	-	-	-	-	-
Stage 2	559	548	-	750	667	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	304	319	763	312	309	641	1263	-	-	1148	-	-
Mov Cap-2 Maneuver	304	319	-	312	309	-	-	-	-	-	-	-
Stage 1	730	682	-	536	525	-	-	-	-	-	-	-
Stage 2	533	525	-	740	667	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	16.48	10.65	0.71	0
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	160	-	-	355	641	1148	-	-
HCM Lane V/C Ratio	0.032	-	-	0.116	0.005	-	-	-
HCM Control Delay (s/veh)	7.9	0	-	16.5	10.6	0	-	-
HCM Lane LOS	A	A	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0	0	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	14	4	2674	2261	17
Future Vol, veh/h	2	14	4	2674	2261	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	700	-	-	700
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	15	4	2907	2458	18

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3920	1229	2476	0	-	0
Stage 1	2458	-	-	-	-	-
Stage 2	1462	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	2	170	183	-	-	-
Stage 1	50	-	-	-	-	-
Stage 2	179	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	2	170	183	-	-	-
Mov Cap-2 Maneuver	2	-	-	-	-	-
Stage 1	49	-	-	-	-	-
Stage 2	179	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	$ 548.98	0.04	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	183	-	17	-	-
HCM Lane V/C Ratio	0.024	-	1.043	-	-
HCM Control Delay (s/veh)	25.1	-	$ 549	-	-
HCM Lane LOS	D	-	F	-	-
HCM 95th %tile Q(veh)	0.1	-	2.6	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	126	24	2443	254	34	1351
Future Volume (veh/h)	126	24	2443	254	34	1351
Number	3	18	2	12	1	6
Initial Q, veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	137	26	2655	276	37	1468
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	172	153	2897	1292	94	2897
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.10	0.82	0.82	0.82	0.82
Unsig. Movement Delay						
Ln Grp Delay, s/veh	53.2	42.8	12.1	2.2	45.1	3.1
Ln Grp LOS	D	D	B	A	D	A
Approach Vol, veh/h	163		2931			1505
Approach Delay, s/veh	51.5		11.2			4.1
Approach LOS	D		B			A

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8			6		
Case No		7.0	9.0			6.0		
Phs Duration (G+Y+Rc), s		87.5	14.3			87.5		
Change Period (Y+Rc), s		4.5	4.5			4.5		
Max Green (Gmax), s		83.0	18.0			83.0		
Max Allow Headway (MAH), s		4.7	3.8			5.4		
Max Q Clear (g_c+I1), s		57.6	9.7			85.0		
Green Ext Time (g_e), s		22.5	0.3			0.0		
Prob of Phs Call (p_c)		1.00	0.99			1.00		
Prob of Max Out (p_x)		0.84	0.02			1.00		

Left-Turn Movement Data								
Assigned Mvmt		5	3			1		
Mvmt Sat Flow, veh/h		0	1781			85		

Through Movement Data								
Assigned Mvmt		2	8			6		
Mvmt Sat Flow, veh/h		3647	0			3647		

Right-Turn Movement Data								
Assigned Mvmt		12	18			16		
Mvmt Sat Flow, veh/h		1585	1585			0		

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	0	0

Lane Assignment			L			L		
Lanes in Grp	0	0	1	0	0	1	0	0
Grp Vol (v), veh/h	0	0	137	0	0	37	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1781	0	0	85	0	0
Q Serve Time (g_s), s	0.0	0.0	7.7	0.0	0.0	27.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	7.7	0.0	0.0	83.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1781	0	0	85	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	83.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	27.4	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	27.4	0.0	0.0
Time to First Blk (g_f), s	0.0	83.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	172	0	0	94	0	0
V/C Ratio (X)	0.00	0.00	0.80	0.00	0.00	0.40	0.00	0.00
Avail Cap (c_a), veh/h	0	0	315	0	0	94	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	45.0	0.0	0.0	42.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	8.2	0.0	0.0	2.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	53.2	0.0	0.0	45.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	3.3	0.0	0.0	0.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.4	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	3.7	0.0	0.0	1.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.18	0.00	0.00	0.03	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	2655	0	0	0	1468	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	55.6	0.0	0.0	0.0	13.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	55.6	0.0	0.0	0.0	13.2	0.0	0.0
Lane Grp Cap (c), veh/h	0	2897	0	0	0	2897	0	0
V/C Ratio (X)	0.00	0.92	0.00	0.00	0.00	0.51	0.00	0.00
Avail Cap (c_a), veh/h	0	2897	0	0	0	2897	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	6.9	0.0	0.0	0.0	3.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	5.2	0.0	0.0	0.0	0.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	12.1	0.0	0.0	0.0	3.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	6.5	0.0	0.0	0.0	1.5	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	2.1	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	8.6	0.0	0.0	0.0	1.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.08	0.00	0.00	0.00	0.05	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		R	R					
Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	276	26	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1585	1585	0	0	0	0	0
Q Serve Time (g_s), s	0.0	4.0	1.5	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.0	1.5	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	1292	153	0	0	0	0	0
V/C Ratio (X)	0.00	0.21	0.17	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1292	280	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	2.1	42.3	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.5	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	2.2	42.8	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.4	0.6	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.4	0.6	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.02	0.31	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	10.3
HCM 7th LOS	B

Intersection	
Intersection Delay, s/veh	10.5
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	161	6	46	2	30	17	2	183	7	13	124	119
Future Vol, veh/h	161	6	46	2	30	17	2	183	7	13	124	119
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	175	7	50	2	33	18	2	199	8	14	135	129
Number of Lanes	1	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	2
HCM Control Delay, s/veh	11	9	10.3	10.6
HCM LOS	B	A	B	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	1%	100%	0%	4%	5%
Vol Thru, %	95%	0%	12%	61%	48%
Vol Right, %	4%	0%	88%	35%	46%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	192	161	52	49	256
LT Vol	2	161	0	2	13
Through Vol	183	0	6	30	124
RT Vol	7	0	46	17	119
Lane Flow Rate	209	175	57	53	278
Geometry Grp	2	5	5	4a	2
Degree of Util (X)	0.298	0.308	0.082	0.081	0.365
Departure Headway (Hd)	5.146	6.343	5.21	5.492	4.725
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	703	569	690	654	751
Service Time	3.146	4.056	2.923	3.511	2.824
HCM Lane V/C Ratio	0.297	0.308	0.083	0.081	0.37
HCM Control Delay, s/veh	10.3	11.9	8.4	9	10.6
HCM Lane LOS	B	B	A	A	B
HCM 95th-tile Q	1.2	1.3	0.3	0.3	1.7

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	19	0	17	0	0	0	26	197	0	0	49	17
Future Vol, veh/h	19	0	17	0	0	0	26	197	0	0	49	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	21	0	18	0	0	0	28	214	0	0	53	18

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	333	333	63	324	342	214	72	0	0	214	0	0
Stage 1	63	63	-	271	271	-	-	-	-	-	-	-
Stage 2	271	271	-	53	72	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	620	587	1002	629	580	826	1528	-	-	1356	-	-
Stage 1	949	843	-	735	685	-	-	-	-	-	-	-
Stage 2	735	685	-	959	835	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	607	574	1002	605	568	826	1528	-	-	1356	-	-
Mov Cap-2 Maneuver	607	574	-	605	568	-	-	-	-	-	-	-
Stage 1	949	843	-	720	671	-	-	-	-	-	-	-
Stage 2	720	671	-	942	835	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	10.09	0	0.86	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	210	-	-	746	-	1356	-	-
HCM Lane V/C Ratio	0.018	-	-	0.052	-	-	-	-
HCM Control Delay (s/veh)	7.4	0	-	10.1	0	0	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	-	0	-	-

Intersection	
Int Delay, s/veh	29.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	45	75	126	2748	2178	175
Future Vol, veh/h	45	75	126	2748	2178	175
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	Yield
Storage Length	0	-	150	-	-	600
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	49	82	137	2987	2367	190

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	4135	1184	2367	0	-	0
Stage 1	2367	-	-	-	-	-
Stage 2	1767	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 2	182	203	-	-	-
Stage 1	56	-	-	-	-	-
Stage 2	122	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 1	182	203	-	-	-
Mov Cap-2 Maneuver	~ 15	-	-	-	-	-
Stage 1	~ 18	-	-	-	-	-
Stage 2	122	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	$ 1274.1	2.34	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	203	-	39	-	-
HCM Lane V/C Ratio	0.676	-	3.351	-	-
HCM Control Delay (s/veh)	53.4	-	$ 1274.1	-	-
HCM Lane LOS	F	-	F	-	-
HCM 95th %tile Q(veh)	4.2	-	14.8	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	7.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	52	23	2383	202	6	1204
Future Vol, veh/h	52	23	2383	202	6	1204
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	Yield	-	None
Storage Length	0	150	-	0	160	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	57	25	2590	220	7	1309

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	3258	1295	0	0	2590	0
Stage 1	2590	-	-	-	-	-
Stage 2	667	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 7	153	-	-	165	-
Stage 1	~ 42	-	-	-	-	-
Stage 2	472	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 7	153	-	-	165	-
Mov Cap-2 Maneuver	~ 36	-	-	-	-	-
Stage 1	~ 42	-	-	-	-	-
Stage 2	453	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, $/s	$ 375.46	0	0.14
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	36	153	165	-
HCM Lane V/C Ratio	-	-	1.567	0.163	0.039	-
HCM Control Delay (s/veh)	-	-	$ 526.9	33.1	27.7	-
HCM Lane LOS	-	-	F	D	D	-
HCM 95th %tile Q(veh)	-	-	6.1	0.6	0.1	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	7.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	150	18	32	33	15	28
Future Vol, veh/h	150	18	32	33	15	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	163	20	35	36	16	30

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	137	32	47	0	-	0
Stage 1	32	-	-	-	-	-
Stage 2	105	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	856	1042	1561	-	-	-
Stage 1	991	-	-	-	-	-
Stage 2	919	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	837	1042	1561	-	-	-
Mov Cap-2 Maneuver	837	-	-	-	-	-
Stage 1	968	-	-	-	-	-
Stage 2	919	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	10.35	3.62	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	886	-	855	-	-
HCM Lane V/C Ratio	0.022	-	0.214	-	-
HCM Control Delay (s/veh)	7.4	0	10.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.8	-	-

Intersection	
Int Delay, s/veh	12.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	127	2	260	108	54	3	55	344	55	48	3
Future Vol, veh/h	3	127	2	260	108	54	3	55	344	55	48	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	150	150	-	150	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	138	2	283	117	59	3	60	374	60	52	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	298	614	54	307	241	60	55	0	0	434	0	0
Stage 1	173	173	-	66	66	-	-	-	-	-	-	-
Stage 2	125	440	-	241	175	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	654	407	1013	645	660	1006	1549	-	-	1126	-	-
Stage 1	828	755	-	944	840	-	-	-	-	-	-	-
Stage 2	879	577	-	763	754	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	477	385	1013	398	624	1006	1549	-	-	1126	-	-
Mov Cap-2 Maneuver	477	385	-	398	624	-	-	-	-	-	-	-
Stage 1	784	715	-	942	838	-	-	-	-	-	-	-
Stage 2	710	576	-	582	714	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	19.25	24.75	0.05	4.35
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1549	-	-	477	389	398	624	1006	1126	-	-
HCM Lane V/C Ratio	0.002	-	-	0.007	0.361	0.71	0.188	0.058	0.053	-	-
HCM Control Delay (s/veh)	7.3	-	-	12.6	19.4	33.3	12.1	8.8	8.4	-	-
HCM Lane LOS	A	-	-	B	C	D	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	1.6	5.4	0.7	0.2	0.2	-	-

Appendix D. Divider Page

Traffic Impact Studies