REGULAR PLANNING COMMISSION MEETING AGENDA
Wednesday, February 9, 2022 5:00 PM
City Council Chambers, Elks Civic Building - 107 S. Cascade Ave.

The Montrose Planning Commission is pleased to have residents of the community take time to attend Planning Commission Meetings. We encourage your attendance and participation. Individuals wishing to be heard during public hearing proceedings are encouraged to be prepared and will generally be limited to three minutes to allow everyone the opportunity to be heard. The 11:00 p.m. rule will be enforced in accordance with City of Montrose Regulations (Sec. 7-15-2).

Additional written comments are welcome. If you would like to comment on an agenda item, please email planningmail@cityofmontrose.org. Written comments must be received by noon one week prior to the meeting in order to be included in the Planning Commission packet. After that deadline, comments received by noon the day prior to the meeting will be distributed to the Planning Commission on the meeting day.

Public participation for this meeting will be in-person in the City Council Chambers and via Zoom at the following link: https://us02web.zoom.us/s/87908151368

Telephone participation is available at: 1 346 248 7799 or +1 669 900 9128 or +1 253 215 8782
Webinar ID: 879 0815 1368

Hearing assistance devices are available for public use. Please let us know if you need accommodation. The City also offers interpretation for Spanish speakers. In order to allow time to book this resource, please email planningmail@ci.montrose.co.us at least three days before the meeting.

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1) Planning Commission meeting called to order

2) Roll call by the Planning Commission Chair

3) Approval of Minutes of the January 26, 2022 meeting

4) Additions or Deletions

5) **MONTROSE REGIONAL HEALTH AMBULATORY CARE CENTER VARIANCE.** This proposal includes a request for a variance to allow a 65' high structure within the "B-3" General Commercial District. The project is located at the intersection of S. Rio Grande Ave. and Orange Rd. (Parcel #399304254002). The applicant is Nexcore Group. *Staff: William Reis*

6) **WOODS CROSSING NORTH SKETCH PLAN REVIEW.** This is a review and discussion of the Sketch Plan for Woods Crossing North Subdivision, a proposed residential development with 545 single-family lots and 45 multi-family units. This property, which consists of 160.71 acres, is bordered on the south by Sunnyside Rd, on the north by Miami Rd, on the west by 6720 Rd, and on the east by agricultural fields and single-family homes. The applicant is Matt Miles, Leadership Circle, LLC. *Staff: Senior Planner Amy Sharp*

7) **HOME OF THE BRAVE SUBDIVSION PRELIMINARY PLAT.** The proposed preliminary plat will subdivide approximately 39.4 acres into 148 residential lots, including 116 single-family lots and 32 duplex lots. The property is located adjacent to 6450 Road, which runs along the western edge of the property. The applicants are Todd and Maya Haynes. *Staff: Senior Planner Amy Sharp*

8) **RIVERBEND RV PARK TRAVEL HOME PARK PERMIT.** This proposal includes a request from Riverbend RV Park for a travel home park permit in order to expand services and facilities within the existing park. The request is for five (5) additional RV sites. Riverbend RV Park is located along Chipeta Road, just north of Chipeta Lake. The applicant is David Svenson. *Staff: Senior Planner Amy Sharp*

9) **MIER ADDITION.** This is a proposal for initial zoning of "R-4" High Density District for the proposed Mier Addition, approximately 14.67 acres. The parcel is located east of 6530 Road, west of 6600 Road, and north of Locust Road. The applicants are Calvin and Helen Mier. *Staff: Senior Planner Amy Sharp*

10) **NIAGARA ROAD ADDITION.** This is a proposal for initial zoning of "B-2" Highway Commercial District for the proposed Niagara Road Addition, approximately 0.456 acres. The parcel is located on the northern half of Niagara Road, approximately centered at the intersection with St. Mary's Drive. The applicant is the City of Montrose. *Staff: Planner I William Reis*

11) Other Business

12) Next Meeting will be February 23, 2022 at 5:00 p.m.

13) Motion to Adjourn

AGENDA JUNTA REGULAR DE LA COMISIÓN DE PLANIFICACIÓN
Miércoles, febrero 9, 2022 5:00 PM
Cámaras del Consejo de la Ciudad, Elks Civic Building - 107 S. Cascade Ave.

El Comité de Planificación de Montrose se complace en tener a residentes de la comunidad que se toman el tiempo para asistir a las juntas del Comité de Planificación. Les animamos a asistir y a participar. A los individuos que deseen ser escuchados durante los procedimientos de la audiencia pública se les anima a que estén preparados y por lo general se les limitará a tres minutos para permitir que todos tengan la oportunidad de ser escuchados. La regla de las 11:00 p.m. será implementada de acuerdo con las regulaciones de la Ciudad de Montrose (Sec.7-115-2).

Comentarios adicionales por escrito son bienvenidos. Si le gustaría comentar en algún punto de la agenda envíe un correo electrónico a cityofmontrose.org. Los comentarios por escrito deben ser recibidos para el mediodía una semana antes de la junta para ser incluídos en el paquete de la Comisión de Planificación. Después de este plazo, los comentarios recibidos al mediodía el día antes de la junta serán distribuídos a la Comisión de Planificación el día de la junta.

La participación pública para esta junta será en persona en las Cámaras del Consejo de la Ciudad y vía Zoom en el siguiente enlace:
https://us02web.zoom.us/webinar/register/WN_i-yvWS9mQlugCtFq09uAqA

La participación telefónica está disponible en: 1-346-248-7799 ó +1-669-900-9128 ó +1 253 215 8782 Webinar ID 879 0815 1368.

Hay asistencia de aparatos auditivos disponibles para el uso público. Por favor déjenos saber si usted necesita esta adaptación. La ciudad también ofrece interpretación para hispanohablantes. Para poder reservar esta asistencia, por favor envíe un email a planningmail@ci.montrose.co.us por lo menos tres días antes de la junta.

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1) Comisión de Planificación llamado a orden de la junta

2) Toma de asistencia por el Presidente de la Comisión de Planificación

3) Aprobación de la minuta de la junta de enero 26, 2022

4) Adiciones o eliminaciones

5) **VARIACIÓN DEL CENTRO DE ATENCIÓN AMBULATORIO DE SALUD REGIONAL DE MONTROSE.** Esta propuesta incluye una solicitud para una variación para permitir una estructura de 65´de alto dentro del Distrito General Comercial "B-3". Este proyecto está localizado en la intersección de S. Río Grande Ave. y Orange Rd. (Parcela #399304254002). El solicitante es Nexcore Group. *Personal: William Reis*

6) **REVISIÓN DEL PLAN BOSQUEJO DE WOODS CROSSING NORTH.** Esta es una revisión y discusión del plan bosquejo para la Subdivisión Woods Crossing North, una propuesta residencial de desarrollo con 545 lotes unifamiliares y 45 unidades multifamiliares. Esta propiedad, la cual consiste de 160.71 acres, está bordeada por Sunnyside Rd, al sur, por el norte Miami Rd, por el oeste 6720 Rd, y por el este por campos de agricultura y casas unifamiliares. El solicitante es Matt Miles, Leadership Circle, LLC. *Personal: Planificadora Amy Sharp*

7) **PLANO PRELIMINAR SUBDIVISION HOME OF THE BRAVE**. El plano preliminar propuesto subdividirá a aproximadamente 39.4 acres en 148 lotes residenciales, incluyendo 116 lotes unifamiliares y 32 lotes dúplex. La propiedad está localizada adyacente a 6450 Road, la cual corre a lo largo de la orilla occidental de la propiedad. Los solicitantes son Todd y Maya Haynes. *Personal: Planificadora Senior Amy Sharp*

8) **PERMISO DE ESTACIONAMIENTO PARA RIVERBEND RV TRAVEL HOME PARK.** Esta propuesta incluye una solicitud de Riverbend RV Park un permiso de estacionamiento para casa de viaje para expandir servicios y facilidades dentro del parque existente. La solicitud es para cinco (5) lugares adicionales de RV (casas de viaje). Riverbend RV Park está localizado a lo largo de Chipeta Road, al norte de Chipeta Lake. El solicitante es David Svenson. *Personal: Planificadora Senior Amy Sharp*

9) **ADICIÓN MIER.** Esta es una propuesta para la zonificación inicial de "R-4" Distrito de Alta Densidad para la propuesta Adición Mier, aproximadamente 14.67 acres. La parcela está localizada al este de 6530 Rd, al occidente de 6600 Road, y al norte de Locust Road. Los solicitantes son Calvin y Helen Mier. *Personal: Planificadora Senior Amy Sharp*

10) **ADICIÓN NIAGARA ROAD.** Esta es una propuesta para zonificación inicial de "B-2" Highway Distrito Comercial para la propuesta de la Adición de Niágara Road, aproximadamente 0.456 acres. La parcela está localizada a la mitad del norte de Niágara Road aproximadamente centrada en la intersección con St. Mary's Drive. El solicitante es la Ciudad de Montrose. *Personal: Planificador I William Reis*

11) Otros asuntos

12) La próxima junta será febrero 23, 2022 a las 5:00 p.m.

13) Moción para levantar la sesión

The Montrose City Planning Commission held a meeting on January 26, 2022 at 5:00 p.m. in City Hall Council Chambers. The meeting agenda was posted in accordance with the Colorado Open Meetings Act (C.R.S. §24-6-401, et.seq.).

Planning Commissioners Present: David Fishering (Chair), Chad Huffman (Vice-Chair), Karen Vacca, Jan Chastain, Phoebe Benziger, Delphine Jadot, Richard Rogers, and Steve Ball. Absent: None

Staff Members Present: Amy Sharp (Senior Planner), William Reis (Planner I), Scott Murphy (City Engineer), Greg Story (Information Systems Director), Ann Morgenthaler (Deputy City Manager), Chris Dowsey (Assistant City Attorney), Christine Aslakson (Paralegal), Gerald Dahl (Attorney – Special Counsel to City of Montrose), C. Dunlap (Police Dept.).

There were approximately 15-20 members of the public present in-person (did not sign in) and 12 members of the public present via Zoom.

CALL TO ORDER

Chairperson David Fishering called the meeting to order at 5:00 p.m.

APPROVAL OF MINUTES

Phoebe Benziger moved to approve the minutes of the January 12, 2022 meeting as submitted. Chad Huffman seconded, and the motion carried.

ADDITIONS OR DELETIONS

None.

1. REZONE OF YOCUM ADDITION.

This is a request to rezone the Yocum Addition from "R-2" Low Density District to "R-3A" Medium High Density District. This property consists of approximately 7.3 acres. The applicant is Luckenbill Drayton & Associates, LLC Profit Sharing Plan & Michael Surak, Real America.

Staff Presentation. Amy Sharp introduced this item. All public requirements have been fulfilled and the official files and exhibits have been entered into the record.

Applicant Presentation

Michael Surak from Real America gave a presentation and answered questions. Jeff Ryan, VP for Development for Real America, also came forward to answer questions.

Questions for Applicant

Planning Commissioners and applicant discussed the rental costs of the units and how those were determined, Federal housing tax credits and compliance with requirements.

Questions for Staff

Planning Commissioners and staff discussed the high density impacts to Ogden Road, the planned development stage of the project, the choice of R-3A for this lot, use by rights for this zone, the open space portion, and the additional comments sent via email.

Public Hearing

Four members of the public came forward to discuss their concerns which included safety issues with the creek and zoning of proposed adjacent open space area, location of high density in relation to surrounding densities, and a zone change that was denied in the past.

Three members of the public came forward in support of the project with comments about the good location with consideration of all the amenities.

Questions for Applicant or Staff and Discussion

Commissioners and staff discussed the safety of the creek, the stages of development that will address safety concerns, the appropriateness of the location of the project, traffic on Ogden Road and the primary issue being a lack of safe pedestrian access, the dramatic difference in the community from when it was originally zoned and how high density zoning fits area with all the local amenities.

Planning Commissioners assured the public the commission will be cognizant of safety concerns when the project is brought back during the development phase.

Attorney Mr. Dahl commented his pleasure with the commission's understanding of their role for the hearing on a rezone.

Motion and Vote

Phoebe Benziger moved to recommend to City Council approval of the rezone request of the Yocum Addition to "R-3A" Medium High Density District. The request meets the Code criteria based on the evidence and testimony presented at this hearing and in the staff report. Chad Huffman seconded, and the motion carried unanimously.

3. OTHER BUSINESS

None

4. NEXT MEETING

The next Planning Commission meeting is scheduled for February 9, 2022.

5. PUBLIC COMMENT

None.

6. ADJOURNMENT

Jan Chastain moved to adjourn the meeting. The motion was seconded and the meeting ended at approximately 6:10 p.m.

_____

CHAIRPERSON

_____

ATTEST

CITY OF MONTROSE
Planning Services

MEMO

TO: Planning Commission
FROM: William Reis, Planner I
DATE: February 9, 2022
RE: 22-0010 – Montrose Regional Health Ambulatory Care Center Variance
ATTACHMENTS:

- Exhibit A: Maps
- Exhibit B: Photos
- Exhibit C: Excerpt from Code - Variances
- Exhibit D: Excerpt from Code - Dimensional Requirements

Public notice requirements have been fulfilled in accordance with Section 4-4-31(D) of the City of Montrose Municipal Code. A sign was posted on the property, letters sent to property owners within 100 feet, and an ad appeared in the Montrose Daily Press.

Planning Commission Consideration:
The Planning Commission is reviewing a variance application for building height to be granted to the proposed Montrose Regional Health Ambulatory Care Center, planned for Lot 8 of River Landing Filing No. 3 1st Amended Plat, also known as Parcel Number 399304254002. The Planning Commission shall approve or deny the variance application. The Planning Commission will consider all of the information in this memo in making a decision.

Application Background:
This project is a variance that would allow for a building of 65’ in height. The property is located in the “B-3” General Commercial District. Buildings in this zoning district ordinarily have a maximum height allowance of 35’. This request is necessary due to the limitations of the lot size in conjunction with the space and parking requirements for the proposed health care center. This request for a 65’ building requires a variance.

Applicant: Montrose Regional Health & NexCore Group

Staff Analysis:

1. The criteria for granting variances are listed below with comments regarding applicability and compliance in italics. Municipal Code, Section 4-4-28 (B). Variances shall be granted only if the following criteria are met:
    a. The variance will not adversely affect the public health, safety and welfare.
    The additional height variance will not adversely affect the public health, safety, and welfare of the community. The services provided in the new Ambulatory Care Center will only improve public health, safety, and welfare by providing ambulatory healthcare in a convenient location that is dedicated to outpatient care delivered in a coordinated manner.
    b. Unusual physical circumstances shall exist, such as unusual lot size or shape, topography, or other physical conditions peculiar to the affected property, and violations of code shown by clear and convincing evidence that they were made in good faith, which make it unfeasible to develop or use the property in conformity with the provisions of this Chapter in question.
    The lot size and shape makes it unfeasible to develop an Ambulatory Care Center on the property in conformity with the height limitation of 35 feet. The required program and vertical stacking would need 65 feet for a 4 story 80,000 SF structure of this type to conform with the City requirements for parking, setbacks, greenspace, and other criteria that affect land utilization. The program has been determined to provide a critical mass of comprehensive services organized in a one stop outpatient care center, and the program will not fit on the site in a less than four story configuration without compromising patient and staff parking. The applicant's standard healthcare parking requirements are more stringent than City regulations; therefore a taller building is necessary in order to meet these requirements. These additional requirements are approximately 4 parking spaces per 1,000 rentable square feet of building area (compared to the City of Montrose requirements of 3 spaces per examination room). According to these requirements, the applicant's standard parking requirements would be approximately 300 spaces, compared to the City's requirements of 272 spaces. In order to meet requirements for parking, a taller building is needed to meet the needs of the facility.
    c. The unusual circumstances have not been created as a result of the action or inaction of the applicants, other parties in interest with the applicant, or their or his predecessors in interest.
    These circumstances were pre-existing, and have not been created as a result of the action or inaction of the applicants, other parties in interest with the applicant, or their or his predecessor in interest.
    d. The variance requested is the minimum variance that will afford relief and allow for reasonable use of the property.
    The minimum height required for a 4 story 80,000 GSF Ambulatory Care Center with an Ambulatory Surgery center is 65 feet.
    1st Floor - 15' (minimum floor to floor first floor and imaging)
    2nd Floor - 13' Floor to Floor (minimum floor to floor for medical offices)
    3rd Floor - 13' Floor to Floor (minimum floor to floor for medical offices)

4th Floor - 14' Floor to Floor (required for Ambulatory Surgery Center)
Parapet/Mechanical Screen system - 5' to 10'
Total desired height - 65'

e. The variance will not result in development incompatible with other property or buildings in the area, and will not affect or impair the value or use or development of other property.
A 65' high Ambulatory Care Center is complementary to the adjacent properties and buildings in the area. The adjacent retail and business occupancies will benefit from the daily patient visits (estimated at 1,500+ per day), and is likely to increase their value. Ambulatory care is increasingly viewed as complementary to retail, business, and mixed use developments seeking to incorporate the concept of healthy lifestyles. The education and health awareness services offered in the Ambulatory Care Center development enhance the places community members go to shop, dine, live, and transact business.

2. Dimensional Requirements
   a. For all uses in the "B-3" General Commercial District, buildings may be allowed 35' in height at a maximum. (Section 4-4-22)

District	**Maximum Building Height**
B-3 General Commercial	35'

3. The Variance does not appear to be adverse to the public health, safety and welfare, and is consistent with Municipal Code requirements and the City of Montrose Comprehensive Plan.

Staff Recommendation:
The staff finds that the criteria have been met, and recommend approval of the request.

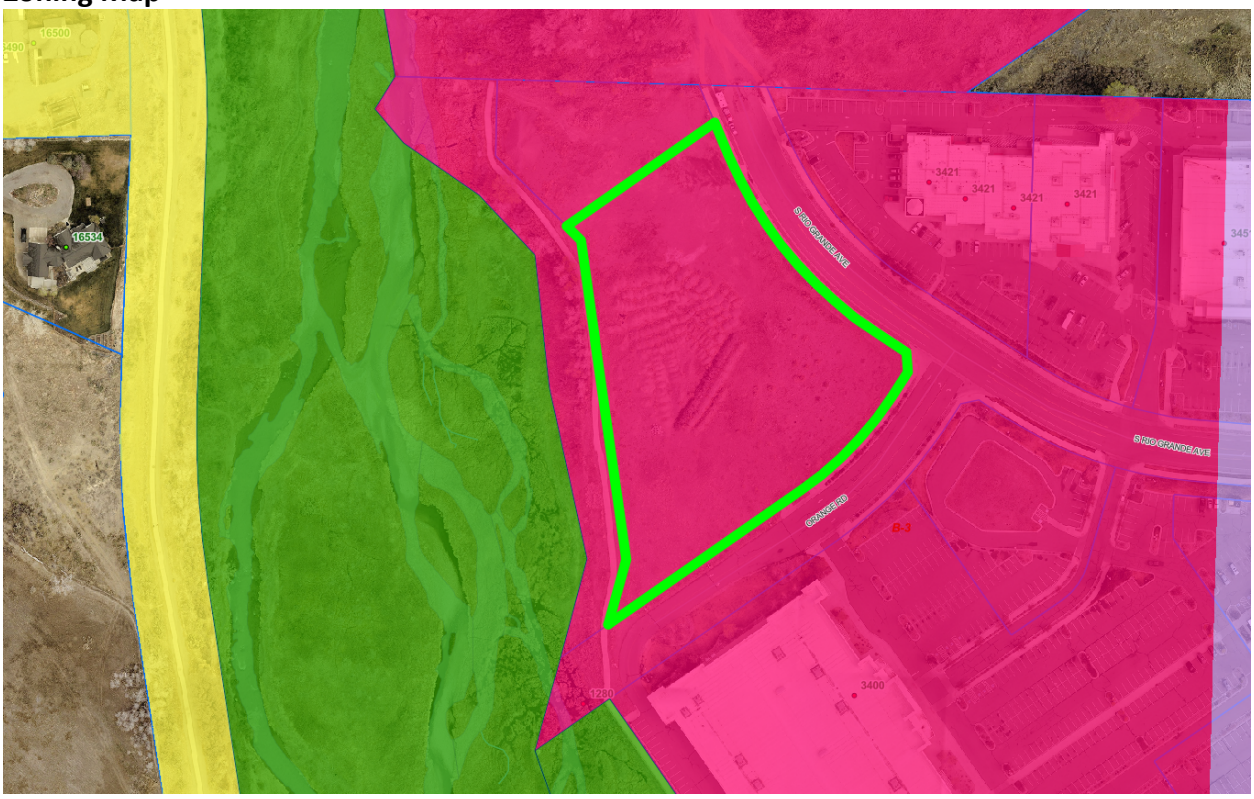
Planning Commission Motion Alternatives:
Approval Motion Recommendation:
"I hereby make a motion to approve the request to allow the variance for a 65' tall building on Parcel Number 399304254002. The request meets the Code criteria and standards based on the evidence and testimony presented at this hearing and in the staff report."

Denial Motion Recommendation:
"I hereby make a motion to deny the request. The request does not meet the Code criteria based on the evidence and testimony presented at this hearing and in the staff report."

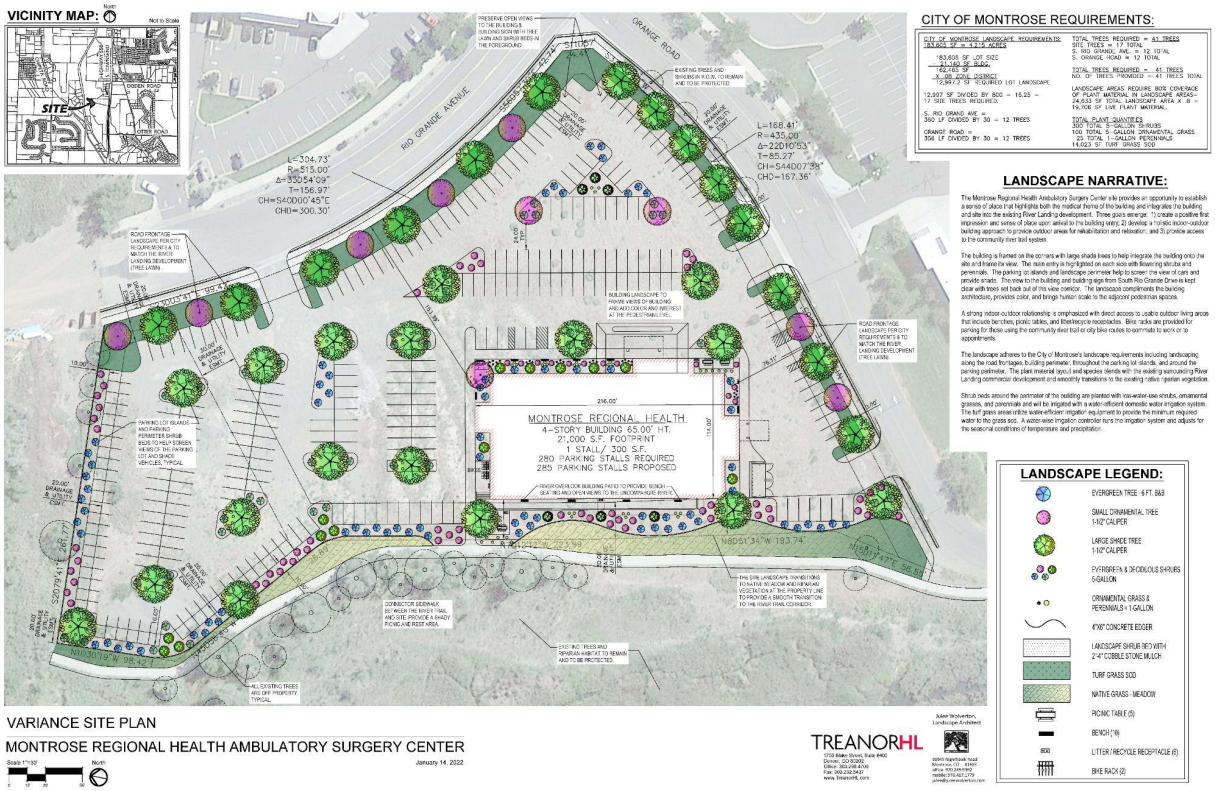
EXHIBIT A: Maps

Location Map

Zoning Map



Site Plan



VARIANCE SITE PLAN

MONTROSE REGIONAL HEALTH AMBULATORY SURGERY CENTER

Scale 1"=30'

North

January 14, 2022

TREANORHL

1733 Blake Street, Suite #400
Denver, CO 80202
Office: 303.296.4700
Fax: 303.296.4705
www.TreanorHL.com

Julie Stolverton,
Landscape Architect

EXHIBIT B: Photos

EXHIBIT C: Sec. 4-4-28. - Variances

(A) The Review Board may grant a variance from the requirements set out in this Chapter, if it determines, following the review procedure of Section 4-4-31, that the criteria of this Section will be met. Provided, however, no variance shall be granted from provisions restricting uses by right and conditional uses within any zoning district.

(B) Variances shall be granted only if all the following criteria are met:

(1) The variance will not adversely affect the public health, safety and welfare.

(2) Unusual physical circumstances shall exist, such as unusual lot size or shape, topography, or other physical conditions peculiar to the affected property, and violations of code shown by clear and convincing evidence that they were made in good faith, which make it unfeasible to develop or use the property in conformity with the provisions of this Chapter in question.

(3) The unusual circumstances have not been created as a result of the action or inaction of the applicants, other parties in interest with the applicant, or their or his predecessors in interest.

(4) The variance requested is the minimum variance that will afford relief and allow for reasonable use of the property.

(5) The variance will not result in development incompatible with other property or buildings in the area, and will not affect or impair the value or use or development of other property.

(C) The burden shall be on the applicant to show that these criteria have been met.

(D) Variances shall be granted for sign regulations only if all of the following criteria are met, in lieu of the criteria of Subsection (B) of this Section.

(1) The variance will not adversely affect the public health, safety and welfare.

(2) The variance requested is the minimum variance that will afford relief.

(3) The variance will not result in signage incompatible with other properties in the area and will not affect or impair the value, use of development of such properties.

(4) Strict compliance with the regulation presents practical difficulties or unnecessary hardships, and the variance sought falls within the spirit of the sign code as a whole.

(Ord. No. 2472 , § 4-4-28, 5-7-2019)

EXHIBIT D: Sec. 4-4-22. – Dimensional requirements.

(A) Tabulated requirements for uses by right are as follows (all dimensions in feet or square feet unless otherwise noted):

		Minimum Lot			Minimum Setbacks				
District	Use	Width at Building Line	Depth	Size	Front	Rear	Side	Corner Lot	Maximum Building Height
RL	All	100	150	* * * *	25	20	10	20	35
R-1	All	100	150	1 acre	25	20	10	20	35
R-1A	All	100	150	½ acre*	25	20	10	20	35
R-1B	All	100	150	⅓ acre*	25	20	10	20	35
R-2	All	N/A	N/A	7,500	25	20	6	20	35
R-3	Single-family	N/A	N/A	6,250	15	25	5	15	35
	All others	N/A	N/A	9,375	15	25	5	15	35
R-3A	Single-family	N/A	N/A	6,250	15	25	5	15	35
	Duplex	N/A	N/A	9375	15	25	5	15	35
	All others	N/A	N/A	lgr 9,375 or 2,900/unit	15	20	10	15	35
R-4	Single-family	N/A	N/A	6,250	15	25	5	15	35
	Duplex	N/A	N/A	9,375	15	25	5	15	35
	All others	N/A	N/A	lgr 9,375 or 2,300/unit	15	20	10	15	35
R-5	All	100	120	12,000	25	20	10	20	35
R-6	Single-family	N/A	N/A	7,500	25	20	6	20	35
	All others	N/A	N/A	9,375	25	20	6	20	35
MHR	All except								
MH Parks**	N/A	N/A	3,125	5	10	10	10	35	
MHR	MH Parks**	N/A	N/A	6,250	12***	10***	5	12	35
OR	Single-family	50	100	6,250	15	15	5	15	35
	Duplexes	50	100	6,250	15	15	5	15	35
	All Others	50	100	6,250	15	15	5	15	35
B-1	No Requirements	No Req.	No Req.	See Subsection 4-4-12(B)(8)	No Req.	No Req.	No Req.	No Req.	No Req.
B-2	All*****	50	100	N/A	15	N/A	N/A	15	N/A
B-2A	All*****	50	100	N/A	25	N/A	N/A	25	35
B-3	All*****	50	100	N/A	25	N/A	N/A	25	35
B-4	All*****	N/A	N/A	N/A	25	N/A	N/A	25	35
I-1	All*****	N/A	N/A	½ acre	25	N/A	N/A	25	N/A
I-2	All*****	N/A	N/A	½ acre	25	N/A	N/A	25	N/A
All Zones Except I-1, I-2	Renewable Energy Facilities	N/A	N/A	N/A	25	25	10	25	35

I-1, I-2	Renewable Energy Facilities	N/A	N/A	N/A	25	25	10	25	N/A
* Garage doors which face an alley require a five-foot minimum setback.									
** Dimensional requirements for mobile home parks are controlled by Chapter 4-12. These provisions shall apply subject to nonconforming use regulations.									
*** The front setback or one of the side setbacks shall be a minimum to 20 feet.									
**** A minimum lot size shall be determined as a condition of initial zoning of property as "RL." Such lot size shall be designed to limit overall residential units per acre to no more than allowed by Montrose County in comparable areas in the County where sewer is available, and to implement the City Master Plan as feasible while remaining economically competitive with allowed County densities.									
***** Residential uses shall comply with the applicable dimensional requirements as set out for the "R-3A" zone.									

(B) Proper dimensional requirements for conditional uses shall be determined in accordance with Section 4-4-22 and 4-4-26, provided that as a general rule, they shall be no less strict than the dimensional requirements specified for uses-by-right in the district concerned or as specified for the use concerned in a zone in which it is a use-by-right. Provided, further, that the following minimum lot sizes shall apply to duplexes and multifamily residences when allowed as a conditional use:

District	*Use*	*Minimum Lot Size*
R-3 and R-6	Multifamily Residence	The larger of 9,375or 2,900 per dwelling unit
OR	Multifamily Residence	The larger of 9,375 or 2,900 per dwelling unit

(C) Additional Dimensional Requirements.

(1) Fueling stations must comply with the dimensional requirements set out in Subsection 4-4-12(B)(9) in any district.

(2) Accessory use structures or buildings in residential districts may be located on those rear and side property lines which do not abut a street, if the structure is at least ten feet to the rear of the building line of the principal structure and does not occupy more than 30 percent of the rear yard area.

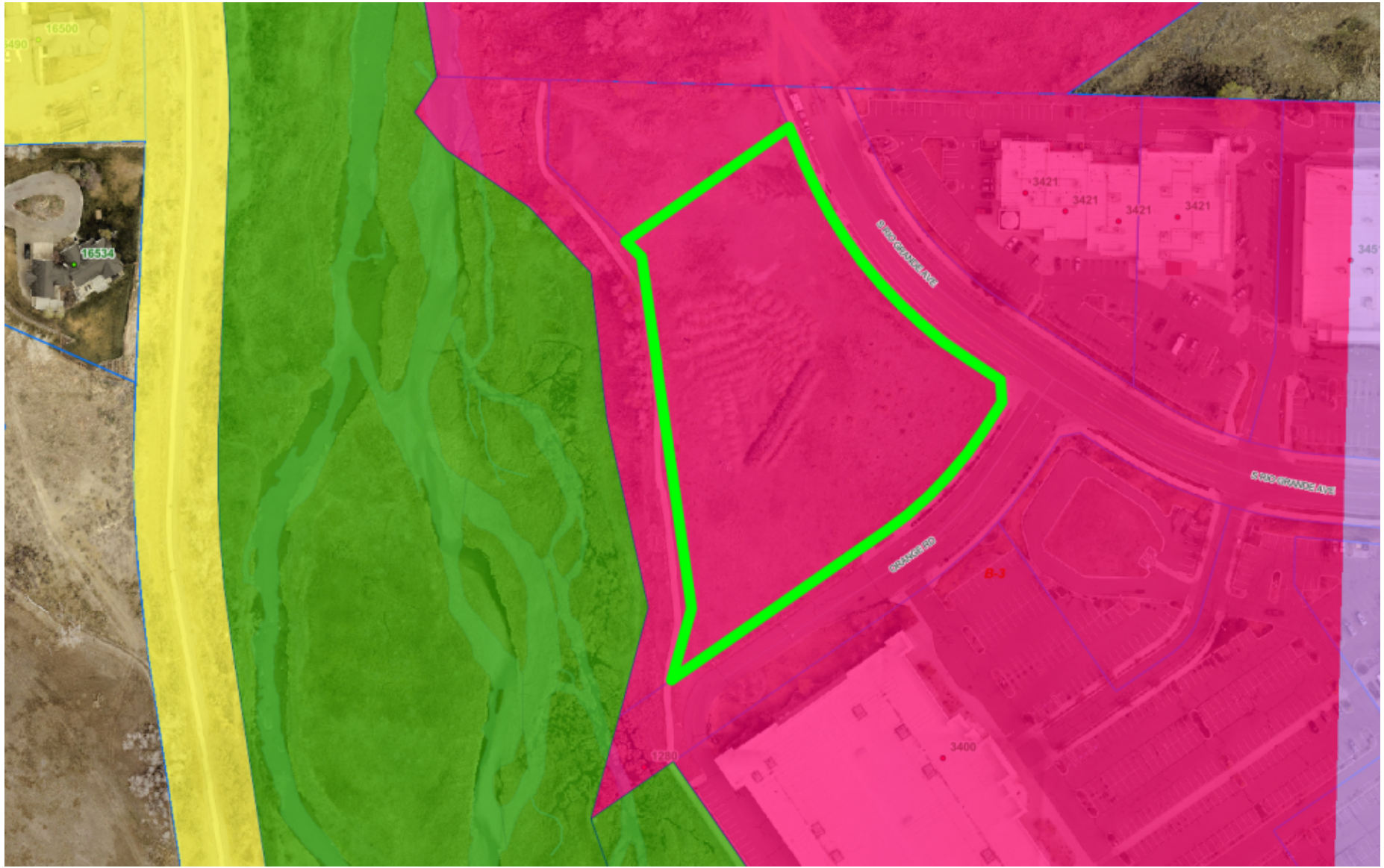
(3) In a block where a setback line has been established by existing structures 50 percent or more of the block, the average setback of the existing buildings may be used as the minimum setback.

(Ord. No. 2472 , § 4-4-22, 5-7-2019)

MONTROSE • COLORADO

Project Site – Lot 8, River Landing Filing No. 3 1st Amended Plat

Zoning – B-3 General Commercial District



Montrose Regional Health Ambulatory Care Center Variance

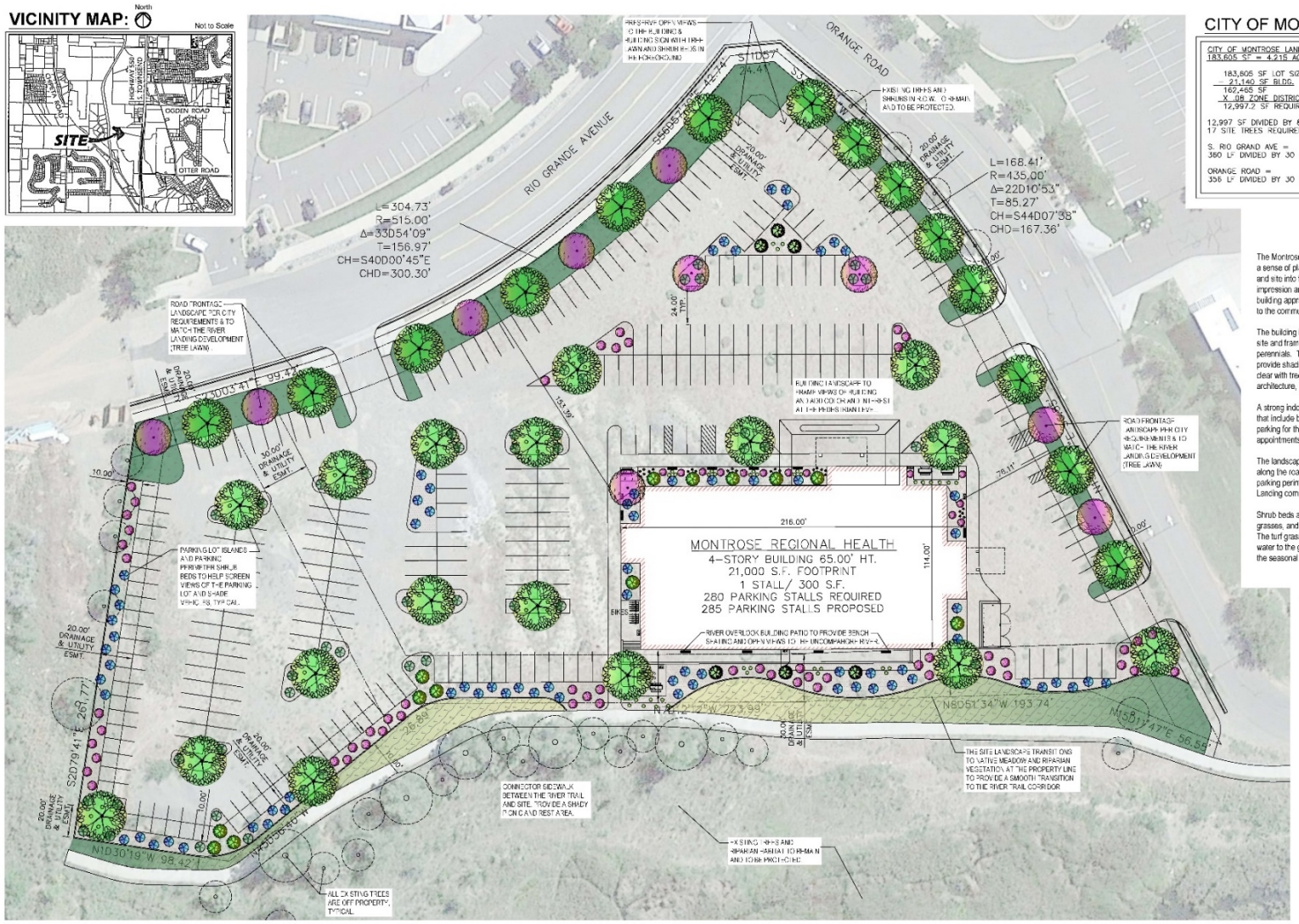
- The applicant seeks a variance to height requirements for buildings in the “B-3” General Commercial District.
- Buildings have a maximum height of 35’ in the “B-3” Zoning District.
- The applicant wishes to erect a 65’ tall outpatient care center in the “B-3” Zoning District.
- Federal parking regulations exceed those of the City’s, and the additional required parking necessitates a taller structure.

Variances – Sec. 4-4-28

Variances shall be granted only if all the following criteria are met:

a) The variance will not adversely affect the public health, safety and welfare.
b) Unusual physical circumstances shall exist, such as unusual lot size or shape, topography, or other physical conditions peculiar to the affected property, and violations of code shown by clear and convincing evidence that they were made in good faith, which make it unfeasible to develop or use the property in conformity with the provisions of this Chapter in question.
c) The unusual circumstances have not been created as a result of the action or inaction of the applicants, other parties in interest with the applicant, or their or his predecessors in interest.
d) The variance requested is the minimum variance that will afford relief and allow for reasonable use of the property.
e) The variance will not result in development incompatible with other property or buildings in the area, and will not affect or impair the value or use or development of other property.

MHRACC Variance Site Plan



CITY OF MONTROSE REQUIREMENTS:

CITY OF MONTROSE LANDSCAPE REQUIREMENTS:
183,605 SF = 4.215 ACRES

183,605 SF LOT SIZE
- 21,140 SF BLDG.
162,465 SF
X .08 ZONE DISTRICT
12,997.2 SF REQUIRED LOT LANDSCAPE

12,997 SF DIVIDED BY 800 = 16.25 = 17 SITE TREES REQUIRED.

S. RIO GRAND AVE =
360 L' DIVIDED BY 30 = 12 TREES

ORANGE ROAD =
356 L' DIVIDED BY 30 = 12 TREES

TOTAL TREES REQUIRED = 41 TREES
SITE TREES = 17 TOTAL
S. RIO GRANDE AVE. = 12 TOTAL
S. ORANGE ROAD = 12 TOTAL

TOTAL TREES REQUIRED = 41 TREES
NO. OF TREES PROVIDED = 41 TREES TOTAL

LANDSCAPE AREAS REQUIRE 80% COVERAGE OF PLANT MATERIAL IN LANDSCAPE AREAS=
24,633 SF TOTAL LANDSCAPE AREA X .8 =
19,706 SF LIVE PLANT MATERIAL.

TOTAL PLANT QUANTITIES
300 TOTAL 5-GALLON SHRUBS
100 TOTAL 5-GALLON ORNAMENTAL GRASS
25 TOTAL 1-GALLON PERENNIALS
14,023 SF TURF GRASS SOD

LANDSCAPE NARRATIVE:

The Montrose Regional Health Ambulatory Surgery Center site provides an opportunity to establish a sense of place that highlights both the medical theme of the building and integrates the building and site into the existing River Landing development. Three goals emerge: 1) create a positive first impression and sense of place upon arrival to the building entry; 2) develop a holistic indoor-outdoor building approach to provide outdoor areas for rehabilitation and relaxation; and 3) provide access to the community river trail system.

The building is framed on the corners with large shade trees to help integrate the building onto the site and frame its view. The main entry is highlighted on each side with flowering shrubs and perennials. The parking lot islands and landscape perimeter help to screen the view of cars and provide shade. The view to the building and building sign from South Rio Grande Drive is kept clear with trees set back out of the view corridor. The landscape compliments the building architecture, provides color, and brings human scale to the adjacent pedestrian spaces.

A strong indoor-outdoor relationship is emphasized with direct access to usable outdoor living areas that include benches, picnic tables, and litter/recycle receptacles. Bike racks are provided for parking for those using the community river trail or city bike routes to commute to work or to appointments.

The landscape adheres to the City of Montrose's landscape requirements including landscaping along the road frontages, building perimeter, throughout the parking lot islands, and around the parking perimeter. The plant material layout and species blends with the existing surrounding River Landing commercial development and smoothly transitions to the existing native riparian vegetation.

Shrub beds around the perimeter of the building are planted with low-water-use shrubs, ornamental grasses, and perennials and will be irrigated with a water-efficient domestic water irrigation system. The turf grass areas utilize water-efficient irrigation equipment to provide the minimum required water to the grass sod. A water-wise irrigation controller runs the irrigation system and adjusts for the seasonal conditions of temperature and precipitation.

LANDSCAPE LEGEND:

- EVERGREEN TREE - 8 FT. B&B
- SMALL ORNAMENTAL TREE 1-1/2" CALIPER
- LARGE SHADE TREE 1-1/2" CALIPER
- EVERGREEN & DECIDUOUS SHRUBS 5-GALLON
- ORNAMENTAL GRASS & PERENNIALS = 1-GALLON
- 4"X8" CONCRETE EDGER
- LANDSCAPE SHRUB BED WITH 2"-4" COBBLE STONE MULCH
- TURF GRASS SOD
- NATIVE GRASS - MEADOW
- PICNIC TABLE (6)
- BENCH (10)
- LITTER / RECYCLE RECEPTACLE (6)
- BIKE RACK (2)

VARIANCE SITE PLAN

MONTROSE REGIONAL HEALTH AMBULATORY SURGERY CENTER

Scale 1"=30'

North

January 14, 2022

TREANORHL
1755 Blake Street, Suite #400
Denver, CO 80202
Office: 303.298.4700
Fax: 303.292.9437
www.TreanorHL.com

Julee Wolverton,
Landscape Architect
6754N Nightshade Road
Montrose, CO 81403
office: 970.275.0692
mobile: 970.417.1173
julie@jw-landscapearchitect.com

MHRACC Variance Example Images

Analysis – Further Comments

- Staff finds that the proposed variance meets the requirements set forth in Sec. 4-4-28.
- It is in compliance with the local zoning and is compatible with existing uses in the area.
- Staff recommends approval of the variance application.

MONTROSE • COLORADO

CITY OF MONTROSE
Planning Services

MEMO

TO: Planning Commission
FROM: Amy Sharp, Senior Planner
DATE: February 9, 2022
RE: Woods Crossing North Subdivision Sketch Plan
ATTACHMENTS

- Exhibit A: Area Maps
- Exhibit B: Excerpts from City of Montrose Municipal Code
- Exhibit C: Sketch Plan Narrative, Maps & Traffic Study

Public notice requirements have been fulfilled in accordance with Section 4-4-31(D) of the City of Montrose Municipal Code. A sign was posted on the property, letters sent to property owners within 100 feet, and an ad appeared in the Montrose Daily Press.

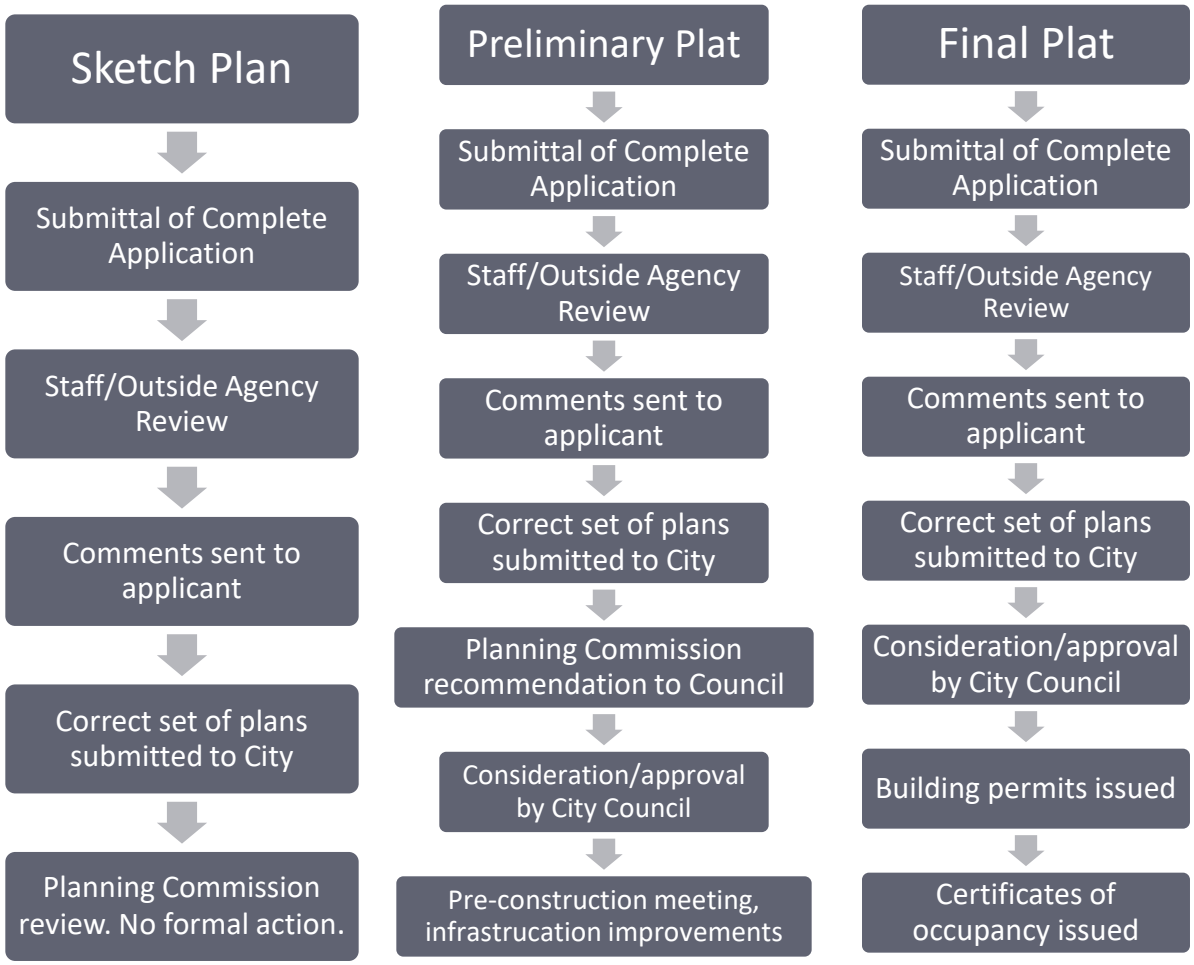
Planning Commission Consideration:
The review and discussion of the Sketch Plan by the Planning Commission is informal and non-binding in nature, and shall serve as a means to provide guidance to the subdivider in accordance with the City of Montrose Municipal Code. No formal action is taken at this time.

Applicant: Matt Miles, Leadership Circle, LLC

Application Background:
Woods Crossing North Subdivision is a proposed residential development on the eastern side of Montrose. The property is approximately 160.71 acres in size and is bordered on the south by Sunnyside Road, on the north by Miami Road, on the west by 6720 Road, and on the east by agricultural fields and single-family homes. The majority of the parcel (134+ acres) is zoned “R-3” Medium Density District, with two “B-4” Neighborhood Shopping District sections including a 360’ deep strip along the Miami Road Front and a 16 acre rectangle in the southeast corner of the extreme eastern section. The “R-3” zoning portion is planned to have 545 single-family lots. The “B-4” zoning portion is planned to have 45 multi-family units. This parcel was annexed and zoned in 2017. The zoning was has not changed and is consistent with the adjacent properties.

The Sketch Plan application is only reviewed by the Planning Commission, not City Council, and no formal action is taken at this stage. The applicant has submitted the attached Sketch Plan application materials (Exhibit C) based on a conceptual design and seeks the Planning Commission's feedback. The sketch plan has been reviewed by City staff and partner agencies and meets the City's design standards for standard subdivisions. After receiving feedback from the Planning Commission, the applicant will submit and the City will review a Preliminary Plat for the subdivision (including engineering design for all public infrastructure). After those plans are reviewed for compliance with the City of Montrose Municipal Code, it will be placed on an upcoming Planning Commission agenda, and the Planning Commission will make a recommendation to City Council. City Council will review the application and consider the Planning Commission's recommendation.

Subdivision Process:
The City of Montrose Municipal Code Section 4-7-5 (Exhibit B) outlines the process and standards for subdivision applications. The following flowchart shows this overall process.



Staff Analysis:

1. Subdivision Regulations:
    a. Municipal Code: Section 4-7-5 (Exhibit B): The sketch plan application has been reviewed by City staff and partner agencies and meets the City's design standards for standard subdivisions.
2. Relevant Comprehensive Plan and Municipal Code References: To assist the Planning Commission, staff has provided the following relevant information from the City of Montrose Envision 2040 Comprehensive Plan and Municipal Code.
    a. A Comprehensive Plan is not legally binding. It provides guidance for zoning and other land use decisions. It is possible for sections of the Comprehensive Plan to conflict, and it is reasonable that a decision may not satisfy every aspect outlined within the Comprehensive Plan.
    b. The Future Land Use Map within the Comprehensive Plan illustrates general, somewhat flexible locations and extents for various land uses and densities.
    c. The Municipal Code and Zoning regulations specify land uses, densities, bulk and height requirements, setbacks, and other development standards that are allowed within each zoning district in order to achieve the intent of the zoning district.
    d. Development on this parcel may occur in accordance with the approved zoning and should also be in general conformance with the Comprehensive Plan.
3. Comprehensive Plan - Land Use Map Designation:
    a. The Comprehensive Plan Future Land Use Map identifies this parcel as located in an area proposed as follows: **Residential Mixed Density Medium**. *This district provides for a variety of residential types, mixed within a neighborhood, including single-family homes, townhomes, duplexes, triplexes, and multi-family housing.* **Neighborhood Center**. *This designation is intended for small mixed-use commercial uses such as limited convenience shopping, office and professional services, and public facilities.*
4. Zoning Regulations:
    a. Municipal Code, Section 4-4-7(A) Intent: The "R-3" Medium Density District is intended to provide an area which is suitable for single-family homes and duplexes. This district provides for other uses which are compatible with such uses.
    b. Municipal Code, Section 4-4-15(A) Intent: The "B-4" Neighborhood Shopping District is intended to provide for retail shopping and services on a parcel or parcels of land collectively no greater than approximately five acres in size, with a convenient location relative to residential neighborhoods. Single family homes, duplexes, and multiple-family residences are a use by right in this zoning district.
    c. The proposed uses are a use-by-right in these zoning districts. The current zoning is compatible with general conditions in the area. The property is adjacent to

properties that are zoned “R-1” Very Low Density District, “R-1A” Large Estate District, “R-2” Low Density District, “R-3A” Medium High Density District, and agricultural (outside City limits).

5. Dimensional Requirements:
    a. Municipal Code, Section 4-4-22. The dimensional requirements in the “R-3”, “R-3A” and “B-4” zoning districts are included in the table below.

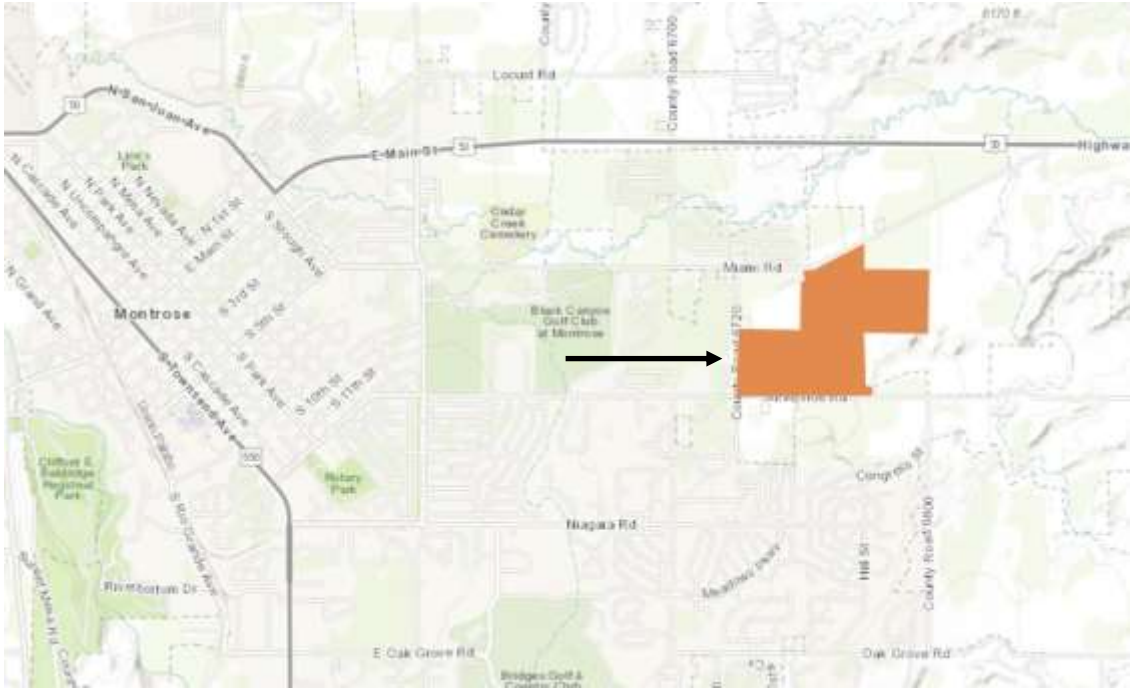
	Minimum Lot				Minimum Setbacks				
District	Use	Width at Building Line	Depth	Size	Front	Rear	Side	Corner Lot	Maximum Building Height
R-3	Single-family	N/A	N/A	6,250	15	25	5	15	35
	All others	N/A	N/A	9,375	15	25	5	15	35
R-3A	Single-family	N/A	N/A	6,250	15	25	5	15	35
	Duplexes	N/A	N/A	9,375	15	25	5	15	35
	All others	N/A	N/A	Lgr 9,375 or 2,900/ unit	15	20	10	15	35
B-4	All*****	N/A	N/A	N/A	25	N/A	N/A	25	35
***** Residential uses shall comply with the applicable dimensional requirements as set out for the "R-3A" zone.									

Staff Guidance to Planning Commission:
The Sketch Plan application meets all dimensional, design, and zoning requirements as set forth in the City of Montrose Municipal Code, Section 4-7-5. The review and discussion of the Sketch Plan by the Planning Commission is informal and non-binding in nature, and shall serve as a means to provide guidance to the subdivider in accordance with the City of Montrose Municipal Code. No formal action is taken at this time.

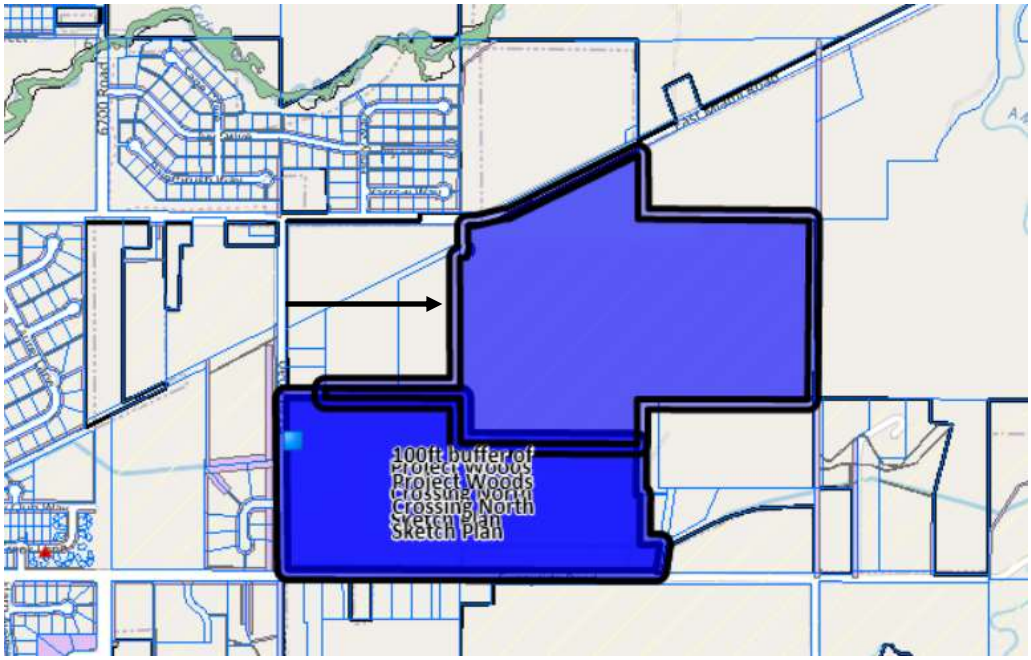
Staff recommends that the Planning Commission share feedback with the applicant, so that the applicant may consider the feedback and incorporate proposed changes into their future Preliminary Plat application.

EXHIBIT A: Area Maps

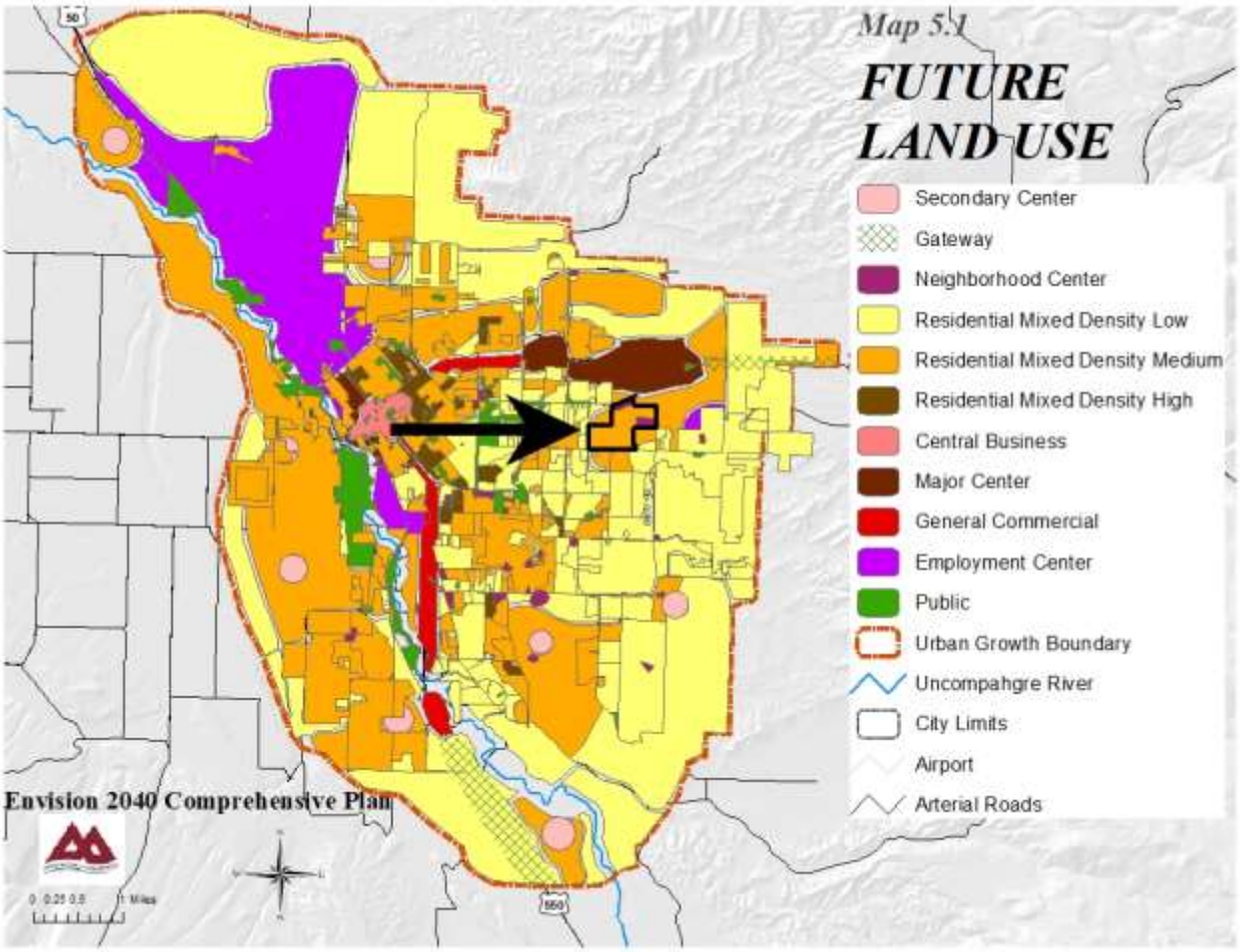
Vicinity Map

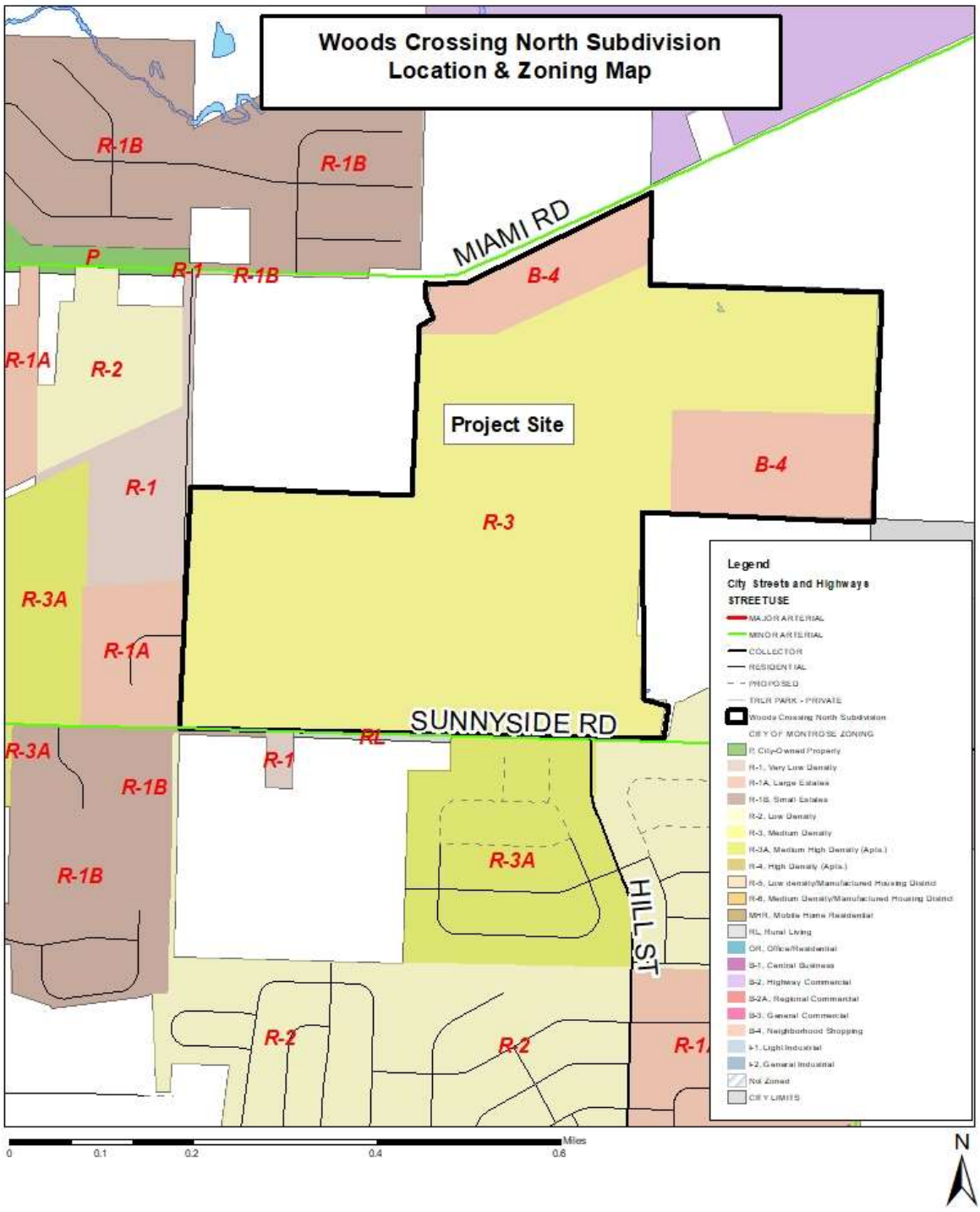


Notification Area Map



Comprehensive Plan Future Land Use Map





Map created 1/31/22

EXHIBIT B: Code Excerpts for Subdivisions

Sec. 4-7-5. - Subdivision procedure.

(A) The subdivision of land shall be accomplished in accordance with the procedures provided in this Section, except for those instances where different governing procedures are set forth pursuant to Sections 4-7-9 through 4-7-11, Informal Review and Sketch Plan. The City Council shall set all application fees related to land use action per resolution.

(1) Prior to submittal of the subdivision application, the subdivider shall make a reasonable effort to consult informally with property owners of record adjoining or within 100 feet of the proposed subdivision, and the City. No fee shall be required for such review or discussions of any plans or data concerning the proposed subdivision, prior to sketch plan review. The City shall not be bound by virtue of any discussions during the informal review stage.

(2) The proposal shall be consistent with the Master Plan, City subdivision and Zoning Regulations, standards and other applicable ordinances and regulations and will be reviewed, considering the following at a minimum.

(a) Conformance with the Master Plan and Zoning Regulations;

(b) Relationship of development to topography, soils, drainage, flooding, potential natural hazard areas and other physical characteristics;

(c) Availability of water, means of sewage collection and treatment, stormwater drainage, access and other utilities and services;

(d) Compatibility with the natural environment, wildlife, vegetation and unique natural features;

(e) Adjacent streets and traffic flow, including pedestrian access;

(f) Availability of fire, police and other emergency services protection;

(g) Impacts on area schools.

(3) A subdivider who intends to immediately develop only a portion of a full tract shall nevertheless submit an informal sketch plan for the entire tract showing his present plans for its eventual development.

(4) Following informal review when applicable, and in all cases except when not required by other provisions of this Chapter, the applicant shall file copies of the sketch plan application and sketch map, along with all required supporting plans, with the City. The submittal of such application, map and supporting plans shall comply with City's application and fee requirements.

Filing of a sketch plan shall not be required in cases where a subdivision, which does not qualify as a minor or amended subdivision, primarily due to a lack of installed on or off-site public improvements. In no case shall the sketch plan requirement be waived under this provision for subdivision proposals containing more than three divisions of real property, or where any part of the subdivision has been subdivided without a sketch plan under any part of this Official Code of the City of Montrose, Colorado, within the three years prior to the date of submission.

(5) The sketch plan review shall commence only upon submittal of a completed sketch map, a completed sketch plan application form, which form shall be provided by the City, and all required

supplemental information as set forth below, as well as any additional materials determined by City staff to be necessary for processing of the application.

(a) Sketch Map. The sketch map shall include the following:

(i) A location map, of approximately four inches by four inches, showing the project location in relation to the City of Montrose, with appropriate reference to major and minor arterial and collector roads or highways.

(ii) A detailed map showing property boundaries of the subdivision, north arrow and date. The scale of the map shall not be less than one inch equals 200 feet. The map shall include the name of the subdivision, name of the county, township, range, Section and quarter Section. The map shall further indicate zoning and land use of all lands within 300 feet of any property boundary owned by or under option to the subdivider. A title box shall be located in the lower right corner of the map. In the case of large subdivisions requiring more than one sheet at such a scale, an index map showing the total area on a single sheet shall also be submitted.

(iii) A conceptual drawing of the lot and street layout indicating the approximate area and number of individual lots and access to the property.

(iv) Significant natural and manmade features on the site, such as streams, lakes, natural drainage ways and wetlands; vegetation types including locations of wood areas; wildlife habitats; scenic corridors; visual impacts; solar access; existing buildings; utility lines and easements; irrigation ditches; bridges and similar physical features; existing development on adjacent property; and footprints of existing buildings.

(v) Total acreage of the tract.

(vi) Existing and proposed zoning district boundary lines. General land use divisions, including residential types, commercial, industrial, parks, open space and community facilities, including the proposal's relevance to underlying zoning.

(vii) Type and layout of all proposed infrastructure, including streets, utilities, water and sewer systems, and impact on existing systems.

(viii) Public use areas proposed to be dedicated to the public, the purpose of the dedication, and their relationship to existing public use areas.

(ix) Existing and proposed land use patterns, including street system, of both the tract proposed for development and immediately adjacent land.

(x) Existing site problems or peculiarities, such as areas of poor drainage, existing floodplain, geological hazards and seepage water.

(xi) Existing and proposed stormwater discharge facilities pertaining to the property.

(b) Sketch Plan Application. The sketch plan application shall include, but not be limited to, the following information pertaining to the proposed subdivision (this information may be provided in a narrative format):

(i) Estimated total number of gallons per day of water system requirements, source of water to supply subdivision requirements, and proposed dedication of water rights in accordance with existing City ordinances.

(ii) Estimated total number of gallons per day of sewage to be treated and means for sewage disposal.

(iii) Availability of electrical power, natural gas, CATV, telephone and other utilities necessary or proposed to serve the subdivision.

(iv) Access to the property, off-street parking, school bus stop area, and mail box location.

(v) Total number of proposed dwelling units.

(vi) Demonstrated compatibility with natural features.

(vii) Identification of all activities of the subdivision which shall require approval by permitting agencies at the local, state and federal level, and a description of the approval so required.

(viii) Names and addresses of all property owners of record adjoining or within 100 feet of the proposed subdivision.

(ix) Summary of issues or concerns resulting from informal review with neighboring property owners, if applicable.

(c) Sketch Plan Supplemental Documents. The sketch plan application shall also include the following supplemental documentation:

Disclosure of ownership, with supporting documentation from a title insurance company or, if acceptable to the City, an attorney licensed in the State of Colorado, which shall set forth a legal description of the property and title ownership of the property.

(6) Upon complete submittal of all required information, City staff shall provide initial review of the sketch plan within 45 days. Upon completion of initial review of the plan and submission by the applicant of any supplemental materials or necessary revisions as requested by City staff, the sketch plan application shall be placed on an upcoming Planning Commission agenda for which space is available and for which all notice requirements can be met.

(7) Advance notice of the sketch plan review by the City Planning Commission shall be provided by publication, with a location map of the property to be subdivided. Fifteen-day advance written notice shall also be provided, by hand delivery or deposit into the U.S. mail, to all property owners of record adjoining or within 100 feet of the proposed subdivision. The City shall provide such notice. The review and discussion of the Sketch Plan by the Planning Commission shall be informal and non-binding in nature, and shall serve as a means to provide guidance to the subdivider.

(B) Preliminary Plat.

(1) An application for preliminary plat shall be submitted to the City and shall comply with applicable City submittal requirements.

(2) The City may distribute copies of the preliminary plat and supporting plans or data as appropriate to the County Land Use Department, the school district, the natural gas, CATV, electrical power and telephone companies, the Fire Protection District, the Colorado Department of Transportation, the Federal Aviation Administration, the Uncompahgre Valley Water User's Association, applicable City departments and employees, and other entities as appropriate.

(3) The preliminary plat and proposed improvements shall comply with all requirements of these subdivision regulations and other applicable City design and construction specifications and standards. The plat shall be drawn to a scale of not less than one inch equals 100 feet. (See Chapter 4-4 of these Zoning Regulations.)

(4) The preliminary plat shall contain, at a minimum, the following:

(a) The name of the subdivision and the name, address and phone number of the subdivider, and his representatives, if applicable. Such information shall be contained in a title box located on the lower right corner of the plat.

(b) A certificate by the engineer or surveyor preparing the plat attesting to the accuracy of the plat. Such information shall be contained in a title box located on the lower right corner of the plat and shall be signed and stamped by the licensed professional engineer or registered surveyor, and shall indicate the scale used and direction of true north.

(c) A certificate by a licensed professional engineer that the water, stormwater, sewer systems, and all other improvements are properly engineered and designed in compliance with applicable requirements of the City and state.

(d) A certificate of ownership of the subject property.

(e) A location map, of approximately four inches by four inches, showing the project location in relation to the City of Montrose, with appropriate reference to significant roads or highways. The location map shall be provided both on the preliminary plat and separately on letter size paper.

(f) Certification on forms approved by the City to document approval of the plat; and the form of the certificates proposed to be used to comply with the requirements imposed for the final plat as found in Subsection (C) of this Section.

(g) Two-foot elevation contours and the boundaries of the base flood (100-year flood) and floodway and base flood elevation data, as defined and specified in the City's floodplain management regulations.

(h) The then-current zoning designations of the subdivision and of adjacent properties.

(i) The names of the owners of record of adjacent properties, and the property lines of adjacent properties as space will allow.

(j) The location and ownership interest of existing and proposed watercourses including lakes, swamps, ditches and floodprone areas (the inclusion of such watercourses within the jurisdictional authority of local, state or federal regulatory agencies shall also be noted); the location of existing and proposed streets, easements, utility lines, poles and towers, sewer lines, water lines, drains, culverts and other underground utilities and stormwater drainage facilities both on the proposed subdivision and adjacent properties as practical.

(k) The layout of all lots showing the building lines, dimensions and lot areas and footprints of existing buildings, if any. The plat shall include at least two references to City GPS coordinates.

(l) The layout and location of all parks and open space.

(m) The location of all land to be reserved or dedicated for public use.

(5) The following shall be submitted accompanying the preliminary plat together with plans and specifications prepared by a licensed professional engineer consistent with City standards and specifications, for all required or proposed improvements. All plans and specifications shall be signed and stamped by a licensed professional engineer.

(a) Plans for the proposed sanitary sewer system showing location, grade, pipe sizes and invert elevations, and the connection points to the existing system.

(b) Plans for the water system and fire protection system showing locations, pipe size, valves, fire hydrants and connection points to the existing system.

(c) Plans for the storm drainage system showing location, pipe sizes, grades and discharge points, including off-site improvements. Such plans shall comply with any applicable City stormwater drainage requirements.

(d) Plans for any improvements specifically affecting watercourses within the jurisdictional authority of local, state or federal regulatory agencies, noting the required permits therefor.

(e) Plans for proposed streets, sidewalks, recreation paths, showing grade and cross Section, trails and walkways and streetlight and street names.

(f) A soil or geological report prepared and certified by a professional geologist or soil scientist.

(g) Plans for piping ditches, or improvements to waterways.

(h) Plans for parks and recreation facilities.

(i) A traffic impact study for all developments when estimated vehicle trips per day will exceed 250 and plans for recommended traffic mitigation measures. The study shall provide, but not be limited to, traffic capacity for existing road infrastructure, proper analyses of transportation linkages in conformance with transportation plan, cumulative traffic impact of development at build-out, and proposed infrastructure design to account for such considerations. The scope of the impact study may be broadened to include other nearby subdivisions and developments, allowing for cooperative participation and cost sharing.

(6) If the applicant intends to develop the project in phases, a phasing plan will be required to be submitted to and approved by the City. The phasing plan must include the numbers of lots in each phase, the infrastructure planned for completion with each phase that is necessary to allow the phase to be properly integrated into City services as determined by the City Engineer, the amenities to be constructed with each phase, and all other information pertinent to the completion of the development.

(7) Upon submittal of all required information, the City staff shall provide initial review of the preliminary plat within 45 days. Upon completion of initial review of the preliminary plat and submission by the applicant of any supplemental materials and revisions necessary to comply with City regulations, the Preliminary Plat Application shall be placed on an upcoming Planning Commission agenda for which space is available and for which all notice requirements can be met. City staff shall make a recommendation to the City Planning Commission to approve the preliminary plat, provided that all supporting documentation has been properly submitted and the plat meets all requirements, disapprove the plat if it does not appear to comply with the provisions of this Chapter, or approve the plat with conditions or modifications.

(8) Advance notice of the preliminary plat review by the City Planning Commission shall be provided by publication, with location map of the property to be subdivided. The City shall provide such notice at least 15 days in advance of the scheduled meeting.

(9) Following receipt of a completed Preliminary Plat Application, the applicant shall be required to diligently pursue the application by providing revised plans, plat maps, and other necessary information in a timely fashion. Where the applicant fails to meet this requirement, the City shall, in writing, request the applicant to withdraw the application. If the applicant fails to take any further action on the Preliminary Plat Application for a period of six consecutive months following such request to withdraw, the Preliminary Plat Application shall automatically expire and all

applicable fees shall be non-refundable. When a Preliminary Plat Application has expired under this Subsection, in the event the applicant wishes to pursue development of the property the applicant must re-apply and pay any applicable fees.

(10) Upon review by the City Planning Commission, the commission shall make a recommendation to the City Council to approve the preliminary plat, provided that all supporting documentation has been properly submitted and the plat meets all requirements, disapprove the plat if it does not appear to comply with the provisions of this Chapter, or approve the plat with modifications or conditions. The reasons for such recommendation shall be included in the minutes of the Planning Commission meeting and provided in writing to the applicant upon request.

(11) Unless the subdivider withdraws the preliminary plat from review, or it expires as set forth herein, the plat shall be submitted to the City Council for final review and action. Advance notice of the preliminary plat review by the City Council shall be provided by posted notice.

(12) Council may approve the preliminary plat, approve the plat subject to conditions necessary to implement the provisions of this Chapter, or disapprove the plat if the Council finds that the requirements of these regulations have not been met.

(13) No construction of the required subdivision improvements shall commence until approval of the preliminary plat by the City Council and submittal of both a Mylar of the preliminary plat, as finally approved with signed certificates as required by the City, and a copy of the preliminary plat in a digital format acceptable to the City and compatible with City computer systems. Upon approval and submittal of the Mylar, and supporting documentation as required, the City shall then issue a written notice to proceed.

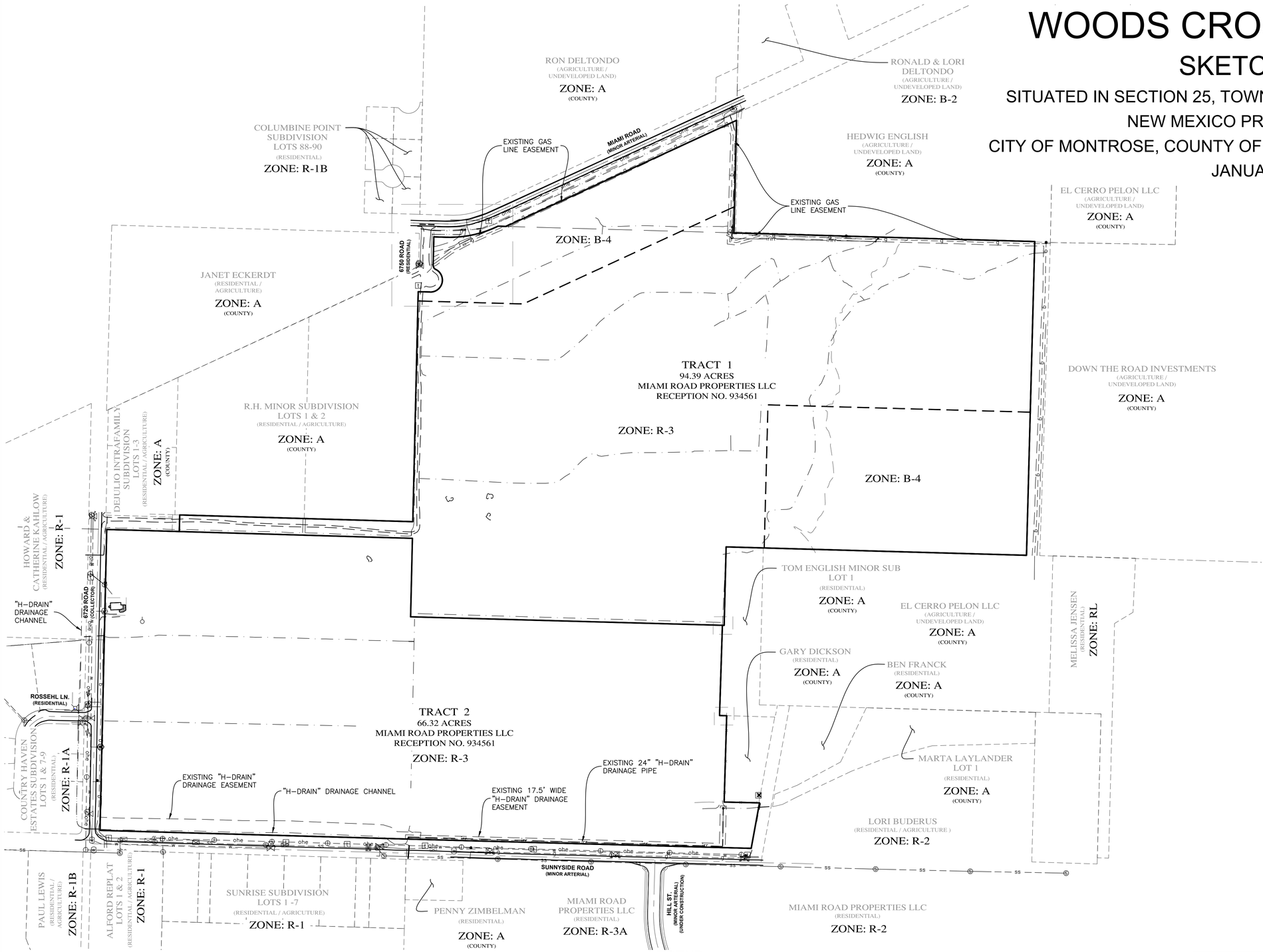
(Code 2012, § 4-7-5; Ord. No. 2062 , 6-2-2005; Ord. No. 2092 , 11-17-2005; Ord. No. 2173 , 11-15-2007; Ord. No. 2229 , 11-5-2009)

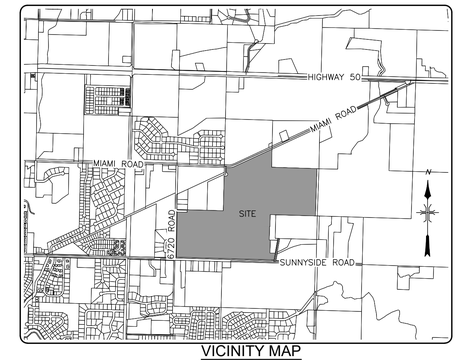
EXHIBIT C: Sketch Plan Narrative, Maps & Traffic Study

WOODS CROSSING NORTH

SKETCH PLAN

SITUATED IN SECTION 25, TOWNSHIP 49 NORTH, RANGE 9 WEST,
NEW MEXICO PRINCIPAL MERIDIAN
CITY OF MONTROSE, COUNTY OF MONTROSE, STATE OF COLORADO
JANUARY 2022





VICINITY MAP
N.T.S.

LEGEND

- ● = SET 5/8"x18" REBAR W/ 1 1/2" ALUMINUM CAP (P.L.S. 37690)
- ○ = FD. REBAR & CAP (P.L.S. AS NOTED)
- = EXISTING TELEPHONE PEDESTAL
- = EXISTING POWER POLE
- = EXISTING WATER VALVE
- = EXISTING FIRE HYDRANT
- = EXISTING WATER METER
- = EXISTING SEWER MANHOLE
- fo = EXISTING FIBER OPTIC LINE
- ohe = EXISTING OVERHEAD POWER LINE
- g = EXISTING GAS LINE
- w = EXISTING WATER LINE
- ss = EXISTING SEWER LINE
- irr = EXISTING IRRIGATION PIPE
- = EXISTING DITCH
- x = EXISTING FENCE
- 5880 = EXISTING GROUND MAJOR CONTOUR
- 5879 = EXISTING GROUND MINOR CONTOUR

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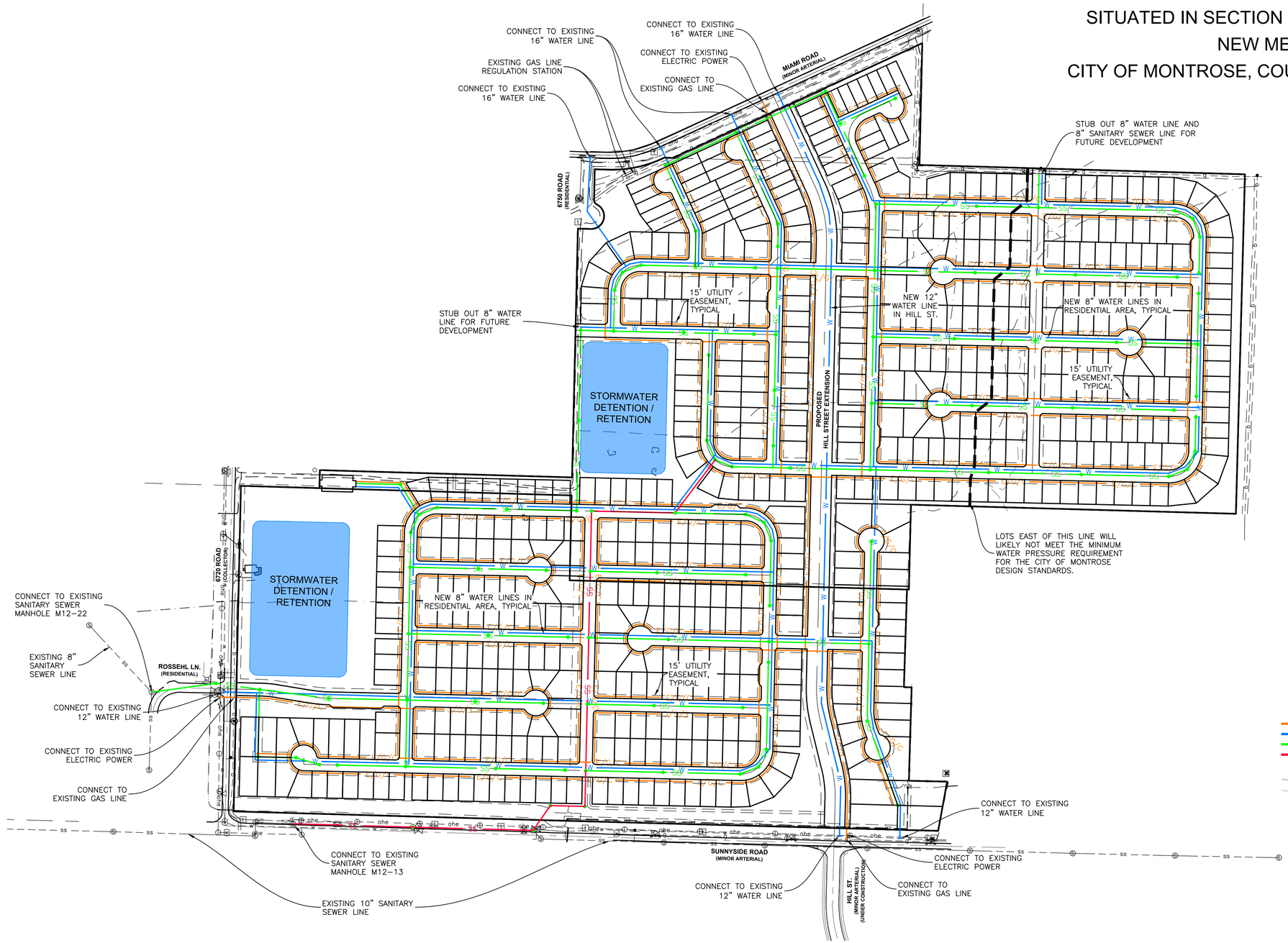
FIELD BOOK:	DRAWN BY: RDD	DATE: 1/12/2022	TITLE: WOODS CROSSING NORTH MONTROSE, CO
SHEET: 1 of 3	FILE: 21123C_SKETCH	JOB NO.: 21123	CLIENT: LEADERSHIP CIRCLE, LLC
			ADDRESS & PHONE: 1521 OXBOW DR. SUITE 210 MONTROSE, CO 81401 970-249-3398
			TYPE: EXHIBIT 1 - EXISTING CONDITIONS

WOODS CROSSING NORTH

SKETCH PLAN

SITUATED IN SECTION 25, TOWNSHIP 49 NORTH, RANGE 9 WEST,
NEW MEXICO PRINCIPAL MERIDIAN
CITY OF MONTROSE, COUNTY OF MONTROSE, STATE OF COLORADO
JANUARY 2022



N

1" = 200'

Scale in feet

200' 0 200' 400'

LEGEND

w	EXISTING WATER LINE
irr	EXISTING IRRIGATION LINE
fo	EXISTING OVERHEAD FIBER-OPTIC LINE
ohe	EXISTING OVERHEAD ELECTRIC LINE
ss	EXISTING SEWER LINE
S	EXISTING SANITARY SEWER MANHOLE
E/G/C	PROPOSED UTILITY CORRIDOR – ELECTRIC/GAS/COMMUNICATIONS
W	PROPOSED WATER LINE (SIZES AS NOTED)
SS	PROPOSED CITY SEWER LINE (8" MAIN LINE)
SS	PROPOSED CITY SEWER LINE (10" MAIN LINE)
●	PROPOSED SANITARY SEWER MANHOLE
5880	EXISTING GROUND MAJOR CONTOUR
5879	EXISTING GROUND MINOR CONTOUR

DMC
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FIELD BOOK:	DRAWN BY: RDD	DATE: 1/12/2022
SHEET: 2 of 3	FILE: 21123C_SKETCH	JOB NO.: 21123

TITLE: *WOODS CROSSING NORTH*
MONTROSE, CO

CLIENT: *LEADERSHIP CIRCLE, LLC*

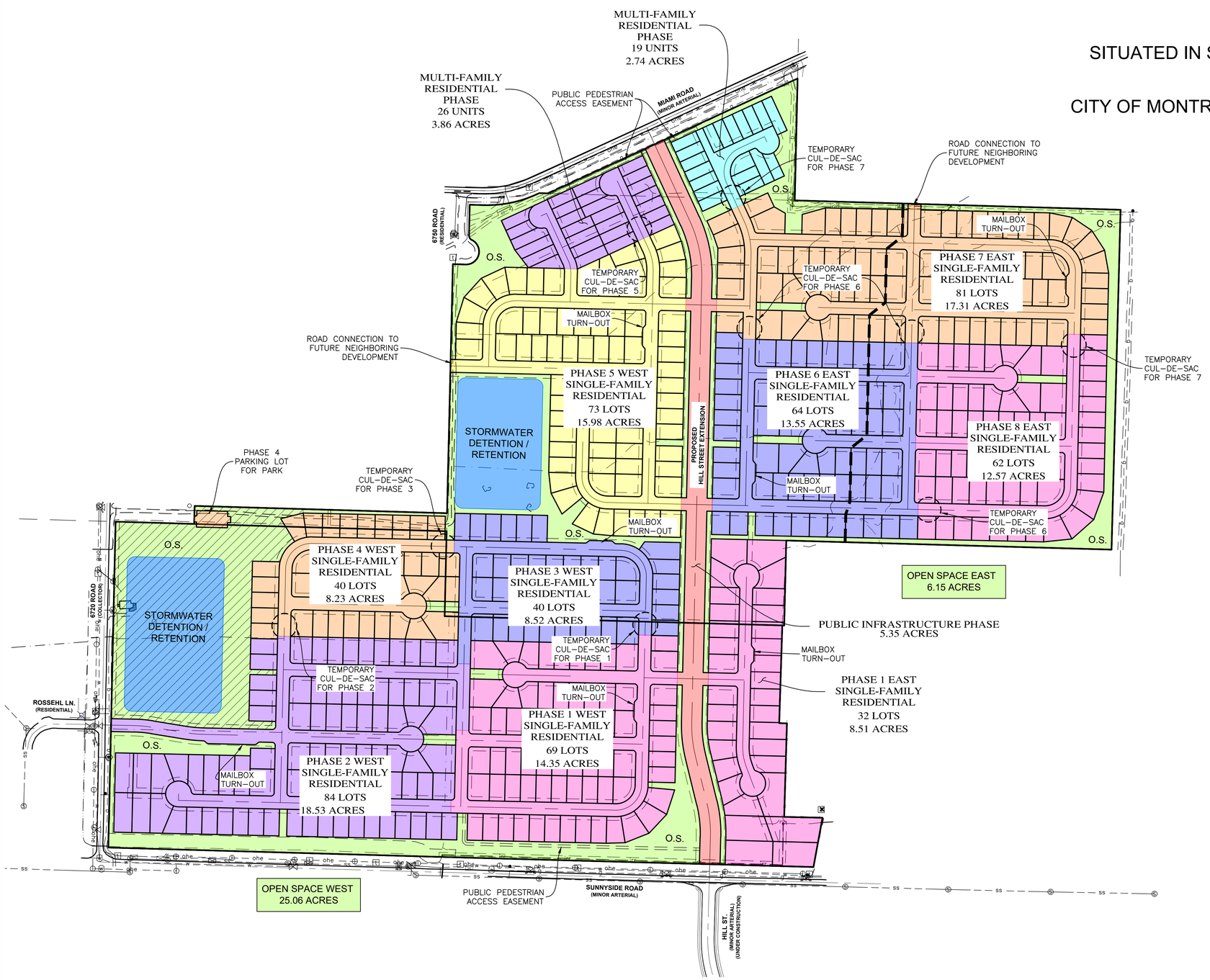
ADDRESS & PHONE:
1521 OXBOW DR. SUITE 210
MONTROSE, CO 81401
970-249-3398

TYPE: *EXHIBIT 2 - UTILITY PLAN*

WOODS CROSSING NORTH

SKETCH PLAN

SITUATED IN SECTION 25, TOWNSHIP 49 NORTH, RANGE 9 WEST,
NEW MEXICO PRINCIPAL MERIDIAN
CITY OF MONTROSE, COUNTY OF MONTROSE, STATE OF COLORADO
JANUARY 2022



WOODS CROSSING NORTH LAND SUMMARY					
TOTAL ACREAGE	TOTAL OPEN SPACE	TOTAL RIGHT-OF-WAY DEDICATION	TOTAL RESIDENTIAL DEVELOPMENT	SINGLE FAMILY LOTS ZONE R-3A	MULTI-FAMILY UNITS ZONE B4 (R-3A)
160.71 AC.	31.25 AC. 19.44%	34.90 AC. 21.72%	94.56 AC. 58.84%	545 LOTS	45 UNITS

PARK DEDICATION (10.71 AC)

N

1" = 200'

Scale in feet

200' 0 200' 400'

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FIELD BOOK:	DRAWN BY: RDD	DATE: 1/12/2022
SHEET: 3 of 3	FILE: 21123C_SKETCH	JOB NO.: 21123

TITLE: WOODS CROSSING NORTH
MONTROSE, CO

CLIENT: LEADERSHIP CIRCLE, LLC

ADDRESS & PHONE: 1521 OXBOW DR. SUITE 210
MONTROSE, CO 81401
970-249-3398

TYPE: EXHIBIT 3 - PHASING PLAN

WOODS CROSSING NORTH SUBDIVISION SKETCH PLAN NARRATIVE

December 8, 2021

Owner:

Matt Miles, Leadership Circle, LLC

Prepared by:
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General

The Woods Crossing North Subdivision is a residential proposed development on 160.71 acres in the eastern area of Montrose. The irregularly shaped parcel is bordered on the south by Sunnyside Road, on the north by Miami Road, on the west by 6720 Road, agricultural parcels, and a few single-family residences, and to the east by more agricultural fields and additional single-family residences.

The property was annexed into the City of Montrose in 2017. The majority of the parcel (134+ acres) is zoned as R3 (Medium Density), with two B4 (Neighborhood Shopping District) sections, a 360' deep strip along the Miami Road Front and a 16 acre rectangle in the southeast corner of the extreme eastern section. That zoning has not changed and is consistent with planned development and housing density of the adjacent properties. Please see the existing conditions and zoning exhibit of the Sketch Map drawing package (sheet 1 of 3) for more details on neighboring property zoning and current use.

The following information is based on the preliminary conceptual layout and is subject to change as the utilities, public roads, and housing layout are designed to meet City standards. Following the Sketch submittal, the developer plans to submit a separate Preliminary Plat package (including public infrastructure engineering) for the southern 80 acres of the development.

All existing structures (old farm house) will either be relocated or demolished and removed from the site. Please see the existing conditions and zoning exhibit of the Sketch Map drawing package (sheet 1 of 3) for locations of existing structures.

School buses are intended to remain on the public road system (Hill Street or new subdivision internal streets). Stop areas would be near main intersections or mailbox turnout areas.

Water

The project will be served by the City of Montrose water system. There is an existing 16" waterline in Miami Road and a 12" waterline in Sunnyside Road both of which are connected to a 24" water main running south from Miami to Sunnyside along the 6800 Road alignment. A 12" main line will be extended north from Sunnyside, following the proposed Hill Street Alignment, and tie into the existing 16" in Miami Road. Internal 8" lines will connect to the new 12" line and loop through the planned internal public streets. Additional external water line connections to existing or planned City infrastructure will be made at appropriate and opportune locations as the development is designed. Water service to the individual lots will tap off the new 8" internal lines.

Please see the attached sketch (Sheet 2 of 3) showing the conceptual water infrastructure backbone layout and connectivity to the existing City of Montrose water system. Existing large (12", 16" & 24") City infrastructure in the vicinity of this development provides more than

adequate pressure and volume to support the planned residential buildout for the majority of the property. The very highest portion of the parcel (eastern section) does have a 29 acre area that is above residual City of Montrose system pressure. This section will likely require a booster pump / storage tank solution to provide adequate residential pressure and fire flow. This section is part of the planned future development (after Phase I in the southern area). Design of any required water system augmentation features will be done as that highest portion of the project is developed. Anticipated fire flows vary from 1,500 gpm to 2,000 gpm depending on location within the project, construction type, and density.

Anticipated water demands are estimated based on City requirements and are as follows:

Anticipated Land Use	Water Usage (gallons per day per acre)	Total Acres	Anticipated Water Demand (gallons/day)
Medium Density (Duplex/Single family)	1,000	160.71	160,710

Formal engineering plans with design of the water system will be completed and submitted with Preliminary Plat applications.

Sanitary Sewer

The project is served by City sewer. All of the development on the property will be a classic gravity system with a network of City owned 8" main lines and manholes. The sewer mains will generally flow west and connect to the existing 8" main line in Rossehl Lane within the Country Haven Estates Subdivision.

According to the City of Montrose Sewer Master Plan, this point of connection is operating well within 50% capacity in the ultimate buildout scenario presented in the plan. This point of connection accounted for future additions and this development is in-line with the anticipated land use. Please see separate letter from Farnsworth Group analyzing the sewer connection via Rossehl Lane.

Please see the attached sketch (Sheet 2 of 3) showing the conceptual sewer system. Anticipated sewage generation is as follows:

Anticipated Land Use	Quantity of Sewage (gallons per day per acre)	Total Acres	Anticipated Sewage (gallons/day)
Medium Density (Duplex/Single family)	1,000	160.71	160,710

Formal engineering plans with design of the waste water system will be completed and submitted with Preliminary Plat applications.

Availability of other utilities

Electric, natural gas, telephone, cable tv, and fiber are available for the development. Please see the accompanying conceptual utility layout for locations (overhead and buried) of the dry utilities. In general, gas/power/fiber available on the North (Miami Road frontage), South (Sunnyside Road frontage) and West side (6720 Road frontage).

Specific dry utility designs will be done by the utility providers as formal site plans are completed. Prior to submitting the Sketch Plan, Shelby Bear at DMEA/Elevate Fiber, and Scott Hunter with Black Hills Energy, confirmed that there is more than enough capacity for all dry utilities (DMEA/Elevate – power, fiber/phone/TV, and Black Hills – natural gas). Other Montrose area telecom, TV, and fiber providers will be afforded the opportunity to service the development during the design phase.

Drainage

The property is well suited for development, sloping from east to west at about an average 2% natural grade. Proposed drainage patterns will follow this natural topography with stormwater routed to the west where it will be collected into designed infiltration ponds within the planned open space area. The stormwater ponds will be designed to provide water quality treatment (extended detention), control peak flows, with emergency (> 100 year storm events) overflow at historical discharge locations.

Access to property

There are three access points planned into this development, with two additional internal roads planned for future connection to adjacent undeveloped land. The first main entrance will be to the south aligning with the soon to be built extension of Hill Street through the newly platted Woods Crossing Subdivision. Hill Street will continue to be extended north through the Woods Crossing North property and connect to Miami Road at the second main entrance point. The third main entrance will be a connection to 6720 Road (to the west) aligning with the existing Rossehl Lane in the Country Haven Estates Subdivision. Please see the accompanying planned layout for more detail on these intersections (Sheets 2 & 3 of 3).

Parking

The development proposes that public streets are built according to City Residential Street Standards and individual lots will provide parking within standard private driveways. No on-street parking will be provided on Hill Street.

Mailboxes

Residential gang mailboxes will be centrally located for both sides of the development.

Total number of proposed dwelling units

The R3 zoning portion (minimum lot size of 6250 sqft/lot) of the project is planned to have 545 single family residential lots.

The northernmost B4 zoning portion of the project (bordering Miami Road to the north) is planned to have 45 multifamily units. If this B4 portion were developed as a Planned Development, the maximum number of dwelling units would be 152.

Compatibility with Natural Features

The development will be laid out to fit the natural topography, with generous open space areas around the perimeter and within the residential areas. This open space concept generally matches the other City residential subdivisions in the surrounding area.

In addition, a 8.61 acre park adjacent to 6720 Road (north end) is planned to be dedicated to the City of Montrose.

The Annexation agreement requires that a minimum of 8% open space will be provided upon development. The plan presented with this Sketch Plan provides 29.88 acres of open space, which is 18.59% of the project total.

Permits

The following is a list of known permits required for The Woods Crossing development.

a. A CDPHE General Permit for Stormwater Discharge Associated with Construction Activity will be required prior to construction of site improvements/infrastructure.
b. The City of Montrose will issue building permits for the individual structures.
c. No wetland permits are required since there are no jurisdictional aquatic features on the property.

Adjoining Property Owners

A list of the names and addresses of the property owners of record adjoining or within the 100 feet of the development are included in a separate document.

Known Public Concerns

As of the date of this Sketch Plan narrative, there are no know public concerns about this project.

Traffic Impact Study

Prepared For:

Woods Crossing North Residential Subdivision

Hill St., Between Sunnyside Rd. & Miami Rd.

Montrose, CO

December 27, 2021

PO Box 629
Mesa, CO 81643
970-314-4888

TurnKey Consulting, LLC
Superior Project Leadership

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1 Introduction & Executive Summary

This report documents the traffic impact study for the proposed Wood Crossing North Residential Subdivision (Project) in Montrose, Colorado. The Project would be located on both sides of Hill St., between Sunnyside Rd. and Miami Rd. The traffic study methodology was reviewed and accepted by the CDOT Region 3 Traffic Section (Mark Bunnell) and the city of Montrose (Scott Murphy). Figure 1 shows the Project location on the east side of Montrose.

1.1 Study Area

The Study Area included these intersections, as shown on Figure 2:

- Int #1, US-50 & 6700 Rd.
- Int #2, US-50 & Miami Rd.
- Int #3, Miami Rd. & 6700 Rd.
- Int #4, Miami Rd. & 6720 Rd.
- Int #5, Miami Rd. & Hill St.
- Int #6, 6720 Rd. & Rossehl Ln.
- Int #7, Sunnyside Rd. & 6700 Rd.
- Int #8, Sunnyside Rd. & 6720 Rd.
- Int #9, Sunnyside Rd & Hill St.
- Int #10 = Niagara Rd & Hillcrest St.
- Int #11 = Niagara Rd & 6700 Rd.
- Int #12 = Niagara Rd & Hill St.

1.2 Project Development Plan & Phasing

Figure 3 shows the Project site plan concept.

<u>Project Build Out Assumptions</u>

- 590 total dwelling units – 545 single family & 45 multi-family
- Assumed to be in place by year 2028.
- Includes extension of Hill St. through the property, with a new intersection at Hill St. & Miami Rd.

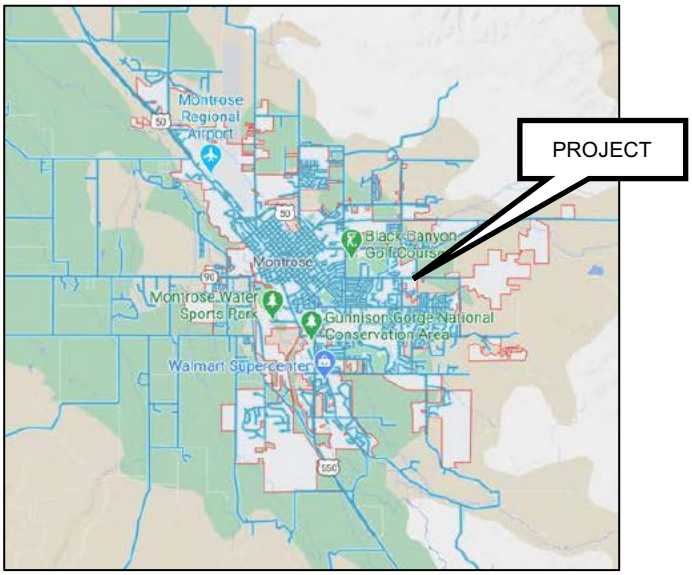


Figure 1 - Vicinity & Location Map of Montrose

Figure 2 – Study Area Map

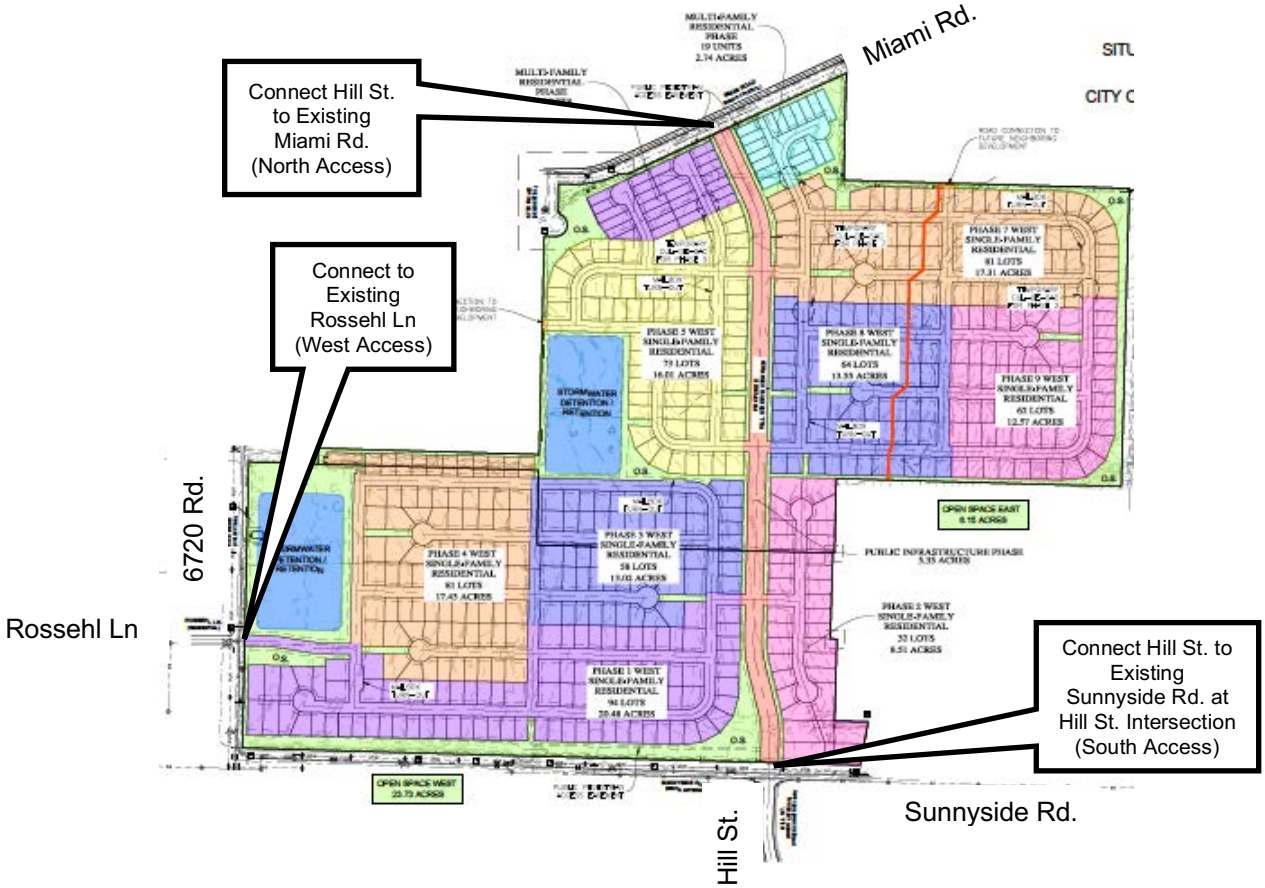


Figure 3 - Project Site Plan Concept

1.3 Conclusions & Recommendations

This section describes the recommended geometric improvements and actions resulting from increased background traffic and project traffic.

1. <u>Intersection #1 – US-50 & 6700 Rd.</u>
   The existing eastbound right turn lane is warranted now, and the existing deceleration length is acceptable.

   This 2-way stop controlled intersection would have acceptable traffic operations through the 2028 total traffic condition. This analysis was based on the lane geometry shown in the current design plans for 6700 Rd (see Appendix), as follows. Left turn acceleration lanes were not evaluated because they would not be part of the configuration with signalization.
   - Eastbound: 1 left, 1 thru, 1 right – plus 1 northbound to eastbound right turn accel lane.
   - Westbound: 1 left, 1 thru, 1 right – plus 1 southbound to westbound right turn accel lane.
   - Northbound: 1 left (new), 1 thru, 1 right (new).
   - Southbound: 1 left (new), 1 thru, 1 right (new).

The unsignalized configuration would not have acceptable operations sometime before the year 2042. Traffic signal control would operate at level of service A in all future conditions. The traffic signal at this location may be necessary in the next 10 - 15 years. The crash history of this intersection was higher than other intersections on the State Highway System with similar configuration and daily traffic volumes.

2. Intersection #2 – US-50 & Miami Rd.
   This 2-way stop controlled intersection would have acceptable traffic operations in all conditions with the existing lane geometry. The crash history of this intersection was similar to other intersections on the State Highway System with similar configuration and daily traffic volumes. This will be a factor to consider in the following turn lane evaluation.
   - By the time of Project buildout (2028), the westbound left turn deceleration lane would be warranted and justified. The existing deceleration length of 475-ft is short of the required deceleration distance of 800-ft. As the owner of Miami Rd. at this location, the County should consider extending this existing turn lane by 325-ft around the year 2028.
   - A new northbound-to-eastbound right turn acceleration lane would be warranted and justified by 2028. The required acceleration distance would be 1,380-ft. As the owner of Miami Rd. at this location, the County should consider constructing this turn lane around the year 2028.

3. Intersection #3 – Miami Rd. & 6700 Rd.
   The proposed roundabout at this location may not be necessary for the next 10-20 years.

4. Int #4 – Miami Rd. & 6720 Rd.
   No changes would be necessary at this location.

5. Intersection #5 – Miami Rd. & Hill St.
   This proposed intersection should have a simple 3-leg configuration with stop control northbound. Turn lanes are not warranted in any of the analysis conditions.

6. Intersection #6 – 6720 Rd. & Rossehl Ln.
   This existing 3-leg intersection should be reconstructed as a simple 4-leg configuration with stop control on the east and west legs. Turn lanes are not warranted in any of the analysis conditions.

7. Intersection #7 – Sunnyside Rd. & 6700 Rd.
   The proposed roundabout at this location may not be necessary for the next 10-20 years.

8. Intersection #8 – Sunnyside Rd. & 6720 Rd.
   No changes would be necessary at this location.

9. Intersection #9 – Sunnyside Rd. & Hill St.
   The 3-leg configuration that is currently under construction should be reconstructed with a north leg, as part of Project construction. Turn lanes were not warranted in any of the analysis conditions. This simple 4-leg configuration should have stop control on the eastbound and westbound approaches to allow free-flow on Hill St.

10. Intersection #10 – Niagara Rd. & Hillcrest St.
    The City should consider constructing a roundabout at this location in the next 3-5 years.

11. Intersection #11 – Niagara Rd. & 6700 Rd.
    The City should consider planning for a roundabout at this location in the next 5-10 years.

12. Int #12 – Niagara Rd. & Hill St
    No changes would be necessary at this location, except that stop control should be on the eastbound and westbound approaches to allow free flow on Hill St.

13. Roadway Segments
    The existing number of through lanes on all existing roads in the Study Area would provide the necessary capacity throughout all analysis periods.

14. CDOT Access Permits
    At some point prior to 2028, CDOT access permits would be necessary at two existing intersections with US-50. The City of Montrose would be the permittee for the south leg of the US-50 & 6700 Rd. intersection. Montrose County would be the permittee for the south leg of the US-50 & Miami Rd. intersection.

2 Project Trips

This section includes Project trip generation, distribution, and assignment to the roadway network.

2.1 Project Trip Generation

The Project will include the following elements. Given the residential project, there will not be any trip reduction for pass-by Capture or internal capture in the trip generation calculations.

- 590 total dwelling units – 545 single family & 45 multi-family
- Assumed to be in place by year 2028.
- Includes extension of Hill St. through the property, with a new intersection at Hills St. & Miami Rd.

Project Build Out Trip Generation – Single-Family Residential

The following table shows Project trip generation for the single-family residential development per ITE LUC 210 (10th Edition).

Table 1 – Single Family Trip Generation

Period	Trip Ends – 545 SFR		
	In	Out	Total
Weekday	2,474	2,474	4,948
AM Peak Hour	98	294	392
PM Peak Hour	326	191	517

Project Build Out Trip Generation – Multi-Family Residential

The following table shows Project trip generation for the multi-family residential development per ITE LUC 220 (10th Edition).

Table 2 – Multi-Family Trip Generation

Period	Trip Ends – 45 SFR		
	In	Out	Total
Weekday	145	145	290
AM Peak Hour	5	17	22
PM Peak Hour	18	11	29

Project Build Out Trip Generation – Total
The following table shows the total Project trip generation.

Table 3 – Total Project Trip Generation

Period	Trip Ends – 590 Total Units		
	In	Out	Total
Weekday	2,619	2,619	5,238
AM Peak Hour	103	311	414
PM Peak Hour	344	202	546

2.2 Project Trip Distribution & Assignment

The Project trip distribution calculations were more complex than typical due to the Project location at the edge of current land development and the availability of various east-west and north-south routes. The distributions at some off-site intersections were based on the existing travel patterns at those intersections, based on the available traffic count data. The same trip distributions were used for analysis period 1 (2028) and period 2 (2042). The same trip distributions were used for the AM & PM periods at all intersections except US-50 & 6700 Rd, which had different distributions for each period. The attachments include detailed calculations and reference material.

2.2.1 General Trip Distribution Patterns.

Steps 1-4 were used to identify trip distribution at intersections 2, 3, 4, 5, 6, 8, 9, and 12. A variety of previous and new traffic counts in the area were reviewed to identify traffic flow patterns and trends. This was necessary to determine the distribution of Project trips at the three site access points.

Step 1 – Determine Trip Distributions to/from The Study Area

- Three intersections were evaluated to determine that 10% of Project trips would travel to/from the east on US-50.
- Three intersections were evaluated to determine the following for the remaining 90% of Project trips:
  - 30% of Project trips would travel to/from the north.
  - 30% of Project trips would travel to/from the south.
  - 30% of Project trips would travel to/from the west.

Step 2 – Determine the Percent of Project Trips Using Rossehl Ln at 6720 Rd.
Rossehl Ln. would connect to 6720 Rd. as the Project's west access point. Based on the proposed site plan, the calculations assumed that 20% of the trips to/from the north, south, and west would use this access point, with the following details:

- 6% of Project trips would travel to/from the north on 6720 Rd.
- 12% of Project trips would travel to/from the south and west on 6720 Rd.

Step 3 – Determine the Percent of Project Trips Using Hill St. at Miami Rd.
Hill St. would connect to Miami Rd. as the Project's north access point. The calculations assumed that 80% of the trips to/from the north and 10% of the trips to/from the west would use this access point, with the following details:

- 27% of Project trips would travel to/from the west on Miami Rd.

Step 4 – Determine the Percent of Project Trips Using Hill St at Sunnyside Rd.
Hill St. would connect to Sunnyside Rd. as the Project's south access point. The calculations assumed that 30% of the trips to/from the south and west would use this access point, with the following details:

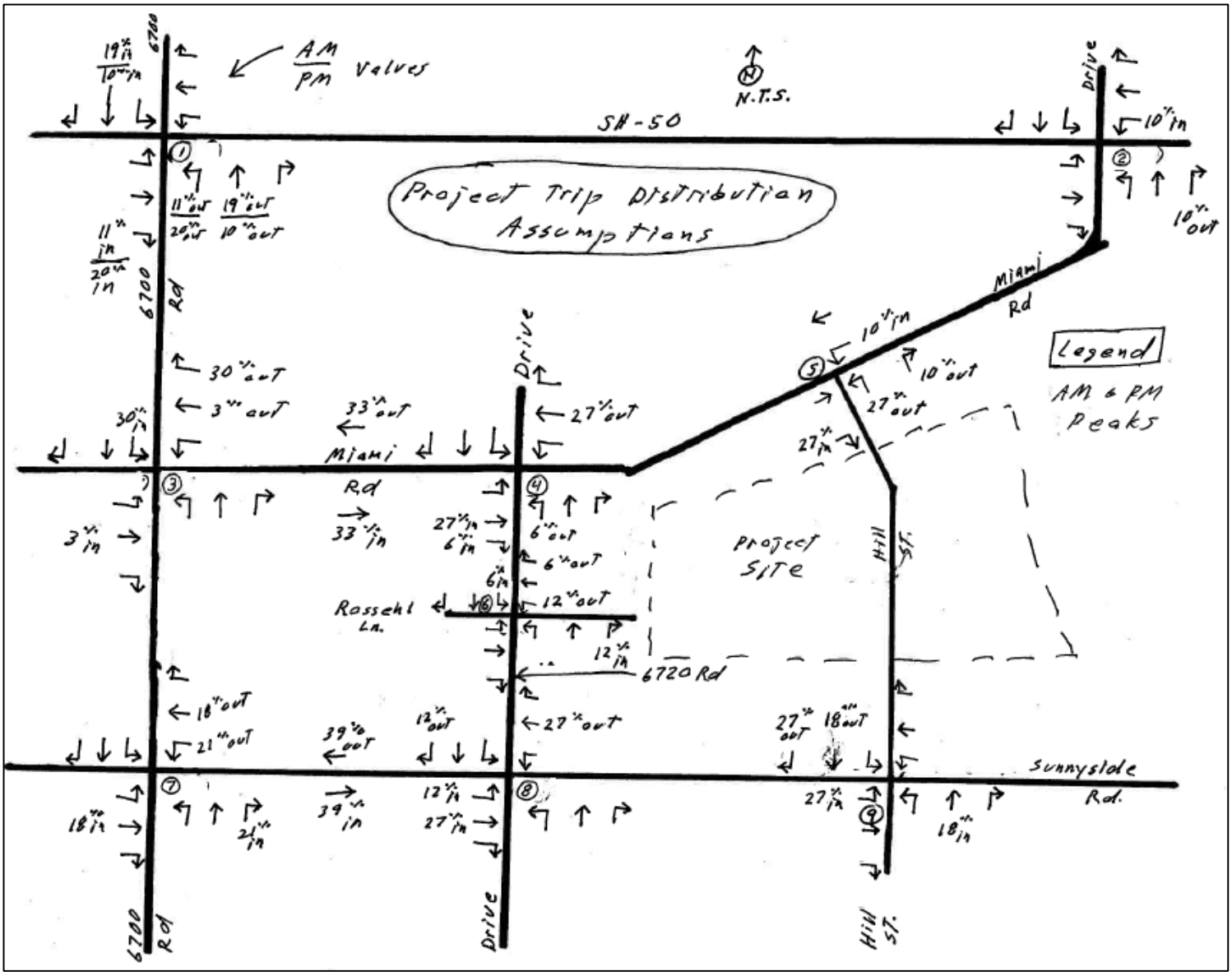
- 18% of Project trips would travel to/from the south on Hill St.

The calculations assumed that 50% of the trips to/from the north and 40% of the trips to/from the west would use this access point, with the following details:

- 27% of Project trips would travel to/from the west on Sunnyside Rd.

2.2.2 Trip Distribution Patterns at Off-site Intersections

This step was used to identify trip distribution at intersections 1, 7, 10, and 11. The recent traffic counts in the area were reviewed to identify traffic flow patterns shown in the following Figure.



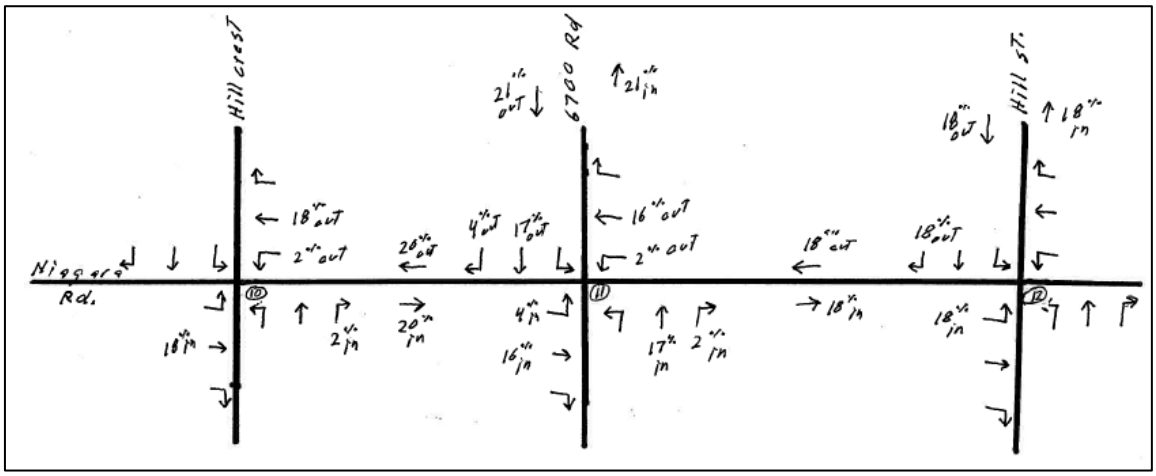


Figure 4 – Project Trip Distributions – All Periods

The following Tables show the inbound and outbound project trip distribution percentages and project trip assignment for each intersection & movement.

Table 4 – Project Trip Distributions & Assignments for Each Intersection

INT 1 US-50 & 6700 Rd.

	Weekday AM Condition											
	Eastbound			Westbound			Northbound			Southbound		
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Trip Distribution % Inbound Period 1 & 2	0%	0%	11%	0%	0%	0%	0%	0%	0%	0%	19%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	0%	0%	0%	11%	19%	0%	0%	0%	0%
Project Trip Volume Inbound - Period 1	0	0	11	0	0	0	0	0	0	0	20	0
Project Trip Volume Outbound - Period 1	0	0	0	0	0	0	34	59	0	0	0	0
Project Trip Volume Total - Period 1	0	0	11	0	0	0	34	59	0	0	20	0
Project Trip Volume Inbound - Period 2	0	0	11	0	0	0	0	0	0	0	20	0
Project Trip Volume Outbound - Period 2	0	0	0	0	0	0	34	59	0	0	0	0
Project Trip Volume Total - Period 2	0	0	11	0	0	0	34	59	0	0	20	0

	Weekday PM Condition											
	Eastbound			Westbound			Northbound			Southbound		
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Trip Distribution % Inbound Period 1 & 2	0%	0%	20%	0%	0%	0%	0%	0%	0%	0%	10%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	0%	0%	0%	20%	10%	0%	0%	0%	0%
Project Trip Volume Inbound - Period 1	0	0	69	0	0	0	0	0	0	0	34	0
Project Trip Volume Outbound - Period 1	0	0	0	0	0	0	40	20	0	0	0	0
Project Trip Volume Total - Period 1	0	0	69	0	0	0	40	20	0	0	34	0
Project Trip Volume Inbound - Period 2	0	0	69	0	0	0	0	0	0	0	34	0
Project Trip Volume Outbound - Period 2	0	0	0	0	0	0	40	20	0	0	0	0
Project Trip Volume Total - Period 2	0	0	69	0	0	0	40	20	0	0	34	0

INT 2 US-50 & Miami Rd.

	Weekday AM Condition											
	Eastbound			Westbound			Northbound			Southbound		
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Trip Distribution % Inbound Period 1 & 2	0%	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	0%	0%	0%	0%	0%	10%	0%	0%	0%
Project Trip Volume Inbound - Period 1	0	0	0	10	0	0	0	0	0	0	0	0
Project Trip Volume Outbound - Period 1	0	0	0	0	0	0	0	0	31	0	0	0
Project Trip Volume Total - Period 1	0	0	0	10	0	0	0	0	31	0	0	0
Project Trip Volume Inbound - Period 2	0	0	0	10	0	0	0	0	0	0	0	0
Project Trip Volume Outbound - Period 2	0	0	0	0	0	0	0	0	31	0	0	0
Project Trip Volume Total - Period 2	0	0	0	10	0	0	0	0	31	0	0	0

	Weekday PM Condition											
	Eastbound			Westbound			Northbound			Southbound		
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Trip Distribution % Inbound Period 1 & 2	0%	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	0%	0%	0%	0%	0%	10%	0%	0%	0%
Project Trip Volume Inbound - Period 1	0	0	0	34	0	0	0	0	0	0	0	0
Project Trip Volume Outbound - Period 1	0	0	0	0	0	0	0	0	20	0	0	0
Project Trip Volume Total - Period 1	0	0	0	34	0	0	0	0	20	0	0	0
Project Trip Volume Inbound - Period 2	0	0	0	34	0	0	0	0	0	0	0	0
Project Trip Volume Outbound - Period 2	0	0	0	0	0	0	0	0	20	0	0	0
Project Trip Volume Total - Period 2	0	0	0	34	0	0	0	0	20	0	0	0

INT 3 Miami Rd. & 6700 Rd.

	Weekday AM Condition											
	Eastbound			Westbound			Northbound			Southbound		
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Trip Distribution % Inbound Period 1 & 2	0%	3%	0%	0%	0%	0%	0%	0%	0%	30%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	0%	3%	30%	0%	0%	0%	0%	0%	0%
Project Trip Volume Inbound - Period 1	0	3	0	0	0	0	0	0	0	31	0	0
Project Trip Volume Outbound - Period 1	0	0	0	0	9	93	0	0	0	0	0	0
Project Trip Volume Total - Period 1	0	3	0	0	9	93	0	0	0	31	0	0
Project Trip Volume Inbound - Period 2	0	3	0	0	0	0	0	0	0	31	0	0
Project Trip Volume Outbound - Period 2	0	0	0	0	9	93	0	0	0	0	0	0
Project Trip Volume Total - Period 2	0	3	0	0	9	93	0	0	0	31	0	0

	Weekday PM Condition											
	Eastbound			Westbound			Northbound			Southbound		
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Trip Distribution % Inbound Period 1 & 2	0%	3%	0%	0%	0%	0%	0%	0%	0%	30%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	0%	3%	30%	0%	0%	0%	0%	0%	0%
Project Trip Volume Inbound - Period 1	0	10	0	0	0	0	0	0	0	103	0	0
Project Trip Volume Outbound - Period 1	0	0	0	0	6	61	0	0	0	0	0	0
Project Trip Volume Total - Period 1	0	10	0	0	6	61	0	0	0	103	0	0
Project Trip Volume Inbound - Period 2	0	10	0	0	0	0	0	0	0	103	0	0
Project Trip Volume Outbound - Period 2	0	0	0	0	6	61	0	0	0	0	0	0
Project Trip Volume Total - Period 2	0	10	0	0	6	61	0	0	0	103	0	0

INT 4 Miami Rd. & 6720 Rd.

	Weekday AM Condition											
	Eastbound			Westbound			Northbound			Southbound		
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Trip Distribution % Inbound Period 1 & 2	0%	27%	6%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	0%	27%	0%	0%	6%	0%	0%	0%	0%
Project Trip Volume Inbound - Period 1	0	28	6	0	0	0	0	0	0	0	0	0
Project Trip Volume Outbound - Period 1	0	0	0	0	84	0	0	19	0	0	0	0
Project Trip Volume Total - Period 1	0	28	6	0	84	0	0	19	0	0	0	0
Project Trip Volume Inbound - Period 2	0	28	6	0	0	0	0	0	0	0	0	0
Project Trip Volume Outbound - Period 2	0	0	0	0	84	0	0	19	0	0	0	0
Project Trip Volume Total - Period 2	0	28	6	0	84	0	0	19	0	0	0	0

	Weekday PM Condition											
	Eastbound			Westbound			Northbound			Southbound		
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Trip Distribution % Inbound Period 1 & 2	0%	27%	6%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	0%	27%	0%	0%	6%	0%	0%	0%	0%
Project Trip Volume Inbound - Period 1	0	93	21	0	0	0	0	0	0	0	0	0
Project Trip Volume Outbound - Period 1	0	0	0	0	55	0	0	12	0	0	0	0
Project Trip Volume Total - Period 1	0	93	21	0	55	0	0	12	0	0	0	0
Project Trip Volume Inbound - Period 2	0	93	21	0	0	0	0	0	0	0	0	0
Project Trip Volume Outbound - Period 2	0	0	0	0	55	0	0	12	0	0	0	0
Project Trip Volume Total - Period 2	0	93	21	0	55	0	0	12	0	0	0	0

INT 5 Miami Rd. & Hill St.

	Weekday AM Condition											
	Eastbound			Westbound			Northbound			Southbound		
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Trip Distribution % Inbound Period 1 & 2	0%	0%	27%	10%	0%	0%	0%	0%	0%	0%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	0%	0%	0%	27%	0%	10%	0%	0%	0%
Project Trip Volume Inbound - Period 1	0	0	28	10	0	0	0	0	0	0	0	0
Project Trip Volume Outbound - Period 1	0	0	0	0	0	0	84	0	31	0	0	0
Project Trip Volume Total - Period 1	0	0	28	10	0	0	84	0	31	0	0	0
Project Trip Volume Inbound - Period 2	0	0	28	10	0	0	0	0	0	0	0	0
Project Trip Volume Outbound - Period 2	0	0	0	0	0	0	84	0	31	0	0	0
Project Trip Volume Total - Period 2	0	0	28	10	0	0	84	0	31	0	0	0

	Weekday PM Condition											
	Eastbound			Westbound			Northbound			Southbound		
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Trip Distribution % Inbound Period 1 & 2	0%	0%	27%	10%	0%	0%	0%	0%	0%	0%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	0%	0%	0%	27%	0%	10%	0%	0%	0%
Project Trip Volume Inbound - Period 1	0	0	93	34	0	0	0	0	0	0	0	0
Project Trip Volume Outbound - Period 1	0	0	0	0	0	0	55	0	20	0	0	0
Project Trip Volume Total - Period 1	0	0	93	34	0	0	55	0	20	0	0	0
Project Trip Volume Inbound - Period 2	0	0	93	34	0	0	0	0	0	0	0	0
Project Trip Volume Outbound - Period 2	0	0	0	0	0	0	55	0	20	0	0	0
Project Trip Volume Total - Period 2	0	0	93	34	0	0	55	0	20	0	0	0

INT 6 6720 Rd. & Rossehl Ln.

	Weekday AM Condition											
	Eastbound			Westbound			Northbound			Southbound		
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Trip Distribution % Inbound Period 1 & 2	0%	0%	0%	0%	0%	0%	0%	0%	12%	6%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	12%	0%	6%	0%	0%	0%	0%	0%	0%
Project Trip Volume Inbound - Period 1	0	0	0	0	0	0	0	0	12	6	0	0
Project Trip Volume Outbound - Period 1	0	0	0	37	0	19	0	0	0	0	0	0
Project Trip Volume Total - Period 1	0	0	0	37	0	19	0	0	12	6	0	0
Project Trip Volume Inbound - Period 2	0	0	0	0	0	0	0	0	12	6	0	0
Project Trip Volume Outbound - Period 2	0	0	0	37	0	19	0	0	0	0	0	0
Project Trip Volume Total - Period 2	0	0	0	37	0	19	0	0	12	6	0	0

	Weekday PM Condition											
	Eastbound			Westbound			Northbound			Southbound		
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Trip Distribution % Inbound Period 1 & 2	0%	0%	0%	0%	0%	0%	0%	0%	12%	6%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	12%	0%	6%	0%	0%	0%	0%	0%	0%
Project Trip Volume Inbound - Period 1	0	0	0	0	0	0	0	0	41	21	0	0
Project Trip Volume Outbound - Period 1	0	0	0	24	0	12	0	0	0	0	0	0
Project Trip Volume Total - Period 1	0	0	0	24	0	12	0	0	41	21	0	0
Project Trip Volume Inbound - Period 2	0	0	0	0	0	0	0	0	41	21	0	0
Project Trip Volume Outbound - Period 2	0	0	0	24	0	12	0	0	0	0	0	0
Project Trip Volume Total - Period 2	0	0	0	24	0	12	0	0	41	21	0	0

INT 7 Sunnyside Rd. & 6700 Rd.

	Weekday AM Condition											
	Eastbound			Westbound			Northbound			Southbound		
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Trip Distribution % Inbound Period 1 & 2	0%	18%	0%	0%	0%	0%	0%	0%	21%	0%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	21%	10%	0%	0%	0%	0%	0%	0%	0%
Project Trip Volume Inbound - Period 1	0	19	0	0	0	0	0	0	22	0	0	0
Project Trip Volume Outbound - Period 1	0	0	0	65	31	0	0	0	0	0	0	0
Project Trip Volume Total - Period 1	0	19	0	65	31	0	0	0	22	0	0	0
Project Trip Volume Inbound - Period 2	0	19	0	0	0	0	0	0	22	0	0	0
Project Trip Volume Outbound - Period 2	0	0	0	65	31	0	0	0	0	0	0	0
Project Trip Volume Total - Period 2	0	19	0	65	31	0	0	0	22	0	0	0

	Weekday PM Condition											
	Eastbound			Westbound			Northbound			Southbound		
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Trip Distribution % Inbound Period 1 & 2	0%	18%	0%	0%	0%	0%	0%	0%	21%	0%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	21%	10%	0%	0%	0%	0%	0%	0%	0%
Project Trip Volume Inbound - Period 1	0	62	0	0	0	0	0	0	72	0	0	0
Project Trip Volume Outbound - Period 1	0	0	0	42	20	0	0	0	0	0	0	0
Project Trip Volume Total - Period 1	0	62	0	42	20	0	0	0	72	0	0	0
Project Trip Volume Inbound - Period 2	0	62	0	0	0	0	0	0	72	0	0	0
Project Trip Volume Outbound - Period 2	0	0	0	42	20	0	0	0	0	0	0	0
Project Trip Volume Total - Period 2	0	62	0	42	20	0	0	0	72	0	0	0

INT 8 Sunnyside Rd. & 6720 Rd.

	Weekday AM Condition											
	Eastbound			Westbound			Northbound			Southbound		
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Trip Distribution % Inbound Period 1 & 2	12%	27%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	0%	27%	0%	0%	0%	0%	0%	0%	12%
Project Trip Volume Inbound - Period 1	12	28	0	0	0	0	0	0	0	0	0	0
Project Trip Volume Outbound - Period 1	0	0	0	0	84	0	0	0	0	0	0	37
Project Trip Volume Total - Period 1	12	28	0	0	84	0	0	0	0	0	0	37
Project Trip Volume Inbound - Period 2	12	28	0	0	0	0	0	0	0	0	0	0
Project Trip Volume Outbound - Period 2	0	0	0	0	84	0	0	0	0	0	0	37
Project Trip Volume Total - Period 2	12	28	0	0	84	0	0	0	0	0	0	37

	Weekday PM Condition											
	Eastbound			Westbound			Northbound			Southbound		
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Trip Distribution % Inbound Period 1 & 2	12%	27%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	0%	27%	0%	0%	0%	0%	0%	0%	12%
Project Trip Volume Inbound - Period 1	41	93	0	0	0	0	0	0	0	0	0	0
Project Trip Volume Outbound - Period 1	0	0	0	0	55	0	0	0	0	0	0	24
Project Trip Volume Total - Period 1	41	93	0	0	55	0	0	0	0	0	0	24
Project Trip Volume Inbound - Period 2	41	93	0	0	0	0	0	0	0	0	0	0
Project Trip Volume Outbound - Period 2	0	0	0	0	55	0	0	0	0	0	0	24
Project Trip Volume Total - Period 2	41	93	0	0	55	0	0	0	0	0	0	24

INT 9 Sunnyside Rd & Hill St.

	Weekday AM Condition											
	Eastbound			Westbound			Northbound			Southbound		
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Trip Distribution % Inbound Period 1 & 2	27%	0%	0%	0%	0%	0%	0%	18%	0%	0%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	18%	27%
Project Trip Volume Inbound - Period 1	28	0	0	0	0	0	0	19	0	0	0	0
Project Trip Volume Outbound - Period 1	0	0	0	0	0	0	0	0	0	0	56	84
Project Trip Volume Total - Period 1	28	0	0	0	0	0	0	19	0	0	56	84
Project Trip Volume Inbound - Period 2	28	0	0	0	0	0	0	19	0	0	0	0
Project Trip Volume Outbound - Period 2	0	0	0	0	0	0	0	0	0	0	56	84
Project Trip Volume Total - Period 2	28	0	0	0	0	0	0	19	0	0	56	84

	Weekday PM Condition											
	Eastbound			Westbound			Northbound			Southbound		
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Trip Distribution % Inbound Period 1 & 2	27%	0%	0%	0%	0%	0%	0%	18%	0%	0%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	18%	27%
Project Trip Volume Inbound - Period 1	93	0	0	0	0	0	0	62	0	0	0	0
Project Trip Volume Outbound - Period 1	0	0	0	0	0	0	0	0	0	0	36	55
Project Trip Volume Total - Period 1	93	0	0	0	0	0	0	62	0	0	36	55
Project Trip Volume Inbound - Period 2	93	0	0	0	0	0	0	62	0	0	0	0
Project Trip Volume Outbound - Period 2	0	0	0	0	0	0	0	0	0	0	36	55
Project Trip Volume Total - Period 2	93	0	0	0	0	0	0	62	0	0	36	55

INT 10 Niagara Rd & Hillcrest St.

	Weekday AM Condition											
	Eastbound			Westbound			Northbound			Southbound		
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Trip Distribution % Inbound Period 1 & 2	0%	18%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	2%	18%	0%	0%	0%	0%	0%	0%	0%
Project Trip Volume Inbound - Period 1	0	19	0	0	0	0	0	0	2	0	0	0
Project Trip Volume Outbound - Period 1	0	0	0	6	56	0	0	0	0	0	0	0
Project Trip Volume Total - Period 1	0	19	0	6	56	0	0	0	2	0	0	0
Project Trip Volume Inbound - Period 2	0	19	0	0	0	0	0	0	2	0	0	0
Project Trip Volume Outbound - Period 2	0	0	0	6	56	0	0	0	0	0	0	0
Project Trip Volume Total - Period 2	0	19	0	6	56	0	0	0	2	0	0	0

	Weekday PM Condition											
	Eastbound			Westbound			Northbound			Southbound		
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Trip Distribution % Inbound Period 1 & 2	0%	18%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	2%	18%	0%	0%	0%	0%	0%	0%	0%
Project Trip Volume Inbound - Period 1	0	62	0	0	0	0	0	0	7	0	0	0
Project Trip Volume Outbound - Period 1	0	0	0	4	36	0	0	0	0	0	0	0
Project Trip Volume Total - Period 1	0	62	0	4	36	0	0	0	7	0	0	0
Project Trip Volume Inbound - Period 2	0	62	0	0	0	0	0	0	7	0	0	0
Project Trip Volume Outbound - Period 2	0	0	0	4	36	0	0	0	0	0	0	0
Project Trip Volume Total - Period 2	0	62	0	4	36	0	0	0	7	0	0	0

INT 11 Niagara Rd & 6700 Rd.

	Weekday AM Condition											
	Eastbound			Westbound			Northbound			Southbound		
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Trip Distribution % Inbound Period 1 & 2	4%	16%	0%	0%	0%	0%	0%	17%	2%	0%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	2%	16%	0%	0%	0%	0%	0%	17%	4%
Project Trip Volume Inbound - Period 1	4	16	0	0	0	0	0	18	2	0	0	0
Project Trip Volume Outbound - Period 1	0	0	0	6	50	0	0	0	0	0	53	12
Project Trip Volume Total - Period 1	4	16	0	6	50	0	0	18	2	0	53	12
Project Trip Volume Inbound - Period 2	4	16	0	0	0	0	0	18	2	0	0	0
Project Trip Volume Outbound - Period 2	0	0	0	6	50	0	0	0	0	0	53	12
Project Trip Volume Total - Period 2	4	16	0	6	50	0	0	18	2	0	53	12

	Weekday PM Condition											
	Eastbound			Westbound			Northbound			Southbound		
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Trip Distribution % Inbound Period 1 & 2	4%	16%	0%	0%	0%	0%	0%	17%	2%	0%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	2%	16%	0%	0%	0%	0%	0%	17%	4%
Project Trip Volume Inbound - Period 1	14	55	0	0	0	0	0	58	7	0	0	0
Project Trip Volume Outbound - Period 1	0	0	0	4	32	0	0	0	0	0	34	8
Project Trip Volume Total - Period 1	14	55	0	4	32	0	0	58	7	0	34	8
Project Trip Volume Inbound - Period 2	14	55	0	0	0	0	0	58	7	0	0	0
Project Trip Volume Outbound - Period 2	0	0	0	4	32	0	0	0	0	0	34	8
Project Trip Volume Total - Period 2	14	55	0	4	32	0	0	58	7	0	34	8

INT 12 Niagara Rd & Hill St.

	Weekday AM Condition											
	Eastbound			Westbound			Northbound			Southbound		
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Trip Distribution % Inbound Period 1 & 2	18%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	18%
Project Trip Volume Inbound - Period 1	19	0	0	0	0	0	0	0	0	0	0	0
Project Trip Volume Outbound - Period 1	0	0	0	0	0	0	0	0	0	0	0	56
Project Trip Volume Total - Period 1	19	0	0	0	0	0	0	0	0	0	0	56
Project Trip Volume Inbound - Period 2	19	0	0	0	0	0	0	0	0	0	0	0
Project Trip Volume Outbound - Period 2	0	0	0	0	0	0	0	0	0	0	0	56
Project Trip Volume Total - Period 2	19	0	0	0	0	0	0	0	0	0	0	56

	Weekday PM Condition											
	Eastbound			Westbound			Northbound			Southbound		
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Trip Distribution % Inbound Period 1 & 2	18%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	18%
Project Trip Volume Inbound - Period 1	62	0	0	0	0	0	0	0	0	0	0	0
Project Trip Volume Outbound - Period 1	0	0	0	0	0	0	0	0	0	0	0	36
Project Trip Volume Total - Period 1	62	0	0	0	0	0	0	0	0	0	0	36
Project Trip Volume Inbound - Period 2	62	0	0	0	0	0	0	0	0	0	0	0
Project Trip Volume Outbound - Period 2	0	0	0	0	0	0	0	0	0	0	0	36
Project Trip Volume Total - Period 2	62	0	0	0	0	0	0	0	0	0	0	36

3 Existing Roadway Conditions

This section describes the existing roadways and intersections.

3.1 Existing Road & Intersection Configurations

The Study Area included the follow existing intersections:

- Int #1, US-50 & 6700 Rd.
- Int #2, US-50 & Miami Rd.
- Int #3, Miami Rd. & 6700 Rd.
- Int #4, Miami Rd. & 6720 Rd.
- Int #5, Miami Rd. & Hill St.
- Int #6, 6720 Rd. & Rossehl Ln.
- Int #7, Sunnyside Rd. & 6700 Rd.
- Int #8, Sunnyside Rd. & 6720 Rd.
- Int #9, Sunnyside Rd. & Hill St.
- Int #10 = Niagara Rd. & Hillcrest St.
- Int #11 = Niagara Rd. & 6700 Rd.
- Int #12 = Niagara Rd. & Hill St.

The functional classification of the roads in the Study Area are shown in the following image. The roads are mostly 2-lane rural roads with 35 mph posted speed limit.

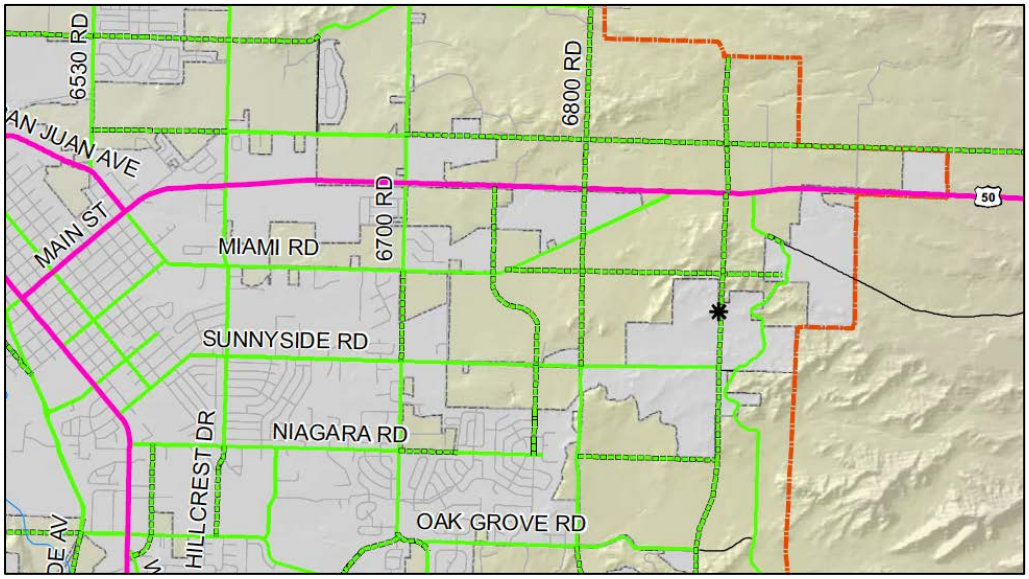
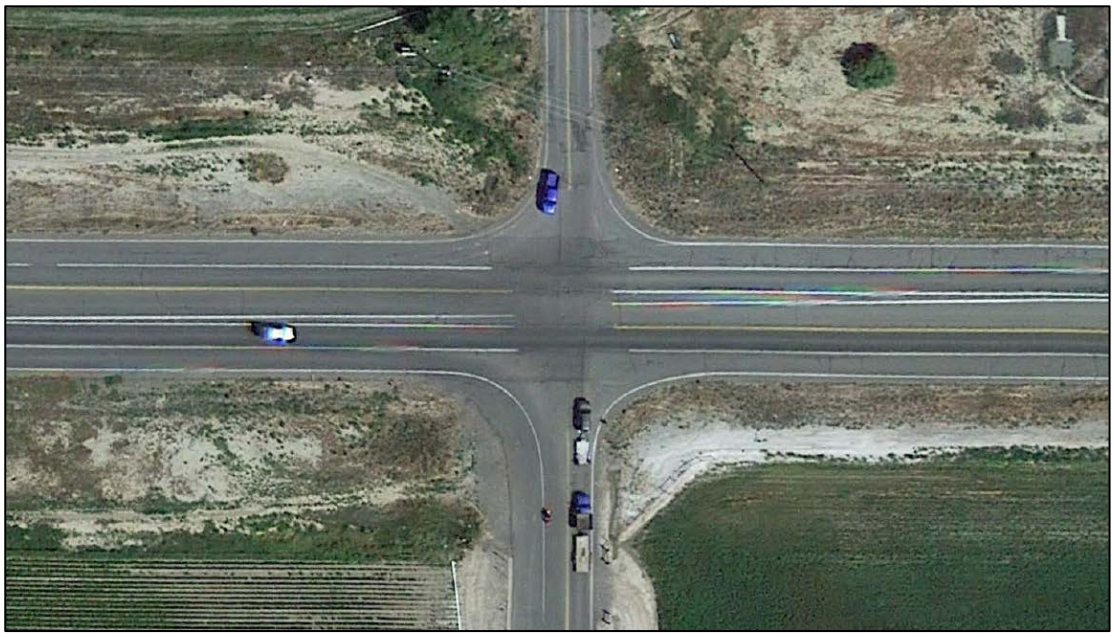


Figure 5 – Roadway Functional Classification

Green – Existing & Proposed Minor Arterial
Pink – Major Arterial

The images in Figure 8 show the existing intersection lane geometry and configurations.

Figure 6 - Existing Intersection Images



#1 US-50 & 6700 Rd (unsignalized 4-leg)

#2 US-50 & Miami Rd (unsignalized 4-leg)

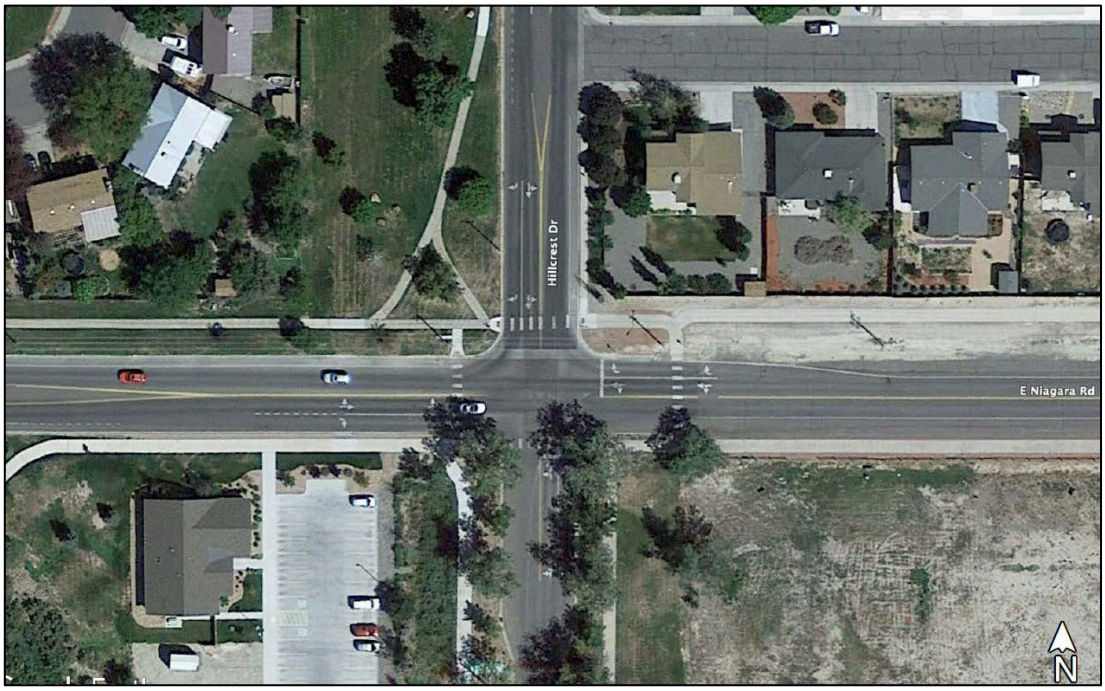
#3 Miami Rd & 6700 Rd (unsignalized 4-leg)

#4 Miami Rd & 6720 Rd (unsignalized 4-leg)

#6 Rossehl Ln & 6720 Rd (unsignalized 3-leg)

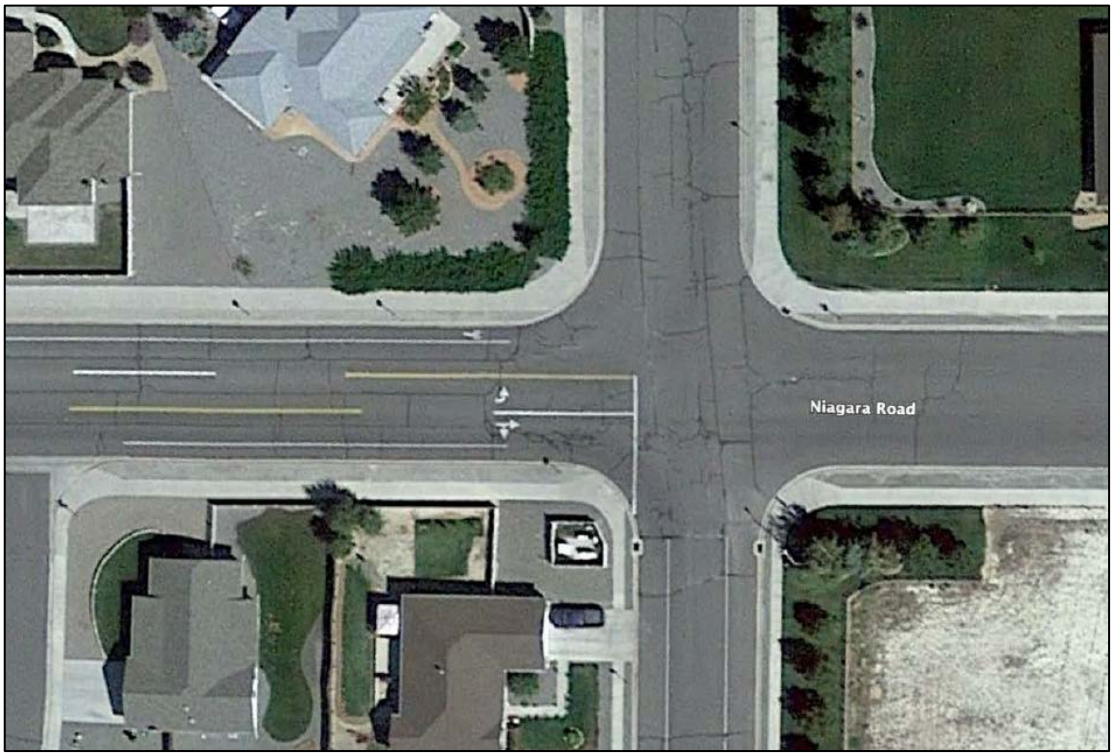
#7 Sunnyside Rd & 6700 Rd (unsignalized 4-leg)

#8 Sunnyside Rd & 6720 Rd (unsignalized 4-leg)



#10 Niagara Rd & Hillcrest St. (unsignalized 4-leg)

#11 Niagara Rd & 6700 Rd (unsignalized 4-leg)



#12 Niagara Rd & Hill St (unsignalized 4-leg)

3.2 US-50 Traffic & Highway Data

CDOT's OTIS system provided the following information about US-50 in the Study Area.

Near 6700 Rd. (MP 95.11)

- Access Category: NR-A
- Functional Class: Principal Arterial
- NHS: Yes
- Speed Limit: 55 mph each direction
- AADT (2019): 10,000 vpd
- Peak Hour Factor (DHV): 9%
- Peak Truck Percentage: 8.3%
- 20-year growth factor: 1.09 (Average Annual Growth Rate = 0.43%)

Near Miami Rd. (MP 95.67)

- Access Category: NR-A
- Functional Class: Principal Arterial
- NHS: Yes
- Speed Limit: 65 mph each direction
- AADT (2019): 4,900 vpd
- Peak Hour Factor (DHV): 10%
- Peak Truck Percentage: 10.5%
- 20-year growth factor: 1.06

3.3 Peak Hour Intersection Traffic Counts & Adjustment Factors

The appendix includes the peak hour traffic counts at the existing intersections. These counts were taken at different times of year as follows.

Counts Taken During COVID Restrictions – Tuesday, February 23, 2021

The intersections on Niagara Rd. were counted this year prior to widespread COVID vaccine distribution. A COVID adjustment factor will be applied to these counts. The intersection of Sunnyside Rd. & 6700 Rd. is a key intersection in the center of the Study Area. This intersection was counted twice during each of the counting efforts specifically to identify the following COVID adjustment factors for counts at intersections on Niagara Rd.

- AM Factor = 5%
- PM Factor = 15%

Counts Taken After COVID Restrictions – Tuesday, November 9, 2021

All other intersections were counted recently when there were not any COVID restrictions. These counts will be used without a COVID adjustment factor.

Peak Season Adjustment Factor

The local road intersections are in mostly residential areas that would not experience traffic variations during the year. Therefore, these local road intersection counts will not be adjusted for peak season.

However, it is likely that US-50 traffic would experience seasonal variations and an adjustment factor for eastbound and westbound through volumes was appropriate. CDOT commissioned a signal retiming project for US-50 & US-550 in 2017. The report provided a plot of traffic differences between summer and winter conditions, which identified a peak season difference of 20% in the PM peak hour. Therefore, a peak season adjustment factor of 1.2 will be applied to the eastbound and westbound through traffic counts on US-50.

4 Future Conditions

This section addresses the planned roadway system changes, growth of background traffic, and the total future traffic volumes.

4.1 Future Background Traffic Volumes

4.1.1 Planned Roadway System Changes

The east side of Montrose is growing to a point where local road improvements have been planned or even designed. The following table shows how the various new roadway segments will be considered in this Study.

Table 5 – Planned Roadways & Study Years

Roadway	Segment	Year 2028	Year 2042
Hill St.	Niagara Rd. to Sunnyside Rd. (under construction)	Yes	Yes
Hill St.	Sunnyside Rd. to Miami Rd. (within Project limits)	Yes	Yes
6700 Rd.	Sunnyside Rd. to Miami Rd. (City road project)	Yes	Yes

The 6700 Rd. improvements will soon be redesigned by the City of Montrose. The current construction plans show the following new intersection configurations, and this study assumed these configurations in the analysis.

- Intersection #2 – Single Lane Roundabout at Niagara Rd. & 6700 Rd.
- Intersection #4 – Single Lane Roundabout at Sunnyside Rd. & 6700 Rd.
- Intersection #7 – Single Lane Roundabout at Miami Rd. & 6700 Rd.
- Intersection #9 – Signalization at US-50 & 6700 Rd, with NB & SB turn lanes.

4.1.2 Diverted Traffic Due to 6700 Rd. Extension – Year 2028 & 2042

The near-term addition of 6700 Rd. between Sunnyside Dr. and Miami Rd. will complete a continuous north-south corridor in this part of Montrose. In the current configuration, northbound and southbound traffic needs to use 6720 Rd., which creates more turns than necessary at four intersections in the area. It was necessary to determine how all the traffic movements at these four intersections would change with the new road segment. To provide more flexibility in the calculations, it was decided to adjust the existing traffic volumes as a basis for the background traffic volumes in years 2028 and 2042.

This calculation was done for the previous Woods Crossing (south) project based on different traffic counts at the four intersections in question. A comparison of the specific traffic volumes obtained during counts for Woods Crossing (south) and the volumes obtained for Woods Crossing North revealed the following conclusions:

- A total of 96 unique volumes were part of the data set (4 intersections, AM/PM periods, 12 movements per intersection).
- 8 current volumes were slightly less than the previous count
- 12 current volumes were slightly more than the previous count

Therefore, the previously calculated diverted volumes will be used in this Study for Woods Crossing North. The basis for this includes: 1) small volume differences at each movement, 2) balanced differences when comparing the new volumes being more than or less than previous counts, 3) the accuracy of this calculation based on detailed assumptions of driver route changes, 4) these were relatively low volume intersections.

Description of Calculation Methodology – Used for Woods Crossing (south) project

This was a relatively complicated manual calculation with all the details and results provided in the attachments. This narrative provides an overview of the process:

1. Identify 5 diverted traffic patterns to consider. Other movements wouldn't be affected or would have a low volume.
    a. To/from 6700 Rd (north of Miami Rd.) & 6700 Rd. (south of Sunnyside Rd.),
    b. To/from Miami Rd. (east of 6720 Rd.) & 6700 Rd. (south of Sunnyside Rd.),
    c. To/from 6700 Rd. (north of Miami Rd.) & Sunnyside Rd. (east of 6720 Rd.),
    d. To/from Miami Rd. (west of 6700 Rd.) & Sunnyside Rd. (west of 6700 Rd.),
    e. To/from 6700 Rd (north of Miami Rd.) & Sunnyside Rd. (west of 6700 Rd.).

2. Identify 5 specific movement shifts at key intersections and then assign the diverted traffic to the appropriate diversion route based on engineering judgement.
    a. At 6700 Rd. & Miami Rd – southbound lefts shift to southbound throughs (routed on diversions 1, 3, 5),
    b. At 6700 Rd. & Miami Rd – westbound rights shift to northbound throughs (routed on diversions 1, 3, 5),
    c. Westbound lefts at 6720 Rd. & Miami Rd. shifts to westbound lefts at 6700 Rd & Miami Rd. (routed on diversion 2),
    d. At 6700 Rd. & Sunnyside Rd – northbound rights shift to northbound throughs (routed on diversions 2 and 4),
    e. At 6700 Rd. & Miami Rd. – eastbound throughs shift to eastbound rights (routed on diversion 4).

3. Add or subtract the specific volumes from each diversion to the original existing traffic volumes

The following figure shows the existing traffic as counted at these four intersections (AM & PM peak hours).

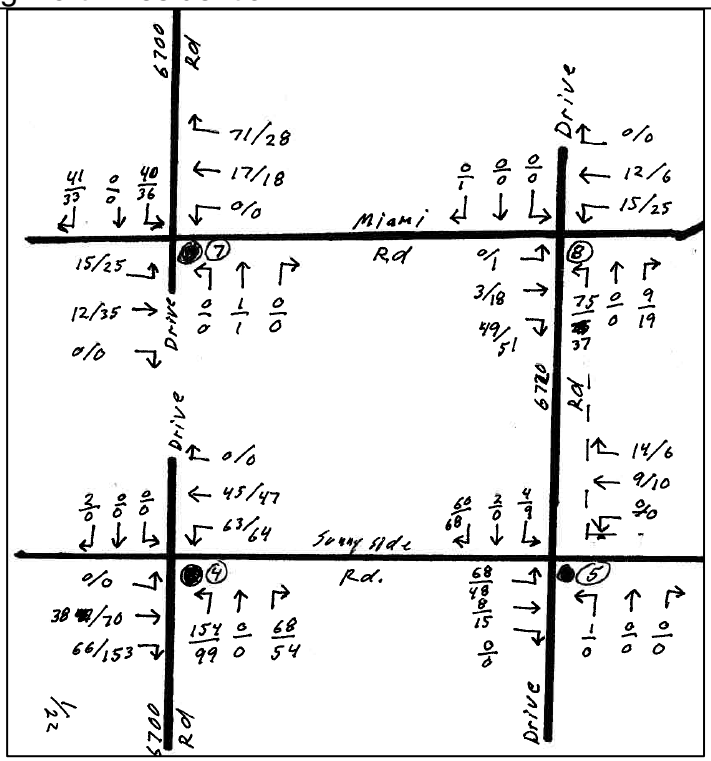


Figure 7 – Existing Peak Hour Traffic at 4 Intersections

The following figure shows the existing traffic when diverted at these four intersections (AM & PM peak hours), with the assumed addition of 6700 Rd between Sunnyside Rd and Miami Rd.

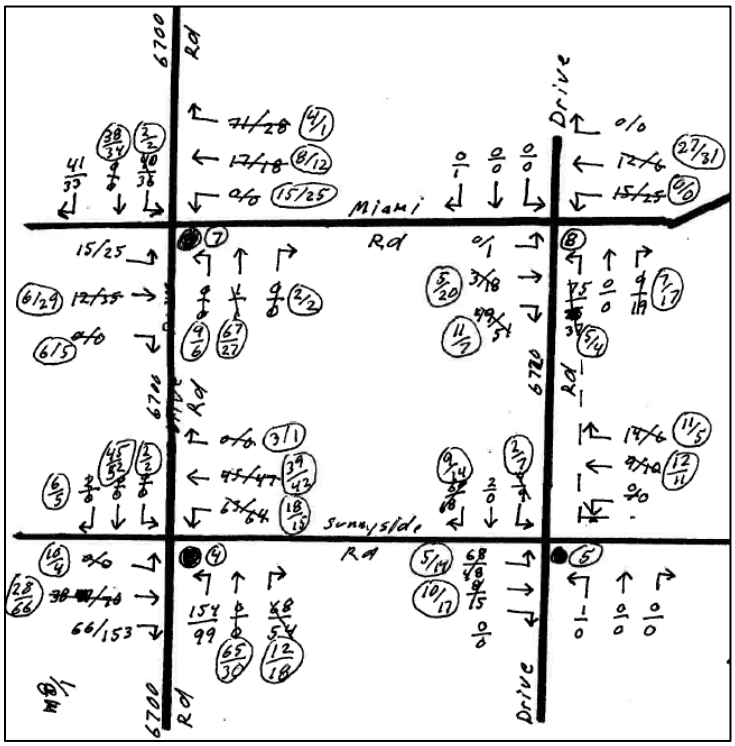


Figure 8 – Diverted Existing Peak Hour Traffic at 4 Intersections

4.1.3 Background Traffic Growth

The study years were 2028 for Project build out, and 2042 for the 20-yr condition. There were different growth factors for local roads and state highways.

US-50 Eastbound and Westbound Through Volumes

The CDOT 20-yr growth factor is 1.09 which equates to an Average Annual Growth Rate of 0.43%. The following growth factors will be applied to the traffic counts to obtain the future background through traffic volumes on US-50 intersections. These intersections were counted in 2021.

- 2021 - 2028, use a 7-year growth factor of 1.031
- 2021 - 2042, use a 21-year growth factor of 1.095

Local Road Intersections

The Colorado State Demography office provide population estimates through year 2050. This data indicates that the 20-year growth factor in Montrose County would be 1.40, which equates to an Average Annual Growth Rate of 1.7%. The following growth factors were applied to the traffic counts to obtain the future background traffic volumes on the local intersections.

- 2021 - 2028, use a 7-year growth factor of 1.125
- 2021 - 2042, use a 21-year growth factor of 1.423

Consideration of Future Traffic from Woods Crossing (South) Development

The Woods Crossing (South) project is located on both sides of Hill St., south of Sunnyside Rd. It was approved by the City of Montrose and is currently under construction. But it is not yet generating any traffic and isn't reflected in the recent traffic counts. The future trips from this project were added to the calculation of future background traffic, per a previous traffic study by TurnKey Consulting.

4.2 Total Future Traffic Volumes (Background + Project)

Future total traffic is the sum of Project trips and background traffic. The following Figures show the future total future traffic volumes at each intersection for years 2028 and 2042.

The Total Future Background Traffic volumes are shown in the appendices for Traffic Volume Calculations.

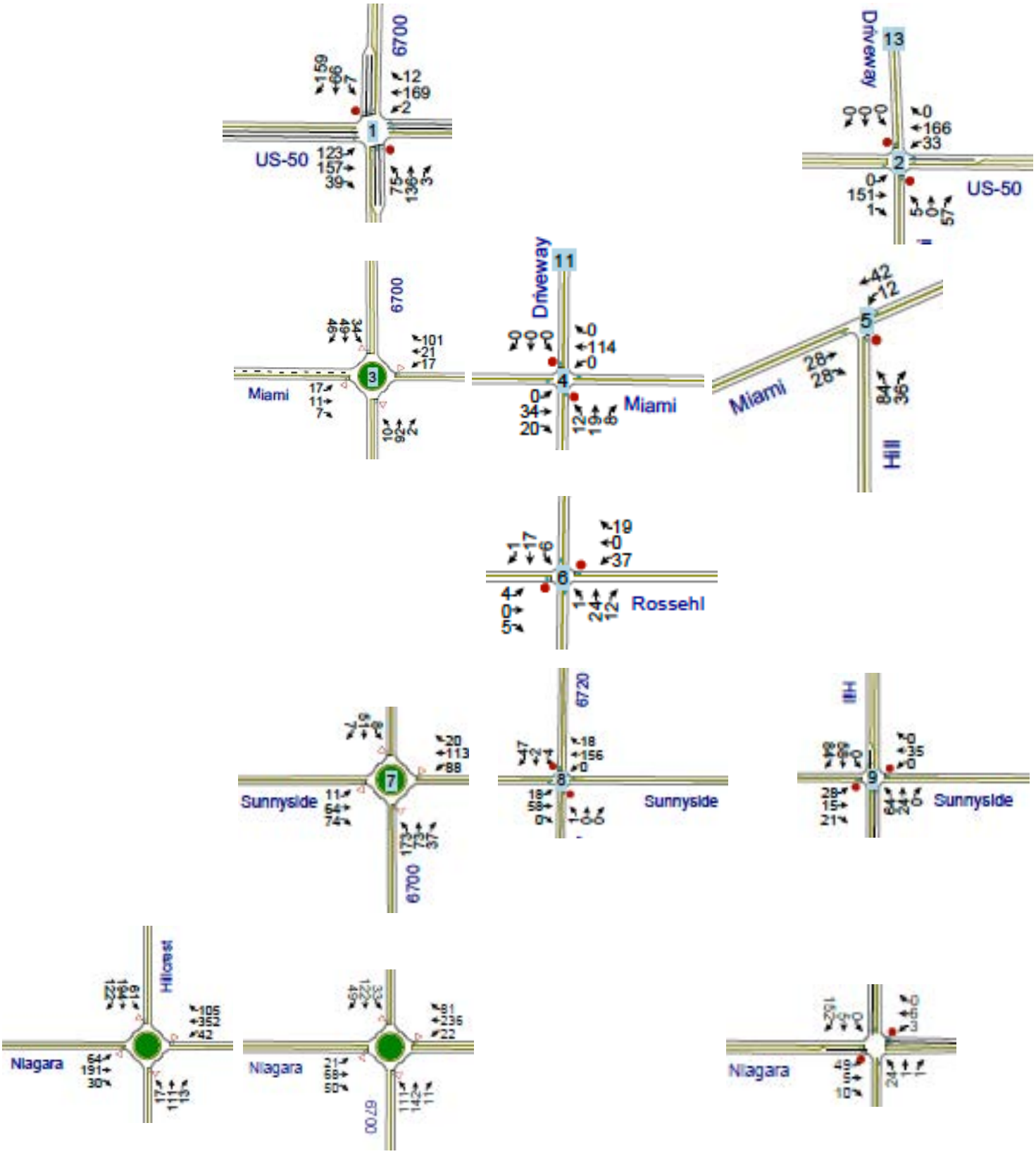


Figure 9 - Total Future Traffic Volumes – 2028 AM

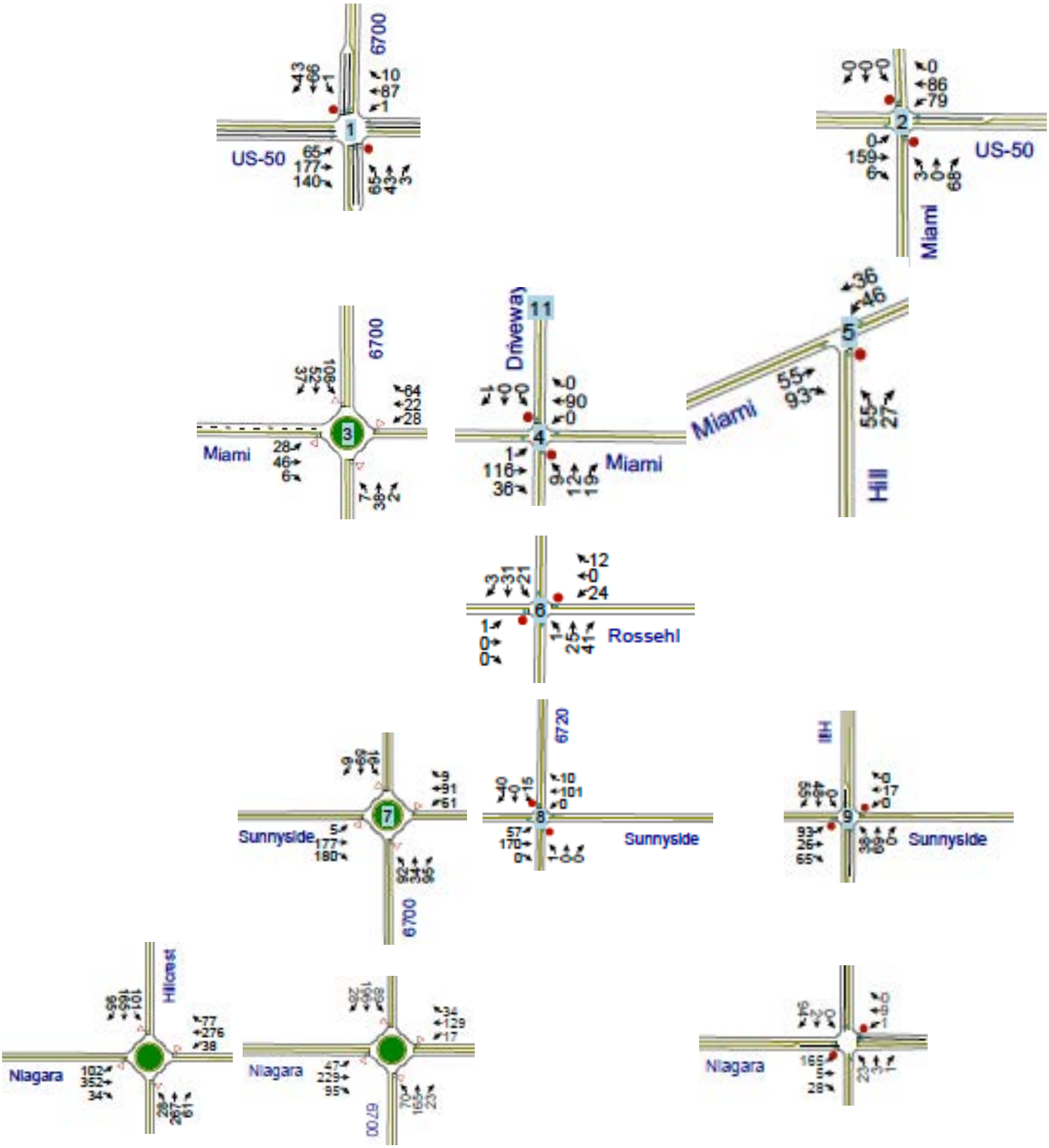


Figure 10 - Total Future Traffic Volumes – 2028 PM

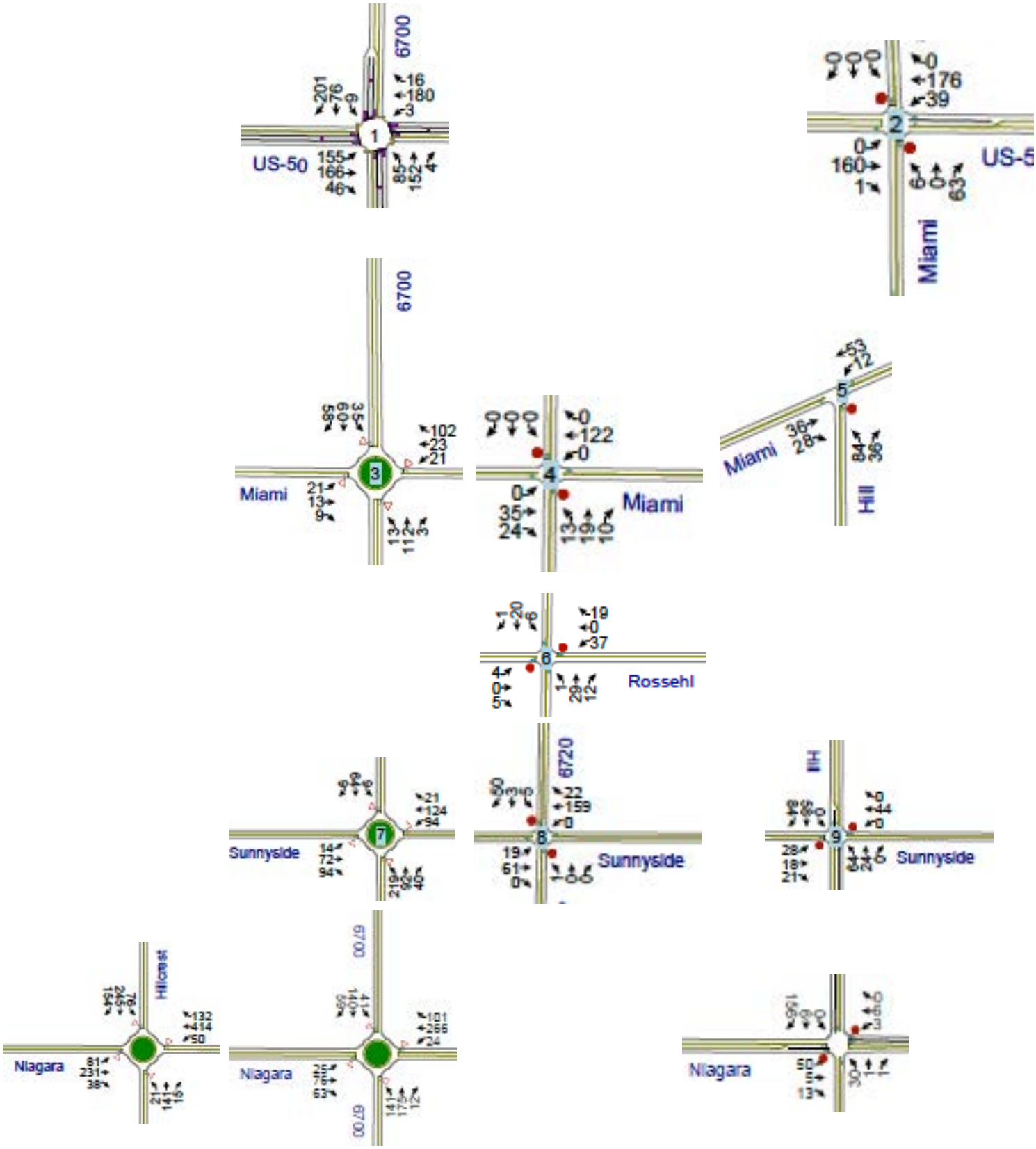


Figure 11 - Total Future Traffic Volumes – 2042 AM

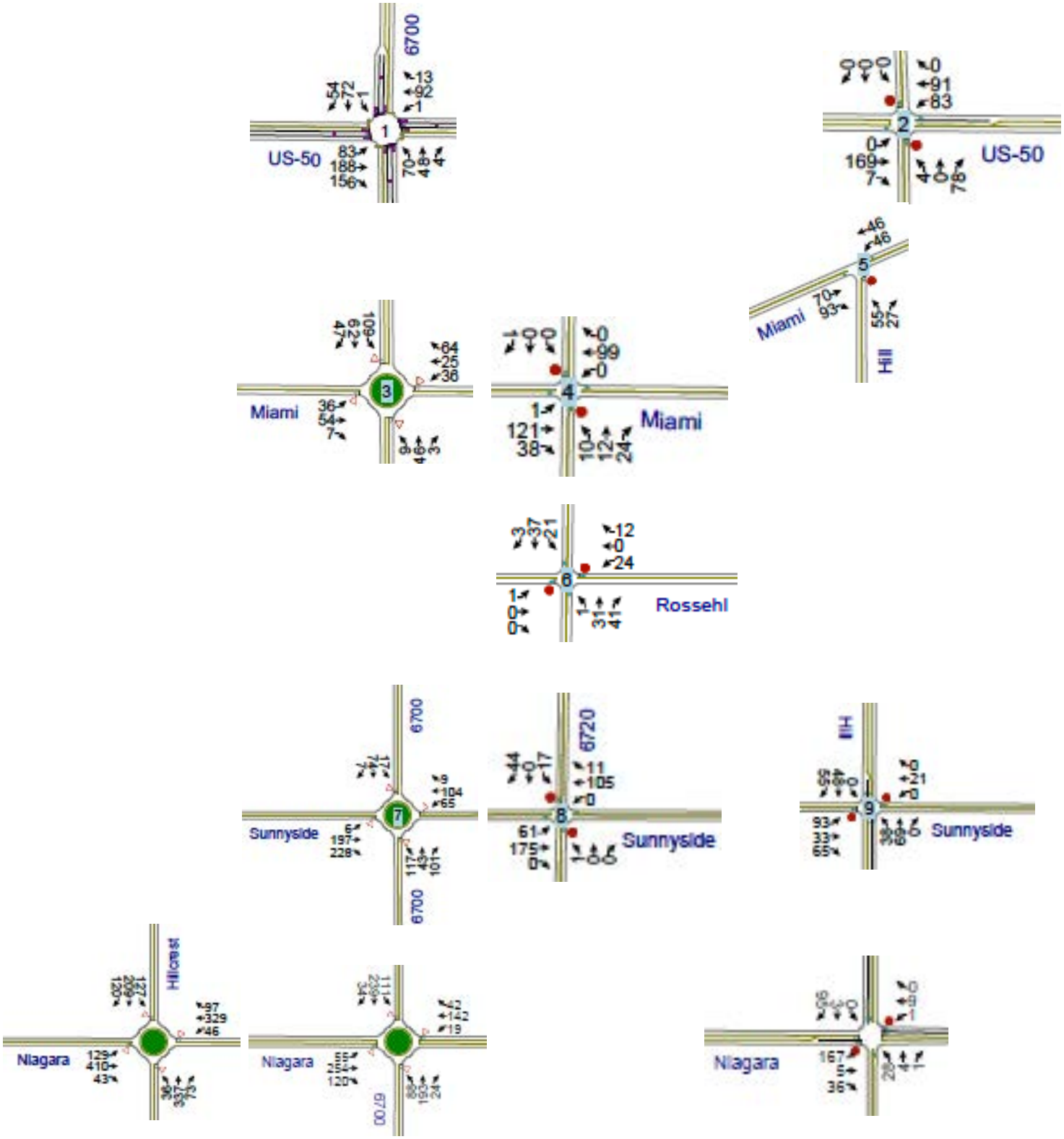


Figure 12 - Total Future Traffic Volumes – 2042 PM

5 Peak Hour Traffic Safety & Operations Analysis

This analysis included turn lane warrant evaluations and traffic operations calculations.

5.1 Turn Lane Warrant Evaluation for Mainline Road Segments

The intersections were evaluated to determine if turn lanes would be warranted on the mainline roadways to reduce vehicle conflicts points and crash potential. This included evaluation of turn lane lengths. The City of Montrose does not have specific requirements for exclusive turn lanes. Rather, they rely on intersection level of service analysis to determine if turn lanes would be necessary. CDOT warrants are used as a reference point and guidance.

CDOT Turn Lane Warrants and Requirements (NR-A)

This criterion includes turn lane warrants, turn lane waiver volumes, and lengths for acceleration and deceleration lanes. The criteria are different for various roadway access classifications and various speed limits, but all the roads in the Study area would have the access classification of NR-A (non-rural level A). The following table shows the CDOT turn lane warrant criteria, per State Highway Access Code Section 3.10.

Table 6 – CDOT Turn Lane Warrant Criteria – NR-A Roads

Auxiliary Lane	CDOT Warrant Requirements
Left Turn Deceleration Lane	More than 10 vph
Right Turn Deceleration Lane	More than 25 vph
Left Turn Acceleration Lane	May be req'd if benefit to safety and operations. Generally, not required if speed less than 45 mph
Right Turn Acceleration Lane	More than 50 vph, when speed greater than 40 mph

Evaluation Results

Exclusive turn lanes are typically not required at roundabouts. The following table shows the detailed turn lane evaluation for non-roundabout intersections. Four turn lanes were warranted:

1. On US-50 at 6700 Rd. – an eastbound right turn deceleration lane is warranted now, and the lane is there. The existing deceleration length is acceptable.

2. On US-50 at Miami Rd.
   a. By 2028, a westbound left turn deceleration lane would be warranted and justified The lane is there, but the existing deceleration length of 475-ft is short of the required deceleration distance of 800-ft. This lane should be extended by 325-ft. no later than 2028.
   b. A northbound-to-eastbound right turn acceleration lane is warranted by year 2028. The required acceleration distance would be 1,380-ft if the posted speed remained 65 mph.

Table 7 – Mainline Turn Lane Warrant Evaluation Summary

Intersection		Year	Turning movement	Function	Speed Limit	Traffic Volumes (4)			Warrant Volumes (vph)(1)		Exclusive Turn Lane Warranted	Lane Geometry	
						Turning (vph)	Conflicting Direction	Conflicting Through (vph)	Turning	Through		Existing Length (ft)	Required Length (ft)
1	US-50 & 6700 Rd	2028	EB Right	Decel	55	140	EB	177	25	150	Yes	635	600
			NB-WB Left	Accel	55	75	WB	169	none	n/a	No (3)		
		2042	EB Right	Decel	55	156	EB	188	25	150	Yes	635	600
			NB-WB Left	Accel	55	85	WB	180	none	n/a	No (3)		
2	US-50 & Miami Rd.	2028	WB Left	Decel	65	75	EB	159	10	150	Yes	325	800
			NB-EB Right	Accel	65	68	EB	159	50	120	Yes	0	1,380
		2042	WB Left	Decel	65	83	EB	169	10	150	Yes	325	800
			NB-EB Right	Accel	65	78	EB	169	50	120	Yes	0	1,380
4	Miami Rd. & 6720 Rd.	2028	EB Right	Decel	35	36	EB	116	25	150	No		
			NB-WB Left	Accel	35	n/a (2)	n/a (2)	n/a (2)	n/a (2)	n/a (2)	No		
			WB Left	Decel	35	0	EB	116	10	150	No		
			NB-EB right	Accel	35	n/a (2)	n/a (2)	n/a (2)	n/a (2)	n/a (2)	No		
		2042	EB Right	Decel	35	38	EB	121	25	150	No		
			NB-WB Left	Accel	35	n/a (2)	n/a (2)	n/a (2)	n/a (2)	n/a (2)	No		
			WB Left	Decel	35	0	EB	121	10	150	No		
			NB-EB right	Accel	35	n/a (2)	n/a (2)	n/a (2)	n/a (2)	n/a (2)	No		
5	Miami Rd. & Hill St.	2028	EB Right	Decel	35	93	EB	55	25	150	No		
			NB-WB Left	Accel	35	n/a (2)	n/a (2)	n/a (2)	n/a (2)	n/a (2)	No		
			WB Left	Decel	35	46	EB	55	10	150	No		
			NB-EB right	Accel	35	n/a (2)	n/a (2)	n/a (2)	n/a (2)	n/a (2)	No		
		2042	EB Right	Decel	35	93	EB	70	25	150	No		
			NB-WB Left	Accel	35	n/a (2)	n/a (2)	n/a (2)	n/a (2)	n/a (2)	No		
			WB Left	Decel	35	46	EB	70	10	150	No		
			NB-EB right	Accel	35	n/a (2)	n/a (2)	n/a (2)	n/a (2)	n/a (2)	No		
6	6720 Rd. & Rossehl Ln.	2028	NB Right	Decel	35	41	NB	25	25	150	No		
			WB-SB Left	Accel	35	n/a (2)	n/a (2)	n/a (2)	n/a (2)	n/a (2)	No		
			SB Left	Decel	35	21	NB	25	10	150	No		
			WB-NB right	Accel	35	n/a (2)	n/a (2)	n/a (2)	n/a (2)	n/a (2)	No		
		2042	NB Right	Decel	35	41	NB	31	25	150	No		
			WB-SB Left	Accel	35	n/a (2)	n/a (2)	n/a (2)	n/a (2)	n/a (2)	No		
			SB Left	Decel	35	21	NB	31	10	150	No		
			WB-NB right	Accel	35	n/a (2)	n/a (2)	n/a (2)	n/a (2)	n/a (2)	No		
8	Sunnyside Rd. & 6720 Rd.	2028	WB Right	Decel	35	18	WB	156	25	150	No		
			SB-EB Left	Accel	35	n/a (2)	n/a (2)	n/a (2)	n/a (2)	n/a (2)	No		
			EB Left	Decel	35	57	WB	101	10	150	No		
			SB-WB right	Accel	35	n/a (2)	n/a (2)	n/a (2)	n/a (2)	n/a (2)	No		
		2042	EB Right	Decel	35	22	WB	159	25	150	No		
			NB-WB Left	Accel	35	n/a (2)	n/a (2)	n/a (2)	n/a (2)	n/a (2)	No		
			WB Left	Decel	35	61	WB	105	10	150	No		
			NB-EB right	Accel	35	n/a (2)	n/a (2)	n/a (2)	n/a (2)	n/a (2)	No		
9	Sunnyside Rd. & Hill St.	2028	EB Right	Decel	35	65	EB	26	25	150	No		
			NB-WB Left	Accel	35	n/a (2)	n/a (2)	n/a (2)	n/a (2)	n/a (2)	No		
			EB Left	Decel	35	93	WB	17	10	150	No		
			SB-WB right	Accel	35	n/a (2)	n/a (2)	n/a (2)	n/a (2)	n/a (2)	No		
		2042	EB Right	Decel	35	65	EB	33	25	150	No		
			NB-WB Left	Accel	35	n/a (2)	n/a (2)	n/a (2)	n/a (2)	n/a (2)	No		
			EB Left	Decel	35	93	WB	21	10	150	No		
			SB-WB right	Accel	35	n/a (2)	n/a (2)	n/a (2)	n/a (2)	n/a (2)	No		
12	Niagara & Hill St.	2028	EB Left	Decel	35	165	WB	9	10	150	No		
			SB-WB right	Accel	35	n/a (2)	n/a (2)	n/a (2)	n/a (2)	n/a (2)	No		
		2042	EB Left	Decel	35	167	WB	9	10	150	No		
			SB-WB right	Accel	35	n/a (2)	n/a (2)	n/a (2)	n/a (2)	n/a (2)	No		

Notes:

1. All city streets in the Study Area are minor arterials, which equates to a CDOT access classification of NR-A, US-50 is NR-A
2. No warrant volume when speed = 35 mph
3. Based on operational analysis of stop control in 2028. Signalization by 2042 would eliminate the need for left turn accel lanes
4. All volumes are "total traffic" conditions

5.2 Traffic Operations Analysis

The analysis used the latest version of Synchro Software to evaluate the existing and future traffic operations at the intersections and driveways within the study area. The concept of Level of Service (LOS) is used as a basis for computing combinations of roadway operating conditions and delay, which accommodate various level of traffic activity. By definition, six different LOS are used - A, B, C, D, E, and F. LOS "A" represents free-flow conditions with little to no delay. LOS "E" represents the maximum capacity of an intersection or roadway, where delay and/or congestion are severe.

Table 8 – Intersection Delay & LOS Thresholds

Level of Service (LOS)	**Signalized Intersections** *(seconds/vehicle)*	**Unsignalized Intersection** *(seconds/vehicle)*
A	0.0 – 10.0	0.0 – 10.0
B	10.1 – 20.0	10.1 – 15.0
C	20.1 – 35.0	15.1 – 25.0
D	35.1 – 55.0	25.1 – 35.0
E	55.1 – 80.0	35.1 – 50.0
F	Greater than 80.0	Greater than 50.0

Source: Transportation Research Board, *Highway Capacity Manual*, 2010 Edition

CDOT does not have any specific LOS standards, but they generally reference the AASHTO "Green Book" as a guideline when absent CDOT standards. The Green Book indicates that LOS C is desirable in rural conditions and LOS D is desirable in urban conditions. However, CDOT recognizes that funding limitations are a constraint that results in many existing intersections experiencing poor LOS.

The operational analysis included the following assumptions:

- The peak hour factor was 0.92.
- This area is flat, so grade adjustments were not necessary.
- Per CDOT data, truck percentages were 11% for eastbound and westbound through movements on US-50. The truck factor for all other movements was 2%.

The following table shows the operation analysis results for the proposed conditions at each intersection and analysis period.

Table 9 – Intersection LOS Summary for Peak Hour Conditions

Year & Location	Traffic Control	New Lane Geometry	Year 2028 Background	Year 2028 Total	Year 2042 Background	Year 2042 Total
Year 2028						
Int #1 US-50 & 6700 Rd. - AM	Unsignalized					
Eastbound			A	A		
Westbound			A	A		
Northbound	Stop	1 left, 1 thru, 1 right	C	D		
Southbound	Stop	1 left, 1 thru, 1 right	B	B		
Critical Movement Delay (ave. sec/veh)			NBL (26.7)	NBL (36.1)		
Int #1 US-50 & 6700 Rd. - PM	Unsignalized					
Eastbound			A	A		
Westbound			A	A		
Northbound	Stop	1 left, 1 thru, 1 right	B	C		
Southbound	Stop	1 left, 1 thru, 1 right	B	B		
Critical Movement Delay (ave. sec/veh)			NBL (14.2)	NBL (16.9)		
Year 2042						
Int #1 US-50 & 6700 Rd. - AM	Signalized					
Eastbound					A	A
Westbound					A	A
Northbound					A	A
Southbound		1 left, 1 thru, 1 right			A	A
Overall Intersection Delay (ave. sec/veh)		1 left, 1 thru, 1 right			A (6.9)	A (7.0)
Int #1 US-50 & 6700 Rd. - PM	Signalized					
Eastbound					A	A
Westbound					A	A
Northbound		1 left, 1 thru, 1 right			A	A
Southbound		1 left, 1 thru, 1 right			A	A
Overall Intersection Delay (ave. sec/veh)					A (6.0)	A (6.1)
Int #2 US-50 & Miami Rd. - AM	Unsignalized					
Eastbound			A	A	A	A
Westbound			A	A	A	A
Northbound	Stop		A	A	A	A
Southbound	Stop		A	A	A	A
Critical Movement Delay (ave. sec/veh)			NB (9.7)	NB (9.7)	NB (9.8)	NB (9.9)
Int #2 US-50 & Miami Rd. - AM	Unsignalized					
Eastbound			A	A	A	A
Westbound			A	A	A	A
Northbound	Stop		A	A	A	A
Southbound	Stop		A	A	A	A
Critical Movement Delay (ave. sec/veh)			NB (9.6)	NB (9.7)	NB (9.8)	NB (9.9)

Year & Location	Traffic Control	New Lane Geometry	Year 2028 Background	Year 2028 Total	Year 2042 Background	Year 2042 Total
Int #3 Miami Rd. & 6700 Rd. - AM	Roundabout					
Eastbound			A	A	A	A
Westbound			A	A	A	A
Northbound			A	A	A	A
Southbound			A	A	A	A
Overall Intersection Delay (ave. sec/veh)			A (3.4)	A (3.8)	A (3.5)	A (3.9)
Int #3 Miami Rd. & 6700 Rd. - PM	Roundabout					
Eastbound			A	A	A	A
Westbound			A	A	A	A
Northbound			A	A	A	A
Southbound			A	A	A	A
Overall Intersection Delay (ave. sec/veh)			A (3.4)	A (4.0)	A (3.5)	A (4.2)
Int #4 Miami Rd. & 6720 Rd. - AM	Unsignalized					
Eastbound			A	A	A	A
Westbound			A	A	A	A
Northbound	Stop		A	A	A	B
Southbound	Stop		A	A	A	A
Critical Movement Delay (ave. sec/veh)			NB (8.8)	NB (9.9)	NB (8.8)	NB (10.0)
Int #4 Miami Rd. & 6720 Rd. - PM	Unsignalized					
Eastbound			A	A	A	A
Westbound			A	A	A	A
Northbound	Stop		A	B	A	B
Southbound	Stop		A	A	A	A
Critical Movement Delay (ave. sec/veh)			NB (8.8)	NB (10.1)	NB (8.9)	NB (10.2)
Int #5 Miami Rd. & Hill St. - AM	Unsignalized					
Eastbound				A		A
Westbound				A		A
Northbound	Stop			A		B
Critical Movement Delay (ave. sec/veh)				NB (9.6)		NB (10.3)
Int #5 Miami Rd. & Hill St. - AM	Unsignalized					
Eastbound				A		A
Westbound				A		A
Northbound	Stop			B		B
Critical Movement Delay (ave. sec/veh)				NB (10.0)		NB (10.7)
Int #6 6720 Rd. & Rossehl Ln- AM	Unsignalized					
Eastbound	Stop		A	A	A	A
Westbound	Stop			A		A
Northbound			A	A	A	A
Southbound			A	A	A	A
Critical Movement Delay (ave. sec/veh)			EB (8.8)	WB (9.2)	EB (8.8)	WB (9.3)
Int #6 6720 Rd. & Rossehl Ln- PM	Unsignalized					
Eastbound	Stop		A	A	A	A
Westbound	Stop			A		A
Northbound			A	A	A	A
Southbound			A	A	A	A
Critical Movement Delay (ave. sec/veh)			EB (9.1)	EB (9.7)	EB (9.2)	EB (9.8)

Year & Location	Traffic Control	New Lane Geometry	Year 2028 Background	Year 2028 Total	Year 2042 Background	Year 2042 Total
Int #7 Sunnyside Rd. & 6700 Rd. – AM	Roundabout					
Eastbound			A	A	A	A
Westbound			A	A	A	A
Northbound			A	A	A	A
Southbound			A	A	A	A
Overall Intersection Delay (ave. sec/veh)			A (4.5)	A (5.2)	A (5.1)	A (5.8)
Int #7 Sunnyside Rd. & 6700 Rd. – PM	Roundabout					
Eastbound			A	A	A	A
Westbound			A	A	A	A
Northbound			A	A	A	A
Southbound			A	A	A	A
Overall Intersection Delay (ave. sec/veh)			A (4.7)	A (5.5)	A (5.3)	A (6.3)
Int #8 Sunnyside Rd. & 6720 Rd. – AM	Unsignalized					
Eastbound			A	A	A	A
Westbound			A	A	A	A
Northbound	Stop		A	B	A	B
Southbound	Stop		A	A	A	A
Critical Movement Delay (ave. sec/veh)			NB (9.5)	NB (11.2)	NB (9.7)	NB (11.4)
Int #8 Sunnyside Rd. & 6720 Rd. – PM	Unsignalized					
Eastbound			A	A	A	A
Westbound			A	A	A	A
Northbound	Stop		A	B	B	B
Southbound	Stop		A	B	A	B
Critical Movement Delay (ave. sec/veh)			NB (9.9)	NB (12.7)	NB (10.1)	NB (13.0)
Int #9 Sunnyside Rd. & Hill St. - AM	Unsignalized					
Eastbound	Stop		A	B	A	B
Westbound	Stop		B	B	B	B
Northbound			A	A	A	A
Southbound			A	A	A	A
Critical Movement Delay (ave. sec/veh)			WB (10.4)	WB (11.9)	WB (10.5)	WB (12.0)
Int #9 Sunnyside Rd. & Hill St. - PM	Unsignalized					
Eastbound	Stop		A	B	A	B
Westbound	Stop		A	B	A	B
Northbound			A	A	A	A
Southbound			A	A	A	A
Critical Movement Delay (ave. sec/veh)			WB (9.9)	EB (11.7)	WB (9.9)	EB (11.9)

[redacted]

Year & Location	Traffic Control	New Lane Geometry	Year 2028 Background	Year 2028 Total	Year 2042 Background	Year 2042 Total
Int #10 Niagara Rd. & Hillcrest Dr. – AM	Roundabout					
Eastbound			A	A	A	A
Westbound			A	A	B	B
Northbound			A	A	A	A
Southbound			A	A	B	C
Overall Intersection Delay (ave. sec/veh)			A (7.9)	A (8.6)	B (10.8)	B (12.2)
Int #10 Niagara Rd. & Hillcrest Dr. – PM	Roundabout					
Eastbound			A	B	B	C
Westbound			A	B	B	C
Northbound			B	B	C	D
Southbound			A	A	B	B
Overall Intersection Delay (ave. sec/veh)			A (9.7)	B (11.0)	C (15.2)	C (18.1)
Int #11 Niagara Rd. & 6700 Rd. - AM	Roundabout					
Eastbound			A	A	A	A
Westbound			A	A	A	A
Northbound			A	A	A	A
Southbound			A	A	A	A
Overall Intersection Delay (ave. sec/veh)			A (5.4)	A (6.3)	A (6.4)	A (7.5)
Int #11 Niagara Rd. & 6700 Rd. - PM	Roundabout					
Eastbound			A	A	A	A
Westbound			A	A	A	A
Northbound			A	A	A	A
Southbound			A	A	A	A
Overall Intersection Delay (ave. sec/veh)			A (6.0)	A (7.3)	A (7.3)	A (9.0)
Int #12 Niagara Rd. & Hill St. – AM	Unsignalized					
Eastbound	Stop		A	A	A	A
Westbound	Stop		B	B	B	B
Northbound			A	A	A	A
Southbound			A	A	A	A
Critical Movement Delay (ave. sec/veh)			EB (9.2)	WB (10.4)	WB (10.2)	WB (10.5)
Int #12 Niagara Rd. & Hill St. – PM	Unsignalized					
Eastbound	Stop		A	A	A	A
Westbound	Stop		A	B	B	B
Northbound			A	A	A	A
Southbound			A	A	A	A
Critical Movement Delay (ave. sec/veh)			WB (9.9)	WB (10.1)	WB (10.0)	WB (10.2)

5.3 Analysis Results & Recommendations

This section describes the recommended geometric improvements and actions resulting from increased background and project traffic. It combines the results of the turn lane warrant analysis and the operational analysis.

Existing Intersections Where Current Configuration is Acceptable in All Conditions

- Int #4 – Miami Rd. & 6720 Rd.
- Int #8 – Sunnyside Rd. & 6720 Rd.
- Int #12 – Niagara Rd. & Hill St.

Intersection #1 – US-50 & 6700 Rd.

This 2-way stop controlled intersection would have acceptable traffic operations through the 2028 total traffic condition. This analysis was based on the lane geometry shown in the current design plans for 6700 Rd (see Appendix), as follows. Left turn acceleration lanes were not evaluated because they would not be part of the configuration with signalization.

- Eastbound: 1 left, 1 thru, 1 right – plus 1 northbound to eastbound right turn accel
- Westbound: 1 left, 1 thru, 1 right – plus 1 southbound to westbound right turn accel
- Northbound: 1 left (new), 1 thru, 1 right (new)
- Southbound: 1 left (new), 1 thru, 1 right (new)

The unsignalized configuration would not work by the year 2042. Traffic signal control for the 2042 conditions was evaluated based on the assumed 2028 lane geometry, and it would operate at level of service A in all conditions.

The signal at this location may not be necessary until 2042. This Study did not conduct a traffic signal warrant analysis or attempt to determine the likely timing of signal installation. The side road volumes would be high enough to warrant the signal, but the mainline volumes might remain too low to warrant the signal. CDOT provided recent crash data (2016 – 2017) for this intersection (Appendix). 6 of the 11 crashes during this period were intersection related and there were not any fatalities. The crash history of this intersection was higher than other intersections on the State Highway System with similar configuration and daily traffic volumes. This will be an important factor in the future signal warrant evaluation. The existing school north of US-50 would require an evaluation of the school warrant.

The existing eastbound right turn lane is warranted now, and this existing deceleration length is acceptable.

Intersection #2 – US-50 & Miami Rd.

This 2-way stop controlled intersection would have acceptable traffic operations in all conditions with the existing lane geometry. CDOT provided recent crash data (2016 – 2017) for this intersection (Appendix). 1 of the 2 crashes during this period were intersection related and there were not any injuries or fatalities. The crash history of this

intersection was similar to other intersections on the State Highway System with similar configuration and daily traffic volumes. This will be a factor to consider in the following turn lane evaluation.

- The existing westbound left turn deceleration lane is warranted now, but the conflicting volume is below the waiver volume. By the time of Project buildout (2028), this lane would still be warranted, and the conflicting volume would barely exceed the waiver volume. The existing deceleration length of 475-ft is short of the required deceleration distance of 800-ft. As the owner of Miami Rd. at this location, the County should consider extending this existing turn lane by 325-ft around the year 2028.
- A new northbound-to-eastbound right turn acceleration lane would be warranted by 2028, and the conflicting volume would be above the waiver volume. The required acceleration distance would be 1,380-ft. As the owner of Miami Rd. at this location, the County should consider constructing this turn lane around the year 2028.

Intersection #3 – Miami Rd. & 6700 Rd.

A single lane roundabout was evaluated for the 2028 and 2042 conditions. It would operate at level of service A in all conditions. The roundabout at this intersection may not be necessary for the next 10-20 years.

Intersection #5 – Miami Rd. & Hill St.

This proposed intersection should have a simple 3-leg configuration with stop control northbound. Turn lanes are not warranted in any of the analysis conditions and the operations would be acceptable with a simple single lane approach configuration.

Intersection #6 – 6720 Rd. & Rossehl Ln.

This existing 3-leg intersection should have a simple 4-leg configuration with stop control on the east and west legs. Turn lanes are not warranted in any of the analysis conditions and the operations would be acceptable with a simple single lane approach configuration.

Intersection #7 – Sunnyside Rd. & 6700 Rd.

A single lane roundabout was evaluated for the 2028 and 2042 conditions. It would operate at level of service A in all conditions. The roundabout at this intersection may not be necessary for the next 10-20 years.

Intersection #9 – Sunnyside Rd. & Hill St.

This existing 3-leg intersection should have the following configurations. Turn lanes are not warranted in any of the analysis conditions and the operations would be acceptable. However, this analysis was based on a 3- lane section on Hill St. that would provide north and southbound left turn deceleration lanes at the intersection.

- Currently under construction as part of the Woods Crossing (south) project: Simple 3-leg configuration with stop control northbound.
- Reconstruction with Woods Crossing North Project: Simple 4-leg configuration with stop control for lower volume approaches - eastbound and westbound.

Intersection #10 – Niagara Rd. & Hillcrest St.
This 4-way stop controlled intersection would start to fail after Project traffic is added incrementally until 2028. A single lane roundabout was evaluated for the 2028 and 2042 conditions and traffic operations would be acceptable. The City should consider constructing a roundabout at this location in the next 3-5 years.

Intersection 11 – Niagara Rd. & 6700 Rd.
The eastbound direction of this 2-way stop controlled intersection would start to fail after Project traffic is added incrementally until 2028. A single lane roundabout was evaluated for years 2028 and 2042, and it would operate at level of service A in all conditions. The City should consider planning for a roundabout at this location in the next 5-10 years.

Roadway Segments
The existing number of through lanes on all existing roads in the Study Area would provide the necessary capacity throughout all analysis periods.

6 CDOT Access Permitting Considerations on US-50

The State Highway Access Code requires CDOT access permitting for new access connections and when approach traffic volumes increase by more than 20% at existing intersections, or when intersection improvements are to be constructed. Two CDOT access permits would be necessary for the total traffic conditions sometime between now and year 2028 (depending on the sales rate for new sfr units in the area).

South Leg of 6700 Rd. at US-50
The Permittee would be the City of Montrose unless they delegate this responsibility to a third party. The permitting approach and timing should be discussed with CDOT and the City of Montrose. The permitted traffic volumes would be as follows.

- 2028 = 321 vph (113% change from existing)
- 2042 = 366 vph (142% change from existing)

South Leg of Miami Rd. at US-50
The Permittee would be Montrose County, unless they delegate this responsibility to a third party. The permitting approach and timing should be discussed with CDOT and Montrose County. The permitted traffic volumes would be as follows.

- 2028 = 152 vph (117% change from existing)
- 2042 = 172 vph (146% change from existing)

7 Conclusions & Recommendations

This section describes the recommended geometric improvements and actions resulting from increased background traffic and project traffic.

1. Intersection #1 – US-50 & 6700 Rd.
   The existing eastbound right turn lane is warranted now, and the existing deceleration length is acceptable.

This 2-way stop controlled intersection would have acceptable traffic operations through the 2028 total traffic condition. This analysis was based on the lane geometry shown in the current design plans for 6700 Rd (see Appendix), as follows. Left turn acceleration lanes were not evaluated because they would not be part of the configuration with signalization.

- Eastbound: 1 left, 1 thru, 1 right – plus 1 northbound to eastbound right turn accel lane.
- Westbound: 1 left, 1 thru, 1 right – plus 1 southbound to westbound right turn accel lane.
- Northbound: 1 left (new), 1 thru, 1 right (new).
- Southbound: 1 left (new), 1 thru, 1 right (new).

The unsignalized configuration would not have acceptable operations sometime before the year 2042. Traffic signal control would operate at level of service A in all future conditions. The traffic signal at this location may be necessary in the next 10 - 15 years. The crash history of this intersection was higher than other intersections on the State Highway System with similar configuration and daily traffic volumes.

2. Intersection #2 – US-50 & Miami Rd.
   This 2-way stop controlled intersection would have acceptable traffic operations in all conditions with the existing lane geometry. The crash history of this intersection was similar to other intersections on the State Highway System with similar configuration and daily traffic volumes. This will be a factor to consider in the following turn lane evaluation.
   - By the time of Project buildout (2028), the westbound left turn deceleration lane would be warranted and justified. The existing deceleration length of 475-ft is short of the required deceleration distance of 800-ft. As the owner of Miami Rd. at this location, the County should consider extending this existing turn lane by 325-ft around the year 2028.
   - A new northbound-to-eastbound right turn acceleration lane would be warranted and justified by 2028. The required acceleration distance would be 1,380-ft. As the owner of Miami Rd. at this location, the County should consider constructing this turn lane around the year 2028.

3. Intersection #3 – Miami Rd. & 6700 Rd.
   The proposed roundabout at this location may not be necessary for the next 10-20 years.

4. Int #4 – Miami Rd. & 6720 Rd.
   No changes would be necessary at this location.

5. Intersection #5 – Miami Rd. & Hill St.
   This proposed intersection should have a simple 3-leg configuration with stop control northbound. Turn lanes are not warranted in any of the analysis conditions.

6. Intersection #6 – 6720 Rd. & Rossehl Ln.
   This existing 3-leg intersection should be reconstructed as a simple 4-leg configuration with stop control on the east and west legs. Turn lanes are not warranted in any of the analysis conditions.

7. Intersection #7 – Sunnyside Rd. & 6700 Rd.
   The proposed roundabout at this location may not be necessary for the next 10-20 years.

8. Intersection #8 – Sunnyside Rd. & 6720 Rd.
   No changes would be necessary at this location.

9. Intersection #9 – Sunnyside Rd. & Hill St.
   The 3-leg configuration that is currently under construction should be reconstructed with a north leg, as part of Project construction. Turn lanes were not warranted in any of the analysis conditions. This simple 4-leg configuration should have stop control on the eastbound and westbound approaches to allow free-flow on Hill St.

10. Intersection #10 – Niagara Rd. & Hillcrest St.
    The City should consider constructing a roundabout at this location in the next 3-5 years.

11. Intersection #11 – Niagara Rd. & 6700 Rd.
    The City should consider planning for a roundabout at this location in the next 5-10 years.

12. Int #12 – Niagara Rd. & Hill St
    No changes would be necessary at this location, except that stop control should be on the eastbound and westbound approaches to allow free flow on Hill St.

13. Roadway Segments
    The existing number of through lanes on all existing roads in the Study Area would provide the necessary capacity throughout all analysis periods.

14. CDOT Access Permits
    At some point prior to 2028, CDOT access permits would be necessary at two existing intersections with US-50. The City of Montrose would be the permittee for the south leg of the US-50 & 6700 Rd. intersection. Montrose County would be the permittee for the south leg of the US-50 & Miami Rd. intersection.

Appendix

Project Trip Generation & Distribution Calculations

CDOT Traffic & Hwy Data

Existing Traffic Count Summaries

Diversion of Existing Traffic Around 6700 Rd

Data for Local Growth Rates & Seasonal Adjustment on US-50

Traffic Volume Calculation Tables

6700 Road Construction Plan Excerpts

Intersection Operational Analysis (sorted by intersection)

Project Trip Generation & Distribution Calculations

Graph Look Up

Query | Filter

DATA SOURCE:
Trip Generation Manual, 10th Ed + Supplemen

New data edition is available. Click here to upgrade.

SEARCH BY LAND USE CODE:
210

LAND USE GROUP:
(200-299) Residential

LAND USE :
210 - Single-Family Detached Housing

LAND USE SUBCATEGORY:
All Sites

SETTING/LOCATION:
General Urban/Suburban

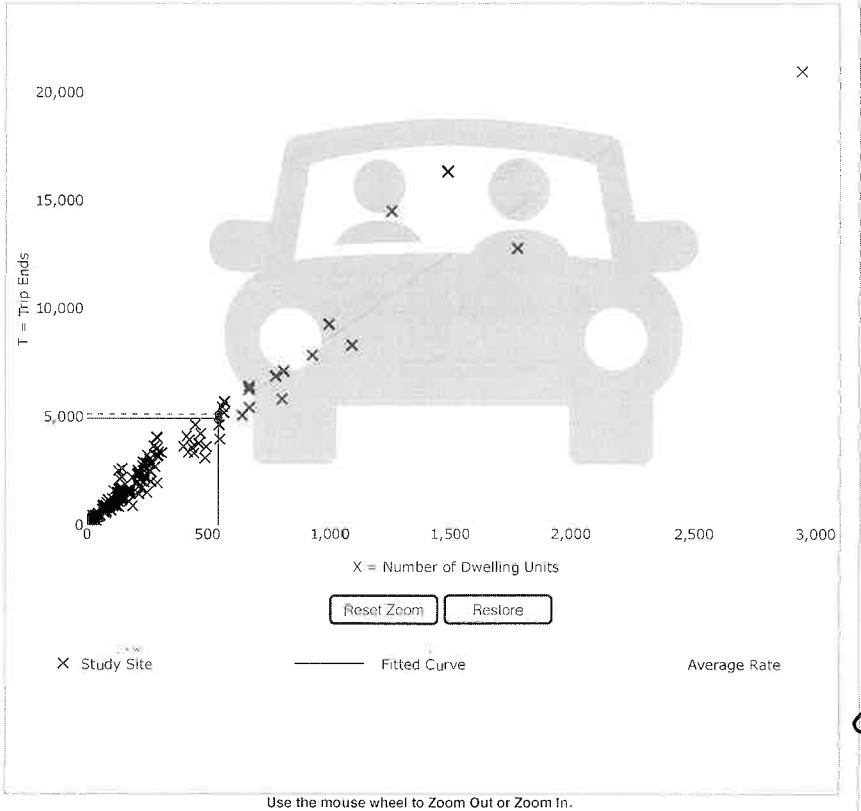
INDEPENDENT VARIABLE (IV):
Dwelling Units

TIME PERIOD:
Weekday

TRIP TYPE:
Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:
545 | Calculate

Data Plot and Equation



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Single-Family Detached Housing (210) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
159

Avg. Num. of Dwelling Units:
264

Average Rate:
9.44

Range of Rates:
4.81 - 19.39

Standard Deviation:
2.10

Fitted Curve Equation:
Ln(T) = 0.92 Ln(X) + 2.71

R^2:
0.95

Directional Distribution:
50% entering, 50% exiting

Calculated Trip Ends:
Average Rate: 5145 (Total), 2572 (Entry), 2573 (Exit)
Fitted Curve: 4948 (Total), 2474 (Entry), 2474 (Exit)

Project Trip Generation @ Build Out

SFR
Weekday

Accepts to do more

9/1

Graph Look Up

Query | Filter

DATA SOURCE:
Trip Generation Manual, 10th Ed + Supplemen
New data edition is available. Click here to upgrade.

SEARCH BY LAND USE CODE:
210

LAND USE GROUP:
(200-299) Residential

LAND USE :
210 - Single-Family Detached Housing

LAND USE SUBCATEGORY:
All Sites

SETTING/LOCATION:
General Urban/Suburban

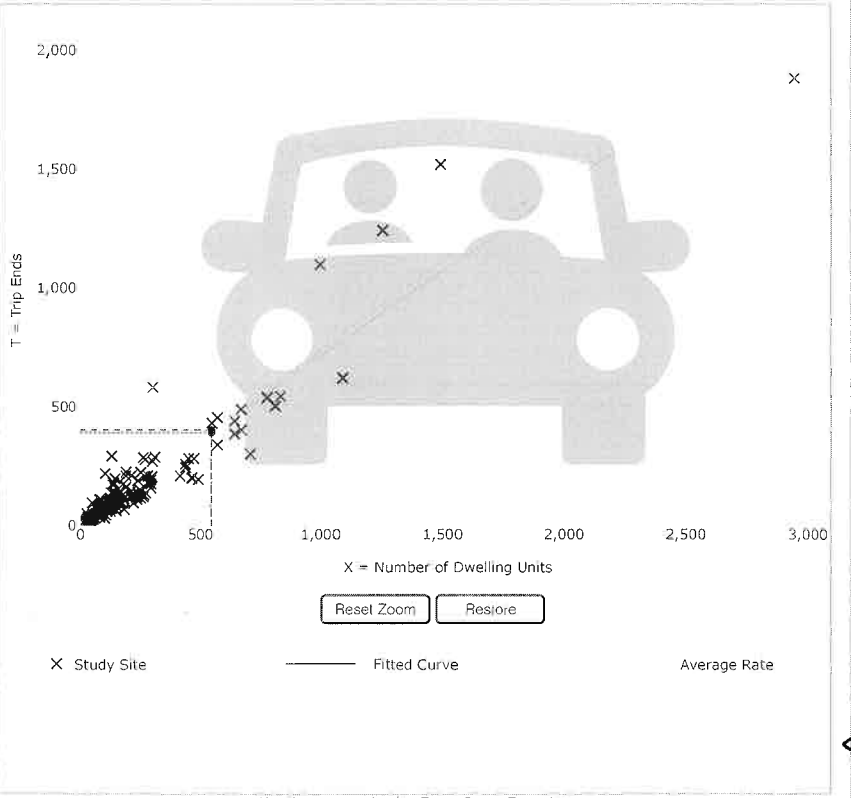
INDEPENDENT VARIABLE (IV):
Dwelling Units

TIME PERIOD:
Weekday, Peak Hour of Adjacent Street Traffic

TRIP TYPE:
Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:
545 | Calculate

Data Plot and Equation



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Single-Family Detached Housing (210) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 7 and 9 a.m.

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
173

Avg. Num. of Dwelling Units:
219

Average Rate:
0.74

Range of Rates:
0.33 - 2.27

Standard Deviation:
0.27

Fitted Curve Equation:
T = 0.71(X) + 4.80

R^2:
0.89

Directional Distribution:
25% entering, 75% exiting

Calculated Trip Ends:
Average Rate: 403 (Total), 101 (Entry), 302 (Exit)
Fitted Curve: 392 (Total), 98 (Entry), 294 (Exit)

SFR
AM Peak

Graph Look Up

Query Filter

DATA SOURCE:
Trip Generation Manual, 10th Ed + Supplemen
New data edition is available. Click here to upgrade.

SEARCH BY LAND USE CODE:
210

LAND USE GROUP:
(200-299) Residential

LAND USE :
210 - Single-Family Detached Housing

LAND USE SUBCATEGORY:
All Sites

SETTING/LOCATION:
General Urban/Suburban

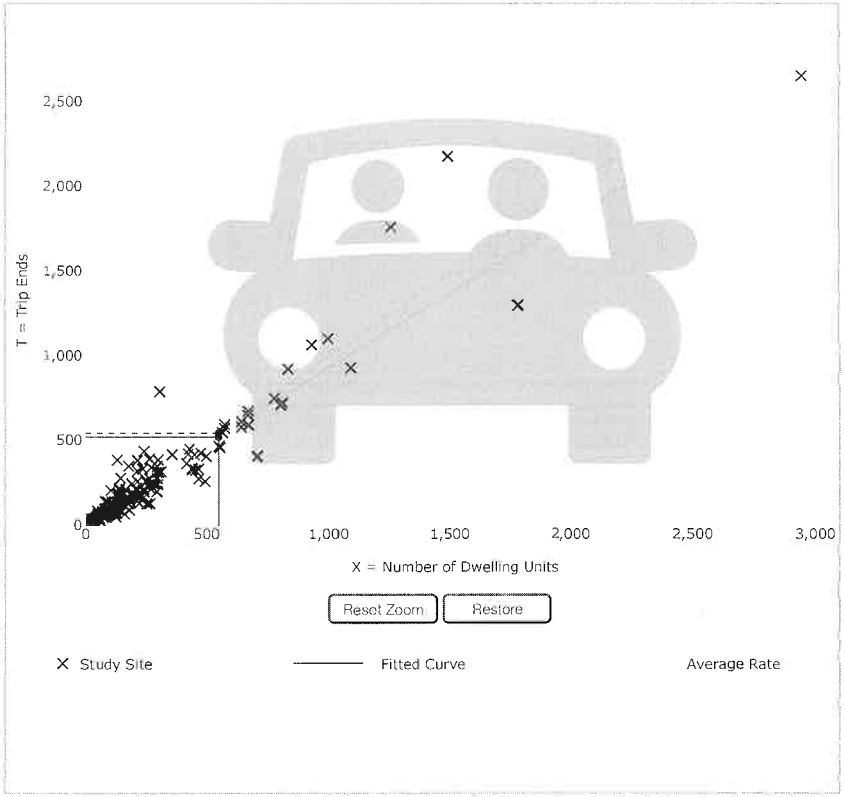
INDEPENDENT VARIABLE (IV):
Dwelling Units

TIME PERIOD:
Weekday, Peak Hour of Adjacent Street Traffic

TRIP TYPE:
Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:
545 Calculate

Data Plot and Equation



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Single-Family Detached Housing (210) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 4 and 6 p.m.

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
190

Avg. Num. of Dwelling Units:
242

Average Rate:
0.99

Range of Rates:
0.44 - 2.98

Standard Deviation:
0.31

Fitted Curve Equation:
Ln(T) = 0.96 Ln(X) + 0.20

R^2:
0.92

Directional Distribution:
63% entering, 37% exiting

Calculated Trip Ends:
Average Rate: 540 (Total), 340 (Entry), 200 (Exit)
Fitted Curve: 517 (Total), 326 (Entry), 191 (Exit)

SFR

PM peak

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DATA SOURCE:
Trip Generation Manual, 10th Ed + Supplemen
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SEARCH BY LAND USE CODE:
221

LAND USE GROUP:
(200-299) Residential

LAND USE :
221 - Multifamily Housing (Mid-Rise)

LAND USE SUBCATEGORY:
All Sites

SETTING/LOCATION:
General Urban/Suburban

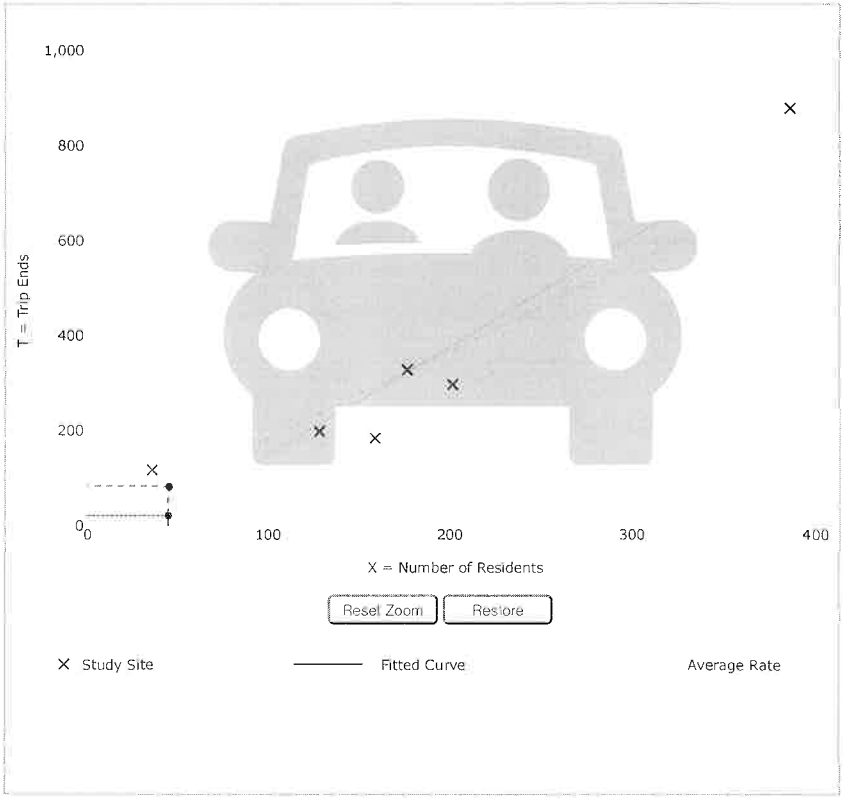
INDEPENDENT VARIABLE (IV):
Residents

TIME PERIOD:
Weekday

TRIP TYPE:
Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:
45 | Calculate

Data Plot and Equation



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Multifamily Housing (Mid-Rise) (221) Click for Description and Data Plots

Independent Variable:
Residents

Time Period:
Weekday

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
6

Avg. Num. of Residents:
182

Average Rate:
1.84

Range of Rates:
1.16 - 3.28

Standard Deviation:
0.54

Fitted Curve Equation:
T = 2.29(X) - 81.02

R^2:
0.91

Directional Distribution:
50% entering, 50% exiting

Calculated Trip Ends:
Average Rate: 83 (Total), 41 (Entry), 42 (Exit)
Fitted Curve: 22 (Total), 11 (Entry), 11 (Exit)

Invalid - Not used

MFR
Weekday

Use 10 x highest Peak Hour
10 x 29 = 290 vpd total
145 in
145 out

Add-ons to do more

9/16

Graph Look Up

Query | Filter

DATA SOURCE:
Trip Generation Manual, 10th Ed + Supplemen

New data edition is available. Click here to upgrade.

SEARCH BY LAND USE CODE:
220

LAND USE GROUP:
(200-299) Residential

LAND USE :
220 - Multifamily Housing (Low-Rise)

LAND USE SUBCATEGORY:
All Sites

SETTING/LOCATION:
General Urban/Suburban

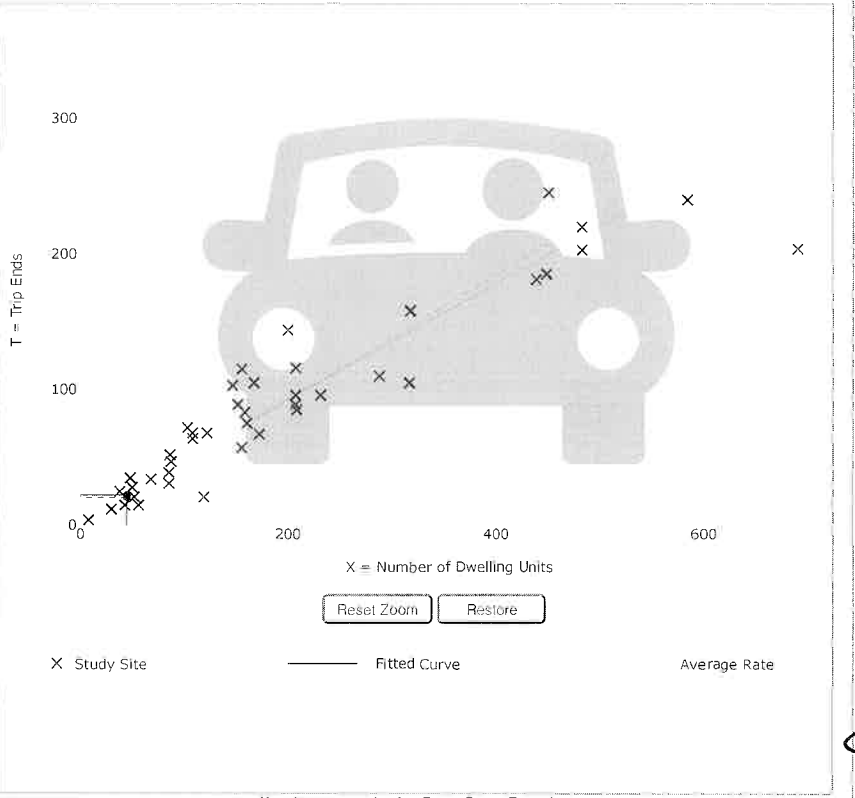
INDEPENDENT VARIABLE (IV):
Dwelling Units

TIME PERIOD:
Weekday, Peak Hour of Adjacent Street Traffic

TRIP TYPE:
Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:
45 | Calculate

Data Plot and Equation



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Multifamily Housing (Low-Rise) (220) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 7 and 9 a.m.

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
42

Avg. Num. of Dwelling Units:
199

Average Rate:
0.46

Range of Rates:
0.18 - 0.74

Standard Deviation:
0.12

Fitted Curve Equation:
Ln(T) = 0.95 Ln(X) + 0.51

R^2:
0.90

Directional Distribution:
23% entering, 77% exiting

Calculated Trip Ends:
Average Rate: 21 (Total), 5 (Entry), 16 (Exit)
Fitted Curve: 22 (Total), 5 (Entry), 17 (Exit)

MFR

AM Peak

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Graph Look Up

ITETripGen Web-based App

Graph Look Up

How to Use *ITETripGen*

Add Units

Compare

Query | Filter

DATA SOURCE:
Trip Generation Manual, 10th Ed + Supplemen

New data edition is available. Click here to upgrade.

SEARCH BY LAND USE CODE:
220

LAND USE GROUP:
(200-299) Residential

LAND USE :
220 - Multifamily Housing (Low-Rise)

LAND USE SUBCATEGORY:
All Sites

SETTING/LOCATION:
General Urban/Suburban

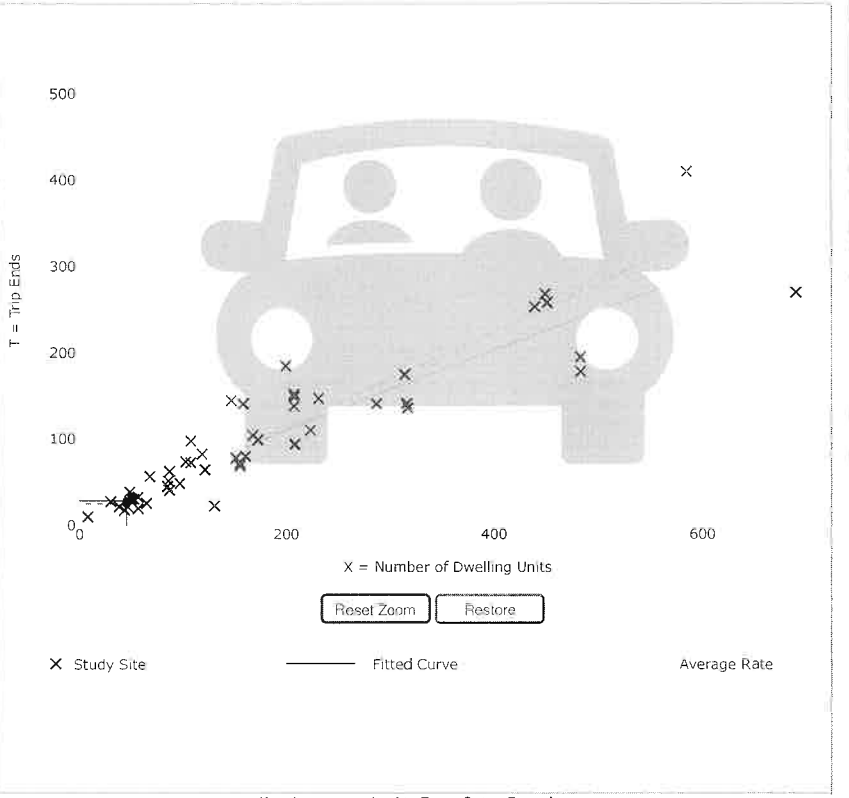
INDEPENDENT VARIABLE (IV):
Dwelling Units

TIME PERIOD:
Weekday, Peak Hour of Adjacent Street Traffic.

TRIP TYPE:
Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:
45 | Calculate

Data Plot and Equation



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Multifamily Housing (Low-Rise) (220) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 4 and 6 p.m.

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
50

Avg. Num. of Dwelling Units:
187

Average Rate:
0.56

Range of Rates:
0.18 - 1.25

Standard Deviation:
0.16

Fitted Curve Equation:
Ln(T) = 0.89 Ln(X) + 0.02

R^2:
0.86

Directional Distribution:
63% entering, 37% exiting

Calculated Trip Ends:
Average Rate: 25 (Total), 16 (Entry), 9 (Exit)
Fitted Curve: 29 (Total), 18 (Entry), 11 (Exit)

MFR

PM Peak

Add-ons to do more

9/9

VERSION: 4.0 (UPDATED) | DATA: 10TH EDITION + SUPPLEMENT | TERMS AND CONDITIONS | PRIVACY | ITE MARKETPLACE

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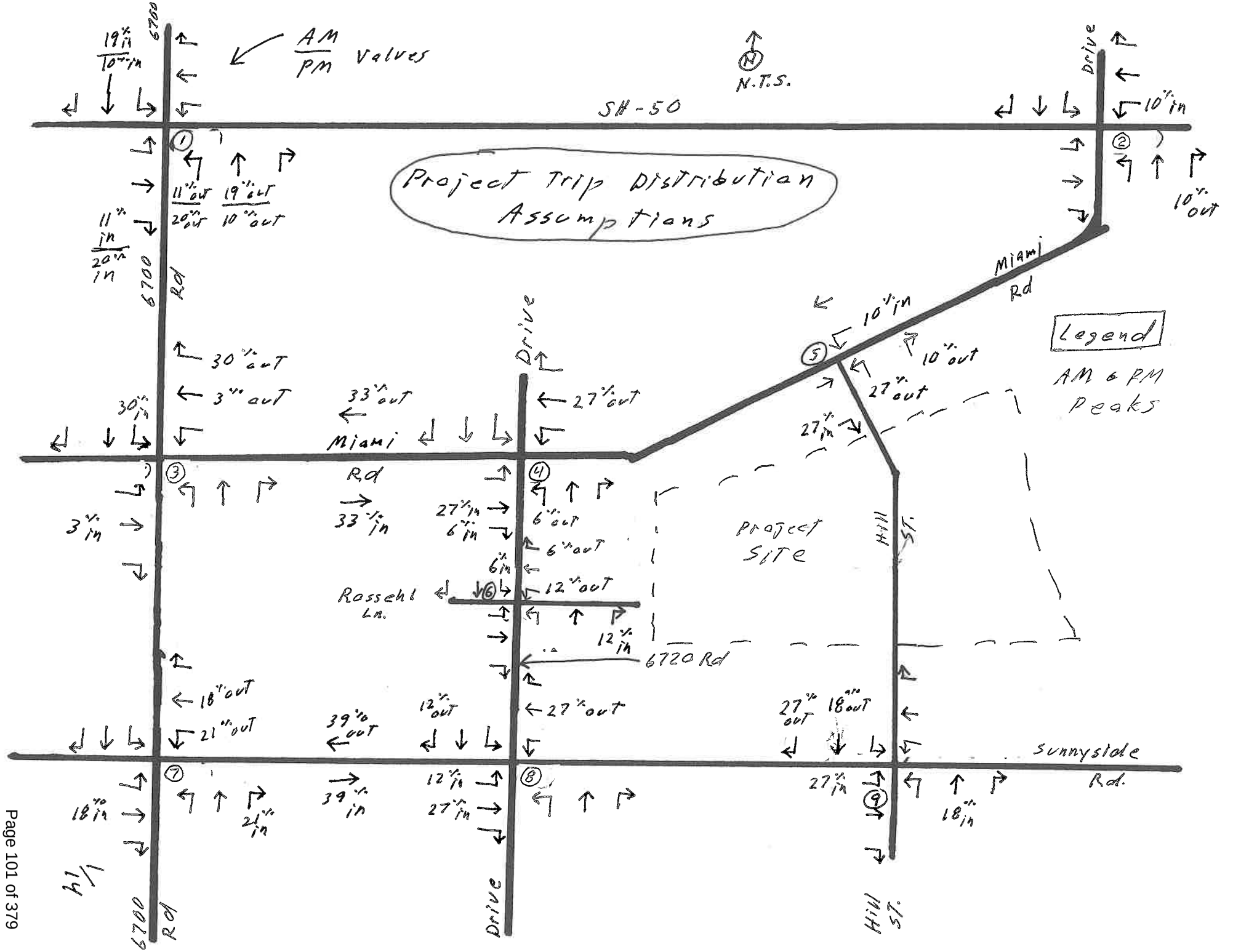
Project Trip Distribution Assumptions
AM / PM Values
N.T.S.
SH-50
6700 Rd
Drive
Miami Rd
Rossehl Ln.
6720 Rd
Project Site
Hill St.
Sunnyside Rd.
Legend
AM & PM Peaks
19% in
10% in
11% out
19% out
20% in
10% out
11% in
20% in
30% out
3% out
33% out
27% out
30% in
3% in
33% in
27% in
6% in
6% out
6% out
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21% in
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27% in
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18% in
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10% out
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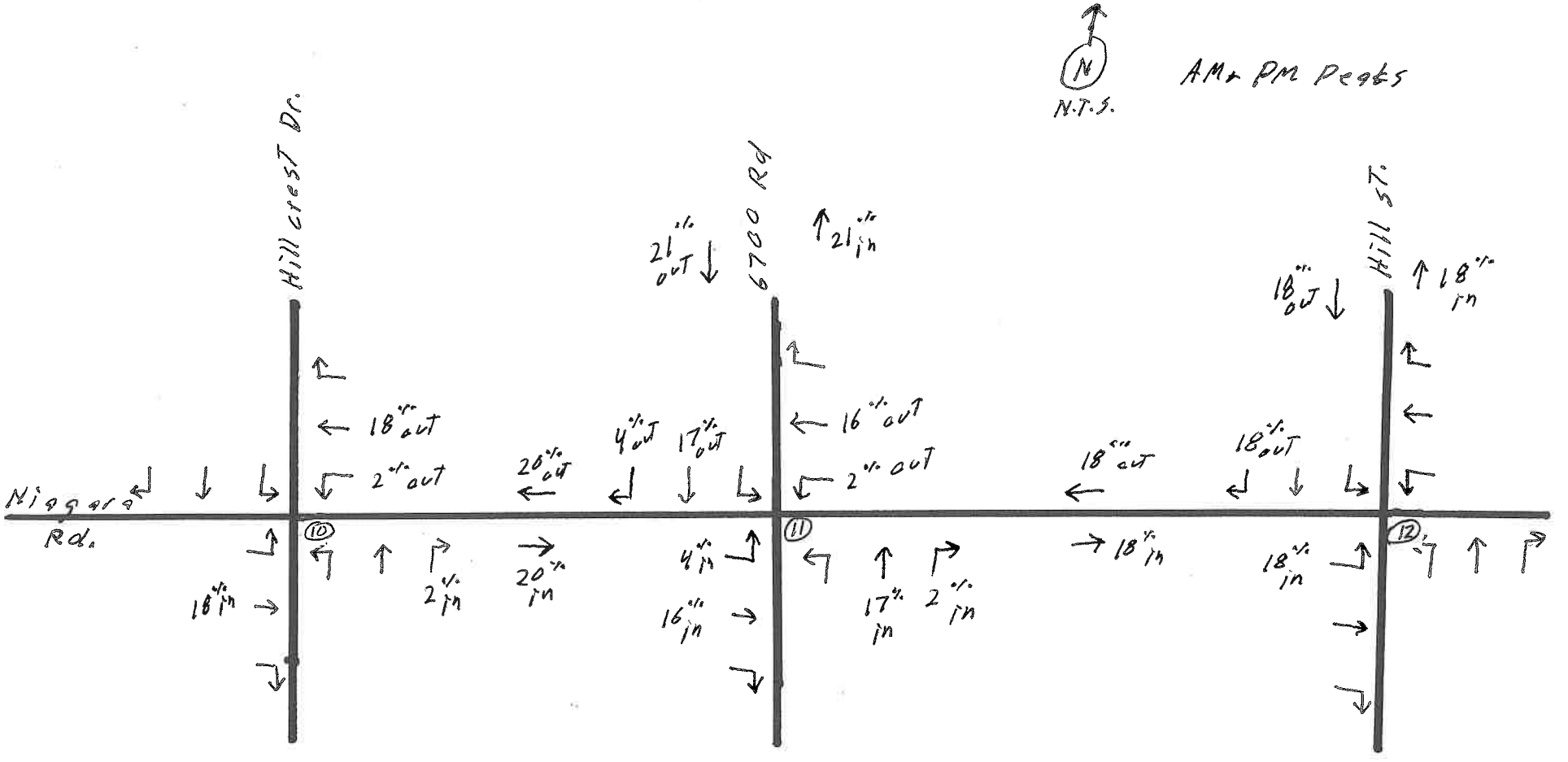
27% out
27% in

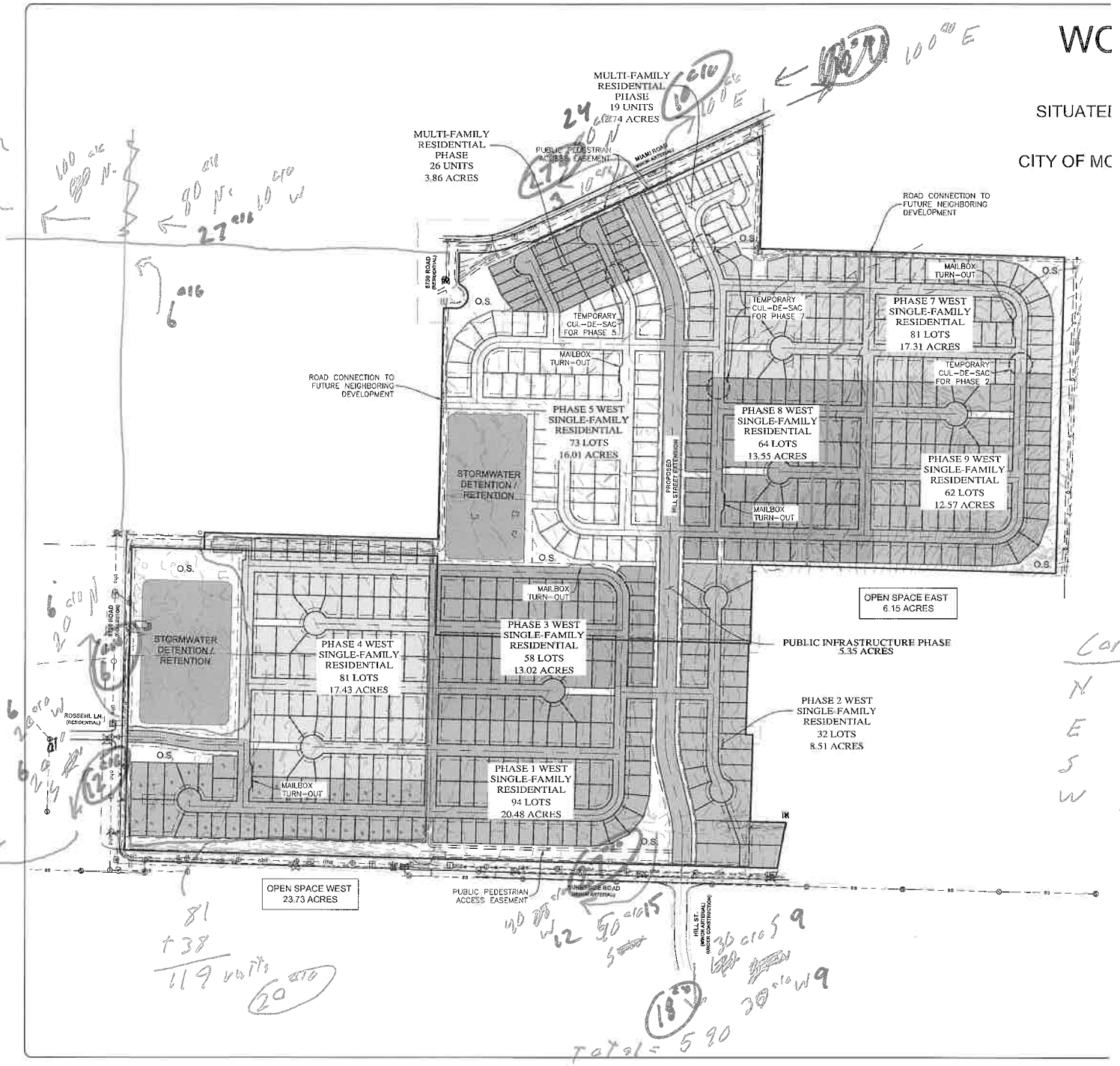

N
N.T.S.
AM + PM Peaks
Hillcrest Dr.
6700 Rd
Hill St.
Niagara Rd.
10
11
12
18% out
2% out
20% out
4% out
17% out
16% out
2% out
18% out
18% out
18% out
21% out
21% in
18% in
2% in
20% in
4% in
16% in
17% in
2% in
18% in
18% in

2/14

WC

SITUATEI

CITY OF MC



Cardinal

N 30 c/o

E 20 c/o

S 30 c/o

W 30 c/o

81
+38
119 units

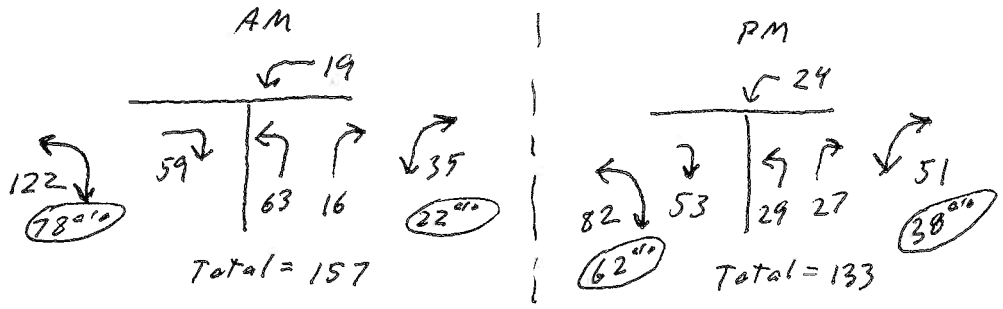
Total = 590

Trip Distribution Calculation

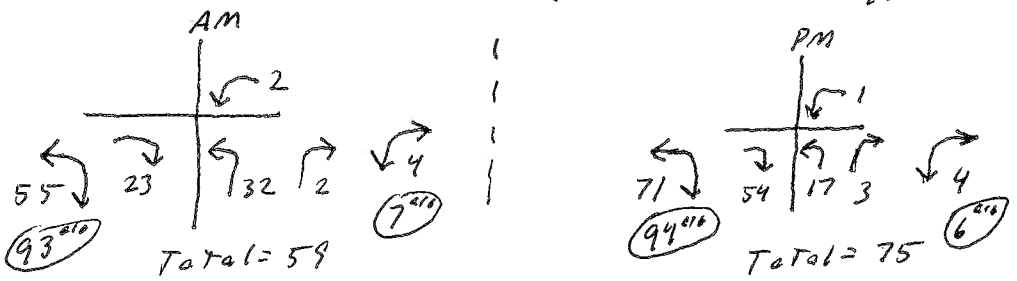
Step 1 - Determine distributions To/From Study Area

① To/from east

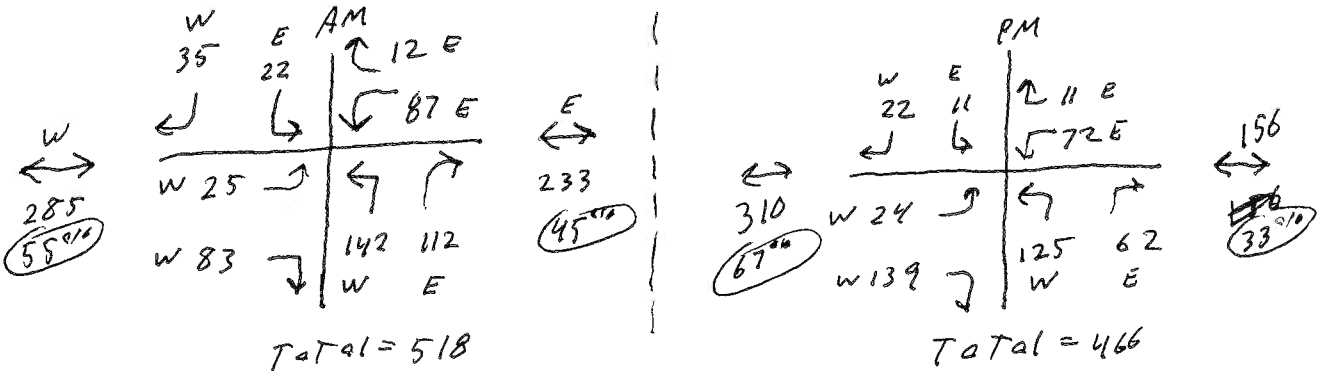
→ Counts at Miami Rd & 6720 Rd (from this study)



→ Counts at 6700 Rd & US-50 (from this study)



→ Counts at Hillcrest & US-50 (from another recent study)

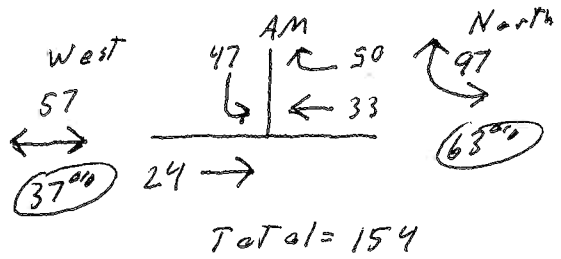


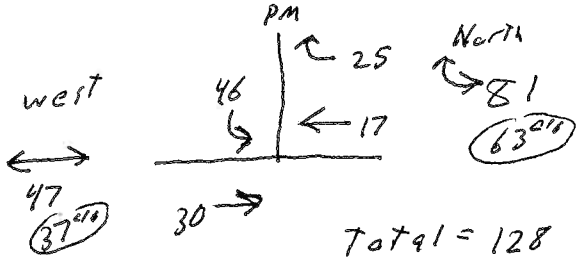
USE 10% T/F East AM & PM

4/14

② To/From North (US-50) + West (E-W Rds) - North side

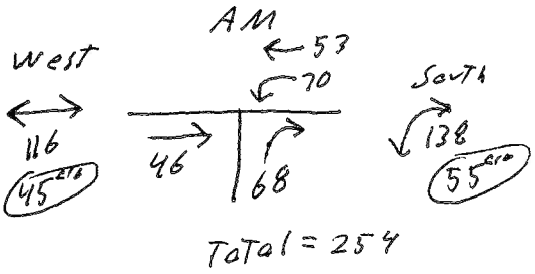
→ Counts at 6700 Rd. + Miami Rd (from this study)

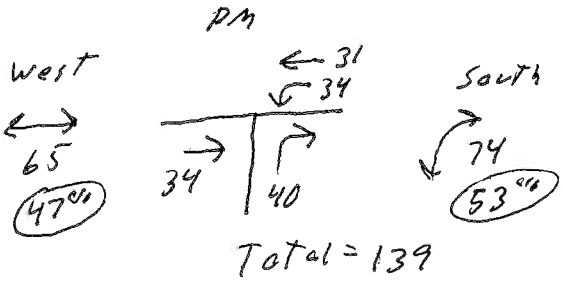




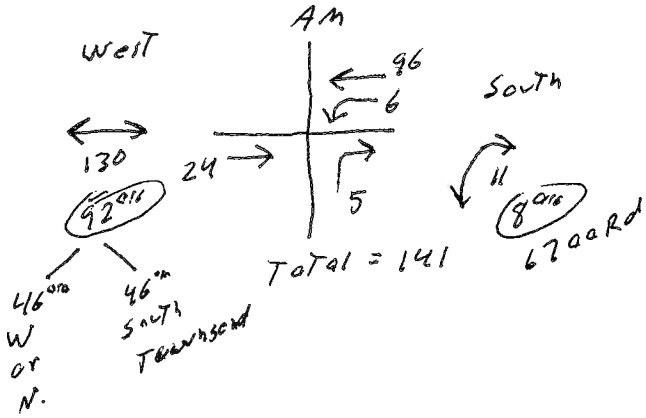
③ To/From South (6700 Rd) + West (E-W Roads) - South side

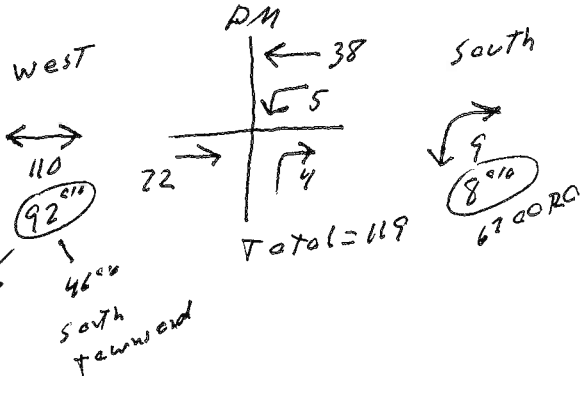
→ Counts at Sunny Side Rd + 6700 Rd (from this study)



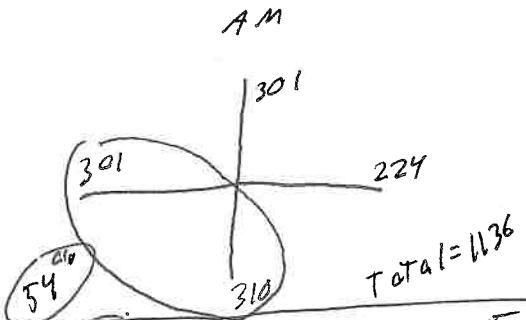


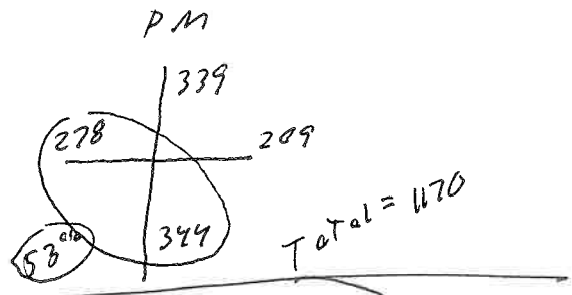
- Counts at 6700 Rd + Niagara Rd (from this study)





- link Volumes at 6700 Rd + Niagara Rd





Use → 30% T/F West + 30% T/F South + 30% T/F North

5/14

Step 2 - Determine % of project that would use Rasseh Ln @ 6720 Rd.

Travelshed area = 118 units = 20% of total

T/from north on 6720 Rd = 20% → (6% Total)

T/from south & west on 6720 Rd = 20% (12% Total)

Step 3 - Determine % of project traffic that would use Hill St. @ Miami Rd

All remaining units outside of Rasseh travelshed

T/from east on Miami Rd = 100% → (10% Total)

T/from west on Miami Rd

- 80% T/F North → 24% Total
- 10% T/F west → 3% Total

(27% Total)

Step 4 - Determine % of project traffic that would use Hill St. @ Sunnyside

All remaining units out side of Rasseh Travelshed

T/from south on Hill St.

- 30% T/F south → 9% of total
- 30% T/F west → 9% of total

(18% Total)

T/from west on Sunnyside

- 50% T/F south → 15% of total
- 40% T/F west → 12% of total

(27% of total)

Check → 6 + 12 + 10 + 27 + 18 + 27 = 100%

Conclusion

Steps 1-4 set the trip assignments for intersections 2, 3, 4, 5, 6, 8, 9, 12

Step 5 - Determine trip assignment at remaining intersections based on existing traffic splits

- Intersections 1, 7, 10, 11

6/14

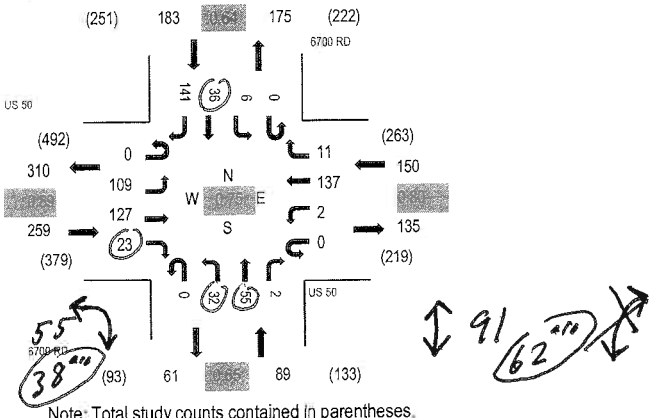
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 1 6700 RD & US 50 AM
Date: Tuesday, November 9, 2021
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

INT #1
AM

11/9/21

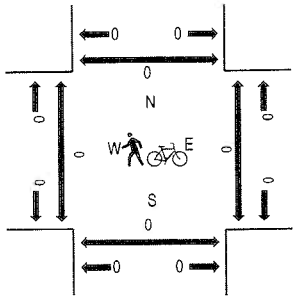
Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Total = 146

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	US 50 Eastbound U-Turn	Left	Thru	Right	US 50 Westbound U-Turn	Left	Thru	Right	6700 RD Northbound U-Turn	Left	Thru	Right	6700 RD Southbound U-Turn	Left	Thru	Right	Total	Rolling Hour	Pedestrian Crossings West	East	South	North
7:00 AM	0	18	39	6	0	0	25	2	0	6	10	0	0	2	0	11	121	681	0	0	0	0
7:15 AM	0	31	23	5	0	0	34	1	0	5	8	2	0	2	1	19	131	667	0	0	0	0
7:30 AM	0	35	33	5	0	0	43	5	0	10	24	0	0	0	15	52	227	624	0	0	0	0
7:45 AM	0	25	32	7	0	2	35	2	0	9	13	0	0	2	16	59	202	484	0	0	0	0
8:00 AM	0	11	22	3	0	0	29	2	0	6	8	0	0	1	8	17	107	345	0	0	0	0
8:15 AM	0	4	17	4	0	1	35	1	0	9	4	0	0	1	1	11	88		0	0	0	0
8:30 AM	0	8	21	3	0	0	30	0	0	4	4	0	0	1	5	11	87		0	0	0	0
8:45 AM	0	3	21	3	0	1	14	0	0	7	2	0	0	0	3	9	63		0	0	0	0
Count Total	0	135	208	36	0	4	245	14	0	58	73	2	0	9	53	189	1,026		0	0	0	0
Peak Hour	0	109	127	23	0	2	137	11	0	32	55	2	0	6	36	141	681		0	0	0	0

Counts used for step 5

INT #1 use diff. AM & PM Values

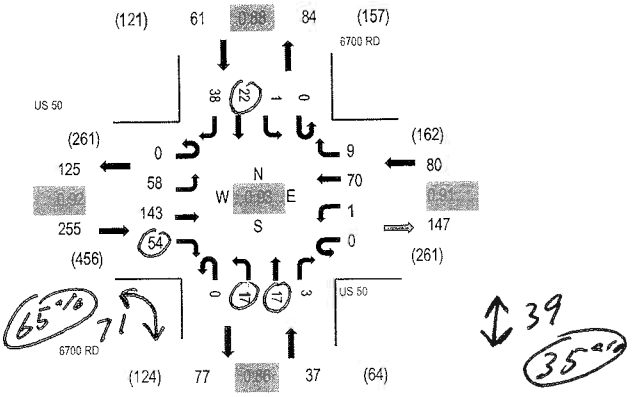
7/14

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 1 6700 RD & US 50 PM
Date: Tuesday, November 9, 2021
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 04:30 PM - 04:45 PM

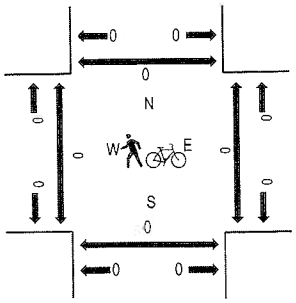
INT #1
PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Total = 110

Interval Start Time	US 50 Eastbound				US 50 Westbound				6700 RD Northbound				6700 RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	13	28	7	0	1	19	1	0	5	3	1	0	0	8	10	96	413	0	0	0	0
4:15 PM	0	10	29	14	0	1	16	2	0	6	3	2	0	0	11	6	100	433	0	0	0	0
4:30 PM	0	12	43	11	0	0	26	4	0	5	5	0	0	0	2	0	115	425	0	0	0	0
4:45 PM	0	18	35	14	0	0	8	0	0	3	4	1	0	0	6	12	101	412	0	0	0	0
5:00 PM	0	18	36	15	0	0	20	3	0	3	5	0	0	1	3	12	116	390	0	0	0	0
5:15 PM	0	14	28	8	0	0	22	0	0	2	3	0	0	1	2	12	92		0	0	0	0
5:30 PM	0	22	32	10	0	0	19	1	0	2	7	0	0	0	1	9	103		0	0	0	0
5:45 PM	0	9	22	8	0	0	19	0	0	4	0	0	0	2	2	13	79		0	0	0	0
Count Total	0	116	253	87	0	2	149	11	0	30	30	4	0	4	35	82	803		0	0	0	0
Peak Hour	0	58	143	54	0	1	70	9	0	17	17	3	0	1	22	38	433		0	0	0	0

8/14

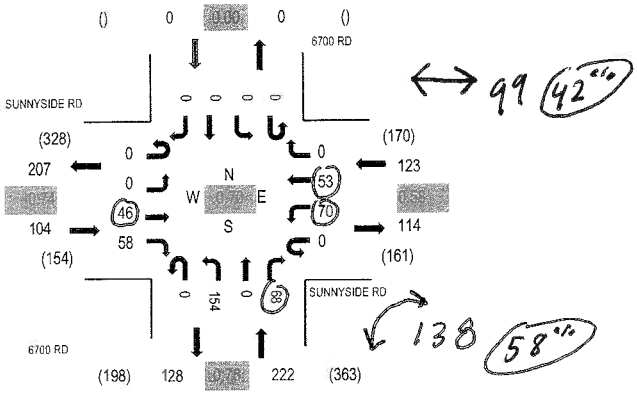
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 6 6700 RD & SUNNYSIDE RD AM
Date: Tuesday, November 9, 2021
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

INT #7
AM

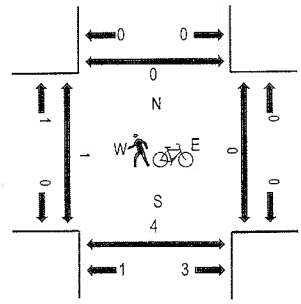
11/19/21

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Total = 237

Traffic Counts

Interval Start Time	SUNNYSIDE RD Eastbound U-Turn	Left	Thru	Right	SUNNYSIDE RD Westbound U-Turn	Left	Thru	Right	6700 RD Northbound U-Turn	Left	Thru	Right	6700 RD Southbound U-Turn	Left	Thru	Right	Total	Rolling Hour	Pedestrian Crossings West	East	South	North
7:00 AM	0	0	4	7	0	4	0	0	0	24	0	10	0	0	0	0	49	396	0	0	0	0
7:15 AM	0	0	6	9	0	9	2	0	0	43	0	13	0	0	0	0	82	449	0	0	0	0
7:30 AM	0	0	12	9	0	18	8	0	0	38	0	20	0	0	0	0	105	428	0	0	3	0
7:45 AM	0	0	16	17	0	16	34	0	0	45	0	26	0	0	0	0	160	382	0	0		0
8:00 AM	0	0	9	23	0	24	9	0	0	28	0	9	0	0	0	0	102	291	1	0	0	0
8:15 AM	0	0	5	13	0	7	5	0	0	25	0	6	0	0	0	0	61		0	0	2	0
8:30 AM	0	0	2	11	0	13	2	0	0	21	0	10	0	0	0	0	59		1	0	0	0
8:45 AM	0	0	3	5	0	10	6	0	0	38	0	7	0	0	0	0	69		0	0	0	0
Count Total	0	0	60	94	0	104	66	0	0	262	0	101	0	0	0	0	687		2	0	6	0
Peak Hour	0	0	46	58	0	70	53	0	0	154	0	68	0	0	0	0	449		1	0	4	0

INT #7 - Use one value (Ave of AM & PM)

45%

55%

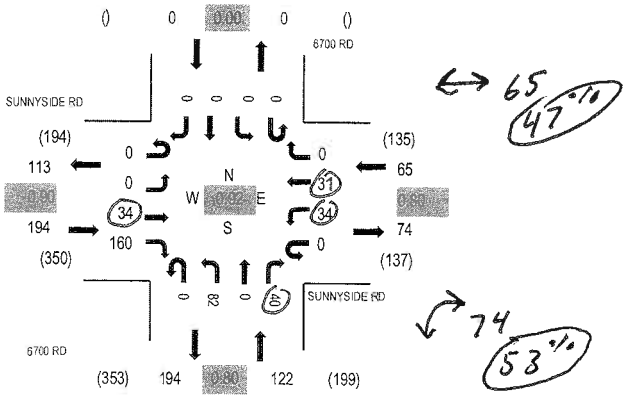
9/14

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 6 6700 RD & SUNNYSIDE RD PM
Date: Tuesday, November 9, 2021
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 04:45 PM - 05:00 PM

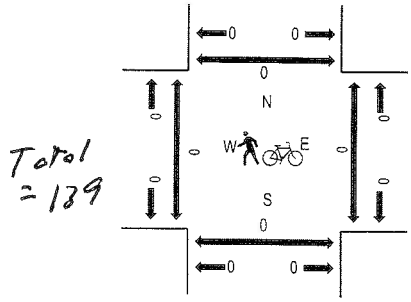
Int #7
PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk

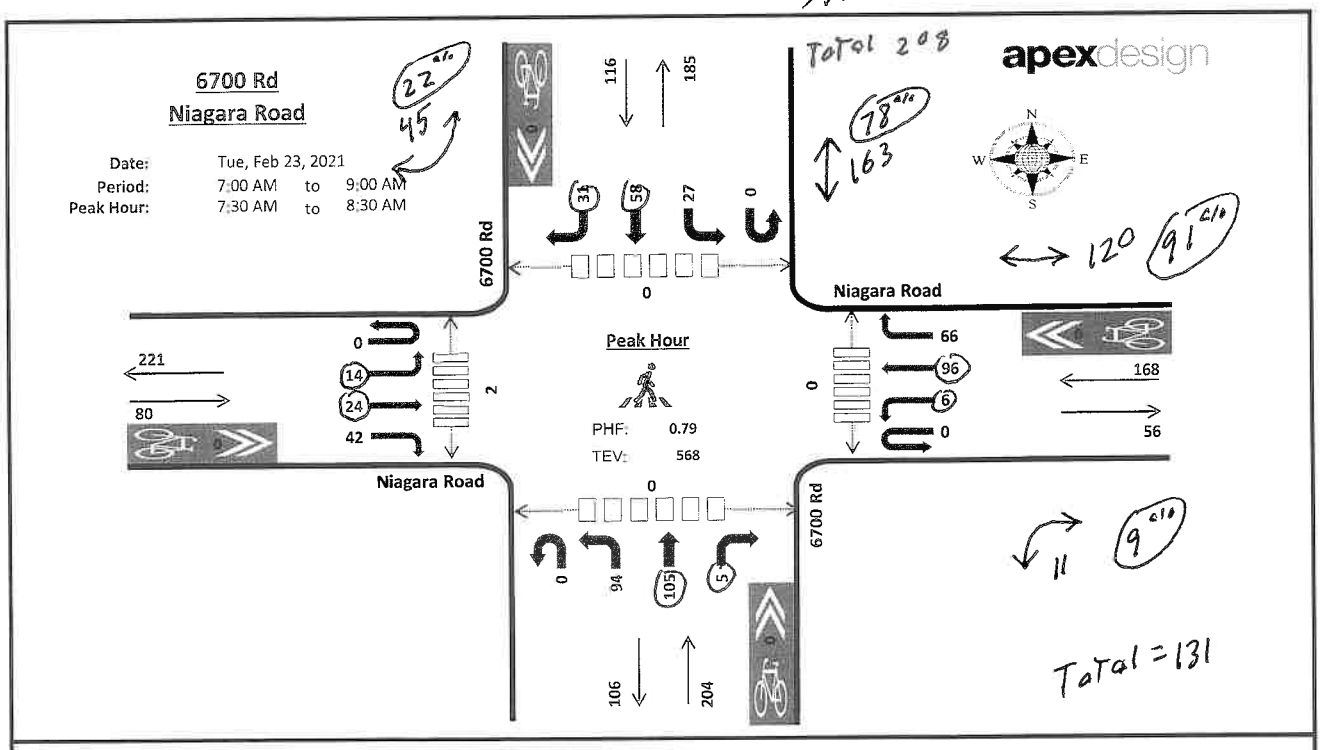


Traffic Counts

Interval Start Time	SUNNYSIDE RD Eastbound				SUNNYSIDE RD Westbound				6700 RD Northbound				6700 RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	0	11	26	0	9	10	0	0	16	0	4	0	0	0	0	76	343	0	0	0	0
4:15 PM	0	0	12	27	0	16	8	0	0	13	0	4	0	0	0	0	80	365	0	0	0	0
4:30 PM	0	0	6	40	0	7	8	0	0	16	0	6	0	0	0	0	83	381	0	0	0	0
4:45 PM	0	0	12	42	0	13	6	0	0	17	0	14	0	0	0	0	104	372	0	0	0	0
5:00 PM	0	0	10	40	0	9	8	0	0	25	0	6	0	0	0	0	98	341	0	0	0	0
5:15 PM	0	0	6	38	0	5	9	0	0	24	0	14	0	0	0	0	96		0	0	0	0
5:30 PM	0	0	5	33	0	10	6	0	0	12	0	8	0	0	0	0	74		0	0	0	0
5:45 PM	0	0	12	30	0	8	3	0	0	13	0	7	0	0	0	0	73		0	0	0	0
Count Total	0	0	74	276	0	77	58	0	0	136	0	63	0	0	0	0	684		0	0	0	0
Peak Hour	0	0	34	160	0	34	31	0	0	82	0	40	0	0	0	0	381		0	0	0	0

10/14

Int #11 AM 2/23/21



Summary

Time	Niagara Road Eastbound UT	LT	TH	RT	Niagara Road Westbound UT	LT	TH	RT	6700 Rd Northbound UT	LT	TH	RT	6700 Rd Southbound UT	LT	TH	RT	Total	Rolling Hour
7:00 AM	0	3	5	2	0	1	17	6	0	11	22	0	0	0	5	7	79	0
7:15 AM	0	1	4	6	0	0	20	8	0	15	24	1	0	2	8	9	98	0
7:30 AM	**0**	**5**	**6**	**9**	**0**	**1**	**26**	**28**	**0**	**19**	**32**	**1**	**0**	**3**	**14**	**6**	**150**	**0**
7:45 AM	**0**	**2**	**9**	**11**	**0**	**4**	**24**	**12**	**0**	**39**	**35**	**2**	**0**	**9**	**19**	**14**	**180**	**507**
8:00 AM	**0**	**4**	**7**	**11**	**0**	**0**	**22**	**9**	**0**	**24**	**28**	**2**	**0**	**12**	**11**	**7**	**137**	**565**
8:15 AM	**0**	**3**	**2**	**11**	**0**	**1**	**24**	**17**	**0**	**12**	**10**	**0**	**0**	**3**	**14**	**4**	**101**	**568**
8:30 AM	0	8	5	12	0	0	13	9	0	7	13	0	0	4	11	0	82	500
8:45 AM	0	5	6	11	0	2	15	11	0	11	26	0	0	4	12	4	107	427
Count Total	**0**	**31**	**44**	**73**	**0**	**9**	**161**	**100**	**0**	**138**	**190**	**6**	**0**	**37**	**94**	**51**	**934**	**0**
Peak Hour	**0**	**14**	**24**	**42**	**0**	**6**	**96**	**66**	**0**	**94**	**105**	**5**	**0**	**27**	**58**	**31**	**568**	**0**
PH HV %		**1.25%**				**0.00%**				**0.98%**				**4.31%**				
PHF		**0.91**				**0.76**				**0.67**				**0.69**				

Classifications by Approach

Time	Heavy Vehicles EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians East	West	North	South	Total
7:00 AM	0	1	2	0	3	0	0	0	0	0	0	1	0	0	1
7:15 AM	1	1	0	0	2	0	0	0	0	0	0	1	0	0	1
7:30 AM	**0**	**0**	**1**	2	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**1**	**2**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**
8:00 AM	**1**	**0**	0	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	1
8:30 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
8:45 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Count Total	**3**	**2**	**5**	**5**	**15**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**4**
Peak Hour	**1**	**0**	**2**	**5**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**2**

Int #11 - Use 1 value (Ave AM + PM)

19% 81% 91% 9%

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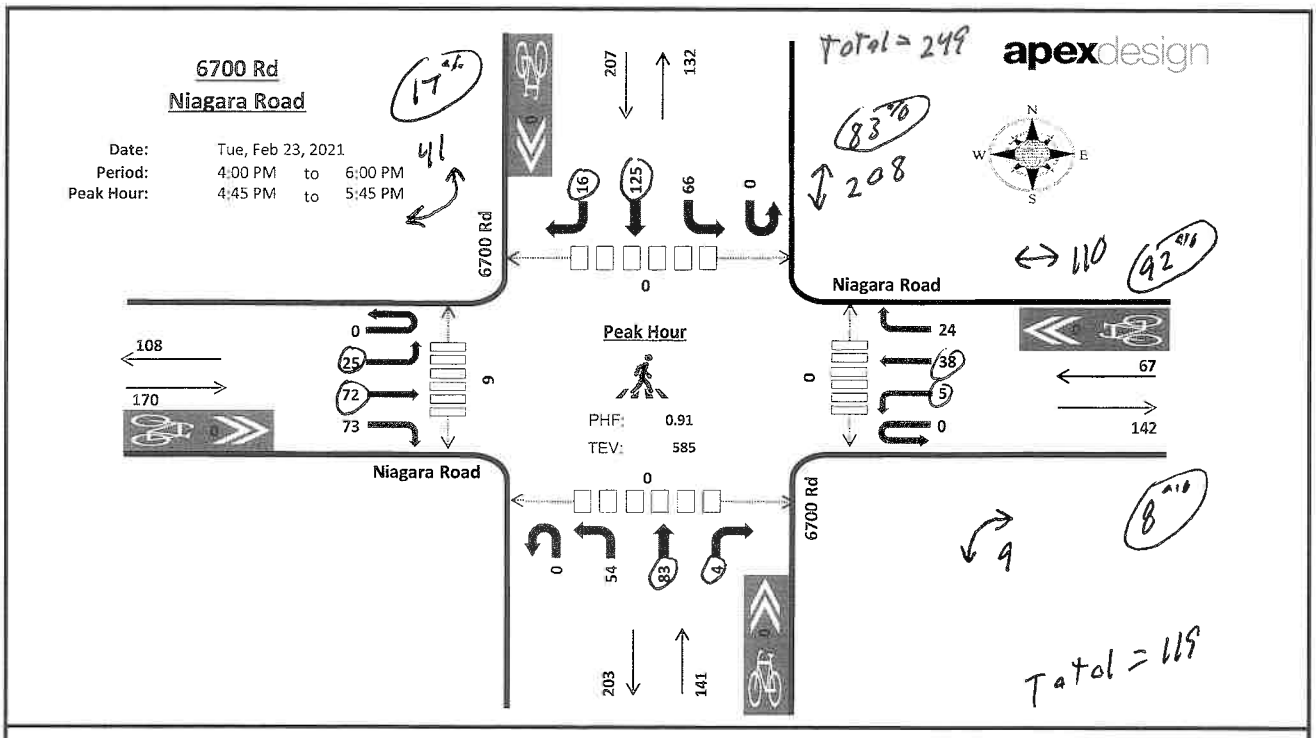
11/14

DwT #11

PM

TMC3



Summary

Time	Niagara Road Eastbound UT	LT	TH	RT	Niagara Road Westbound UT	LT	TH	RT	6700 Rd Northbound UT	LT	TH	RT	6700 Rd Southbound UT	LT	TH	RT	Total	Rolling Hour
4:00 PM	0	8	25	21	0	2	12	6	0	11	18	3	0	7	28	1	142	0
4:15 PM	0	2	16	12	0	2	11	6	0	11	17	2	0	8	18	2	107	0
4:30 PM	0	3	17	13	0	0	16	8	0	13	17	3	0	12	25	1	128	0
4:45 PM	**0**	**6**	**20**	**26**	**0**	**1**	**6**	**5**	**0**	**10**	**23**	**0**	**0**	**11**	**30**	**4**	**142**	519
5:00 PM	**0**	**7**	**16**	**14**	**0**	**1**	**12**	**7**	**0**	**12**	**22**	**2**	**0**	**21**	**42**	**4**	**160**	537
5:15 PM	**0**	**4**	**13**	**20**	**0**	**1**	**9**	**7**	**0**	**17**	**22**	**1**	**0**	**25**	**27**	**5**	**151**	581
5:30 PM	**0**	**8**	**23**	**13**	**0**	**2**	**11**	**5**	**0**	**15**	**16**	**1**	**0**	**9**	**26**	**3**	**132**	585
5:45 PM	0	3	15	11	0	1	14	7	0	15	27	4	0	11	26	5	139	582
Count Total	**0**	**41**	**145**	**130**	**0**	**10**	**91**	**51**	**0**	**104**	**162**	**16**	**0**	**104**	**222**	**25**	**1,101**	**0**
Peak Hour	**0**	**25**	**72**	**73**	**0**	**5**	**38**	**24**	**0**	**54**	**83**	**4**	**0**	**66**	**125**	**16**	**585**	**0**
PH HV %	**0.00%**				**0.00%**				**0.00%**				**0.00%**					
PHF	**0.82**				**0.84**				**0.88**				**0.77**					

Classifications by Approach

Time	Heavy Vehicles EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians East	West	North	South	Total
4:00 PM	0	0	2	2	4	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:30 PM	0	1	1	0	2	0	0	0	0	0	0	2	0	0	2
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	1
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	2
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	2
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	4
5:45 PM	0	0	0	0	0	1	0	0	0	1	0	0	2	0	2
Count Total	**0**	**1**	**3**	**2**	**6**	**1**	**0**	**0**	**0**	**1**	**0**	**12**	**2**	**0**	**14**
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**0**	**0**	**9**

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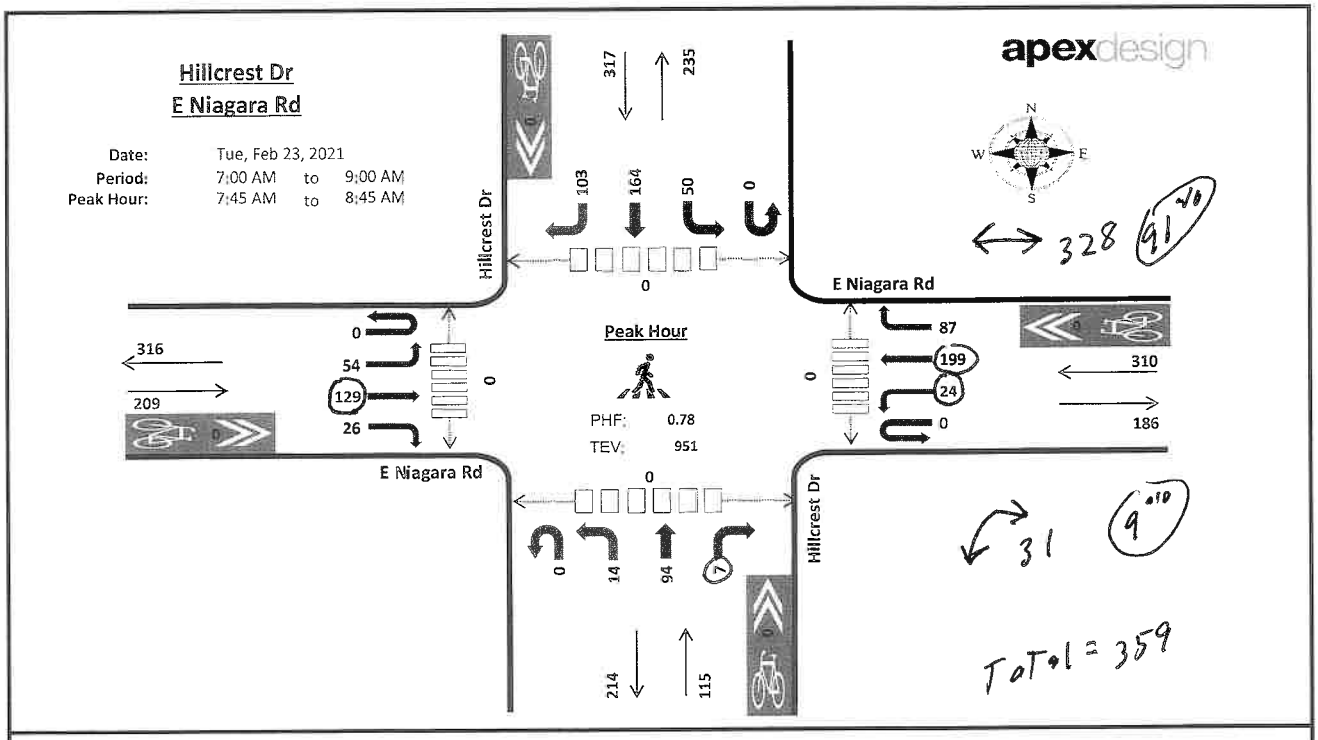
Int #10 AM 2/23/21



Summary

Time	E Niagara Rd Eastbound UT	LT	TH	RT	E Niagara Rd Westbound UT	LT	TH	RT	Hillcrest Dr Northbound UT	LT	TH	RT	Hillcrest Dr Southbound UT	LT	TH	RT	Total	Rolling Hour
7:00 AM	0	5	11	6	0	3	33	8	0	4	10	1	0	7	30	15	133	0
7:15 AM	0	8	20	1	0	2	45	15	0	2	16	0	0	6	28	18	161	0
7:30 AM	0	13	31	2	0	6	40	20	0	3	25	1	0	11	34	19	205	0
7:45 AM	0	15	28	10	0	9	71	30	0	8	22	1	0	18	47	44	303	802
8:00 AM	0	11	33	5	0	8	43	20	0	4	25	4	0	17	46	13	229	898
8:15 AM	0	14	28	2	0	6	53	16	0	2	25	1	0	9	30	25	211	948
8:30 AM	0	14	40	9	0	1	32	21	0	0	22	1	0	6	41	21	208	951
8:45 AM	0	18	22	4	0	3	36	13	0	2	25	1	0	22	32	24	202	850
Count Total	0	98	213	39	0	38	353	143	0	25	170	10	0	96	288	179	1,652	0
Peak Hour	0	54	129	26	0	24	199	87	0	14	94	7	0	50	164	103	951	0
PH HV %	0.96%				0.97%				1.74%				1.26%					
PHF	0.83				0.70				0.87				0.73					

Classifications by Approach

Time	Heavy Vehicles EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians East	West	North	South	Total
7:00 AM	2	0	0	1	3	0	0	0	0	0	0	0	3	0	3
7:15 AM	2	1	0	0	3	0	0	0	0	0	0	0	1	0	1
7:30 AM	0	2	1	0	3	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0
8:30 AM	2	2	0	2	6	0	0	0	0	0	0	0	0	0	0
8:45 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Count Total	7	6	3	5	21	0	0	0	0	0	0	0	4	0	4
Peak Hour	2	3	2	4	11	0	0	0	0	0	0	0	0	0	0

Int 10 - Use 1 value (Ave of AM + PM)
↔ 88%
↱ 12%

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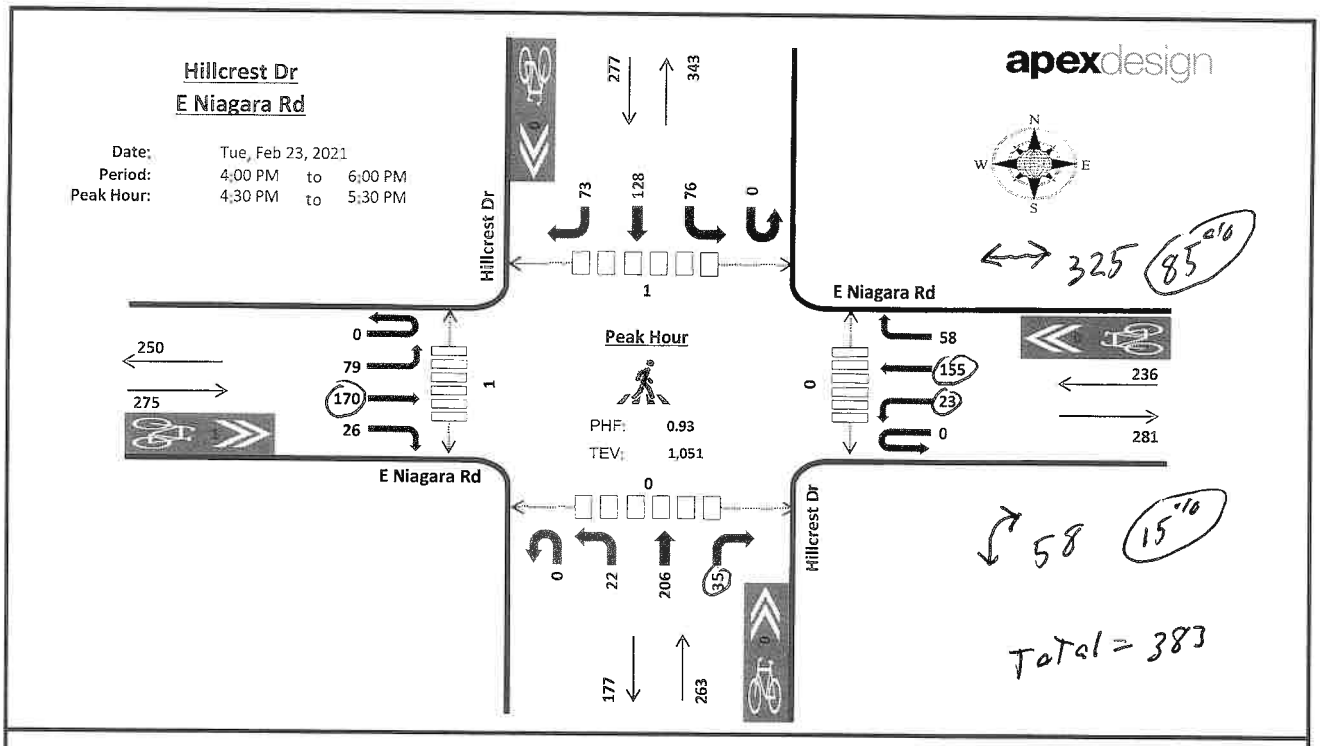
13/14

Int #10
PM

TMC2



Summary

Time	E Niagara Rd Eastbound UT	LT	TH	RT	E Niagara Rd Westbound UT	LT	TH	RT	Hillcrest Dr Northbound UT	LT	TH	RT	Hillcrest Dr Southbound UT	LT	TH	RT	Total	Rolling Hour
4:00 PM	0	36	44	3	0	3	41	10	0	2	36	4	0	25	36	24	264	0
4:15 PM	0	18	34	16	0	7	23	15	0	1	36	5	0	12	41	22	230	0
4:30 PM	**0**	**15**	**48**	**5**	**0**	**2**	**48**	**14**	**0**	**6**	**53**	**8**	**0**	**14**	**29**	**25**	**267**	0
4:45 PM	**0**	**17**	**48**	**1**	**0**	**9**	**30**	**13**	**0**	**3**	**57**	**10**	**0**	**17**	**26**	**14**	**245**	1,006
5:00 PM	**0**	**28**	**35**	**11**	**0**	**7**	**34**	**19**	**0**	**6**	**50**	**10**	**0**	**23**	**41**	**18**	**282**	1,024
5:15 PM	**0**	**19**	**39**	**9**	**0**	**5**	**43**	**12**	**0**	**7**	**46**	**7**	**0**	**22**	**32**	**16**	**257**	1,051
5:30 PM	0	25	46	5	0	3	34	5	0	2	54	6	0	13	33	16	242	1,026
5:45 PM	0	20	31	4	0	4	27	9	0	1	44	4	0	14	30	10	198	979
Count Total	**0**	**178**	**325**	**54**	**0**	**40**	**280**	**97**	**0**	**28**	**376**	**54**	**0**	**140**	**268**	**145**	**1,985**	**0**
Peak Hour	**0**	**79**	**170**	**26**	**0**	**23**	**155**	**58**	**0**	**22**	**206**	**35**	**0**	**76**	**128**	**73**	**1,051**	**0**
PH HV %	**0.36%**				**0.00%**				**0.38%**				**0.36%**					
PHF	**0.93**				**0.92**				**0.94**				**0.84**					

Classifications by Approach

Time	Heavy Vehicles EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians East	West	North	South	Total
4:00 PM	2	0	0	0	2	0	0	0	0	0	0	0	3	0	3
4:15 PM	0	1	0	1	2	0	0	0	0	0	0	1	4	0	5
4:30 PM	**0**	**0**	**1**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	2
4:45 PM	**1**	**0**	**0**	**0**	1	**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**
5:15 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**
5:30 PM	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	1	1	0	2
Count Total	**3**	**1**	**1**	**2**	**7**	**1**	**0**	**0**	**0**	**1**	**0**	**3**	**9**	**0**	**12**
Peak Hour	**1**	**0**	**1**	**1**	**3**	**1**	**0**	**0**	**0**	**1**	**0**	**1**	**1**	**0**	**2**

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14/14

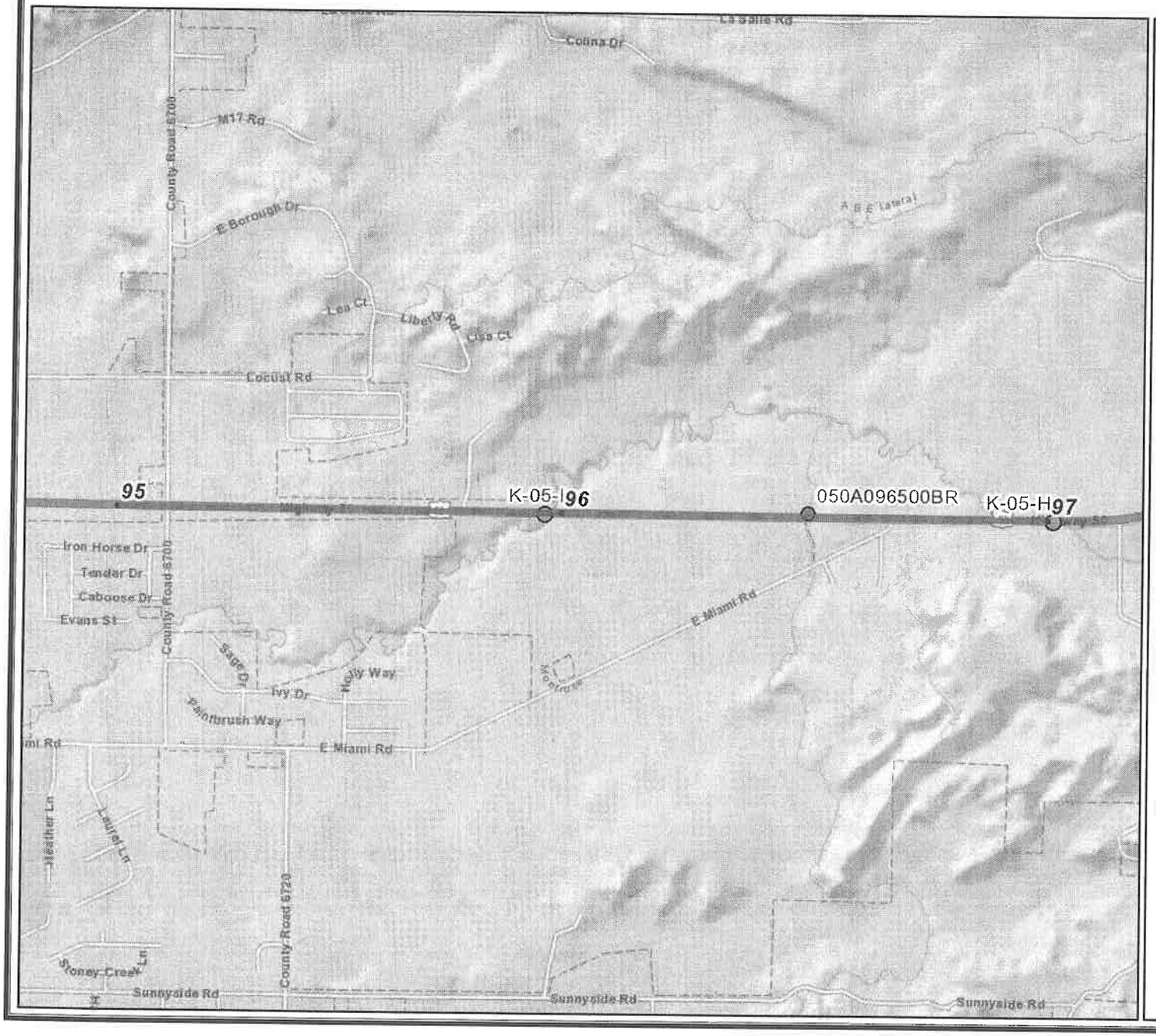
CDOT Traffic & Hwy Data

SH050A	MP	Length	Description	City	County:	Hwy Name	Comments
050A	94.34	0.296	CHANGE ROADWAY WIDTH (LANES 2) (JOHN DEERE ENTRANCE)	Montrose	Montrose	E MAIN ST	
050A	94.65	0.35	MINORSTR (050A094650BR) LOUTZENHEIZER CANAL -- REPLACED HISTORICAL STRID (K-05-K)	NONE	Montrose	E MAIN ST	
050A	95.00	0.103	MILEPOST 95	NONE	Montrose	E MAIN ST	
050A	95.11	0.603	RD N AND S (CO RD 67.00) ENTER MONTROSE CITY LIMIT	Montrose	Montrose	E MAIN ST	
050A	95.80	0.179	RD N (CO RD 67.6)	Montrose	Montrose	US-50	
050A	95.97	0.02	MAJOR STR (K-05-I) CEDAR CREEK	NONE	Montrose	US-50	
050A	96.00	0.5	MILEPOST 96	NONE	Montrose	US-50	
050A	96.50	0.172	MINORSTR (050A096500BR) AM LATERAL CANAL	NONE	Montrose	US-50	
050A	96.67	0.185	RD SW (MIAMI RD) (CO RD N.5)	NONE	Montrose	US-50	
050A	96.86	0.135	MAJOR STR (K-05-H) CEDAR CREEK	NONE	Montrose	US-50	
050A	97.00	0.145	MILEPOST 97	NONE	Montrose	US-50	
050A	97.15	0.098	RD S (MIGUEL RD) (CO RD 69.00) LOOP ROAD WEST	NONE	Montrose	US-50	
050A	97.24	0.122	RD N (CO RD 69.00)	NONE	Montrose	US-50	
050A	97.71	0.266	RD N (CO RD 69.50)	Montrose	Montrose	US-50	
050A	98.00	0.235	MILEPOST 98	Montrose	Montrose	US-50	
050A	98.66	0.375	MINORSTR (050A098720BR) STOCK PASS	NONE	Montrose	US-50	
050A	99.00	0.352	MILEPOST 99	NONE	Montrose	US-50	
050A	99.39	0.478	MINORSTR (050A099360BL) ABA LATERAL CANAL	NONE	Montrose	US-50	

CDOT Highway & Traffic Data

1/3

Route 050A From 95 to 97



Legend

- Route
- Milepoint

Structures

- Major Structure
- Minor Structure

Created:

Date: 3/27/2020

Time: 3:46:09 PM

0 0.15 0.3 0.45 0.6

Miles

N W E S

The information contained in this map is based on the most currently available data and has been checked for accuracy. CDOT does not guarantee the accuracy of any information presented, is not liable in any respect for any errors or omissions, and is not responsible for determining "fitness for use".

2/5

Route 050A
From 95 To 96

Ramps
Overpass
Underpass
Structures

95 — Co Rd 67.08 — Co Rd 67.6 — 96 — K-95-I

CLASSIFICATION	
Access Control	NR-A: Non-Rural Principal Highway
Functional Class	3: Principal Arterial - Other
NHS Designation	1: Mainline NHS
SAFETY	
Primary Speed Limit	55 / 65
Secondary Speed Limit	55 / 65
TRAFFIC	
DHV	11.0 / 10.6
Peak Truck Percentage	0.70 / 0.64
Year 20 Factor	1.11 / 1.07

It may appear that information is missing from the straight line diagram. If so, reduce the number of miles/page and re-submit the request.

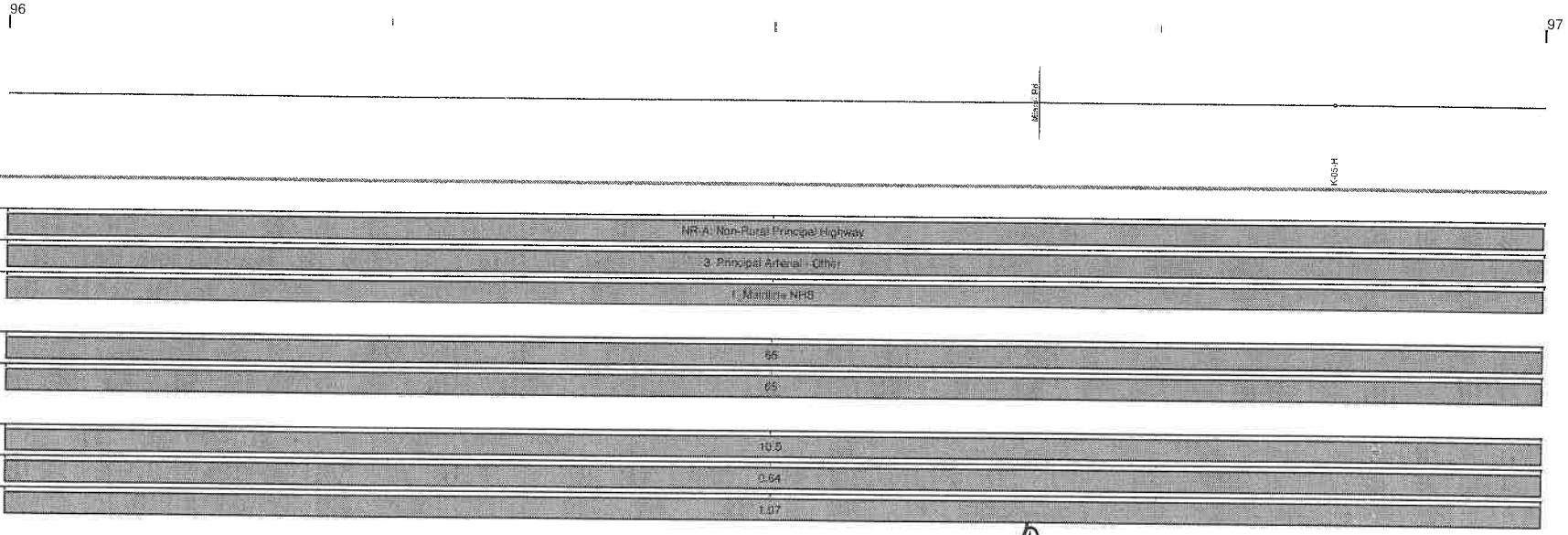
20-yr = 1.07

6700 Rd

3/5

Route 050A
From 96 To 97

Ramps
Overpass
Underpass
Structures



CLASSIFICATION

Access Control	NR-A: Non-Rural Principal Highway
Functional Class	3: Principal Arterial - Other
NHS Designation	1: Mainline NHS

SAFETY

Primary Speed Limit	55
Secondary Speed Limit	55

TRAFFIC

DHV	10.5
Peak Truck Percentage	0.64
Year 20 Factor	1.07

It may appear that information is missing from the straight line diagram. If so, reduce the number of miles/page and re-submit the request.

Miami Road

4/5

Export to Excel (/otis/API/TRANSYS/GetTrafficStationsByRouteRefs/050A/95/96/true/true.csv)

Station ID	Route	Start	End	County	City	Description
102245	050A	94.098	95.107	Montrose	Montrose	ON SH 50, MAIN ST E/O HILLCREST DR, MONTROSE
102246	050A	95.107	100.545	Montrose		ON SH 50 W/O MIGUEL RD, W/O SH 347

Found 2 Short Duration stations and 0 Continuous Count stations. Click the magnifying glass icon in front of a station to see count data below.

Export to Excel (/otis/API/TRANSYS/GetAadtsByRouteRefs/050A/95/96/true/true.csv)

Station ID	Route	Start	End	Description	AADT	Year	Single Unit	Comb Trucks	% Trucks	20 Year Factor	DHV	DVMT	DD
102245	050A	94.098	95.107	ON SH 50, MAIN ST E/O HILLCREST DR, MONTROSE	10,000	2019	270	560	8.3	1.09	9	10,020	52
102246	050A	95.107	100.545	ON SH 50 W/O MIGUEL RD, W/O SH 347	4,900	2019	150	370	10.5	1.06	10	26,093	54

Projection Year: 2041 Export to Excel (/otis/API/TRANSYS/GetFutureTrafficByRouteRefs/2041/050A/95/96/true/true.csv)

Station ID	Route	Start	End	AADT	Year	Single Trucks	Combined Trucks	% Trucks	DHV	Projected AADT	Projected Single Trucks	Projected Combined Trucks

Build Year: Design Life (yrs): Lanes: 1 Rigid pavement: Export to Excel (/otis/API/TRANSYS/GetEsalsByRouteRefs///1/false/050A/95/96/true/true.csv)

Route	Start	End	Length	AADT	Year	20 Year Factor	Single Trucks	Combined Trucks	Projected AADT	Projected Single Trucks	Projected Combined Trucks	18 Kip ESALs

ON SH 50, MAIN ST E/O HILLCREST DR, MONTROSE (Station Id: 102245)

- Daily (#daily-tab)
- Monthly Summaries (#monthly-tab)
- Annual (#annual-tab)

07/17/2019

Data is only available on select dates for Short Duration sites.

Export to Excel (/otis/API/TRANSYS/GetDailyTrafficVolumeForStationByDay/102245/false/2019-7-17.csv) View Entire Month (/otis/TrafficData/GetDailyTrafficVolumeForStationByMonth/102245/false/2019/7)

Dir	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	12h	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h
P	00021	00015	00016	00014	00037	00111	220	343	436	406	456	463	486	440	408	417	426	437	329	223	179	150	62	23
S	00009	00004	00006	00010	00040	00097	192	271	349	354	385	459	471	475	432	467	461	440	295	230	189	118	55	29

P = Primary direction S = Secondary direction C = Combined traffic counts

Annual data is only available for continuous sites.

Click here (https://dtdapps.coloradodot.info/staticdata/Downloads/TrafficDataBase/) to download current and historical CDOT traffic data in Excel (.xlsx) format.

5/5

Colorado Department of Transportation
DiExSys™ Roadway Safety Systems
Detailed Summary of Crashes Report

03/06/2021

Job #: 20210306052711

Location: 50A **Begin:** 94.91 **End:** 95.31 **From:** 07/01/2016 **To:** 06/30/2020

Severity

PDO:	9	
INJ:	2	6 :Injured
FAT:	0	0 :Killed
Total:	**11**	

Number of Vehicles

One Vehicle:	5
Two Vehicles:	5
Three or More:	1
Unknown:	0
Total:	**11**

Location

On Road:	9
Off Road Left:	1
Off Road Right:	1
Off Road at Tee:	0
Off in Median:	0
Unknown:	0
Total:	**11**

Lighting Conditions

Daylight:	5
Dawn or Dusk:	0
Dark - Lighted:	0
Dark - Unlighted:	6
Unknown:	0
Total:	**11**

Weather Conditions

None:	10
Rain:	0
Snow/Sleet/Hail:	0
Fog:	0
Dust:	0
Wind:	1
Unknown:	0
Total:	**11**

Crash Rates

PDO:	2.02 *	* MVMT
INJ:	0.45 *	** 100 MVMT
FAT:	0.00 **	**Total:** 2.47 *

Crash Type

Overturning:	0	Bridge Abutment:	0
Other Non Collision:	1	Column/Pier:	0
Pedestrians:	0	Culvert/Headwall:	0
Broadside:	4	Embankment:	0
Head On:	0	Curb:	0
Rear End:	0	Delineator Post:	0
Sideswipe (Same):	1	Fence:	0
Sideswipe (Opposite):	0	Tree:	0
Approach Turn:	0	Large Boulders or Rocks:	0
Overtaking Turn:	0	Barricade:	0
Parked Motor Vehicle:	0	Wall/Building:	0
Railway Vehicle:	0	Crash Cushion:	0
Bicycle:	0	Mailbox:	0
Motorized Bicycle:	0	Other Fixed Object:	0
Domestic Animal:	0	Total Fixed Objects:	1
Wild Animal:	4	Rocks in Roadway:	0
Light/Utility Pole:	0	Vehicle Cargo/Debris:	0
Traffic Signal Pole:	0	Road Maintenance Equipment:	0
Sign:	1	Involving Other Object:	0
Bridge Rail:	0	Total Other Objects:	0
Guard Rail:	0	Unknown:	0
Cable Rail:	0	**Total:**	**11**
Concrete Barrier:	0		

Mainline/Ramps/Frontage Roads

Mainline:	11
Crossroad (A):	0

Frontage/Ramp Intersections

M:	0	N:	0	O:	0	P:	0

Ramps

B:	0	F:	0	J:	0		
C:	0	G:	0	K:	0		
D:	0	H:	0	T:	0		
E:	0	I:	0	Z:	0		

Left Frontage Rd (L):	0		
Rt Frontage Rd (R):	0		
HOV Lanes (V):	0		
Unknown:	0	**Total:**	**11**

Road Description

At Intersection:	5
At Driveway Access:	0
Intersection Related:	1
Non Intersection:	5
In Alley:	0
Roundabout:	0
Ramp:	0
Parking Lot:	0
Unknown:	0
Total:	**11**

Road Conditions

Dry:	11
Wet:	0
Muddy:	0
Snowy:	0
Icy:	0
Slushy:	0
Foreign Material:	0
With Road Treatment:	0
Dry w/Icy Road Treatment:	0
Wet w/Icy Road Treatment:	0
Snowy w/Icy Road Treatment:	0
Icy w/Icy Road Treatment:	0
Slushy w/Icy Road Treatment:	0
Unknown:	0
Total:	**11**

ADT: 8,251 **Length:** 0.37

Any intentional or inadvertent release of this data or any data derived from its use shall not constitute a waiver of privilege pursuant to 23 USC 409.

Crash Analysis US-50 near 6700 Rd

1/4

Location: 50A **Begin:** 94.91 **End:** 95.31 **From:** 07/01/2016 **To:** 06/30/2020

Vehicle Type	Veh 1	Veh 2	Veh 3
Passenger Car/Van:	1	2	0
Passenger Car/Van w/Trl:	0	0	0
Pickup Truck/Utility Van:	3	2	1
Pickup Truck/Utility Van w/Trl:	1	1	0
SUV:	4	0	0
SUV w/Trl:	0	0	0
Truck 10k lbs or Less:	0	0	0
Trucks > 10k lbs/Bus > 15 People:	0	0	0
School Bus < 15 People:	0	0	0
Non School Bus < 15 People:	0	0	0
Motorhome:	0	0	0
Motorcycle:	0	0	0
Bicycle:	0	0	0
Motorized Bicycle:	0	0	0
Farm Equipment:	0	0	0
Hit and Run - Unknown:	2	0	0
Other:	0	0	0
Unknown:	0	1	0
Total:	**11**	**6**	**1**

Vehicle Movement	Veh 1	Veh 2	Veh 3
Going Straight:	7	4	0
Slowing:	0	0	0
Stopped in Traffic:	0	0	0
Making Right Turn:	0	0	0
Making Left Turn:	1	1	1
Making U-Turn:	0	0	0
Passing:	1	0	0
Backing:	0	0	0
Enter/Leave Parked Position:	0	0	0
Starting in Traffic:	0	0	0
Parked:	0	0	0
Changing Lanes:	0	0	0
Avoiding Object/Veh in Road:	1	0	0
Weaving:	0	0	0
Wrong Way:	0	0	0
Other:	1	0	0
Unknown:	0	1	0
Total:	**11**	**6**	**1**

Contributing Factor	Veh 1	Veh 2	Veh 3
No Apparent Contributing Factor:	8	6	1
Asleep at the Wheel:	0	0	0
Illness:	0	0	0
Distracted by Passenger:	0	0	0
Driver Inexperience:	1	0	0
Driver Fatigue:	0	0	0
Driver Preoccupied:	2	0	0
Driver Unfamilar with Area:	0	0	0
Driver Emotionally Upset:	0	0	0
Evading Law Enforcement Officier:	0	0	0
Physical Disability:	0	0	0
Unknown:	0	0	0
Total:	**11**	**6**	**1**

Direction	Veh 1	Veh 2	Veh 3
North:	3	0	0
Northeast:	0	0	0
East:	2	2	0
Southeast:	0	0	0
South:	1	0	1
Southwest:	0	0	0
West:	4	3	0
Northwest:	0	0	0
Unknown:	1	1	0
Total:	**11**	**6**	**1**

Condition of Driver	Veh 1	Veh 2	Veh 3
No Impairment Suspected:	11	6	1
Alcohol Involved:	0	0	0
RX, Medication, or Drugs Involved:	0	0	0
Illegal Drugs Involved:	0	0	0
Alcohol and Drugs Involved:	0	0	0
Driver/Pedestrian not Observed:	0	0	0
Unknown:	0	0	0
Total:	**11**	**6**	**1**

ADT: 8,251 **Length:** 0.37

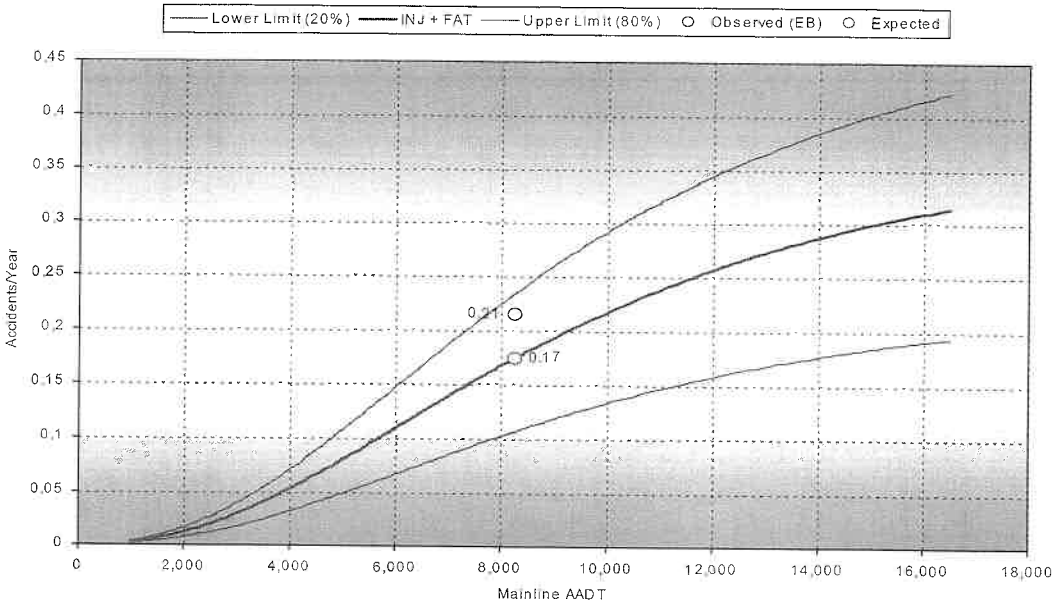
Any intentional or inadvertent release of this data or any data derived from its use shall not constitute a waiver of privilege pursuant to 23 USC 409.

Colorado Department of Transportation
DiExSys™ Roadway Safety Systems
SPF Model: CO - Urban 2-Lane Divided UnSignalized 4-Leg Intersections (2018)

03/06/2021

Job #: 20210306053748

Location: 000000050A **Begin:** 94.91 **End:** 95.31 **From:** 07/01/2016 **To:** 06/30/2020



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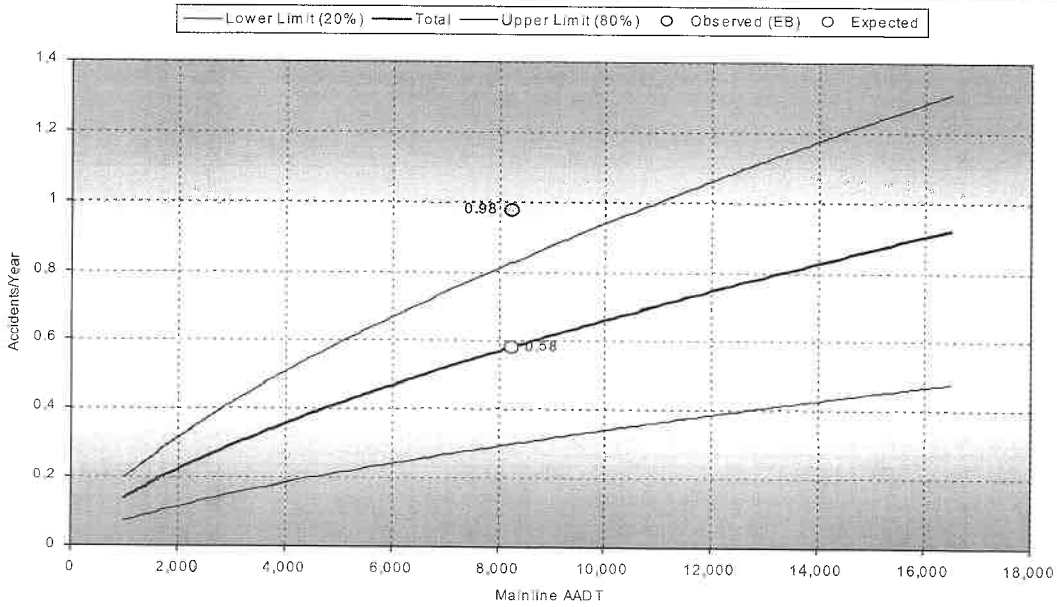
3/4

Colorado Department of Transportation
DiExSys™ Roadway Safety Systems
SPF Model: CO - Urban 2-Lane Divided UnSignalized 4-Leg Intersections (2018)

03/06/2021

Job #: 20210306053813

Location: 000000050A **Begin:** 94.91 **End:** 95.31 **From:** 07/01/2016 **To:** 06/30/2020



Any intentional or inadvertent release of this data or any data derived from its use shall not constitute a waiver of privilege pursuant to 23 USC 409.

Colorado Department of Transportation
DiExSys™ Roadway Safety Systems
Detailed Summary of Crashes Report

03/06/2021

Job #: 20210306052930

Location: 50A **Begin:** 96.57 **End:** 96.77 **From:** 07/01/2016 **To:** 06/30/2020

Severity

PDO:	2	
INJ:	0	0 :Injured
FAT:	0	0 :Killed
Total:	**2**	

Number of Vehicles

One Vehicle:	1
Two Vehicles:	1
Three or More:	0
Unknown:	0
Total:	**2**

Location

On Road:	1
Off Road Left:	1
Off Road Right:	0
Off Road at Tee:	0
Off in Median:	0
Unknown:	0
Total:	**2**

Lighting Conditions

Daylight:	2
Dawn or Dusk:	0
Dark - Lighted:	0
Dark - Unlighted:	0
Unknown:	0
Total:	**2**

Weather Conditions

None:	1
Rain:	0
Snow/Sleet/Hail:	0
Fog:	0
Dust:	0
Wind:	1
Unknown:	0
Total:	**2**

Crash Rates

PDO:	1.50 *	* MVMT
INJ:	0.00 *	** 100 MVMT
FAT:	0.00 **	**Total: 1.50** *

Crash Type

Overturning:	0	Bridge Abutment:	0
Other Non Collision:	0	Column/Pier:	0
Pedestrians:	0	Culvert/Headwall:	1
Broadside:	0	Embankment:	0
Head On:	0	Curb:	0
Rear End:	0	Delineator Post:	0
Sideswipe (Same):	0	Fence:	0
Sideswipe (Opposite):	0	Tree:	0
Approach Turn:	0	Large Boulders or Rocks:	0
Overtaking Turn:	0	Barricade:	0
Parked Motor Vehicle:	0	Wall/Building:	0
Railway Vehicle:	0	Crash Cushion:	0
Bicycle:	0	Mailbox:	0
Motorized Bicycle:	0	Other Fixed Object:	0
Domestic Animal:	0	Total Fixed Objects:	1
Wild Animal:	0	Rocks in Roadway:	0
Light/Utility Pole:	0	Vehicle Cargo/Debris:	1
Traffic Signal Pole:	0	Road Maintenance Equipment:	0
Sign:	0	Involving Other Object:	0
Bridge Rail:	0	Total Other Objects:	1
Guard Rail:	0	Unknown:	0
Cable Rail:	0	**Total:**	**2**
Concrete Barrier:	0		

Mainline/Ramps/Frontage Roads

Mainline:	2
Crossroad (A):	0

Frontage/Ramp Intersections

M:	0	N:	0	O:	0	P:	0

Ramps

B:	0	F:	0	J:	0		
C:	0	G:	0	K:	0		
D:	0	H:	0	T:	0		
E:	0	I:	0	Z:	0		

Left Frontage Rd (L):	0		
Rt Frontage Rd (R):	0		
HOV Lanes (V):	0		
Unknown:	0	**Total:**	**2**

Road Description

At Intersection:	0
At Driveway Access:	0
Intersection Related:	1
Non Intersection:	1
In Alley:	0
Roundabout:	0
Ramp:	0
Parking Lot:	0
Unknown:	0
Total:	**2**

Road Conditions

Dry:	2
Wet:	0
Muddy:	0
Snowy:	0
Icy:	0
Slushy:	0
Foreign Material:	0
With Road Treatment:	0
Dry w/Icy Road Treatment:	0
Wet w/Icy Road Treatment:	0
Snowy w/Icy Road Treatment:	0
Icy w/Icy Road Treatment:	0
Slushy w/Icy Road Treatment:	0
Unknown:	0
Total:	**2**

ADT: 4,600 **Length:** 0.19

Any intentional or inadvertent release of this data or any data derived from its use shall not constitute a waiver of privilege pursuant to 23 USC 409.

Crash Analysis US-50 near Miami Rd

1/4

Location: 50A **Begin:** 96.57 **End:** 96.77 **From:** 07/01/2016 **To:** 06/30/2020

Vehicle Type	Veh 1	Veh 2	Veh 3
Passenger Car/Van:	0	1	0
Passenger Car/Van w/Trl:	0	0	0
Pickup Truck/Utility Van:	2	0	0
Pickup Truck/Utility Van w/Trl:	0	0	0
SUV:	0	0	0
SUV w/Trl:	0	0	0
Truck 10k lbs or Less:	0	0	0
Trucks > 10k lbs/Bus > 15 People:	0	0	0
School Bus < 15 People:	0	0	0
Non School Bus < 15 People:	0	0	0
Motorhome:	0	0	0
Motorcycle:	0	0	0
Bicycle:	0	0	0
Motorized Bicycle:	0	0	0
Farm Equipment:	0	0	0
Hit and Run - Unknown:	0	0	0
Other:	0	0	0
Unknown:	0	0	0
Total:	2	1	0

Vehicle Movement	Veh 1	Veh 2	Veh 3
Going Straight:	1	1	0
Slowing:	0	0	0
Stopped in Traffic:	0	0	0
Making Right Turn:	0	0	0
Making Left Turn:	1	0	0
Making U-Turn:	0	0	0
Passing:	0	0	0
Backing:	0	0	0
Enter/Leave Parked Position:	0	0	0
Starting in Traffic:	0	0	0
Parked:	0	0	0
Changing Lanes:	0	0	0
Avoiding Object/Veh in Road:	0	0	0
Weaving:	0	0	0
Wrong Way:	0	0	0
Other:	0	0	0
Unknown:	0	0	0
Total:	2	1	0

Contributing Factor	Veh 1	Veh 2	Veh 3
No Apparent Contributing Factor:	1	1	0
Asleep at the Wheel:	0	0	0
Illness:	0	0	0
Distracted by Passenger:	0	0	0
Driver Inexperience:	0	0	0
Driver Fatigue:	0	0	0
Driver Preoccupied:	0	0	0
Driver Unfamilar with Area:	0	0	0
Driver Emotionally Upset:	0	0	0
Evading Law Enforcement Officier:	0	0	0
Physical Disability:	0	0	0
Unknown:	1	0	0
Total:	2	1	0

Direction	Veh 1	Veh 2	Veh 3
North:	0	0	0
Northeast:	0	0	0
East:	1	0	0
Southeast:	0	0	0
South:	0	0	0
Southwest:	0	0	0
West:	1	1	0
Northwest:	0	0	0
Unknown:	0	0	0
Total:	2	1	0

Condition of Driver	Veh 1	Veh 2	Veh 3
No Impairment Suspected:	1	1	0
Alcohol Involved:	0	0	0
RX, Medication, or Drugs Involved:	0	0	0
Illegal Drugs Involved:	0	0	0
Alcohol and Drugs Involved:	1	0	0
Driver/Pedestrian not Observed:	0	0	0
Unknown:	0	0	0
Total:	2	1	0

ADT: 4,600 **Length:** 0.19

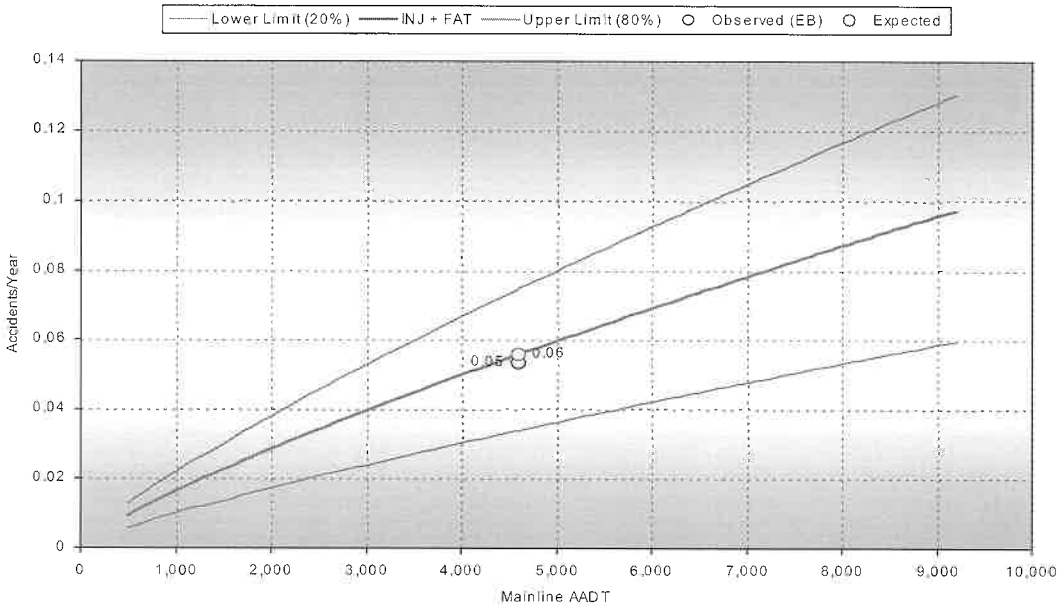
Any intentional or inadvertent release of this data or any data derived from its use shall not constitute a waiver of privilege pursuant to 23 USC 409.

Colorado Department of Transportation
DiExSys™ Roadway Safety Systems
SPF Model: CO - Rural 2-Lane Divided UnSignalized 3-Leg Intersections (2018)

03/06/2021

Job # *20210306054023*

Location: 000000050A **Begin:** 96.57 **End:** 96.77 **From:** 07/01/2016 **To:** 06/30/2020



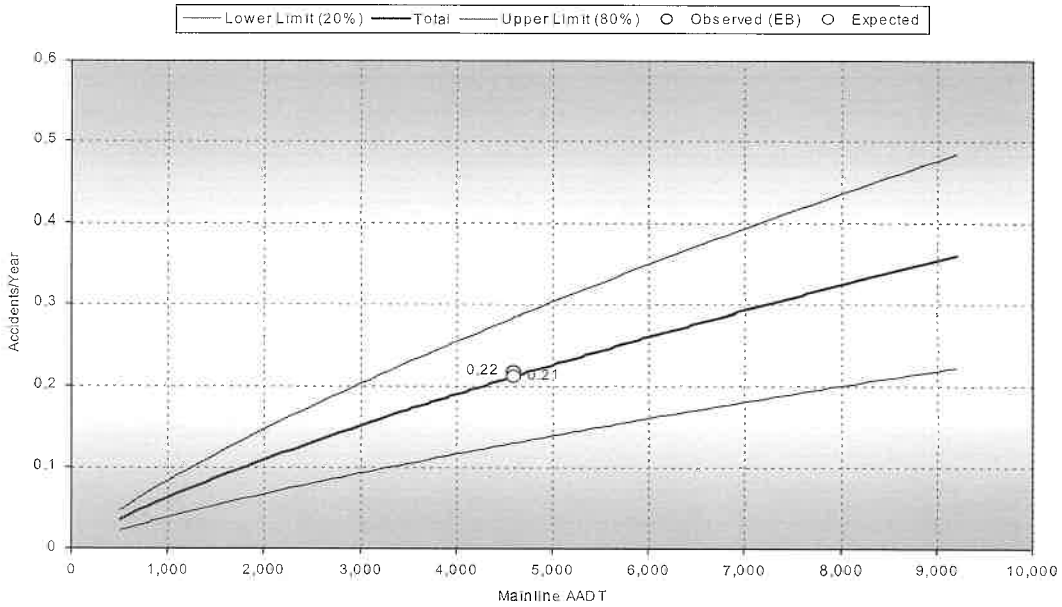
Any intentional or inadvertent release of this data or any data derived from its use shall not constitute a waiver of privilege pursuant to 23 USC 409.

Colorado Department of Transportation
DiExSys™ Roadway Safety Systems
SPF Model: CO - Rural 2-Lane Divided UnSignalized 3-Leg Intersections (2018)

03/06/2021

Job #: 20210306053955

Location: 000000050A **Begin:** 96.57 **End:** 96.77 **From:** 07/01/2016 **To:** 06/30/2020



Any intentional or inadvertent release of this data or any data derived from its use shall not constitute a waiver of privilege pursuant to 23 USC 409.

Existing Traffic Count Summaries

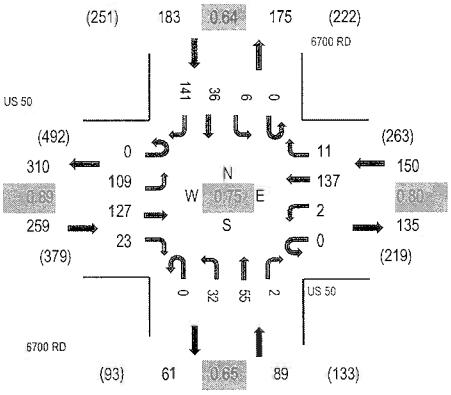
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 1 6700 RD & US 50 AM
Date: Tuesday, November 9, 2021
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

INT #1
AM

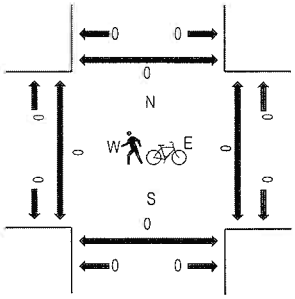
11/9/21

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	US 50 Eastbound				US 50 Westbound				6700 RD Northbound				6700 RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	18	39	6	0	0	25	2	0	8	10	0	0	2	0	11	121	681	0	0	0	0
7:15 AM	0	31	23	5	0	0	34	1	0	5	8	2	0	2	1	19	131	667	0	0	0	0
7:30 AM	0	35	33	5	0	0	43	6	0	10	24	0	0	0	19	52	227	624	0	0	0	0
7:45 AM	0	25	32	7	0	2	35	2	0	9	13	0	0	2	16	59	202	484	0	0	0	0
8:00 AM	0	11	22	3	0	0	29	2	0	6	8	0	0	1	8	17	107	345	0	0	0	0
8:15 AM	0	4	17	4	0	1	35	1	0	9	4	0	0	1	1	11	88		0	0	0	0
8:30 AM	0	8	21	3	0	0	30	0	0	4	4	0	0	1	5	11	87		0	0	0	0
8:45 AM	0	3	21	3	0	1	14	0	0	7	2	0	0	0	3	9	63		0	0	0	0
Count Total	0	135	208	36	0	4	245	14	0	58	73	2	0	9	53	189	1,026		0	0	0	0
Peak Hour	0	109	127	23	0	2	137	11	0	32	55	2	0	6	36	141	681		0	0	0	0

Intersection Traffic Counts

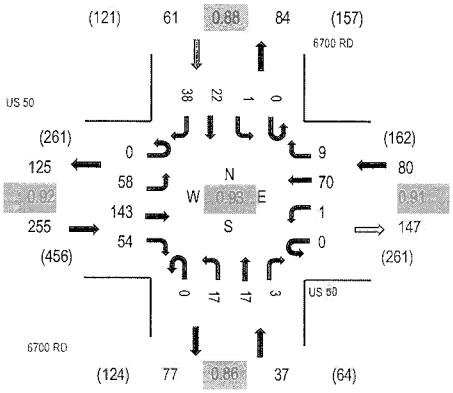
1/20

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 1 6700 RD & US 50 PM
Date: Tuesday, November 9, 2021
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 04:30 PM - 04:45 PM

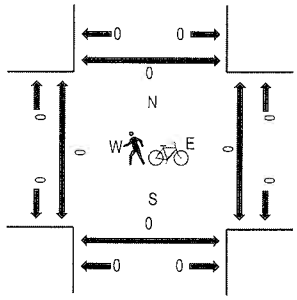
PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	US 50 Eastbound				US 50 Westbound				6700 RD Northbound				6700 RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	13	28	7	0	1	19	1	0	5	3	1	0	0	8	10	96	413	0	0	0	0
4:15 PM	0	10	29	14	0	1	16	2	0	6	3	2	0	0	11	6	100	433	0	0	0	0
4:30 PM	0	12	43	11	0	0	26	4	0	5	5	0	0	0	2	8	116	425	0	0	0	0
4:45 PM	0	18	35	14	0	0	8	0	0	3	4	1	0	0	6	12	101	412	0	0	0	0
5:00 PM	0	18	36	15	0	0	20	3	0	3	5	0	0	1	3	12	116	390	0	0	0	0
5:15 PM	0	14	28	8	0	0	22	0	0	2	3	0	0	1	2	12	92		0	0	0	0
5:30 PM	0	22	32	10	0	0	19	1	0	2	7	0	0	0	1	9	103		0	0	0	0
5:45 PM	0	9	22	8	0	0	19	0	0	4	0	0	0	2	2	13	79		0	0	0	0
Count Total	0	116	253	87	0	2	149	11	0	30	30	4	0	4	35	82	803		0	0	0	0
Peak Hour	0	58	143	54	0	1	70	9	0	17	17	3	0	1	22	38	433		0	0	0	0

2/20

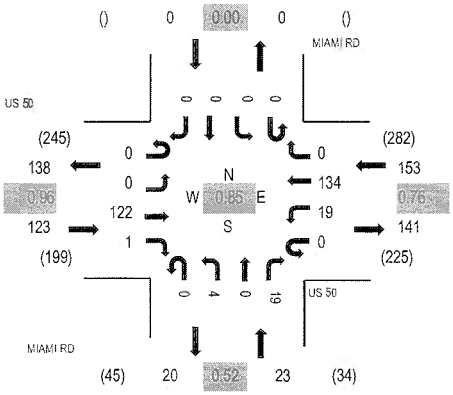
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 2 MIAMI RD & US 50 AM
Date: Tuesday, November 9, 2021
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

INT #2
AM

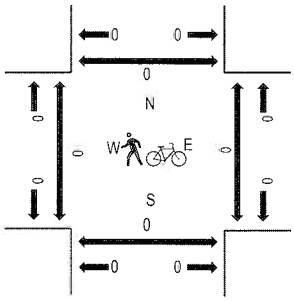
11/9/21

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	US 50 Eastbound				US 50 Westbound				MIAMI RD Northbound				MIAMI RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	32	0	0	3	24	0	0	0	0	2	0	0	0	0	61	299	0	0	0	0
7:15 AM	0	0	29	0	0	7	33	0	0	1	0	5	0	0	0	0	75	298	0	0	0	0
7:30 AM	0	0	30	0	0	5	49	0	0	0	0	4	0	0	0	0	88	283	0	0	0	0
7:45 AM	0	0	31	1	0	4	28	0	0	3	0	8	0	0	0	0	75	248	0	0	0	0
8:00 AM	0	0	22	1	0	6	31	0	0	0	0	0	0	0	0	0	60	216	0	0	0	0
8:15 AM	0	0	18	0	0	6	35	0	0	0	0	1	0	0	0	0	60		0	0	0	0
8:30 AM	0	0	21	0	0	5	22	0	0	1	0	4	0	0	0	0	53		0	0	0	0
8:45 AM	0	0	13	1	0	6	18	0	0	0	0	5	0	0	0	0	43		0	0	0	0
Count Total	0	0	196	3	0	42	240	0	0	5	0	29	0	0	0	0	515		0	0	0	0
Peak Hour	0	0	122	1	0	19	134	0	0	4	0	19	0	0	0	0	299		0	0	0	0

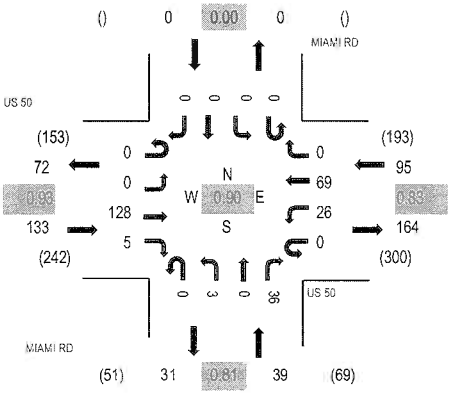
3/20

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 2 MIAMI RD & US 50 PM
Date: Tuesday, November 9, 2021
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 04:30 PM - 04:45 PM

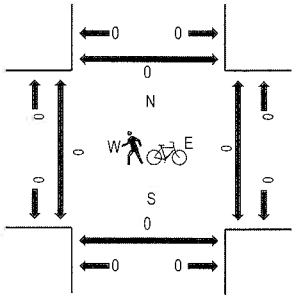
PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	US 50 Eastbound				US 50 Westbound				MIAMI RD Northbound				MIAMI RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	26	1	0	6	19	0	0	0	0	8	0	0	0	0	60	265	0	0	0	0
4:15 PM	0	0	25	3	0	6	20	0	0	3	0	8	0	0	0	0	65	267	0	0	0	0
4:30 PM	0	0	35	1	0	7	23	0	0	0	0	8	0	0	0	0	74	262	0	0	0	0
4:45 PM	0	0	35	1	0	6	12	0	0	0	0	12	0	0	0	0	66	259	0	0	0	0
5:00 PM	0	0	33	0	0	7	14	0	0	0	0	8	0	0	0	0	62	239	0	0	0	0
5:15 PM	0	0	28	1	0	2	21	0	0	0	0	8	0	0	0	0	60		0	0	0	0
5:30 PM	0	0	32	0	0	7	25	0	0	0	0	7	0	0	0	0	71		0	0	0	0
5:45 PM	0	0	21	0	0	3	15	0	0	1	0	6	0	0	0	0	46		0	0	0	0
Count Total	0	0	235	7	0	44	149	0	0	4	0	65	0	0	0	0	504		0	0	0	0
Peak Hour	0	0	128	5	0	26	69	0	0	3	0	36	0	0	0	0	267		0	0	0	0

4/20

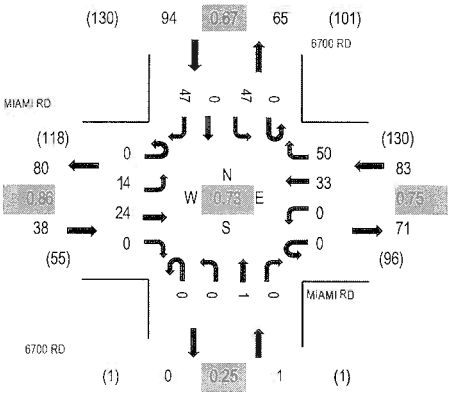
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 3 6700 RD & MIAMI RD AM
Date: Tuesday, November 9, 2021
Peak Hour: 07:30 AM - 08:30 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Int #3 11/9/21

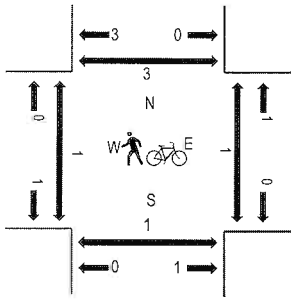
AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	MIAMI RD Eastbound				MIAMI RD Westbound				6700 RD Northbound				6700 RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	0	1	0	0	0	4	11	0	0	0	0	0	1	1	3	21	190	0	0	0	0
7:15 AM	0	3	0	0	0	0	5	8	0	0	0	0	0	4	0	4	24	209	0	0	0	1
7:30 AM	0	4	7	0	0	0	9	19	0	0	0	0	0	14	0	18	71	216	0	0	0	0
7:45 AM	0	3	8	0	0	0	10	18	0	0	0	0	0	22	0	13	74	170	0	0	0	0
8:00 AM	0	5	4	0	0	0	5	9	0	0	1	0	0	7	0	9	40	126	0	0	0	0
8:15 AM	0	2	5	0	0	0	9	4	0	0	0	0	0	4	0	7	31		1	0	0	1
8:30 AM	0	4	4	0	0	0	2	3	0	0	0	0	0	5	0	7	25		0	0	0	0
8:45 AM	0	1	4	0	0	0	8	6	0	0	0	0	0	6	0	5	30		1	0	0	1
Count Total	0	22	33	0	0	0	52	78	0	0	1	0	0	63	1	66	316		2	0	0	3
Peak Hour	0	14	24	0	0	0	33	50	0	0	1	0	0	47	0	47	216		1	0	0	1

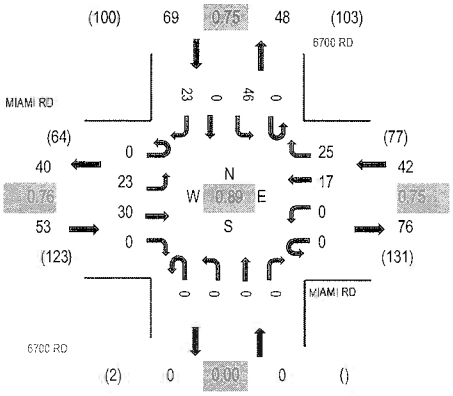
5/20

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 3 6700 RD & MIAMI RD PM
Date: Tuesday, November 9, 2021
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:00 PM - 04:15 PM

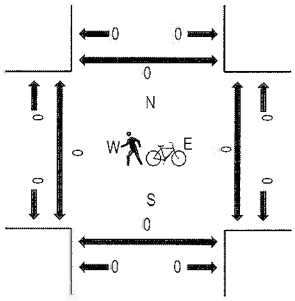
PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	MIAMI RD Eastbound				MIAMI RD Westbound				6700 RD Northbound				6700 RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	5	10	0	0	0	9	5	0	0	0	0	0	11	0	6	46	164	0	0	0	0
4:15 PM	0	5	4	0	0	0	4	3	0	0	0	0	0	13	0	6	35	150	0	0	0	0
4:30 PM	0	8	9	0	0	0	3	8	0	0	0	0	0	5	0	5	38	152	0	0	0	0
4:45 PM	0	5	7	0	0	0	1	9	0	0	0	0	0	17	0	6	45	155	0	0	0	0
5:00 PM	0	7	6	0	0	0	3	5	0	0	0	0	0	7	0	4	32	136	0	0	0	0
5:15 PM	0	10	7	0	0	0	5	7	0	0	0	0	0	8	0	0	37		0	0	0	0
5:30 PM	0	10	11	2	0	0	2	8	0	0	0	0	0	6	0	2	41		0	0	0	0
5:45 PM	0	8	9	0	0	0	5	0	0	0	0	0	0	1	0	3	26		0	0	0	0
Count Total	0	58	63	2	0	0	32	45	0	0	0	0	0	68	0	32	300		0	0	0	0
Peak Hour	0	23	30	0	0	0	17	25	0	0	0	0	0	46	0	23	164		0	0	0	0

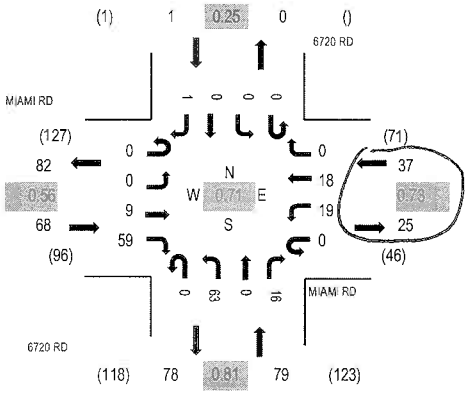
6/20

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 4 6720 RD & MIAMI RD AM
Date: Tuesday, November 9, 2021
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

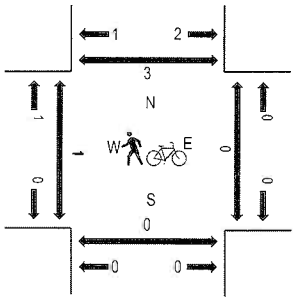
Int #4 AM 11/18/21

Peak Hour - All Vehicles



Use for Int #5 EB & WB Thrus

Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	MIAMI RD Eastbound U-Turn	Left	Thru	Right	MIAMI RD Westbound U-Turn	Left	Thru	Right	6720 RD Northbound U-Turn	Left	Thru	Right	6720 RD Southbound U-Turn	Left	Thru	Right	Total	Rolling Hour	Pedestrian Crossings West	East	South	North
7:00 AM	0	0	1	2	0	1	2	0	0	13	0	2	0	0	0	0	21	175	0	0	0	0
7:15 AM	0	0	1	2	0	7	2	0	0	12	0	6	0	0	0	0	30	185	0	0	0	0
7:30 AM	0	0	3	19	0	6	8	0	0	18	0	5	0	0	0	0	59	183	0	0	0	0
7:45 AM	0	0	5	27	0	3	5	0	0	22	0	3	0	0	0	0	65	150	1	0	0	0
8:00 AM	0	0	0	11	0	3	3	0	0	11	0	2	0	0	0	1	31	116	0	0	0	3
8:15 AM	0	0	1	6	0	7	6	0	0	5	0	3	0	0	0	0	28		0	0	0	0
8:30 AM	0	0	2	6	0	7	1	0	0	4	0	6	0	0	0	0	26		0	0	0	0
8:45 AM	0	0	4	6	0	5	5	0	0	9	0	2	0	0	0	0	31		0	0	0	2
Count Total	0	0	17	79	0	39	32	0	0	94	0	29	0	0	0	1	291		1	0	0	5
Peak Hour	0	0	9	59	0	19	18	0	0	63	0	16	0	0	0	1	185		1	0	0	3

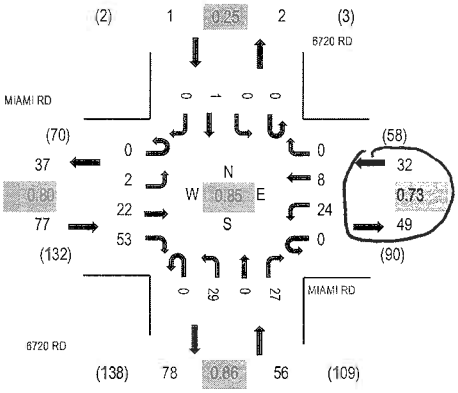
7/20

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 4 6720 RD & MIAMI RD PM
Date: Tuesday, November 9, 2021
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:45 PM - 05:00 PM

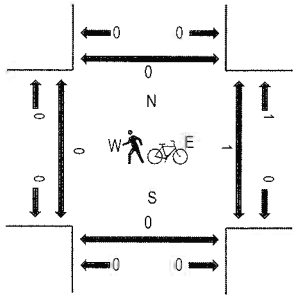
PM

Peak Hour - All Vehicles



Use for Int #5 EB & WB Thru

Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	MIAMI RD Eastbound				MIAMI RD Westbound				6720 RD Northbound				6720 RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	9	12	0	6	5	0	0	9	0	7	0	0	0	0	48	166	0	1	0	0
4:15 PM	0	1	4	15	0	6	1	0	0	3	0	6	0	0	1	0	37	152	0	0	0	0
4:30 PM	0	0	5	7	0	4	2	0	0	8	0	6	0	0	0	0	32	151	0	0	0	0
4:45 PM	0	1	4	19	0	8	0	0	0	9	0	8	0	0	0	0	49	158	0	0	0	0
5:00 PM	0	0	1	13	0	6	2	0	0	5	0	7	0	0	0	0	34	135	0	0	0	0
5:15 PM	0	0	4	10	0	2	1	0	0	12	0	6	0	0	1	0	36		0	0	0	0
5:30 PM	0	0	5	13	0	6	0	0	0	8	1	6	0	0	0	0	39		0	0	0	0
5:45 PM	0	0	7	2	0	7	2	0	0	3	0	5	0	0	0	0	26		0	0	0	0
Count Total	0	2	39	91	0	45	13	0	0	57	1	51	0	0	2	0	301		0	1	0	0
Peak Hour	0	2	22	53	0	24	8	0	0	29	0	27	0	0	1	0	166		0	1	0	0

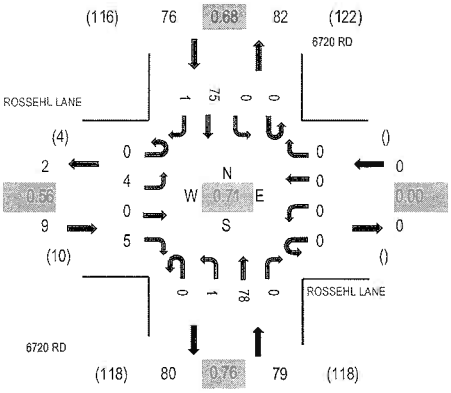
8/20

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 5 6720 RD & ROSSEHL LANE AM
Date: Tuesday, November 9, 2021
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

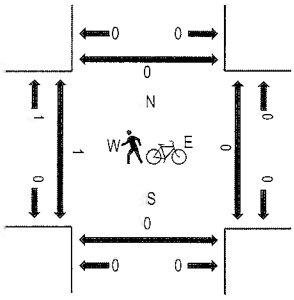
INT #6
AM
11/9/21

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	ROSSEHL LANE Eastbound				ROSSEHL LANE Westbound				6720 RD Northbound				6720 RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	1	0	0	0	0	0	0	0	0	13	0	0	0	3	0	17	151	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	17	0	0	0	8	0	25	164	0	0	0	0
7:30 AM	0	2	0	2	0	0	0	0	0	1	22	0	0	0	23	1	51	155	0	0	0	0
7:45 AM	0	1	0	2	0	0	0	0	0	0	26	0	0	0	29	0	58	130	1	0	0	0
8:00 AM	0	1	0	1	0	0	0	0	0	0	13	0	0	0	15	0	30	93	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	11	0	16		0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	11	0	0	0	13	2	26		0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	10	0	0	0	11	0	21		0	0	0	0
Count Total	0	5	0	5	0	0	0	0	0	1	117	0	0	0	113	3	244		1	0	0	0
Peak Hour	0	4	0	5	0	0	0	0	0	1	78	0	0	0	75	1	164		1	0	0	0

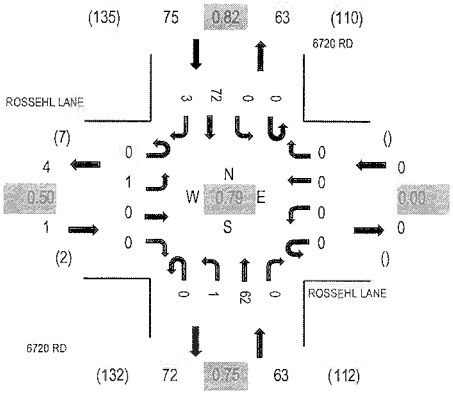
9/20

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 5 6720 RD & ROSSEHL LANE PM
Date: Tuesday, November 9, 2021
Peak Hour: 04:45 PM - 05:45 PM
Peak 15-Minutes: 04:45 PM - 05:00 PM

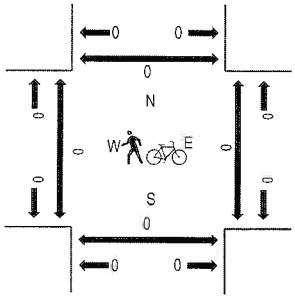
PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	ROSSEHL LANE Eastbound				ROSSEHL LANE Westbound				6720 RD Northbound				6720 RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	0	0	0	0	0	0	0	2	15	0	0	0	18	0	35	135	1	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	1	10	0	0	0	19	0	30	130	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	13	0	0	0	13	0	26	132	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	21	0	0	0	22	1	44	139	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	1	9	0	0	0	19	1	30	114	0	0	0	0
5:15 PM	0	1	0	0	0	0	0	0	0	0	19	0	0	0	12	0	32		0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	13	0	0	0	19	1	33		0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0	0	0	8	0	0	0	10	0	19		0	0	0	0
Count Total	0	2	0	0	0	0	0	0	0	4	108	0	0	0	132	3	249		1	0	0	0
Peak Hour	0	1	0	0	0	0	0	0	0	1	62	0	0	0	72	3	139		0	0	0	0

10/20

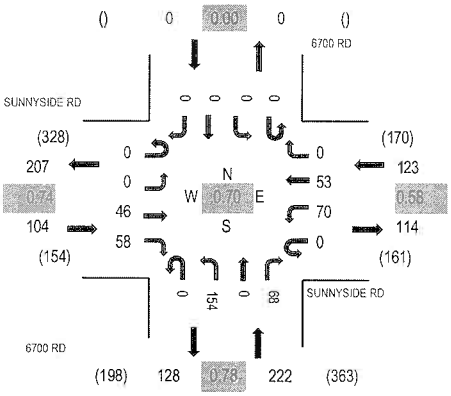
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 6 6700 RD & SUNNYSIDE RD AM
Date: Tuesday, November 9, 2021
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

INT #7
AM

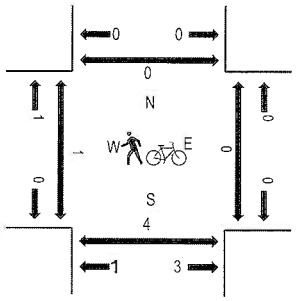
11/19/21

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	SUNNYSIDE RD Eastbound				SUNNYSIDE RD Westbound				6700 RD Northbound				6700 RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	4	7	0	4	0	0	0	24	0	10	0	0	0	0	49	396	0	0	0	0
7:15 AM	0	0	6	9	0	9	2	0	0	43	0	13	0	0	0	0	82	449	0	0	0	0
7:30 AM	0	0	12	9	0	18	8	0	0	38	0	20	0	0	0	0	105	428	0	0	3	0
7:45 AM	0	0	19	17	0	19	34	0	0	45	0	26	0	0	0	0	160	382	0	0	1	0
8:00 AM	0	0	9	23	0	24	9	0	0	28	0	9	0	0	0	0	102	291	1	0	0	0
8:15 AM	0	0	5	13	0	7	5	0	0	25	0	6	0	0	0	0	61		0	0	2	0
8:30 AM	0	0	2	11	0	13	2	0	0	21	0	10	0	0	0	0	59		1	0	0	0
8:45 AM	0	0	3	5	0	10	6	0	0	38	0	7	0	0	0	0	69		0	0	0	0
Count Total	0	0	60	94	0	104	66	0	0	262	0	101	0	0	0	0	687		2	0	6	0
Peak Hour	0	0	46	58	0	70	53	0	0	154	0	68	0	0	0	0	449		1	0	4	0

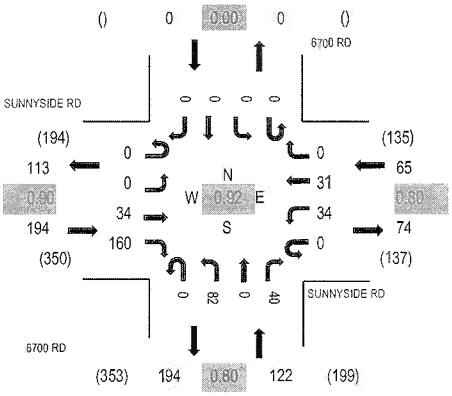
11/20

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 6 6700 RD & SUNNYSIDE RD PM
Date: Tuesday, November 9, 2021
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 04:45 PM - 05:00 PM

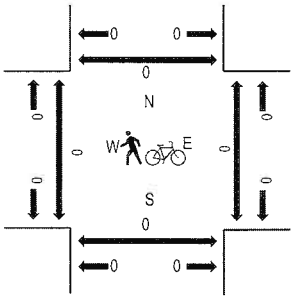
PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	SUNNYSIDE RD Eastbound				SUNNYSIDE RD Westbound				6700 RD Northbound				6700 RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	11	26	0	9	10	0	0	16	0	4	0	0	0	0	76	343	0	0	0	0
4:15 PM	0	0	12	27	0	16	8	0	0	13	0	4	0	0	0	0	80	365	0	0	0	0
4:30 PM	0	0	6	40	0	7	8	0	0	16	0	6	0	0	0	0	83	381	0	0	0	0
4:45 PM	0	0	12	42	0	13	6	0	0	17	0	14	0	0	0	0	104	372	0	0	0	0
5:00 PM	0	0	10	40	0	9	8	0	0	25	0	6	0	0	0	0	98	341	0	0	0	0
5:15 PM	0	0	6	38	0	5	9	0	0	24	0	14	0	0	0	0	96		0	0	0	0
5:30 PM	0	0	5	33	0	10	6	0	0	12	0	8	0	0	0	0	74		0	0	0	0
5:45 PM	0	0	12	30	0	8	3	0	0	13	0	7	0	0	0	0	73		0	0	0	0
Count Total	0	0	74	276	0	77	58	0	0	136	0	63	0	0	0	0	684		0	0	0	0
Peak Hour	0	0	34	160	0	34	31	0	0	82	0	40	0	0	0	0	381		0	0	0	0

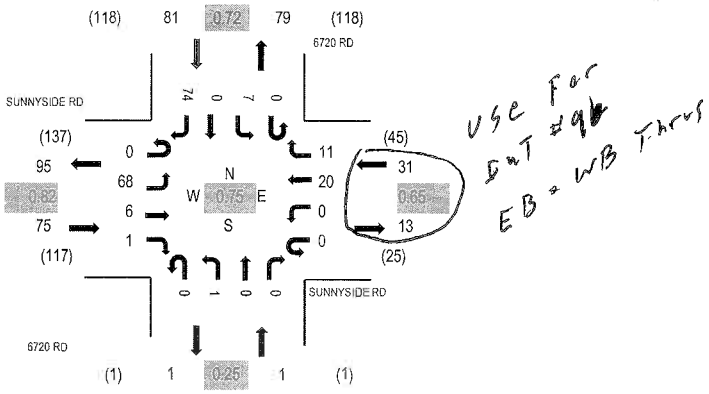
12/20

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 7 6720 RD & SUNNYSIDE RD AM
Date: Tuesday, November 9, 2021
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

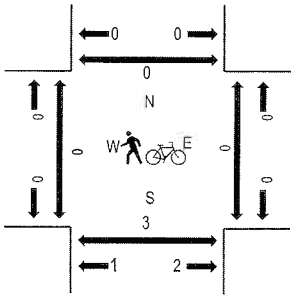
Int #8 AM 11/9/21

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	SUNNYSIDE RD Eastbound				SUNNYSIDE RD Westbound				6720 RD Northbound				6720 RD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	12	0	0	0	0	0	1	0	0	0	0	0	0	0	3	16	163	0	0	0	0
7:15 AM	0	14	1	0	0	0	4	3	0	0	0	0	0	1	0	7	30	188	0	0	0	0
7:30 AM	0	23	0	0	0	0	4	1	0	0	0	0	0	2	0	24	54	181	0	0	3	0
7:45 AM	0	21	0	0	0	0	8	4	0	1	0	0	0	3	0	26	63	157	0	0	0	0
8:00 AM	0	10	5	1	0	0	4	3	0	0	0	0	0	1	0	17	41	118	0	0	0	0
8:15 AM	0	5	4	0	0	0	3	0	0	0	0	0	0	2	0	9	23		0	0	1	0
8:30 AM	0	9	3	0	0	0	3	2	0	0	0	0	0	1	0	12	30		0	0	1	0
8:45 AM	0	7	2	0	0	0	2	3	0	0	0	0	0	0	0	10	24		0	0	0	0
Count Total	0	101	15	1	0	0	28	17	0	1	0	0	0	10	0	108	281		0	0	5	0
Peak Hour	0	68	6	1	0	0	20	11	0	1	0	0	0	7	0	74	188		0	0	3	0

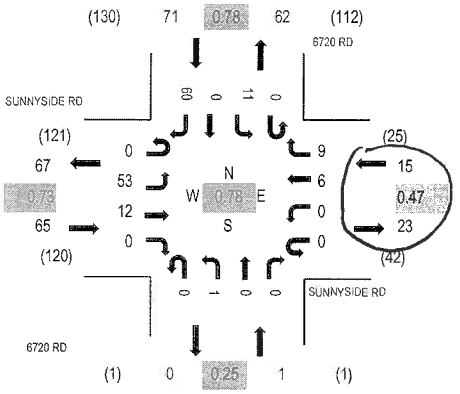
13/29

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 7 6720 RD & SUNNYSIDE RD PM
Date: Tuesday, November 9, 2021
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:45 PM - 05:00 PM

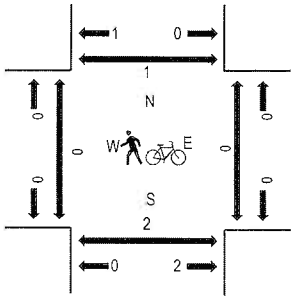
PM

Peak Hour - All Vehicles



Use for Int #9 EB + WB Thrus

Peak Hour - Pedestrians/Bicycles on Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

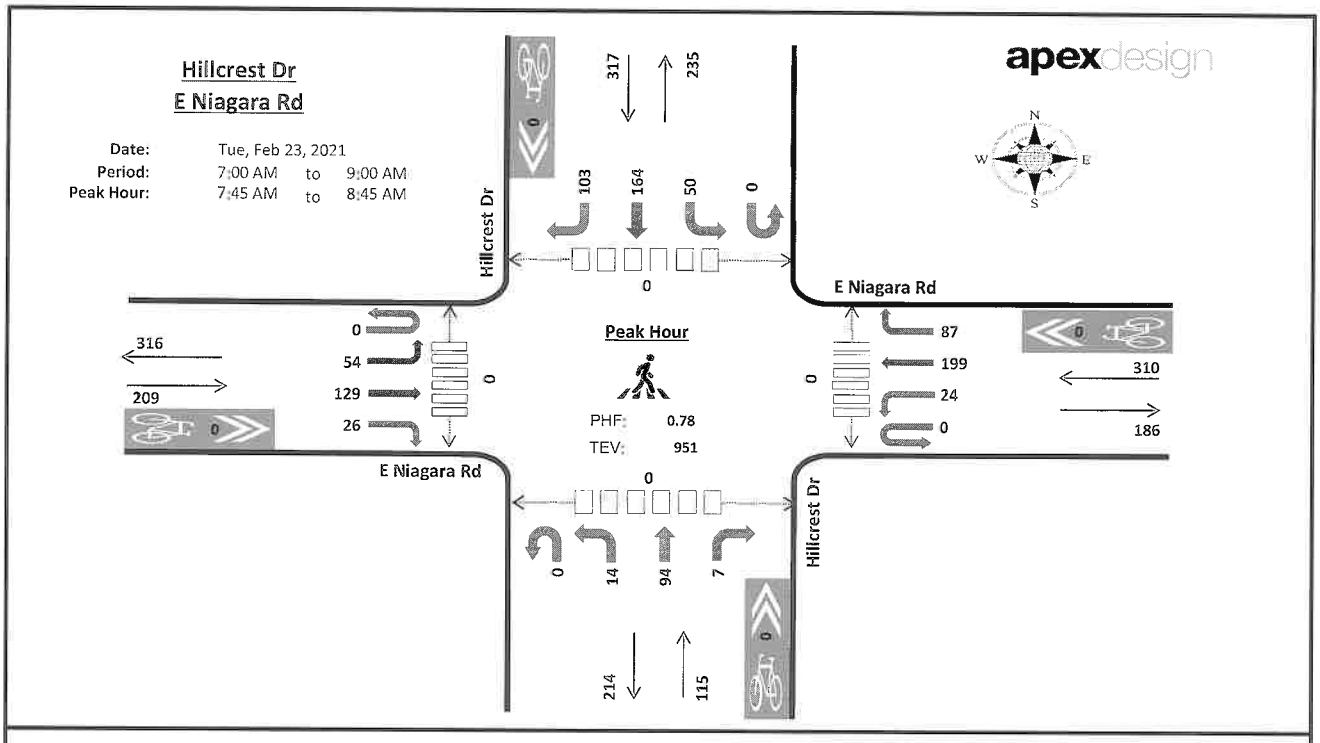
Interval Start Time	SUNNYSIDE RD Eastbound				SUNNYSIDE RD Westbound				6720 RD Northbound				6720 RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	13	5	0	0	0	3	5	0	0	0	0	0	2	0	15	43	152	0	0	0	1
4:15 PM	0	10	1	0	0	0	1	0	0	1	0	0	0	2	0	17	32	139	0	0	1	0
4:30 PM	0	11	2	0	0	0	1	2	0	0	0	0	0	0	0	12	28	145	0	0	1	0
4:45 PM	0	19	4	0	0	0	1	2	0	0	0	0	0	7	0	16	49	150	0	0	0	0
5:00 PM	0	10	2	0	0	0	1	0	0	0	0	0	0	3	0	14	30	124	0	0	1	0
5:15 PM	0	16	2	1	0	0	2	3	0	0	0	0	0	4	0	10	38		0	0	0	0
5:30 PM	0	11	1	0	0	0	1	2	0	0	0	0	0	2	0	16	33		0	0	0	0
5:45 PM	0	8	4	0	0	0	1	0	0	0	0	0	0	1	0	9	23		0	0	0	0
Count Total	0	98	21	1	0	0	11	14	0	1	0	0	0	21	0	109	276		0	0	3	1
Peak Hour	0	53	12	0	0	0	6	9	0	1	0	0	0	11	0	60	152		0	0	2	1

14/20

INT #10 AM

2/23/21

TMC2



Summary

Time	E Niagara Rd Eastbound UT	LT	TH	RT	E Niagara Rd Westbound UT	LT	TH	RT	Hillcrest Dr Northbound UT	LT	TH	RT	Hillcrest Dr Southbound UT	LT	TH	RT	Total	Rolling Hour
7:00 AM	0	5	11	6	0	3	33	8	0	4	10	1	0	7	30	15	133	0
7:15 AM	0	8	20	1	0	2	45	15	0	2	16	0	0	6	28	18	161	0
7:30 AM	0	13	31	2	0	6	40	20	0	3	25	1	0	11	34	19	205	0
7:45 AM	0	15	28	10	0	9	71	30	0	8	22	1	0	18	47	44	303	802
8:00 AM	0	11	33	5	0	8	43	20	0	4	25	4	0	17	46	13	229	898
8:15 AM	0	14	28	2	0	6	53	16	0	2	25	1	0	9	30	25	211	948
8:30 AM	0	14	40	9	0	1	32	21	0	0	22	1	0	6	41	21	208	951
8:45 AM	0	18	22	4	0	3	36	13	0	2	25	1	0	22	32	24	202	850
Count Total	0	98	213	39	0	38	353	143	0	25	170	10	0	96	288	179	1,652	0
Peak Hour	0	54	129	26	0	24	199	87	0	14	94	7	0	50	164	103	951	0
PH HV %	0.96%				0.97%				1.74%				1.26%					
PHF	0.83				0.70				0.87				0.73					

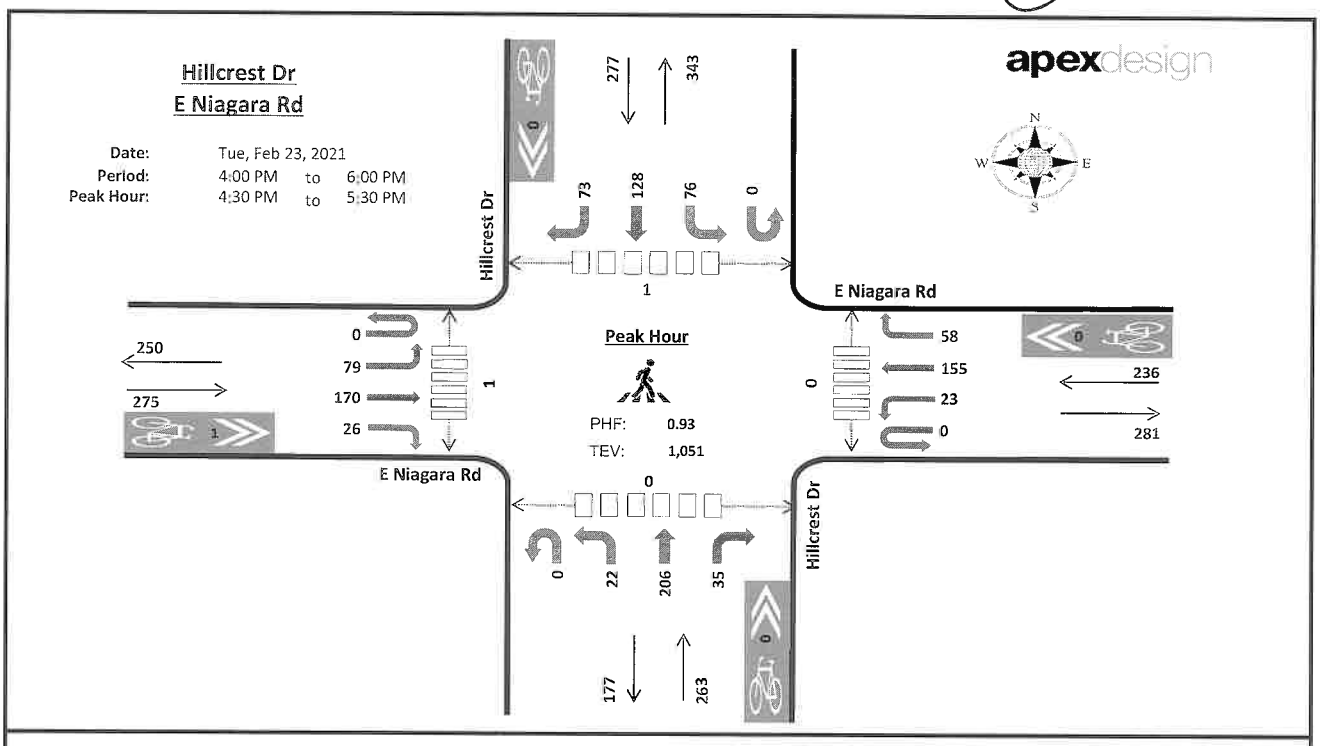
Classifications by Approach

Time	Heavy Vehicles EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians East	West	North	South	Total
7:00 AM	2	0	0	1	3	0	0	0	0	0	0	0	3	0	3
7:15 AM	2	1	0	0	3	0	0	0	0	0	0	0	1	0	1
7:30 AM	0	2	1	0	3	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0
8:30 AM	2	2	0	2	6	0	0	0	0	0	0	0	0	0	0
8:45 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Count Total	7	6	3	5	21	0	0	0	0	0	0	0	4	0	4
Peak Hour	2	3	2	4	11	0	0	0	0	0	0	0	0	0	0

Nathan Warren: (720) 660-4048
nathan.warren@apexdesignpc.com

15/20

PM



Summary

Time	E Niagara Rd Eastbound UT	LT	TH	RT	E Niagara Rd Westbound UT	LT	TH	RT	Hillcrest Dr Northbound UT	LT	TH	RT	Hillcrest Dr Southbound UT	LT	TH	RT	Total	Rolling Hour
4:00 PM	0	36	44	3	0	3	41	10	0	2	36	4	0	25	36	24	264	0
4:15 PM	0	18	34	16	0	7	23	15	0	1	36	5	0	12	41	22	230	0
4:30 PM	**0**	**15**	**48**	**5**	**0**	**2**	**48**	**14**	**0**	**6**	**53**	**8**	**0**	**14**	**29**	**25**	**267**	0
4:45 PM	**0**	**17**	**48**	1	**0**	**9**	**30**	**13**	**0**	**3**	**57**	**10**	**0**	**17**	**26**	**14**	**245**	1,006
5:00 PM	**0**	**28**	**35**	**11**	**0**	**7**	**34**	**19**	**0**	**6**	**50**	**10**	**0**	**23**	**41**	**18**	**282**	1,024
5:15 PM	**0**	**19**	**39**	**9**	**0**	**5**	**43**	**12**	**0**	**7**	**46**	**7**	**0**	**22**	**32**	**16**	**257**	1,051
5:30 PM	0	25	46	5	0	3	34	5	0	2	54	6	0	13	33	16	242	1,026
5:45 PM	0	20	31	4	0	4	27	9	0	1	44	4	0	14	30	10	198	979
Count Total	**0**	**178**	**325**	**54**	**0**	**40**	**280**	**97**	**0**	**28**	**376**	**54**	**0**	**140**	**268**	**145**	**1,985**	**0**
Peak Hour	**0**	**79**	**170**	**26**	**0**	**23**	**155**	**58**	**0**	**22**	**206**	**35**	**0**	**76**	**128**	**73**	**1,051**	**0**
PH HV %	**0.36%**				**0.00%**				**0.38%**				**0.36%**					
PHF	**0.93**				**0.92**				**0.94**				**0.84**					

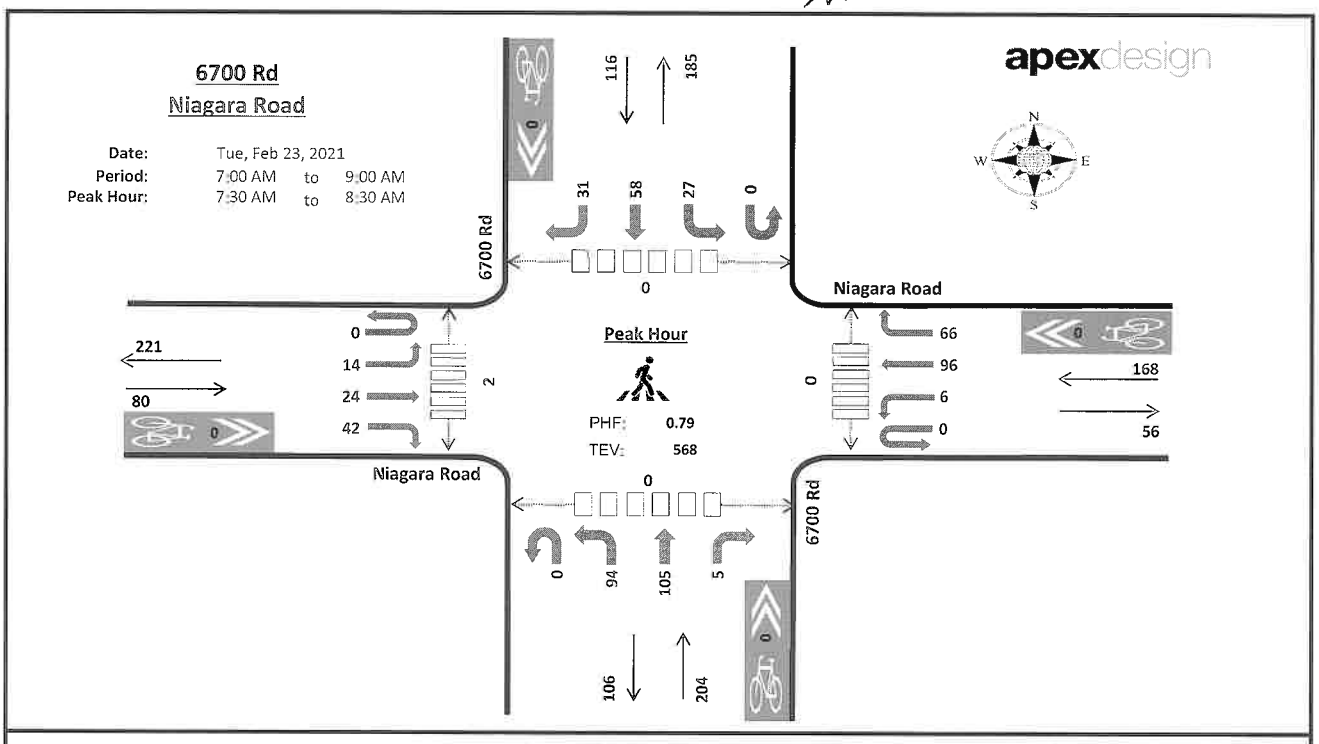
Classifications by Approach

Time	Heavy Vehicles EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians East	West	North	South	Total
4:00 PM	2	0	0	0	2	0	0	0	0	0	0	0	3	0	3
4:15 PM	0	1	0	1	2	0	0	0	0	0	0	1	4	0	5
4:30 PM	**0**	**0**	**1**	1	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	2
4:45 PM	1	**0**	**0**	0	**1**	**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
5:15 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	0
5:30 PM	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	1	1	0	2
Count Total	**3**	**1**	**1**	**2**	**7**	**1**	**0**	**0**	**0**	**1**	**0**	**3**	**9**	**0**	**12**
Peak Hour	**1**	**0**	**1**	**1**	**3**	**1**	**0**	**0**	**0**	**1**	**0**	**1**	**1**	**0**	**2**

16/20

Nathan Warren: (720) 660-4048
nathan.warren@apexdesignpc.com

Int #11 AM 2/23/21



Summary

Time	Niagara Road Eastbound UT	LT	TH	RT	Niagara Road Westbound UT	LT	TH	RT	6700 Rd Northbound UT	LT	TH	RT	6700 Rd Southbound UT	LT	TH	RT	Total	Rolling Hour
7:00 AM	0	3	5	2	0	1	17	6	0	11	22	0	0	0	5	7	79	0
7:15 AM	0	1	4	6	0	0	20	8	0	15	24	1	0	2	8	9	98	0
7:30 AM	**0**	**5**	**6**	**9**	**0**	**1**	**26**	**28**	**0**	**19**	**32**	**1**	**0**	**3**	**14**	**6**	**150**	**0**
7:45 AM	**0**	**2**	**9**	**11**	**0**	**4**	**24**	**12**	**0**	**39**	**35**	**2**	**0**	**9**	**19**	**14**	**180**	**507**
8:00 AM	**0**	**4**	**7**	**11**	**0**	**0**	**22**	**9**	**0**	**24**	**28**	**2**	**0**	**12**	**11**	**7**	**137**	**565**
8:15 AM	**0**	**3**	**2**	**11**	**0**	**1**	**24**	**17**	**0**	**12**	**10**	**0**	**0**	**3**	**14**	**4**	**101**	**568**
8:30 AM	0	8	5	12	0	0	13	9	0	7	13	0	0	4	11	0	82	500
8:45 AM	0	5	6	11	0	2	15	11	0	11	26	0	0	4	12	4	107	427
Count Total	**0**	**31**	**44**	**73**	**0**	**9**	**161**	**100**	**0**	**138**	**190**	**6**	**0**	**37**	**94**	**51**	**934**	**0**
Peak Hour	**0**	**14**	**24**	**42**	**0**	**6**	**96**	**66**	**0**	**94**	**105**	**5**	**0**	**27**	**58**	**31**	**568**	**0**
PH HV %	**1.25%**				**0.00%**				**0.98%**				**4.31%**					
PHF	**0.91**				**0.76**				**0.67**				**0.69**					

Classifications by Approach

Time	Heavy Vehicles EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians East	West	North	South	Total
7:00 AM	0	1	2	0	3	0	0	0	0	0	0	1	0	0	1
7:15 AM	1	1	0	0	2	0	0	0	0	0	0	1	0	0	1
7:30 AM	**0**	**0**	**1**	**2**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**1**	**2**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	1
8:00 AM	**1**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	1
8:30 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
8:45 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Count Total	**3**	**2**	**5**	**5**	**15**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**4**
Peak Hour	**1**	**0**	**2**	**5**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**2**

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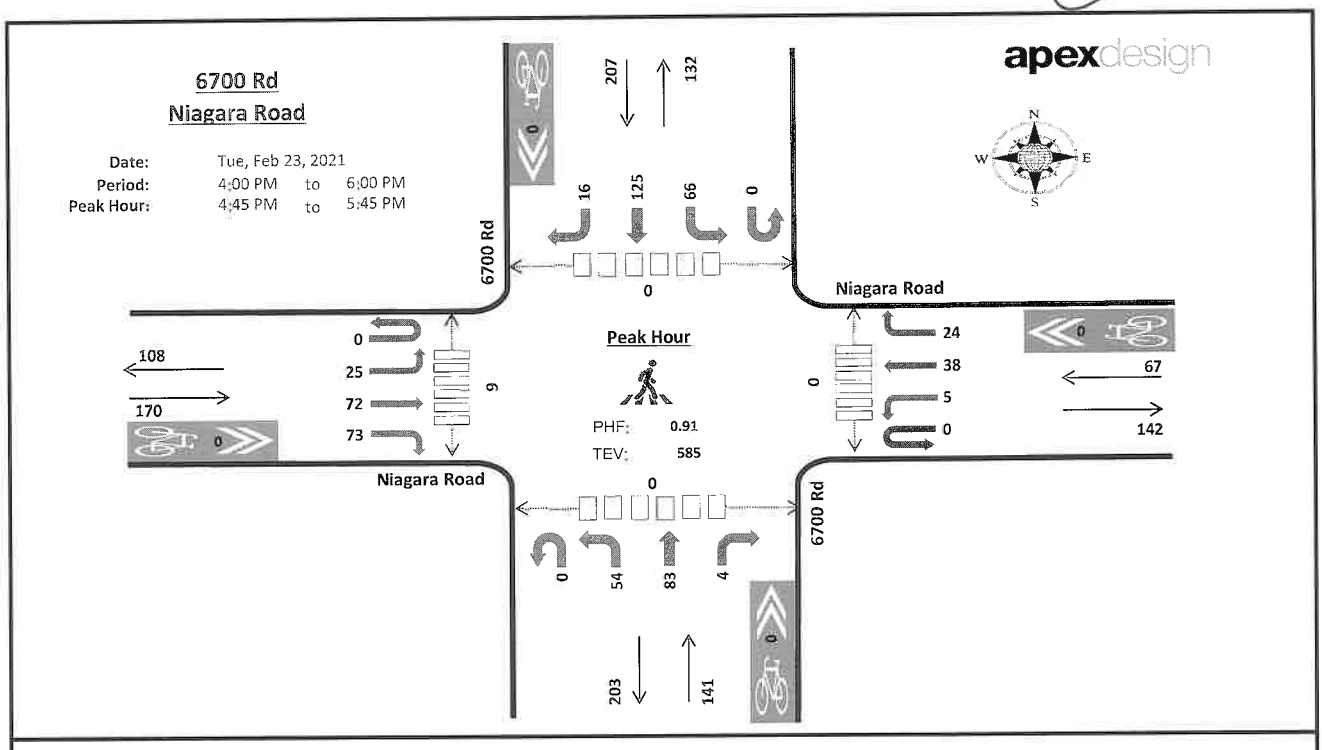
17/29

PM



Summary

Time	Niagara Road Eastbound UT	LT	TH	RT	Niagara Road Westbound UT	LT	TH	RT	6700 Rd Northbound UT	LT	TH	RT	6700 Rd Southbound UT	LT	TH	RT	Total	Rolling Hour
4:00 PM	0	8	25	21	0	2	12	6	0	11	18	3	0	7	28	1	142	0
4:15 PM	0	2	16	12	0	2	11	6	0	11	17	2	0	8	18	2	107	0
4:30 PM	0	3	17	13	0	0	16	8	0	13	17	3	0	12	25	1	128	0
4:45 PM	**0**	**6**	**20**	**26**	**0**	**1**	**6**	**5**	**0**	**10**	**23**	**0**	**0**	**11**	**30**	**4**	**142**	519
5:00 PM	**0**	**7**	**16**	**14**	**0**	**1**	**12**	**7**	**0**	**12**	**22**	**2**	**0**	**21**	**42**	**4**	**160**	537
5:15 PM	**0**	**4**	**13**	**20**	**0**	**1**	**9**	**7**	**0**	**17**	**22**	**1**	**0**	**25**	**27**	**5**	**151**	581
5:30 PM	**0**	**8**	**23**	**13**	**0**	**2**	**11**	**5**	**0**	**15**	**16**	**1**	**0**	**9**	**26**	**3**	**132**	585
5:45 PM	0	3	15	11	0	1	14	7	0	15	27	4	0	11	26	5	139	582
Count Total	**0**	**41**	**145**	**130**	**0**	**10**	**91**	**51**	**0**	**104**	**162**	**16**	**0**	**104**	**222**	**25**	**1,101**	**0**
Peak Hour	**0**	**25**	**72**	**73**	**0**	**5**	**38**	**24**	**0**	**54**	**83**	**4**	**0**	**66**	**125**	**16**	**585**	**0**
PH HV %	**0.00%**				**0.00%**				**0.00%**				**0.00%**					
PHF	**0.82**				**0.84**				**0.88**				**0.77**					

Classifications by Approach

Time	Heavy Vehicles EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians East	West	North	South	Total
4:00 PM	0	0	2	2	4	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:30 PM	0	1	1	0	2	0	0	0	0	0	0	2	0	0	2
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	1
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	2
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	2
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	4	**0**	**0**	4
5:45 PM	0	0	0	0	0	1	0	0	0	1	0	0	2	0	2
Count Total	**0**	**1**	**3**	**2**	**6**	**1**	**0**	**0**	**0**	**1**	**0**	**12**	**2**	**0**	**14**
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**0**	**0**	**9**

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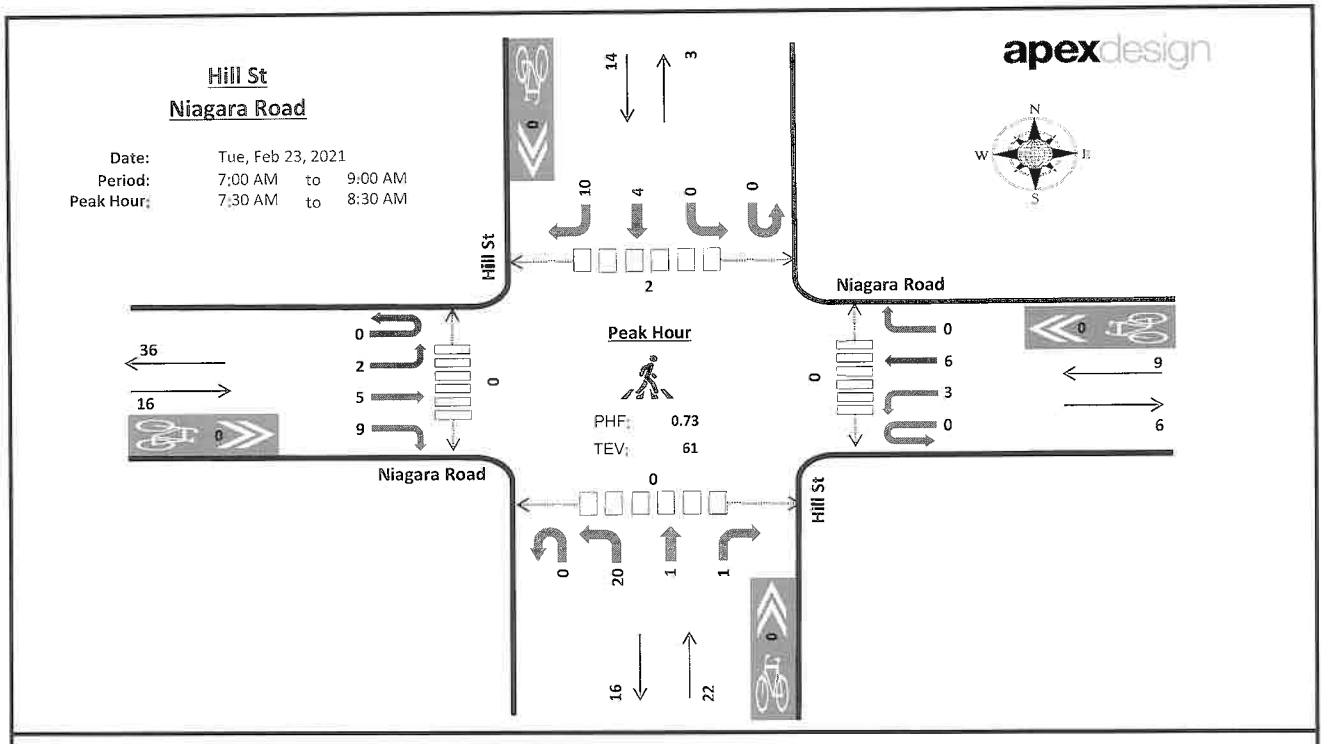
18/20

Ent #12

AM 2/23/21

TMC4



Summary

Time	Niagara Road Eastbound UT	LT	TH	RT	Niagara Road Westbound UT	LT	TH	RT	Hill St Northbound UT	LT	TH	RT	Hill St Southbound UT	LT	TH	RT	Total	Rolling Hour
7:00 AM	0	0	1	1	0	0	2	0	0	2	0	0	0	0	1	0	7	0
7:15 AM	0	1	1	2	0	1	1	0	0	1	1	1	0	0	1	1	11	0
7:30 AM	**0**	**0**	**1**	**3**	**0**	**2**	**4**	**0**	**0**	**8**	**0**	**1**	**0**	**0**	**2**	**0**	**21**	**0**
7:45 AM	**0**	**0**	**3**	**2**	**0**	**0**	**1**	**0**	**0**	4	**1**	**0**	**0**	**0**	**1**	**3**	**15**	54
8:00 AM	**0**	**1**	**1**	4	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**3**	**11**	58
8:15 AM	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**1**	**4**	**14**	61
8:30 AM	0	1	2	2	0	0	0	0	0	1	0	0	0	0	3	1	10	50
8:45 AM	0	1	3	3	0	1	3	0	0	1	0	0	0	0	1	4	17	52
Count Total	**0**	**5**	**12**	**17**	**0**	**5**	**12**	**0**	**0**	**25**	**2**	**2**	**0**	**0**	**10**	**16**	**106**	**0**
Peak Hour	**0**	**2**	**5**	**9**	**0**	**3**	**6**	**0**	**0**	**20**	**1**	**1**	**0**	**0**	**4**	**10**	**61**	**0**
PH HV %	**6.25%**				**11.11%**				**4.55%**				**0.00%**					
PHF	**0.67**				**0.38**				**0.61**				**0.70**					

Classifications by Approach

Time	Heavy Vehicles EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians East	West	North	South	Total
7:00 AM	0	0	1	0	1	0	0	0	0	0	1	0	0	0	1
7:15 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**1**	**1**	**0**	**2**	**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**	**1**	**0**	1
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0
Count Total	**2**	**2**	**3**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**0**	**3**
Peak Hour	**1**	**1**	**1**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**

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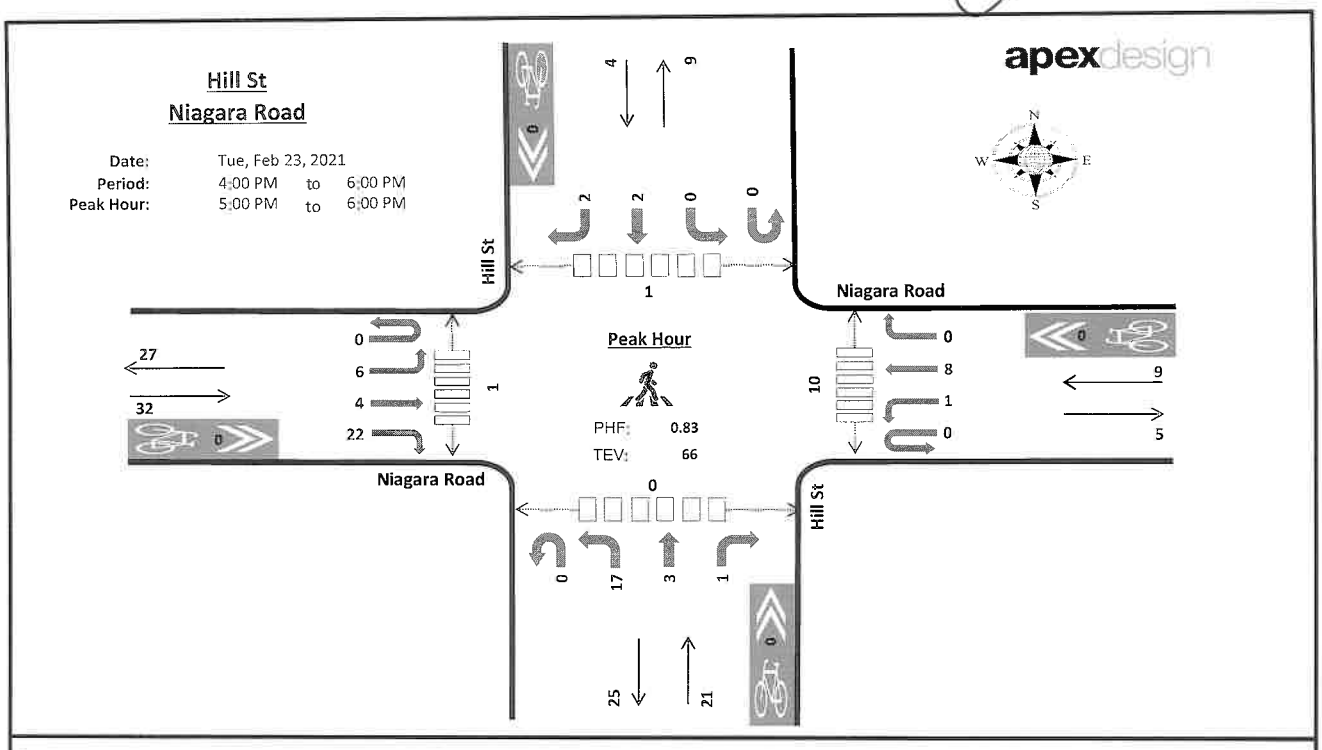
19/20

PM



Summary

Time	Niagara Road Eastbound UT	LT	TH	RT	Niagara Road Westbound UT	LT	TH	RT	Hill St Northbound UT	LT	TH	RT	Hill St Southbound UT	LT	TH	RT	Total	Rolling Hour
4:00 PM	0	1	3	1	0	1	2	0	0	4	0	1	0	0	0	0	13	0
4:15 PM	0	1	0	4	0	0	0	0	0	6	3	1	0	0	0	1	16	0
4:30 PM	0	0	1	1	0	0	1	0	0	1	2	0	0	0	3	2	11	0
4:45 PM	0	1	2	5	0	2	1	0	0	0	0	0	0	0	2	2	15	55
5:00 PM	**0**	**2**	**0**	**8**	**0**	**0**	**2**	**0**	**0**	**5**	**2**	**1**	**0**	**0**	**0**	**0**	**20**	62
5:15 PM	**0**	**2**	**1**	**5**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**2**	**16**	62
5:30 PM	**0**	**2**	**2**	**1**	**0**	**0**	**2**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	61
5:45 PM	**0**	**0**	**1**	**8**	**0**	**1**	**4**	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**2**	**0**	**20**	66
Count Total	**0**	**9**	**10**	**33**	**0**	**4**	**12**	**0**	**0**	**28**	**8**	**3**	**0**	**0**	**7**	**7**	**121**	**0**
Peak Hour	**0**	**6**	**4**	**22**	**0**	**1**	**8**	**0**	**0**	**17**	**3**	**1**	**0**	**0**	**2**	**2**	**66**	**0**
PH HV %	**0.00%**				**0.00%**				**0.00%**				**0.00%**					
PHF	**0.80**				**0.45**				**0.66**				**0.50**					

Classifications by Approach

Time	Heavy Vehicles EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians East	West	North	South	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	1	0	1	0	0	0	1	1	3	4	1	2	10
4:30 PM	0	0	0	0	0	0	0	0	0	0	3	1	0	0	4
4:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	2
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**1**	**0**	4
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	4
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	2
Count Total	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**18**	**6**	**2**	**2**	**28**
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**1**	**1**	**0**	**12**

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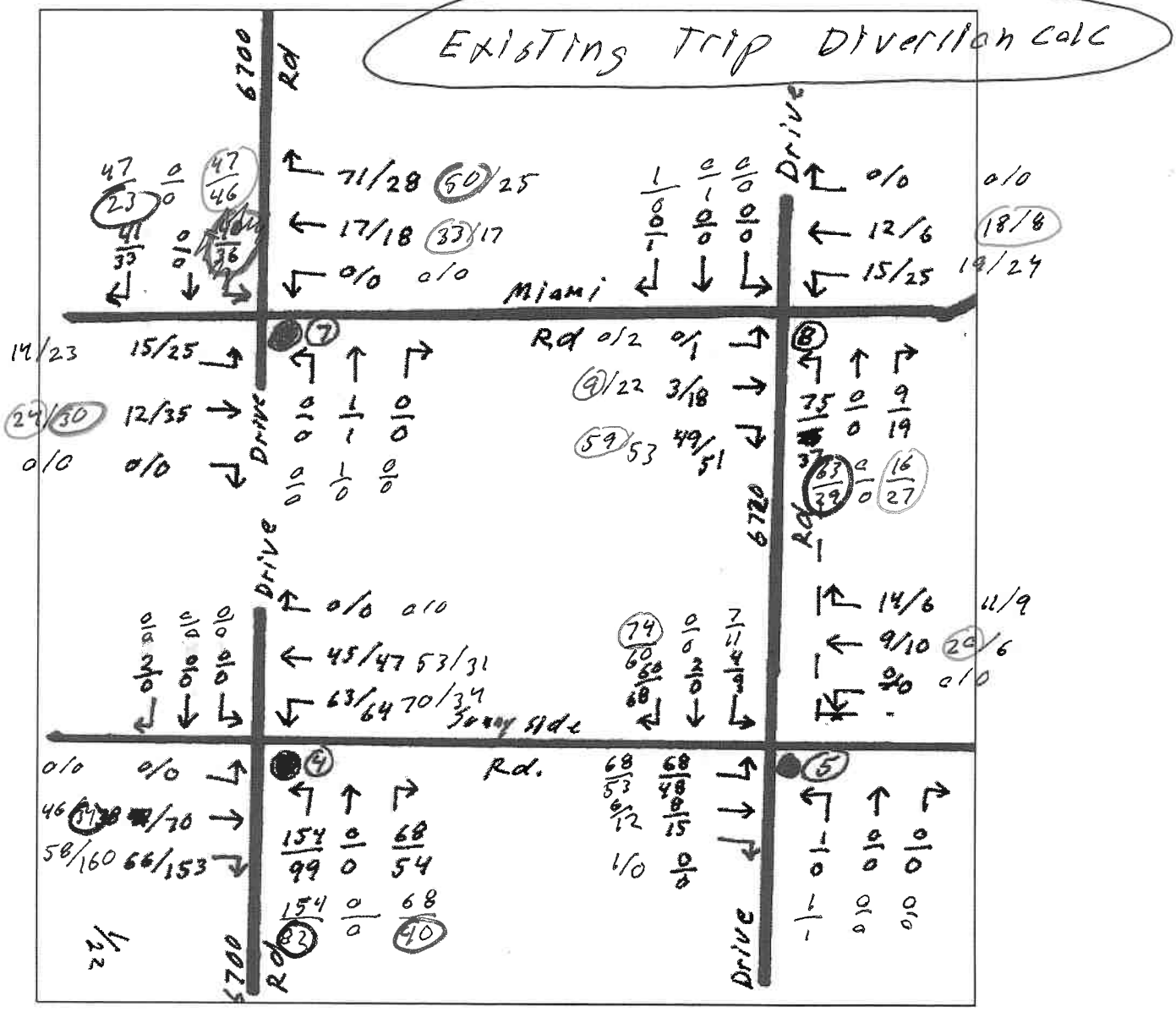
20/20

Diversion of Existing Traffic Around 6700 Rd.

d. At 6700 Rd. & Sunnyside Rd – northbound rights shift to northbound throughs (routed on diversions 2 and 4).
e. At 6700 Rd. & Miami Rd. – eastbound throughs shift to eastbound rights (routed on diversion 4).

3. Add or subtract the specific volumes from each diversion to the original existing traffic volumes

The following figure shows the existing traffic as counted at these four intersections (AM & PM peak hours).



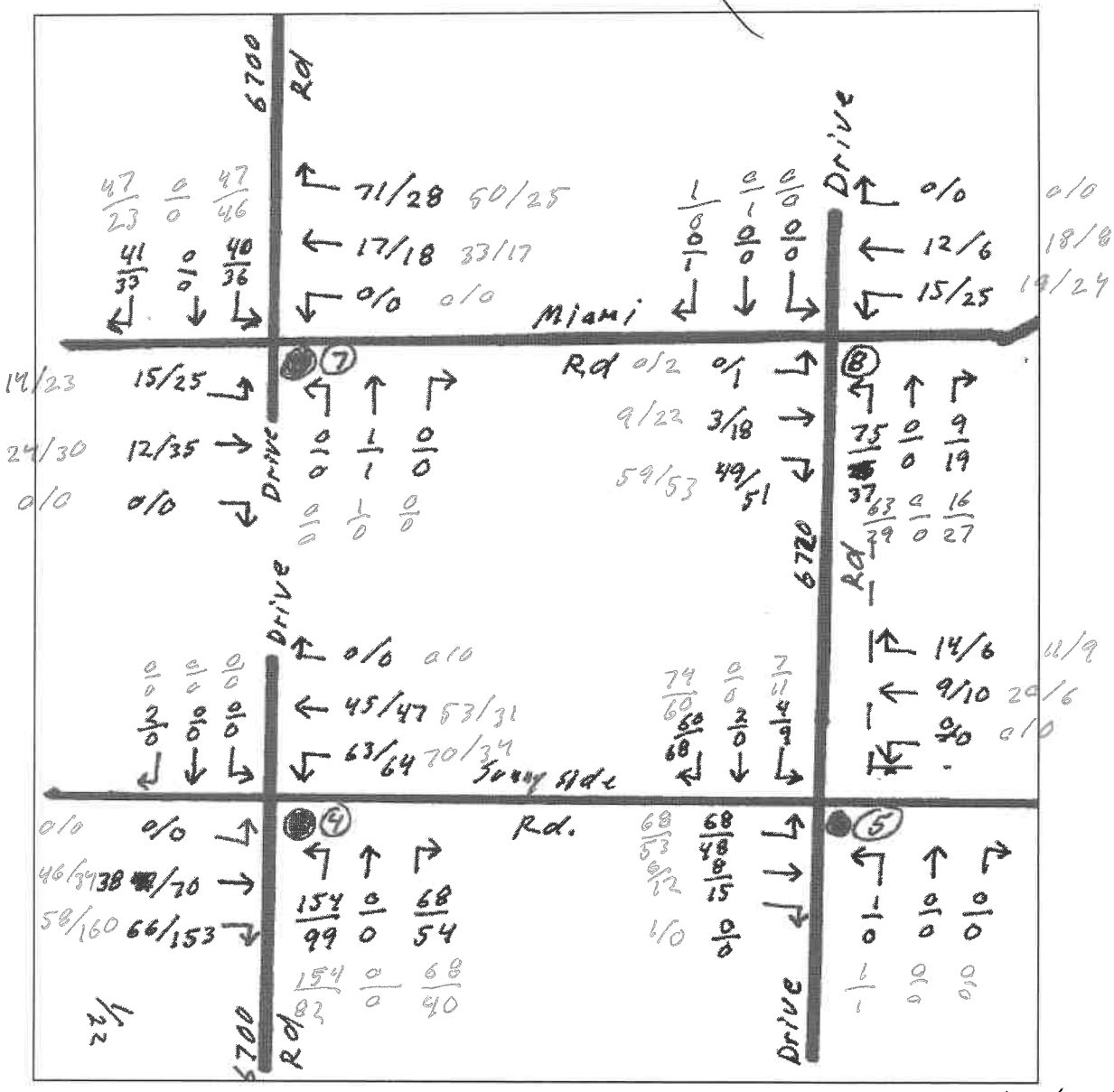
96 total values
-8 slightly less now vs. Feb (8%)
-12 slightly more now vs. Feb (12.5%)

Conclusion - use volumes from previous calculation - within the acceptable accuracy

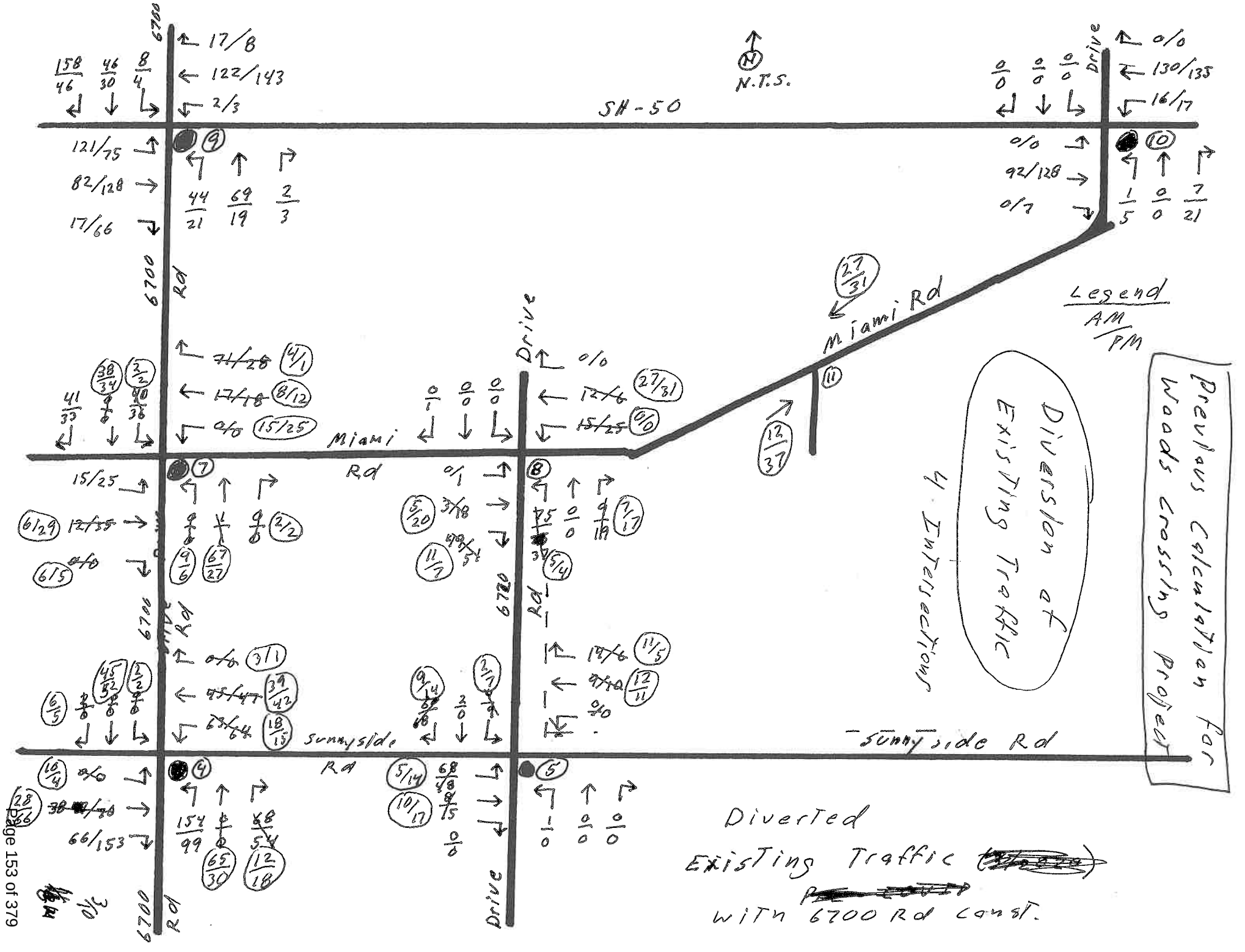
d. At 6700 Rd. & Sunnyside Rd – northbound rights shift to northbound throughs (routed on diversions 2 and 4),
e. At 6700 Rd. & Miami Rd. – eastbound throughs shift to eastbound rights (routed on diversion 4).

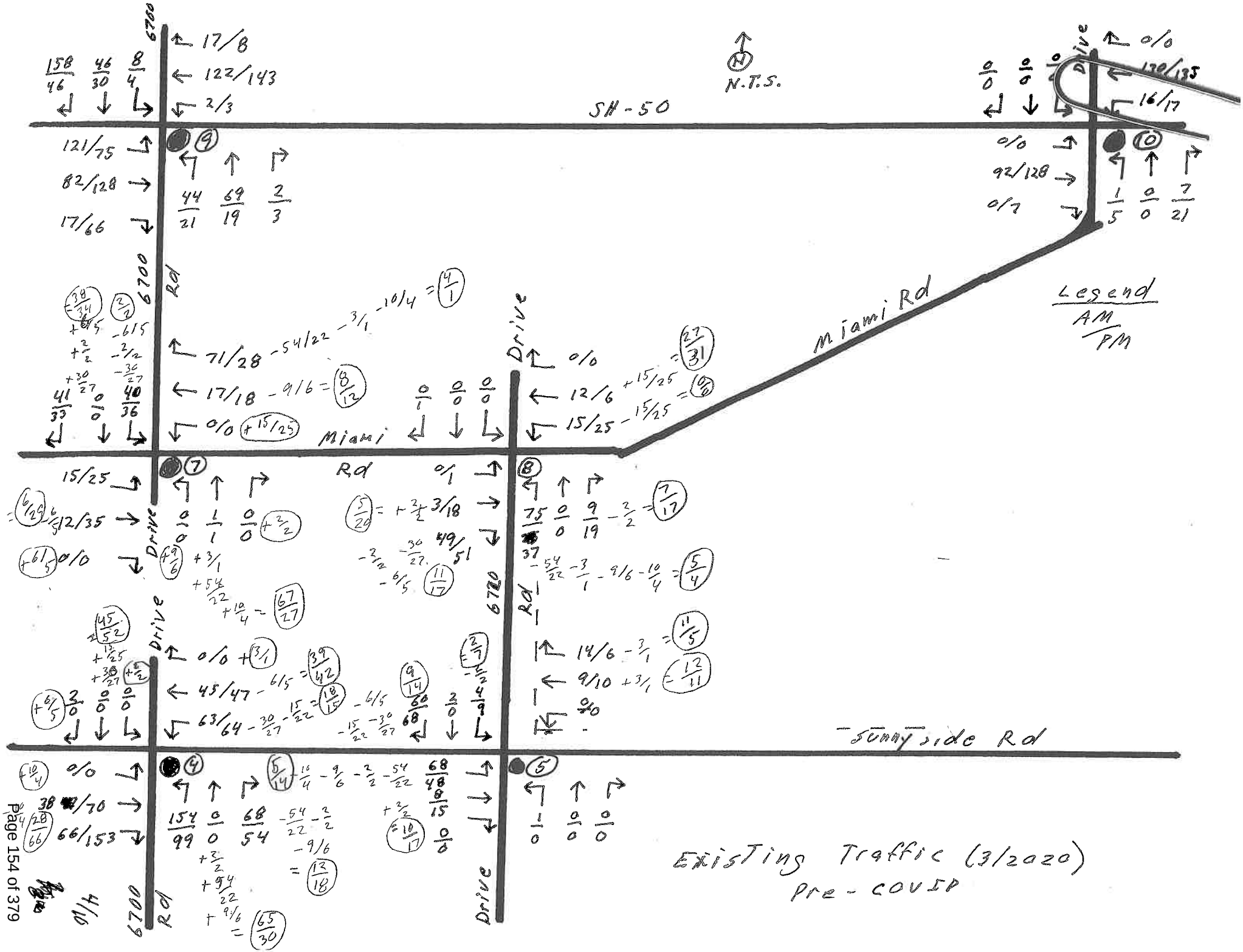
3. Add or subtract the specific volumes from each diversion to the original existing traffic volumes

The following figure shows the existing traffic as counted at these four intersections (AM & PM peak hours).



Comparison of Traffic Counts 2/23/21 (inner) 1/19/21 (outer)


Previous Calculation for Woods Crossing Project
Diversion of Existing Traffic
4 Intersections
Legend
AM/PM
N.T.S.
SH-50
Miami Rd
Sunnyside Rd
6700 Rd
Drive
Diverted Existing Traffic
with 6700 Rd const.


N.T.S.
SH-50
Miami Rd
Miami Rd
Sunnyside Rd
6700 Rd
6700 Rd
6720 Rd
Drive
Drive
Drive
Drive
Legend
AM
PM
Existing Traffic (3/2020)
Pre-COVID

6700 Rd. & Miami ~~Backroad~~

Exist Vol @ SBL = 40/36

① SBL shift to SBT – Assume shifted Vol = 95% = 38/34

	% shift	shifted volume
- DIV #1	80%	30/27
- DIV #3	5%	2/2
- DIV #5	15%	6/5

See diagram for routing impacts

6700 Rd & Miami

② WBR shift to NBT

- exist Vol @ WBR = 71/28
- assume shifted vol = 95% = 67/27

DIV	% shift	shifted Volume
1	80	54/22
3	5	3/1
5	15	10/4

③ WBL (6700-Miami) shift to WBL (6700-Miami)

- exist vol WBL @ 6700 = 15/25 – assume 100% shift

DIV	% shift	shift vol
2	100%	15/25

④ 6700 Rd & Sunnyside

NBR shift to NB Thru

- exist vol NBR = 68/54
- shifted vol = 68/54 - 8/15 = 60/39

DIV	% shift	shift vol.
2	5%	3/2
4	15%	9/6
1	see calc ①	

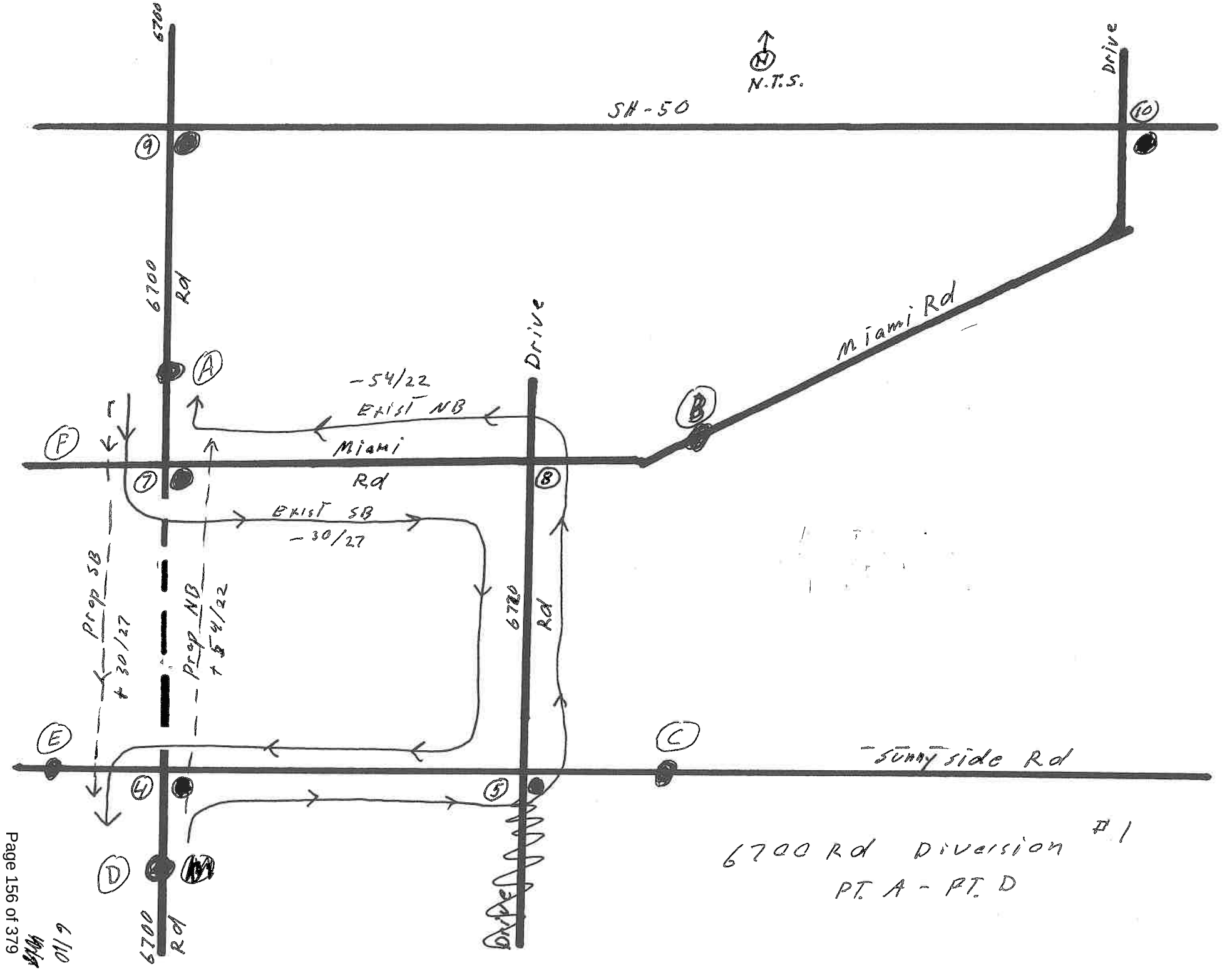
⑤ 6700 Rd & Miami

EBT shift to EBR

exist vol EBT = 12/35 – Assume 95% shift = 11/33

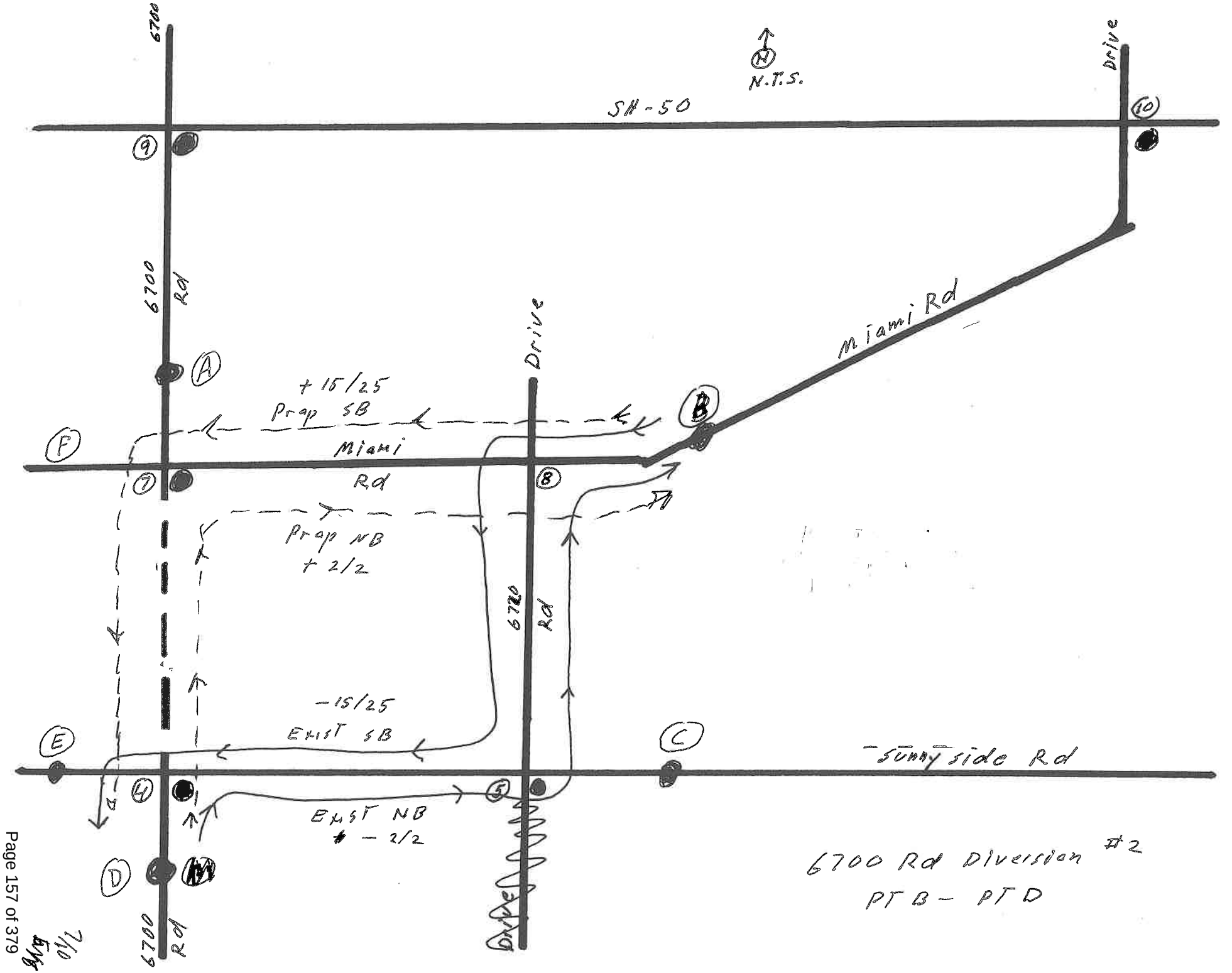
100% to DIV. #4

5/10

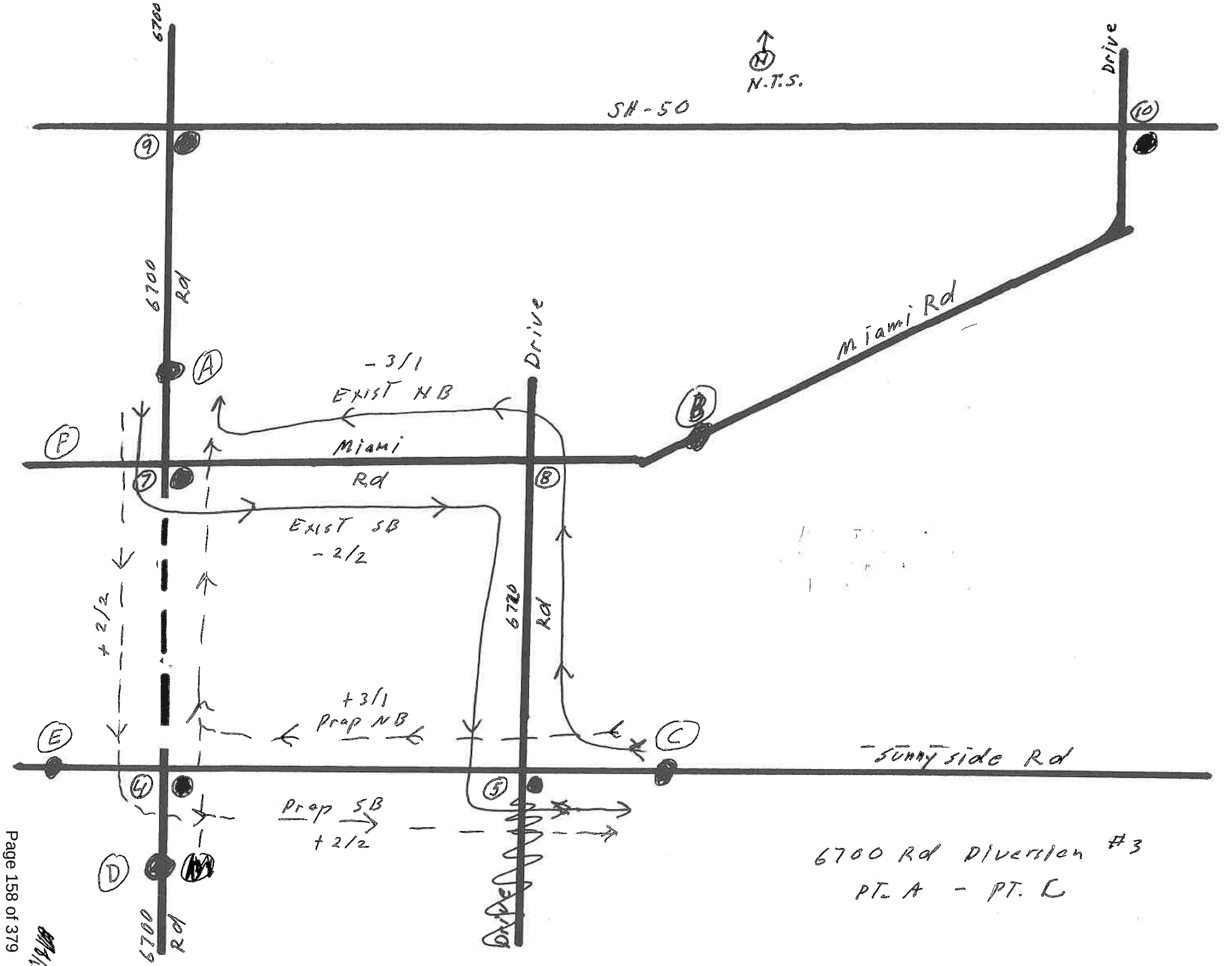


6700 Rd Diversion #1
PT. A - PT. D

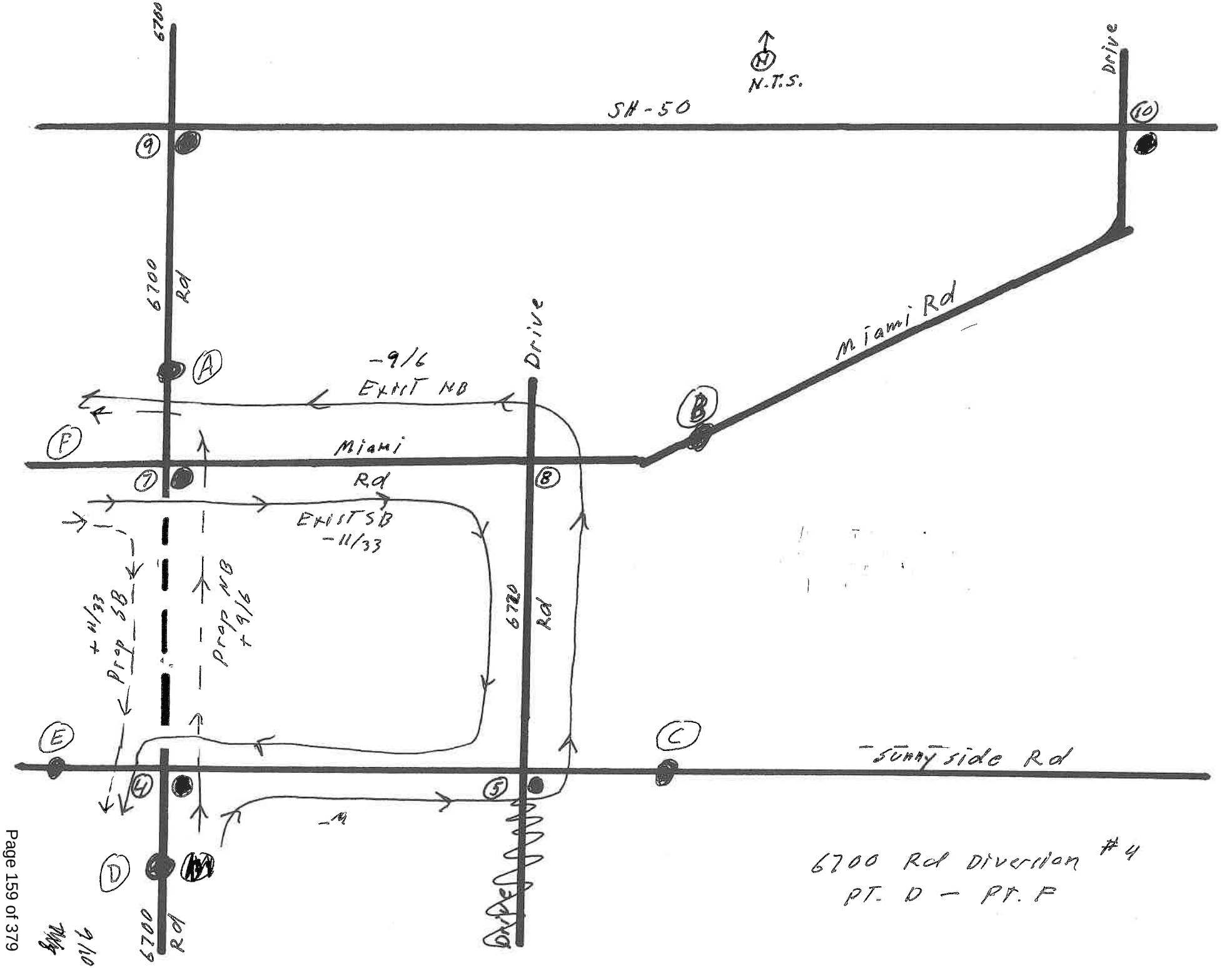
6/10



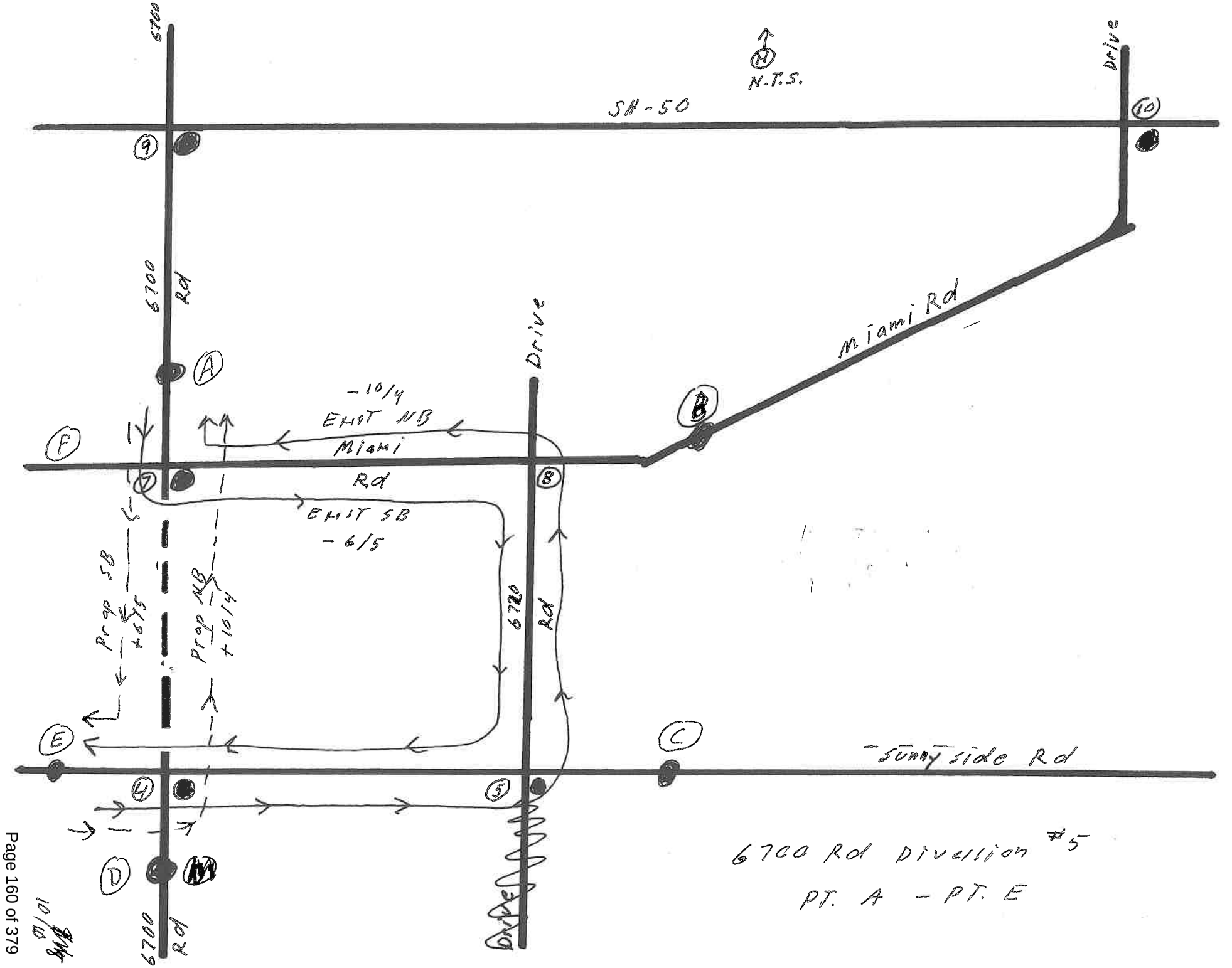
6700 Rd Diversion #2
PT B – PT D



6700 Rd Diversion #3
PT. A - PT. C



6700 Rd Diversion #4
PT. D – PT. F



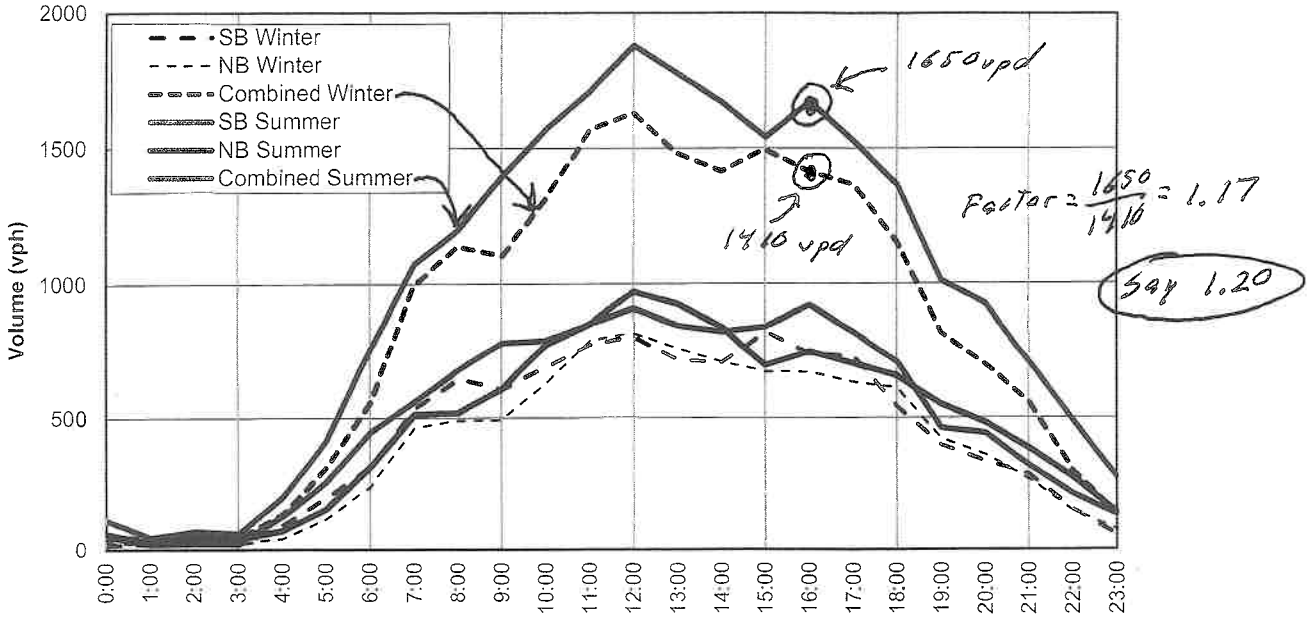
6700 Rd Diversion #5

PT. A - PT. E

Data for Local Growth Rates & Seasonal Adjustment on US-50

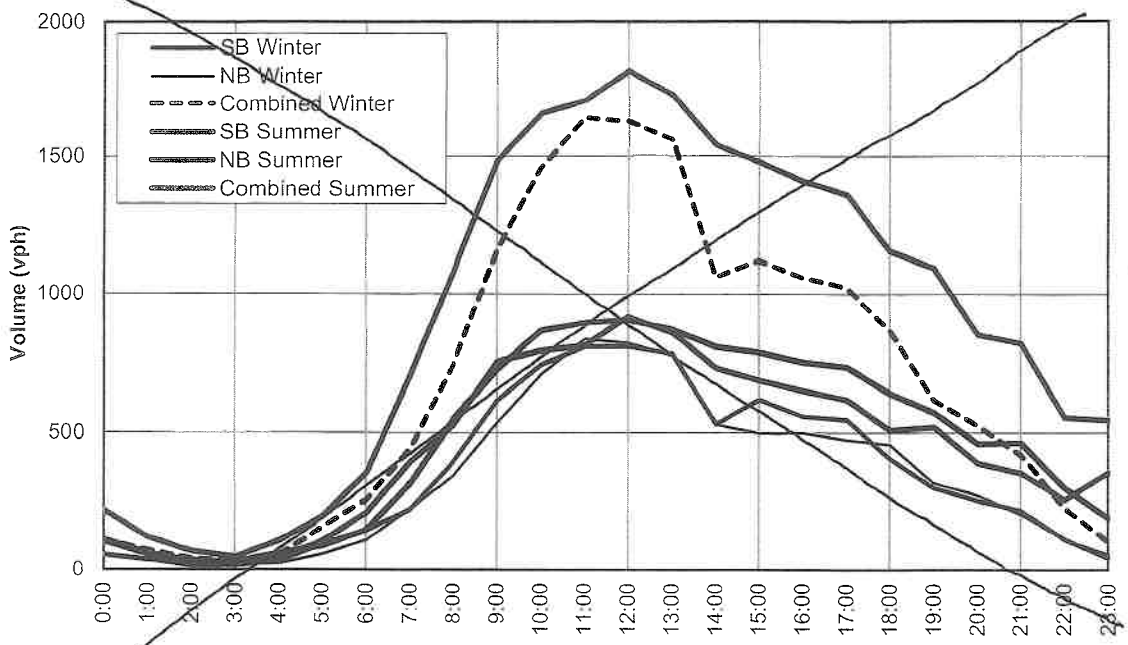
US-50 Seasonal Adj. Factor

Figure 2: US 550 south of S. 2nd St. Thursday summer and winter 24 Hour Traffic Volume



Note: Based on data collected in March and July 2016.

Figure 3: US 550 s/o S. 2nd St. Saturday summer & winter 24 Hour Data



Note: Based on data collected in March and July 2016.

TABLE 3. PRELIMINARY POPULATION FORECASTS BY COUNTY, 2010 - 2050

COUNTIES	SDO Est. July, 2010	SDO Est. July, 2015	SDO Proj. July, 2020	SDO Proj. July, 2025	SDO Proj. July, 2030	SDO Proj. July, 2035	SDO Proj. July, 2040	SDO Proj. July, 2045	SDO Proj. July, 2050	Average Annual Percent Change 10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	
COLORADO	5,050,332	5,454,707	5,842,076	6,252,913	6,686,512	7,092,627	7,460,600	7,774,711	8,049,275	1.6%	1.4%	1.4%	1.3%	1.2%	1.0%	0.8%	0.7%	
Adams	443,711	490,688	528,857	580,775	637,554	694,085	748,318	800,559	851,814	2.0%	1.5%	1.9%	1.9%	1.7%	1.5%	1.4%	1.2%	
Alamosa	15,474	15,869	16,485	17,720	18,665	19,552	20,447	21,299	22,114	0.5%	0.8%	1.5%	1.0%	0.9%	0.9%	0.8%	0.8%	
Arapahoe	574,819	630,701	664,990	701,091	738,737	773,744	805,299	828,408	843,697	1.9%	1.1%	1.1%	1.1%	0.9%	0.8%	0.6%	0.4%	
Archuleta	12,060	12,411	14,176	15,289	16,680	18,658	20,612	22,494	24,322	0.6%	2.7%	1.5%	1.8%	2.3%	2.0%	1.8%	1.6%	
Baca	3,795	3,546	3,510	3,396	3,258	3,132	3,025	2,931	2,843	-1.3%	-0.2%	-0.7%	-0.8%	-0.8%	-0.7%	-0.6%	-0.6%	
Bent	6,506	5,871	5,836	5,812	5,752	5,691	5,631	5,574	5,530	-2.0%	-0.1%	-0.1%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	
Boulder	295,605	319,009	330,975	345,676	363,507	380,235	395,397	408,587	420,107	1.5%	0.7%	0.9%	1.0%	0.9%	0.8%	0.7%	0.6%	
Broomfield	56,107	64,765	72,825	85,562	94,053	96,691	97,976	98,171	97,997	2.9%	2.4%	3.3%	1.9%	0.6%	0.3%	0.0%	0.0%	
Chaffee	17,797	18,592	20,448	21,672	22,923	23,870	24,629	25,336	26,056	0.9%	1.9%	1.2%	1.1%	0.8%	0.6%	0.6%	0.6%	
Cheyenne	1,834	1,830	1,857	1,868	1,858	1,805	1,749	1,688	1,626	0.0%	0.3%	0.1%	-0.1%	-0.6%	-0.6%	-0.7%	-0.7%	
Clear Creek	9,155	9,293	9,779	10,050	10,488	10,990	11,511	12,037	12,574	0.3%	1.0%	0.5%	0.9%	0.9%	0.9%	0.9%	0.9%	
Conejos	8,282	8,042	8,143	8,204	8,288	8,385	8,437	8,448	8,440	-0.6%	0.2%	0.2%	0.2%	0.2%	0.1%	0.0%	0.0%	
Costilla	3,532	3,585	3,824	3,800	3,752	3,709	3,678	3,668	3,676	0.3%	1.3%	-0.1%	-0.3%	-0.2%	-0.2%	-0.1%	0.0%	
Crowley	5,838	5,589	5,915	6,100	6,256	6,437	6,618	6,702	6,793	-0.9%	1.1%	0.6%	0.5%	0.6%	0.6%	0.3%	0.3%	
Custer	4,272	4,430	4,951	4,910	4,999	5,126	5,237	5,347	5,483	0.7%	2.2%	-0.2%	0.4%	0.5%	0.4%	0.4%	0.5%	
Delta	30,889	29,946	31,089	32,248	33,788	35,590	37,292	38,867	40,355	-0.6%	0.8%	0.7%	0.9%	1.0%	0.9%	0.8%	0.8%	
Denver	604,879	685,057	737,855	780,298	824,805	862,020	887,132	890,450	884,329	2.5%	1.5%	1.1%	1.1%	0.9%	0.6%	0.1%	-0.1%	
Dolores	2,060	1,974	2,031	1,998	1,961	1,946	1,947	1,962	1,975	-0.8%	0.6%	-0.3%	-0.4%	-0.2%	0.0%	0.2%	0.1%	
Douglas	287,124	322,224	354,332	381,229	408,792	431,713	448,475	458,766	463,995	2.3%	1.9%	1.5%	1.4%	1.1%	0.8%	0.5%	0.2%	
Eagle	52,057	53,840	56,194	59,916	63,912	67,740	71,273	74,465	77,347	0.7%	0.9%	1.3%	1.3%	1.2%	1.0%	0.9%	0.8%	
Elbert	23,107	24,587	28,276	33,433	38,117	41,732	44,901	47,711	50,326	1.2%	2.8%	3.4%	2.7%	1.8%	1.5%	1.2%	1.1%	
El Paso	627,232	675,663	737,354	796,369	857,452	916,604	973,081	1,026,027	1,077,248	1.5%	1.8%	1.6%	1.5%	1.3%	1.2%	1.1%	1.0%	
Fremont	46,854	46,295	47,805	48,270	49,222	50,478	51,665	52,857	54,135	-0.2%	0.6%	0.2%	0.4%	0.5%	0.5%	0.5%	0.5%	
Garfield	56,150	57,829	61,595	66,561	72,746	79,628	86,337	92,715	98,776	0.6%	1.3%	1.6%	1.8%	1.8%	1.6%	1.4%	1.3%	
Gilpin	5,463	5,795	6,119	6,171	6,119	6,207	6,223	6,217	6,208	1.2%	1.1%	0.2%	-0.2%	0.3%	0.1%	0.0%	0.0%	
Grand	14,790	14,720	15,729	17,088	18,247	19,667	21,076	22,410	23,669	-0.1%	1.3%	1.7%	1.3%	1.5%	1.4%	1.2%	1.1%	
Gunnison	15,309	16,131	17,450	18,300	19,046	19,759	20,439	20,951	21,387	1.1%	1.6%	1.0%	0.8%	0.7%	0.7%	0.5%	0.4%	
Hinsdale	843	764	829	896	948	1,007	1,076	1,128	1,159	-1.9%	1.6%	1.6%	1.1%	1.2%	1.3%	0.9%	0.6%	
Huerfano	6,655	6,385	6,775	6,791	6,705	6,536	6,289	6,044	5,836	-0.8%	1.2%	0.0%	-0.3%	-0.5%	-0.8%	-0.8%	-0.7%	
Jackson	1,387	1,352	1,376	1,330	1,298	1,272	1,243	1,216	1,192	-0.5%	0.3%	-0.7%	-0.5%	-0.4%	-0.5%	-0.4%	-0.4%	
Jefferson	535,651	565,173	586,065	607,838	625,644	639,890	650,289	657,223	660,315	1.1%	0.7%	0.7%	0.6%	0.5%	0.3%	0.2%	0.1%	
Kiowa	1,399	1,382	1,373	1,342	1,296	1,249	1,205	1,171	1,145	-0.2%	-0.1%	-0.5%	-0.7%	-0.7%	-0.7%	-0.6%	-0.5%	
Kit Carson	8,267	8,207	7,181	7,388	7,641	7,935	8,264	8,603	8,974	-0.1%	-2.6%	0.6%	0.7%	0.8%	0.8%	0.8%	0.8%	
Lake	7,282	7,399	7,901	8,296	8,769	9,152	9,443	9,627	9,767	0.3%	1.3%	1.0%	1.1%	0.9%	0.6%	0.4%	0.3%	
La Plata	51,441	54,765	58,510	64,804	70,308	74,963	79,313	83,313	86,937	1.3%	1.3%	2.1%	1.6%	1.3%	1.1%	1.0%	0.9%	
Larimer	300,532	333,429	359,838	390,771	422,441	452,133	480,122	506,606	531,472	2.1%	1.5%	1.7%	1.6%	1.4%	1.2%	1.1%	1.0%	
Las Animas	15,407	14,052	14,380	14,303	14,092	13,821	13,503	13,178	12,887	-1.8%	0.5%	-0.1%	-0.3%	-0.4%	-0.5%	-0.5%	-0.4%	
Lincoln	5,474	5,547	5,719	6,190	6,559	6,901	7,247	7,575	7,906	0.3%	0.6%	1.6%	1.2%	1.0%	1.0%	0.9%	0.9%	
Logan	22,293	22,015	22,176	23,781	24,847	25,721	26,543	27,325	28,057	-0.3%	0.1%	1.4%	0.9%	0.7%	0.6%	0.6%	0.5%	
Mesa	147,155	148,657	156,262	165,517	179,410	195,247	210,703	225,529	234,747	0.2%	1.0%	1.2%	1.6%	1.7%	1.5%	1.4%	0.8%	
Mineral	705	746	782	843	868	874	883	890	904	1.1%	0.9%	1.5%	0.6%	0.2%	0.2%	0.2%	0.3%	
Moffat	13,806	12,954	13,137	13,238	13,319	13,399	13,459	13,504	13,565	-1.3%	0.3%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	
Montezuma	25,532	25,696	26,673	28,519	30,231	31,742	33,159	34,540	35,879	0.1%	0.7%	1.3%	1.2%	1.0%	0.9%	0.8%	0.8%	
Montrose	41,188	40,595	43,242	47,080	51,933	56,433	60,730	64,791	68,640	-0.3%	1.3%	1.7%	2.0%	1.7%	1.5%	1.3%	1.2%	1.40
Morgan	28,196	28,191	28,941	30,762	32,620	34,636	36,930	39,294	41,739	0.0%	0.5%	1.2%	1.2%	1.2%	1.3%	1.2%	1.2%	
Otero	18,838	18,184	18,287	18,236	17,756	17,210	16,687	16,194	15,715	-0.7%	0.1%	-0.1%	-0.5%	-0.6%	-0.6%	-0.6%	-0.6%	
Ouray	4,446	4,596	4,887	5,106	5,272	5,455	5,657	5,872	6,102	0.7%	1.2%	0.9%	0.6%	0.7%	0.7%	0.7%	0.8%	
Park	16,262	16,721	19,029	20,230	21,560	22,574	22,900	22,640	22,220	0.6%	2.6%	1.2%	1.3%	0.9%	0.3%	-0.2%	-0.4%	
Phillips	4,465	4,326	4,246	4,280	4,262	4,228	4,187	4,159	4,148	-0.6%	-0.4%	0.2%	-0.1%	-0.2%	-0.2%	-0.1%	-0.1%	
Pitkin	17,156	17,946	17,876	18,152	18,401	18,636	18,778	18,931	19,116	0.9%	-0.1%	0.3%	0.3%	0.3%	0.2%	0.2%	0.2%	
Prowers	12,531	11,939	12,027	12,007	11,912	11,793	11,660	11,528	11,395	-1.0%	0.1%	0.0%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	
Pueblo	159,496	162,724	169,270	175,128	184,123	192,432	200,082	207,097	213,673	0.4%	0.8%	0.7%	1.0%	0.9%	0.8%	0.7%	0.6%	

20-yr Factor

Prepared by the Colorado Division of Local Government, State Demography Office, November 2019.
https://demography.dola.colorado.gov/population/population-totals-counties/#population-totals-for-colorado-counties

Traffic Volume Calculation Tables

General Inputs

Project Woods XingN

Version 12/16/21

Smoothing (yes/no)

		AM	PM
Niagara	Covid Adj factor =	1.05	1.15
US-50 thru	Seasonal Adj Factor =	1.2	1.2

Traffic Volume Calculations

Trip Generation - Phase 1

Driveways

	Weekday AM	Weekday PM	Sat
Enter (in)	103	344	
Exit (out)	311	202	

Off Site intersection (non-driveways)

	AM	PM	Sat
Enter (in)	103	344	
Exit (out)	311	202	

Trip Generation - Phase 2

Driveways

	Weekday AM	Weekday PM	Sat
Enter (in)	103	344	
Exit (out)	311	202	

Off Site intersection (non-driveways)

	AM	PM	Sat
Enter (in)	103	344	
Exit (out)	311	202	

Growth Factors

Period	Year	Factor
1	2028	varies
2	2042	varies
3		

Intersection Names

INT 1	US-50 & 6700 Rd.
INT 2	US-50 & Miami Rd.
INT 3	Miami Rd. & 6700 Rd.
INT 4	Miami Rd. & 6720 Rd.
INT 5	Miami Rd. & Hill St.
INT 6	6720 Rd. & Rossehl Ln.
INT 7	Sunnyside Rd. & 6700 Rd.
INT 8	Sunnyside Rd. & 6720 Rd.
INT 9	Sunnyside Rd & Hill St.
INT 10	Niagara Rd & Hillcrest St
INT 11	Niagara Rd & 6700 Rd.
INT 12	Niagara Rd & Hill St.
INT 13	
INT 14	
INT 15	

INT 1 US-50 & 6700 Rd. Woods XingN
INT 2 US-50 & Miami Rd. Woods XingN
INT 3 Miami Rd. & 6700 Rd. Woods XingN
INT 4 Miami Rd. & 6720 Rd. Woods XingN
INT 5 Miami Rd. & Hill St. Woods XingN
INT 6 6720 Rd. & Rossehl Ln. Woods XingN
INT 7 Sunnyside Rd. & 6700 Rd. Woods XingN
INT 8 Sunnyside Rd. & 6720 Rd. Woods XingN
INT 9 Sunnyside Rd & Hill St. Woods XingN
INT 10 Niagara Rd & Hillcrest St. Woods XingN
INT 11 Niagara Rd & 6700 Rd. Woods XingN
INT 12 Niagara Rd & Hill St.

Niagara Rd & Hillcrest St
Niagara Rd & 6700 Rd
Niagara Rd & Hill St
Sunnyside Rd & 6700 Rd
Sunnyside Rd & 6720 Rd
Sunnyside Rd. & Hill St.
Miami Rd & 6700 Rd
Miami Rd & 6720 Rd
US-50 & 6700 Rd
US-50 & Miami Rd
Miami Rd & Hill St.

Study Times

Condition 1	Weekday AM
Condition 2	Weekday PM
Condition 3	Not used

1/13

INT 1 US-50 & 6700 Rd. Woods XingN

	Weekday AM Condition												
	Eastbound			Westbound			Northbound			Southbound			
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R	
Existing Volumes (Nov 2021) for Period 1 & 2	109	127	23	2	137	11	32	55	3	6	36	141	Exist S. Leg 2-way
Adjusted volumes - seasonal & covid Period 1 &2	109	152	23	2	164	11	32	55	3	6	36	141	151
Diverted Existing Volumes for Period 1 & 2	109	152	23	2	164	11	32	55	3	6	36	141	
Trip Distribution % Inbound Period 1 & 2	0%	0%	11%	0%	0%	0%	0%	0%	0%	0%	19%	0%	
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	0%	0%	0%	11%	19%	0%	0%	0%	0%	
Driveway Enter "1" Yes, or "0" No Period 1 & 2	0	0	0	0	0	0	0	0	0	0	0	0	
Driveway Enter "1" Yes, or "0" No Period 3	0	0	0	0	0	0	0	0	0	0	0	0	
Project Trip Volume Inbound - Period 1	0	0	11	0	0	0	0	0	0	0	20	0	
Project Trip Volume Outbound - Period 1	0	0	0	0	0	0	34	59	0	0	0	0	
Project Trip Volume Total - Period 1	0	0	11	0	0	0	34	59	0	0	20	0	
Project Trip Volume Inbound - Period 2	0	0	11	0	0	0	0	0	0	0	20	0	
Project Trip Volume Outbound - Period 2	0	0	0	0	0	0	34	59	0	0	0	0	
Project Trip Volume Total - Period 2	0	0	11	0	0	0	34	59	0	0	20	0	
Growth Factor Period 1	1.125	1.031	1.125	1.125	1.031	1.125	1.125	1.125	1.125	1.125	1.125	1.125	
Growth Factor Period 2	1.423	1.095	1.423	1.423	1.095	1.423	1.423	1.423	1.423	1.423	1.423	1.423	
Future Background Volume - Period 1	123	157	28	2	169	12	41	77	3	7	46	159	
Future Background Volume - Period 2	155	166	35	3	180	16	51	93	4	9	56	201	
Other Project Trip Assignment AM Period 1 (WCS)	0	0	2	0	0	0	5	15	0	0	5	0	Manual entry
Other Project Trip Assignment AM Period 2 (WCS)	0	0	2	0	0	0	5	15	0	0	5	0	Manual entry
Total Future Volume - Period 1	123	157	39	2	169	12	75	136	3	7	66	159	321
Total Future Volume - Period 2	155	166	46	3	180	16	85	152	4	9	76	201	366

	Weekday PM Condition												
	Eastbound			Westbound			Northbound			Southbound			
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R	
Existing Volumes (Nov 2021) for Period 1 & 2	58	143	54	1	70	9	17	17	3	1	22	38	Exist S. Leg 2-way
Adjusted volumes - seasonal & covid Period 1 &2	58	172	54	1	84	9	17	17	3	1	22	38	114
Diverted Existing Volumes for Period 1 & 2	58	172	54	1	84	9	17	17	3	1	22	38	
Trip Distribution % Inbound Period 1 & 2	0%	0%	20%	0%	0%	0%	0%	0%	0%	0%	10%	0%	
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	0%	0%	0%	20%	10%	0%	0%	0%	0%	
Project Trip Volume Inbound - Period 1	0	0	69	0	0	0	0	0	0	0	34	0	
Project Trip Volume Outbound - Period 1	0	0	0	0	0	0	40	20	0	0	0	0	
Project Trip Volume Total - Period 1	0	0	69	0	0	0	40	20	0	0	34	0	
Project Trip Volume Inbound - Period 2	0	0	69	0	0	0	0	0	0	0	34	0	
Project Trip Volume Outbound - Period 2	0	0	0	0	0	0	40	20	0	0	0	0	
Project Trip Volume Total - Period 2	0	0	69	0	0	0	40	20	0	0	34	0	
Growth Factor Period 1	1.125	1.031	1.125	1.125	1.031	1.125	1.125	1.125	1.125	1.125	1.125	1.125	
Growth Factor Period 2	1.423	1.095	1.423	1.423	1.095	1.423	1.423	1.423	1.423	1.423	1.423	1.423	
Future Background Volume - Period 1	65	177	71	1	87	10	25	23	3	1	32	43	
Future Background Volume - Period 2	83	188	87	1	92	13	30	28	4	1	38	54	
Other Project Trip Assignment PM Period 1 (WCS)	0	0	10	0	0	0	6	4	0	0	7	0	Manual entry
Other Project Trip Assignment PM Period 2 (WCS)	0	0	10	0	0	0	6	4	0	0	7	0	Manual entry
Total Future Volume - Period 1	65	177	140	1	87	10	65	43	3	1	66	43	318
Total Future Volume - Period 2	83	188	156	1	92	13	70	48	4	1	72	54	351

2/13

INT 2 US-50 & Miami Rd. Woods XingN

	Weekday AM Condition												
	Eastbound			Westbound			Northbound			Southbound			
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R	
Existing Volumes (Nov 2021) for Period 1 & 2	0	122	1	19	134	0	4	0	19	0	0	0	Exist S. Leg 2-way
Adjusted volumes - seasonal & covid Period 1 &2	0	146	1	19	161	0	4	0	19	0	0	0	43
Diverted Existing Volumes for Period 1 & 2	0	146	1	19	161	0	4	0	19	0	0	0	
Trip Distribution % Inbound Period 1 & 2	0%	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%	0%	
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	0%	0%	0%	0%	0%	10%	0%	0%	0%	
Driveway Enter "1" Yes, or "0" No Period 1 & 2	0	0	0	0	0	0	0	0	0	0	0	0	
Driveway Enter "1" Yes, or "0" No Period 3	0	0	0	0	0	0	0	0	0	0	0	0	
Project Trip Volume Inbound - Period 1	0	0	0	10	0	0	0	0	0	0	0	0	
Project Trip Volume Outbound - Period 1	0	0	0	0	0	0	0	0	31	0	0	0	
Project Trip Volume Total - Period 1	0	0	0	10	0	0	0	0	31	0	0	0	
Project Trip Volume Inbound - Period 2	0	0	0	10	0	0	0	0	0	0	0	0	
Project Trip Volume Outbound - Period 2	0	0	0	0	0	0	0	0	31	0	0	0	
Project Trip Volume Total - Period 2	0	0	0	10	0	0	0	0	31	0	0	0	
Growth Factor Period 1	1.125	1.031	1.125	1.125	1.031	1.125	1.125	1.125	1.125	1.125	1.125	1.125	
Growth Factor Period 2	1.423	1.095	1.423	1.423	1.095	1.423	1.423	1.423	1.423	1.423	1.423	1.423	
Future Background Volume - Period 1	0	151	1	23	166	0	5	0	26	0	0	0	
Future Background Volume - Period 2	0	160	1	29	176	0	6	0	32	0	0	0	
Other Project Trip Assignment AM Period 1 (WCS)	0	0	0	2	0	0	0	0	5	0	0	0	Manual entry
Other Project Trip Assignment AM Period 2 (WCS)	0	0	0	2	0	0	0	0	5	0	0	0	Manual entry
Total Future Volume - Period 1	0	151	1	33	166	0	5	0	57	0	0	0	96
Total Future Volume - Period 2	0	160	1	39	176	0	6	0	63	0	0	0	109

	Weekday PM Condition												
	Eastbound			Westbound			Northbound			Southbound			
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R	
Existing Volumes (Nov 2021) for Period 1 & 2	0	128	5	26	69	0	3	0	36	0	0	0	Exist S. Leg 2-way
Adjusted volumes - seasonal & covid Period 1 &2	0	154	5	26	83	0	3	0	36	0	0	0	70
Diverted Existing Volumes for Period 1 & 2	0	154	5	26	83	0	3	0	36	0	0	0	
Trip Distribution % Inbound Period 1 & 2	0%	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%	0%	
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	0%	0%	0%	0%	0%	10%	0%	0%	0%	
Project Trip Volume Inbound - Period 1	0	0	0	34	0	0	0	0	0	0	0	0	
Project Trip Volume Outbound - Period 1	0	0	0	0	0	0	0	0	20	0	0	0	
Project Trip Volume Total - Period 1	0	0	0	34	0	0	0	0	20	0	0	0	
Project Trip Volume Inbound - Period 2	0	0	0	34	0	0	0	0	0	0	0	0	
Project Trip Volume Outbound - Period 2	0	0	0	0	0	0	0	0	20	0	0	0	
Project Trip Volume Total - Period 2	0	0	0	34	0	0	0	0	20	0	0	0	
Growth Factor Period 1	1.125	1.031	1.125	1.125	1.031	1.125	1.125	1.125	1.125	1.125	1.125	1.125	
Growth Factor Period 2	1.423	1.095	1.423	1.423	1.095	1.423	1.423	1.423	1.423	1.423	1.423	1.423	
Future Background Volume - Period 1	0	159	6	41	86	0	3	0	48	0	0	0	
Future Background Volume - Period 2	0	169	7	49	91	0	4	0	58	0	0	0	
Other Project Trip Assignment PM Period 1 (WCS)	0	0	0	12	0	0	0	0	7	0	0	0	Manual entry
Other Project Trip Assignment PM Period 2 (WCS)	0	0	0	12	0	0	0	0	7	0	0	0	Manual entry
Total Future Volume - Period 1	0	159	6	75	86	0	3	0	68	0	0	0	152
Total Future Volume - Period 2	0	169	7	83	91	0	4	0	78	0	0	0	172

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INT 3 Miami Rd. & 6700 Rd. Woods XingN

	Weekday AM Condition												
	Eastbound			Westbound			Northbound			Southbound			
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R	
Existing Volumes (Nov 2021) for Period 1 & 2	14	24	0	0	33	50	0	1	0	47	0	47	
Adjusted volumes - seasonal & covid Period 1 &2	14	24	0	0	33	50	0	1	0	47	0	47	
Diverted Existing Volumes for Period 1 & 2	15	6	6	15	8	4	9	67	2	2	38	41	
Trip Distribution % Inbound Period 1 & 2	0%	3%	0%	0%	0%	0%	0%	0%	0%	30%	0%	0%	
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	0%	3%	30%	0%	0%	0%	0%	0%	0%	
Driveway Enter "1" Yes, or "0" No Period 1 & 2	0	0	0	0	0	0	0	0	0	0	0	0	
Driveway Enter "1" Yes, or "0" No Period 3	0	0	0	0	0	0	0	0	0	0	0	0	
Project Trip Volume Inbound - Period 1	0	3	0	0	0	0	0	0	0	31	0	0	
Project Trip Volume Outbound - Period 1	0	0	0	0	9	93	0	0	0	0	0	0	
Project Trip Volume Total - Period 1	0	3	0	0	9	93	0	0	0	31	0	0	
Project Trip Volume Inbound - Period 2	0	3	0	0	0	0	0	0	0	31	0	0	
Project Trip Volume Outbound - Period 2	0	0	0	0	9	93	0	0	0	0	0	0	
Project Trip Volume Total - Period 2	0	3	0	0	9	93	0	0	0	31	0	0	
Growth Factor Period 1	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	
Growth Factor Period 2	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	
Future Background Volume - Period 1	17	8	7	17	12	8	10	92	2	3	49	46	
Future Background Volume - Period 2	21	10	9	21	14	9	13	112	3	4	60	58	
Other Project Trip Assignment AM Period 1 (WCS	0	1	0	0	3	3	0	17	0	1	6	0	Manual ent
Other Project Trip Assignment AM Period 2 (WCS	0	1	0	0	3	3	0	17	0	1	6	0	Manual ent
Total Future Volume - Period 1	17	11	7	17	21	101	10	92	2	34	49	46	
Total Future Volume - Period 2	21	13	9	21	23	102	13	112	3	35	60	58	218

	Weekday PM Condition												
	Eastbound			Westbound			Northbound			Southbound			
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R	
Existing Volumes (Nov 2021) for Period 1 & 2	23	30	0	0	17	25	0	0	0	46	0	23	
Adjusted volumes - seasonal & covid Period 1 &2	23	30	0	0	17	25	0	0	0	46	0	23	
Diverted Existing Volumes for Period 1 & 2	25	29	5	25	12	1	6	27	2	2	34	33	
Trip Distribution % Inbound Period 1 & 2	0%	3%	0%	0%	0%	0%	0%	0%	0%	30%	0%	0%	
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	0%	3%	30%	0%	0%	0%	0%	0%	0%	
Project Trip Volume Inbound - Period 1	0	10	0	0	0	0	0	0	0	103	0	0	
Project Trip Volume Outbound - Period 1	0	0	0	0	6	61	0	0	0	0	0	0	
Project Trip Volume Total - Period 1	0	10	0	0	6	61	0	0	0	103	0	0	
Project Trip Volume Inbound - Period 2	0	10	0	0	0	0	0	0	0	103	0	0	
Project Trip Volume Outbound - Period 2	0	0	0	0	6	61	0	0	0	0	0	0	
Project Trip Volume Total - Period 2	0	10	0	0	6	61	0	0	0	103	0	0	
Growth Factor Period 1	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	
Growth Factor Period 2	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	
Future Background Volume - Period 1	28	36	6	28	16	3	7	38	2	5	52	37	
Future Background Volume - Period 2	36	44	7	36	19	3	9	46	3	6	62	47	
Other Project Trip Assignment PM Period 1 (WCS	0	3	0	0	2	2	0	8	0	3	14	0	Manual ent
Other Project Trip Assignment PM Period 2 (WCS	0	3	0	0	2	2	0	8	0	3	14	0	Manual ent
Total Future Volume - Period 1	28	46	6	28	22	64	7	38	2	108	52	37	
Total Future Volume - Period 2	36	54	7	36	25	64	9	46	3	109	62	47	163

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INT 4 Miami Rd. & 6720 Rd. Woods XingN

	Weekday AM Condition												
	Eastbound			Westbound			Northbound			Southbound			
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R	
Existing Volumes (Nov 2021) for Period 1 & 2	0	9	59	19	18	0	63	0	16	0	0	0	
Adjusted volumes - seasonal & covid Period 1 &2	0	9	59	19	18	0	63	0	16	0	0	0	
Diverted Existing Volumes for Period 1 & 2	0	5	11	0	27	0	5	0	7	0	0	0	
Trip Distribution % Inbound Period 1 & 2	0%	27%	6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	0%	27%	0%	0%	6%	0%	0%	0%	0%	
Driveway Enter "1" Yes, or "0" No Period 1 & 2	0	0	0	0	0	0	0	0	0	0	0	0	
Driveway Enter "1" Yes, or "0" No Period 3	0	0	0	0	0	0	0	0	0	0	0	0	
Project Trip Volume Inbound - Period 1	0	28	6	0	0	0	0	0	0	0	0	0	
Project Trip Volume Outbound - Period 1	0	0	0	0	84	0	0	19	0	0	0	0	
Project Trip Volume Total - Period 1	0	28	6	0	84	0	0	19	0	0	0	0	
Project Trip Volume Inbound - Period 2	0	28	6	0	0	0	0	0	0	0	0	0	
Project Trip Volume Outbound - Period 2	0	0	0	0	84	0	0	19	0	0	0	0	
Project Trip Volume Total - Period 2	0	28	6	0	84	0	0	19	0	0	0	0	
Growth Factor Period 1	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	
Growth Factor Period 2	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	
Future Background Volume - Period 1	0	6	14	0	30	0	12	0	8	0	0	0	
Future Background Volume - Period 2	0	7	18	0	38	0	13	0	10	0	0	0	
Other Project Trip Assignment AM Period 1 (WCS)	0	0	2	0	0	0	6	0	0	0	0	0	Manual ent
Other Project Trip Assignment AM Period 2 (WCS)	0	0	2	0	0	0	6	0	0	0	0	0	Manual ent
Total Future Volume - Period 1	0	34	20	0	114	0	12	19	8	0	0	0	
Total Future Volume - Period 2	0	35	24	0	122	0	13	19	10	0	0	0	66

	Weekday PM Condition											
	Eastbound			Westbound			Northbound			Southbound		
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Existing Volumes (Nov 2021) for Period 1 & 2	2	22	53	24	8	0	29	0	27	0	1	0
Adjusted volumes - seasonal & covid Period 1 &2	2	22	53	24	8	0	29	0	27	0	1	0
Diverted Existing Volumes for Period 1 & 2	1	20	7	0	31	0	4	0	17	0	0	1
Trip Distribution % Inbound Period 1 & 2	0%	27%	6%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	0%	27%	0%	0%	6%	0%	0%	0%	0%
Project Trip Volume Inbound - Period 1	0	93	21	0	0	0	0	0	0	0	0	0
Project Trip Volume Outbound - Period 1	0	0	0	0	55	0	0	12	0	0	0	0
Project Trip Volume Total - Period 1	0	93	21	0	55	0	0	12	0	0	0	0
Project Trip Volume Inbound - Period 2	0	93	21	0	0	0	0	0	0	0	0	0
Project Trip Volume Outbound - Period 2	0	0	0	0	55	0	0	12	0	0	0	0
Project Trip Volume Total - Period 2	0	93	21	0	55	0	0	12	0	0	0	0
Growth Factor Period 1	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125
Growth Factor Period 2	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423
Future Background Volume - Period 1	1	23	15	0	35	0	9	0	19	0	0	1
Future Background Volume - Period 2	1	28	17	0	44	0	10	0	24	0	0	1
Other Project Trip Assignment PM Period 1 (WCS)	0	0	7	0	0	0	4	0	0	0	0	0	Manual ent
Other Project Trip Assignment PM Period 2 (WCS)	0	0	7	0	0	0	4	0	0	0	0	0	Manual ent
Total Future Volume - Period 1	1	116	36	0	90	0	9	12	19	0	0	1	
Total Future Volume - Period 2	1	121	38	0	99	0	10	12	24	0	0	1	84

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INT 5 Miami Rd. & Hill St. Woods XingN

	Weekday AM Condition												
	Eastbound			Westbound			Northbound			Southbound			
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R	
Existing Volumes (Nov 2021) for Period 1 & 2		25			37								
Adjusted volumes - seasonal & covid Period 1 &2	0	25	0	0	37	0	0	0	0	0	0	0	
Diverted Existing Volumes for Period 1 & 2	0	25	0	0	37	0	0	0	0	0	0	0	
Trip Distribution % Inbound Period 1 & 2	0%	0%	27%	10%	0%	0%	0%	0%	0%	0%	0%	0%	
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	0%	0%	0%	27%	0%	10%	0%	0%	0%	
Driveway Enter "1" Yes, or "0" No Period 1 & 2	0	0	0	0	0	0	0	0	0	0	0	0	
Driveway Enter "1" Yes, or "0" No Period 3	0	0	0	0	0	0	0	0	0	0	0	0	
Project Trip Volume Inbound - Period 1	0	0	28	10	0	0	0	0	0	0	0	0	
Project Trip Volume Outbound - Period 1	0	0	0	0	0	0	84	0	31	0	0	0	
Project Trip Volume Total - Period 1	0	0	28	10	0	0	84	0	31	0	0	0	
Project Trip Volume Inbound - Period 2	0	0	28	10	0	0	0	0	0	0	0	0	
Project Trip Volume Outbound - Period 2	0	0	0	0	0	0	84	0	31	0	0	0	
Project Trip Volume Total - Period 2	0	0	28	10	0	0	84	0	31	0	0	0	
Growth Factor Period 1	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	
Growth Factor Period 2	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	
Future Background Volume - Period 1	0	28	0	2	42	0	0	0	5	0	0	0	
Future Background Volume - Period 2	0	36	0	2	53	0	0	0	5	0	0	0	
Other Project Trip Assignment AM Period 1 (WCS)	0	0	0	2	0	0	0	0	5	0	0	0	Manual ent
Other Project Trip Assignment AM Period 2 (WCS)	0	0	0	2	0	0	0	0	5	0	0	0	Manual ent
Total Future Volume - Period 1	0	28	28	12	42	0	84	0	36	0	0	0	
Total Future Volume - Period 2	0	36	28	12	53	0	84	0	36	0	0	0	160

	Weekday PM Condition												
	Eastbound			Westbound			Northbound			Southbound			
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R	
Existing Volumes (Nov 2021) for Period 1 & 2		49			32								
Adjusted volumes - seasonal & covid Period 1 &2	0	49	0	0	32	0	0	0	0	0	0	0	
Diverted Existing Volumes for Period 1 & 2	0	49	0	0	32	0	0	0	0	0	0	0	
Trip Distribution % Inbound Period 1 & 2	0%	0%	27%	10%	0%	0%	0%	0%	0%	0%	0%	0%	
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	0%	0%	0%	27%	0%	10%	0%	0%	0%	
Project Trip Volume Inbound - Period 1	0	0	93	34	0	0	0	0	0	0	0	0	
Project Trip Volume Outbound - Period 1	0	0	0	0	0	0	55	0	20	0	0	0	
Project Trip Volume Total - Period 1	0	0	93	34	0	0	55	0	20	0	0	0	
Project Trip Volume Inbound - Period 2	0	0	93	34	0	0	0	0	0	0	0	0	
Project Trip Volume Outbound - Period 2	0	0	0	0	0	0	55	0	20	0	0	0	
Project Trip Volume Total - Period 2	0	0	93	34	0	0	55	0	20	0	0	0	
Growth Factor Period 1	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	
Growth Factor Period 2	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	
Future Background Volume - Period 1	0	55	0	12	36	0	0	0	7	0	0	0	
Future Background Volume - Period 2	0	70	0	12	46	0	0	0	7	0	0	0	
Other Project Trip Assignment PM Period 1 (WCS)	0	0	0	12	0	0	0	0	7	0	0	0	Manual ent
Other Project Trip Assignment PM Period 2 (WCS)	0	0	0	12	0	0	0	0	7	0	0	0	Manual ent
Total Future Volume - Period 1	0	55	93	46	36	0	55	0	27	0	0	0	
Total Future Volume - Period 2	0	70	93	46	46	0	55	0	27	0	0	0	221

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INT 6 6720 Rd. & Rossehl Ln. Woods XingN

	Weekday AM Condition												
	Eastbound			Westbound			Northbound			Southbound			
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R	
Existing Volumes (Nov 2021) for Period 1 & 2	4	0	5	0	0	0	1	78	0	0	75	1	
Adjusted volumes - seasonal & covid Period 1 &2	4	0	5	0	0	0	1	78	0	0	75	1	
Diverted Existing Volumes for Period 1 & 2	4	0	5	0	0	0	1	16	0	0	13	1	
Trip Distribution % Inbound Period 1 & 2	0%	0%	0%	0%	0%	0%	0%	0%	12%	6%	0%	0%	
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	12%	0%	6%	0%	0%	0%	0%	0%	0%	
Driveway Enter "1" Yes, or "0" No Period 1 & 2	0	0	0	0	0	0	0	0	0	0	0	0	
Driveway Enter "1" Yes, or "0" No Period 3	0	0	0	0	0	0	0	0	0	0	0	0	
Project Trip Volume Inbound - Period 1	0	0	0	0	0	0	0	0	12	6	0	0	
Project Trip Volume Outbound - Period 1	0	0	0	37	0	19	0	0	0	0	0	0	
Project Trip Volume Total - Period 1	0	0	0	37	0	19	0	0	12	6	0	0	
Project Trip Volume Inbound - Period 2	0	0	0	0	0	0	0	0	12	6	0	0	
Project Trip Volume Outbound - Period 2	0	0	0	37	0	19	0	0	0	0	0	0	
Project Trip Volume Total - Period 2	0	0	0	37	0	19	0	0	12	6	0	0	
Growth Factor Period 1	1.000	1.000	1.000	1.125	1.125	1.125	1.000	1.125	1.125	1.125	1.125	1.000	
Growth Factor Period 2	1.000	1.000	1.000	1.423	1.423	1.423	1.000	1.423	1.423	1.423	1.423	1.000	
Future Background Volume - Period 1	4	0	5	0	0	0	1	24	0	0	17	1	
Future Background Volume - Period 2	4	0	5	0	0	0	1	29	0	0	20	1	
Other Project Trip Assignment AM Period 1 (WCS)	0	0	0	0	0	0	0	6	0	0	2	0	Manual ent
Other Project Trip Assignment AM Period 2 (WCS)	0	0	0	0	0	0	0	6	0	0	2	0	Manual ent
Total Future Volume - Period 1	4	0	5	37	0	19	1	24	12	6	17	1	
Total Future Volume - Period 2	4	0	5	37	0	19	1	29	12	6	20	1	104

	Weekday PM Condition												
	Eastbound			Westbound			Northbound			Southbound			
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R	
Existing Volumes (Nov 2021) for Period 1 & 2	1	0	0	0	0	0	1	62	0	0	72	3	
Adjusted volumes - seasonal & covid Period 1 &2	1	0	0	0	0	0	1	62	0	0	72	3	
Diverted Existing Volumes for Period 1 & 2	1	0	0	0	0	0	1	19	0	0	21	3	
Trip Distribution % Inbound Period 1 & 2	0%	0%	0%	0%	0%	0%	0%	0%	12%	6%	0%	0%	
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	12%	0%	6%	0%	0%	0%	0%	0%	0%	
Project Trip Volume Inbound - Period 1	0	0	0	0	0	0	0	0	41	21	0	0	
Project Trip Volume Outbound - Period 1	0	0	0	24	0	12	0	0	0	0	0	0	
Project Trip Volume Total - Period 1	0	0	0	24	0	12	0	0	41	21	0	0	
Project Trip Volume Inbound - Period 2	0	0	0	0	0	0	0	0	41	21	0	0	
Project Trip Volume Outbound - Period 2	0	0	0	24	0	12	0	0	0	0	0	0	
Project Trip Volume Total - Period 2	0	0	0	24	0	12	0	0	41	21	0	0	
Growth Factor Period 1	1.000	1.000	1.000	1.125	1.125	1.125	1.000	1.125	1.125	1.125	1.125	1.000	
Growth Factor Period 2	1.000	1.000	1.000	1.423	1.423	1.423	1.000	1.423	1.423	1.423	1.423	1.000	
Future Background Volume - Period 1	1	0	0	0	0	0	1	25	0	0	31	3	
Future Background Volume - Period 2	1	0	0	0	0	0	1	31	0	0	37	3	
Other Project Trip Assignment PM Period 1 (WCS)	0	0	0	0	0	0	0	4	0	0	7	0	Manual ent
Other Project Trip Assignment PM Period 2 (WCS)	0	0	0	0	0	0	0	4	0	0	7	0	Manual ent
Total Future Volume - Period 1	1	0	0	24	0	12	1	25	41	21	31	3	
Total Future Volume - Period 2	1	0	0	24	0	12	1	31	41	21	37	3	134

INT 7 Sunnyside Rd. & 6700 Rd. Woods XingN

	Weekday AM Condition											
	Eastbound			Westbound			Northbound			Southbound		
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Existing Volumes (Nov 2021) for Period 1 & 2	0	46	58	70	53	0	154	0	68	0	0	0
Adjusted volumes - seasonal & covid Period 1 &2	0	46	58	70	53	0	154	0	68	0	0	0
Diverted Existing Volumes for Period 1 & 2	10	28	66	18	39	3	154	65	12	2	45	6
Trip Distribution % Inbound Period 1 & 2	0%	18%	0%	0%	0%	0%	0%	0%	21%	0%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	21%	10%	0%	0%	0%	0%	0%	0%	0%
Driveway Enter "1" Yes, or "0" No Period 1 & 2	0	0	0	0	0	0	0	0	0	0	0	0
Driveway Enter "1" Yes, or "0" No Period 3	0	0	0	0	0	0	0	0	0	0	0	0
Project Trip Volume Inbound - Period 1	0	19	0	0	0	0	0	0	22	0	0	0
Project Trip Volume Outbound - Period 1	0	0	0	65	31	0	0	0	0	0	0	0
Project Trip Volume Total - Period 1	0	19	0	65	31	0	0	0	22	0	0	0
Project Trip Volume Inbound - Period 2	0	19	0	0	0	0	0	0	22	0	0	0
Project Trip Volume Outbound - Period 2	0	0	0	65	31	0	0	0	0	0	0	0
Project Trip Volume Total - Period 2	0	19	0	65	31	0	0	0	22	0	0	0
Growth Factor Period 1	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125
Growth Factor Period 2	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423
Future Background Volume - Period 1	11	45	74	23	82	20	173	73	15	8	51	7
Future Background Volume - Period 2	14	53	94	29	93	21	219	92	18	9	64	9
Other Project Trip Assignment AM Period 1 (WCS)	0	13	0	3	38	17	0	0	1	6	0	0
Other Project Trip Assignment AM Period 2 (WCS)	0	13	0	3	38	17	0	0	1	6	0	0
Total Future Volume - Period 1	11	64	74	88	113	20	173	73	37	8	51	7
Total Future Volume - Period 2	14	72	94	94	124	21	219	92	40	9	64	9

	Weekday PM Condition											
	Eastbound			Westbound			Northbound			Southbound		
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Existing Volumes (Nov 2021) for Period 1 & 2	0	34	160	34	31	0	82	0	40	0	0	0
Adjusted volumes - seasonal & covid Period 1 &2	0	34	160	34	31	0	82	0	40	0	0	0
Diverted Existing Volumes for Period 1 & 2	4	66	160	15	42	1	82	30	18	2	52	5
Trip Distribution % Inbound Period 1 & 2	0%	18%	0%	0%	0%	0%	0%	0%	21%	0%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	21%	10%	0%	0%	0%	0%	0%	0%	0%
Project Trip Volume Inbound - Period 1	0	62	0	0	0	0	0	0	72	0	0	0
Project Trip Volume Outbound - Period 1	0	0	0	42	20	0	0	0	0	0	0	0
Project Trip Volume Total - Period 1	0	62	0	42	20	0	0	0	72	0	0	0
Project Trip Volume Inbound - Period 2	0	62	0	0	0	0	0	0	72	0	0	0
Project Trip Volume Outbound - Period 2	0	0	0	42	20	0	0	0	0	0	0	0
Project Trip Volume Total - Period 2	0	62	0	42	20	0	0	0	72	0	0	0
Growth Factor Period 1	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125
Growth Factor Period 2	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423
Future Background Volume - Period 1	5	115	180	19	71	9	92	34	23	16	59	6
Future Background Volume - Period 2	6	135	228	23	84	9	117	43	29	17	74	7
Other Project Trip Assignment PM Period 1 (WCS)	0	41	0	2	24	8	0	0	3	14	0	0
Other Project Trip Assignment PM Period 2 (WCS)	0	41	0	2	24	8	0	0	3	14	0	0
Total Future Volume - Period 1	5	177	180	61	91	9	92	34	95	16	59	6
Total Future Volume - Period 2	6	197	228	65	104	9	117	43	101	17	74	7

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INT 8 Sunnyside Rd. & 6720 Rd. Woods XingN

	Weekday AM Condition											
	Eastbound			Westbound			Northbound			Southbound		
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Existing Volumes (Nov 2021) for Period 1 & 2	68	6	1	0	20	11	1	0	0	7	0	74
Adjusted volumes - seasonal & covid Period 1 &2	68	6	1	0	20	11	1	0	0	7	0	74
Diverted Existing Volumes for Period 1 & 2	5	10	0	0	12	11	1	0	0	2	2	9
Trip Distribution % Inbound Period 1 & 2	12%	27%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	0%	27%	0%	0%	0%	0%	0%	0%	12%
Driveway Enter "1" Yes, or "0" No Period 1 & 2	0	0	0	0	0	0	0	0	0	0	0	0
Driveway Enter "1" Yes, or "0" No Period 3	0	0	0	0	0	0	0	0	0	0	0	0
Project Trip Volume Inbound - Period 1	12	28	0	0	0	0	0	0	0	0	0	0
Project Trip Volume Outbound - Period 1	0	0	0	0	84	0	0	0	0	0	0	37
Project Trip Volume Total - Period 1	12	28	0	0	84	0	0	0	0	0	0	37
Project Trip Volume Inbound - Period 2	12	28	0	0	0	0	0	0	0	0	0	0
Project Trip Volume Outbound - Period 2	0	0	0	0	84	0	0	0	0	0	0	37
Project Trip Volume Total - Period 2	12	28	0	0	84	0	0	0	0	0	0	37
Growth Factor Period 1	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125
Growth Factor Period 2	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423
Future Background Volume - Period 1	6	30	0	0	72	18	1	0	0	4	2	10
Future Background Volume - Period 2	7	33	0	0	75	22	1	0	0	5	3	13
Other Project Trip Assignment AM Period 1 (WCS)	0	19	0	0	58	6	0	0	0	2	0	0
Other Project Trip Assignment AM Period 2 (WCS)	0	19	0	0	58	6	0	0	0	2	0	0
Total Future Volume - Period 1	18	58	0	0	156	18	1	0	0	4	2	47
Total Future Volume - Period 2	19	61	0	0	159	22	1	0	0	5	3	50

	Weekday PM Condition											
	Eastbound			Westbound			Northbound			Southbound		
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Existing Volumes (Nov 2021) for Period 1 & 2	53	12	0	0	6	9	1	0	0	11	0	60
Adjusted volumes - seasonal & covid Period 1 &2	53	12	0	0	6	9	1	0	0	11	0	60
Diverted Existing Volumes for Period 1 & 2	14	17	0	0	11	5	1	0	0	7	0	14
Trip Distribution % Inbound Period 1 & 2	12%	27%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	0%	27%	0%	0%	0%	0%	0%	0%	12%
Project Trip Volume Inbound - Period 1	41	93	0	0	0	0	0	0	0	0	0	0
Project Trip Volume Outbound - Period 1	0	0	0	0	55	0	0	0	0	0	0	24
Project Trip Volume Total - Period 1	41	93	0	0	55	0	0	0	0	0	0	24
Project Trip Volume Inbound - Period 2	41	93	0	0	0	0	0	0	0	0	0	0
Project Trip Volume Outbound - Period 2	0	0	0	0	55	0	0	0	0	0	0	24
Project Trip Volume Total - Period 2	41	93	0	0	55	0	0	0	0	0	0	24
Growth Factor Period 1	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125
Growth Factor Period 2	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423
Future Background Volume - Period 1	16	77	0	0	46	10	1	0	0	15	0	16
Future Background Volume - Period 2	20	82	0	0	50	11	1	0	0	17	0	20
Other Project Trip Assignment PM Period 1 (WCS)	0	58	0	0	34	4	0	0	0	7	0	0
Other Project Trip Assignment PM Period 2 (WCS)	0	58	0	0	34	4	0	0	0	7	0	0
Total Future Volume - Period 1	57	170	0	0	101	10	1	0	0	15	0	40
Total Future Volume - Period 2	61	175	0	0	105	11	1	0	0	17	0	44

INT 9 Sunnyside Rd & Hill St. Woods XingN

	Weekday AM Condition												
	Eastbound			Westbound			Northbound			Southbound			
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R	
Existing Volumes (Nov 2021) for Period 1 & 2		13			31								
Adjusted volumes - seasonal & covid Period 1 &2	0	13	0	0	31	0	0	0	0	0	0	0	
Diverted Existing Volumes for Period 1 & 2	0	13	0	0	31	0	0	0	0	0	0	0	
Trip Distribution % Inbound Period 1 & 2	27%	0%	0%	0%	0%	0%	0%	18%	0%	0%	0%	0%	
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	18%	27%	
Driveway Enter "1" Yes, or "0" No Period 1 & 2	0	0	0	0	0	0	0	0	0	0	0	0	
Driveway Enter "1" Yes, or "0" No Period 3	0	0	0	0	0	0	0	0	0	0	0	0	
Project Trip Volume Inbound - Period 1	28	0	0	0	0	0	0	19	0	0	0	0	
Project Trip Volume Outbound - Period 1	0	0	0	0	0	0	0	0	0	0	56	84	
Project Trip Volume Total - Period 1	28	0	0	0	0	0	0	19	0	0	56	84	
Project Trip Volume Inbound - Period 2	28	0	0	0	0	0	0	19	0	0	0	0	
Project Trip Volume Outbound - Period 2	0	0	0	0	0	0	0	0	0	0	56	84	
Project Trip Volume Total - Period 2	28	0	0	0	0	0	0	19	0	0	56	84	
Growth Factor Period 1	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	
Growth Factor Period 2	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	
Future Background Volume - Period 1	0	15	21	0	35	0	64	5	0	0	2	0	
Future Background Volume - Period 2	0	18	21	0	44	0	64	5	0	0	2	0	
Other Project Trip Assignment AM Period 1 (WCS)	0	0	21	0	0	0	64	5	0	0	2	0	Manual ent
Other Project Trip Assignment AM Period 2 (WCS)	0	0	21	0	0	0	64	5	0	0	2	0	Manual ent
Total Future Volume - Period 1	28	15	21	0	35	0	64	24	0	0	58	84	
Total Future Volume - Period 2	28	18	21	0	44	0	64	24	0	0	58	84	167

	Weekday PM Condition												
	Eastbound			Westbound			Northbound			Southbound			
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R	
Existing Volumes (Nov 2021) for Period 1 & 2		23			15								
Adjusted volumes - seasonal & covid Period 1 &2	0	23	0	0	15	0	0	0	0	0	0	0	
Diverted Existing Volumes for Period 1 & 2	0	23	0	0	15	0	0	0	0	0	0	0	
Trip Distribution % Inbound Period 1 & 2	27%	0%	0%	0%	0%	0%	0%	18%	0%	0%	0%	0%	
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	18%	27%	
Project Trip Volume Inbound - Period 1	93	0	0	0	0	0	0	62	0	0	0	0	
Project Trip Volume Outbound - Period 1	0	0	0	0	0	0	0	0	0	0	36	55	
Project Trip Volume Total - Period 1	93	0	0	0	0	0	0	62	0	0	36	55	
Project Trip Volume Inbound - Period 2	93	0	0	0	0	0	0	62	0	0	0	0	
Project Trip Volume Outbound - Period 2	0	0	0	0	0	0	0	0	0	0	36	55	
Project Trip Volume Total - Period 2	93	0	0	0	0	0	0	62	0	0	36	55	
Growth Factor Period 1	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	
Growth Factor Period 2	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	
Future Background Volume - Period 1	0	26	65	0	17	0	38	7	0	0	12	0	
Future Background Volume - Period 2	0	33	65	0	21	0	38	7	0	0	12	0	
Other Project Trip Assignment PM Period 1 (WCS)	0	0	65	0	0	0	38	7	0	0	12	0	Manual ent
Other Project Trip Assignment PM Period 2 (WCS)	0	0	65	0	0	0	38	7	0	0	12	0	Manual ent
Total Future Volume - Period 1	93	26	65	0	17	0	38	69	0	0	48	55	
Total Future Volume - Period 2	93	33	65	0	21	0	38	69	0	0	48	55	220

INT 10 Niagara Rd & Hillcrest St. Woods XingN

	Weekday AM Condition											
	Eastbound			Westbound			Northbound			Southbound		
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Existing Volumes (Feb 2021) for Period 1 & 2	54	129	26	24	199	87	14	94	7	50	164	103
Adjusted volumes - seasonal & covid Period 1 &2	57	135	27	25	209	91	15	99	7	53	172	108
Diverted Existing Volumes for Period 1 & 2	57	135	27	25	209	91	15	99	7	53	172	108
Trip Distribution % Inbound Period 1 & 2	0%	18%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	2%	18%	0%	0%	0%	0%	0%	0%	0%
Driveway Enter "1" Yes, or "0" No Period 1 & 2	0	0	0	0	0	0	0	0	0	0	0	0
Driveway Enter "1" Yes, or "0" No Period 3	0	0	0	0	0	0	0	0	0	0	0	0
Project Trip Volume Inbound - Period 1	0	19	0	0	0	0	0	0	2	0	0	0
Project Trip Volume Outbound - Period 1	0	0	0	6	56	0	0	0	0	0	0	0
Project Trip Volume Total - Period 1	0	19	0	6	56	0	0	0	2	0	0	0
Project Trip Volume Inbound - Period 2	0	19	0	0	0	0	0	0	2	0	0	0
Project Trip Volume Outbound - Period 2	0	0	0	6	56	0	0	0	0	0	0	0
Project Trip Volume Total - Period 2	0	19	0	6	56	0	0	0	2	0	0	0
Growth Factor Period 1	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125
Growth Factor Period 2	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423
Future Background Volume - Period 1	64	172	30	36	296	105	17	111	11	61	194	122
Future Background Volume - Period 2	81	212	38	44	358	132	21	141	13	76	245	154
Other Project Trip Assignment AM Period 1 (WCS)	0	20	0	8	61	3	0	0	3	1	0	0
Other Project Trip Assignment AM Period 2 (WCS)	0	20	0	8	61	3	0	0	3	1	0	0
Total Future Volume - Period 1	64	191	30	42	352	105	17	111	13	61	194	122
Total Future Volume - Period 2	81	231	38	50	414	132	21	141	15	76	245	154

	Weekday PM Condition											
	Eastbound			Westbound			Northbound			Southbound		
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Existing Volumes (Feb 2021) for Period 1 & 2	79	170	26	23	155	58	22	206	35	76	128	73
Adjusted volumes - seasonal & covid Period 1 &2	91	196	30	26	178	67	25	237	40	87	147	84
Diverted Existing Volumes for Period 1 & 2	91	196	30	26	178	67	25	237	40	87	147	84
Trip Distribution % Inbound Period 1 & 2	0%	18%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	2%	18%	0%	0%	0%	0%	0%	0%	0%
Project Trip Volume Inbound - Period 1	0	62	0	0	0	0	0	0	7	0	0	0
Project Trip Volume Outbound - Period 1	0	0	0	4	36	0	0	0	0	0	0	0
Project Trip Volume Total - Period 1	0	62	0	4	36	0	0	0	7	0	0	0
Project Trip Volume Inbound - Period 2	0	62	0	0	0	0	0	0	7	0	0	0
Project Trip Volume Outbound - Period 2	0	0	0	4	36	0	0	0	0	0	0	0
Project Trip Volume Total - Period 2	0	62	0	4	36	0	0	0	7	0	0	0
Growth Factor Period 1	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125
Growth Factor Period 2	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423
Future Background Volume - Period 1	102	290	34	34	240	77	28	267	54	101	165	95
Future Background Volume - Period 2	129	348	43	42	293	97	36	337	66	127	209	120
Other Project Trip Assignment PM Period 1 (WCS)	0	69	0	5	40	2	0	0	9	3	0	0
Other Project Trip Assignment PM Period 2 (WCS)	0	69	0	5	40	2	0	0	9	3	0	0
Total Future Volume - Period 1	102	352	34	38	276	77	28	267	61	101	165	95
Total Future Volume - Period 2	129	410	43	46	329	97	36	337	73	127	209	120

INT 11 Niagara Rd & 6700 Rd. Woods XingN

	Weekday AM Condition											
	Eastbound			Westbound			Northbound			Southbound		
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Existing Volumes (Feb 2021) for Period 1 & 2	14	24	42	6	96	66	94	105	5	27	58	31
Adjusted volumes - seasonal & covid Period 1 &2	15	25	44	6	101	69	99	110	5	28	61	33
Diverted Existing Volumes for Period 1 & 2	15	25	44	6	101	69	99	110	5	28	61	33
Trip Distribution % Inbound Period 1 & 2	4%	16%	0%	0%	0%	0%	0%	17%	2%	0%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	2%	16%	0%	0%	0%	0%	0%	17%	4%
Driveway Enter "1" Yes, or "0" No Period 1 & 2	0	0	0	0	0	0	0	0	0	0	0	0
Driveway Enter "1" Yes, or "0" No Period 3	0	0	0	0	0	0	0	0	0	0	0	0
Project Trip Volume Inbound - Period 1	4	16	0	0	0	0	0	18	2	0	0	0
Project Trip Volume Outbound - Period 1	0	0	0	6	50	0	0	0	0	0	53	12
Project Trip Volume Total - Period 1	4	16	0	6	50	0	0	18	2	0	53	12
Project Trip Volume Inbound - Period 2	4	16	0	0	0	0	0	18	2	0	0	0
Project Trip Volume Outbound - Period 2	0	0	0	6	50	0	0	0	0	0	53	12
Project Trip Volume Total - Period 2	4	16	0	6	50	0	0	18	2	0	53	12
Growth Factor Period 1	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125
Growth Factor Period 2	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423
Future Background Volume - Period 1	17	52	50	16	186	81	111	124	9	33	69	37
Future Background Volume - Period 2	21	60	63	18	216	101	141	157	10	41	87	47
Other Project Trip Assignment AM Period 1 (WCS)	0	24	0	9	72	3	0	0	3	1	0	0
Other Project Trip Assignment AM Period 2 (WCS)	0	24	0	9	72	3	0	0	3	1	0	0
Total Future Volume - Period 1	21	68	50	22	236	81	111	142	11	33	122	49
Total Future Volume - Period 2	25	76	63	24	266	101	141	175	12	41	140	59

	Weekday PM Condition											
	Eastbound			Westbound			Northbound			Southbound		
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Existing Volumes (Feb 2021) for Period 1 & 2	25	72	73	5	38	24	54	83	4	66	125	16
Adjusted volumes - seasonal & covid Period 1 &2	29	83	84	6	44	28	62	95	5	76	144	18
Diverted Existing Volumes for Period 1 & 2	29	83	84	6	44	28	62	95	5	76	144	18
Trip Distribution % Inbound Period 1 & 2	4%	16%	0%	0%	0%	0%	0%	17%	2%	0%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	2%	16%	0%	0%	0%	0%	0%	17%	4%
Project Trip Volume Inbound - Period 1	14	55	0	0	0	0	0	58	7	0	0	0
Project Trip Volume Outbound - Period 1	0	0	0	4	32	0	0	0	0	0	34	8
Project Trip Volume Total - Period 1	14	55	0	4	32	0	0	58	7	0	34	8
Project Trip Volume Inbound - Period 2	14	55	0	0	0	0	0	58	7	0	0	0
Project Trip Volume Outbound - Period 2	0	0	0	4	32	0	0	0	0	0	34	8
Project Trip Volume Total - Period 2	14	55	0	4	32	0	0	58	7	0	34	8
Growth Factor Period 1	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125
Growth Factor Period 2	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423	1.423
Future Background Volume - Period 1	33	174	95	13	97	34	70	107	16	89	162	20
Future Background Volume - Period 2	41	199	120	15	110	42	88	135	17	111	205	26
Other Project Trip Assignment PM Period 1 (WCS)	0	81	0	6	47	2	0	0	10	3	0	0
Other Project Trip Assignment PM Period 2 (WCS)	0	81	0	6	47	2	0	0	10	3	0	0
Total Future Volume - Period 1	47	229	95	17	129	34	70	165	23	89	196	28
Total Future Volume - Period 2	55	254	120	19	142	42	88	193	24	111	239	34

12/13

INT 12 Niagara Rd & Hill St.

	Weekday AM Condition											
	Eastbound			Westbound			Northbound			Southbound		
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Existing Volumes (Feb 2021) for Period 1 & 2	2	5	9	3	6	0	20	1	1	0	4	10
Adjusted volumes - seasonal & covid Period 1 &2	2	5	9	3	6	0	21	1	1	0	4	11
Diverted Existing Volumes for Period 1 & 2	2	5	9	3	6	0	21	1	1	0	4	11
Trip Distribution % Inbound Period 1 & 2	18%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	18%
Driveway Enter "1" Yes, or "0" No Period 1 & 2	0	0	0	0	0	0	0	0	0	0	0	0
Driveway Enter "1" Yes, or "0" No Period 3	0	0	0	0	0	0	0	0	0	0	0	0
Project Trip Volume Inbound - Period 1	19	0	0	0	0	0	0	0	0	0	0	0
Project Trip Volume Outbound - Period 1	0	0	0	0	0	0	0	0	0	0	0	56
Project Trip Volume Total - Period 1	19	0	0	0	0	0	0	0	0	0	0	56
Project Trip Volume Inbound - Period 2	19	0	0	0	0	0	0	0	0	0	0	0
Project Trip Volume Outbound - Period 2	0	0	0	0	0	0	0	0	0	0	0	56
Project Trip Volume Total - Period 2	19	0	0	0	0	0	0	0	0	0	0	56
Growth Factor Period 1	1.125	1.000	1.125	1.000	1.000	1.000	1.125	1.125	1.000	1.000	1.125	1.125
Growth Factor Period 2	1.423	1.000	1.423	1.000	1.000	1.000	1.423	1.423	1.000	1.000	1.423	1.423
Future Background Volume - Period 1	30	5	10	3	6	0	24	1	1	0	5	96
Future Background Volume - Period 2	31	5	13	3	6	0	30	1	1	0	6	100
Other Project Trip Assignment AM Period 1 (WCS)	28	0	0	0	0	0	0	0	0	0	0	84
Other Project Trip Assignment AM Period 2 (WCS)	28	0	0	0	0	0	0	0	0	0	0	84
Total Future Volume - Period 1	49	5	10	3	6	0	24	1	1	0	5	152
Total Future Volume - Period 2	50	5	13	3	6	0	30	1	1	0	6	156

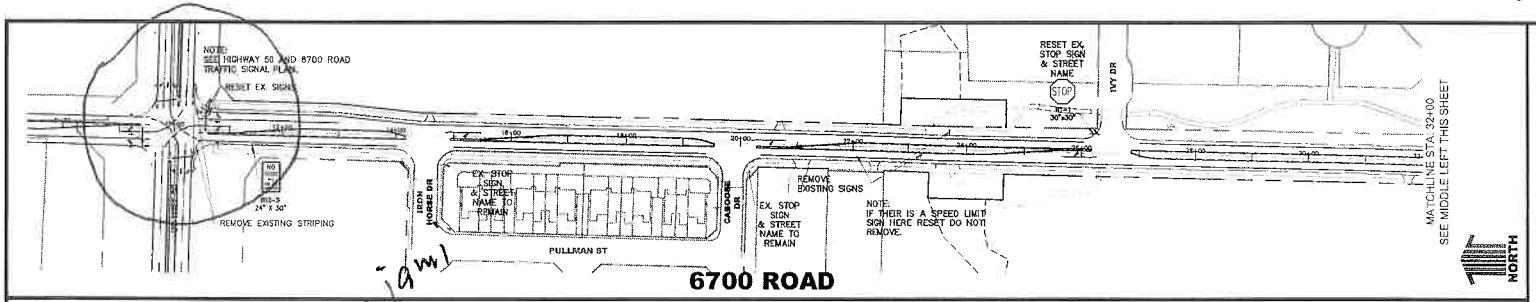
	Weekday PM Condition											
	Eastbound			Westbound			Northbound			Southbound		
Description	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Existing Volumes (Feb 2021) for Period 1 & 2	6	4	22	1	8	0	17	3	1	0	2	2
Adjusted volumes - seasonal & covid Period 1 &2	7	5	25	1	9	0	20	3	1	0	2	2
Diverted Existing Volumes for Period 1 & 2	7	5	25	1	9	0	20	3	1	0	2	2
Trip Distribution % Inbound Period 1 & 2	18%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	18%
Project Trip Volume Inbound - Period 1	62	0	0	0	0	0	0	0	0	0	0	0
Project Trip Volume Outbound - Period 1	0	0	0	0	0	0	0	0	0	0	0	36
Project Trip Volume Total - Period 1	62	0	0	0	0	0	0	0	0	0	0	36
Project Trip Volume Inbound - Period 2	62	0	0	0	0	0	0	0	0	0	0	0
Project Trip Volume Outbound - Period 2	0	0	0	0	0	0	0	0	0	0	0	36
Project Trip Volume Total - Period 2	62	0	0	0	0	0	0	0	0	0	0	36
Growth Factor Period 1	1.125	1.000	1.125	1.000	1.000	1.000	1.125	1.125	1.000	1.000	1.125	1.125
Growth Factor Period 2	1.423	1.000	1.423	1.000	1.000	1.000	1.423	1.423	1.000	1.000	1.423	1.423
Future Background Volume - Period 1	103	5	28	1	9	0	23	3	1	0	2	58
Future Background Volume - Period 2	105	5	36	1	9	0	28	4	1	0	3	59
Other Project Trip Assignment PM Period 1 (WCS)	95	0	0	0	0	0	0	0	0	0	0	56
Other Project Trip Assignment PM Period 2 (WCS)	95	0	0	0	0	0	0	0	0	0	0	56
Total Future Volume - Period 1	165	5	28	1	9	0	23	3	1	0	2	94
Total Future Volume - Period 2	167	5	36	1	9	0	28	4	1	0	3	95

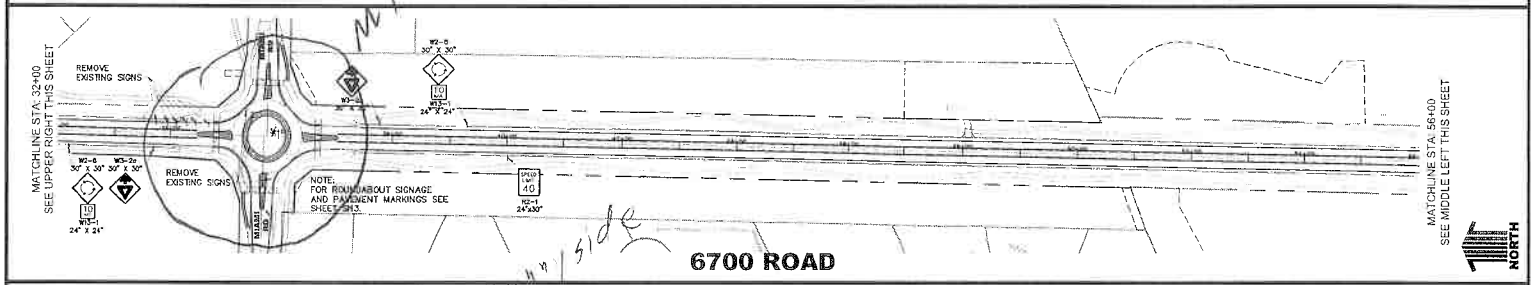
13/13

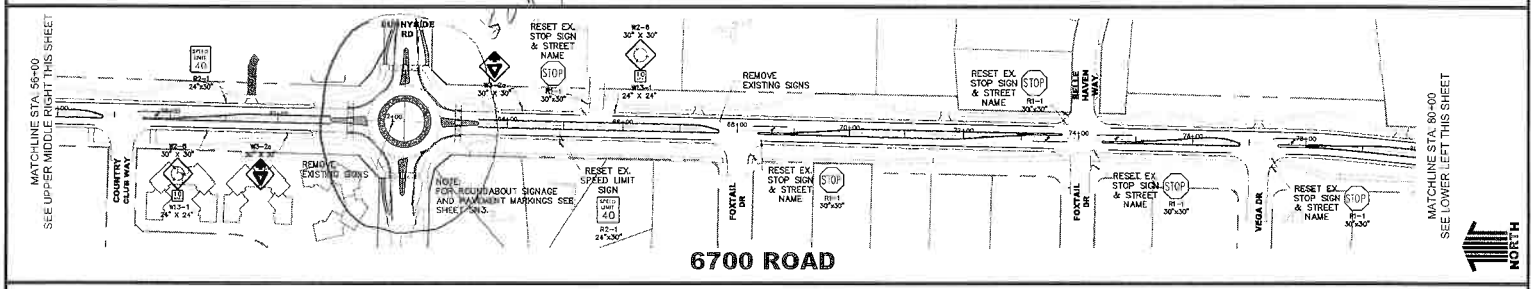
6700 Road Construction Plan Excerpts

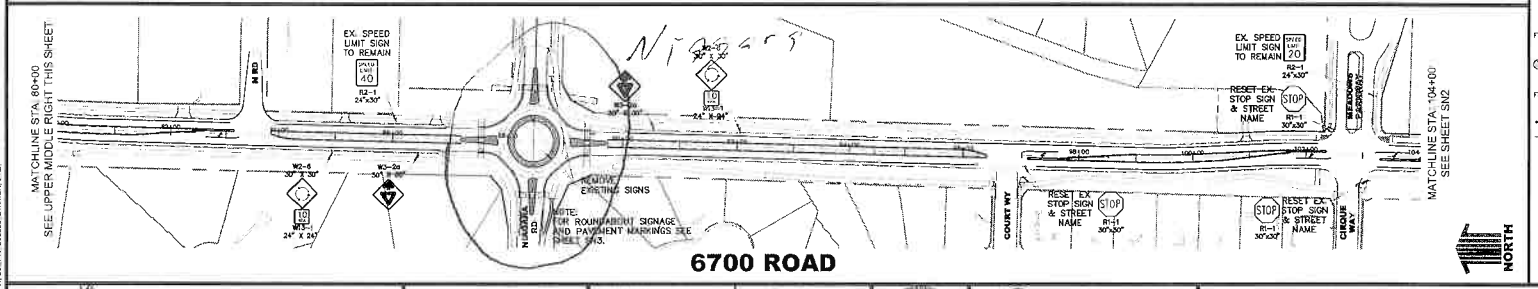
V5-50

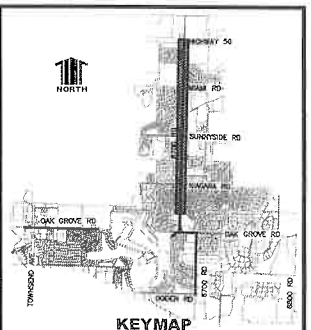
2042 Geom. 6700 Rd







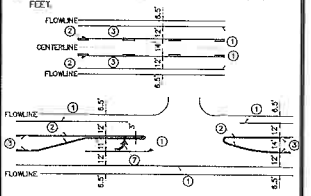




KEYMAP

NOTES

1. ALL SIGNING AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) CITY OF MONTROSE, AND CDOT S STANDARDS LATEST EDITION.
2. TRAFFIC LANE MARKINGS–MATERIAL SHALL BE REFLECTORIZED THEROPLASTIC MARKING MATERIAL UNLESS OTHERWISE SPECIFIED.
3. CROSSWALK MARKINGS–MATERIAL SHALL BE REFLECTORIZED PREFORMED THERMO–PLASTIC TAPE, 60 MIL. MIN. FULL WIDTH WITHOUT SEAMS UNLESS OTHERWISE SPECIFIED.
4. ANY FINAL PAVEMENT MARKING QUANTITIES SHALL INCLUDE REMOVAL OF ANY CONFLICTING, PREVIOUS OR DETOUR MARKINGS AS NECESSARY.
5. ALL TEMPORARY OR DETOUR CONSTRUCTION MARKING SHALL BE REFLECTORIZED "STAMARK", 3M COMPANY, DETOUR GRADE PAVEMENT MARKING TAPE OR APPROVED EQUAL AND SHALL BE INSTALLED TO MANUFACTURERS SPECIFICATIONS. ALL DETOUR MARKING QUANTITIES SHALL INCLUDE TEMPORARY PAINT MARKINGS IF NECESSARY UNTIL DETOUR GRADE TAPE CAN BE INSTALLED TO MEET SPECIFICATIONS, AND SHALL INCLUDE REPAINTING OR RETAPING AS NECESSARY TO KEEP MARKINGS IN A FRESH, VISIBLE CONDITION AS REQUIRED BY THE PROJECT ENGINEER.
6. ALL REMOVALS SHALL BE BY GRINDING, SANDBLASTING OR CHEMICAL METHODS PROVIDED THAT THE PAVEMENT SURFACE SHALL NOT BE MATERIALLY DAMAGED. THE PAVEMENT MARKINGS SHALL BE REMOVED TO THE EXTENT THAT THEY SHALL NOT BE VISIBLE UNDER DAY OR NIGHT CONDITIONS. BLACK OUT PAINT MAY ONLY BE USED WHEN APPROVED BY THE PROJECT ENGINEER FOR SHORT TERMS, USUALLY LESS THAN 2 WEEKS.
7. ATTACH SIGNS TO LIGHT POLES WHENEVER WITHIN 5 FEET.



TYPICAL PAVEMENT MARKINGS

1. 6" SOLID WHITE RIGHT EDGE LINE OR TURN LINE
2. 4" DOUBLE SOLID YELLOW LINE
3. 4" SKIP YELLOW LANE LINE, 10' LINE, 30' GAP
4. 24"x8' CROSSWALK
5. 6" DASHED WHITE LINE 3' DASH 9' SPACE
6. 24" SOLID WHITE STRIPE (STOP LINE)
7. TURN ARROW
8. 12" DASHED WHITE LINE – 3' DASH – 3' SPACE
9. SHARK TEETH

DATE	REVISION DESCRIPTION

MONTROSE

21SN01.dwg
MONTROSE 6700 & OAK 2
CITY OF MONTROSE
1 inch = 100 ft Horizontal
KH | JAH | TAJ

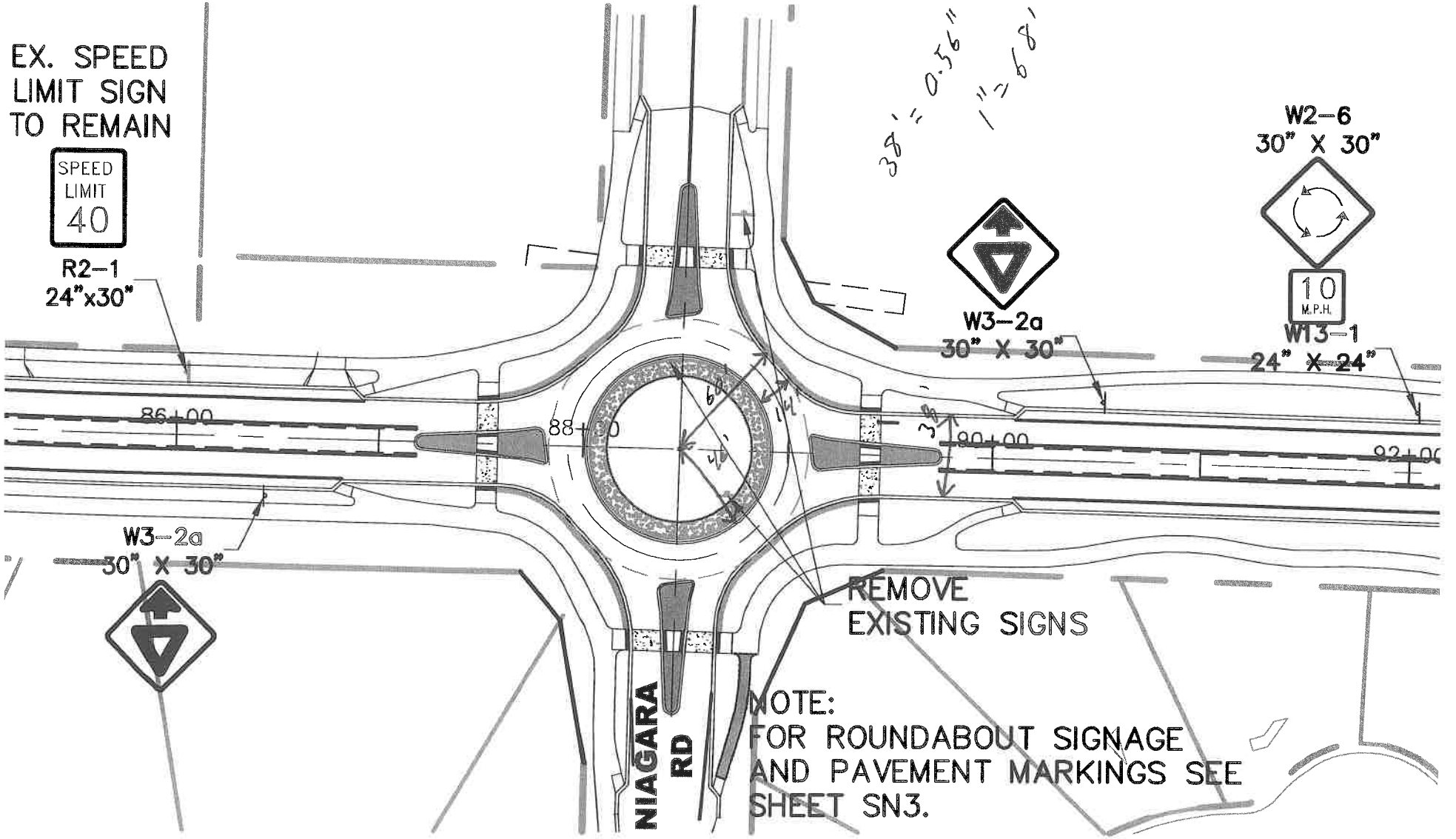
Calibre
Construction Management Civil Engineering Surveying

CITY OF MONTROSE
6700 AND EAST OAK GROVE ROADS
PAVEMENT MARKINGS AND SIGNAGE PLANS

SHEET SN1 | 93 / 144
DATE FEBRUARY 4, 2011

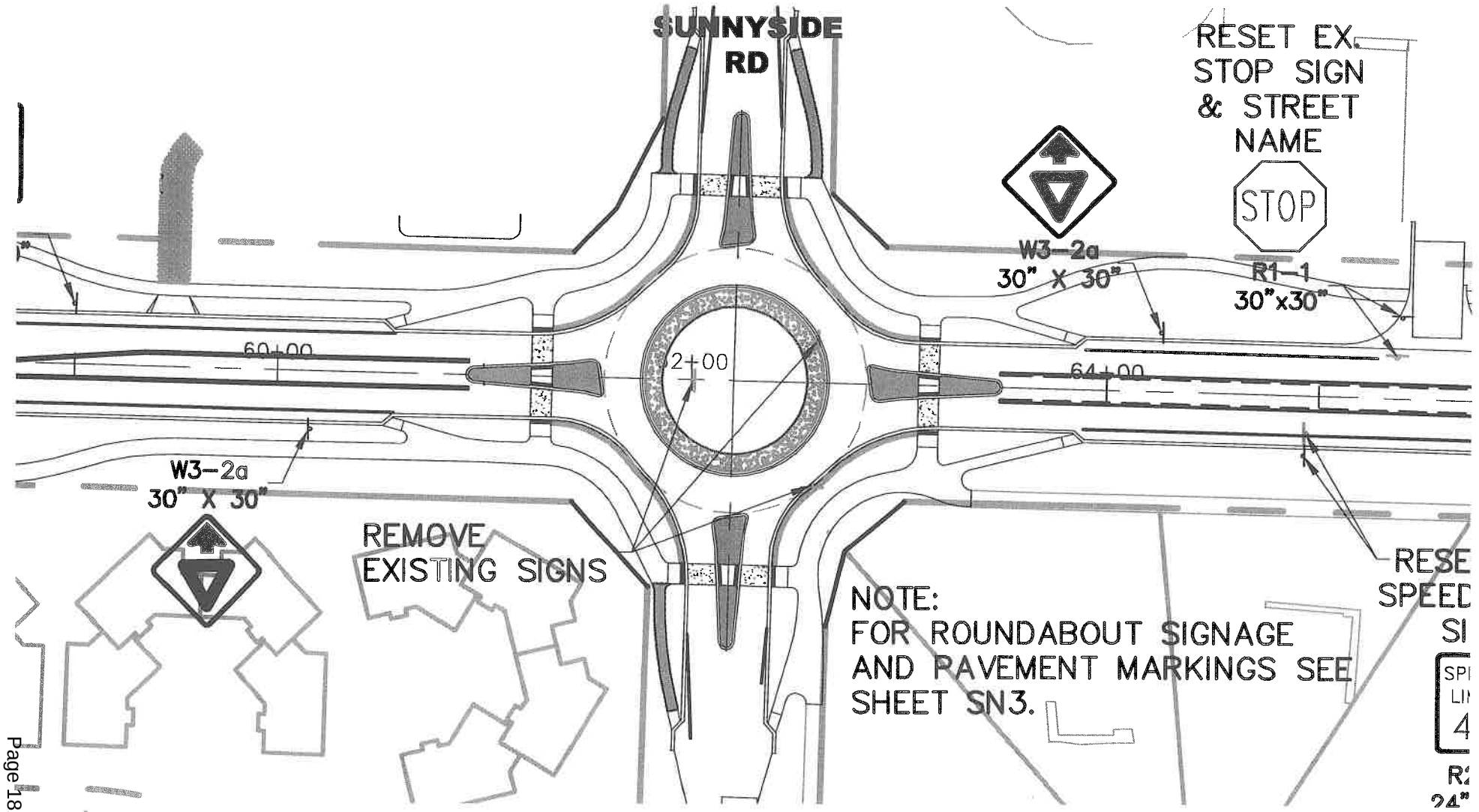
PATH: J:\MONTROSE\6700&OAKGROVE\01-FINAL\01SN01.DWG
PLOT DATE: 2/4/2011 - 2:00 PM
XREFS: 20SN 20PPN 20EPN 20sign 21HSEN 21ID

5/5

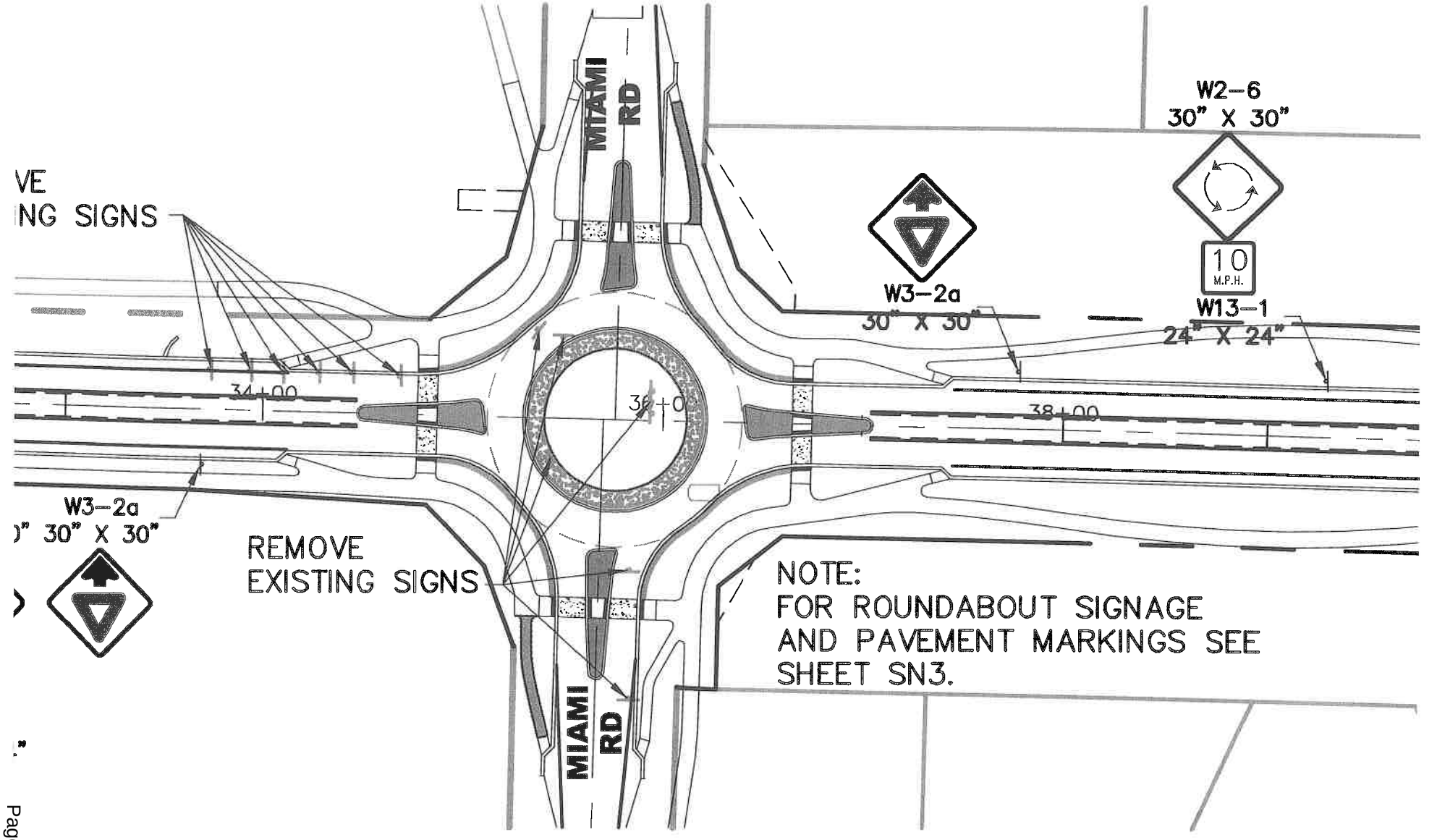

EX. SPEED LIMIT SIGN TO REMAIN
SPEED LIMIT 40
R2-1
24"x30"
W3-2a
30" X 30"
W2-6
30" X 30"
10 M.P.H.
W13-1
24" X 24"
W3-2a
30" X 30"
86+00
88+00
80+00
82+00
38' = 0.56"
1" = 68'
REMOVE EXISTING SIGNS
NIAGARA RD
NOTE:
FOR ROUNDABOUT SIGNAGE AND PAVEMENT MARKINGS SEE SHEET SN3.

6700

2/5

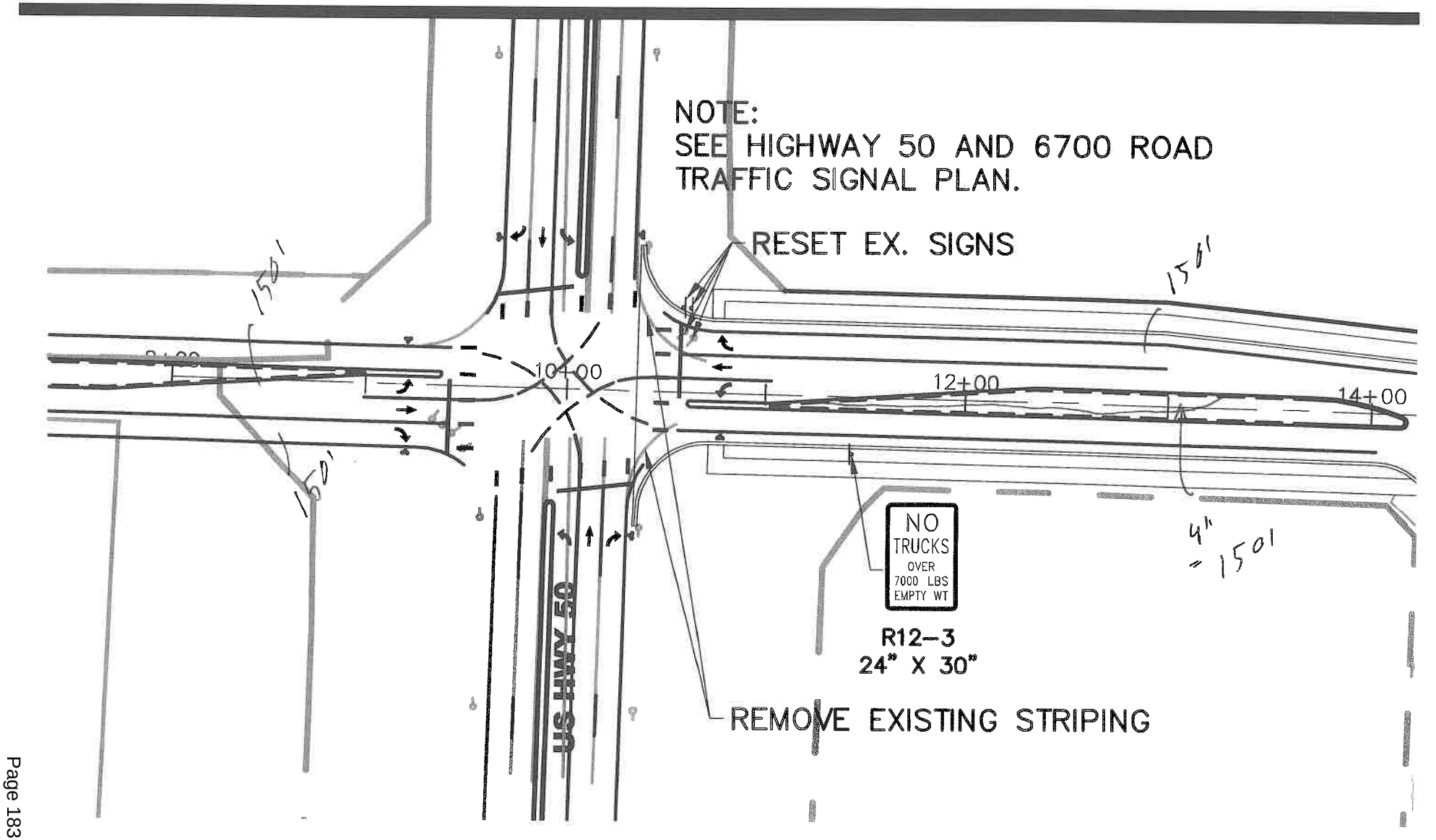

SUNNYSIDE RD
RESET EX. STOP SIGN & STREET NAME
STOP
W3-2a
30" X 30"
R1-1
30"x30"
60+00
2+00
64+00
W3-2a
30" X 30"
REMOVE EXISTING SIGNS
NOTE:
FOR ROUNDABOUT SIGNAGE AND PAVEMENT MARKINGS SEE SHEET SN3.

3/5


VE
NG SIGNS
MIAMI RD
W2-6
30" X 30"
10
M.P.H.
W13-1
24" X 24"
W3-2a
30" X 30"
34+00
36+00
38+00
W3-2a
30" X 30"
REMOVE
EXISTING SIGNS
NOTE:
FOR ROUNDABOUT SIGNAGE
AND PAVEMENT MARKINGS SEE
SHEET SN3.
MIAMI RD

4/5

2.8" = 100'
1" = 35'


NOTE:
SEE HIGHWAY 50 AND 6700 ROAD
TRAFFIC SIGNAL PLAN.
RESET EX. SIGNS
150'
150'
150'
10+00
12+00
14+00
NO
TRUCKS
OVER
7000 LBS
EMPTY WT
R12-3
24" X 30"
4" = 150'
US HWY 50
REMOVE EXISTING STRIPING

5/5

Intersection Operational Analysis (Sorted By Intersection)

Intersection

Int Delay, s/veh 7.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	123	157	28	2	169	12	41	77	3	7	46	159
Future Vol, veh/h	123	157	28	2	169	12	41	77	3	7	46	159
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	425	-	450	450	-	425	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	11	2	2	11	2	2	2	2	2	2	2
Mvmt Flow	134	171	30	2	184	13	45	84	3	8	50	173

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	202	0	0	206	0	0	755	650	181	696	667	194
Stage 1	-	-	-	-	-	-	444	444	-	193	193	-
Stage 2	-	-	-	-	-	-	311	206	-	503	474	-
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	1370	-	-	1365	-	-	325	388	862	356	380	847
Stage 1	-	-	-	-	-	-	593	575	-	809	741	-
Stage 2	-	-	-	-	-	-	699	731	-	551	558	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1363	-	-	1359	-	-	210	346	854	265	339	839
Mov Cap-2 Maneuver	-	-	-	-	-	-	210	346	-	265	339	-
Stage 1	-	-	-	-	-	-	532	516	-	726	737	-
Stage 2	-	-	-	-	-	-	514	727	-	413	501	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.2	0.1	21.2	12.2
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	210	346	854	1363	-	-	1359	-	-	265	339	839
HCM Lane V/C Ratio	0.212	0.242	0.004	0.098	-	-	0.002	-	-	0.029	0.147	0.206
HCM Control Delay (s)	26.7	18.7	9.2	7.9	-	-	7.7	-	-	19	17.4	10.4
HCM Lane LOS	D	C	A	A	-	-	A	-	-	C	C	B
HCM 95th %tile Q(veh)	0.8	0.9	0	0.3	-	-	0	-	-	0.1	0.5	0.8

TnT #1

Intersection

Int Delay, s/veh 10.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	123	157	39	2	169	12	75	136	3	7	66	159
Future Vol, veh/h	123	157	39	2	169	12	75	136	3	7	66	159
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	425	-	450	450	-	425	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	11	2	2	11	2	2	2	2	2	2	2
Mvmt Flow	134	171	42	2	184	13	82	148	3	8	72	173

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	202	0	0	218	0	0	766	650	181	734	679	194
Stage 1	-	-	-	-	-	-	444	444	-	193	193	-
Stage 2	-	-	-	-	-	-	322	206	-	541	486	-
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	1370	-	-	1352	-	-	320	388	862	336	374	847
Stage 1	-	-	-	-	-	-	593	575	-	809	741	-
Stage 2	-	-	-	-	-	-	690	731	-	525	551	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1363	-	-	1346	-	-	195	346	854	205	334	839
Mov Cap-2 Maneuver	-	-	-	-	-	-	195	346	-	205	334	-
Stage 1	-	-	-	-	-	-	532	516	-	726	737	-
Stage 2	-	-	-	-	-	-	491	727	-	335	494	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.1	0.1	27.3	13.1
HCM LOS			D	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	195	346	854	1363	-	-	1346	-	-	205	334	839
HCM Lane V/C Ratio	0.418	0.427	0.004	0.098	-	-	0.002	-	-	0.037	0.215	0.206
HCM Control Delay (s)	36.1	22.9	9.2	7.9	-	-	7.7	-	-	23.2	18.7	10.4
HCM Lane LOS	E	C	A	A	-	-	A	-	-	C	C	B
HCM 95th %tile Q(veh)	1.9	2.1	0	0.3	-	-	0	-	-	0.1	0.8	0.8

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	65	177	71	1	87	10	25	23	3	1	32	43
Future Vol, veh/h	65	177	71	1	87	10	25	23	3	1	32	43
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	425	-	450	450	-	425	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	11	2	2	11	2	2	2	2	2	2	2
Mvmt Flow	71	192	77	1	95	11	27	25	3	1	35	47

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	111	0	0	274	0	0	488	452	202	494	518	105
Stage 1	-	-	-	-	-	-	339	339	-	102	102	-
Stage 2	-	-	-	-	-	-	149	113	-	392	416	-
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	1479	-	-	1289	-	-	490	503	839	486	462	949
Stage 1	-	-	-	-	-	-	676	640	-	904	811	-
Stage 2	-	-	-	-	-	-	854	802	-	633	592	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1472	-	-	1283	-	-	417	474	831	443	435	940
Mov Cap-2 Maneuver	-	-	-	-	-	-	417	474	-	443	435	-
Stage 1	-	-	-	-	-	-	640	606	-	856	806	-
Stage 2	-	-	-	-	-	-	772	797	-	573	561	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.6	0.1	13.4	11.2
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	417	474	831	1472	-	-	1283	-	-	443	435	940
HCM Lane V/C Ratio	0.065	0.053	0.004	0.048	-	-	0.001	-	-	0.002	0.08	0.05
HCM Control Delay (s)	14.2	13	9.3	7.6	-	-	7.8	-	-	13.1	14	9
HCM Lane LOS	B	B	A	A	-	-	A	-	-	B	B	A
HCM 95th %tile Q(veh)	0.2	0.2	0	0.2	-	-	0	-	-	0	0.3	0.2

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	65	177	140	1	87	10	65	43	3	1	66	43
Future Vol, veh/h	65	177	140	1	87	10	65	43	3	1	66	43
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	425	-	450	450	-	425	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	11	2	2	11	2	2	2	2	2	2	2
Mvmt Flow	71	192	152	1	95	11	71	47	3	1	72	47

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	111	0	0	349	0	0	506	452	202	542	593	105
Stage 1	-	-	-	-	-	-	339	339	-	102	102	-
Stage 2	-	-	-	-	-	-	167	113	-	440	491	-
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	1479	-	-	1210	-	-	477	503	839	451	418	949
Stage 1	-	-	-	-	-	-	676	640	-	904	811	-
Stage 2	-	-	-	-	-	-	835	802	-	596	548	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1472	-	-	1204	-	-	372	474	831	396	394	940
Mov Cap-2 Maneuver	-	-	-	-	-	-	372	474	-	396	394	-
Stage 1	-	-	-	-	-	-	640	606	-	856	806	-
Stage 2	-	-	-	-	-	-	719	797	-	519	519	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.3	0.1	15.3	13.4
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	372	474	831	1472	-	-	1204	-	-	396	394	940
HCM Lane V/C Ratio	0.19	0.099	0.004	0.048	-	-	0.001	-	-	0.003	0.182	0.05
HCM Control Delay (s)	16.9	13.4	9.3	7.6	-	-	8	-	-	14.1	16.2	9
HCM Lane LOS	C	B	A	A	-	-	A	-	-	B	C	A
HCM 95th %tile Q(veh)	0.7	0.3	0	0.2	-	-	0	-	-	0	0.7	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	166	35	3	180	16	51	93	4	9	56	201
Future Volume (veh/h)	155	166	35	3	180	16	51	93	4	9	56	201
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.99		0.99	0.99		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	
Adj Sat Flow, veh/h/ln	1870	1737	1870	1870	1737	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	168	180	38	3	196	17	55	101	4	10	61	218
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	11	2	2	11	2	2	2	2	2	2	2
Cap, veh/h	625	627	569	632	627	569	562	496	416	584	496	416
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	1163	1737	1574	1158	1737	1574	1093	1870	1570	1279	1870	1570
Grp Volume(v), veh/h	168	180	38	3	196	17	55	101	4	10	61	218
Grp Sat Flow(s),veh/h/ln	1163	1737	1574	1158	1737	1574	1093	1870	1570	1279	1870	1570
Q Serve(g_s), s	2.9	1.8	0.4	0.0	2.0	0.2	1.0	1.0	0.0	0.1	0.6	2.9
Cycle Q Clear(g_c), s	4.9	1.8	0.4	1.8	2.0	0.2	1.6	1.0	0.0	1.2	0.6	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	625	627	569	632	627	569	562	496	416	584	496	416
V/C Ratio(X)	0.27	0.29	0.07	0.00	0.31	0.03	0.10	0.20	0.01	0.02	0.12	0.52
Avail Cap(c_a), veh/h	2886	4004	3628	2882	4004	3628	2338	3534	2967	2663	3534	2967
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	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	7.3	5.5	5.0	6.1	5.5	5.0	7.3	6.9	6.5	7.3	6.7	7.6
Incr Delay (d2), s/veh	0.2	0.2	0.0	0.0	0.3	0.0	0.1	0.2	0.0	0.0	0.1	1.0
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	0.2	0.1	0.0	0.0	0.1	0.0	0.1	0.2	0.0	0.0	0.1	0.6
Unsig. Movement Delay, s/veh												Free
LnGrp Delay(d),s/veh	7.5	5.7	5.1	6.1	5.8	5.0	7.4	7.1	6.5	7.3	6.8	8.6
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		386			216			160			289	
Approach Delay, s/veh		6.4			5.8			7.2			8.2	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	10.9	13.2	10.9	13.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	45.5	55.5	45.5	55.5
Max Q Clear Time (g_c+I1), s	3.6	6.9	4.9	4.0
Green Ext Time (p_c), s	0.8	1.6	1.1	1.0

Intersection Summary	
HCM 6th Ctrl Delay	6.9
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	166	46	3	180	16	85	152	4	9	76	201
Future Volume (veh/h)	155	166	46	3	180	16	85	152	4	9	76	201
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.99		0.99	0.99		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	
Adj Sat Flow, veh/h/ln	1870	1737	1870	1870	1737	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	168	180	50	3	196	17	92	165	4	10	83	218
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	11	2	2	11	2	2	2	2	2	2	2
Cap, veh/h	622	628	569	626	628	569	547	502	421	535	502	421
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	1163	1737	1574	1145	1737	1574	1072	1870	1570	1208	1870	1570
Grp Volume(v), veh/h	168	180	50	3	196	17	92	165	4	10	83	218
Grp Sat Flow(s),veh/h/ln	1163	1737	1574	1145	1737	1574	1072	1870	1570	1208	1870	1570
Q Serve(g_s), s	3.0	1.8	0.5	0.0	2.0	0.2	1.7	1.7	0.0	0.2	0.8	2.9
Cycle Q Clear(g_c), s	4.9	1.8	0.5	1.8	2.0	0.2	2.6	1.7	0.0	1.9	0.8	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	622	628	569	626	628	569	547	502	421	535	502	421
V/C Ratio(X)	0.27	0.29	0.09	0.00	0.31	0.03	0.17	0.33	0.01	0.02	0.17	0.52
Avail Cap(c_a), veh/h	2856	3963	3592	2825	3963	3592	2265	3499	2937	2471	3499	2937
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	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	7.4	5.5	5.1	6.2	5.6	5.0	7.8	7.1	6.5	7.9	6.8	7.6
Incr Delay (d2), s/veh	0.2	0.2	0.1	0.0	0.3	0.0	0.1	0.4	0.0	0.0	0.2	1.0
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	0.2	0.1	0.0	0.0	0.1	0.0	0.2	0.4	0.0	0.0	0.2	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.6	5.8	5.2	6.2	5.9	5.0	7.9	7.5	6.5	7.9	7.0	8.5 free
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		398			216			261			311	
Approach Delay, s/veh		6.5			5.8			7.7			8.1	
Approach LOS		A			A			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		11.0		13.3		11.0		13.3				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		45.5		55.5		45.5		55.5				
Max Q Clear Time (g_c+I1), s		4.6		6.9		4.9		4.0				
Green Ext Time (p_c), s		1.4		1.7		1.3		1.0				

Intersection Summary

HCM 6th Ctrl Delay	7.0
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	188	87	1	92	13	30	28	4	1	38	54
Future Volume (veh/h)	83	188	87	1	92	13	30	28	4	1	38	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00		0.99	0.99		0.99	0.99		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	
Adj Sat Flow, veh/h/ln	1870	1737	1870	1870	1737	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	90	204	95	1	100	14	33	30	4	1	41	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	11	2	2	11	2	2	2	2	2	2	2
Cap, veh/h	663	491	444	561	491	444	683	501	421	708	501	421
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	1270	1737	1571	1075	1737	1571	1285	1870	1570	1363	1870	1570
Grp Volume(v), veh/h	90	204	95	1	100	14	33	30	4	1	41	59
Grp Sat Flow(s),veh/h/ln	1270	1737	1571	1075	1737	1571	1285	1870	1570	1363	1870	1570
Q Serve(g_s), s	1.2	1.9	0.9	0.0	0.9	0.1	0.4	0.2	0.0	0.0	0.3	0.6
Cycle Q Clear(g_c), s	2.0	1.9	0.9	1.9	0.9	0.1	0.7	0.2	0.0	0.2	0.3	0.6
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	663	491	444	561	491	444	683	501	421	708	501	421
V/C Ratio(X)	0.14	0.42	0.21	0.00	0.20	0.03	0.05	0.06	0.01	0.00	0.08	0.14
Avail Cap(c_a), veh/h	4330	5508	4982	3666	5508	4982	2744	3503	2941	2895	3503	2941
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	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	6.2	5.8	5.5	6.6	5.5	5.2	5.8	5.5	5.4	5.5	5.5	5.6
Incr Delay (d2), s/veh	0.1	0.6	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.1	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	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.3	6.4	5.7	6.6	5.7	5.2	5.8	5.5	5.4	5.5	5.6	5.7
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		389			115			67			101	
Approach Delay, s/veh		6.2			5.6			5.6			5.7	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	9.9	10.2	9.9	10.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	37.5	63.5	37.5	63.5
Max Q Clear Time (g_c+I1), s	2.7	4.0	2.6	3.9
Green Ext Time (p_c), s	0.2	1.6	0.4	0.5

Intersection Summary	
HCM 6th Ctrl Delay	6.0
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	188	156	1	92	13	70	48	4	1	72	54
Future Volume (veh/h)	83	188	156	1	92	13	70	48	4	1	72	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00		0.99	0.99		0.99	0.99		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	
Adj Sat Flow, veh/h/ln	1870	1737	1870	1870	1737	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	90	204	170	1	100	14	76	52	4	1	78	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	11	2	2	11	2	2	2	2	2	2	2
Cap, veh/h	674	514	465	556	514	465	640	492	413	676	492	413
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	1270	1737	1572	1004	1737	1572	1243	1870	1570	1336	1870	1570
Grp Volume(v), veh/h	90	204	170	1	100	14	76	52	4	1	78	59
Grp Sat Flow(s),veh/h/ln	1270	1737	1572	1004	1737	1572	1243	1870	1570	1336	1870	1570
Q Serve(g_s), s	1.2	1.9	1.7	0.0	0.9	0.1	1.0	0.4	0.0	0.0	0.7	0.6
Cycle Q Clear(g_c), s	2.0	1.9	1.7	1.9	0.9	0.1	1.7	0.4	0.0	0.4	0.7	0.6
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	674	514	465	556	514	465	640	492	413	676	492	413
V/C Ratio(X)	0.13	0.40	0.37	0.00	0.19	0.03	0.12	0.11	0.01	0.00	0.16	0.14
Avail Cap(c_a), veh/h	4002	5065	4583	3187	5065	4583	2841	3804	3193	3042	3804	3193
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	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	6.1	5.7	5.7	6.5	5.4	5.1	6.4	5.7	5.6	5.9	5.8	5.8
Incr Delay (d2), s/veh	0.1	0.5	0.5	0.0	0.2	0.0	0.1	0.1	0.0	0.0	0.1	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	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.2	6.2	6.2	6.5	5.6	5.1	6.5	5.8	5.6	5.9	5.9	5.9
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		464			115			132			138	
Approach Delay, s/veh		6.2			5.5			6.2			5.9	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	9.9	10.5	9.9	10.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	41.5	59.5	41.5	59.5
Max Q Clear Time (g_c+I1), s	3.7	4.0	2.7	3.9
Green Ext Time (p_c), s	0.5	1.9	0.6	0.5

Intersection Summary	
HCM 6th Ctrl Delay	6.1
HCM 6th LOS	A

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	0	151	1	23	166	0	5	0	26	0	0	0
Future Vol, veh/h	0	151	1	23	166	0	5	0	26	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	-	-	-	165	-	-	-	-	-	-	-	-
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	11	2	2	11	2	2	2	2	2	2	2
Mvmt Flow	0	164	1	25	180	0	5	0	28	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	180	0	0	165	0	0	395	395	165	409	395	180
Stage 1	-	-	-	-	-	-	165	165	-	230	230	-
Stage 2	-	-	-	-	-	-	230	230	-	179	165	-
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	1396	-	-	1413	-	-	565	542	879	553	542	863
Stage 1	-	-	-	-	-	-	837	762	-	773	714	-
Stage 2	-	-	-	-	-	-	773	714	-	823	762	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1396	-	-	1413	-	-	558	532	879	528	532	863
Mov Cap-2 Maneuver	-	-	-	-	-	-	558	532	-	528	532	-
Stage 1	-	-	-	-	-	-	837	762	-	773	701	-
Stage 2	-	-	-	-	-	-	759	701	-	797	762	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.9	9.7	0
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	804	1396	-	-	1413	-	-	-
HCM Lane V/C Ratio	0.042	-	-	-	0.018	-	-	-
HCM Control Delay (s)	9.7	0	-	-	7.6	-	-	0
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	-

Int #2

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	0	151	1	33	166	0	5	0	57	0	0	0
Future Vol, veh/h	0	151	1	33	166	0	5	0	57	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	-	-	-	165	-	-	-	-	-	-	-	-
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	11	2	2	11	2	2	2	2	2	2	2
Mvmt Flow	0	164	1	36	180	0	5	0	62	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	180	0	0	165	0	0	417	417	165	448	417	180
Stage 1	-	-	-	-	-	-	165	165	-	252	252	-
Stage 2	-	-	-	-	-	-	252	252	-	196	165	-
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	1396	-	-	1413	-	-	546	527	879	521	527	863
Stage 1	-	-	-	-	-	-	837	762	-	752	698	-
Stage 2	-	-	-	-	-	-	752	698	-	806	762	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1396	-	-	1413	-	-	536	514	879	475	514	863
Mov Cap-2 Maneuver	-	-	-	-	-	-	536	514	-	475	514	-
Stage 1	-	-	-	-	-	-	837	762	-	752	681	-
Stage 2	-	-	-	-	-	-	733	681	-	749	762	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	1.3	9.7	0
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	836	1396	-	-	1413	-	-	-
HCM Lane V/C Ratio	0.081	-	-	-	0.025	-	-	-
HCM Control Delay (s)	9.7	0	-	-	7.6	-	-	0
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	-

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	0	159	6	41	86	0	3	0	48	0	0	0
Future Vol, veh/h	0	159	6	41	86	0	3	0	48	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	-	-	-	165	-	-	-	-	-	-	-	-
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	11	2	2	11	2	2	2	2	2	2	2
Mvmt Flow	0	173	7	45	93	0	3	0	52	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	93	0	0	180	0	0	360	360	177	386	363	93
Stage 1	-	-	-	-	-	-	177	177	-	183	183	-
Stage 2	-	-	-	-	-	-	183	183	-	203	180	-
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	1501	-	-	1396	-	-	596	567	866	573	565	964
Stage 1	-	-	-	-	-	-	825	753	-	819	748	-
Stage 2	-	-	-	-	-	-	819	748	-	799	750	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1501	-	-	1396	-	-	581	549	866	525	547	964
Mov Cap-2 Maneuver	-	-	-	-	-	-	581	549	-	525	547	-
Stage 1	-	-	-	-	-	-	825	753	-	819	724	-
Stage 2	-	-	-	-	-	-	793	724	-	751	750	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	2.5	9.6	0
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	842	1501	-	-	1396	-	-	-
HCM Lane V/C Ratio	0.066	-	-	-	0.032	-	-	-
HCM Control Delay (s)	9.6	0	-	-	7.7	-	-	0
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	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	0	159	6	79	86	0	3	0	68	0	0	0
Future Vol, veh/h	0	159	6	79	86	0	3	0	68	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	-	-	-	165	-	-	-	-	-	-	-	-
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	11	2	2	11	2	2	2	2	2	2	2
Mvmt Flow	0	173	7	86	93	0	3	0	74	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	93	0	0	180	0	0	442	442	177	479	445	93
Stage 1	-	-	-	-	-	-	177	177	-	265	265	-
Stage 2	-	-	-	-	-	-	265	265	-	214	180	-
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	1501	-	-	1396	-	-	526	510	866	497	508	964
Stage 1	-	-	-	-	-	-	825	753	-	740	689	-
Stage 2	-	-	-	-	-	-	740	689	-	788	750	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1501	-	-	1396	-	-	501	478	866	433	477	964
Mov Cap-2 Maneuver	-	-	-	-	-	-	501	478	-	433	477	-
Stage 1	-	-	-	-	-	-	825	753	-	740	646	-
Stage 2	-	-	-	-	-	-	694	646	-	721	750	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.7	9.7	0
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	840	1501	-	-	1396	-	-	-
HCM Lane V/C Ratio	0.092	-	-	-	0.062	-	-	-
HCM Control Delay (s)	9.7	0	-	-	7.7	-	-	0
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.3	0	-	-	0.2	-	-	-

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	0	160	1	29	176	0	6	0	32	0	0	0
Future Vol, veh/h	0	160	1	29	176	0	6	0	32	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	-	-	-	165	-	-	-	-	-	-	-	-
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	11	2	2	11	2	2	2	2	2	2	2
Mvmt Flow	0	174	1	32	191	0	7	0	35	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	191	0	0	175	0	0	430	430	175	447	430	191
Stage 1	-	-	-	-	-	-	175	175	-	255	255	-
Stage 2	-	-	-	-	-	-	255	255	-	192	175	-
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	1383	-	-	1401	-	-	535	518	868	522	518	851
Stage 1	-	-	-	-	-	-	827	754	-	749	696	-
Stage 2	-	-	-	-	-	-	749	696	-	810	754	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1383	-	-	1401	-	-	526	506	868	492	506	851
Mov Cap-2 Maneuver	-	-	-	-	-	-	526	506	-	492	506	-
Stage 1	-	-	-	-	-	-	827	754	-	749	680	-
Stage 2	-	-	-	-	-	-	732	680	-	778	754	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	1.1	9.8	0
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	787	1383	-	-	1401	-	-	-
HCM Lane V/C Ratio	0.052	-	-	-	0.022	-	-	-
HCM Control Delay (s)	9.8	0	-	-	7.6	-	-	0
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	-

Intersection

Int Delay, s/veh 2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	160	1	39	176	0	6	0	63	0	0	0
Future Vol, veh/h	0	160	1	39	176	0	6	0	63	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	-	-	-	165	-	-	-	-	-	-	-	-
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	11	2	2	11	2	2	2	2	2	2	2
Mvmt Flow	0	174	1	42	191	0	7	0	68	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	191	0	0	175	0	0	450	450	175	484	450	191
Stage 1	-	-	-	-	-	-	175	175	-	275	275	-
Stage 2	-	-	-	-	-	-	275	275	-	209	175	-
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	1383	-	-	1401	-	-	519	504	868	493	504	851
Stage 1	-	-	-	-	-	-	827	754	-	731	683	-
Stage 2	-	-	-	-	-	-	731	683	-	793	754	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1383	-	-	1401	-	-	507	489	868	444	489	851
Mov Cap-2 Maneuver	-	-	-	-	-	-	507	489	-	444	489	-
Stage 1	-	-	-	-	-	-	827	754	-	731	663	-
Stage 2	-	-	-	-	-	-	709	663	-	730	754	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	1.4	9.9	0
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	817	1383	-	-	1401	-	-	-
HCM Lane V/C Ratio	0.092	-	-	-	0.03	-	-	-
HCM Control Delay (s)	9.9	0	-	-	7.7	-	-	0
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	-

Intersection

Int Delay, s/veh 2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	169	7	49	91	0	4	0	58	0	0	0
Future Vol, veh/h	0	169	7	49	91	0	4	0	58	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	-	-	-	165	-	-	-	-	-	-	-	-
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	11	2	2	11	2	2	2	2	2	2	2
Mvmt Flow	0	184	8	53	99	0	4	0	63	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	99	0	0	192	0	0	393	393	188	425	397	99
Stage 1	-	-	-	-	-	-	188	188	-	205	205	-
Stage 2	-	-	-	-	-	-	205	205	-	220	192	-
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	1494	-	-	1381	-	-	566	543	854	540	540	957
Stage 1	-	-	-	-	-	-	814	745	-	797	732	-
Stage 2	-	-	-	-	-	-	797	732	-	782	742	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1494	-	-	1381	-	-	550	522	854	485	519	957
Mov Cap-2 Maneuver	-	-	-	-	-	-	550	522	-	485	519	-
Stage 1	-	-	-	-	-	-	814	745	-	797	704	-
Stage 2	-	-	-	-	-	-	766	704	-	724	742	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	2.7	9.8	0
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	825	1494	-	-	1381	-	-	-
HCM Lane V/C Ratio	0.082	-	-	-	0.039	-	-	-
HCM Control Delay (s)	9.8	0	-	-	7.7	-	-	0
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	-

Intersection

Int Delay, s/veh 3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	169	7	83	91	0	4	0	78	0	0	0
Future Vol, veh/h	0	169	7	83	91	0	4	0	78	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	-	-	-	165	-	-	-	-	-	-	-	-
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	11	2	2	11	2	2	2	2	2	2	2
Mvmt Flow	0	184	8	90	99	0	4	0	85	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	99	0	0	192	0	0	467	467	188	510	471	99
Stage 1	-	-	-	-	-	-	188	188	-	279	279	-
Stage 2	-	-	-	-	-	-	279	279	-	231	192	-
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	1494	-	-	1381	-	-	506	493	854	474	491	957
Stage 1	-	-	-	-	-	-	814	745	-	728	680	-
Stage 2	-	-	-	-	-	-	728	680	-	772	742	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1494	-	-	1381	-	-	481	461	854	406	459	957
Mov Cap-2 Maneuver	-	-	-	-	-	-	481	461	-	406	459	-
Stage 1	-	-	-	-	-	-	814	745	-	728	636	-
Stage 2	-	-	-	-	-	-	681	636	-	695	742	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.7	9.9	0
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	823	1494	-	-	1381	-	-	-
HCM Lane V/C Ratio	0.108	-	-	-	0.065	-	-	-
HCM Control Delay (s)	9.9	0	-	-	7.8	-	-	0
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.4	0	-	-	0.2	-	-	-

Intersection	
Intersection Delay, s/veh	3.4
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	35	40	113	106
Demand Flow Rate, veh/h	35	40	115	108
Vehicles Circulating, veh/h	75	131	30	42
Vehicles Exiting, veh/h	75	14	80	129
Ped Vol Crossing Leg, #/h	5	5	0	5
Ped Cap Adj	0.999	0.999	1.000	0.999
Approach Delay, s/veh	3.0	3.3	3.4	3.4
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	R	R	R	R
Assumed Moves	R	R	R	R
RT Channelized				
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
Entry Flow, veh/h	35	40	115	108
Cap Entry Lane, veh/h	1278	1207	1338	1322
Entry HV Adj Factor	0.995	0.994	0.983	0.981
Flow Entry, veh/h	35	40	113	106
Cap Entry, veh/h	1271	1199	1315	1296
V/C Ratio	0.027	0.033	0.086	0.082
Control Delay, s/veh	3.0	3.3	3.4	3.4
LOS	A	A	A	A
95th %tile Queue, veh	0	0	0	0

Int #3

Intersection	
Intersection Delay, s/veh	3.8
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	38	151	113	140
Demand Flow Rate, veh/h	38	153	115	143
Vehicles Circulating, veh/h	110	131	68	52
Vehicles Exiting, veh/h	85	52	80	232
Ped Vol Crossing Leg, #/h	5	5	0	5
Ped Cap Adj	0.999	0.999	1.000	0.999
Approach Delay, s/veh	3.2	4.1	3.6	3.7
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	R	R	R	R
Assumed Moves	R	R	R	R
RT Channelized				
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
Entry Flow, veh/h	38	153	115	143
Cap Entry Lane, veh/h	1233	1207	1287	1309
Entry HV Adj Factor	0.994	0.984	0.983	0.979
Flow Entry, veh/h	38	151	113	140
Cap Entry, veh/h	1225	1187	1265	1280
V/C Ratio	0.031	0.127	0.089	0.109
Control Delay, s/veh	3.2	4.1	3.6	3.7
LOS	A	A	A	A
95th %tile Queue, veh	0	0	0	0

Intersection	
Intersection Delay, s/veh	3.4
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	76	50	51	102
Demand Flow Rate, veh/h	78	51	52	104
Vehicles Circulating, veh/h	94	81	76	56
Vehicles Exiting, veh/h	66	47	96	76
Ped Vol Crossing Leg, #/h	5	5	0	5
Ped Cap Adj	0.999	0.999	1.000	0.999
Approach Delay, s/veh	3.4	3.2	3.2	3.5
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	R	R	R	R
Assumed Moves	R	R	R	R
RT Channelized				
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
Entry Flow, veh/h	78	51	52	104
Cap Entry Lane, veh/h	1254	1270	1277	1303
Entry HV Adj Factor	0.977	0.974	0.984	0.979
Flow Entry, veh/h	76	50	51	102
Cap Entry, veh/h	1224	1236	1257	1276
V/C Ratio	0.062	0.040	0.041	0.080
Control Delay, s/veh	3.4	3.2	3.2	3.5
LOS	A	A	A	A
95th %tile Queue, veh	0	0	0	0

Intersection	
Intersection Delay, s/veh	4.0
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	87	124	51	214
Demand Flow Rate, veh/h	89	126	52	218
Vehicles Circulating, veh/h	208	81	201	63
Vehicles Exiting, veh/h	73	172	96	144
Ped Vol Crossing Leg, #/h	5	5	0	5
Ped Cap Adj	0.999	0.999	1.000	0.999
Approach Delay, s/veh	4.0	3.7	3.6	4.3
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	R	R	R	R
Assumed Moves	R	R	R	R
RT Channelized				
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
Entry Flow, veh/h	89	126	52	218
Cap Entry Lane, veh/h	1116	1270	1124	1294
Entry HV Adj Factor	0.978	0.980	0.984	0.981
Flow Entry, veh/h	87	124	51	214
Cap Entry, veh/h	1090	1245	1106	1269
V/C Ratio	0.080	0.099	0.046	0.169
Control Delay, s/veh	4.0	3.7	3.6	4.3
LOS	A	A	A	A
95th %tile Queue, veh	0	0	0	1

Intersection	
Intersection Delay, s/veh	3.5
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	44	48	139	132
Demand Flow Rate, veh/h	44	48	141	134
Vehicles Circulating, veh/h	93	161	38	52
Vehicles Exiting, veh/h	93	18	99	157
Ped Vol Crossing Leg, #/h	5	5	0	5
Ped Cap Adj	0.999	0.999	1.000	0.999
Approach Delay, s/veh	3.2	3.4	3.6	3.6
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	R	R	R	R
Assumed Moves	R	R	R	R
RT Channelized				
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
Entry Flow, veh/h	44	48	141	134
Cap Entry Lane, veh/h	1255	1171	1327	1309
Entry HV Adj Factor	0.995	0.994	0.983	0.983
Flow Entry, veh/h	44	48	139	132
Cap Entry, veh/h	1248	1163	1304	1285
V/C Ratio	0.035	0.041	0.106	0.102
Control Delay, s/veh	3.2	3.4	3.6	3.6
LOS	A	A	A	A
95th %tile Queue, veh	0	0	0	0

Intersection	
Intersection Delay, s/veh	3.9
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	47	159	139	166
Demand Flow Rate, veh/h	47	162	141	169
Vehicles Circulating, veh/h	128	161	76	62
Vehicles Exiting, veh/h	103	56	99	260
Ped Vol Crossing Leg, #/h	5	5	0	5
Ped Cap Adj	0.999	0.999	1.000	0.999
Approach Delay, s/veh	3.3	4.3	3.8	3.9
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	R	R	R	R
Assumed Moves	R	R	R	R
RT Channelized				
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
Entry Flow, veh/h	47	162	141	169
Cap Entry Lane, veh/h	1211	1171	1277	1295
Entry HV Adj Factor	0.994	0.985	0.983	0.981
Flow Entry, veh/h	47	159	139	166
Cap Entry, veh/h	1203	1152	1255	1269
V/C Ratio	0.039	0.138	0.110	0.131
Control Delay, s/veh	3.3	4.3	3.8	3.9
LOS	A	A	A	A
95th %tile Queue, veh	0	0	0	0

Intersection	
Intersection Delay, s/veh	3.5
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	95	63	63	125
Demand Flow Rate, veh/h	97	64	64	127
Vehicles Circulating, veh/h	115	101	96	71
Vehicles Exiting, veh/h	83	59	116	94
Ped Vol Crossing Leg, #/h	5	5	0	5
Ped Cap Adj	0.999	0.999	1.000	0.999
Approach Delay, s/veh	3.6	3.4	3.3	3.7
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	R	R	R	R
Assumed Moves	R	R	R	R
RT Channelized				
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
Entry Flow, veh/h	97	64	64	127
Cap Entry Lane, veh/h	1227	1245	1251	1283
Entry HV Adj Factor	0.980	0.978	0.984	0.982
Flow Entry, veh/h	95	63	63	125
Cap Entry, veh/h	1202	1216	1232	1259
V/C Ratio	0.079	0.051	0.051	0.099
Control Delay, s/veh	3.6	3.4	3.3	3.7
LOS	A	A	A	A
95th %tile Queue, veh	0	0	0	0

Intersection	
Intersection Delay, s/veh	4.2
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	106	136	63	236
Demand Flow Rate, veh/h	108	139	64	240
Vehicles Circulating, veh/h	228	101	220	78
Vehicles Exiting, veh/h	90	183	116	162
Ped Vol Crossing Leg, #/h	5	5	0	5
Ped Cap Adj	0.999	0.999	1.000	0.999
Approach Delay, s/veh	4.2	3.9	3.8	4.5
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	R	R	R	R
Assumed Moves	R	R	R	R
RT Channelized				
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
Entry Flow, veh/h	108	139	64	240
Cap Entry Lane, veh/h	1094	1245	1103	1274
Entry HV Adj Factor	0.980	0.982	0.984	0.982
Flow Entry, veh/h	106	136	63	236
Cap Entry, veh/h	1071	1221	1085	1250
V/C Ratio	0.099	0.112	0.058	0.188
Control Delay, s/veh	4.2	3.9	3.8	4.5
LOS	A	A	A	A
95th %tile Queue, veh	0	0	0	1

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	0	6	14	0	30	0	12	0	8	0	0	0
Future Vol, veh/h	0	6	14	0	30	0	12	0	8	0	0	0
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
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	7	15	0	33	0	13	0	9	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	38	0	0	27	0	0	58	58	25	62	65	43
Stage 1	-	-	-	-	-	-	20	20	-	38	38	-
Stage 2	-	-	-	-	-	-	38	38	-	24	27	-
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	1572	-	-	1587	-	-	939	833	1051	933	826	1027
Stage 1	-	-	-	-	-	-	999	879	-	977	863	-
Stage 2	-	-	-	-	-	-	977	863	-	994	873	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1565	-	-	1579	-	-	930	825	1041	916	818	1017
Mov Cap-2 Maneuver	-	-	-	-	-	-	930	825	-	916	818	-
Stage 1	-	-	-	-	-	-	994	875	-	972	859	-
Stage 2	-	-	-	-	-	-	972	859	-	981	869	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	8.8	0
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	971	1565	-	-	1579	-	-	-
HCM Lane V/C Ratio	0.022	-	-	-	-	-	-	-
HCM Control Delay (s)	8.8	0	-	-	0	-	-	0
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	-

Int #4

Intersection

Int Delay, s/veh 1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	34	20	0	114	0	12	19	8	0	0	0
Future Vol, veh/h	0	34	20	0	114	0	12	19	8	0	0	0
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
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	37	22	0	124	0	13	21	9	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	129	0	0	64	0	0	182	182	58	197	193	134
Stage 1	-	-	-	-	-	-	53	53	-	129	129	-
Stage 2	-	-	-	-	-	-	129	129	-	68	64	-
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	1457	-	-	1538	-	-	779	712	1008	762	702	915
Stage 1	-	-	-	-	-	-	960	851	-	875	789	-
Stage 2	-	-	-	-	-	-	875	789	-	942	842	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1450	-	-	1531	-	-	771	705	998	732	695	906
Mov Cap-2 Maneuver	-	-	-	-	-	-	771	705	-	732	695	-
Stage 1	-	-	-	-	-	-	955	847	-	871	785	-
Stage 2	-	-	-	-	-	-	871	785	-	907	838	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	9.9	0
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	772	1450	-	-	1531	-	-	-
HCM Lane V/C Ratio	0.055	-	-	-	-	-	-	-
HCM Control Delay (s)	9.9	0	-	-	0	-	-	0
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	-

Intersection

Int Delay, s/veh 2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	23	15	0	35	0	9	0	19	0	0	1
Future Vol, veh/h	1	23	15	0	35	0	9	0	19	0	0	1
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
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	25	16	0	38	0	10	0	21	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	43	0	0	46	0	0	84	83	43	94	91	48
Stage 1	-	-	-	-	-	-	40	40	-	43	43	-
Stage 2	-	-	-	-	-	-	44	43	-	51	48	-
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	1566	-	-	1562	-	-	903	807	1027	889	799	1021
Stage 1	-	-	-	-	-	-	975	862	-	971	859	-
Stage 2	-	-	-	-	-	-	970	859	-	962	855	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1559	-	-	1555	-	-	893	798	1017	862	790	1011
Mov Cap-2 Maneuver	-	-	-	-	-	-	893	798	-	862	790	-
Stage 1	-	-	-	-	-	-	969	857	-	965	855	-
Stage 2	-	-	-	-	-	-	964	855	-	937	850	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0	8.8	8.6
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	974	1559	-	-	1555	-	-	1011
HCM Lane V/C Ratio	0.031	0.001	-	-	-	-	-	0.001
HCM Control Delay (s)	8.8	7.3	0	-	0	-	-	8.6
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	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	1	116	36	0	90	0	9	12	19	0	0	1
Future Vol, veh/h	1	116	36	0	90	0	9	12	19	0	0	1
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
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	126	39	0	98	0	10	13	21	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	103	0	0	170	0	0	257	256	156	273	275	108
Stage 1	-	-	-	-	-	-	153	153	-	103	103	-
Stage 2	-	-	-	-	-	-	104	103	-	170	172	-
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	1489	-	-	1407	-	-	696	648	890	679	632	946
Stage 1	-	-	-	-	-	-	849	771	-	903	810	-
Stage 2	-	-	-	-	-	-	902	810	-	832	756	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1482	-	-	1400	-	-	688	641	882	646	625	937
Mov Cap-2 Maneuver	-	-	-	-	-	-	688	641	-	646	625	-
Stage 1	-	-	-	-	-	-	844	766	-	898	806	-
Stage 2	-	-	-	-	-	-	897	806	-	794	751	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	10.1	8.8
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	750	1482	-	-	1400	-	-	937
HCM Lane V/C Ratio	0.058	0.001	-	-	-	-	-	0.001
HCM Control Delay (s)	10.1	7.4	0	-	0	-	-	8.8
HCM Lane LOS	B	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0

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	0	7	18	0	38	0	13	0	10	0	0	0
Future Vol, veh/h	0	7	18	0	38	0	13	0	10	0	0	0
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
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	8	20	0	41	0	14	0	11	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	46	0	0	33	0	0	69	69	28	75	79	51
Stage 1	-	-	-	-	-	-	23	23	-	46	46	-
Stage 2	-	-	-	-	-	-	46	46	-	29	33	-
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	1562	-	-	1579	-	-	923	822	1047	915	811	1017
Stage 1	-	-	-	-	-	-	995	876	-	968	857	-
Stage 2	-	-	-	-	-	-	968	857	-	988	868	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1555	-	-	1571	-	-	914	814	1037	897	803	1007
Mov Cap-2 Maneuver	-	-	-	-	-	-	914	814	-	897	803	-
Stage 1	-	-	-	-	-	-	990	872	-	963	853	-
Stage 2	-	-	-	-	-	-	963	853	-	973	864	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	8.8	0
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	964	1555	-	-	1571	-	-	-
HCM Lane V/C Ratio	0.026	-	-	-	-	-	-	-
HCM Control Delay (s)	8.8	0	-	-	0	-	-	0
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	-

Intersection

Int Delay, s/veh 1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	35	24	0	122	0	13	19	10	0	0	0
Future Vol, veh/h	0	35	24	0	122	0	13	19	10	0	0	0
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
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	38	26	0	133	0	14	21	11	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	138	0	0	69	0	0	194	194	61	210	207	143
Stage 1	-	-	-	-	-	-	56	56	-	138	138	-
Stage 2	-	-	-	-	-	-	138	138	-	72	69	-
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	1446	-	-	1532	-	-	765	701	1004	747	690	905
Stage 1	-	-	-	-	-	-	956	848	-	865	782	-
Stage 2	-	-	-	-	-	-	865	782	-	938	837	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1439	-	-	1525	-	-	757	694	994	715	683	896
Mov Cap-2 Maneuver	-	-	-	-	-	-	757	694	-	715	683	-
Stage 1	-	-	-	-	-	-	951	844	-	861	778	-
Stage 2	-	-	-	-	-	-	861	778	-	901	833	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	10	0
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	769	1439	-	-	1525	-	-	-
HCM Lane V/C Ratio	0.059	-	-	-	-	-	-	-
HCM Control Delay (s)	10	0	-	-	0	-	-	0
HCM Lane LOS	B	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	-

Intersection

Int Delay, s/veh 2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	28	17	0	44	0	10	0	24	0	0	1
Future Vol, veh/h	1	28	17	0	44	0	10	0	24	0	0	1
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
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	30	18	0	48	0	11	0	26	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	53	0	0	53	0	0	100	99	49	112	108	58
Stage 1	-	-	-	-	-	-	46	46	-	53	53	-
Stage 2	-	-	-	-	-	-	54	53	-	59	55	-
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	1553	-	-	1553	-	-	881	791	1020	866	782	1008
Stage 1	-	-	-	-	-	-	968	857	-	960	851	-
Stage 2	-	-	-	-	-	-	958	851	-	953	849	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1546	-	-	1546	-	-	871	782	1010	835	773	998
Mov Cap-2 Maneuver	-	-	-	-	-	-	871	782	-	835	773	-
Stage 1	-	-	-	-	-	-	962	852	-	954	847	-
Stage 2	-	-	-	-	-	-	952	847	-	923	844	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0	8.9	8.6
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	965	1546	-	-	1546	-	-	998
HCM Lane V/C Ratio	0.038	0.001	-	-	-	-	-	0.001
HCM Control Delay (s)	8.9	7.3	0	-	0	-	-	8.6
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	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	1	121	38	0	99	0	10	12	24	0	0	1
Future Vol, veh/h	1	121	38	0	99	0	10	12	24	0	0	1
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
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	132	41	0	108	0	11	13	26	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	113	0	0	178	0	0	274	273	163	292	293	118
Stage 1	-	-	-	-	-	-	160	160	-	113	113	-
Stage 2	-	-	-	-	-	-	114	113	-	179	180	-
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	1476	-	-	1398	-	-	678	634	882	660	618	934
Stage 1	-	-	-	-	-	-	842	766	-	892	802	-
Stage 2	-	-	-	-	-	-	891	802	-	823	750	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1469	-	-	1391	-	-	671	627	874	624	611	925
Mov Cap-2 Maneuver	-	-	-	-	-	-	671	627	-	624	611	-
Stage 1	-	-	-	-	-	-	837	761	-	887	798	-
Stage 2	-	-	-	-	-	-	886	798	-	780	746	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	10.2	8.9
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	748	1469	-	-	1391	-	-	925
HCM Lane V/C Ratio	0.067	0.001	-	-	-	-	-	0.001
HCM Control Delay (s)	10.2	7.5	0	-	0	-	-	8.9
HCM Lane LOS	B	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	5.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	28	28	12	42	84	36
Future Vol, veh/h	28	28	12	42	84	36
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	30	30	13	46	91	39

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	60	0	117	45
Stage 1	-	-	-	-	45	-
Stage 2	-	-	-	-	72	-
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	-	-	1544	-	879	1025
Stage 1	-	-	-	-	977	-
Stage 2	-	-	-	-	951	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1544	-	871	1025
Mov Cap-2 Maneuver	-	-	-	-	871	-
Stage 1	-	-	-	-	977	-
Stage 2	-	-	-	-	942	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.6	9.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	912	-	-	1544	-
HCM Lane V/C Ratio	0.143	-	-	0.008	-
HCM Control Delay (s)	9.6	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.5	-	-	0	-

Int #5

Intersection						
Int Delay, s/veh	3.8					

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	55	93	46	36	55	27
Future Vol, veh/h	55	93	46	36	55	27
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	60	101	50	39	60	29

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	161	0	250	111
Stage 1	-	-	-	-	111	-
Stage 2	-	-	-	-	139	-
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	-	-	1418	-	739	942
Stage 1	-	-	-	-	914	-
Stage 2	-	-	-	-	888	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1418	-	712	942
Mov Cap-2 Maneuver	-	-	-	-	712	-
Stage 1	-	-	-	-	914	-
Stage 2	-	-	-	-	856	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.3	10.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	774	-	-	1418	-
HCM Lane V/C Ratio	0.115	-	-	0.035	-
HCM Control Delay (s)	10.3	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0.1	-

Intersection

Int Delay, s/veh 5.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	36	28	12	53	84	36
Future Vol, veh/h	36	28	12	53	84	36
Conflicting Peds, #/hr	0	10	10	0	10	10
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	39	30	13	58	91	39

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	79	0	158	74
Stage 1	-	-	-	-	64	-
Stage 2	-	-	-	-	94	-
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	-	-	1519	-	833	988
Stage 1	-	-	-	-	959	-
Stage 2	-	-	-	-	930	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1505	-	809	969
Mov Cap-2 Maneuver	-	-	-	-	809	-
Stage 1	-	-	-	-	949	-
Stage 2	-	-	-	-	913	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.4	10
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	851	-	-	1505	-
HCM Lane V/C Ratio	0.153	-	-	0.009	-
HCM Control Delay (s)	10	-	-	7.4	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.5	-	-	0	-

Intersection						
Int Delay, s/veh	3.7					

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	70	93	46	46	55	27
Future Vol, veh/h	70	93	46	46	55	27
Conflicting Peds, #/hr	0	10	10	0	10	10
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	76	101	50	50	60	29

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	187	0	297	147
Stage 1	-	-	-	-	137	-
Stage 2	-	-	-	-	160	-
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	-	-	1387	-	694	900
Stage 1	-	-	-	-	890	-
Stage 2	-	-	-	-	869	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1374	-	655	883
Mov Cap-2 Maneuver	-	-	-	-	655	-
Stage 1	-	-	-	-	881	-
Stage 2	-	-	-	-	829	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.9	10.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	716	-	-	1374	-
HCM Lane V/C Ratio	0.124	-	-	0.036	-
HCM Control Delay (s)	10.7	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0.1	-

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	4	0	5	0	0	0	1	24	0	0	17	1
Future Vol, veh/h	4	0	5	0	0	0	1	24	0	0	17	1
Conflicting Peds, #/hr	10	0	10	10	0	10	10	0	10	10	0	10
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	0	1	26	0	0	18	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	67	67	39	69	67	46	29	0	0	36	0	0
Stage 1	29	29	-	38	38	-	-	-	-	-	-	-
Stage 2	38	38	-	31	29	-	-	-	-	-	-	-
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	926	824	1033	923	824	1023	1584	-	-	1575	-	-
Stage 1	988	871	-	977	863	-	-	-	-	-	-	-
Stage 2	977	863	-	986	871	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	907	807	1013	900	807	1004	1569	-	-	1560	-	-
Mov Cap-2 Maneuver	907	807	-	900	807	-	-	-	-	-	-	-
Stage 1	977	862	-	966	854	-	-	-	-	-	-	-
Stage 2	967	854	-	971	862	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.8	0	0.3	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1569	-	-	963	-	1560	-	-
HCM Lane V/C Ratio	0.001	-	-	0.01	-	-	-	-
HCM Control Delay (s)	7.3	0	-	8.8	0	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	0	-	-

INT #6

Intersection												
Int Delay, s/veh	5.1											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	0	5	37	0	19	1	24	12	6	17	1
Future Vol, veh/h	4	0	5	37	0	19	1	24	12	6	17	1
Conflicting Peds, #/hr	10	0	10	10	0	10	10	0	10	10	0	10
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	40	0	21	1	26	13	7	18	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	98	94	39	90	88	53	29	0	0	49	0	0
Stage 1	43	43	-	45	45	-	-	-	-	-	-	-
Stage 2	55	51	-	45	43	-	-	-	-	-	-	-
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	884	796	1033	895	802	1014	1584	-	-	1558	-	-
Stage 1	971	859	-	969	857	-	-	-	-	-	-	-
Stage 2	957	852	-	969	859	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	845	775	1013	869	781	995	1569	-	-	1543	-	-
Mov Cap-2 Maneuver	845	775	-	869	781	-	-	-	-	-	-	-
Stage 1	960	846	-	958	848	-	-	-	-	-	-	-
Stage 2	927	843	-	950	846	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.9	9.2	0.2	1.8
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1569	-	-	931	908	1543	-	-
HCM Lane V/C Ratio	0.001	-	-	0.011	0.067	0.004	-	-
HCM Control Delay (s)	7.3	0	-	8.9	9.2	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0	-	-

Intersection

Int Delay, s/veh 0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	0	0	0	0	1	25	0	0	31	3
Future Vol, veh/h	1	0	0	0	0	0	1	25	0	0	31	3
Conflicting Peds, #/hr	10	0	10	10	0	10	10	0	10	10	0	10
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	0	0	0	0	1	27	0	0	34	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	85	85	56	85	86	47	47	0	0	37	0	0
Stage 1	46	46	-	39	39	-	-	-	-	-	-	-
Stage 2	39	39	-	46	47	-	-	-	-	-	-	-
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	901	805	1011	901	804	1022	1560	-	-	1574	-	-
Stage 1	968	857	-	976	862	-	-	-	-	-	-	-
Stage 2	976	862	-	968	856	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	883	788	992	883	787	1003	1545	-	-	1559	-	-
Mov Cap-2 Maneuver	883	788	-	883	787	-	-	-	-	-	-	-
Stage 1	957	848	-	965	853	-	-	-	-	-	-	-
Stage 2	966	853	-	959	847	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.1	0	0.3	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1545	-	-	883	-	1559	-	-
HCM Lane V/C Ratio	0.001	-	-	0.001	-	-	-	-
HCM Control Delay (s)	7.3	0	-	9.1	0	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	0	-	-

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	1	0	0	24	0	12	1	25	41	21	31	3
Future Vol, veh/h	1	0	0	24	0	12	1	25	41	21	31	3
Conflicting Peds, #/hr	10	0	10	10	0	10	10	0	10	10	0	10
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	0	26	0	13	1	27	45	23	34	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	160	176	56	154	155	70	47	0	0	82	0	0
Stage 1	92	92	-	62	62	-	-	-	-	-	-	-
Stage 2	68	84	-	92	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	806	717	1011	813	737	993	1560	-	-	1515	-	-
Stage 1	915	819	-	949	843	-	-	-	-	-	-	-
Stage 2	942	825	-	915	818	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	770	690	992	787	710	974	1545	-	-	1501	-	-
Mov Cap-2 Maneuver	770	690	-	787	710	-	-	-	-	-	-	-
Stage 1	905	798	-	939	834	-	-	-	-	-	-	-
Stage 2	920	816	-	892	797	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.7	9.5	0.1	2.8
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1545	-	-	770	841	1501	-	-
HCM Lane V/C Ratio	0.001	-	-	0.001	0.047	0.015	-	-
HCM Control Delay (s)	7.3	0	-	9.7	9.5	7.4	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	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	4	0	5	0	0	0	1	29	0	0	20	1
Future Vol, veh/h	4	0	5	0	0	0	1	29	0	0	20	1
Conflicting Peds, #/hr	10	0	10	10	0	10	10	0	10	10	0	10
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	0	1	32	0	0	22	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	77	77	43	79	77	52	33	0	0	42	0	0
Stage 1	33	33	-	44	44	-	-	-	-	-	-	-
Stage 2	44	44	-	35	33	-	-	-	-	-	-	-
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	912	813	1027	910	813	1016	1579	-	-	1567	-	-
Stage 1	983	868	-	970	858	-	-	-	-	-	-	-
Stage 2	970	858	-	981	868	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	894	796	1008	887	796	997	1564	-	-	1552	-	-
Mov Cap-2 Maneuver	894	796	-	887	796	-	-	-	-	-	-	-
Stage 1	972	859	-	959	849	-	-	-	-	-	-	-
Stage 2	960	849	-	966	859	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.8	0	0.2	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1564	-	-	954	-	1552	-	-
HCM Lane V/C Ratio	0.001	-	-	0.01	-	-	-	-
HCM Control Delay (s)	7.3	0	-	8.8	0	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	0	-	-

Intersection

Int Delay, s/veh 4.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✥			✥			✥			✥	
Traffic Vol, veh/h	4	0	5	37	0	19	1	29	12	6	20	1
Future Vol, veh/h	4	0	5	37	0	19	1	29	12	6	20	1
Conflicting Peds, #/hr	10	0	10	10	0	10	10	0	10	10	0	10
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	40	0	21	1	32	13	7	22	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	108	104	43	100	98	59	33	0	0	55	0	0
Stage 1	47	47	-	51	51	-	-	-	-	-	-	-
Stage 2	61	57	-	49	47	-	-	-	-	-	-	-
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	786	1027	881	792	1007	1579	-	-	1550	-	-
Stage 1	967	856	-	962	852	-	-	-	-	-	-	-
Stage 2	950	847	-	964	856	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	833	766	1008	855	771	988	1564	-	-	1535	-	-
Mov Cap-2 Maneuver	833	766	-	855	771	-	-	-	-	-	-	-
Stage 1	956	843	-	951	843	-	-	-	-	-	-	-
Stage 2	920	838	-	945	843	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.9	9.3	0.2	1.6
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1564	-	-	922	896	1535	-	-
HCM Lane V/C Ratio	0.001	-	-	0.011	0.068	0.004	-	-
HCM Control Delay (s)	7.3	0	-	8.9	9.3	7.4	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0	-	-

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	1	0	0	0	0	0	1	31	0	0	37	3
Future Vol, veh/h	1	0	0	0	0	0	1	31	0	0	37	3
Conflicting Peds, #/hr	10	0	10	10	0	10	10	0	10	10	0	10
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	0	0	0	0	1	34	0	0	40	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	98	98	62	98	99	54	53	0	0	44	0	0
Stage 1	52	52	-	46	46	-	-	-	-	-	-	-
Stage 2	46	46	-	52	53	-	-	-	-	-	-	-
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	884	792	1003	884	791	1013	1553	-	-	1564	-	-
Stage 1	961	852	-	968	857	-	-	-	-	-	-	-
Stage 2	968	857	-	961	851	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	866	775	984	866	774	994	1538	-	-	1549	-	-
Mov Cap-2 Maneuver	866	775	-	866	774	-	-	-	-	-	-	-
Stage 1	950	843	-	957	848	-	-	-	-	-	-	-
Stage 2	958	848	-	952	842	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.2	0	0.2	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1538	-	-	866	-	1549	-	-
HCM Lane V/C Ratio	0.001	-	-	0.001	-	-	-	-
HCM Control Delay (s)	7.3	0	-	9.2	0	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	0	-	-

Intersection

Int Delay, s/veh 3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	0	24	0	12	1	31	41	21	37	3
Future Vol, veh/h	1	0	0	24	0	12	1	31	41	21	37	3
Conflicting Peds, #/hr	10	0	10	10	0	10	10	0	10	10	0	10
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	0	26	0	13	1	34	45	23	40	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	173	189	62	167	168	77	53	0	0	89	0	0
Stage 1	98	98	-	69	69	-	-	-	-	-	-	-
Stage 2	75	91	-	98	99	-	-	-	-	-	-	-
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	790	706	1003	797	725	984	1553	-	-	1506	-	-
Stage 1	908	814	-	941	837	-	-	-	-	-	-	-
Stage 2	934	820	-	908	813	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	754	680	984	771	698	965	1538	-	-	1492	-	-
Mov Cap-2 Maneuver	754	680	-	771	698	-	-	-	-	-	-	-
Stage 1	898	793	-	931	828	-	-	-	-	-	-	-
Stage 2	912	811	-	885	792	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.8	9.6	0.1	2.6
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1538	-	-	754	826	1492	-	-
HCM Lane V/C Ratio	0.001	-	-	0.001	0.047	0.015	-	-
HCM Control Delay (s)	7.3	0	-	9.8	9.6	7.5	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection	
Intersection Delay, s/veh	4.5
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	141	136	283	72
Demand Flow Rate, veh/h	144	139	289	73
Vehicles Circulating, veh/h	90	285	71	308
Vehicles Exiting, veh/h	291	75	163	115
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	3.9	4.8	4.8	4.3
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	R	R	R	R
Assumed Moves	R	R	R	R
RT Channelized				
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
Entry Flow, veh/h	144	139	289	73
Cap Entry Lane, veh/h	1259	1032	1283	1008
Entry HV Adj Factor	0.979	0.980	0.981	0.985
Flow Entry, veh/h	141	136	283	72
Cap Entry, veh/h	1233	1011	1259	993
V/C Ratio	0.114	0.135	0.225	0.072
Control Delay, s/veh	3.9	4.8	4.8	4.3
LOS	A	A	A	A
95th %tile Queue, veh	0	0	1	0

Int #7

Intersection	
Intersection Delay, s/veh	5.2
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	162	241	307	72
Demand Flow Rate, veh/h	165	245	314	73
Vehicles Circulating, veh/h	163	285	92	415
Vehicles Exiting, veh/h	325	121	236	115
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	4.4	5.8	5.1	4.8
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	R	R	R	R
Assumed Moves	R	R	R	R
RT Channelized				
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
Entry Flow, veh/h	165	245	314	73
Cap Entry Lane, veh/h	1169	1032	1256	904
Entry HV Adj Factor	0.979	0.982	0.979	0.985
Flow Entry, veh/h	162	241	307	72
Cap Entry, veh/h	1144	1013	1230	890
V/C Ratio	0.141	0.237	0.250	0.081
Control Delay, s/veh	4.4	5.8	5.1	4.8
LOS	A	A	A	A
95th %tile Queue, veh	0	1	1	0

Intersection	
Intersection Delay, s/veh	4.7
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	326	108	162	88
Demand Flow Rate, veh/h	333	110	166	89
Vehicles Circulating, veh/h	103	145	149	202
Vehicles Exiting, veh/h	188	169	286	53
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.4	3.8	4.3	3.9
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	R	R	R	R
Assumed Moves	R	R	R	R
RT Channelized				
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
Entry Flow, veh/h	333	110	166	89
Cap Entry Lane, veh/h	1242	1190	1185	1123
Entry HV Adj Factor	0.980	0.986	0.977	0.986
Flow Entry, veh/h	326	108	162	88
Cap Entry, veh/h	1218	1173	1159	1107
V/C Ratio	0.268	0.092	0.140	0.079
Control Delay, s/veh	5.4	3.8	4.3	3.9
LOS	A	A	A	A
95th %tile Queue, veh	1	0	0	0

Intersection	
Intersection Delay, s/veh	5.5
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	393	175	240	88
Demand Flow Rate, veh/h	401	178	245	89
Vehicles Circulating, veh/h	149	145	218	270
Vehicles Exiting, veh/h	210	318	332	53
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.4	4.4	5.4	4.2
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	R	R	R	R
Assumed Moves	R	R	R	R
RT Channelized				
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
Entry Flow, veh/h	401	178	245	89
Cap Entry Lane, veh/h	1185	1190	1105	1048
Entry HV Adj Factor	0.980	0.983	0.981	0.986
Flow Entry, veh/h	393	175	240	88
Cap Entry, veh/h	1162	1170	1083	1033
V/C Ratio	0.338	0.150	0.222	0.085
Control Delay, s/veh	6.4	4.4	5.4	4.2
LOS	A	A	A	A
95th %tile Queue, veh	2	1	1	0

Intersection	
Intersection Delay, s/veh	5.1
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	175	156	358	90
Demand Flow Rate, veh/h	178	159	365	91
Vehicles Circulating, veh/h	114	360	84	379
Vehicles Exiting, veh/h	356	89	208	140
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	4.2	5.4	5.5	4.8
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	R	R	R	R
Assumed Moves	R	R	R	R
RT Channelized				
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
Entry Flow, veh/h	178	159	365	91
Cap Entry Lane, veh/h	1228	956	1267	937
Entry HV Adj Factor	0.982	0.981	0.981	0.985
Flow Entry, veh/h	175	156	358	90
Cap Entry, veh/h	1207	938	1242	923
V/C Ratio	0.145	0.166	0.288	0.097
Control Delay, s/veh	4.2	5.4	5.5	4.8
LOS	A	A	A	A
95th %tile Queue, veh	1	1	1	0

Intersection	
Intersection Delay, s/veh	5.8
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	195	260	381	90
Demand Flow Rate, veh/h	199	265	389	91
Vehicles Circulating, veh/h	185	360	105	485
Vehicles Exiting, veh/h	391	134	279	140
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	4.8	6.7	5.9	5.4
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	R	R	R	R
Assumed Moves	R	R	R	R
RT Channelized				
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
Entry Flow, veh/h	199	265	389	91
Cap Entry Lane, veh/h	1143	956	1240	841
Entry HV Adj Factor	0.982	0.982	0.979	0.985
Flow Entry, veh/h	195	260	381	90
Cap Entry, veh/h	1122	939	1214	829
V/C Ratio	0.174	0.277	0.314	0.108
Control Delay, s/veh	4.8	6.7	5.9	5.4
LOS	A	A	A	A
95th %tile Queue, veh	1	1	1	0

Intersection	
Intersection Delay, s/veh	5.3
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	402	126	206	106
Demand Flow Rate, veh/h	410	129	211	108
Vehicles Circulating, veh/h	125	185	175	248
Vehicles Exiting, veh/h	231	201	360	65
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	4.2	4.8	4.3
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	R	R	R	R
Assumed Moves	R	R	R	R
RT Channelized				
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
Entry Flow, veh/h	410	129	211	108
Cap Entry Lane, veh/h	1215	1143	1154	1071
Entry HV Adj Factor	0.981	0.978	0.977	0.985
Flow Entry, veh/h	402	126	206	106
Cap Entry, veh/h	1191	1118	1127	1056
V/C Ratio	0.338	0.113	0.183	0.101
Control Delay, s/veh	6.2	4.2	4.8	4.3
LOS	A	A	A	A
95th %tile Queue, veh	2	0	1	0

Intersection	
Intersection Delay, s/veh	6.3
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	469	194	284	106
Demand Flow Rate, veh/h	478	197	290	108
Vehicles Circulating, veh/h	172	185	243	317
Vehicles Exiting, veh/h	253	348	407	65
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.4	4.7	6.0	4.6
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	R	R	R	R
Assumed Moves	R	R	R	R
RT Channelized				
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
Entry Flow, veh/h	478	197	290	108
Cap Entry Lane, veh/h	1158	1143	1077	999
Entry HV Adj Factor	0.981	0.983	0.980	0.985
Flow Entry, veh/h	469	194	284	106
Cap Entry, veh/h	1135	1124	1055	984
V/C Ratio	0.413	0.172	0.269	0.108
Control Delay, s/veh	7.4	4.7	6.0	4.6
LOS	A	A	A	A
95th %tile Queue, veh	2	1	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	6	30	0	0	72	18	1	0	0	4	2	10
Future Vol, veh/h	6	30	0	0	72	18	1	0	0	4	2	10
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
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	33	0	0	78	20	1	0	0	4	2	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	103	0	0	38	0	0	152	155	43	145	145	98
Stage 1	-	-	-	-	-	-	52	52	-	93	93	-
Stage 2	-	-	-	-	-	-	100	103	-	52	52	-
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	1489	-	-	1572	-	-	815	737	1027	824	746	958
Stage 1	-	-	-	-	-	-	961	852	-	914	818	-
Stage 2	-	-	-	-	-	-	906	810	-	961	852	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1482	-	-	1565	-	-	793	726	1017	813	735	949
Mov Cap-2 Maneuver	-	-	-	-	-	-	793	726	-	813	735	-
Stage 1	-	-	-	-	-	-	951	843	-	905	814	-
Stage 2	-	-	-	-	-	-	889	806	-	952	843	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.2	0	9.5	9.2
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	793	1482	-	-	1565	-	-	880
HCM Lane V/C Ratio	0.001	0.004	-	-	-	-	-	0.02
HCM Control Delay (s)	9.5	7.4	0	-	0	-	-	9.2
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

INT #8

Intersection

Int Delay, s/veh 2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	58	0	0	156	18	1	0	0	4	2	47
Future Vol, veh/h	18	58	0	0	156	18	1	0	0	4	2	47
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
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	20	63	0	0	170	20	1	0	0	4	2	51

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	195	0	0	68	0	0	320	303	73	293	293	190
Stage 1	-	-	-	-	-	-	108	108	-	185	185	-
Stage 2	-	-	-	-	-	-	212	195	-	108	108	-
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	1378	-	-	1533	-	-	633	610	989	659	618	852
Stage 1	-	-	-	-	-	-	897	806	-	817	747	-
Stage 2	-	-	-	-	-	-	790	739	-	897	806	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1371	-	-	1526	-	-	580	595	980	645	603	844
Mov Cap-2 Maneuver	-	-	-	-	-	-	580	595	-	645	603	-
Stage 1	-	-	-	-	-	-	879	790	-	801	743	-
Stage 2	-	-	-	-	-	-	736	735	-	879	790	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.8	0	11.2	9.8
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	580	1371	-	-	1526	-	-	813
HCM Lane V/C Ratio	0.002	0.014	-	-	-	-	-	0.071
HCM Control Delay (s)	11.2	7.7	0	-	0	-	-	9.8
HCM Lane LOS	B	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.2

Intersection

Int Delay, s/veh 2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⊕			⊕			⊕			⊕	
Traffic Vol, veh/h	16	77	0	0	46	10	1	0	0	15	0	16
Future Vol, veh/h	16	77	0	0	46	10	1	0	0	15	0	16
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
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	17	84	0	0	50	11	1	0	0	16	0	17

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	66	0	0	89	0	0	192	189	94	184	184	66
Stage 1	-	-	-	-	-	-	123	123	-	61	61	-
Stage 2	-	-	-	-	-	-	69	66	-	123	123	-
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	1536	-	-	1506	-	-	768	706	963	777	710	998
Stage 1	-	-	-	-	-	-	881	794	-	950	844	-
Stage 2	-	-	-	-	-	-	941	840	-	881	794	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1529	-	-	1499	-	-	740	690	954	762	694	989
Mov Cap-2 Maneuver	-	-	-	-	-	-	740	690	-	762	694	-
Stage 1	-	-	-	-	-	-	866	781	-	934	840	-
Stage 2	-	-	-	-	-	-	920	836	-	866	781	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.3	0	9.9	9.3
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	740	1529	-	-	1499	-	-	864
HCM Lane V/C Ratio	0.001	0.011	-	-	-	-	-	0.039
HCM Control Delay (s)	9.9	7.4	0	-	0	-	-	9.3
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Intersection

Int Delay, s/veh 2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✥			✥			✥			✥	
Traffic Vol, veh/h	57	170	0	0	101	10	1	0	0	15	0	40
Future Vol, veh/h	57	170	0	0	101	10	1	0	0	15	0	40
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
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	62	185	0	0	110	11	1	0	0	16	0	43

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	126	0	0	190	0	0	456	440	195	435	435	126
Stage 1	-	-	-	-	-	-	314	314	-	121	121	-
Stage 2	-	-	-	-	-	-	142	126	-	314	314	-
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	1460	-	-	1384	-	-	515	511	846	531	514	924
Stage 1	-	-	-	-	-	-	697	656	-	883	796	-
Stage 2	-	-	-	-	-	-	861	792	-	697	656	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1453	-	-	1377	-	-	468	482	838	507	485	915
Mov Cap-2 Maneuver	-	-	-	-	-	-	468	482	-	507	485	-
Stage 1	-	-	-	-	-	-	660	621	-	836	792	-
Stage 2	-	-	-	-	-	-	816	788	-	660	621	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.9	0	12.7	10.2
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	468	1453	-	-	1377	-	-	750
HCM Lane V/C Ratio	0.002	0.043	-	-	-	-	-	0.08
HCM Control Delay (s)	12.7	7.6	0	-	0	-	-	10.2
HCM Lane LOS	B	A	A	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.3

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	7	33	0	0	75	22	1	0	0	5	3	13
Future Vol, veh/h	7	33	0	0	75	22	1	0	0	5	3	13
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
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	8	36	0	0	82	24	1	0	0	5	3	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	111	0	0	41	0	0	165	168	46	156	156	104
Stage 1	-	-	-	-	-	-	57	57	-	99	99	-
Stage 2	-	-	-	-	-	-	108	111	-	57	57	-
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	1479	-	-	1568	-	-	800	725	1023	810	736	951
Stage 1	-	-	-	-	-	-	955	847	-	907	813	-
Stage 2	-	-	-	-	-	-	897	804	-	955	847	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1472	-	-	1561	-	-	774	713	1013	799	724	942
Mov Cap-2 Maneuver	-	-	-	-	-	-	774	713	-	799	724	-
Stage 1	-	-	-	-	-	-	944	838	-	897	809	-
Stage 2	-	-	-	-	-	-	876	800	-	945	838	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.3	0	9.7	9.3
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	774	1472	-	-	1561	-	-	868
HCM Lane V/C Ratio	0.001	0.005	-	-	-	-	-	0.026
HCM Control Delay (s)	9.7	7.5	0	-	0	-	-	9.3
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Intersection

Int Delay, s/veh 2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⊕			⊕			⊕			⊕	
Traffic Vol, veh/h	19	61	0	0	159	22	1	0	0	5	3	50
Future Vol, veh/h	19	61	0	0	159	22	1	0	0	5	3	50
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
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	21	66	0	0	173	24	1	0	0	5	3	54

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	202	0	0	71	0	0	332	315	76	303	303	195
Stage 1	-	-	-	-	-	-	113	113	-	190	190	-
Stage 2	-	-	-	-	-	-	219	202	-	113	113	-
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	1370	-	-	1529	-	-	621	601	985	649	610	846
Stage 1	-	-	-	-	-	-	892	802	-	812	743	-
Stage 2	-	-	-	-	-	-	783	734	-	892	802	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1363	-	-	1522	-	-	566	585	976	635	594	838
Mov Cap-2 Maneuver	-	-	-	-	-	-	566	585	-	635	594	-
Stage 1	-	-	-	-	-	-	873	785	-	795	739	-
Stage 2	-	-	-	-	-	-	726	730	-	874	785	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.8	0	11.4	9.9
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	566	1363	-	-	1522	-	-	799
HCM Lane V/C Ratio	0.002	0.015	-	-	-	-	-	0.079
HCM Control Delay (s)	11.4	7.7	0	-	0	-	-	9.9
HCM Lane LOS	B	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.3

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	20	82	0	0	50	11	1	0	0	17	0	20
Future Vol, veh/h	20	82	0	0	50	11	1	0	0	17	0	20
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
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	22	89	0	0	54	12	1	0	0	18	0	22

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	71	0	0	94	0	0	214	209	99	203	203	70
Stage 1	-	-	-	-	-	-	138	138	-	65	65	-
Stage 2	-	-	-	-	-	-	76	71	-	138	138	-
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	1529	-	-	1500	-	-	743	688	957	755	693	993
Stage 1	-	-	-	-	-	-	865	782	-	946	841	-
Stage 2	-	-	-	-	-	-	933	836	-	865	782	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1522	-	-	1493	-	-	712	671	948	739	676	984
Mov Cap-2 Maneuver	-	-	-	-	-	-	712	671	-	739	676	-
Stage 1	-	-	-	-	-	-	848	766	-	927	837	-
Stage 2	-	-	-	-	-	-	908	832	-	848	766	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.5	0	10.1	9.4
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	712	1522	-	-	1493	-	-	854
HCM Lane V/C Ratio	0.002	0.014	-	-	-	-	-	0.047
HCM Control Delay (s)	10.1	7.4	0	-	0	-	-	9.4
HCM Lane LOS	B	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

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	61	175	0	0	105	11	1	0	0	17	0	44
Future Vol, veh/h	61	175	0	0	105	11	1	0	0	17	0	44
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
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	66	190	0	0	114	12	1	0	0	18	0	48

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	131	0	0	195	0	0	476	458	200	452	452	130
Stage 1	-	-	-	-	-	-	327	327	-	125	125	-
Stage 2	-	-	-	-	-	-	149	131	-	327	327	-
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	1454	-	-	1378	-	-	499	499	841	518	503	920
Stage 1	-	-	-	-	-	-	686	648	-	879	792	-
Stage 2	-	-	-	-	-	-	854	788	-	686	648	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1447	-	-	1371	-	-	450	469	833	493	473	911
Mov Cap-2 Maneuver	-	-	-	-	-	-	450	469	-	493	473	-
Stage 1	-	-	-	-	-	-	648	612	-	830	788	-
Stage 2	-	-	-	-	-	-	805	784	-	648	612	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2	0	13	10.4
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	450	1447	-	-	1371	-	-	737
HCM Lane V/C Ratio	0.002	0.046	-	-	-	-	-	0.09
HCM Control Delay (s)	13	7.6	0	-	0	-	-	10.4
HCM Lane LOS	B	A	A	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.3

Intersection

Int Delay, s/veh 8.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	15	21	0	35	0	64	5	0	0	2	0
Future Vol, veh/h	0	15	21	0	35	0	64	5	0	0	2	0
Conflicting Peds, #/hr	0	0	5	5	0	0	5	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	-	-	50	-	-
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	16	23	0	38	0	70	5	0	0	2	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	171	152	12	172	152	5	7	0	0	5	0	0
Stage 1	7	7	-	145	145	-	-	-	-	-	-	-
Stage 2	164	145	-	27	7	-	-	-	-	-	-	-
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	792	740	1069	791	740	1078	1614	-	-	1616	-	-
Stage 1	1015	890	-	858	777	-	-	-	-	-	-	-
Stage 2	838	777	-	990	890	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	731	704	1059	732	704	1078	1606	-	-	1616	-	-
Mov Cap-2 Maneuver	731	704	-	732	704	-	-	-	-	-	-	-
Stage 1	966	886	-	820	743	-	-	-	-	-	-	-
Stage 2	760	743	-	946	886	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.3	10.4	6.8	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1606	-	-	875	704	1616	-	-
HCM Lane V/C Ratio	0.043	-	-	0.045	0.054	-	-	-
HCM Control Delay (s)	7.3	-	-	9.3	10.4	0	-	-
HCM Lane LOS	A	-	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.2	0	-	-

Int #9

Intersection

Int Delay, s/veh 4.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	28	15	21	0	35	0	64	24	0	0	58	84
Future Vol, veh/h	28	15	21	0	35	0	64	24	0	0	58	84
Conflicting Peds, #/hr	0	0	5	5	0	0	5	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	-	-	50	-	-
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	30	16	23	0	38	0	70	26	0	0	63	91

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	299	280	119	299	325	26	159	0	0	26	0	0
Stage 1	114	114	-	166	166	-	-	-	-	-	-	-
Stage 2	185	166	-	133	159	-	-	-	-	-	-	-
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	653	628	933	653	593	1050	1420	-	-	1588	-	-
Stage 1	891	801	-	836	761	-	-	-	-	-	-	-
Stage 2	817	761	-	870	766	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	593	593	924	597	560	1050	1413	-	-	1588	-	-
Mov Cap-2 Maneuver	593	593	-	597	560	-	-	-	-	-	-	-
Stage 1	843	797	-	794	723	-	-	-	-	-	-	-
Stage 2	736	723	-	827	762	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11	11.9	5.6	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1413	-	-	672	560	1588	-	-
HCM Lane V/C Ratio	0.049	-	-	0.104	0.068	-	-	-
HCM Control Delay (s)	7.7	-	-	11	11.9	0	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.3	0.2	0	-	-

Intersection

Int Delay, s/veh 7.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	26	65	0	17	0	38	7	0	0	12	0
Future Vol, veh/h	0	26	65	0	17	0	38	7	0	0	12	0
Conflicting Peds, #/hr	0	0	5	5	0	0	5	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	-	-	50	-	-
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	28	71	0	18	0	41	8	0	0	13	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	117	108	23	158	108	8	18	0	0	8	0	0
Stage 1	18	18	-	90	90	-	-	-	-	-	-	-
Stage 2	99	90	-	68	18	-	-	-	-	-	-	-
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	859	782	1054	808	782	1074	1599	-	-	1612	-	-
Stage 1	1001	880	-	917	820	-	-	-	-	-	-	-
Stage 2	907	820	-	942	880	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	823	758	1044	714	758	1074	1591	-	-	1612	-	-
Mov Cap-2 Maneuver	823	758	-	714	758	-	-	-	-	-	-	-
Stage 1	971	876	-	893	799	-	-	-	-	-	-	-
Stage 2	863	799	-	846	876	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.3	9.9	6.2	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1591	-	-	942	758	1612	-	-
HCM Lane V/C Ratio	0.026	-	-	0.105	0.024	-	-	-
HCM Control Delay (s)	7.3	-	-	9.3	9.9	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.1	0	-	-

Intersection

Int Delay, s/veh 6.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	93	26	65	0	17	0	38	69	0	0	48	55
Future Vol, veh/h	93	26	65	0	17	0	38	69	0	0	48	55
Conflicting Peds, #/hr	0	0	5	5	0	0	5	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	-	-	50	-	-
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	101	28	71	0	18	0	41	75	0	0	52	60

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	253	244	92	294	274	75	117	0	0	75	0	0
Stage 1	87	87	-	157	157	-	-	-	-	-	-	-
Stage 2	166	157	-	137	117	-	-	-	-	-	-	-
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	700	658	965	658	633	986	1471	-	-	1524	-	-
Stage 1	921	823	-	845	768	-	-	-	-	-	-	-
Stage 2	836	768	-	866	799	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	666	636	956	574	612	986	1464	-	-	1524	-	-
Mov Cap-2 Maneuver	666	636	-	574	612	-	-	-	-	-	-	-
Stage 1	891	819	-	821	746	-	-	-	-	-	-	-
Stage 2	792	746	-	771	795	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.7	11.1	2.7	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1464	-	-	740	612	1524	-	-
HCM Lane V/C Ratio	0.028	-	-	0.27	0.03	-	-	-
HCM Control Delay (s)	7.5	-	-	11.7	11.1	0	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.1	0.1	0	-	-

Intersection

Int Delay, s/veh 8.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	18	21	0	44	0	64	5	0	0	2	0
Future Vol, veh/h	0	18	21	0	44	0	64	5	0	0	2	0
Conflicting Peds, #/hr	0	0	5	5	0	0	5	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	-	-	50	-	-
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	20	23	0	48	0	70	5	0	0	2	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	176	152	12	174	152	5	7	0	0	5	0	0
Stage 1	7	7	-	145	145	-	-	-	-	-	-	-
Stage 2	169	145	-	29	7	-	-	-	-	-	-	-
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	786	740	1069	789	740	1078	1614	-	-	1616	-	-
Stage 1	1015	890	-	858	777	-	-	-	-	-	-	-
Stage 2	833	777	-	988	890	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	717	704	1059	727	704	1078	1606	-	-	1616	-	-
Mov Cap-2 Maneuver	717	704	-	727	704	-	-	-	-	-	-	-
Stage 1	966	886	-	820	743	-	-	-	-	-	-	-
Stage 2	745	743	-	941	886	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.4	10.5	6.8	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1606	-	-	859	704	1616	-	-
HCM Lane V/C Ratio	0.043	-	-	0.049	0.068	-	-	-
HCM Control Delay (s)	7.3	-	-	9.4	10.5	0	-	-
HCM Lane LOS	A	-	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.2	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	28	18	21	0	44	0	64	24	0	0	58	84
Future Vol, veh/h	28	18	21	0	44	0	64	24	0	0	58	84
Conflicting Peds, #/hr	0	0	5	5	0	0	5	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	-	-	50	-	-
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	30	20	23	0	48	0	70	26	0	0	63	91

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	304	280	119	301	325	26	159	0	0	26	0	0
Stage 1	114	114	-	166	166	-	-	-	-	-	-	-
Stage 2	190	166	-	135	159	-	-	-	-	-	-	-
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	648	628	933	651	593	1050	1420	-	-	1588	-	-
Stage 1	891	801	-	836	761	-	-	-	-	-	-	-
Stage 2	812	761	-	868	766	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	581	593	924	593	560	1050	1413	-	-	1588	-	-
Mov Cap-2 Maneuver	581	593	-	593	560	-	-	-	-	-	-	-
Stage 1	843	797	-	794	723	-	-	-	-	-	-	-
Stage 2	721	723	-	822	762	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.1	12	5.6	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1413	-	-	662	560	1588	-	-
HCM Lane V/C Ratio	0.049	-	-	0.11	0.085	-	-	-
HCM Control Delay (s)	7.7	-	-	11.1	12	0	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.4	0.3	0	-	-

Intersection	
Int Delay, s/veh	8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	33	65	0	21	0	38	7	0	0	12	0
Future Vol, veh/h	0	33	65	0	21	0	38	7	0	0	12	0
Conflicting Peds, #/hr	0	0	5	5	0	0	5	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	-	-	50	-	-
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	36	71	0	23	0	41	8	0	0	13	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	120	108	23	162	108	8	18	0	0	8	0	0
Stage 1	18	18	-	90	90	-	-	-	-	-	-	-
Stage 2	102	90	-	72	18	-	-	-	-	-	-	-
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	855	782	1054	803	782	1074	1599	-	-	1612	-	-
Stage 1	1001	880	-	917	820	-	-	-	-	-	-	-
Stage 2	904	820	-	938	880	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	815	758	1044	704	758	1074	1591	-	-	1612	-	-
Mov Cap-2 Maneuver	815	758	-	704	758	-	-	-	-	-	-	-
Stage 1	971	876	-	893	799	-	-	-	-	-	-	-
Stage 2	856	799	-	835	876	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.4	9.9	6.2	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1591	-	-	926	758	1612	-	-
HCM Lane V/C Ratio	0.026	-	-	0.115	0.03	-	-	-
HCM Control Delay (s)	7.3	-	-	9.4	9.9	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.1	0	-	-

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	93	33	65	0	21	0	38	69	0	0	48	55
Future Vol, veh/h	93	33	65	0	21	0	38	69	0	0	48	55
Conflicting Peds, #/hr	0	0	5	5	0	0	5	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	-	-	50	-	-
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	101	36	71	0	23	0	41	75	0	0	52	60

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	256	244	92	298	274	75	117	0	0	75	0	0
Stage 1	87	87	-	157	157	-	-	-	-	-	-	-
Stage 2	169	157	-	141	117	-	-	-	-	-	-	-
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	697	658	965	654	633	986	1471	-	-	1524	-	-
Stage 1	921	823	-	845	768	-	-	-	-	-	-	-
Stage 2	833	768	-	862	799	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	659	636	956	564	612	986	1464	-	-	1524	-	-
Mov Cap-2 Maneuver	659	636	-	564	612	-	-	-	-	-	-	-
Stage 1	891	819	-	821	746	-	-	-	-	-	-	-
Stage 2	785	746	-	760	795	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.9	11.1	2.7	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1464	-	-	732	612	1524	-	-
HCM Lane V/C Ratio	0.028	-	-	0.284	0.037	-	-	-
HCM Control Delay (s)	7.5	-	-	11.9	11.1	0	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.2	0.1	0	-	-

Intersection	
Intersection Delay, s/veh	7.8
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	290	475	151	410
Demand Flow Rate, veh/h	296	484	153	418
Vehicles Circulating, veh/h	322	212	329	386
Vehicles Exiting, veh/h	482	270	289	310
Ped Vol Crossing Leg, #/h	5	5	5	5
Ped Cap Adj	0.999	0.999	0.999	0.999
Approach Delay, s/veh	6.8	8.0	5.2	9.4
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	R	R	R	R
Assumed Moves	R	R	R	R
RT Channelized				
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
Entry Flow, veh/h	296	484	153	418
Cap Entry Lane, veh/h	994	1112	987	931
Entry HV Adj Factor	0.981	0.981	0.984	0.980
Flow Entry, veh/h	290	475	151	410
Cap Entry, veh/h	974	1089	970	912
V/C Ratio	0.298	0.436	0.155	0.449
Control Delay, s/veh	6.8	8.0	5.2	9.4
LOS	A	A	A	A
95th %tile Queue, veh	1	2	1	2

INT #10

Intersection	
Intersection Delay, s/veh	8.6
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	311	543	153	410
Demand Flow Rate, veh/h	317	554	155	418
Vehicles Circulating, veh/h	329	212	350	456
Vehicles Exiting, veh/h	545	293	296	310
Ped Vol Crossing Leg, #/h	5	5	5	5
Ped Cap Adj	0.999	0.999	0.999	0.999
Approach Delay, s/veh	7.1	9.0	5.3	10.5
Approach LOS	A	A	A	B

Lane	Left	Left	Left	Left
Designated Moves	R	R	R	R
Assumed Moves	R	R	R	R
RT Channelized				
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
Entry Flow, veh/h	317	554	155	418
Cap Entry Lane, veh/h	987	1112	966	867
Entry HV Adj Factor	0.981	0.981	0.984	0.980
Flow Entry, veh/h	311	543	153	410
Cap Entry, veh/h	967	1089	950	849
V/C Ratio	0.322	0.499	0.161	0.483
Control Delay, s/veh	7.1	9.0	5.3	10.5
LOS	A	A	A	B
95th %tile Queue, veh	1	3	1	3

Intersection	
Intersection Delay, s/veh	9.7
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	463	382	379	392
Demand Flow Rate, veh/h	472	390	387	400
Vehicles Circulating, veh/h	333	440	546	335
Vehicles Exiting, veh/h	402	493	259	495
Ped Vol Crossing Leg, #/h	5	5	5	5
Ped Cap Adj	0.999	0.999	0.999	0.999
Approach Delay, s/veh	9.6	9.7	11.5	8.3
Approach LOS	A	A	B	A

Lane	Left	Left	Left	Left
Designated Moves	R	R	R	R
Assumed Moves	R	R	R	R
RT Channelized				
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
Entry Flow, veh/h	472	390	387	400
Cap Entry Lane, veh/h	983	881	791	981
Entry HV Adj Factor	0.980	0.979	0.980	0.981
Flow Entry, veh/h	463	382	379	392
Cap Entry, veh/h	963	862	774	961
V/C Ratio	0.481	0.443	0.490	0.408
Control Delay, s/veh	9.6	9.7	11.5	8.3
LOS	A	A	B	A
95th %tile Queue, veh	3	2	3	2

Intersection	
Intersection Delay, s/veh	11.0
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	531	425	386	392
Demand Flow Rate, veh/h	542	434	394	400
Vehicles Circulating, veh/h	337	440	616	379
Vehicles Exiting, veh/h	442	570	263	495
Ped Vol Crossing Leg, #/h	5	5	5	5
Ped Cap Adj	0.999	0.999	0.999	0.999
Approach Delay, s/veh	11.1	10.6	13.3	8.9
Approach LOS	B	B	B	A

Lane	Left	Left	Left	Left
Designated Moves	R	R	R	R
Assumed Moves	R	R	R	R
RT Channelized				
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
Entry Flow, veh/h	542	434	394	400
Cap Entry Lane, veh/h	979	881	736	937
Entry HV Adj Factor	0.980	0.979	0.980	0.981
Flow Entry, veh/h	531	425	386	392
Cap Entry, veh/h	959	862	721	919
V/C Ratio	0.554	0.493	0.536	0.427
Control Delay, s/veh	11.1	10.6	13.3	8.9
LOS	B	B	B	A
95th %tile Queue, veh	4	3	3	2

Intersection	
Intersection Delay, s/veh	10.8
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	359	580	190	516
Demand Flow Rate, veh/h	367	592	193	526
Vehicles Circulating, veh/h	405	269	410	469
Vehicles Exiting, veh/h	590	334	362	392
Ped Vol Crossing Leg, #/h	5	5	5	5
Ped Cap Adj	0.999	0.999	0.999	0.999
Approach Delay, s/veh	8.7	10.8	6.2	14.0
Approach LOS	A	B	A	B

Lane	Left	Left	Left	Left
Designated Moves	R	R	R	R
Assumed Moves	R	R	R	R
RT Channelized				
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
Entry Flow, veh/h	367	592	193	526
Cap Entry Lane, veh/h	913	1049	908	855
Entry HV Adj Factor	0.979	0.980	0.984	0.980
Flow Entry, veh/h	359	580	190	516
Cap Entry, veh/h	893	1027	893	838
V/C Ratio	0.402	0.565	0.213	0.615
Control Delay, s/veh	8.7	10.8	6.2	14.0
LOS	A	B	A	B
95th %tile Queue, veh	2	4	1	4

Intersection	
Intersection Delay, s/veh	12.2
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	380	647	192	516
Demand Flow Rate, veh/h	388	660	195	526
Vehicles Circulating, veh/h	411	269	431	537
Vehicles Exiting, veh/h	652	357	368	392
Ped Vol Crossing Leg, #/h	5	5	5	5
Ped Cap Adj	0.999	0.999	0.999	0.999
Approach Delay, s/veh	9.2	12.4	6.4	16.4
Approach LOS	A	B	A	C

Lane	Left	Left	Left	Left
Designated Moves	R	R	R	R
Assumed Moves	R	R	R	R
RT Channelized				
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
Entry Flow, veh/h	388	660	195	526
Cap Entry Lane, veh/h	907	1049	889	798
Entry HV Adj Factor	0.979	0.980	0.984	0.980
Flow Entry, veh/h	380	647	192	516
Cap Entry, veh/h	888	1027	875	782
V/C Ratio	0.428	0.630	0.219	0.660
Control Delay, s/veh	9.2	12.4	6.4	16.4
LOS	A	B	A	C
95th %tile Queue, veh	2	5	1	5

Intersection	
Intersection Delay, s/veh	15.2
Intersection LOS	C

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	565	469	477	495
Demand Flow Rate, veh/h	577	478	486	506
Vehicles Circulating, veh/h	420	556	670	411
Vehicles Exiting, veh/h	497	600	327	623
Ped Vol Crossing Leg, #/h	5	5	5	5
Ped Cap Adj	0.999	0.999	0.999	0.999
Approach Delay, s/veh	14.3	14.8	20.0	11.8
Approach LOS	B	B	C	B

Lane	Left	Left	Left	Left
Designated Moves	R	R	R	R
Assumed Moves	R	R	R	R
RT Channelized				
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
Entry Flow, veh/h	577	478	486	506
Cap Entry Lane, veh/h	899	783	697	907
Entry HV Adj Factor	0.980	0.980	0.981	0.979
Flow Entry, veh/h	565	469	477	495
Cap Entry, veh/h	880	767	683	888
V/C Ratio	0.642	0.611	0.698	0.558
Control Delay, s/veh	14.3	14.8	20.0	11.8
LOS	B	B	C	B
95th %tile Queue, veh	5	4	6	4

Intersection	
Intersection Delay, s/veh	18.1
Intersection LOS	C

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	633	513	484	495
Demand Flow Rate, veh/h	646	523	494	506
Vehicles Circulating, veh/h	424	556	739	456
Vehicles Exiting, veh/h	538	677	331	623
Ped Vol Crossing Leg, #/h	5	5	5	5
Ped Cap Adj	0.999	0.999	0.999	0.999
Approach Delay, s/veh	17.6	17.0	25.2	13.0
Approach LOS	C	C	D	B

Lane	Left	Left	Left	Left
Designated Moves	R	R	R	R
Assumed Moves	R	R	R	R
RT Channelized				
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
Entry Flow, veh/h	646	523	494	506
Cap Entry Lane, veh/h	895	783	649	867
Entry HV Adj Factor	0.980	0.981	0.979	0.979
Flow Entry, veh/h	633	513	484	495
Cap Entry, veh/h	877	767	635	848
V/C Ratio	0.722	0.669	0.761	0.584
Control Delay, s/veh	17.6	17.0	25.2	13.0
LOS	C	C	D	B
95th %tile Queue, veh	6	5	7	4

Intersection	
Intersection Delay, s/veh	5.4
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	129	307	266	151
Demand Flow Rate, veh/h	131	313	271	154
Vehicles Circulating, veh/h	130	279	113	346
Vehicles Exiting, veh/h	370	105	148	246
Ped Vol Crossing Leg, #/h	5	5	10	10
Ped Cap Adj	0.999	0.999	0.999	0.999
Approach Delay, s/veh	3.9	6.6	4.9	5.3
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	R	R	R	R
Assumed Moves	R	R	R	R
RT Channelized				
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
Entry Flow, veh/h	131	313	271	154
Cap Entry Lane, veh/h	1209	1038	1230	970
Entry HV Adj Factor	0.984	0.981	0.983	0.977
Flow Entry, veh/h	129	307	266	151
Cap Entry, veh/h	1188	1017	1207	946
V/C Ratio	0.108	0.302	0.221	0.159
Control Delay, s/veh	3.9	6.6	4.9	5.3
LOS	A	A	A	A
95th %tile Queue, veh	0	1	1	1

Int #11

Intersection	
Intersection Delay, s/veh	6.3
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	151	369	287	222
Demand Flow Rate, veh/h	153	376	292	227
Vehicles Circulating, veh/h	197	303	135	409
Vehicles Exiting, veh/h	439	124	215	270
Ped Vol Crossing Leg, #/h	5	5	10	10
Ped Cap Adj	0.999	0.999	0.999	0.999
Approach Delay, s/veh	4.4	7.6	5.2	6.6
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	R	R	R	R
Assumed Moves	R	R	R	R
RT Channelized				
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
Entry Flow, veh/h	153	376	292	227
Cap Entry Lane, veh/h	1129	1013	1202	909
Entry HV Adj Factor	0.984	0.981	0.983	0.979
Flow Entry, veh/h	151	369	287	222
Cap Entry, veh/h	1110	993	1180	889
V/C Ratio	0.136	0.371	0.243	0.250
Control Delay, s/veh	4.4	7.6	5.2	6.6
LOS	A	A	A	A
95th %tile Queue, veh	0	2	1	1

Intersection	
Intersection Delay, s/veh	6.0
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	328	156	209	295
Demand Flow Rate, veh/h	335	159	213	301
Vehicles Circulating, veh/h	293	233	329	199
Vehicles Exiting, veh/h	207	309	299	193
Ped Vol Crossing Leg, #/h	5	5	10	10
Ped Cap Adj	0.999	0.999	0.999	0.999
Approach Delay, s/veh	7.0	4.7	5.8	5.8
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	R	R	R	R
Assumed Moves	R	R	R	R
RT Channelized				
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
Entry Flow, veh/h	335	159	213	301
Cap Entry Lane, veh/h	1023	1088	987	1126
Entry HV Adj Factor	0.980	0.981	0.980	0.982
Flow Entry, veh/h	328	156	209	295
Cap Entry, veh/h	1002	1066	965	1104
V/C Ratio	0.328	0.146	0.216	0.268
Control Delay, s/veh	7.0	4.7	5.8	5.8
LOS	A	A	A	A
95th %tile Queue, veh	1	1	1	1

Intersection	
Intersection Delay, s/veh	7.3
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	403	195	280	340
Demand Flow Rate, veh/h	411	199	287	347
Vehicles Circulating, veh/h	334	313	405	239
Vehicles Exiting, veh/h	252	378	340	273
Ped Vol Crossing Leg, #/h	5	5	10	10
Ped Cap Adj	0.999	0.999	0.999	0.999
Approach Delay, s/veh	8.5	5.6	7.5	6.6
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	R	R	R	R
Assumed Moves	R	R	R	R
RT Channelized				
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
Entry Flow, veh/h	411	199	287	347
Cap Entry Lane, veh/h	982	1003	913	1081
Entry HV Adj Factor	0.981	0.981	0.977	0.979
Flow Entry, veh/h	403	195	280	340
Cap Entry, veh/h	962	983	891	1057
V/C Ratio	0.419	0.199	0.315	0.321
Control Delay, s/veh	8.5	5.6	7.5	6.6
LOS	A	A	A	A
95th %tile Queue, veh	2	1	1	1

Intersection	
Intersection Delay, s/veh	6.4
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	156	365	335	191
Demand Flow Rate, veh/h	158	372	341	195
Vehicles Circulating, veh/h	163	353	135	416
Vehicles Exiting, veh/h	448	123	186	309
Ped Vol Crossing Leg, #/h	5	5	10	10
Ped Cap Adj	0.999	0.999	0.999	0.999
Approach Delay, s/veh	4.3	8.1	5.7	6.3
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	R	R	R	R
Assumed Moves	R	R	R	R
RT Channelized				
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
Entry Flow, veh/h	158	372	341	195
Cap Entry Lane, veh/h	1169	963	1202	903
Entry HV Adj Factor	0.985	0.982	0.981	0.980
Flow Entry, veh/h	156	365	335	191
Cap Entry, veh/h	1151	945	1178	883
V/C Ratio	0.135	0.387	0.284	0.216
Control Delay, s/veh	4.3	8.1	5.7	6.3
LOS	A	A	A	A
95th %tile Queue, veh	0	2	1	1

Intersection	
Intersection Delay, s/veh	7.5
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	178	425	356	261
Demand Flow Rate, veh/h	182	434	363	266
Vehicles Circulating, veh/h	228	378	159	478
Vehicles Exiting, veh/h	516	144	251	334
Ped Vol Crossing Leg, #/h	5	5	10	10
Ped Cap Adj	0.999	0.999	0.999	0.999
Approach Delay, s/veh	4.9	9.6	6.1	7.9
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	R	R	R	R
Assumed Moves	R	R	R	R
RT Channelized				
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
Entry Flow, veh/h	182	434	363	266
Cap Entry Lane, veh/h	1094	938	1173	847
Entry HV Adj Factor	0.980	0.980	0.981	0.981
Flow Entry, veh/h	178	425	356	261
Cap Entry, veh/h	1071	919	1150	830
V/C Ratio	0.167	0.463	0.310	0.314
Control Delay, s/veh	4.9	9.6	6.1	7.9
LOS	A	A	A	A
95th %tile Queue, veh	1	2	1	1

Intersection	
Intersection Delay, s/veh	7.3
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	391	182	261	372
Demand Flow Rate, veh/h	399	185	266	379
Vehicles Circulating, veh/h	366	294	389	236
Vehicles Exiting, veh/h	249	361	376	243
Ped Vol Crossing Leg, #/h	5	5	10	10
Ped Cap Adj	0.999	0.999	0.999	0.999
Approach Delay, s/veh	8.8	5.3	7.0	7.0
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	R	R	R	R
Assumed Moves	R	R	R	R
RT Channelized				
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
Entry Flow, veh/h	399	185	266	379
Cap Entry Lane, veh/h	950	1022	928	1085
Entry HV Adj Factor	0.979	0.982	0.981	0.980
Flow Entry, veh/h	391	182	261	372
Cap Entry, veh/h	930	1003	909	1062
V/C Ratio	0.420	0.181	0.287	0.350
Control Delay, s/veh	8.8	5.3	7.0	7.0
LOS	A	A	A	A
95th %tile Queue, veh	2	1	1	2

Intersection	
Intersection Delay, s/veh	9.0
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	466	221	332	418
Demand Flow Rate, veh/h	476	225	339	426
Vehicles Circulating, veh/h	409	373	466	276
Vehicles Exiting, veh/h	293	432	419	322
Ped Vol Crossing Leg, #/h	5	5	10	10
Ped Cap Adj	0.999	0.999	0.999	0.999
Approach Delay, s/veh	11.0	6.3	9.1	8.0
Approach LOS	B	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	R	R	R	R
Assumed Moves	R	R	R	R
RT Channelized				
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
Entry Flow, veh/h	476	225	339	426
Cap Entry Lane, veh/h	909	943	858	1041
Entry HV Adj Factor	0.980	0.982	0.979	0.981
Flow Entry, veh/h	466	221	332	418
Cap Entry, veh/h	890	926	839	1020
V/C Ratio	0.524	0.239	0.396	0.410
Control Delay, s/veh	11.0	6.3	9.1	8.0
LOS	B	A	A	A
95th %tile Queue, veh	3	1	2	2

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	30	5	10	3	6	0	24	1	1	0	5	96
Future Vol, veh/h	30	5	10	3	6	0	24	1	1	0	5	96
Conflicting Peds, #/hr	5	0	5	10	0	10	5	0	5	5	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	-	-	200	-	-	-	-	-	200
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	33	5	11	3	7	0	26	1	1	0	5	104

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	77	69	20	134	173	17	114	0	0	7	0	0
Stage 1	10	10	-	59	59	-	-	-	-	-	-	-
Stage 2	67	59	-	75	114	-	-	-	-	-	-	-
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	912	822	1058	838	720	1062	1475	-	-	1614	-	-
Stage 1	1011	887	-	953	846	-	-	-	-	-	-	-
Stage 2	943	846	-	934	801	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	880	799	1043	802	700	1047	1468	-	-	1606	-	-
Mov Cap-2 Maneuver	880	799	-	802	700	-	-	-	-	-	-	-
Stage 1	988	883	-	931	827	-	-	-	-	-	-	-
Stage 2	910	827	-	910	797	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.1	10	6.9	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1468	-	-	880	947	731	-	1606	-	-
HCM Lane V/C Ratio	0.018	-	-	0.037	0.017	0.013	-	-	-	-
HCM Control Delay (s)	7.5	0	-	9.2	8.9	10	0	0	-	-
HCM Lane LOS	A	A	-	A	A	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.1	0	-	0	-	-

Int #12

Intersection												
Int Delay, s/veh	3.4											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	49	5	10	3	6	0	24	1	1	0	5	152
Future Vol, veh/h	49	5	10	3	6	0	24	1	1	0	5	152
Conflicting Peds, #/hr	5	0	5	10	0	10	5	0	5	5	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	-	-	200	-	-	-	-	-	200
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	53	5	11	3	7	0	26	1	1	0	5	165

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	77	69	20	165	234	17	175	0	0	7	0	0
Stage 1	10	10	-	59	59	-	-	-	-	-	-	-
Stage 2	67	59	-	106	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	912	822	1058	800	666	1062	1401	-	-	1614	-	-
Stage 1	1011	887	-	953	846	-	-	-	-	-	-	-
Stage 2	943	846	-	900	754	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	879	798	1043	765	647	1047	1394	-	-	1606	-	-
Mov Cap-2 Maneuver	879	798	-	765	647	-	-	-	-	-	-	-
Stage 1	987	883	-	930	826	-	-	-	-	-	-	-
Stage 2	909	826	-	877	750	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.3	10.4	7	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1394	-	-	879	946	682	-	1606	-	-
HCM Lane V/C Ratio	0.019	-	-	0.061	0.017	0.014	-	-	-	-
HCM Control Delay (s)	7.6	0	-	9.4	8.9	10.4	0	0	-	-
HCM Lane LOS	A	A	-	A	A	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.1	0	-	0	-	-

Intersection

Int Delay, s/veh 6.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	103	5	28	1	9	0	23	3	1	0	2	58
Future Vol, veh/h	103	5	28	1	9	0	23	3	1	0	2	58
Conflicting Peds, #/hr	5	0	5	10	0	10	5	0	5	5	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	-	-	200	-	-	-	-	-	200
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	112	5	30	1	10	0	25	3	1	0	2	63

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	76	66	17	120	129	19	70	0	0	9	0	0
Stage 1	7	7	-	59	59	-	-	-	-	-	-	-
Stage 2	69	59	-	61	70	-	-	-	-	-	-	-
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	914	825	1062	855	762	1059	1531	-	-	1611	-	-
Stage 1	1015	890	-	953	846	-	-	-	-	-	-	-
Stage 2	941	846	-	950	837	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	881	804	1047	805	742	1044	1524	-	-	1603	-	-
Mov Cap-2 Maneuver	881	804	-	805	742	-	-	-	-	-	-	-
Stage 1	994	886	-	933	828	-	-	-	-	-	-	-
Stage 2	906	828	-	908	833	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.5	9.9	6.3	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1524	-	-	881	1001	748	-	1603	-	-
HCM Lane V/C Ratio	0.016	-	-	0.127	0.036	0.015	-	-	-	-
HCM Control Delay (s)	7.4	0	-	9.7	8.7	9.9	0	0	-	-
HCM Lane LOS	A	A	-	A	A	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.1	0	-	0	-	-

Intersection

Int Delay, s/veh 6.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	165	5	28	1	9	0	23	3	1	0	2	94
Future Vol, veh/h	165	5	28	1	9	0	23	3	1	0	2	94
Conflicting Peds, #/hr	5	0	5	10	0	10	5	0	5	5	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	-	-	200	-	-	-	-	-	200
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	179	5	30	1	10	0	25	3	1	0	2	102

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	76	66	17	140	168	19	109	0	0	9	0	0
Stage 1	7	7	-	59	59	-	-	-	-	-	-	-
Stage 2	69	59	-	81	109	-	-	-	-	-	-	-
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	914	825	1062	830	725	1059	1481	-	-	1611	-	-
Stage 1	1015	890	-	953	846	-	-	-	-	-	-	-
Stage 2	941	846	-	927	805	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	880	803	1047	780	705	1044	1474	-	-	1603	-	-
Mov Cap-2 Maneuver	880	803	-	780	705	-	-	-	-	-	-	-
Stage 1	993	886	-	932	827	-	-	-	-	-	-	-
Stage 2	905	827	-	886	801	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.9	10.1	6.4	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1474	-	-	880	1001	712	-	1603	-	-
HCM Lane V/C Ratio	0.017	-	-	0.204	0.036	0.015	-	-	-	-
HCM Control Delay (s)	7.5	0	-	10.1	8.7	10.1	0	0	-	-
HCM Lane LOS	A	A	-	B	A	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.8	0.1	0	-	0	-	-

Intersection												
Int Delay, s/veh	3.9											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	31	5	13	3	6	0	30	1	1	0	6	100
Future Vol, veh/h	31	5	13	3	6	0	30	1	1	0	6	100
Conflicting Peds, #/hr	5	0	5	10	0	10	5	0	5	5	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	-	-	200	-	-	-	-	-	200
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	34	5	14	3	7	0	33	1	1	0	7	109

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	93	85	22	154	194	17	121	0	0	7	0	0
Stage 1	12	12	-	73	73	-	-	-	-	-	-	-
Stage 2	81	73	-	81	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	891	805	1055	813	701	1062	1467	-	-	1614	-	-
Stage 1	1009	886	-	937	834	-	-	-	-	-	-	-
Stage 2	927	834	-	927	796	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	856	778	1040	772	678	1047	1460	-	-	1606	-	-
Mov Cap-2 Maneuver	856	778	-	772	678	-	-	-	-	-	-	-
Stage 1	981	882	-	911	811	-	-	-	-	-	-	-
Stage 2	890	811	-	900	792	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.2	10.2	7.1	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1460	-	-	856	951	707	-	1606	-	-
HCM Lane V/C Ratio	0.022	-	-	0.039	0.021	0.014	-	-	-	-
HCM Control Delay (s)	7.5	0	-	9.4	8.9	10.2	0	0	-	-
HCM Lane LOS	A	A	-	A	A	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.1	0	-	0	-	-

Intersection

Int Delay, s/veh 3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	50	5	13	3	6	0	30	1	1	0	6	156
Future Vol, veh/h	50	5	13	3	6	0	30	1	1	0	6	156
Conflicting Peds, #/hr	5	0	5	10	0	10	5	0	5	5	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	-	-	200	-	-	-	-	-	200
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	54	5	14	3	7	0	33	1	1	0	7	170

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	93	85	22	185	255	17	182	0	0	7	0	0
Stage 1	12	12	-	73	73	-	-	-	-	-	-	-
Stage 2	81	73	-	112	182	-	-	-	-	-	-	-
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	891	805	1055	776	649	1062	1393	-	-	1614	-	-
Stage 1	1009	886	-	937	834	-	-	-	-	-	-	-
Stage 2	927	834	-	893	749	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	855	778	1040	736	627	1047	1386	-	-	1606	-	-
Mov Cap-2 Maneuver	855	778	-	736	627	-	-	-	-	-	-	-
Stage 1	980	882	-	910	810	-	-	-	-	-	-	-
Stage 2	889	810	-	867	745	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.3	10.5	7.2	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1386	-	-	855	951	660	-	1606	-	-
HCM Lane V/C Ratio	0.024	-	-	0.064	0.021	0.015	-	-	-	-
HCM Control Delay (s)	7.7	0	-	9.5	8.9	10.5	0	0	-	-
HCM Lane LOS	A	A	-	A	A	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.1	0	-	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	105	5	36	1	9	0	28	4	1	0	3	59
Future Vol, veh/h	105	5	36	1	9	0	28	4	1	0	3	59
Conflicting Peds, #/hr	5	0	5	10	0	10	5	0	5	5	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	-	-	200	-	-	-	-	-	200
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	114	5	39	1	10	0	30	4	1	0	3	64

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	88	78	18	137	142	20	72	0	0	10	0	0
Stage 1	8	8	-	70	70	-	-	-	-	-	-	-
Stage 2	80	70	-	67	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	897	812	1061	834	749	1058	1528	-	-	1610	-	-
Stage 1	1013	889	-	940	837	-	-	-	-	-	-	-
Stage 2	929	837	-	943	835	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	862	788	1046	776	727	1043	1521	-	-	1602	-	-
Mov Cap-2 Maneuver	862	788	-	776	727	-	-	-	-	-	-	-
Stage 1	988	885	-	917	816	-	-	-	-	-	-	-
Stage 2	891	816	-	894	831	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.5	10	6.3	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1521	-	-	862	1006	732	-	1602	-	-
HCM Lane V/C Ratio	0.02	-	-	0.132	0.044	0.015	-	-	-	-
HCM Control Delay (s)	7.4	0	-	9.8	8.7	10	0	0	-	-
HCM Lane LOS	A	A	-	A	A	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.1	0	-	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	167	5	36	1	9	0	28	4	1	0	3	95
Future Vol, veh/h	167	5	36	1	9	0	28	4	1	0	3	95
Conflicting Peds, #/hr	5	0	5	10	0	10	5	0	5	5	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	-	-	200	-	-	-	-	-	200
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	182	5	39	1	10	0	30	4	1	0	3	103

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	88	78	18	157	181	20	111	0	0	10	0	0
Stage 1	8	8	-	70	70	-	-	-	-	-	-	-
Stage 2	80	70	-	87	111	-	-	-	-	-	-	-
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	897	812	1061	809	713	1058	1479	-	-	1610	-	-
Stage 1	1013	889	-	940	837	-	-	-	-	-	-	-
Stage 2	929	837	-	921	804	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	861	788	1046	752	692	1043	1472	-	-	1602	-	-
Mov Cap-2 Maneuver	861	788	-	752	692	-	-	-	-	-	-	-
Stage 1	988	885	-	917	816	-	-	-	-	-	-	-
Stage 2	891	816	-	873	800	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10	10.2	6.4	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1472	-	-	861	1006	698	-	1602	-	-
HCM Lane V/C Ratio	0.021	-	-	0.211	0.044	0.016	-	-	-	-
HCM Control Delay (s)	7.5	0	-	10.3	8.7	10.2	0	0	-	-
HCM Lane LOS	A	A	-	B	A	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.8	0.1	0	-	0	-	-

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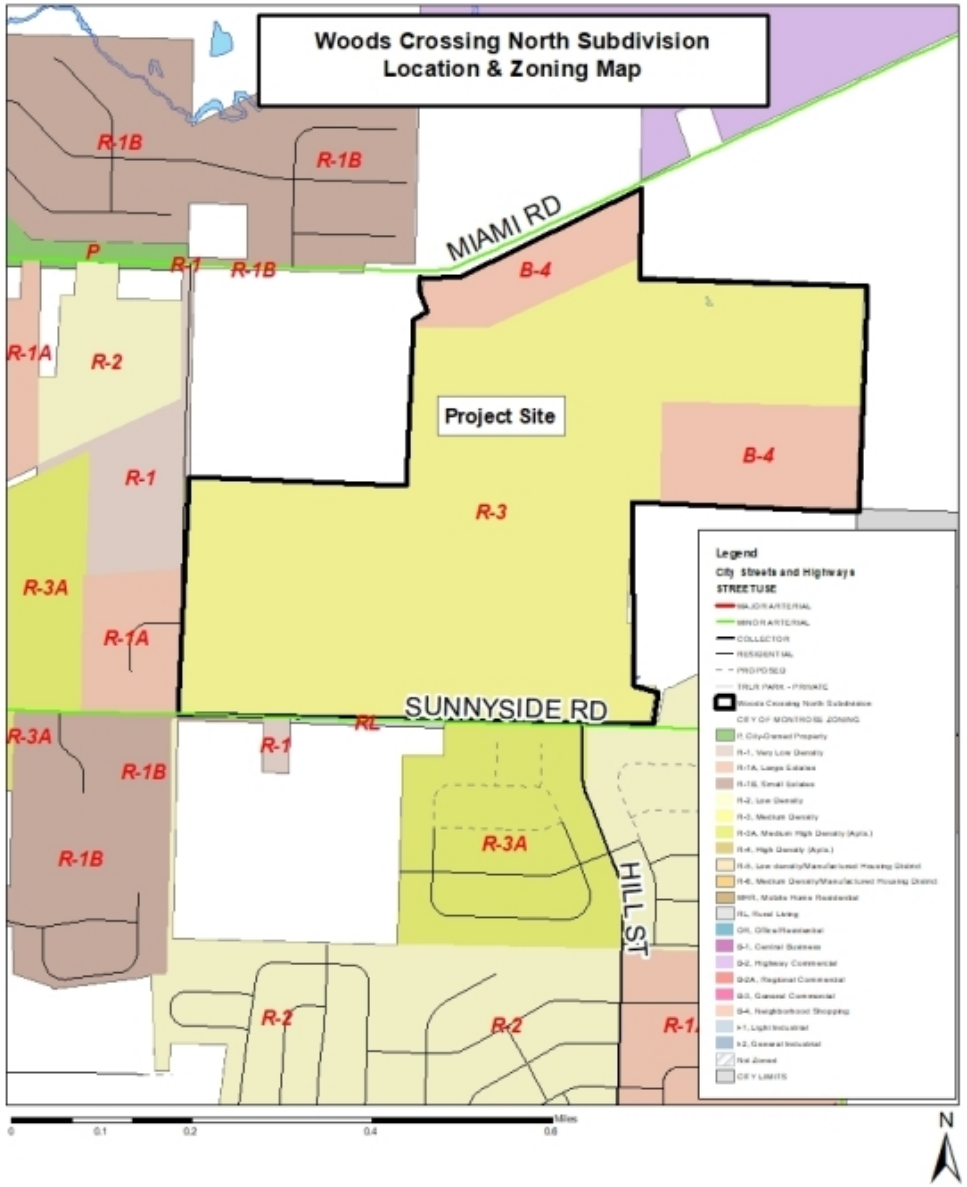
Proposal & Vicinity Map

Woods Crossing North is a proposed residential development.

Project Background

- Project site: 160.71 acres
- Zoned “R-3A” Medium High Density & “B-4” Neighborhood Shopping District
- “R-3”: 545 single family residential lots
- “B-4”: 45 multi-family units
- Zoning completed as part of annexation (2017) & consistent with surrounding area



Subdivision Process

Sketch Plan

- Submittal of Complete Application
- Staff/Outside Agency Review
- Comments sent to applicant
- Correct set of plans submitted to City
- Planning Commission review. No formal action.

Preliminary Plat

- Submittal of Complete Application
- Staff/Outside Agency Review
- Comments sent to applicant
- Correct set of plans submitted to City
- Planning Commission recommendation to Council
- Consideration/approval by City Council
- Pre-construction meeting, infrastructure improvements

Final Plat

- Submittal of Complete Application
- Staff/Outside Agency Review
- Comments sent to applicant
- Correct set of plans submitted to City
- Consideration/approval by City Council
- Building permits issued
- Certificates of occupancy issued

Subdivision Procedures – Section 4-7-5(A)(2)

"The proposal shall be consistent with the Master Plan, City subdivision and zoning regulations, standards and other applicable ordinances and regulations and will be reviewed considering the following at a minimum:

(a) Conformance with the master plan and zoning regulations;

(b) Relationship of development to topography, soils, drainage, flooding, poten hazard areas and other physical characteristics;

(c) Availability of water, means of sewage collection and treatment, storm wate drainage, access and other utilities and services;

(d) Compatibility with the natural environment, wildlife, vegetation and unique natural features;

(e) Adjacent streets and traffic flow, including pedestrian access;

(f) Availability of fire, police and other emergency services protection;

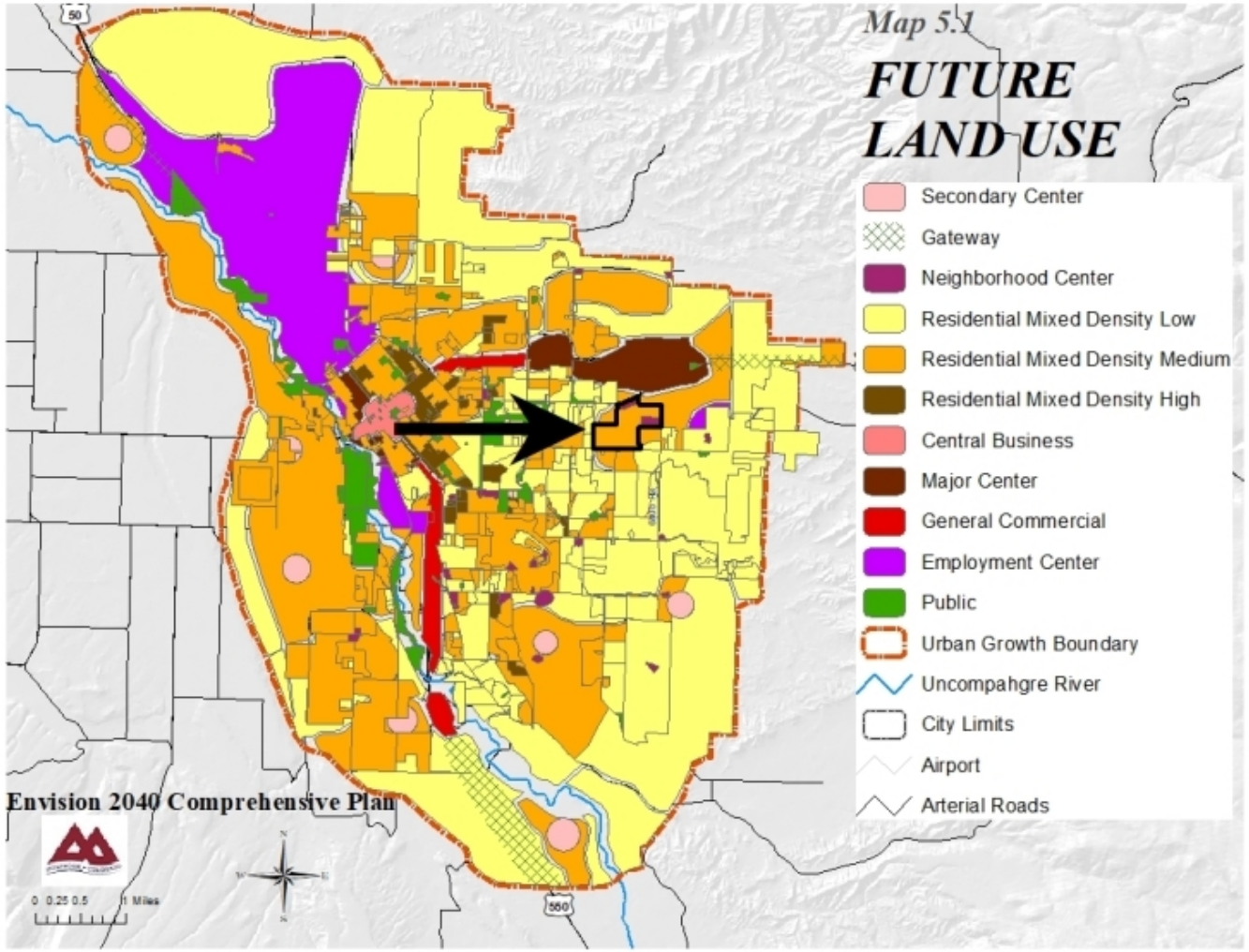
(g) Impacts on area schools."

Comprehensive Plan & Municipal Code

- Comprehensive Plan is not legally binding. It provides guidance for zoning and other land use decisions.
- It is possible for sections of the Comprehensive Plan to conflict, and it is reasonable that a decision may not satisfy every aspect outlined within the Comprehensive Plan.
- Future Land Use Map within the Comprehensive Plan illustrates general, somewhat flexible locations and extents for various land uses and densities.
- The Municipal Code and Zoning regulations specify land uses and densities, bulk & height requirements, setbacks, and other development standards that are allowed within each zoning district.
- Development on this parcel may occur in accordance with the approved zoning and should also be in general conformance with the Comprehensive Plan.

Comprehensive Plan – Land Use Chapter 3

Listed as **Residential Mixed Density Medium** & **Neighborhood Center** in the future land use map.



Zoning Regulations

- Municipal Code, Section 4-4-7(A) Intent: The “R-3” Medium Density District is intended to provide an area which is suitable for single-family homes and duplexes. This district provides for other uses which are compatible with such uses.
- Municipal Code, Section 4-4-15(A) Intent: The “B-4” Neighborhood Shopping District is intended to provide for retail shopping and services on a parcel or parcels of land collectively no greater than approximately five acres in size, with a convenient location relative to residential neighborhoods. Single family homes, duplexes, and multiple-family residences are a use by right in this zoning district.
- The proposed uses are a use-by-right in these zoning districts. The current zoning is compatible with general conditions in the area. The property is adjacent to properties that are zoned “R-1” Very Low Density District, “R-1A” Large Estate District, “R-2” Low Density District, “R-3A” Medium High Density District, and agricultural (outside City limits).

Zoning Regulations

- The dimensional requirements are included below. (Section 4-4-22).

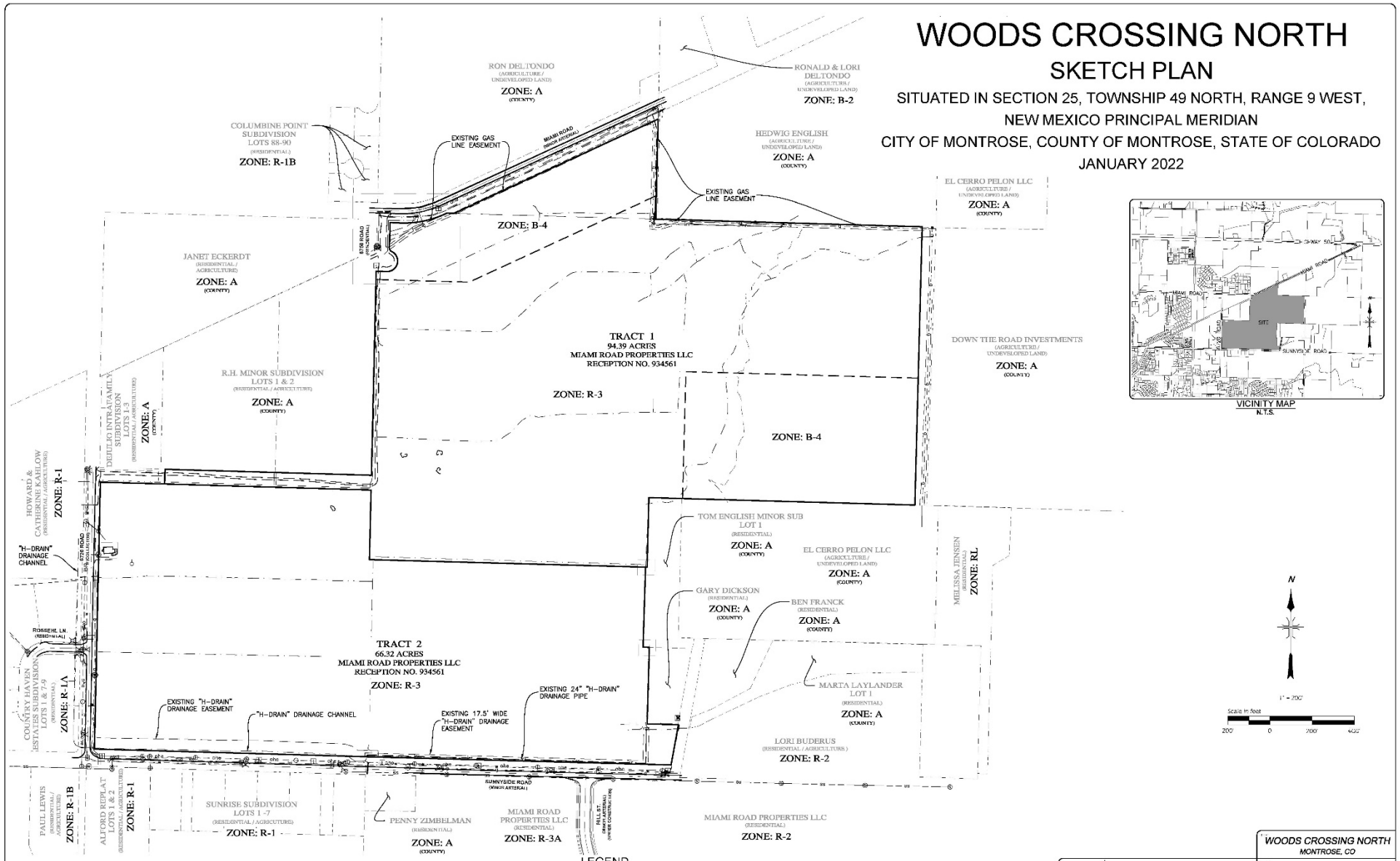
	Minimum Lot				Minimum Setbacks				
District	Use	Width at Building Line	Depth	Size	Front	Rear	Side	Corner Lot	Maximum Building Height
R-3	Single-family	N/A	N/A	6,250	15	25	5	15	35
	All others	N/A	N/A	9,375	15	25	5	15	35
R-3A	Single-family	N/A	N/A	6,250	15	25	5	15	35
	Duplexes	N/A	N/A	9,375	15	25	5	15	35
	All others	N/A	N/A	Lgr 9,375 or 2,900/ unit	15	20	10	15	35
B-4	All*****	N/A	N/A	N/A	25	N/A	N/A	25	35

******* Residential uses shall comply with the applicable dimensional requirements as set out for the "R-3A" zone.**

WOODS CROSSING NORTH

SKETCH PLAN

SITUATED IN SECTION 25, TOWNSHIP 49 NORTH, RANGE 9 WEST,
NEW MEXICO PRINCIPAL MERIDIAN
CITY OF MONTROSE, COUNTY OF MONTROSE, STATE OF COLORADO
JANUARY 2022



VICINITY MAP
N.T.S.

N

1" = 200'

Scale in feet
200' 0 200' 400'

DMC DEL-MONT CONSULTANTS, INC.
ENGINEERING • SURVEYING
1521 OXBOW DR. SUITE 210
MONTROSE, CO 81401
970-249-3396

FIELD BOOK	DRAWN BY: RDD	DATE: 1/12/2022
SHEET: 1 of 3	FILE: 21123C_SKETCH	JOB NO.: 21123

WOODS CROSSING NORTH
MONTROSE, CO

OWNER: LEADERSHIP CIRCLE, LLC

EXHIBIT 1 - EXISTING CONDITIONS

WOODS CROSSING NORTH

SKETCH PLAN

SITUATED IN SECTION 25, TOWNSHIP 49 NORTH, RANGE 9 WEST,
NEW MEXICO PRINCIPAL MERIDIAN
CITY OF MONTROSE, COUNTY OF MONTROSE, STATE OF COLORADO
JANUARY 2022

DMC DEL-MONT CONSULTANTS, INC. ENGINEERING & SURVEYING

RDD	1/12/2022	2 of 3	21123C_SKETCH
21123			

WOODS CROSSING NORTH
MONTROSE, CO

LEADERSHIP CIRCLE, LLC

1521 OXBOW DR. SUITE 210
MONTROSE, CO 81401
970-249-3398

EXHIBIT 2 - UTILITY PLAN

WOODS CROSSING NORTH

SKETCH PLAN

SITUATED IN SECTION 25, TOWNSHIP 49 NORTH, RANGE 9 WEST,
NEW MEXICO PRINCIPAL MERIDIAN
CITY OF MONTROSE, COUNTY OF MONTROSE, STATE OF COLORADO
JANUARY 2022

WOODS CROSSING NORTH LAND SUMMARY					
TOTAL ACREAGE	TOTAL OPEN SPACE	TOTAL RIGHT OF WAY DEDICATION	TOTAL RESIDENTIAL DEVELOPMENT	SINGLE FAMILY LOTS ZONE R-3A	MULTI-FAMILY UNITS ZONE R4 (R-3A)
160.77 AC.	31.25 AC. 19.44%	34.90 AC. 21.72%	94.55 AC. 58.84%	545 LOTS	45 UNITS

PARK DEDICATION (10.71 AC)

N

1" = 200'

Scale in feet
200' 0 200' 400'

DMC DEL-MONT CONSULTANTS, INC. ENGINEERING • SURVEYING			WOODS CROSSING NORTH MONTROSE, CO
			LEADERSHIP CIRCLE, LLC
			1521 OXBOW DR. SUITE 210 MONTROSE, CO 81401 970-249-3398
3 of 3	RDD	1/12/2022	
	21123C_SKETCH	21123	EXHIBIT 3 - PHASING PLAN

Staff Guidance to Planning Commission

- The Sketch Plan application meets all dimensional, design, and zoning requirements as set forth in the City of Montrose Municipal Code, Section 4-4-24. The review and discussion of the Sketch Plan by the Planning Commission is informal and non-binding in nature, and shall serve as a means to **provide guidance** to the subdivider in accordance with the City of Montrose Municipal Code. **No formal action is taken at this time**.
- Staff recommends that the Planning Commission share feedback with the applicant, so that the applicant may consider the feedback and incorporate proposed changes into their future Preliminary Planned Development application. If the Planning Commission determines that adherence with certain components of the Comprehensive Plan should be prioritized, this information should be shared with the applicant at this time.
- **Planning Commission will give clear and concise guidance to the applicant.**

MONTROSE • COLORADO

CITY OF MONTROSE
Planning Services

MEMO

TO: Planning Commission
FROM: Amy Sharp, Senior Planner
DATE: February 9, 2022
RE: Home of the Brave Preliminary Plat
ATTACHMENTS

- Exhibit A: Area Maps
- Exhibit B: Excerpts from City of Montrose Municipal Code

Public notice requirements have been fulfilled in accordance with Section 4-4-31(D) of the City of Montrose Municipal Code. A sign was posted on the property, letters sent to property ownerswithin 100 feet, and an ad appeared in the Montrose Daily Press.

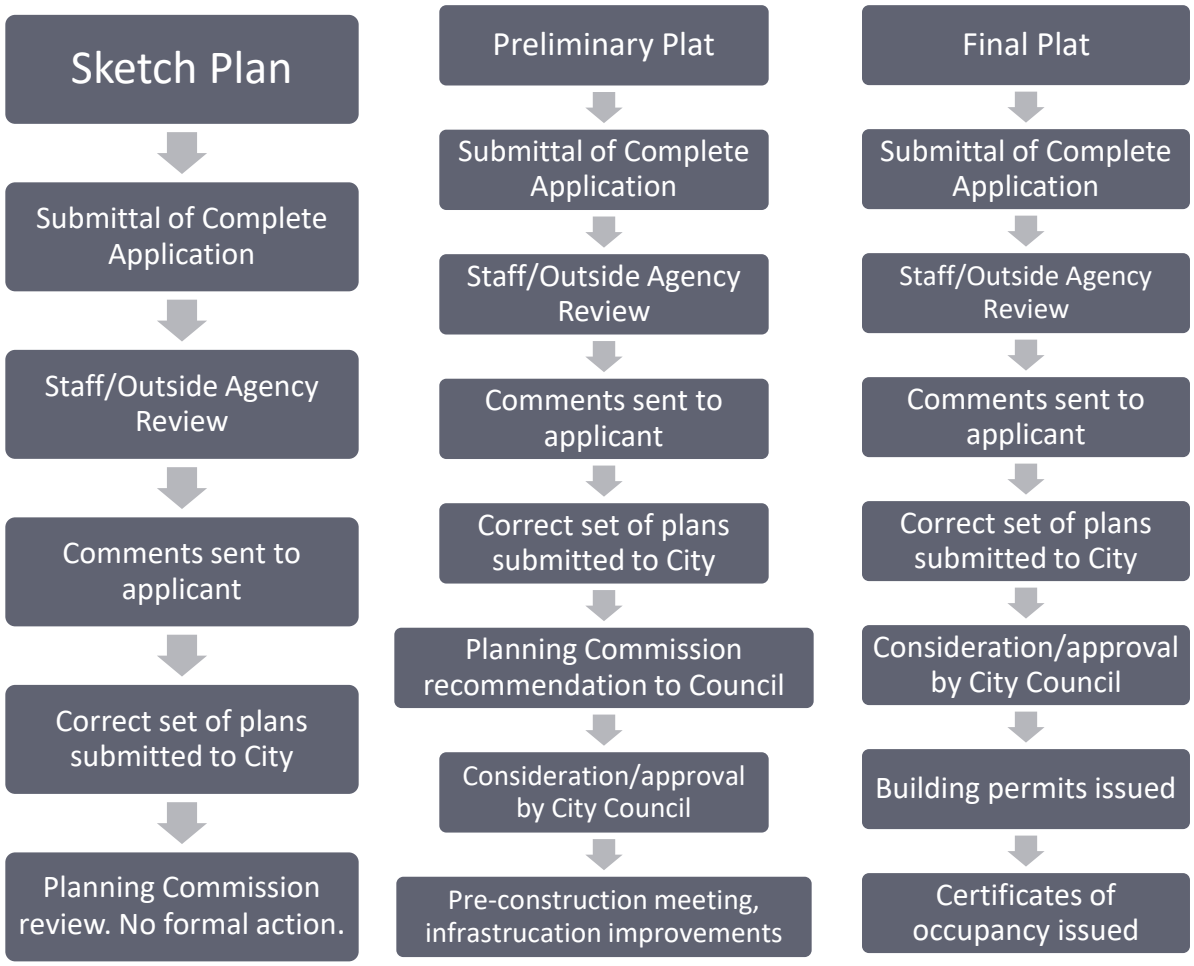
Planning Commission Consideration:
The Planning Commission shall make a recommendation to City Council to approve, deny, or approve with conditions the Home of the Brave Preliminary Plat. The Planning Commission will consider all of the information in this memo in making a decision.

Applicant: Todd and Maya Haynes

Application Background:
The Home of the Brave Preliminary Plat will subdivide a parcel, 39.4 acres in size, into a residential subdivision. The property is located adjacent to 6450 Road which runs along the western edge of the property. It is located approximately 0.5 mile north of Hwy 50. The property is zoned "R-3" Medium Density. The proposed subdivision will consist of 148 residential lots, plus a clubhouse and park/playground. This subdivision will include 116 single-family lots and 32 duplex lots for a total of 180 dwelling units. This parcel was annexed and zoned in 2000.

The hearing before City Council to approve or deny the Preliminary Plat is scheduled for March 1, 2022. A Final Plat will also be required within five (5) years of approval of this Preliminary Plat (City of Montrose Municipal Code, Section 4-7-5(C) (1) (a).

Subdivision Process:
The City of Montrose Municipal Code Section 4-7-5 (Exhibit B) outlines the process and standards for subdivision applications. The following flowchart shows this overall process.



Staff Analysis:

1. Subdivision Application Details & Review Standards:
   The City of Montrose Municipal Code outlines the process and standards for Subdivision applications. The preliminary plat and proposed improvements shall comply with all requirements of the subdivision regulations and other applicable City design and construction specifications and standards. The Planning Commission should consider whether the project meets the standards outlined within Section 4-7-5 (A) (2) and summarized below:
   (See Exhibit B)

- The proposal shall be consistent with the Master Plan, City subdivision and zoning regulations, standards and other applicable ordinances and regulations and will be reviewed considering the following at a minimum:
    a. Conformance with the master plan and zoning regulations;
    b. Relationship of development to topography, soils, drainage, flooding, potential hazard areas and other physical characteristics;
    c. Availability of water, means of sewage collection and treatment, storm water drainage, access and other utilities and services;
    d. Compatibility with the natural environment, wildlife, vegetation and unique natural features;
    e. Adjacent streets and traffic flow, including pedestrian access;
    f. Availability of fire, police and other emergency services protection;
    g. Impacts on area schools.

2. The Comprehensive Plan Future Land Use Map designates the area as Residential Mixed Density Medium. The majority of the mixed-density medium residential land uses are designated in areas that are not yet developed. This district provides for a variety of residential types, mixed within a neighborhood, including single-family homes, townhomes, duplexes and triplexes.
3. Zoning Regulations:
    a. Municipal Code, Section 4-4-7(A) Intent: The "R-3" Medium Density District is intended to provide an area which is suitable for single-family homes and duplexes. The district provides for other uses which are compatible with such uses.
    b. The proposed uses are a use-by-right in these zoning districts. The current zoning is compatible with general conditions in the area. The property is adjacent to properties that are zoned “MHR” Manufactured Housing Residential District, “I-1” Light Industrial District, “B-4” Neighborhood Shopping District, and agricultural (outside City limits).
4. Dimensional Requirements:
    c. Municipal Code, Section 4-4-22. The dimensional requirements in the “R-3” zoning district are included in the table below.

	Minimum Lot				Minimum Setbacks				
District	Use	Width at Building Line	Depth	Size	Front	Rear	Side	Corner Lot	Maximum Building Height
R-3	Single-family	N/A	N/A	6,250	15	25	5	15	35
	All others	N/A	N/A	9,375	15	25	5	15	35

5. The Home of the Brave Preliminary Plat does not appear to be adverse to the public health, safety and welfare and is in compliance with the City's Subdivision Regulations.

Planning Commission Action:
The Planning Commission shall make a recommendation to City Council to approve, deny, or approve with conditions the Home of the Brave Preliminary Plat. The Planning Commission may also continue the item. Proposed motions for Planning Commission consideration are included below.

Planning Commission Recommendation Alternatives for Preliminary Plat:
Conditional Approval Motion: "I hereby make a motion to recommend to City Council approval of the Preliminary Plat application with the following condition(s). The approval of this Preliminary Plat is expressly conditioned upon City staff ensuring that all policies, regulations, ordinances and municipal code provisions are met and that the Applicant adequately addresses all of staff's concerns prior to the execution of the Final Plat. The City staff is not authorized by this approval to execute the Final Plat prior to all conditions being satisfied. The request meets the Code criteria based on the evidence and testimony presented at this hearing and in the staff report."

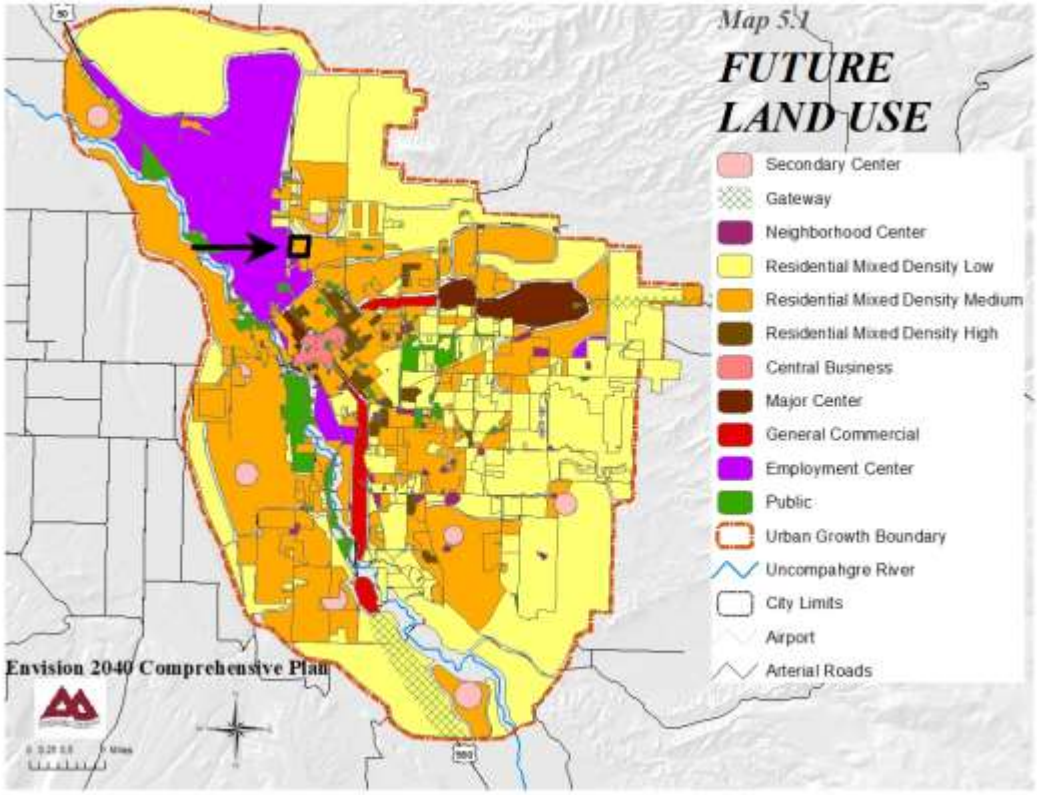
Denial Motion: "I hereby make a motion to recommend to City Council denial of the Preliminary Plat application. The application does not meet the Code criteria based on evidence and testimony presented at this hearing and in the staff report."

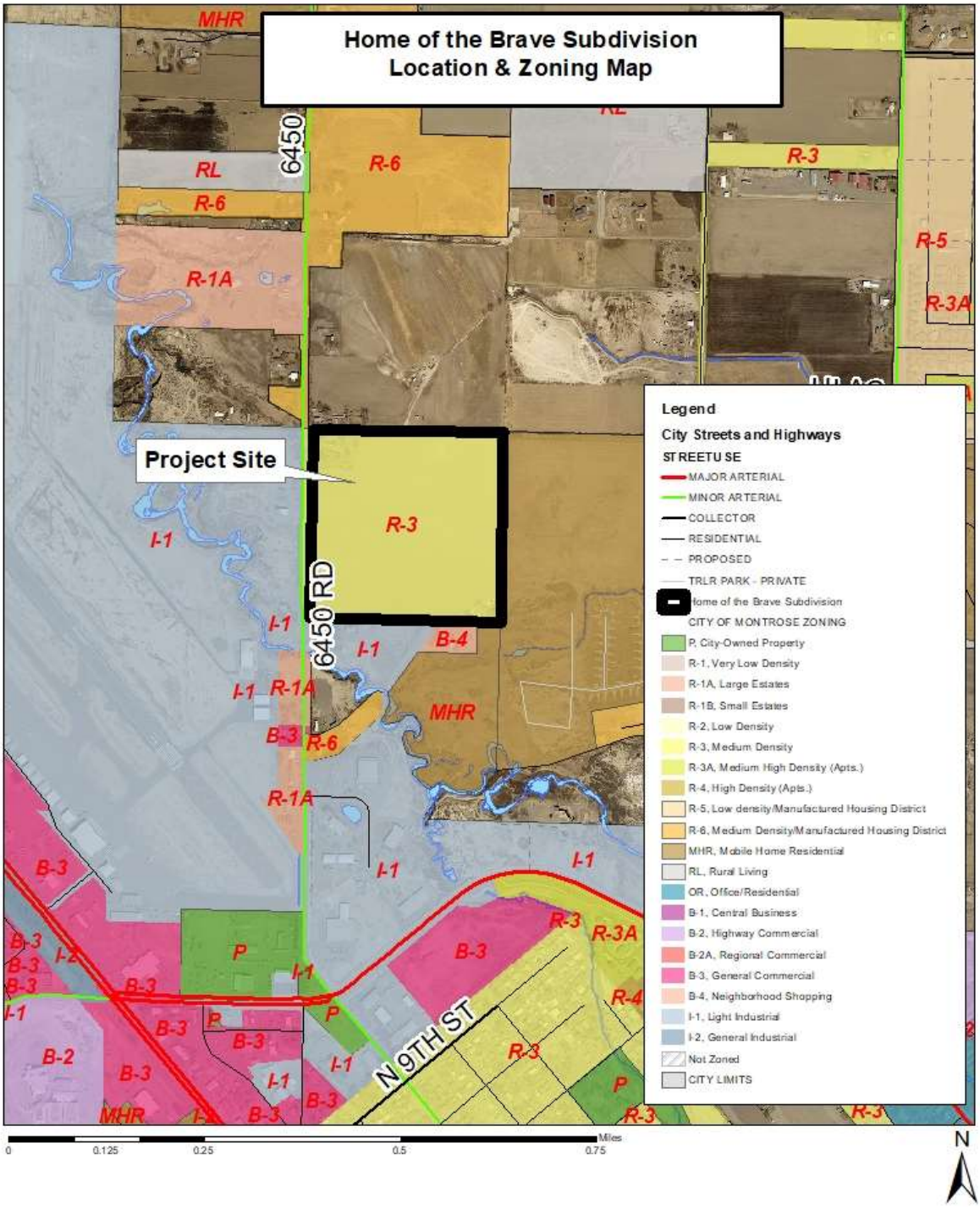
EXHIBIT A: Area Maps

Vicinity Map

Notification Area

Comprehensive Plan Future Land Use Map



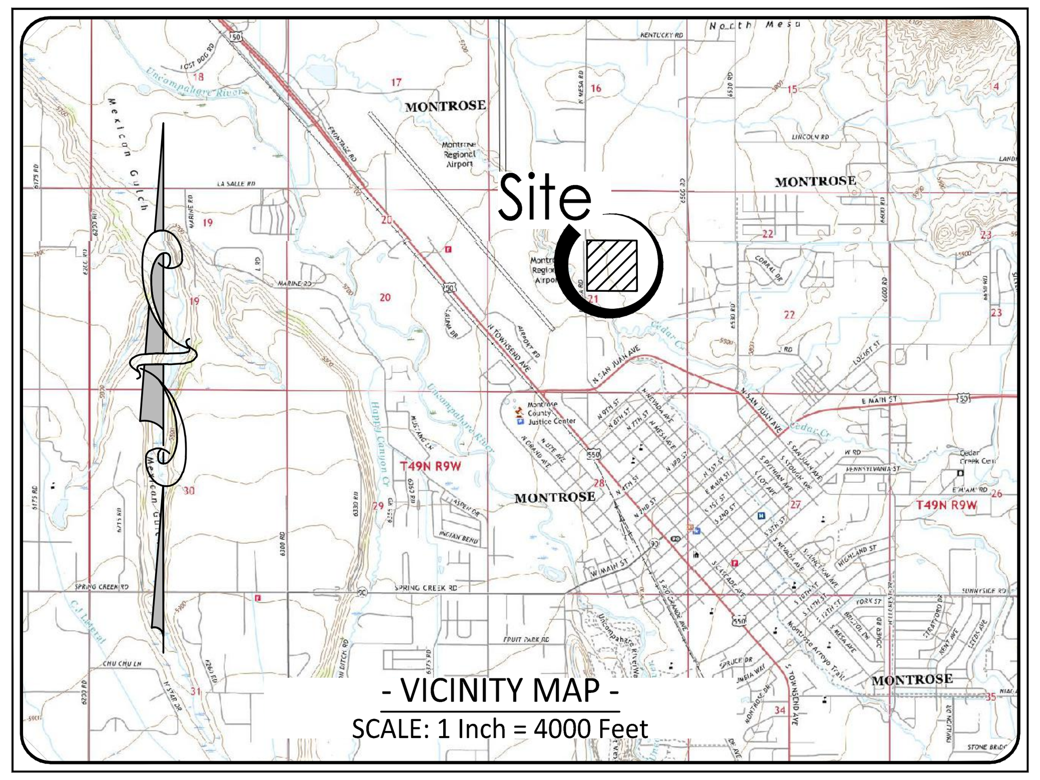


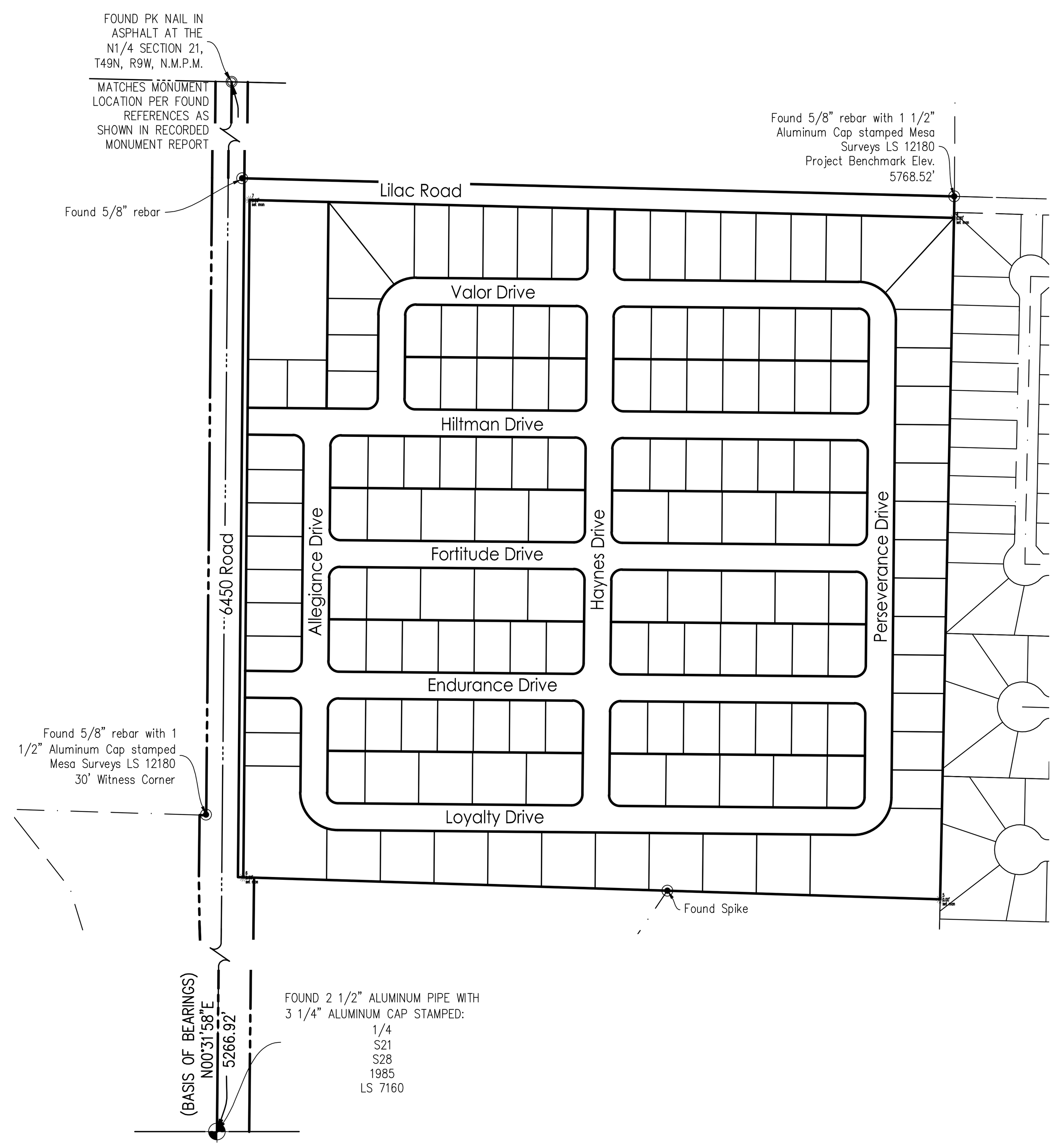
Map created 09/30/2021

Preliminary Plat

Home of the Brave Subdivision

SW1/4 NE1/4 Section 21, Township 49 North, Range 9 West of the New Mexico Principal Meridian City of Montrose, Montrose County, Colorado





CERTIFICATE OF DEDICATION AND OWNERSHIP

KNOW ALL MEN BY THESE PRESENTS that the undersigned being the owners of certain lands in the City of Montrose, County of Montrose and State of Colorado to wit:

THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER, SECTION 21, TOWNSHIP 49 NORTH, RANGE 9 WEST, N.M.P.M., COUNTY OF MONTROSE, STATE OF COLORADO.

Containing 39.408 acres, more or less.

Have by these presents laid out, platted and subdivided the same into lots and tracts as shown on this Plat under the name and style of Home of the Brave Subdivision, and do hereby dedicate, grant and convey to the City of Montrose, Colorado for use of the public, 6450 Road, Lilac Road, Allegiance Drive, Haynes Drive, Perseverance Drive, Valor Drive, Hiltman Drive, Fortitude Drive, Endurance Drive, and Loyalty Drive, as shown hereon.

The easements shown on this plat are dedicated, granted and conveyed to the City of Montrose, Colorado for public utilities, including but not limited to water, sewer, electrical, telephone, gas and CATV lines, and drainage easements specifically labeled for dedication, together with perpetual right of ingress and egress for installation, maintenance and replacement of such facilities. The dedication of easements as herein provided shall not include those easements exclusively utilized for irrigation improvements, or otherwise subject to a previously recorded conveyance.

Executed this_____________ day of __________________, 20__.

_______________________ _______________________

Todd D. Haynes Maya Haynes

STATE OF COLORADO)
) ss.
COUNTY OF MONTROSE)

The foregoing Certificate of Dedication and Ownership was acknowledged before me this_____________ day of __________________, 20__, by Todd D. Haynes.

Witness my hand and official seal.
My commission expires: _______ _______________________
Notary

STATE OF COLORADO)
) ss.
COUNTY OF MONTROSE)

The foregoing Certificate of Dedication and Ownership was acknowledged before me this_____________ day of __________________, 20__, by Maya Haynes.

Witness my hand and official seal.
My commission expires: _______ _______________________
Notary

ATTORNEY'S CERTIFICATE

I, _____________, an attorney at law, duly licensed to practice in Colorado, do hereby certify that I have examined the title of all land herein platted and described in the above Certificate of Ownership and Dedication, and that title to the such land is in the owners and dedicators; and that the title to all dedicated property therein described, is free and clear of all liens and encumbrances, except:

____
____

____
Attorney
Registration No. ___________
Date: ______________

ENGINEER'S CERTIFICATE

I, _____________, a Registered Engineer in the State of Colorado, do hereby certify that the sanitary sewer system, water distribution system, and the storm drainage system shown on the accompanying plans of this Subdivision are properly designed, meet City of Montrose specifications, and are adequate to properly serve the Subdivision shown hereon. I further certify that the sanitary sewer system, water distribution system, storm drainage system, streets, parks, and other improvements are designed and constructed in accordance with applicable City specifications and regulations.

____
Engineer
Registration No. ____________

Date: ______________

CERTIFICATE OF COMPLETED IMPROVEMENTS

I, _____________, City Engineer, certify that all improvements and utilities required by the current Subdivision Regulations of the City of Montrose, have been constructed, inspected and approved in this subdivision in accordance with applicable City Regulations and specifications, and a preliminary letter of infrastructure completion has been issued, as required by the City's Municipal Code.

__________ ______________ Date: ______________

City Engineer
Registration No. _______

LIENHOLDER'S AFFIDAVIT

STATE OF COLORADO)
) ss.
COUNTY OF MONTROSE)

Before a Notary Public, duly qualified and acting in and for said city, county, and state, appeared ___________________, known by official government-issued photographs identification to the affiant herein, who stated the following under oath:

The undersigned holder of a lien pursuant to an instrument recorded under Reception No. __________, in the records of the Montrose County Clerk and Recorder, hereby joins in this subdivision and the dedication of easements, streets and other properties to the City shown hereon. The undersigned duly swears or affirms that: 1) he/she is authorized to sign this Plat on behalf of the lien-holding entity named below for which he/she functions as an agent; and 2) said agency includes the actual authority to sign this Plat joining in this subdivision and any dedications to the City; and 3) that all necessary corporate or other legal formalities have been met to allow the agent's signature below to be effective; and 4) that the signature below was made by the person whose name it purports to be.

____
____
of ____________________

Subscribed and sworn to before me this_____________ day of __________________, 20__, by the ___________ of _______________.

Witness my hand and official seal.
My commission expires: _______ _______________________
Notary

APPROVAL OF CITY MANAGER

Approved this _________ day of ___________, 20___, by _____________________________, City Manager of the City of Montrose.

____
City Manager

APPROVAL OF CITY COUNCIL

Approved this ________ day of ____________, 20__, by __________________________, Mayor of the City of Montrose; all conveyances of interests in real property made on this plat are hereby accepted by the City.

____
Mayor

APPROVAL OF CITY ATTORNEY

Approved for recording this _________ day of ___________, 20___, by ___________________, City Attorney of the City of Montrose.

____
City Attorney

CERTIFICATE OF RECEIPT OF SECURITY

I, ___________________, City Clerk of the City of Montrose, hereby certify that Security for the two (2) year warranty on all public improvements has been received in the amount of $_________ to be held in escrow by the City in accordance with Municipal Code Section 4-7-6 (D), and other applicable City ordinances and regulations.

__________ ___________________ Date: ___________

City Clerk

PLAT NOTES:

1. Lot 1 is to be excluded from the HOA; no improvements are proposed for Lot 1.

2. Building setbacks are as shown hereon: 15' Front Yard
25' Rear Yard
5' Side Yard

3. Money in lieu of School Land Dedication: All residential lots or residential units having unique legal descriptions shall be required to make payment of money in lieu of school land dedication, at the time of issuance of building permit or certificate of occupancy relative to improvements upon said lot. The payment of money in lieu of school land dedication is subject to Section 4-7-7(C)(7) of the Municipal Code. Payments shall be made to the City, to be later disbursed to the RE-1J School District.

4. Privately Owned Open Space, Parks, and other Improvements: All open spaces and parks, now existing or hereafter conveyed, shall be owned and maintained by an owners' association, or in the absence of an owners' association lawfully formed for such purposes, by the owners of all lots final platted in Home of the Brave Subdivision jointly and severally. The City is not responsible or liable in any manner for the maintenance, repair, or operation of such properties and/or improvements, nor shall the City be responsible for future dedications of such properties. Upon failure to properly maintain such properties and/or improvements shown hereon, or in the need to abate a nuisance or public hazard, the City may cause the maintenance or repair to be performed, and assess the costs thereof to such owner(s), or the City may certify such charges as a delinquent charge to the County Treasurer to be collected similarly to taxes or in any lawful manner.
   A, Conveyance of Private Parks and Open Space to Owners' Association:
   By executing this Plat, the owner(s) whose signature(s) appear hereon, joined by the Lienholder(s), if any, whose signatures also appear on this Plat, for and in consideration of TEN AND NO/100 DOLLARS ($10.00), and other good and valuable consideration, in hand paid, hereby sell(s) and quit claim(s) to ______________________, a Colorado nonprofit corporation, Tracts 1, 2, and 3 shown and designated on this Plat.
   B. Certificate of Good Standing:
   The owner(s) whose signature(s) appear on the Certificate of Dedication and Ownership on this Plat have provided the City a current, valid, Certificate of Good Standing bearing Confirmation No. _____, from the Colorado Secretary of State, as proof of the above-named HOA or Owners' Association entity's: i) compliance with all applicable requirements of the Colorado Secretary of State, and ii) good standing with the Colorado Secretary of State.
   C. Declaration of Covenants Recorded:
   The Declaration of Covenants, Conditions, and Restrictions for _____________, applicable to the development platted hereon, and made binding to the entity named above, was recorded under Reception No. __________, on the ______day of 20___ in the office of the Montrose County Clerk and Recorder.

5. COPS Fee: The preannexation agreement for this development subjects it to a City Operations and Police Service Fee to be paid for each dwelling unit at the time of final plat, in the amount of $650.00 per dwelling unit based on the maximum dwelling units allowed on each lot. In the event a building permit is issued for any residential units prior to filing of this plat, the fee shall be collected on each unit with the building permit and a correlating credit applied to the fees due on subsequent subdivision or planned unit development final plat. The amount of the fee may be adjusted for inflation from time to time.
   No residential units may be placed on Tracts 1, 2 or 3.
   The following lots are limited to 1 dwelling unit each: Lots 1-35, 44-91, 100-101, 110-139, 148
   The following lots are limited to a maximum of 2 dwelling units: Lots 36-43, 92-99, 102-109, 140-147
   The following lots are limited to 3 dwelling units: N/A

6. Airport Influence Area Notice: The Home of the Brave Subdivision is located approximately 1/4 mile east of the Montrose Regional Airport. The Home of the Brave Subdivision is within the Airport Influence Area of a busy airport used by piston and jet aircraft and is open 24 hours a day seven days a week. All property within the Home of the Brave Subdivision is subject to over-flights and the effects thereof, which may include but is not limited to noise, vibration, fumes, and dust.

7. Zoning: The zoning of this property is R-3 as shown on the City's Official Zoning Map, and as defined and described by the City of Montrose Municipal Code at the time of approval and recordation of this plat, and is subject to change.

8. Final Plat Conditional Approval: The approval of the Home of the Brave Subdivision Final Plat is expressly conditioned upon City staff ensuring that all policies, regulations, ordinances and municipal code provisions are met, and that the Applicant adequately addresses all of staff's concerns.

9. Basis of Bearings: Bearings shown hereon are based on a bearing of N00°31'58"E, between the south quarter corner of said Section 21 monumented by a 2 1/2" aluminum pipe with 3 1/4" Aluminum Cap stamped ¼ S21/S28 1985 LS7160 and the north quarter corner of said Section 21 monumented by a PK nail in asphalt.

10. Units of linear measurements are displayed in US Survey Feet.

11. SGM is not responsible for any changes made to this document after it leaves our possession. Any copy, facsimile, etc., of this document must be compared to the original signed, sealed and dated document to insure the accuracy of the information shown on any such copy, and to insure that no such changes have been made.

12. Property descriptions shown hereon are based on the title insurance commitment issued by Old Republic National Title Insurance Company, Order No. MRR87018800, having an effective date of March 26, 2021.

13. Fences shown hereon, if any, have been shown for general reference and do not necessarily depict limits of ownership.

14. The property shown hereon is subject to all easements, rights-of-way, building setbacks or other restrictions of record, as such items may affect this property. This survey does not represent a title search by this surveyor to determine ownership or to discover easements or other encumbrances of record. All information pertaining to ownership, easement and other encumbrances of record has been taken from the title insurance commitment issued by Old Republic National Title Insurance Company, Order No. MRR87018800, having an effective date of March 26, 2021.

    Every attempt has been made to show all easements, rights-of-way, etc. referred to in the Schedule B2 Exceptions recited in said title insurance policy. Some such items may not be shown (i.e. Items 1-9 & 11) if they are standard title commitment exceptions, or if not sufficiently described in recorded documents to be shown graphically, or if they are situated on adjacent properties, or if they affect the property in general, etc. In regards to other such items:

    Item 10: Right of Way Easement as granted to Delta-Montrose Electric Association in instrument recorded February 20, 1996, in Book 914 at Page 450. Affects subject parcel and is shown hereon.

    Item 12: Non-Exclusive Easement for ingress, egress and underground utilities recorded June 23, 2011 under Reception No. 825879. Affects subject parcel and is shown hereon.

SURVEYOR'S CERTIFICATE:

I, Robert E. Brandeberry, being a Registered Professional Land Surveyor, licensed in the State of Colorado, do hereby certify that there are no roads, pipelines, irrigation ditches or other easements or rights-of-way in evidence or known to me to exist on or across said property except as shown on this plat. I certify that I have made the survey represented by this plat and that this plat accurately represents said survey, and conforms to all applicable requirements of the City Subdivision Regulations and applicable law. I further certify that all monuments shown hereon actually exist and their positions are as shown.

C.R.S. Section 38-51-106 Statement: this plat does not represent a title search by the Surveyor, nor by any professional corporation or business entity with which said Surveyor may be associated. Information regarding the title work performed for and used in producing this plat may be found in the title policy issued by Old Republic National Title Insurance Company, Order No. MRR87018800, having an effective date of March 26, 2021.

REVIEW COPY

Robert E. Brandeberry
Colorado PLS # 38388
For, and on behalf of SGM

RECORDER'S CERTIFICATE

This plat was filed for record in the office of the Clerk and Recorder of Montrose County, Colorado, at the time of ____________, on the _______ day of _____________, 20___ under Reception No. ___________

____
Clerk and Recorder
Montrose County, Colorado

APPROVAL OF PRELIMINARY PLAT

_______________________________ City Engineer, Scott Murphy — _____________ Date

_______________________________ City Attorney, — _____________ Date

_______________________________ Chair, Planning Commission, David Fishering — _____________ Date

_______________________________ Mayor, City Council, Douglas Glaspell — _____________ Date

Graphic Scale
0 100 200 400
In U.S. Feet : 1" = 200'

SGM
118 West Sixth Street, Suite 200
Glenwood Springs, CO 81601
970.945.1004 www.sgm-inc.com

Preliminary Plat
Home of the Brave Subdivision
1956 6450 Road
Montrose, Colorado

#	Revision	Date	By:
1			
2			
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Notice: According to Colorado Law, you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. In no event may any legal action based upon any defect in this survey be commenced more than ten years from the date of the certification shown hereon.

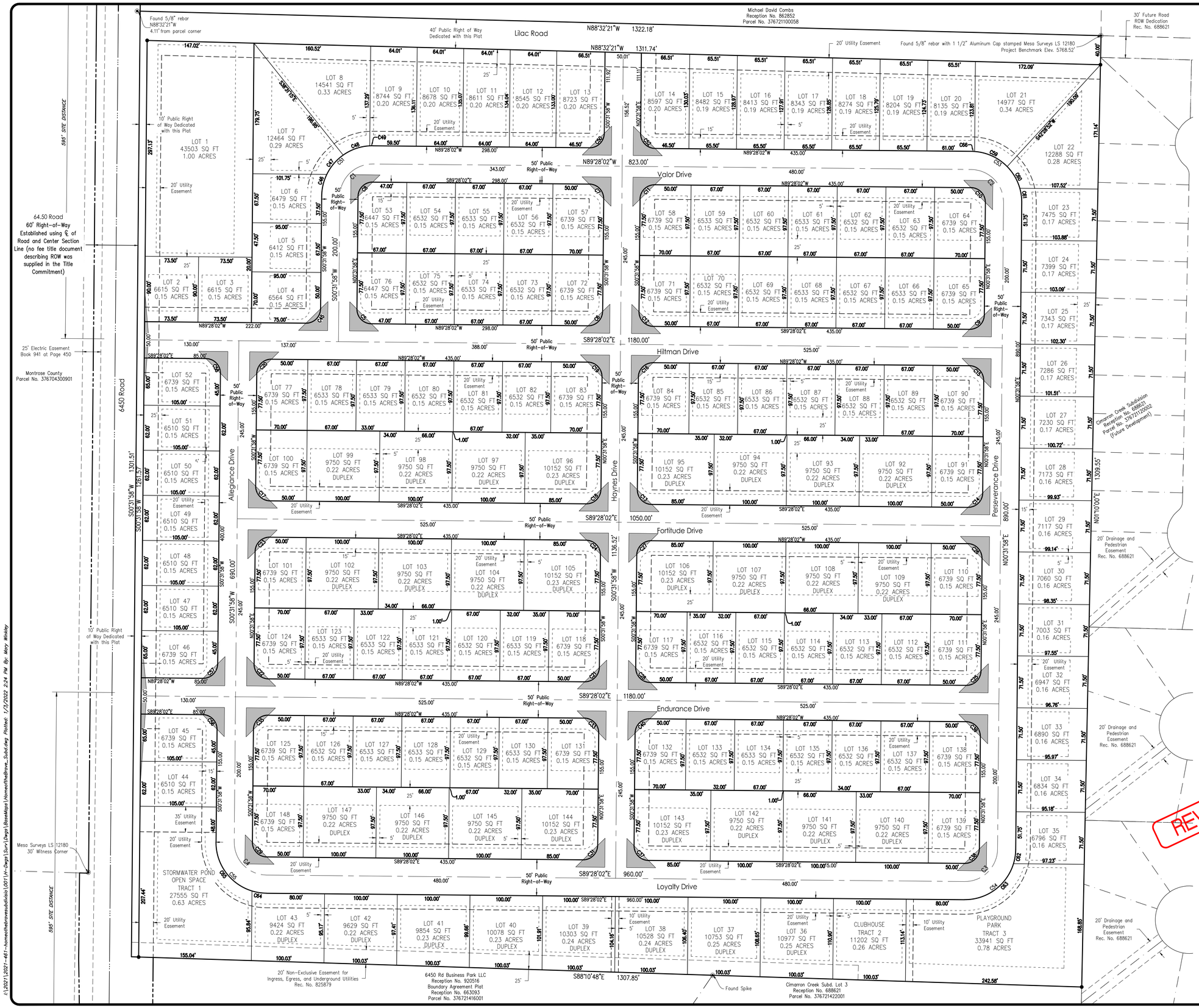
Job No.	2021-461.001
Drawn by:	MEW
Date:	1/03/2022
Approved: --	PLS: REB
File:	HomeoftheBrave_Subd

Title: Home of the Brave Subdivision

Sheet No. 1

Of: 3

I:\2021\2021-461-homeofthebravesubdivisio\001\H-Dwgs\Surv\Dwgs\BaseMaps\HomeoftheBrave_Subd.dwg Plotted: 1/3/2022 2:23 PM By: Mary Winkley



Curve Table					
Curve #	Length	Radius	Delta	Chord Direction	Chord Length
C1	70.69'	45.00'	90°00'00"	S45°31'58"W	63.64'
C2	70.69'	45.00'	90°00'00"	N44°28'02"W	63.64'
C3	70.69'	45.00'	90°00'00"	N45°31'58"E	63.64'
C4	70.69'	45.00'	90°00'00"	S44°28'02"E	63.64'
C5	31.42'	20.00'	90°00'00"	N44°28'02"W	28.28'
C6	31.42'	20.00'	90°00'00"	S45°31'58"W	28.28'
C7	31.42'	20.00'	90°00'00"	S44°28'02"E	28.28'
C8	31.42'	20.00'	90°00'00"	N45°31'58"E	28.28'
C9	31.42'	20.00'	90°00'00"	N45°31'58"E	28.28'
C10	31.42'	20.00'	90°00'00"	N44°28'02"W	28.28'
C11	31.42'	20.00'	90°00'00"	S45°31'58"W	28.28'
C12	31.42'	20.00'	90°00'00"	S44°28'02"E	28.28'
C13	31.42'	20.00'	90°00'00"	S44°28'02"E	28.28'
C14	31.42'	20.00'	90°00'00"	N45°31'58"E	28.28'
C15	31.42'	20.00'	90°00'00"	N44°28'02"W	28.28'
C16	31.42'	20.00'	90°00'00"	S45°31'58"W	28.28'
C17	31.42'	20.00'	90°00'00"	S44°28'02"E	28.28'
C18	31.42'	20.00'	90°00'00"	N45°31'58"E	28.28'
C19	31.42'	20.00'	90°00'00"	N44°28'02"W	28.28'
C20	31.42'	20.00'	90°00'00"	S45°31'58"W	28.28'
C21	31.42'	20.00'	90°00'00"	S45°31'58"W	28.28'
C22	31.42'	20.00'	90°00'00"	N44°28'02"W	28.28'
C23	31.42'	20.00'	90°00'00"	N45°31'58"E	28.28'
C24	31.42'	20.00'	90°00'00"	S44°28'02"E	28.28'
C25	31.42'	20.00'	90°00'00"	N45°31'58"E	28.28'
C26	31.42'	20.00'	90°00'00"	N44°28'02"W	28.28'
C27	31.42'	20.00'	90°00'00"	S45°31'58"W	28.28'
C28	31.42'	20.00'	90°00'00"	S44°28'02"E	28.28'
C29	31.42'	20.00'	90°00'00"	S44°28'02"E	28.28'
C31	31.42'	20.00'	90°00'00"	N45°31'58"E	28.28'
C33	31.42'	20.00'	90°00'00"	N44°28'02"W	28.28'
C35	31.42'	20.00'	90°00'00"	S45°31'58"W	28.28'
C37	31.42'	20.00'	90°00'00"	S44°28'02"E	28.28'
C38	31.42'	20.00'	90°00'00"	N45°31'58"E	28.28'
C39	31.42'	20.00'	90°00'00"	N44°28'02"W	28.28'
C40	31.42'	20.00'	90°00'00"	S45°31'58"W	28.28'
C45	31.42'	20.00'	90°00'00"	S45°31'58"W	28.28'
C46	31.00'	70.00'	25°22'37"	S13°13'16"W	30.75'
C47	35.26'	70.00'	28°51'36"	S40°20'23"W	34.89'
C48	39.19'	70.00'	32°04'38"	S70°48'30"W	38.68'
C49	4.50'	70.00'	3°41'09"	S88°41'23"W	4.50'
C50	31.42'	20.00'	90°00'00"	S45°31'58"W	28.28'
C51	109.96'	70.00'	90°00'00"	S45°31'58"W	98.99'
C52	31.42'	20.00'	90°00'00"	N44°28'02"W	28.28'
C53	109.96'	70.00'	90°00'00"	N44°28'02"W	98.99'
C54	109.96'	70.00'	90°00'00"	N45°31'58"E	98.99'
C55	109.96'	70.00'	90°00'00"	S44°28'02"E	98.99'
C56	31.42'	20.00'	90°00'00"	S44°28'02"E	28.28'
C57	31.42'	20.00'	90°00'00"	S45°31'58"W	28.28'
C58	31.42'	20.00'	90°00'00"	S44°28'02"E	28.28'
C59	50.47'	70.00'	41°18'51"	N65°07'28"W	49.39'
C60	34.96'	70.00'	28°36'43"	N30°09'41"W	34.59'
C61	20.02'	70.00'	16°23'17"	N07°39'41"W	19.95'
C62	20.02'	70.00'	16°23'17"	N08°43'36"E	19.95'
C63	89.93'	70.00'	73°36'43"	N53°43'36"E	83.87'
C64	20.28'	70.00'	16°36'06"	S81°10'00"E	20.21'
C65	89.67'	70.00'	73°23'54"	S36°10'00"E	83.67'
C66	4.50'	70.00'	3°41'09"	N87°37'28"W	4.50'

Graphic Scale
0 30 60 120
In U.S. Feet : 1" = 60'

SGM
118 West Sixth Street, Suite 200
Glenwood Springs, CO 81601
970.945.1004 www.sgm-inc.com

Preliminary Plat
Home of the Brave Subdivision
1956 6450 Road
Montrose, Colorado

#	Revision	Date	By
1			
2			
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Notice: According to Colorado Law, you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. In no event, may any legal action based upon any defect in this survey be commenced more than ten years from the date of the certification shown hereon.

Job No.	2021-461.001
Drawn by:	MEW
Date:	1/03/2022
Approved: →	PLS: REB
File:	HomeoftheBrave_Subd

Title:
Home of the Brave Subdivision

Sheet No.
2
Of: 3

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Graphic Scale

0 30 60 120

In U.S. Feet : 1" = 60'

SGM
118 West Sixth Street, Suite 200
Glenwood Springs, CO 81601
970.945.1004 www.sgm-inc.com

Preliminary Plat
Home of the Brave Subdivision
1956 6450 Road
Montrose, Colorado

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Notice: According to Colorado Law, you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. In no event, may any legal action based upon any defect in this survey be commenced more than ten years from the date of the certification shown hereon.

Job No.	2021-461.001
Drawn by:	MEW
Date:	1/03/2022
Approved: --	PLS: REB
File:	HomeoftheBrave_Subd

Title:
Home of the Brave
Subdivision
Phasing Plan

Sheet No.
3
Of: 3

I:\2021\2021-461-homeofthebravesubdivision\001\H-Dwgs\Surv\Dwgs\BaseMaps\HomeoftheBrave_Subd.dwg Plotted: 1/3/2022 2:24 PM By: Mary Winkley

EXHIBIT B: Code Excerpts for Subdivisions

Sec. 4-7-5. - Subdivision procedure.

(A) The subdivision of land shall be accomplished in accordance with the procedures provided in this Section, except for those instances where different governing procedures are set forth pursuant to Sections 4-7-9 through 4-7-11, Informal Review and Sketch Plan. The City Council shall set all application fees related to land use action per resolution.

(1) Prior to submittal of the subdivision application, the subdivider shall make a reasonable effort to consult informally with property owners of record adjoining or within 100 feet of the proposed subdivision, and the City. No fee shall be required for such review or discussions of any plans or data concerning the proposed subdivision, prior to sketch plan review. The City shall not be bound by virtue of any discussions during the informal review stage.

(2) The proposal shall be consistent with the Master Plan, City subdivision and Zoning Regulations, standards and other applicable ordinances and regulations and will be reviewed, considering the following at a minimum.

(a) Conformance with the Master Plan and Zoning Regulations;

(b) Relationship of development to topography, soils, drainage, flooding, potential natural hazard areas and other physical characteristics;

(c) Availability of water, means of sewage collection and treatment, stormwater drainage, access and other utilities and services;

(d) Compatibility with the natural environment, wildlife, vegetation and unique natural features;

(e) Adjacent streets and traffic flow, including pedestrian access;

(f) Availability of fire, police and other emergency services protection;

(g) Impacts on area schools.

(3) A subdivider who intends to immediately develop only a portion of a full tract shall nevertheless submit an informal sketch plan for the entire tract showing his present plans for its eventual development.

(4) Following informal review when applicable, and in all cases except when not required by other provisions of this Chapter, the applicant shall file copies of the sketch plan application and sketch map, along with all required supporting plans, with the City. The submittal of such application, map and supporting plans shall comply with City's application and fee requirements.

Filing of a sketch plan shall not be required in cases where a subdivision, which does not qualify as a minor or amended subdivision, primarily due to a lack of installed on or off-site public improvements. In no case shall the sketch plan requirement be waived under this provision for subdivision proposals containing more than three divisions of real property, or where any part of the subdivision has been subdivided without a sketch plan under any part of this Official Code of the City of Montrose, Colorado, within the three years prior to the date of submission.

(5) The sketch plan review shall commence only upon submittal of a completed sketch map, a completed sketch plan application form, which form shall be provided by the City, and all required

supplemental information as set forth below, as well as any additional materials determined by City staff to be necessary for processing of the application.

(a) Sketch Map. The sketch map shall include the following:

(i) A location map, of approximately four inches by four inches, showing the project location in relation to the City of Montrose, with appropriate reference to major and minor arterial and collector roads or highways.

(ii) A detailed map showing property boundaries of the subdivision, north arrow and date. The scale of the map shall not be less than one inch equals 200 feet. The map shall include the name of the subdivision, name of the county, township, range, Section and quarter Section. The map shall further indicate zoning and land use of all lands within 300 feet of any property boundary owned by or under option to the subdivider. A title box shall be located in the lower right corner of the map. In the case of large subdivisions requiring more than one sheet at such a scale, an index map showing the total area on a single sheet shall also be submitted.

(iii) A conceptual drawing of the lot and street layout indicating the approximate area and number of individual lots and access to the property.

(iv) Significant natural and manmade features on the site, such as streams, lakes, natural drainage ways and wetlands; vegetation types including locations of wood areas; wildlife habitats; scenic corridors; visual impacts; solar access; existing buildings; utility lines and easements; irrigation ditches; bridges and similar physical features; existing development on adjacent property; and footprints of existing buildings.

(v) Total acreage of the tract.

(vi) Existing and proposed zoning district boundary lines. General land use divisions, including residential types, commercial, industrial, parks, open space and community facilities, including the proposal's relevance to underlying zoning.

(vii) Type and layout of all proposed infrastructure, including streets, utilities, water and sewer systems, and impact on existing systems.

(viii) Public use areas proposed to be dedicated to the public, the purpose of the dedication, and their relationship to existing public use areas.

(ix) Existing and proposed land use patterns, including street system, of both the tract proposed for development and immediately adjacent land.

(x) Existing site problems or peculiarities, such as areas of poor drainage, existing floodplain, geological hazards and seepage water.

(xi) Existing and proposed stormwater discharge facilities pertaining to the property.

(b) Sketch Plan Application. The sketch plan application shall include, but not be limited to, the following information pertaining to the proposed subdivision (this information may be provided in a narrative format):

(i) Estimated total number of gallons per day of water system requirements, source of water to supply subdivision requirements, and proposed dedication of water rights in accordance with existing City ordinances.

(ii) Estimated total number of gallons per day of sewage to be treated and means for sewage disposal.

(iii) Availability of electrical power, natural gas, CATV, telephone and other utilities necessary or proposed to serve the subdivision.

(iv) Access to the property, off-street parking, school bus stop area, and mail box location.

(v) Total number of proposed dwelling units.

(vi) Demonstrated compatibility with natural features.

(vii) Identification of all activities of the subdivision which shall require approval by permitting agencies at the local, state and federal level, and a description of the approval so required.

(viii) Names and addresses of all property owners of record adjoining or within 100 feet of the proposed subdivision.

(ix) Summary of issues or concerns resulting from informal review with neighboring property owners, if applicable.

(c) Sketch Plan Supplemental Documents. The sketch plan application shall also include the following supplemental documentation:

Disclosure of ownership, with supporting documentation from a title insurance company or, if acceptable to the City, an attorney licensed in the State of Colorado, which shall set forth a legal description of the property and title ownership of the property.

(6) Upon complete submittal of all required information, City staff shall provide initial review of the sketch plan within 45 days. Upon completion of initial review of the plan and submission by the applicant of any supplemental materials or necessary revisions as requested by City staff, the sketch plan application shall be placed on an upcoming Planning Commission agenda for which space is available and for which all notice requirements can be met.

(7) Advance notice of the sketch plan review by the City Planning Commission shall be provided by publication, with a location map of the property to be subdivided. Fifteen-day advance written notice shall also be provided, by hand delivery or deposit into the U.S. mail, to all property owners of record adjoining or within 100 feet of the proposed subdivision. The City shall provide such notice. The review and discussion of the Sketch Plan by the Planning Commission shall be informal and non-binding in nature, and shall serve as a means to provide guidance to the subdivider.

(B) Preliminary Plat.

(1) An application for preliminary plat shall be submitted to the City and shall comply with applicable City submittal requirements.

(2) The City may distribute copies of the preliminary plat and supporting plans or data as appropriate to the County Land Use Department, the school district, the natural gas, CATV, electrical power and telephone companies, the Fire Protection District, the Colorado Department of Transportation, the Federal Aviation Administration, the Uncompahgre Valley Water User's Association, applicable City departments and employees, and other entities as appropriate.

(3) The preliminary plat and proposed improvements shall comply with all requirements of these subdivision regulations and other applicable City design and construction specifications and standards. The plat shall be drawn to a scale of not less than one inch equals 100 feet. (See Chapter 4-4 of these Zoning Regulations.)

(4) The preliminary plat shall contain, at a minimum, the following:

(a) The name of the subdivision and the name, address and phone number of the subdivider, and his representatives, if applicable. Such information shall be contained in a title box located on the lower right corner of the plat.

(b) A certificate by the engineer or surveyor preparing the plat attesting to the accuracy of the plat. Such information shall be contained in a title box located on the lower right corner of the plat and shall be signed and stamped by the licensed professional engineer or registered surveyor, and shall indicate the scale used and direction of true north.

(c) A certificate by a licensed professional engineer that the water, stormwater, sewer systems, and all other improvements are properly engineered and designed in compliance with applicable requirements of the City and state.

(d) A certificate of ownership of the subject property.

(e) A location map, of approximately four inches by four inches, showing the project location in relation to the City of Montrose, with appropriate reference to significant roads or highways. The location map shall be provided both on the preliminary plat and separately on letter size paper.

(f) Certification on forms approved by the City to document approval of the plat; and the form of the certificates proposed to be used to comply with the requirements imposed for the final plat as found in Subsection (C) of this Section.

(g) Two-foot elevation contours and the boundaries of the base flood (100-year flood) and floodway and base flood elevation data, as defined and specified in the City's floodplain management regulations.

(h) The then-current zoning designations of the subdivision and of adjacent properties.

(i) The names of the owners of record of adjacent properties, and the property lines of adjacent properties as space will allow.

(j) The location and ownership interest of existing and proposed watercourses including lakes, swamps, ditches and floodprone areas (the inclusion of such watercourses within the jurisdictional authority of local, state or federal regulatory agencies shall also be noted); the location of existing and proposed streets, easements, utility lines, poles and towers, sewer lines, water lines, drains, culverts and other underground utilities and stormwater drainage facilities both on the proposed subdivision and adjacent properties as practical.

(k) The layout of all lots showing the building lines, dimensions and lot areas and footprints of existing buildings, if any. The plat shall include at least two references to City GPS coordinates.

(l) The layout and location of all parks and open space.

(m) The location of all land to be reserved or dedicated for public use.

(5) The following shall be submitted accompanying the preliminary plat together with plans and specifications prepared by a licensed professional engineer consistent with City standards and specifications, for all required or proposed improvements. All plans and specifications shall be signed and stamped by a licensed professional engineer.

(a) Plans for the proposed sanitary sewer system showing location, grade, pipe sizes and invert elevations, and the connection points to the existing system.

(b) Plans for the water system and fire protection system showing locations, pipe size, valves, fire hydrants and connection points to the existing system.

(c) Plans for the storm drainage system showing location, pipe sizes, grades and discharge points, including off-site improvements. Such plans shall comply with any applicable City stormwater drainage requirements.

(d) Plans for any improvements specifically affecting watercourses within the jurisdictional authority of local, state or federal regulatory agencies, noting the required permits therefor.

(e) Plans for proposed streets, sidewalks, recreation paths, showing grade and cross Section, trails and walkways and streetlight and street names.

(f) A soil or geological report prepared and certified by a professional geologist or soil scientist.

(g) Plans for piping ditches, or improvements to waterways.

(h) Plans for parks and recreation facilities.

(i) A traffic impact study for all developments when estimated vehicle trips per day will exceed 250 and plans for recommended traffic mitigation measures. The study shall provide, but not be limited to, traffic capacity for existing road infrastructure, proper analyses of transportation linkages in conformance with transportation plan, cumulative traffic impact of development at build-out, and proposed infrastructure design to account for such considerations. The scope of the impact study may be broadened to include other nearby subdivisions and developments, allowing for cooperative participation and cost sharing.

(6) If the applicant intends to develop the project in phases, a phasing plan will be required to be submitted to and approved by the City. The phasing plan must include the numbers of lots in each phase, the infrastructure planned for completion with each phase that is necessary to allow the phase to be properly integrated into City services as determined by the City Engineer, the amenities to be constructed with each phase, and all other information pertinent to the completion of the development.

(7) Upon submittal of all required information, the City staff shall provide initial review of the preliminary plat within 45 days. Upon completion of initial review of the preliminary plat and submission by the applicant of any supplemental materials and revisions necessary to comply with City regulations, the Preliminary Plat Application shall be placed on an upcoming Planning Commission agenda for which space is available and for which all notice requirements can be met. City staff shall make a recommendation to the City Planning Commission to approve the preliminary plat, provided that all supporting documentation has been properly submitted and the plat meets all requirements, disapprove the plat if it does not appear to comply with the provisions of this Chapter, or approve the plat with conditions or modifications.

(8) Advance notice of the preliminary plat review by the City Planning Commission shall be provided by publication, with location map of the property to be subdivided. The City shall provide such notice at least 15 days in advance of the scheduled meeting.

(9) Following receipt of a completed Preliminary Plat Application, the applicant shall be required to diligently pursue the application by providing revised plans, plat maps, and other necessary information in a timely fashion. Where the applicant fails to meet this requirement, the City shall, in writing, request the applicant to withdraw the application. If the applicant fails to take any further action on the Preliminary Plat Application for a period of six consecutive months following such request to withdraw, the Preliminary Plat Application shall automatically expire and all

applicable fees shall be non-refundable. When a Preliminary Plat Application has expired under this Subsection, in the event the applicant wishes to pursue development of the property the applicant must re-apply and pay any applicable fees.

(10) Upon review by the City Planning Commission, the commission shall make a recommendation to the City Council to approve the preliminary plat, provided that all supporting documentation has been properly submitted and the plat meets all requirements, disapprove the plat if it does not appear to comply with the provisions of this Chapter, or approve the plat with modifications or conditions. The reasons for such recommendation shall be included in the minutes of the Planning Commission meeting and provided in writing to the applicant upon request.

(11) Unless the subdivider withdraws the preliminary plat from review, or it expires as set forth herein, the plat shall be submitted to the City Council for final review and action. Advance notice of the preliminary plat review by the City Council shall be provided by posted notice.

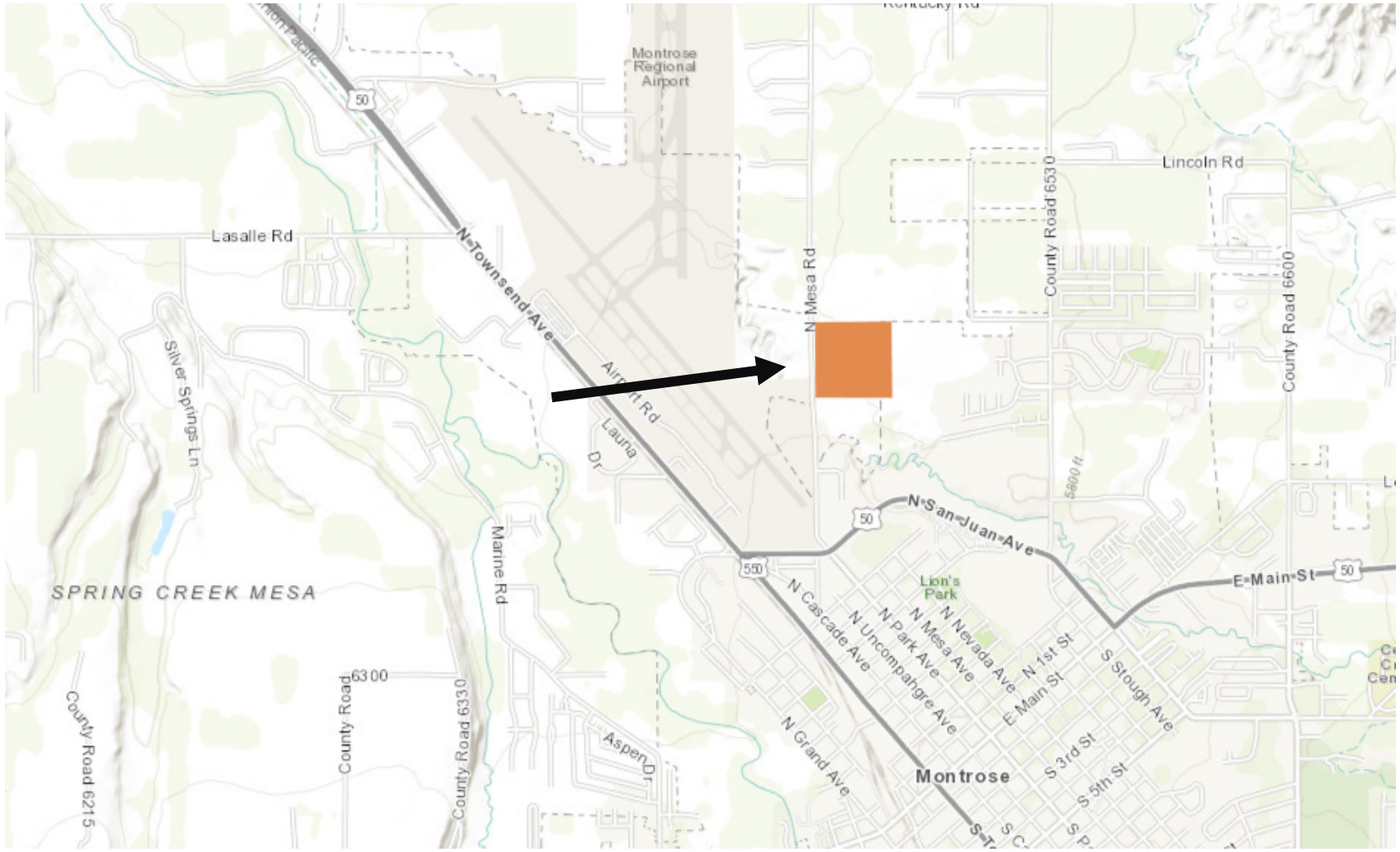
(12) Council may approve the preliminary plat, approve the plat subject to conditions necessary to implement the provisions of this Chapter, or disapprove the plat if the Council finds that the requirements of these regulations have not been met.

(13) No construction of the required subdivision improvements shall commence until approval of the preliminary plat by the City Council and submittal of both a Mylar of the preliminary plat, as finally approved with signed certificates as required by the City, and a copy of the preliminary plat in a digital format acceptable to the City and compatible with City computer systems. Upon approval and submittal of the Mylar, and supporting documentation as required, the City shall then issue a written notice to proceed.

(Code 2012, § 4-7-5; Ord. No. 2062 , 6-2-2005; Ord. No. 2092 , 11-17-2005; Ord. No. 2173 , 11-15-2007; Ord. No. 2229 , 11-5-2009)

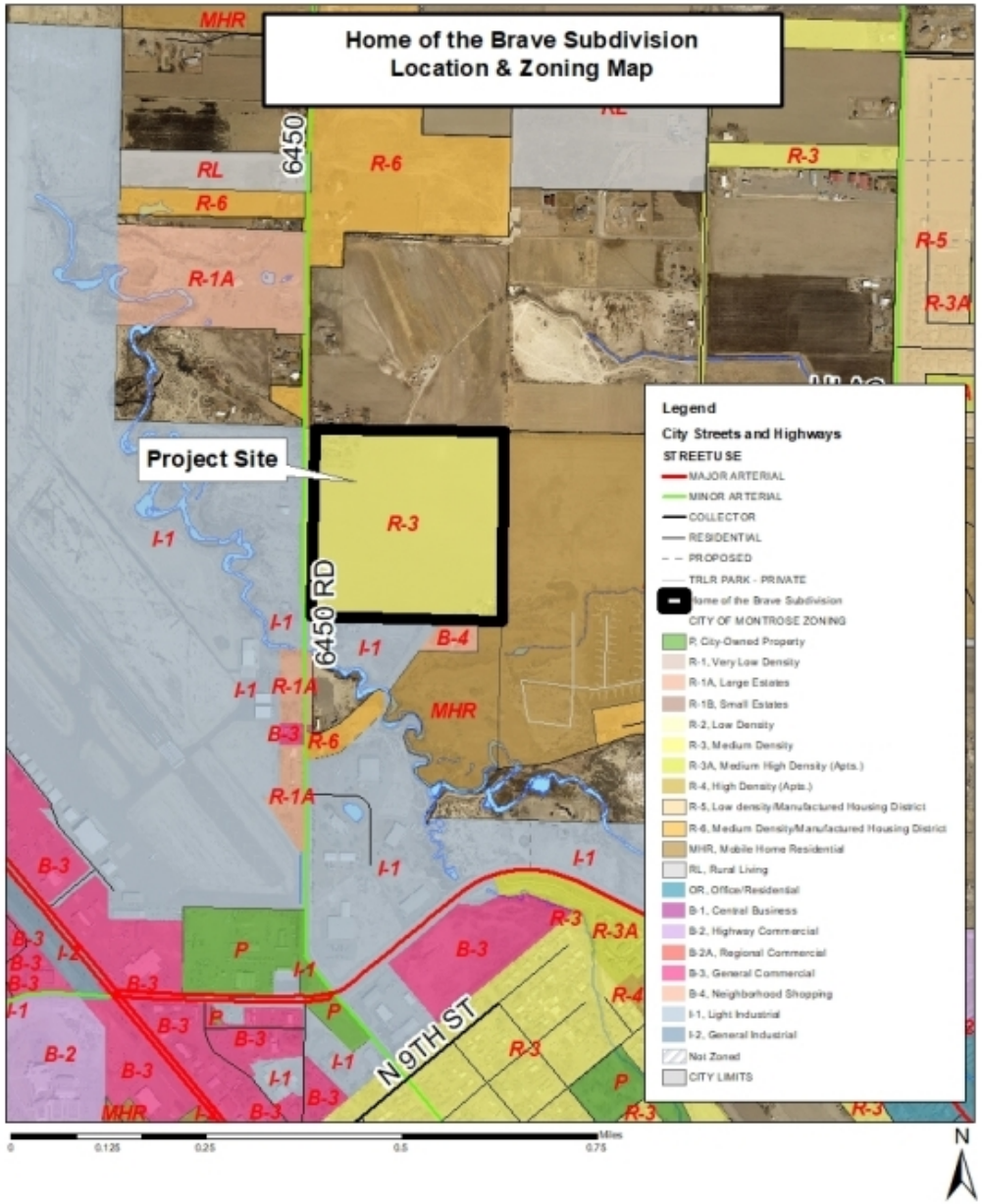
MONTROSE • COLORADO

General Vicinity Map – Home of the Brave Subdivision



Project Background

- Approx. 39.4 acres
- 148 residential lots
  - 116 single-family
  - 32 duplex lots
  - = 180 dwelling units
  - Clubhouse & park
- "R-3" Medium Density District
- Annexed in 2000



Map created 09/30/2021

Subdivision Process

Sketch Plan

- Submittal of Complete Application
- Staff/Outside Agency Review
- Comments sent to applicant
- Correct set of plans submitted to City
- Planning Commission review. No formal action.

Preliminary Plat

- Submittal of Complete Application
- Staff/Outside Agency Review
- Comments sent to applicant
- Correct set of plans submitted to City
- Planning Commission recommendation to Council
- Consideration/approval by City Council
- Pre-construction meeting, infrastructure improvements

Final Plat

- Submittal of Complete Application
- Staff/Outside Agency Review
- Comments sent to applicant
- Correct set of plans submitted to City
- Consideration/approval by City Council
- Building permits issued
- Certificates of occupancy issued

Standard Subdivision Review Standards Section 4-7-5 (A)(2) (Exhibit B)

"The proposal shall be consistent with the Master Plan, City subdivision and zoning regulations, standards and other applicable ordinances and regulations and will be reviewed considering the following at a minimum:

a) Conformance with the master plan and zoning regulations;

b) Relationship of development to topography, soils, drainage, flooding, potential hazard areas and other physical characteristics;

c) Availability of water, means of sewage collection and treatment, storm water drainage, access and other utilities and services;

d) Compatibility with the natural environment, wildlife, vegetation and unique natural features;

e) Adjacent streets and traffic flow, including pedestrian access;

f) Availability of fire, police and other emergency services protection;

g) Impacts on area schools."

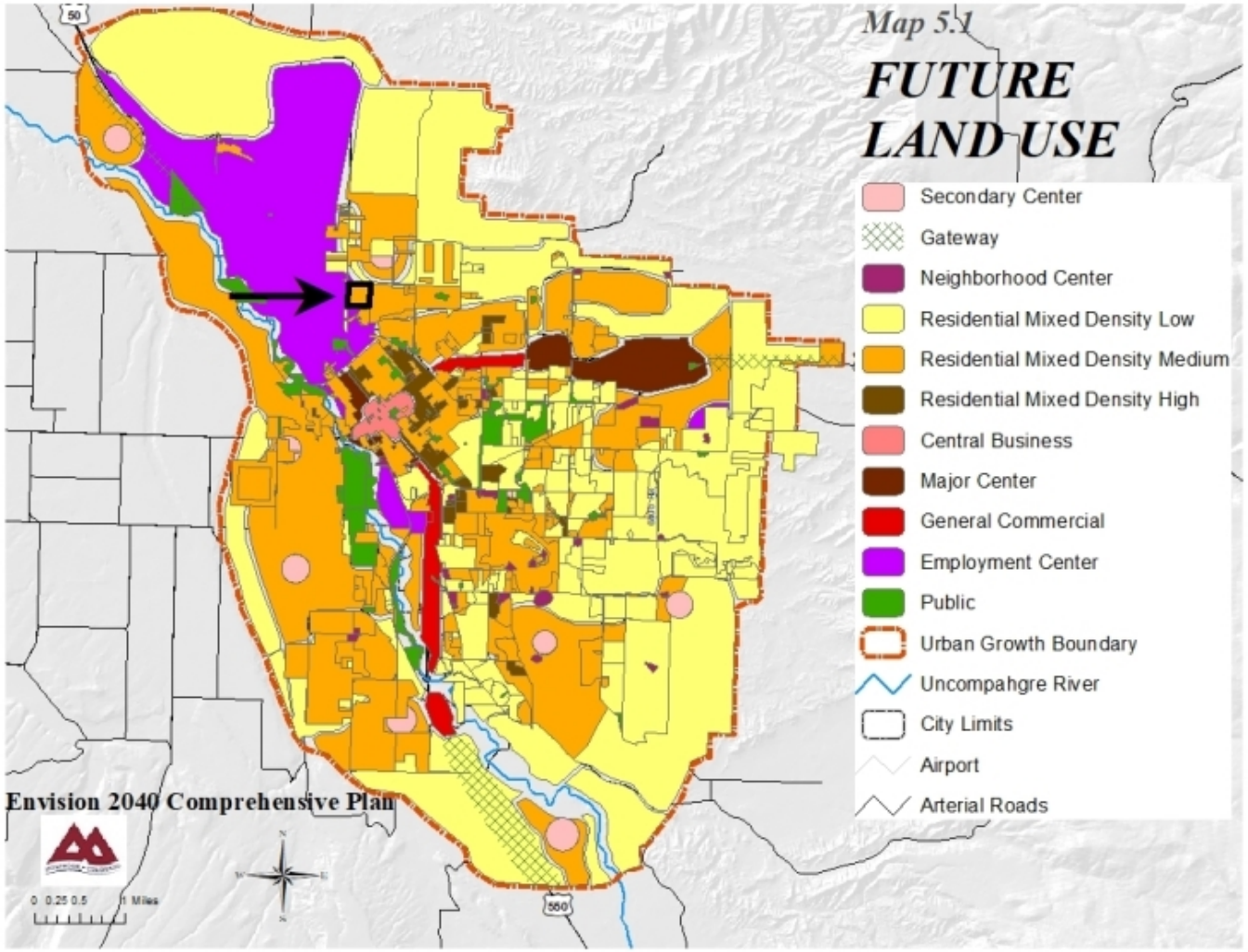
Comprehensive Plan & Municipal Code

- Comprehensive Plan is not legally binding. It provides guidance for zoning and other land use decisions.
- It is possible for sections of the Comprehensive Plan to conflict, and it is reasonable that a decision may not satisfy every aspect outlined within the Comprehensive Plan.
- Future Land Use Map within the Comprehensive Plan illustrates general, somewhat flexible locations and extents for various land uses and densities.
- The Municipal Code and Zoning regulations specify land uses and densities, bulk & height requirements, setbacks, and other development standards that are allowed within each zoning district.
- Development on this parcel may occur in accordance with the approved zoning and should also be in general conformance with the Comprehensive Plan.

Comprehensive Plan – Future Land Use

Listed as **Residential Mixed Density Medium** in the future land use map.

The majority of the mixed-density medium residential land uses are designated in areas that are not yet developed. This district provides for a variety of residential types, mixed within a neighborhood, including single-family homes, townhomes, duplexes and triplexes.



Zoning Regulations

- Municipal Code, Section 4-4-7(A) Intent: The "R-3" Medium Density District is intended to provide an area which is suitable for single-family homes and duplexes. The district provides for other uses which are compatible with such uses.

- The proposed use is a use-by-right in this zoning district. The current zoning is compatible with general conditions in the area. The property is adjacent to properties that are zoned “MHR” Manufactured Housing Residential District, “I-1” Light Industrial District, “B-4” Neighborhood Shopping District, and agricultural (outside City limits).

Zoning Regulations

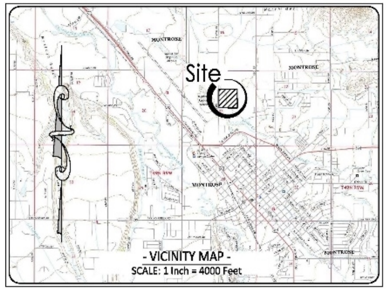
- The dimensional requirements in the “R-3” zoning district are included below. (Municipal Code Section 4-4-22). All lots meet the minimum lot size requirement.

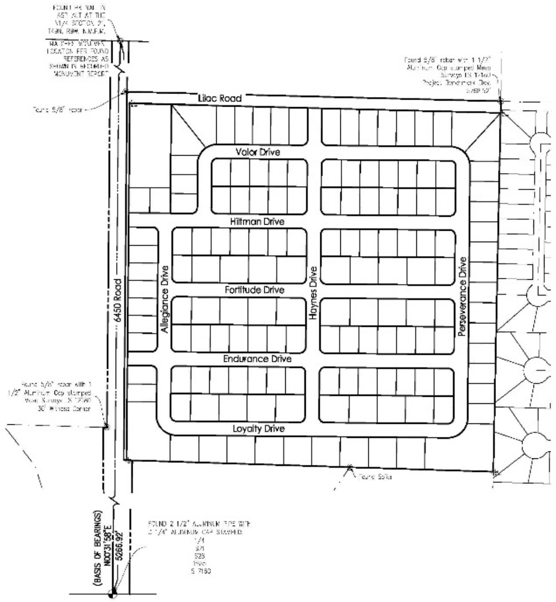
	Minimum Lot				**Minimum Setbacks**				
District	Use	Width at Building Line	Depth	Size	Front	Rear	Side	Corner Lot	Maximum Building Height
R-3	Single-Family	N/A	N/A	6,250	15	25	5	15	35
	All others	N/A	N/A	9,375	15	25	5	15	35

Preliminary Plat

Home of the Brave Subdivision

SW1/4 NE1/4 Section 21, Township 49 North, Range 9 West of the New Mexico Principal Meridian City of Montrose, Montrose County, Colorado





CERTIFICATE OF DEDICATION AND OWNERSHIP

KNOW ALL MEN BY THESE PRESENTS that the undersigned being the owners of certain lands in the City of Montrose, County of Montrose and State of Colorado to wit:

THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER, SECTION 21, TOWNSHIP 49 NORTH, RANGE 9 WEST, N.M.P.M., COUNTY OF MONTROSE, STATE OF COLORADO.

Containing 39.408 acres, more or less.

Have by these presents laid out, platted and subdivided the same into lots and tracts as shown on this Plat under the name and style of Home of the Brave Subdivision, and do hereby dedicate, grant and convey to the City of Montrose, Colorado for use of the public, 6450 Road, Lilac Road, Allegiance Drive, Haynes Drive, Perseverance Drive, Valor Drive, Hiltman Drive, Fortitude Drive, Endurance Drive, and Loyalty Drive, as shown hereon.

The easements shown on this plat are dedicated, granted and conveyed to the City of Montrose, Colorado for public utilities, including but not limited to water, sewer, electrical, telephone, gas and CATV lines, and drainage easements specifically labeled for dedication, together with perpetual right of ingress and egress for installation, maintenance and replacement of such facilities. The dedication of easements as herein provided shall not include those easements exclusively utilized for irrigation improvements, or otherwise subject to a previously recorded conveyance.

Executed this____________ day of ________________, 20__.

Todd D. Haynes   Maya Haynes

STATE OF COLORADO)
) ss.
COUNTY OF MONTROSE)

The foregoing Certificate of Dedication and Ownership was acknowledged before me this____________ day of ________________, 20__, by Todd D. Haynes.

Witness my hand and official seal.
My commission expires: ______

Notary

STATE OF COLORADO)
) ss.
COUNTY OF MONTROSE)

The foregoing Certificate of Dedication and Ownership was acknowledged before me this____________ day of ________________, 20__, by Maya Haynes.

Witness my hand and official seal.
My commission expires: ______

Notary

ATTORNEY'S CERTIFICATE

I, ____________, an attorney at law, duly licensed to practice in Colorado, do hereby certify that I have examined the title of all land herein platted and described in the above Certificate of Ownership and Dedication, and that title to the such land is in the owners and dedicators; and that the title to all dedicated property therein described, is free and clear of all liens and encumbrances, except:

Attorney
Registration No. __________
Date: __________

ENGINEER'S CERTIFICATE

I, ____________, a Registered Engineer in the State of Colorado, do hereby certify that the sanitary sewer system, water distribution system, and the storm drainage system shown on the accompanying plans of this Subdivision are properly designed, meet City of Montrose specifications, and are adequate to properly serve the Subdivision shown hereon. I further certify that the sanitary sewer system, water distribution system, storm drainage system, streets, parks, and other improvements are designed and constructed in accordance with applicable City specifications and regulations.

Engineer
Registration No. __________
Date: __________

CERTIFICATE OF COMPLETED IMPROVEMENTS

I, ____________, City Engineer, certify that all improvements and utilities required by the current Subdivision Regulations of the City of Montrose, have been constructed, inspected and approved in this subdivision in accordance with applicable City Regulations and specifications, and a preliminary letter of infrastructure completion has been issued, as required by the City's Municipal Code.

City Engineer   Date: __________
Registration No. ______

LIENHOLDER'S AFFIDAVIT

STATE OF COLORADO)
) ss.
COUNTY OF MONTROSE)

Before a Notary Public, duly qualified and acting in and for said city, county, and state, appeared ______________, known by official government-issued photographs identification to the affiant herein, who stated the following under oath:

The undersigned holder of a lien pursuant to an instrument recorded under Reception No. ________ in the records of the Montrose County Clerk and Recorder, hereby joins in this subdivision and the dedication of easements, streets and other properties to the City shown hereon. The undersigned duly swears or affirms that: 1) he/she is authorized to sign this Plat on behalf of the lien-holding entity named below for which he/she functions as an agent; and 2) said agency includes the actual authority to sign this Plat joining in this subdivision and any dedications to the City; and 3) that all necessary corporate or other legal formalities have been met to allow the agent's signature below to be effective; and 4) that the signature below was made by the person whose name it purports to be.

of __________

Subscribed and sworn to before me this____________ day of ________________, 20__, by the __________ of ____________.

Witness my hand and official seal.
My commission expires: ______

Notary

APPROVAL OF CITY MANAGER

Approved this ________ day of __________, 20__, by ____________________, City Manager of the City of Montrose.

City Manager

APPROVAL OF CITY COUNCIL

Approved this ________ day of __________, 20__, by ____________________, Mayor of the City of Montrose; all conveyances of interests in real property made on this plat are hereby accepted by the City.

Mayor

APPROVAL OF CITY ATTORNEY

Approved for recording this ________ day of __________, 20__, by ________________, City Attorney of the City of Montrose.

City Attorney

CERTIFICATE OF RECEIPT OF SECURITY

I, ______________, City Clerk of the City of Montrose, hereby certify that Security for the two (2) year warranty on all public improvements has been received in the amount of $________ to be held in escrow by the City in accordance with Municipal Code Section 4-7-6 (D), and other applicable City ordinances and regulations.

City Clerk   Date: __________

PLAT NOTES:

1. Lot 1 is to be excluded from the HOA; no improvements are proposed for Lot 1.
2. Building setbacks are as shown hereon: 15' Front Yard, 25' Rear Yard, 5' Side Yard
3. Money in lieu of School Land Dedication: All residential lots or residential units having unique legal descriptions shall be required to make payment of money in lieu of school land dedication, at the time of issuance of building permit or certificate of occupancy relative to improvements upon said lot. The payment of money in lieu of school land dedication is subject to Section 4-7-7(C)(7) of the Municipal Code. Payments shall be made to the City, to be later disbursed to the RE-1J School District.
4. Privately Owned Open Space, Parks, and other Improvements: All open spaces and parks, now existing or hereafter conveyed, shall be owned and maintained by an owners' association, or in the absence of an owners' association lawfully formed for such purposes, by the owners of all lots final platted in Home of the Brave Subdivision jointly and severally. The City is not responsible or liable in any manner for the maintenance, repair, or operation of such properties and/or improvements, nor shall the City be responsible for future dedications of such properties. Upon failure to properly maintain such properties and/or improvements shown hereon, or in the need to abate a nuisance or public hazard, the City may cause the maintenance or repair to be performed, and assess the costs thereof to such owner(s), or the City may certify such charges as a delinquent charge to the County Treasurer to be collected similarly to taxes or in any lawful manner.
   A. Conveyance of Private Parks and Open Space to Owners' Association:
   By executing this Plat, the owner(s) whose signature(s) appear hereon, joined by the Lienholder(s), if any, whose signatures also appear on this Plat, for and in consideration of TEN AND NO/100 DOLLARS ($10.00), and other good and valuable consideration, in hand paid, hereby sell(s) and quit claim(s) to ____________________, a Colorado nonprofit corporation, Tracts 1, 2, and 3 shown and designated on this Plat.
   B. Certificate of Good Standing:
   The owner(s) whose signature(s) appear on the Certificate of Dedication and Ownership on this Plat have provided the City a current, valid, Certificate of Good Standing bearing Confirmation No. _____, from the Colorado Secretary of State, as proof of the above-named HOA or Owners' Association entity's: I) compliance with all applicable requirements of the Colorado Secretary of State, and II) good standing with the Colorado Secretary of State.
   C. Declaration of Covenants Recorded:
   The Declaration of Covenants, Conditions, and Restrictions for ____________, applicable to the development platted hereon, and made binding to the entity named above, was recorded under Reception No. __________, on the ______day of 20____ in the office of the Montrose County Clerk and Recorder.
5. COPS Fee: The preannexation agreement for this development subjects it to a City Operations and Police Service Fee to be paid for each dwelling unit at the time of final plat, in the amount of $650.00 per dwelling unit based on the maximum dwelling units allowed on each lot. In the event a building permit is issued for any residential units prior to filing of this plat, the fee shall be collected on each unit with the building permit and a correlating credit applied to the fees due on subsequent subdivision or planned unit development final plat. The amount of the fee may be adjusted for inflation from time to time.
   No residential units may be placed on Tracts 1, 2 or 3.
   The following lots are limited to 1 dwelling unit each: Lots 1-35, 44-91, 100-101, 110-139, 148
   The following lots are limited to a maximum of 2 dwelling units: Lots 36-43, 92-99, 102-109, 140-147
   The following lots are limited to 3 dwelling units: N/A
6. Airport Influence Area Notice: The Home of the Brave Subdivision is located approximately 1/4 mile east of the Montrose Regional Airport. The Home of the Brave Subdivision is within the Airport Influence Area of a busy airport used by piston and jet aircraft and is open 24 hours a day seven days a week. All property within the Home of the Brave Subdivision is subject to over-flights and the effects thereof, which may include but is not limited to noise, vibration, fumes, and dust.
7. Zoning: The zoning of this property is R-3 as shown on the City's Official Zoning Map, and as defined and described by the City of Montrose Municipal Code at the time of approval and recordation of this plat, and is subject to change.
8. Final Plat Conditional Approval: The approval of the Home of the Brave Subdivision Final Plat is expressly conditioned upon City staff ensuring that all policies, regulations, ordinances and municipal code provisions are met, and that the Applicant adequately addresses all of staff's concerns.
9. Basis of Bearings: Bearings shown hereon are based on a bearing of N00°31'58"E, between the south quarter corner of said Section 21 monumented by a 2 1/2" aluminum pipe with 3 1/4" Aluminum Cap stamped ¼ S21/S28 1985 LS7160 and the north quarter corner of said Section 21 monumented by a PK nail in asphalt.
10. Units of linear measurements are displayed in US Survey Feet.
11. SGM is not responsible for any changes made to this document after it leaves our possession. Any copy, facsimile, etc., of this document must be compared to the original signed, sealed and dated document to insure the accuracy of the information shown on any such copy, and to insure that no such changes have been made.
12. Property descriptions shown hereon are based on the title insurance commitment issued by Old Republic National Title Insurance Company, Order No. MRR87018800, having an effective date of March 26, 2021.
13. Fences shown hereon, if any, have been shown for general reference and do not necessarily depict limits of ownership.
14. The property shown hereon is subject to all easements, rights-of-way, building setbacks or other restrictions of record, as such items may affect this property. This survey does not represent a title search by this surveyor to determine ownership or to discover easements or other encumbrances of record. All information pertaining to ownership, easement and other encumbrances of record has been taken from the title insurance commitment issued by Old Republic National Title Insurance Company, Order No. MRR87018800, having an effective date of March 26, 2021.

   Every attempt has been made to show all easements, rights-of-way, etc. referred to in the Schedule B2 Exceptions recited in said title insurance policy. Some such items may not be shown (i.e. Items 1-9 & 11) if they are standard title commitment exceptions, or if not sufficiently described in recorded documents to be shown graphically, or if they are situated on adjacent properties, or if they affect the property in general, etc. In regards to other such items:

   Item 10: Right of Way Easement as granted to Delta-Montrose Electric Association in instrument recorded February 20, 1998, in Book 914 at Page 450. Affects subject parcel and is shown hereon.

   Item 12: Non-Exclusive Easement for ingress, egress and underground utilities recorded June 23, 2011 under Reception No. 825879. Affects subject parcel and is shown hereon.

SURVEYOR'S CERTIFICATE:

I, Robert E. Brandeberry, being a Registered Professional Land Surveyor, licensed in the State of Colorado, do hereby certify that there are no roads, pipelines, irrigation ditches or other easements or rights-of-way in evidence or known to me to exist on or across said property except as shown on this plat. I certify that I have made the survey represented by this plat and that this plat accurately represents said survey, and conforms to all applicable requirements of the City Subdivision Regulations and applicable law. I further certify that all monuments shown hereon actually exist and their positions are as shown.

C.R.S. Section 38-51-106 Statement: this plat does not represent a title search by the Surveyor, nor by any professional corporation or business entity with which said Surveyor may be associated. Information regarding the title work performed for and used in producing this plat may be found in the title policy issued by Old Republic National Title Insurance Company, Order No. MRR87018800, having an effective date of March 26, 2021.

REVIEW COPY

Robert E. Brandeberry
Colorado PLS # 38089
For, and on behalf of SGM

RECORDER'S CERTIFICATE

This plat was filed for record in the office of the Clerk and Recorder of Montrose County, Colorado, at the time of __________, on the ______ day of ____________, 20___ under Reception No. __________

Clerk and Recorder
Montrose County, Colorado

APPROVAL OF PRELIMINARY PLAT

City Engineer, Scott Murphy	Date
City Attorney,	Date
Chair, Planning Commission, David Fishering	Date
Mayor, City Council, Douglas Glaspell	Date

Graphic Scale
0 100 200 400
In U.S. Feet : 1" = 200'

SGM
118 West Sixth Street, Suite 200
Glenwood Springs, CO 81601
970.945.1004 www.sgm-inc.com

Preliminary Plat
Home of the Brave Subdivision
1956 6450 Road
Montrose, Colorado

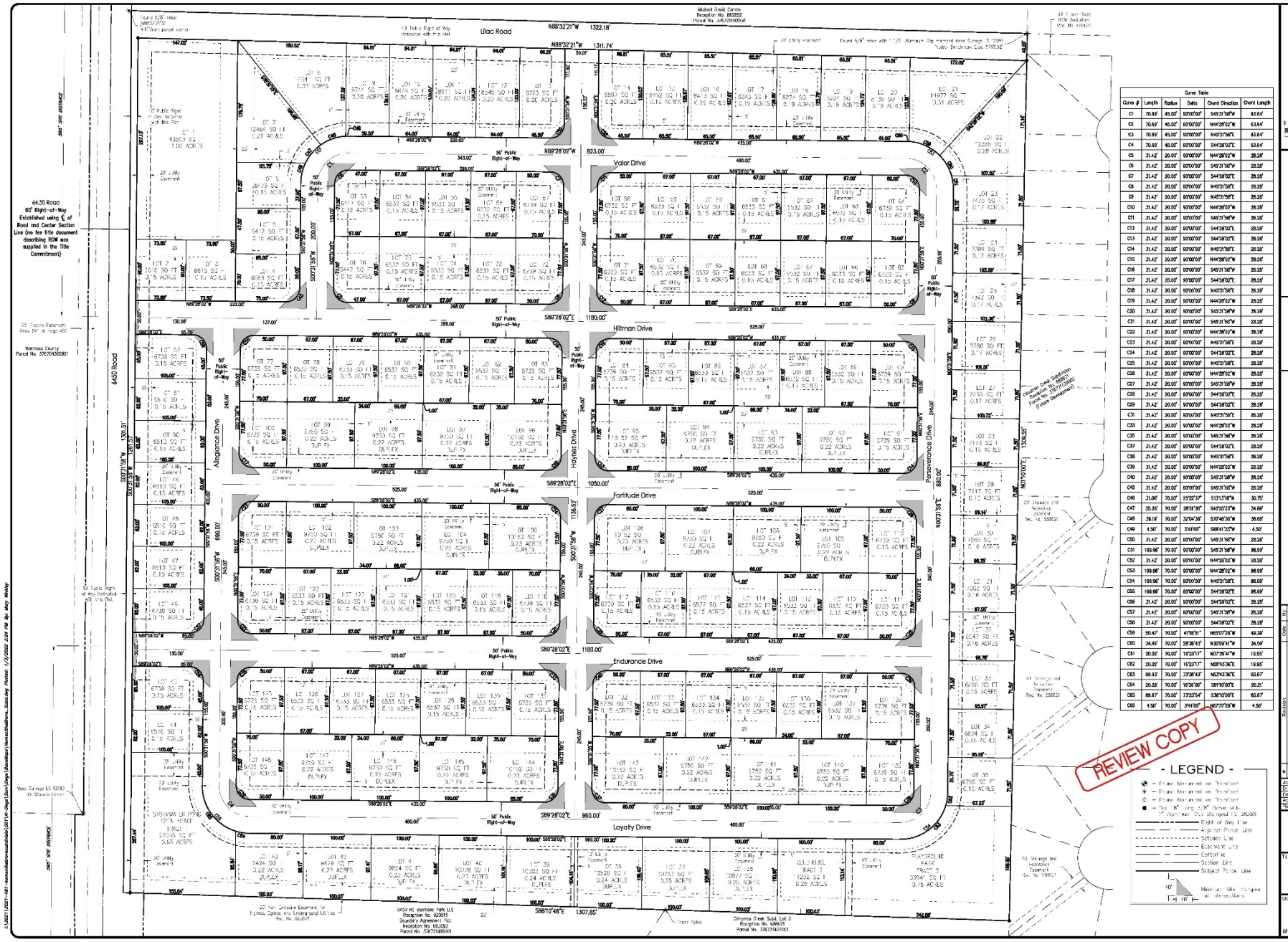
Job No.	2021-461.001
Drawn by:	MEW
Date	1/03/2022
Approved: –	PLS: REB
File	HomeoftheBrave Subd

Title: Home of the Brave Subdivision

Sheet No 1

Of: 3

I:\2021\2021-461-homeofthebravesubdivisio\001\H-Dwgs\Surv\Dwgs\BaseMaps\HomeoftheBrave_Subd.dwg Plotted: 1/3/2022 2:23 PM By: Mary Wakley



Curve Table					
Curve #	Length	Radius	Delta	Chord Direction	Chord Length
C1	70.69'	45.00'	90°00'00"	S45°31'58"W	63.64'
C2	70.69'	45.00'	90°00'00"	N44°28'02"W	63.64'
C3	70.69'	45.00'	90°00'00"	N45°31'58"E	63.64'
C4	70.69'	45.00'	90°00'00"	S44°28'02"E	63.64'
C5	31.42'	20.00'	90°00'00"	S45°31'58"W	28.28'
C6	31.42'	20.00'	90°00'00"	S45°31'58"W	28.28'
C7	31.42'	20.00'	90°00'00"	S44°28'02"E	28.28'
C8	31.42'	20.00'	90°00'00"	N45°31'58"E	28.28'
C9	31.42'	20.00'	90°00'00"	N45°31'58"E	28.28'
C10	31.42'	20.00'	90°00'00"	N44°28'02"W	28.28'
C11	31.42'	20.00'	90°00'00"	S45°31'58"W	28.28'
C12	31.42'	20.00'	90°00'00"	S44°28'02"E	28.28'
C13	31.42'	20.00'	90°00'00"	S44°28'02"E	28.28'
C14	31.42'	20.00'	90°00'00"	N45°31'58"E	28.28'
C15	31.42'	20.00'	90°00'00"	N44°28'02"W	28.28'
C16	31.42'	20.00'	90°00'00"	S45°31'58"W	28.28'
C17	31.42'	20.00'	90°00'00"	S44°28'02"E	28.28'
C18	31.42'	20.00'	90°00'00"	N45°31'58"E	28.28'
C19	31.42'	20.00'	90°00'00"	N44°28'02"W	28.28'
C20	31.42'	20.00'	90°00'00"	S45°31'58"W	28.28'
C21	31.42'	20.00'	90°00'00"	S45°31'58"W	28.28'
C22	31.42'	20.00'	90°00'00"	N44°28'02"W	28.28'
C23	31.42'	20.00'	90°00'00"	N45°31'58"E	28.28'
C24	31.42'	20.00'	90°00'00"	S44°28'02"E	28.28'
C25	31.42'	20.00'	90°00'00"	N45°31'58"E	28.28'
C26	31.42'	20.00'	90°00'00"	N44°28'02"W	28.28'
C27	31.42'	20.00'	90°00'00"	S45°31'58"W	28.28'
C28	31.42'	20.00'	90°00'00"	S44°28'02"E	28.28'
C29	31.42'	20.00'	90°00'00"	S44°28'02"E	28.28'
C31	31.42'	20.00'	90°00'00"	N45°31'58"E	28.28'
C33	31.42'	20.00'	90°00'00"	N44°28'02"W	28.28'
C35	31.42'	20.00'	90°00'00"	S45°31'58"W	28.28'
C37	31.42'	20.00'	90°00'00"	S44°28'02"E	28.28'
C38	31.42'	20.00'	90°00'00"	N45°31'58"E	28.28'
C39	31.42'	20.00'	90°00'00"	N44°28'02"W	28.28'
C40	31.42'	20.00'	90°00'00"	S45°31'58"W	28.28'
C45	31.42'	20.00'	90°00'00"	S45°31'58"W	28.28'
C46	31.00'	70.00'	25°22'37"	S13°13'16"W	30.75'
C47	35.28'	70.00'	28°51'36"	S40°22'23"W	34.89'
C48	38.19'	70.00'	32°04'28"	S70°45'30"W	38.69'
C49	4.50'	70.00'	3°41'05"	S88°41'25"W	4.50'
C50	31.42'	20.00'	90°00'00"	S45°31'58"W	28.28'
C51	109.96'	70.00'	90°00'00"	S45°31'58"W	98.99'
C52	31.42'	20.00'	90°00'00"	N44°28'02"W	28.28'
C53	109.96'	70.00'	90°00'00"	N44°28'02"W	98.99'
C54	109.96'	70.00'	90°00'00"	N45°31'58"E	98.99'
C55	109.96'	70.00'	90°00'00"	S44°28'02"E	98.99'
C56	31.42'	20.00'	90°00'00"	S44°28'02"E	28.28'
C57	31.42'	20.00'	90°00'00"	S45°31'58"W	28.28'
C58	31.42'	20.00'	90°00'00"	S44°28'02"E	28.28'
C59	50.47'	70.00'	41°18'51"	N65°07'28"W	49.38'
C60	34.96'	70.00'	28°36'43"	N30°09'41"W	34.59'
C61	20.02'	70.00'	16°23'17"	N07°36'41"W	19.95'
C62	20.02'	70.00'	16°23'17"	N08°45'36"E	19.95'
C63	89.93'	70.00'	73°36'43"	N57°43'36"E	83.87'
C64	20.28'	70.00'	16°36'06"	S81°10'00"E	20.21'
C65	89.87'	70.00'	73°23'54"	S36°10'00"E	83.67'
C66	4.50'	70.00'	3°41'05"	N87°37'25"E	4.50'

Graphic Scale

0 30 60 120

In U.S. Feet : 1" = 60'

SGM
118 West Sixth Street, Suite 200
Glenwood Springs, CO 81601
970.945.1004 www.sgminc.com

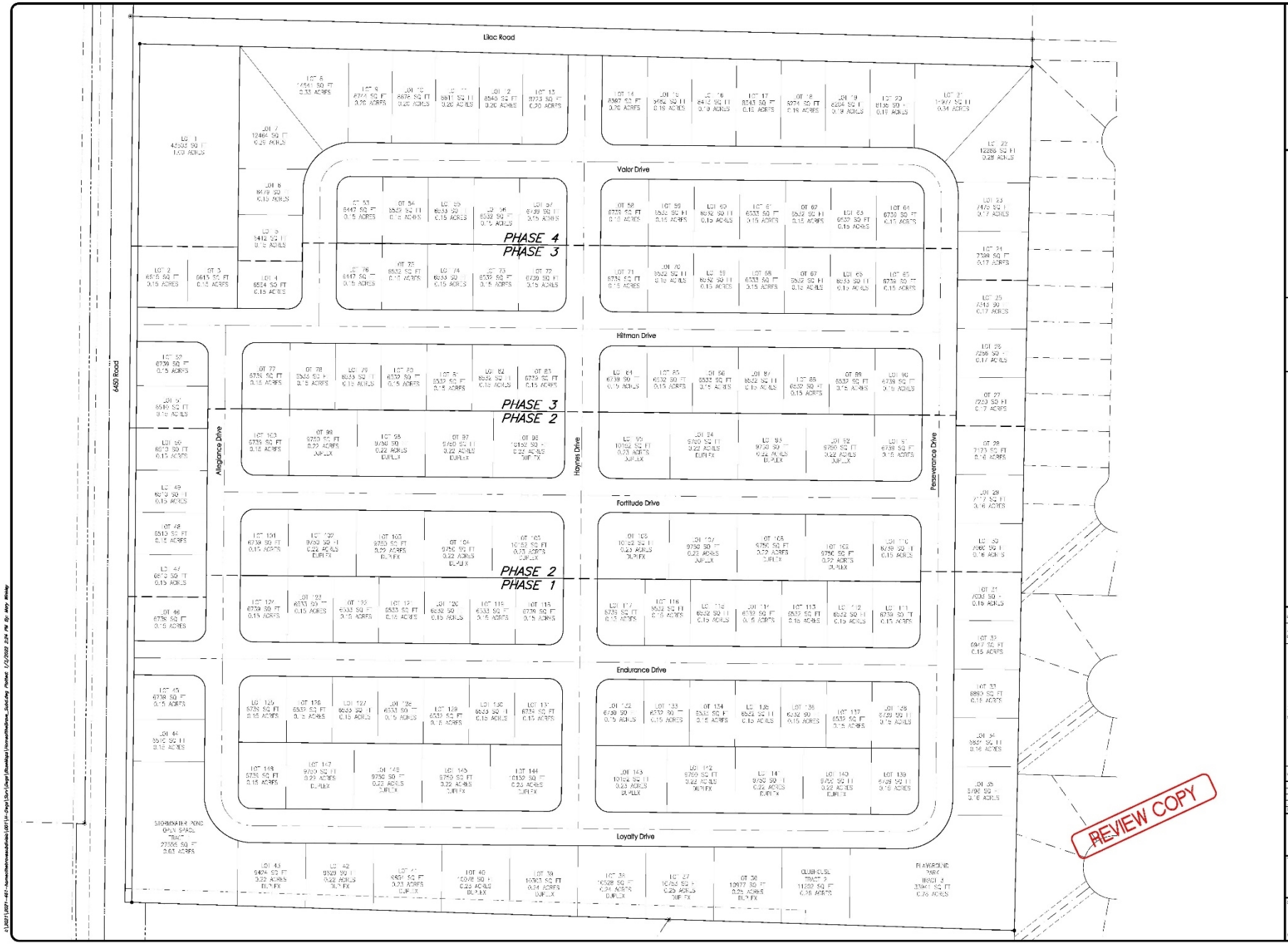
Preliminary Plat
Home of the Brave Subdivision
1956 6450 Road
Montrose, Colorado

Revisions			

Job No. 2021-461.001
Drawn by: MEW
Date: 1/28/2022
Approved: HLS RHB
File: HomeoftheBrave_Subd

Title
Home of the Brave Subdivision

Sheet No.
2
Of: 3



Graphic Scale

0 30 60 120

In U.S. Feet: 1" = 60'

SGM
118 West Sixth Street, Suite 200
Glenwood Springs, CO 81601
970.945.1004 www.sgminc.com

Preliminary Plat
Home of the Brave Subdivision
1956 6450 Road
Montrose, Colorado

No.	Revision	Date	By
1			
2			
3			
4			
5			
6			
7			
8			

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Job No. 2021-467.001
Drawn by: NEW
Date: 1/25/2022
Approved: PLB
File: HomeoftheBrave_SubD

Title
Home of the Brave Subdivision Phasing Plan

Sheet No.
3
Of: 3

Staff Recommendation – Conditional Approval

- Staff finds that the Preliminary Plat is in compliance with the Subdivision Regulations and Comprehensive Plan.
- The proposal meets the intent of the “R-3” zoning districts.
- Staff recommends Conditional Approval of the Home of the Brave Preliminary Plat.
  - [Standard Condition]: The approval of this Plat is expressly conditioned upon City staff ensuring that all policies, regulations, ordinances and municipal code provisions are met and that the Applicant adequately addresses all of staff's concerns prior to the execution of the Final Plat. The City staff is not authorized by this approval to execute the Final Plat prior to all conditions being satisfied.

MONTROSE • COLORADO

CITY OF MONTROSE
Planning Services

MEMO

TO: Planning Commission
FROM: Amy Sharp, Senior Planner
DATE: February 9, 2022
RE: Travel Home Park Permit
ATTACHMENTS

- Exhibit A: Area Map & Site Plan
- Exhibit B: Excerpts from City of Montrose Municipal Code
- Exhibit C: Photos

Public notice requirements have been fulfilled in accordance with Section 4-4-31(D) of the City of Montrose Municipal Code. A sign was posted on the property, letters sent to property owners within 100 feet, and an ad appeared in the Montrose Daily Press.

Planning Commission Consideration:
The Planning Commission is reviewing a revised site plan for an existing travel home park permit for the Riverbend RV Park. The Planning Commission shall make a recommendation to City Council to approve or deny a travel home park permit. The Planning Commission will consider all of the information in this memo in making a decision.

Application Background:
The Riverbend RV Park is requesting is an update to a site plan for an existing travel home park permit in order to expand services and facilities within the existing park. This must be approved by both the Planning Commission and City Council. This project is located along Chipeta Road just north of Chipeta Lake.

Applicant: David Svenson

Staff Analysis – Issuance of Travel Home Park Permit
The City Municipal Code, Section 4-12-7 outlines the process for the Planning Commission's review of Travel Home Park applications. Section 4-12-8 outlines the travel home park design requirements (Exhibit B). The Planning Commission reviews the site plan and shall approve or disapprove of the application. If disapproved, the reasons for disapproval shall be included in the Planning Commission minutes and provided to the applicant upon request. If the application is approved, it shall be submitted to the City Council for review and action. The Council may approve the application, or disapprove the application, if it finds that the requirements of these regulations have not been met.

Staff's analysis of the travel home park permit application and site plan (Exhibit A) is that the proposal is consistent with Section 4-12-7 and Section 4-12-8. A conditional use permit, variance, and travel home park permit were all approved in 2021. This updated travel home park permit would allow an additional five (5) RV only sites on the west side of the property from what was approved in 2021. These five (5) sites do not need additional conditional use permit or variance approvals.

Staff Recommendation:
The staff finds that the criteria have been met and recommend approval of the travel home park permit and attached site plan.

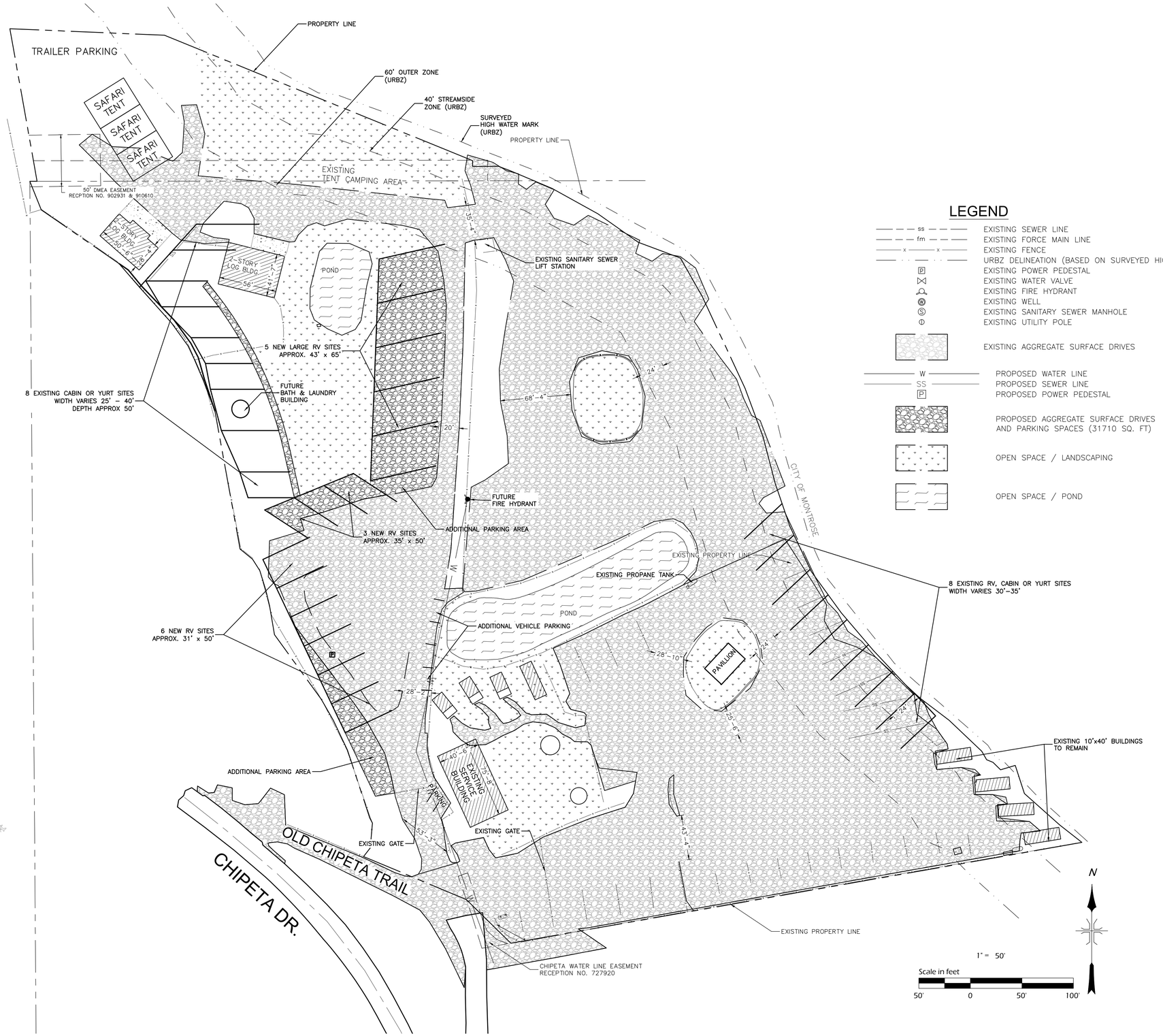
Planning Commission Motion Alternatives – Travel Home Park Permit
Approval Motion Recommendation:
"I hereby make a motion to approve the request to allow a travel home park permit for the requested improvements at Riverbend RV Park as shown on the approved site plan in this staff report. The request meets the Code criteria based on the evidence and testimony presented at this hearing and in the staff report."

Denial Motion Recommendation:
"I hereby make a motion to deny the request. The request does not meet the Code criteria based on the evidence and testimony presented at this hearing and in the staff report.

EXHIBIT A:
Vicinity Map

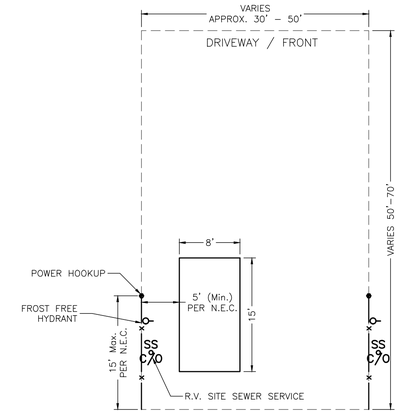
LOCATION MAP
NOT TO SCALE

Notification Area



LEGEND

- EXISTING SEWER LINE
- EXISTING FORCE MAIN LINE
- EXISTING FENCE
- URBZ DELINEATION (BASED ON SURVEYED HIGH WATER MARK)
- EXISTING POWER PEDESTAL
- EXISTING WATER VALVE
- EXISTING FIRE HYDRANT
- EXISTING WELL
- EXISTING SANITARY SEWER MANHOLE
- EXISTING UTILITY POLE
- EXISTING AGGREGATE SURFACE DRIVES
- PROPOSED WATER LINE
- PROPOSED SEWER LINE
- PROPOSED POWER PEDESTAL
- PROPOSED AGGREGATE SURFACE DRIVES AND PARKING SPACES (31710 SQ. FT)
- OPEN SPACE / LANDSCAPING
- OPEN SPACE / POND



TYPICAL R.V. SITE LAYOUT

N.T.S.

SPACES:
EXISTING R.V. SPACES: 59
EXISTING CABIN SPACES: 9
PROPOSED MULTI–USE: 32
TOTAL SPACES: 100

PROJECT SITE AREA / SPACE RATIO CALCULATION:
SITE AREA 9.76 ACRES
EXISTING SITES / ACRE: 7.01 PER ACRE
FUTURE SITES / ACRE: 9.73 PER ACRE

PROJECT SITE INFORMATION:
APPROXIMATELY 9.7 ACRES EXCEPTING THE 0.3± ACRES THAT IS ENCOMPASSED BY THE 14' WIDTH ALONG THE RIVER.

PARKING & ACCESS INFORMATION:
IN ADDITION TO THE PARKING PROVIDED IN THE ABOVE NOTED R.V. SITES, AN ADDITIONAL 21 DESIGNATED PARKING LOCATIONS ARE IDENTIFIED ON THIS SITE PLAN.
ALL NEW 2–WAY DRIVE AISLES ARE TO BE A MINIMUM OF 22' IN WIDTH.
ALL NEW 1–WAY DRIVE AISLES ARE TO BE A MINIMUM OF 15' IN WIDTH.

PARK & PLAYGROUND AREA:
85,090 S.F. OF THE SITE IS SPECIFICALLY PARK/PICNIC AREA COMPRISED OF PONDS, GRASSED AREAS AND NATIVE TREE COVER. THIS IS ROUGHLY 22% OF THE PROJECT SITE.

DIMENSIONAL REQUIREMENTS:
THE MINIMUM DISTANCE BETWEEN TRAVEL HOMES AND/OR ACCESSORY STRUCTURES SHALL BE 10'.

ZONING:
THE ZONING OF THAT PORTION OF THIS PROPERTY WITHIN THE CITY LIMITS IS CURRENTLY B–2.

PROPERTY ADDRESS:
SITE ADDRESS IS 65110 OLD CHIPETA TR. MONTROSE, CO.

NO	DATE	REVISIONS	BY

DEL-MONT CONSULTANTS, INC.
P.O. Box 1775 ▼ 121 S. Pine St., Suite 7 ▼ Montrose, CO 81402
DC Construction ▼ Montrose, CO 81401 ▼ www.del-mont.com ▼ service@del-mont.com ▼ (970) 249-9201 ▼ (970) 249-2452 FAX

DESIGNED BY:	DRAWN BY:	SCALE:	FILE NAME:	CHECKED BY:	DATE ISSUED:
DESIGN	MGW	AS-NOTED	21028C_SITE_20211215.DWG	NB	2022-01-14

DAVID SVENSON
RIVERBEND R.V. PARK
MONTROSE, CO

RV AND CABIN EXPANSION AMENDED SITE LAYOUT

DMC JOB NO.: 21028

SHEET NO.: 1 OF 1 SHEETS

PLOTTED BY MWHITE, FILE PATH & NAME = \\DMS14\PROJECTS\ACTIVE PROJECTS\2021\21028-RIVERBEND SITE\C3D\21028C_SITE_20211215.DWG, PLOT DATE = 1/14/2022 11:46 AM

EXHIBIT B: Excerpts from Municipal Code

Sec. 4-12-7. Travel home park permits.

(A) It shall be unlawful to commence construction of any travel home park until a travel home park construction permit has been approved by the City Planning Commission and City Council as meeting the criteria and requirements of this Chapter and other applicable City and state regulations.

(B) Application for a travel home park construction permit shall be made by submitting a site plan of the travel home park, accompanied by any supporting documents, plans or drawings as necessary to show that the design requirements of Section 4-12-8 have been complied with.

(C) The site plan and all supporting plans must be submitted to the City no later than 30 days before the date at which the Planning Commission is to review the application. Following review of the application, the Planning Commission shall approve or disapprove the application. If disapproved the reasons for disapproval shall be included in the Planning Commission minutes and provided to the applicant upon request. If the application is approved it shall be submitted to the City Council for review and action. The Council may approve the application, or disapprove the application, if it finds that the requirements of these regulations have not been met.

(D) It shall be unlawful to occupy any travel home within any travel home park prior to the time that an occupancy permit for the travel home park, or applicable portion thereof, has been issued by the City Manager following an inspection to determine if the travel home park, or the applicable portion thereof, has been developed in substantial conformity with the site plan as approved by the City Council.

(E) An application fee as set forth in Chapter 3-1 of the City of Montrose Regulations Manual shall accompany the application for a travel home park construction permit.

(Code 2012, § 4-12-7; Ord. No. 1999 , 4-15-2004)

Sec. 4-12-8. Travel home park design requirements.

(A) Size and Location. Travel home parks may be located only where allowed by City Zoning Regulations and shall be a minimum of two acres in area.

(B) All travel home parks shall, as a minimum, comply with applicable State of Colorado regulations for campgrounds and recreation areas, and the requirements of this Chapter. In the event of any conflict between state regulations and the requirements of this Chapter, or other City ordinances or regulations, those regulations which are more stringent shall apply.

(C) Dimensional Requirements.

- (1) All travel homes and any accessory structures shall be at least ten feet from any other travel home and accessory structure.
- (2) The number of travel homes in the park shall not exceed 25 travel homes per acre.

(D) Eight percent of the gross area of the travel home park, or 2,500 square feet, whichever is greater, shall be developed and maintained as a park or playground.

(E) The travel home park developer shall provide the following improvements:

- (1) A water system, including fire hydrants and fire mains.
- (2) A sanitary sewer system.
- (3) Paved streets with a minimum width as follows:
  - (a) One-way/no parking: 11 feet;
  - (b) One-way/parking on one side: 18 feet;
  - (c) Two-way/no parking: 24 feet;
  - (d) Two-way/parking on one side: 27 feet; and
  - (e) Two-way/parking on both sides: 34 feet.

(4) A storm drainage system.

(5) Street signs and security lights.

(6) A service building meeting the requirements of applicable state and City regulations.

(F) Plans for all improvements shall be submitted with the site plan and shall be approved by the City Manager and the City Engineer prior to the approval of any permit by the City Council. All required improvements shall comply with standard City design and construction standards and specifications.

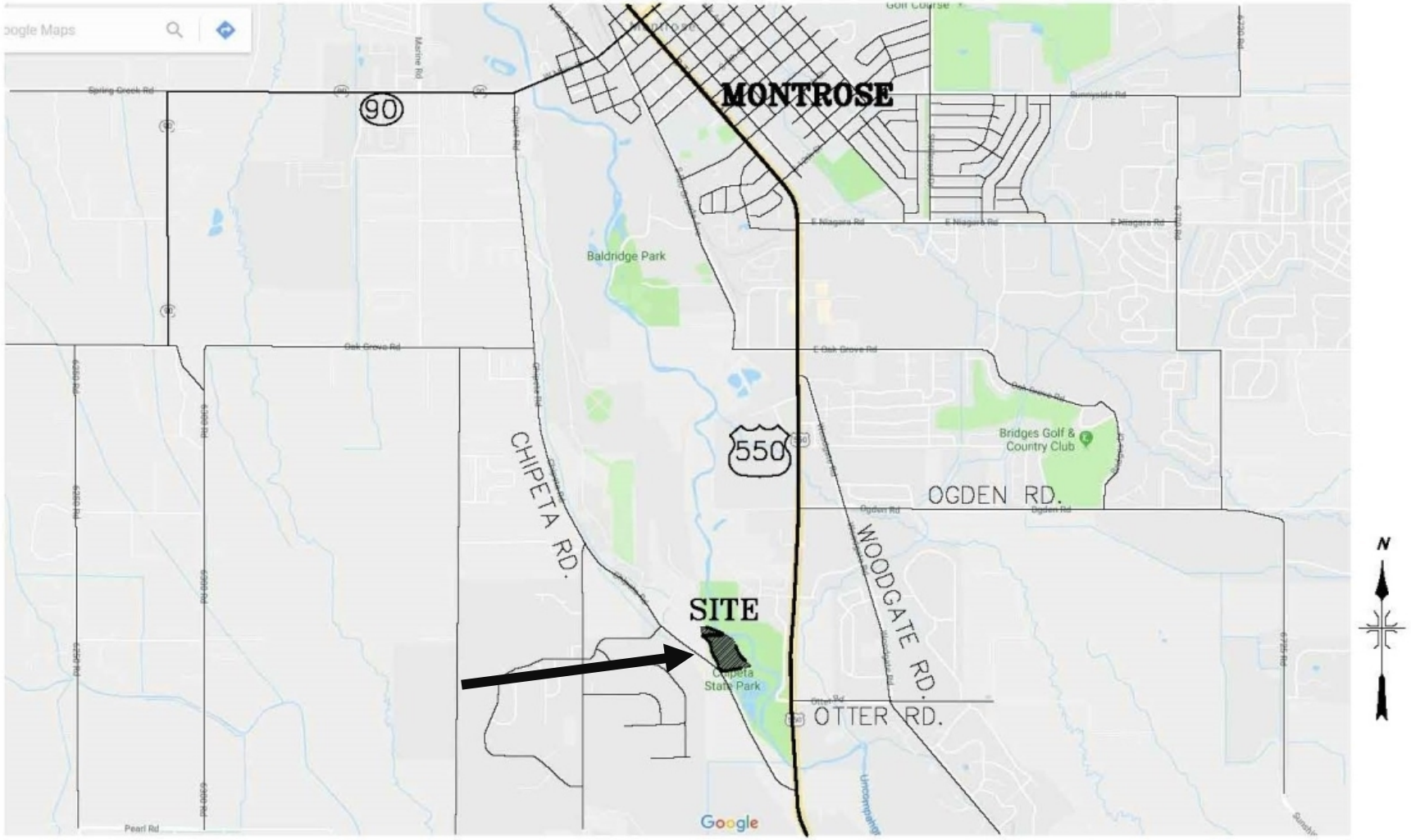
(G) Easements. The City may require reasonable utility easements to be dedicated to the public for the purpose of public and City utilities. The City may require the over-sizing of water and sewer lines in which event the City shall pay the cost for over-sizing.

(Code 2012, § 4-12-8)

EXHIBIT C: Photos

MONTROSE • COLORADO

Vicinity Map



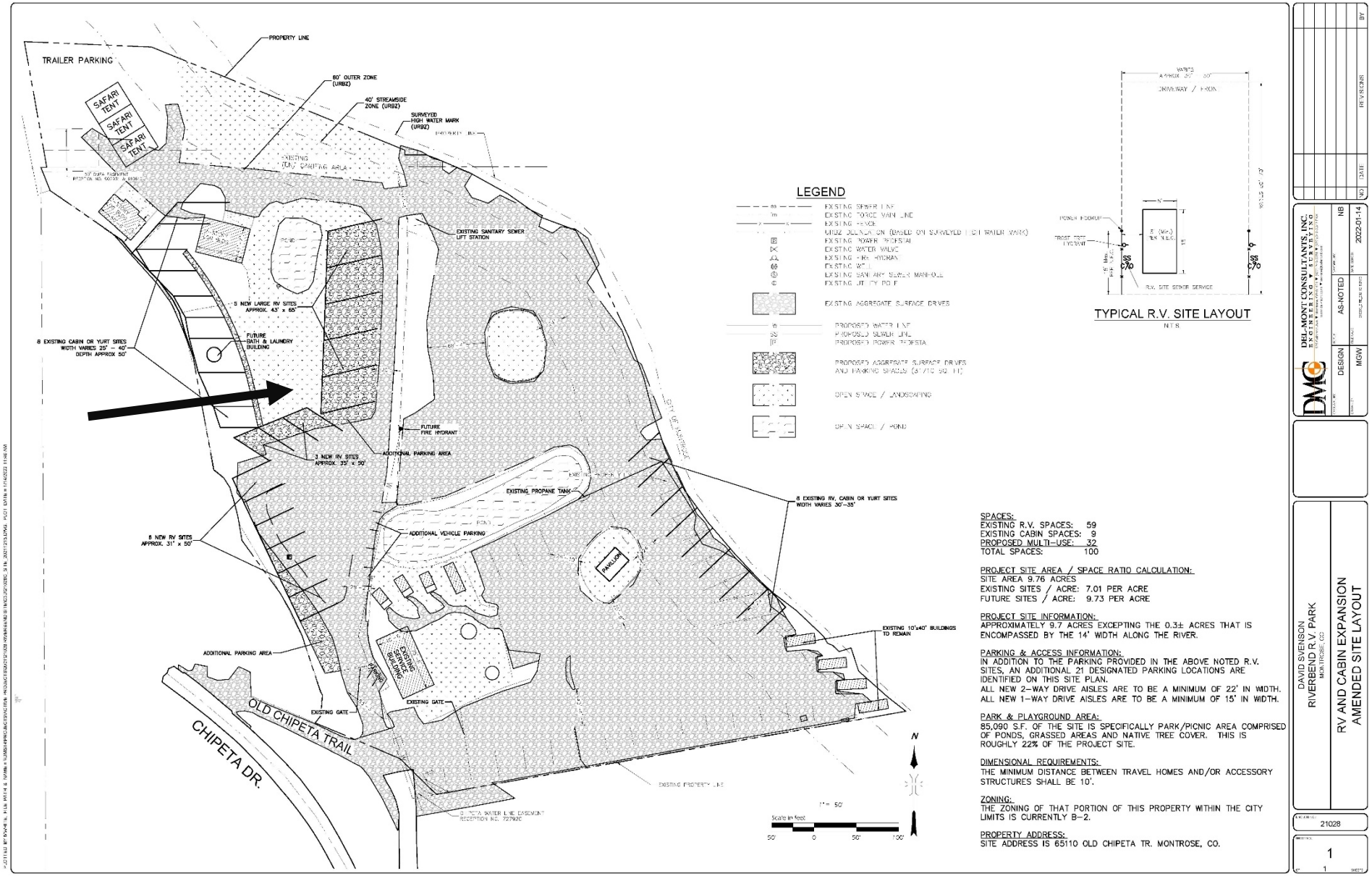
LOCATION MAP

NOT TO SCALE

Proposal

- Planning Commission is reviewing a revised site plan for an existing travel home park permit for Riverbend RV Park.
- The Planning Commission shall approve or deny a travel home park permit. The City Council will also approve or deny the travel home park permit.
- The updated site plan would allow 5 additional RV only sites on the west side of the property.
- Additional conditional use permits or variances are not needed for these 5 sites.

Site Plan



SPACES:
EXISTING R.V. SPACES: 59
EXISTING CABIN SPACES: 9
PROPOSED MULTI-USE: 32
TOTAL SPACES: 100

PROJECT SITE AREA / SPACE RATIO CALCULATION:
SITE AREA 9.76 ACRES
EXISTING SITES / ACRE: 7.01 PER ACRE
FUTURE SITES / ACRE: 9.73 PER ACRE

PROJECT SITE INFORMATION:
APPROXIMATELY 9.7 ACRES EXCEPTING THE 0.3± ACRES THAT IS ENCOMPASSED BY THE 14' WIDTH ALONG THE RIVER.

PARKING & ACCESS INFORMATION:
IN ADDITION TO THE PARKING PROVIDED IN THE ABOVE NOTED R.V. SITES, AN ADDITIONAL 21 DESIGNATED PARKING LOCATIONS ARE IDENTIFIED ON THIS SITE PLAN.
ALL NEW 2-WAY DRIVE AISLES ARE TO BE A MINIMUM OF 22' IN WIDTH.
ALL NEW 1-WAY DRIVE AISLES ARE TO BE A MINIMUM OF 15' IN WIDTH.

PARK & PLAYGROUND AREA:
85,090 S.F. OF THE SITE IS SPECIFICALLY PARK/PICNIC AREA COMPRISED OF PONDS, GRASSED AREAS AND NATIVE TREE COVER. THIS IS ROUGHLY 22% OF THE PROJECT SITE.

DIMENSIONAL REQUIREMENTS:
THE MINIMUM DISTANCE BETWEEN TRAVEL HOMES AND/OR ACCESSORY STRUCTURES SHALL BE 10'.

ZONING:
THE ZONING OF THAT PORTION OF THIS PROPERTY WITHIN THE CITY LIMITS IS CURRENTLY B-2.

PROPERTY ADDRESS:
SITE ADDRESS IS 65110 OLD CHIPETA TR. MONTROSE, CO.

NO	DATE	REVISIONS	BY

DEL-MONT CONSULTANTS, INC.
ENGINEERING • SURVEYING
DESIGN: MGW
DRAWN: NB
DATE: 2022-01-14
SCALE: AS-NOTED

DAVID SVENSON
RIVERBEND R.V. PARK
MONTROSE, CO

RV AND CABIN EXPANSION
AMENDED SITE LAYOUT

21028

1

Travel Home Park Permit Section 4-12-7 & 4-12-8

- The Planning Commission reviews the site plan and shall approve or disapprove of the application. If disapproved, the reasons for disapproval shall be included in the Planning Commission minutes and provided to the applicant upon request. If the application is approved, it shall be submitted to the City Council for review and action. The Council may approve the application, or disapprove the application, if it finds that the requirements of these regulations have not been met.
- Staff's analysis of the travel home park permit application and site plan is that the proposal is consistent with Section 4-12-7 and Section 4-12-8. Issuance of a travel home park permit allows the applicant to make additions to the Riverbend RV Park, which otherwise are not permitted, and thus creates a pathway to improvements within the Riverbend RV Park.

Staff Analysis - Recommendation

- Staff finds that the site plan for the travel home park permit meets the requirements of the Municipal Code. Staff recommends approval of the travel home park permit.

MONTROSE • COLORADO

CITY OF MONTROSE
Planning Services

MEMO

TO: Planning Commission
FROM: Amy Sharp, Senior Planner
DATE: February 9, 2022
RE: 21-0110 Mier Addition
ATTACHMENTS:

- Exhibit A: Maps
- Exhibit B: Zoning Code Excerpt

Public notice requirements have been fulfilled in accordance with Section 4-4-31(D) of the City of Montrose Municipal Code. A sign was posted on the property, letters sent to property owners within 100 feet, and an ad appeared in the Montrose Daily Press.

Planning Commission Consideration:
The Planning Commission is recommending the initial zoning for the Mier Addition, a proposed annexation to the city limits of Montrose. The Planning Commission will consider all of the information in this memo in making a decision.

Application Background:
The Mier Addition is a proposed annexation approximately 14.67 acres in size. The parcel is located east of 6530 Road, west of 6600 Road, and north of Locust Road. It is within the City's Urban Growth Boundary, Tri-County Water Service Area, and the City of Montrose Sewer Service Area. Annexation of this property will allow for future housing development. An Annexation Agreement will be required.

Proposed Zoning: "R-4" High Density District

Applicant: Calvin and Helen Mier

Staff Analysis:

1. The City-County IGA gives the City the option to annex properties within the IGA. The area is urbanizing and more than 1/6 of the perimeter is contiguous to the city limits. These factors support annexation.
2. A Petition for Annexation and annexation agreement were required for this annexation.
3. Zoning Regulations
    a. Municipal Code, Section, 4-4-29(B), Zoning of Additions. "The Planning Commission shall recommend to the Council a zoning district designation for all property annexed to the City not previously subject to City zoning, and shall follow the review procedure set out in Section 4-4-31 in arriving at its recommendation. Proceedings concerning the zoning of property to be annexed may be commenced at any time prior to the effective date of the annexation ordinance or thereafter. *The zoning designation for newly annexed property shall not adversely affect the public health, safety and welfare* (emphasis added)."
    b. Municipal Code, Section 4-4-8(A) Intent: The "R-4" High Density District is intended to provide for high density multiple-family residences and to allow variable densities. This allows variety in the types of residences.
    c. The proposed zoning is compatible with existing zoning and general conditions in the area. The property is adjacent to properties that are zoned "R-4" High Density District, "R-2" Low Density District, and agricultural (outside City limits).
4. General Conformance with the Comprehensive Plan:
    a. The Comprehensive Plan Future Land Use Map (Chapter 5) designates the area of the Mier Addition as ***Residential Mixed Density Medium***. This district provides for a variety of residential types, mixed within a neighborhood, including single-family homes, townhomes, duplexes, triplexes, and multi-family housing. The majority of the mixed density medium residential land uses are designated in areas that are not yet developed.
    b. Goal LU (Land Use) 5: Infill & Redevelopment: Promote higher density infill and redevelopment of underutilized sites and support development in areas that can be easily accessed by foot, bike, and/or public transit.
    c. Goal HN (Housing & Neighborhoods)-1: Housing Variety. Encourage a variety of housing types, tenure, and density to meet the needs of the community.
        i. Objective 1.1 Promote a mix of residential housing types including single-family homes on a variety of lot sizes, multi-family housing, townhomes, apartments, senior housing, and transitional housing.
        ii. Objective 1.2 Encourage a variety of housing densities (low, medium, high) throughout the community, including mixed-density neighborhoods.
    d. Goal HN-2: Affordable Housing. Increase access to affordable housing.

i. Objective 2.1 Encourage a mix of housing price ranges, thereby providing choices for residents of all incomes and ages.

5. The property is located within Growth Area 2. According to the Comprehensive Plan, Growth Area 2 consists of some level of infrastructure or moderate proximity to existing infrastructure (existing streets, utilities and public services).
6. The "R-4" zoning does not appear to be adverse to the public health, safety and welfare.

Staff Recommendation:
Staff recommends approval of the annexation and "R-4" High Density District.

<u>Planning Commission Recommendation Alternatives:</u>

Approval Motion Recommendation:

"I hereby make a motion to recommend to City Council approval the initial zoning request of "R-4" High Density District. The request meets the Code criteria based on the evidence and testimony presented at this hearing and in the staff report."

Denial/No Action Motion Recommendation:

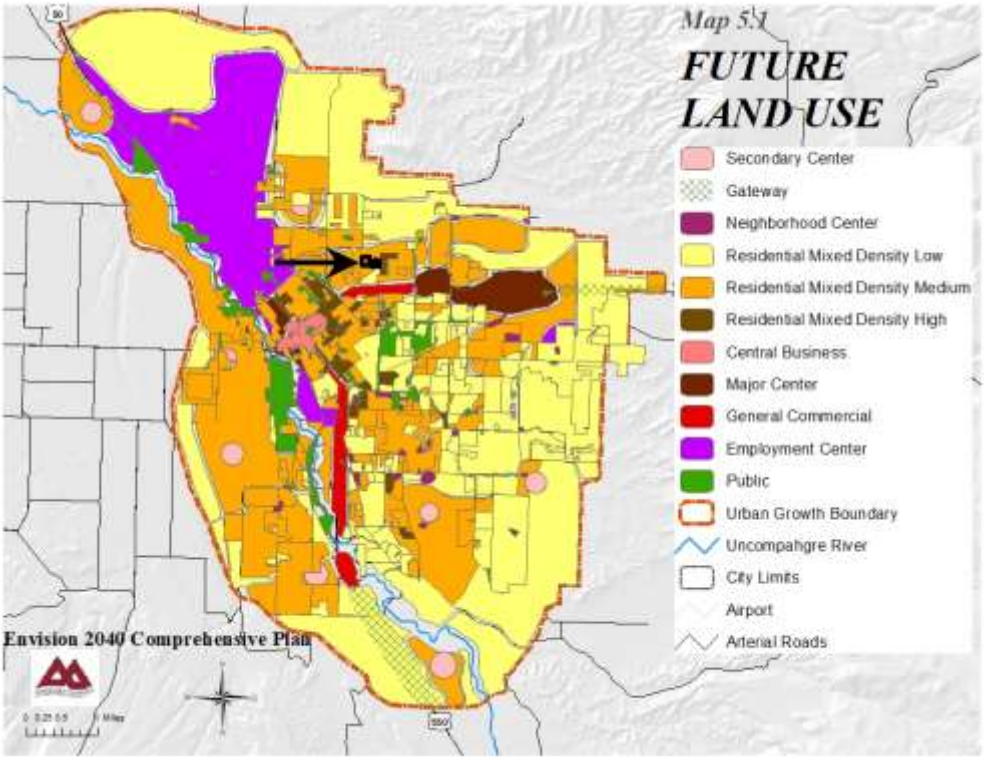
"I hereby make a motion to recommend denial of the rezone request. The request does not meet the Code criteria based on the evidence and testimony presented at this hearing and in the staff report."

EXHIBIT A: Maps

Vicinity Map

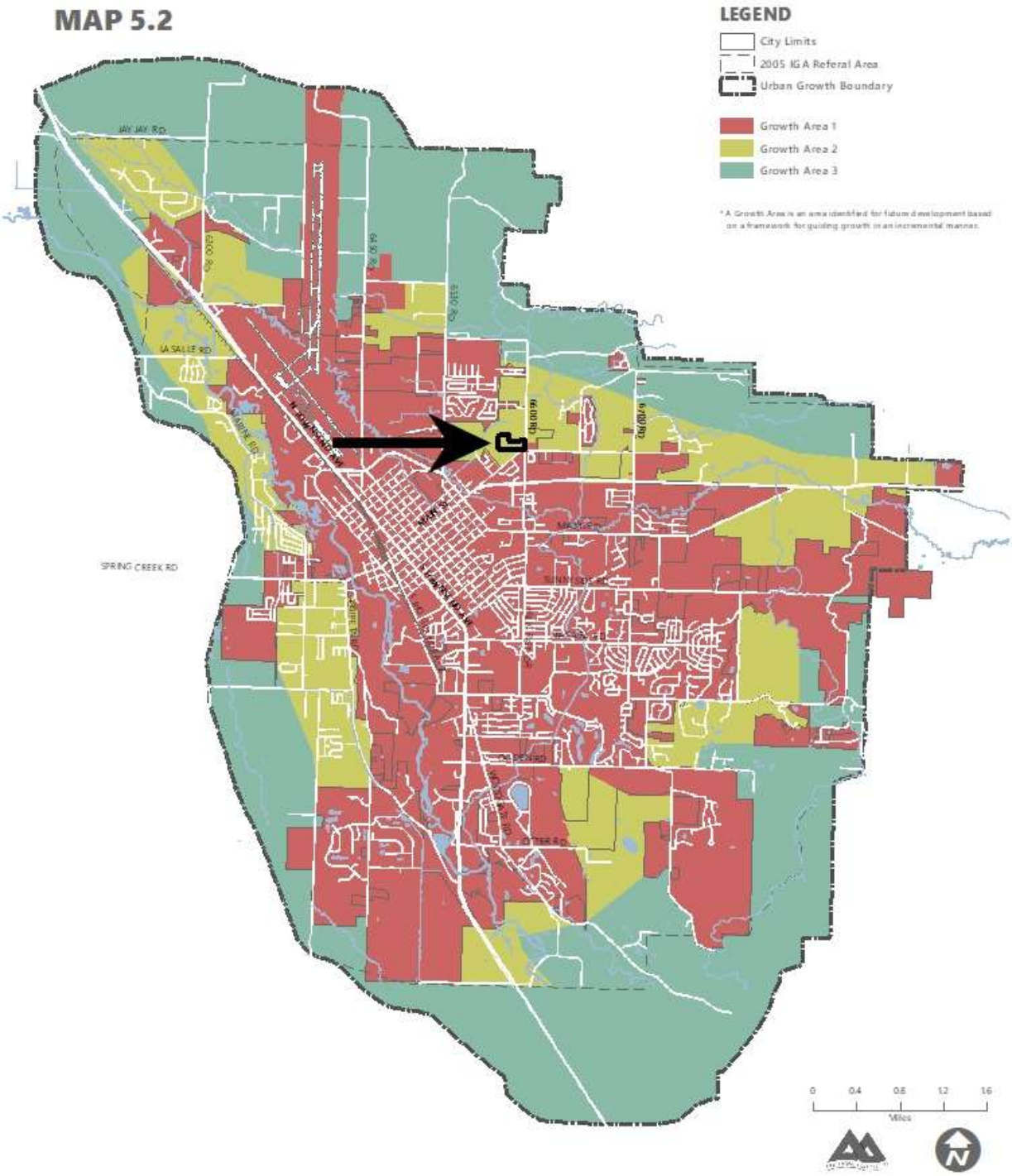
Notification Area Map

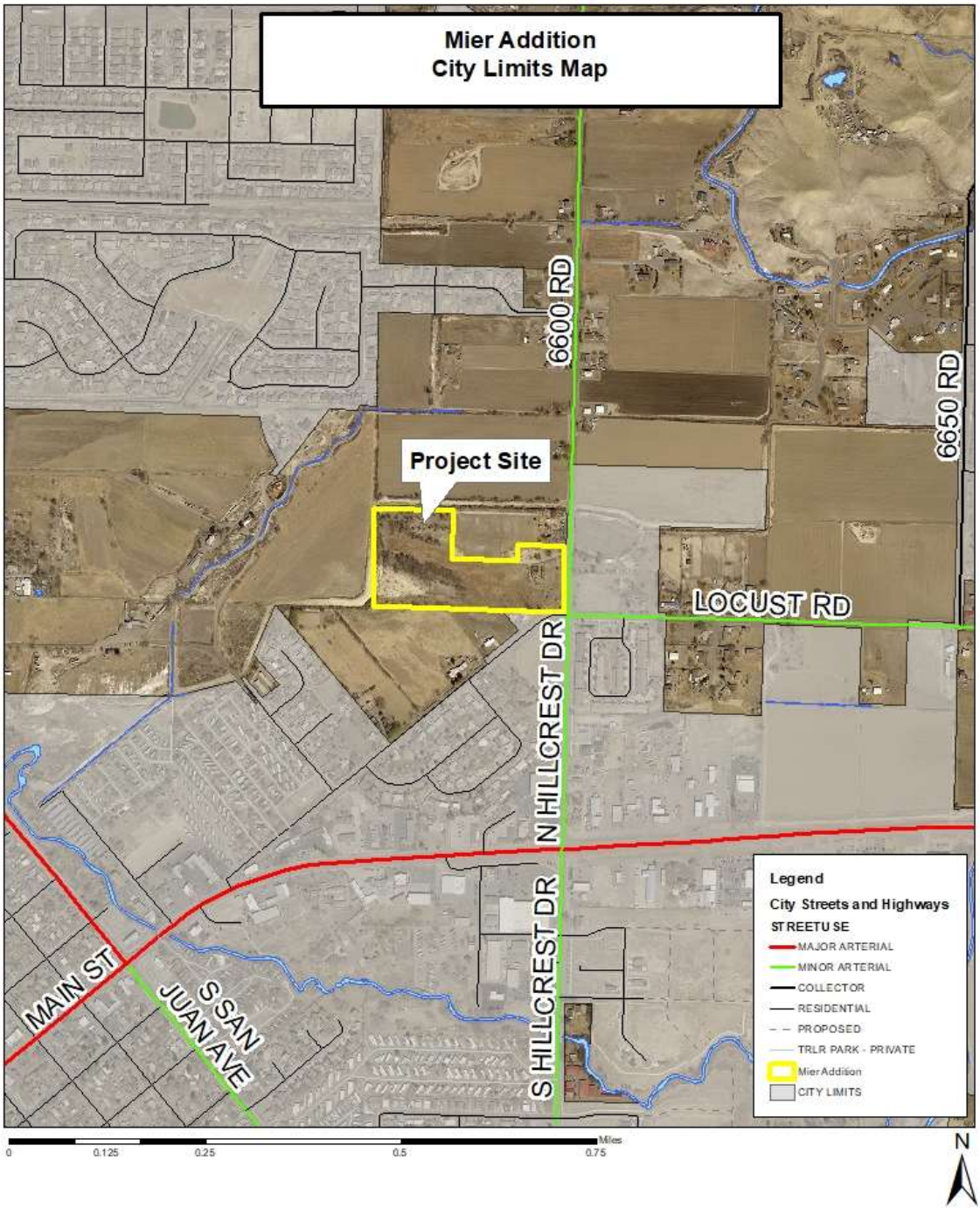
Comprehensive Plan Future Land Use Map



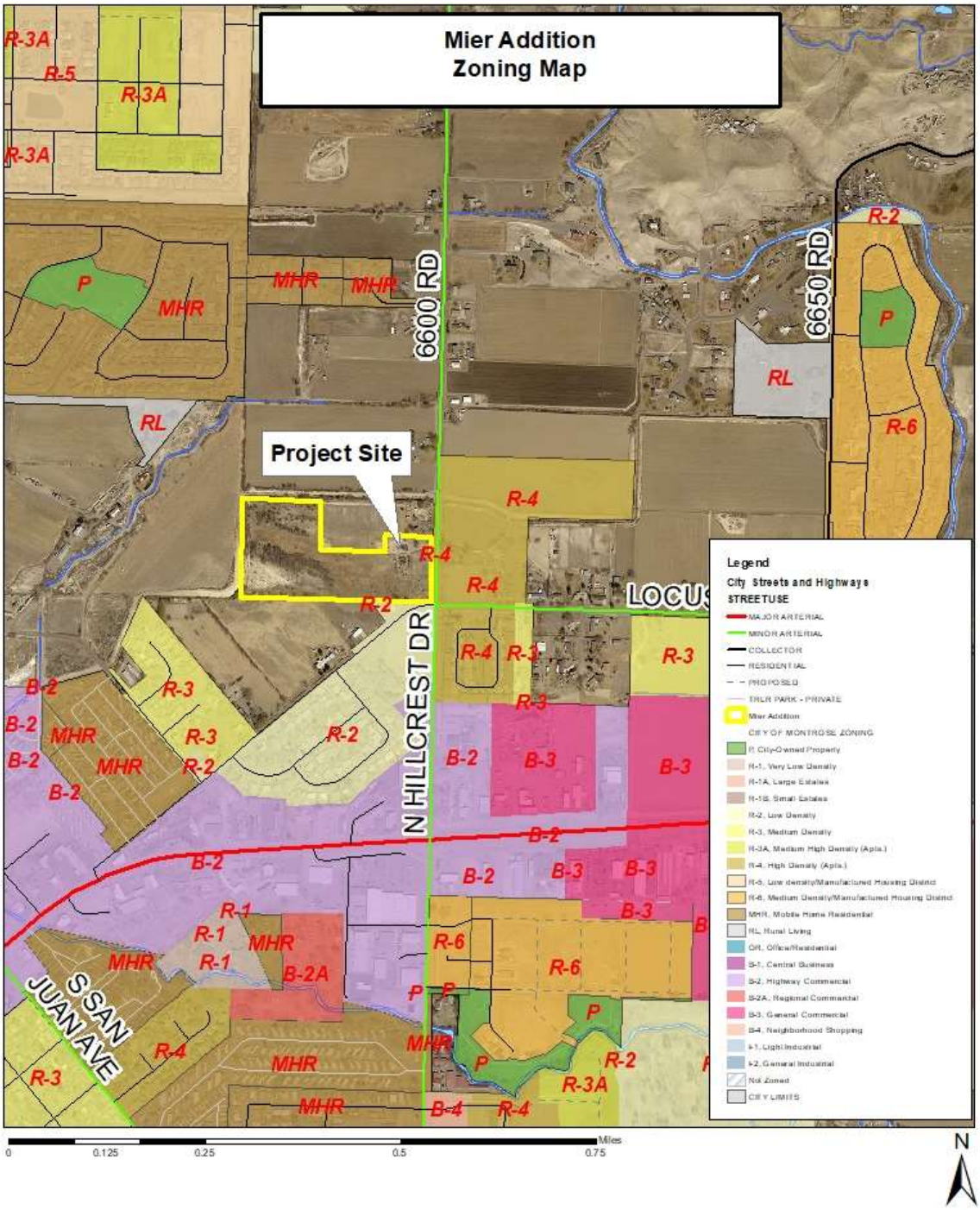
GROWTH AREAS*

MAP 5.2





Map created 11/29/2021

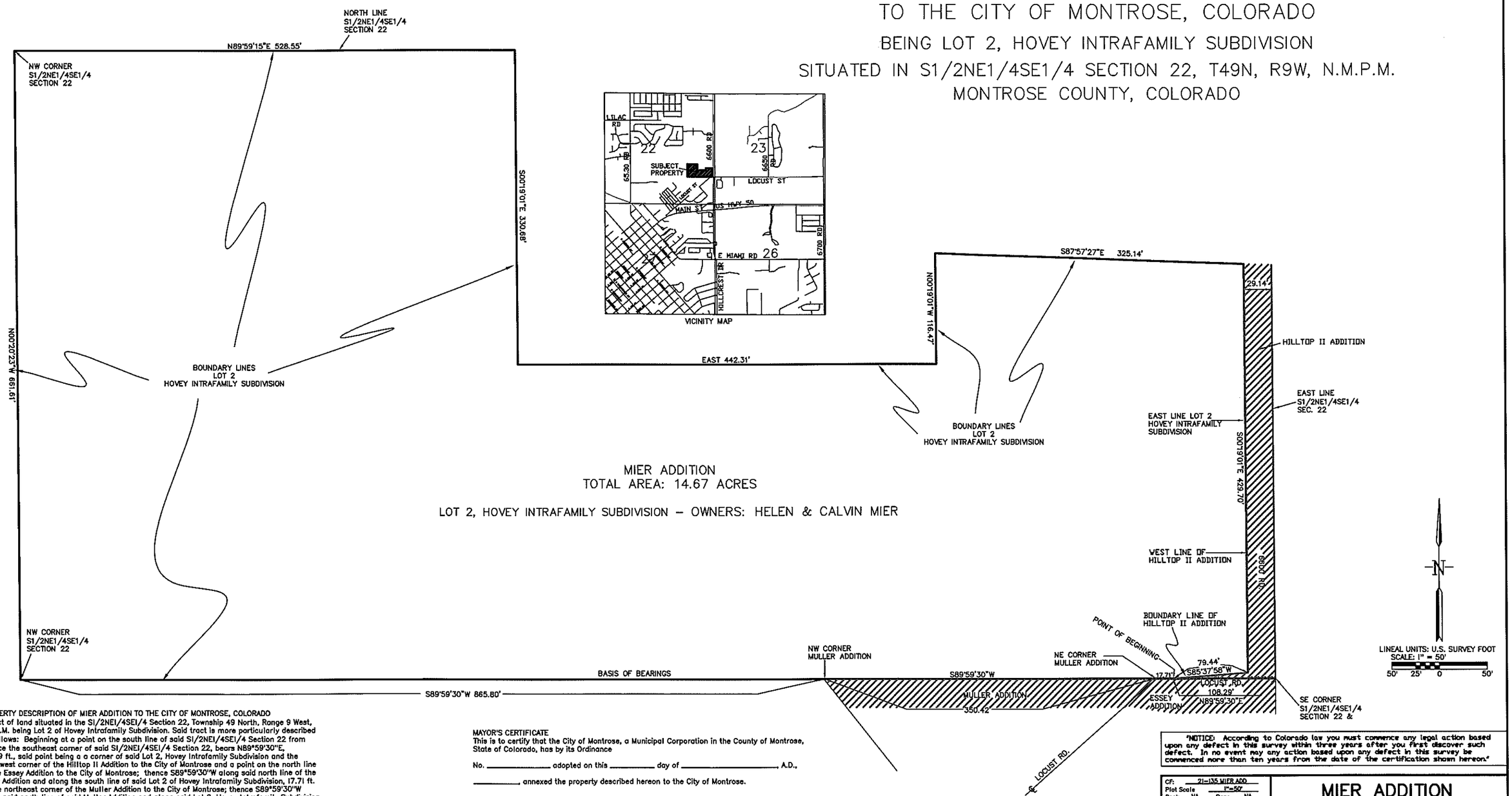


Map created 11/29/2021

MIER ADDITION

TO THE CITY OF MONTROSE, COLORADO

BEING LOT 2, HOVEY INTRAFAMILY SUBDIVISION
SITUATED IN S1/2NE1/4SE1/4 SECTION 22, T49N, R9W, N.M.P.M.
MONTROSE COUNTY, COLORADO



PROPERTY DESCRIPTION OF MIER ADDITION TO THE CITY OF MONTROSE, COLORADO
A tract of land situated in the S1/2NE1/4SE1/4 Section 22, Township 49 North, Range 9 West, N.M.P.M. being Lot 2 of Hovey Intrafamily Subdivision. Said tract is more particularly described as follows: Beginning at a point on the south line of said S1/2NE1/4SE1/4 Section 22 from whence the southeast corner of said S1/2NE1/4SE1/4 Section 22, bears N89°59'30"E, 108.29 ft., said point being a a corner of said Lot 2, Hovey Intrafamily Subdivision and the southwest corner of the Hilltop II Addition to the City of Montrose and a point on the north line of the Essey Addition to the City of Montrose; thence S89°59'30"W along said north line of the Essey Addition and along the south line of said Lot 2 of Hovey Intrafamily Subdivision, 17.71 ft. to the northeast corner of the Muller Addition to the City of Montrose; thence S89°59'30"W along said north line of said Muller Addition and along said Lot 2, Hovey Intrafamily Subdivision, 350.42 ft. to the northwest corner of said Muller Addition; thence the following courses along the boundary line of said Lot 2, Hovey Intrafamily Subdivision: S89°59'30"W, 865.80 ft.; N00°20'23"W, 661.61 ft.; N89°59'15"E, 528.55 ft.; S00°19'01"E, 330.68 ft.; East, 442.31 ft.; N00°19'01"W, 116.47 ft.; S87°57'27"E, 324.28 ft. to a point on the west line of the Hilltop II Addition to the City of Montrose; thence S00°19'01"E along said west line, also being the east line of said Lot 2, Hovey Intrafamily Subdivision 429.70 ft.; thence S85°37'58"W along a boundary line of said Hilltop II Addition, also being a boundary line of said Lot 2, Hovey Intrafamily Subdivision, 79.44 ft. to the point of beginning, containing 14.67 acres.

SURVEYOR'S CERTIFICATE
I, William D. Wiley, a Registered Land Surveyor in the State of Colorado, do hereby state the accompanying Annexation Map of MIER ADDITION to the City of Montrose, Colorado has been prepared under my direction and supervision, that it does not constitute a boundary survey and is only a compilation of existing records for the purpose of annexation.

William D. Wiley
Colorado Registered Land Surveyor
#12180

Date

MAYOR'S CERTIFICATE
This is to certify that the City of Montrose, a Municipal Corporation in the County of Montrose, State of Colorado, has by its Ordinance

No. _____ adopted on this _____ day of _____, A.D.,

_____, annexed the property described hereon to the City of Montrose.

Mayor

ATTEST:

City Clerk

CLERK & RECORDER'S CERTIFICATE
This plat was filed for record in the office of the Clerk and Recorder of Montrose County

at _____m. on the _____ day of _____, 20___,

Reception No. _____.

Montrose County Clerk & Recorder

Deputy

CITY LIMITS

CONTIGUOUS CITY LIMITS: 877.27 SQ. FT.
TOTAL PERIMETER: 4,130.12 SQ. FT
ACRES ANNEXED: 14.67 ACRES

"NOTICE: According to Colorado law you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. In no event may any action based upon any defect in this survey be commenced more than ten years from the date of the certification shown hereon."

CF: 21-135 MIER ADD
Plot Scale 1"=50'
Book NA Page NA
BLW
DATE 9/8/2021
REVISIONS:
10/7/21 CITY REVISIONS
WDW

MIER ADDITION
TO THE CITY OF MONTROSE, COLORADO

BEING LOT 2, HOVEY INTRAFAMILY SUBDIVISION
SITUATED IN
S1/2NE1/4SE1/4 SECTION 22, T49N, R9W, N.M.P.M.
MONTROSE COUNTY, COLORADO

FOR: HELEN AND CALVIN MIER

MESA SURVEYING ASSOCIATES INC.
P.O. Box 1287 Montrose, CO 81402
(970)-240-9994

Sheet 1 of 1 File No. 21-135

EXHIBIT B: Zoning Code Excerpt

Sec. 4-4-8. "R-4" High Density District.

(A) *Intent.* The "R-4" High Density District is intended to provide for high density multiple-family residences and to allow variable densities. This allows variety in the types of residences.

(B) *Uses by Right.*

(1) Single-family homes, duplexes, and multiple-family residences.

(2) Public utility service facilities.

(3) Government buildings and facilities.

(4) Parks and recreation facilities owned or operated by a homeowner association.

(5) Places of worship.

(6) Accessory uses.

(i) Bed and breakfast operations operated solely by the residents of a residence providing no more than four bedrooms for rent in the dwelling unit, and the only meal provided on the premises shall be breakfast to the renters. The lot shall be at least 6,250 square feet and at least 3,125 square feet per rental bedroom.

(ii) Childcare facilities. A childcare facility shall be considered an accessory use to a residence in all districts, provided no more than eight children under 13 years of age are present on the premises at any one time, including children of the family living in the residence; a childcare facility shall not be considered an accessory use to a residence when a greater number of children is present on the premises at any one time. The facility must comply with all appropriate State Statutes and regulations.

(7) Short-term rentals.

(C) *Conditional Uses.*

(1) Skilled nursing and assisted living facilities.

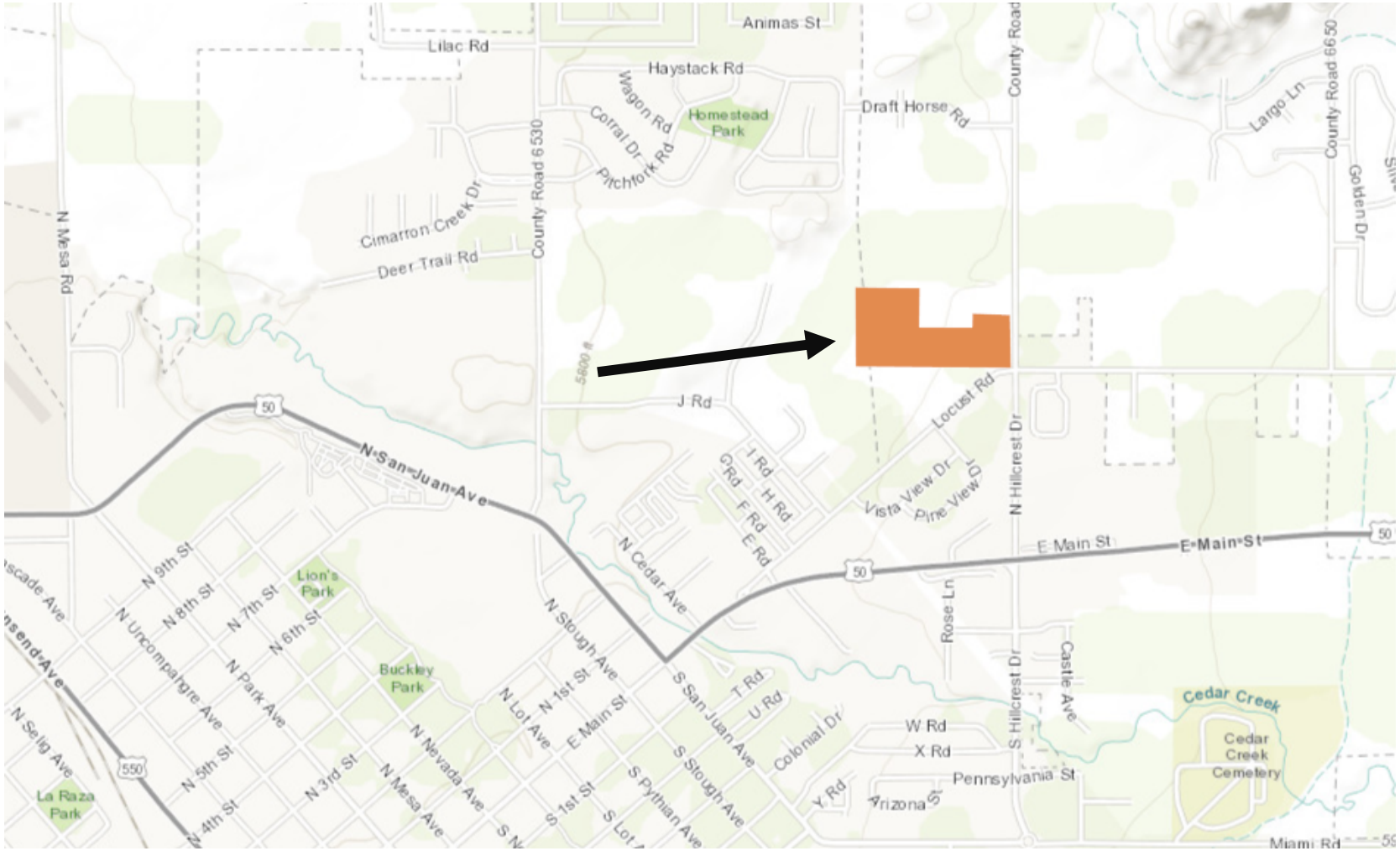
(2) Childcare facilities. A childcare facility shall be a conditional use in all districts if more than eight but less than 16 children under 13 years of age are present on the premises at any one time, including children of the family living in the residence, in accordance with State Statutes and regulations.

(3) Schools.

(Ord. No. 2472 , § 4-4-8, 5-7-2019)

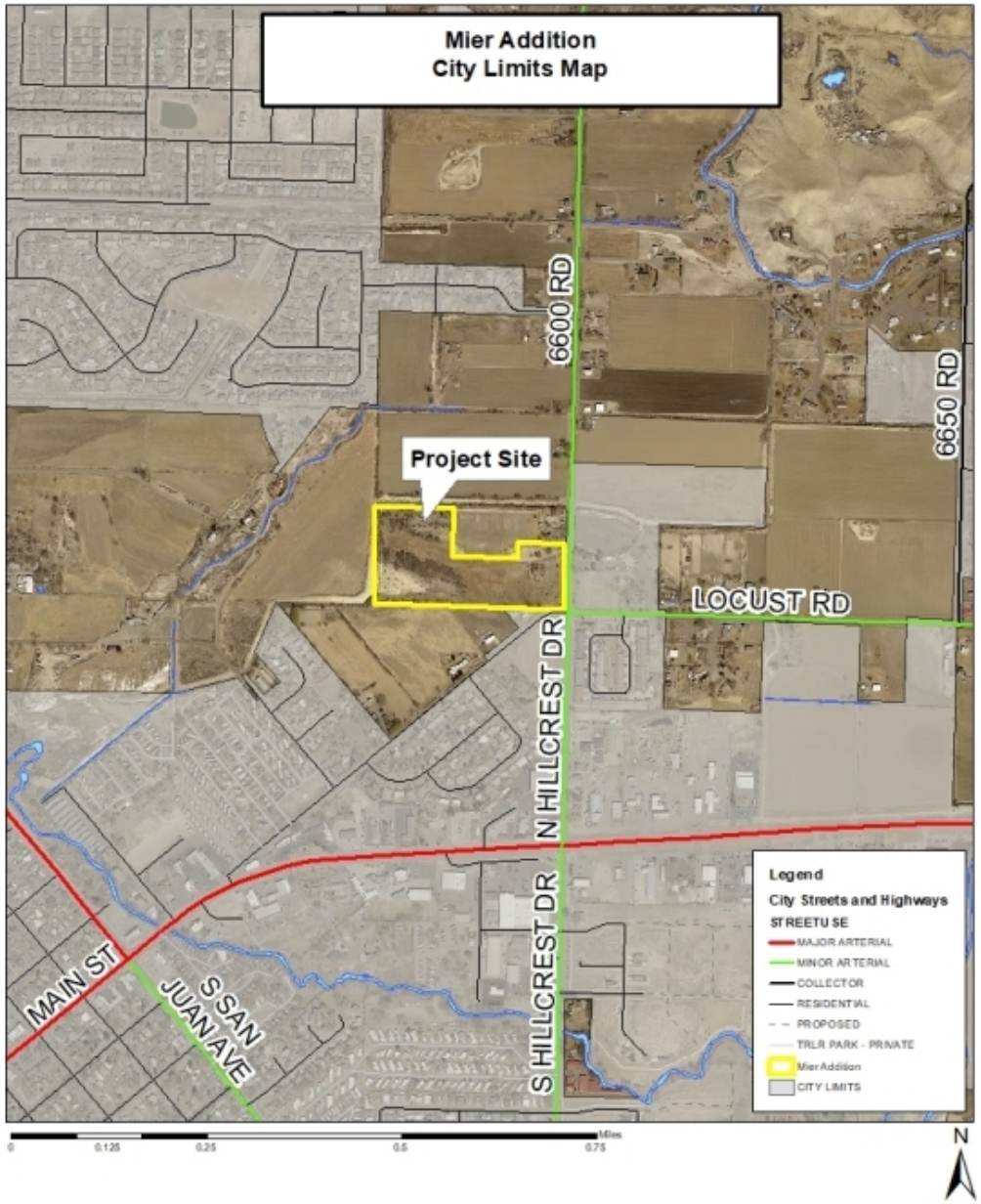
MONTROSE • COLORADO

General Vicinity Map – Mier Addition



Site Location

- 14.67 acres
- Within the City's Urban Growth Boundary, Tri-County Water Service Area & City Sewer Service Area
- Area is urbanizing and more than 1/6 of the perimeter is contiguous to city limits
- Annexation Agreement is required
- Annexation will allow for future housing development

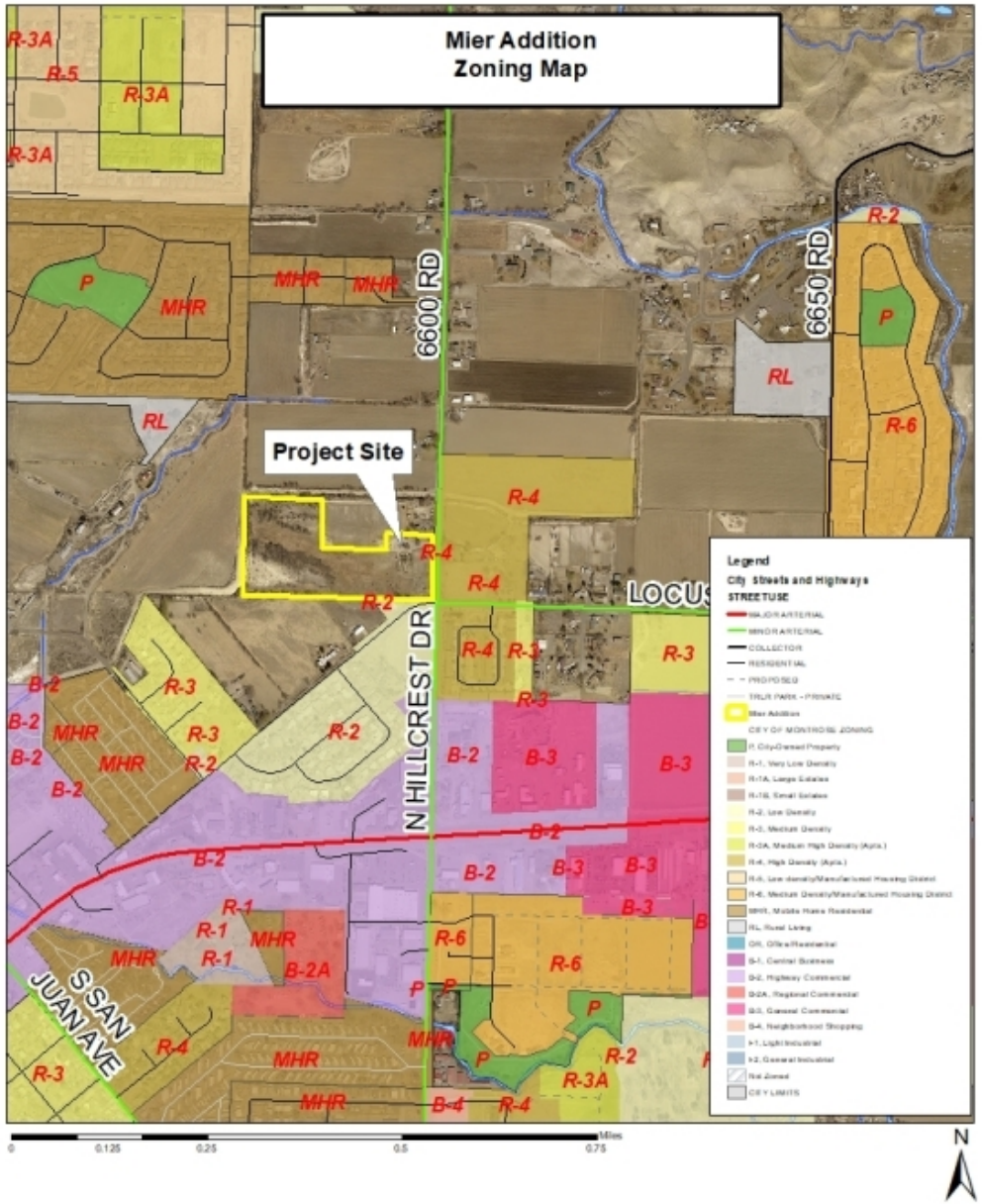


Map created 11/29/2021

Site Details

- Zoning of surrounding area is “R-4” High Density District, “R-2” Low Density District & agricultural

- Proposed zoning is “R-4” High Density District



Map created 11/29/2021

Zoning of Additions – Section 4-4-29 (B)

(B) Zoning of Additions:

"The Planning Commission shall recommend to the Council a zoning district designation for all property annexed to the City not previously subject to City zoning, and shall follow the review procedure set out in Section 4-4-31 in arriving at its recommendation. Proceedings concerning the zoning of property to be annexed may be commenced at any time prior to the effective date of the annexation ordinance or thereafter. *The zoning designation for newly annexed property shall not adversely affect the public health, safety and welfare* (emphasis added)."

Zoning Regulations

- Municipal Code, Section 4-4-7(A) Intent: The "R-4" High Density District is intended to provide for high density multiple-family residences and to allow variable densities. This allows variety in the types of residences.

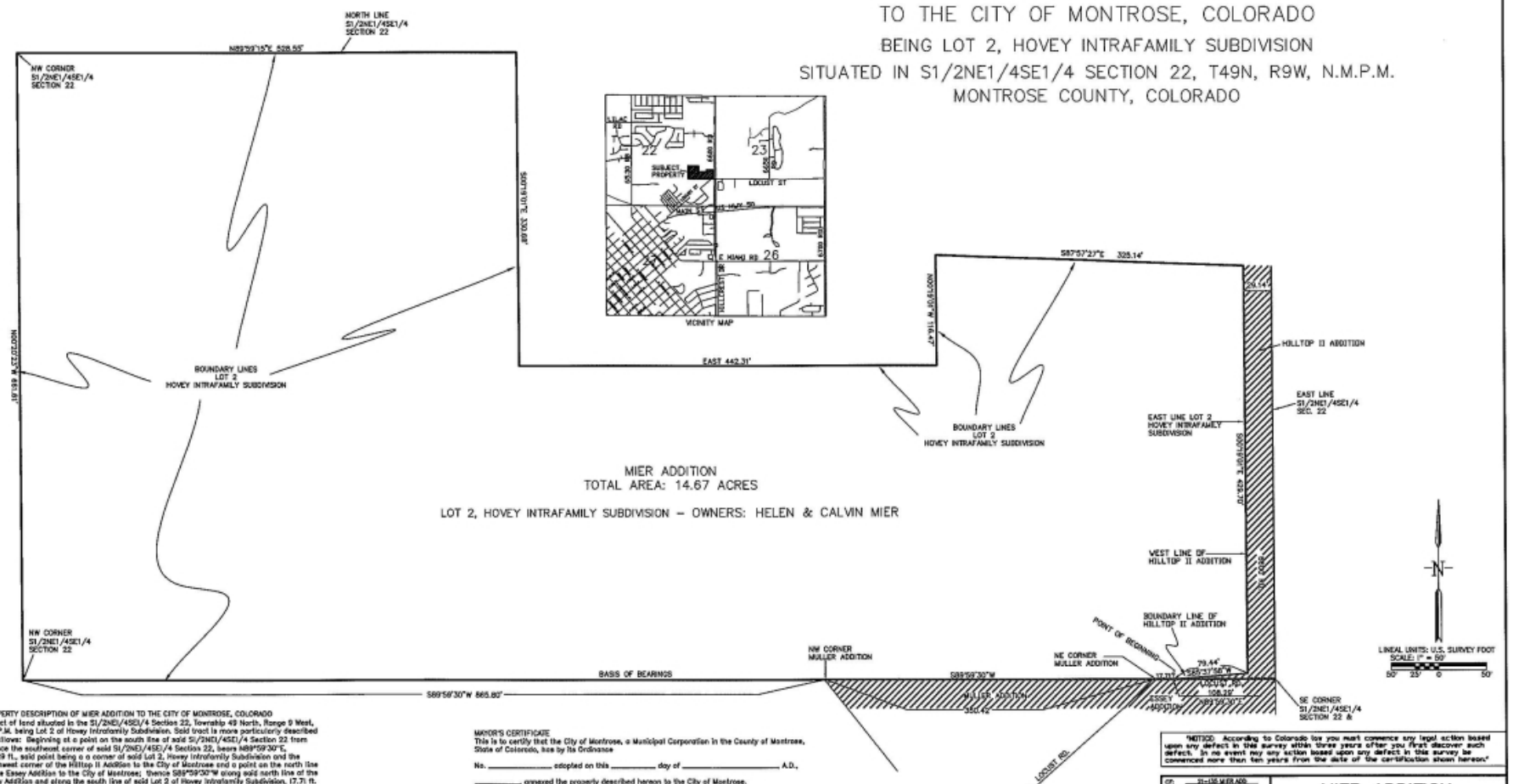
MIER ADDITION

TO THE CITY OF MONTROSE, COLORADO

BEING LOT 2, HOVEY INTRAFAMILY SUBDIVISION

SITUATED IN S1/2NE1/4SE1/4 SECTION 22, T49N, R9W, N.M.P.M.

MONTROSE COUNTY, COLORADO



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William D. Wiley
Colorado Registered Land Surveyor
#12180

Date

MAYOR'S CERTIFICATE
This is to certify that the City of Montrose, a Municipal Corporation in the County of Montrose, State of Colorado, has by its Ordinance

No. _____, adopted on this _____ day of _____, A.D.,

_____, annexed the property described hereon to the City of Montrose.

Mayor

ATTEST:

City Clerk

CLERK & RECORDER'S CERTIFICATE
This plat was filed for record in the office of the Clerk and Recorder of Montrose County

at _____ m. on the _____ day of _____, 20____

Reception No. _____

Montrose County Clerk & Recorder

Deputy

CITY LIMITS

CONTIGUOUS CITY LIMITS: 877.27 SQ. FT.
TOTAL PERIMETER: 4,130.12 SQ. FT
ACRES ANNEXED: 14.67 ACRES

"NOTICE: According to Colorado law you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. In no event may any action based upon any defect in this survey be commenced more than ten years from the date of the certification shown hereon."

CP: 21-135 MIER ADD.
Plot Scale: 1"=50'
Book: NA Page: NA
BLM
DATE: 8/8/2022
REVISIONS:
10/7/21 CITY REVISIONS

MIER ADDITION
TO THE CITY OF MONTROSE, COLORADO

BEING LOT 2, HOVEY INTRAFAMILY SUBDIVISION
SITUATED IN
S1/2NE1/4SE1/4 SECTION 22, T49N, R9W, N.M.P.M.
MONTROSE COUNTY, COLORADO

FOR: HELEN AND CALVIN MIER

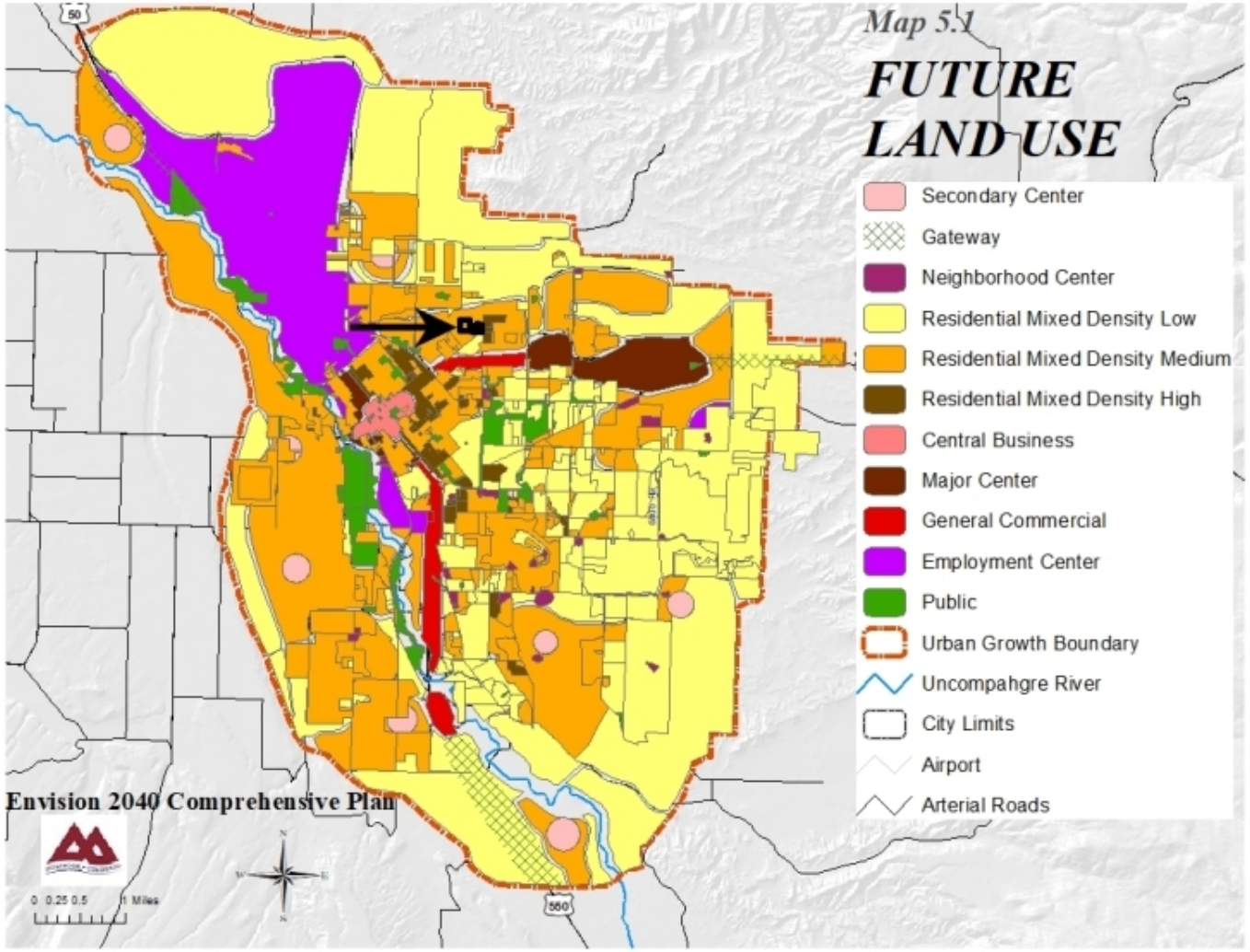
MESA SURVEYING ASSOCIATES INC.
P.O. Box 1287 Montrose, CO 81402
(970)-240-9994

Sheet 1 of 1 File No. 21-135

Comprehensive Plan – Future Land Use

Listed as **residential mixed density medium.**

This district provides for a variety of residential types, mixed within a neighborhood, including single-family homes, townhomes, duplexes, triplexes, and multi-family housing. The majority of the mixed density medium residential land uses are designated in areas that are not yet developed.

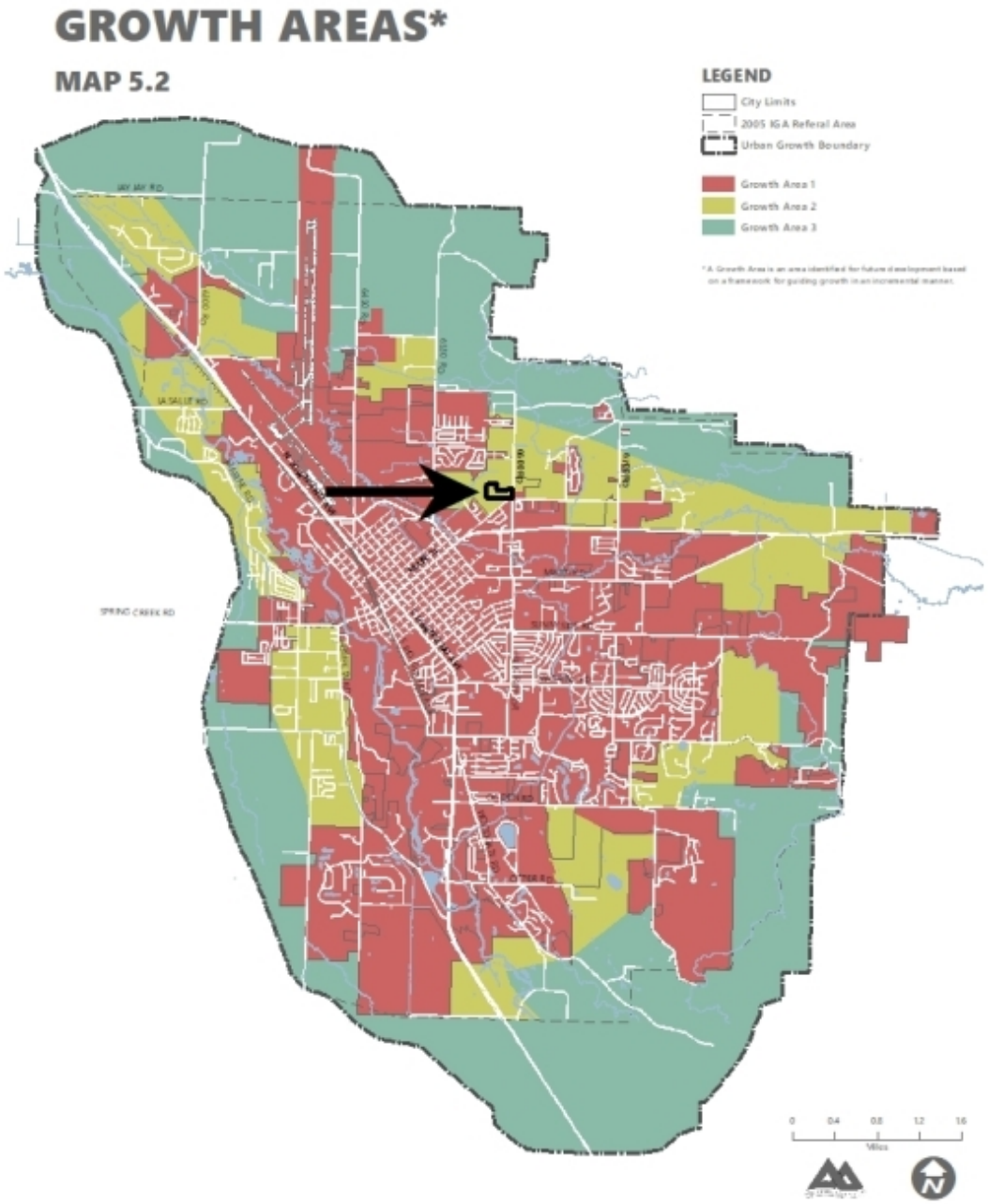


Comprehensive Plan Goals & Objectives

- Goal LU (Land Use) 5: Infill & Redevelopment: Promote higher density infill and redevelopment of underutilized sites and support development in areas that can be easily accessed by foot, bike, and/or public transit.
- Goal HN (Housing & Neighborhoods)-1: Housing Variety. Encourage a variety of housing types, tenure, and density to meet the needs of the community.
  - Objective 1.1 Promote a mix of residential housing types including single-family homes on a variety of lot sizes, multi-family housing, townhomes, apartments, senior housing, and transitional housing.
  - Objective 1.2 Encourage a variety of housing densities (low, medium, high) throughout the community, including mixed-density neighborhoods.
- Goal HN-2: Affordable Housing. Increase access to affordable housing.
  - Objective 2.1 Encourage a mix of housing price ranges, thereby providing choices for residents of all incomes and ages.

Growth Areas

Located in **Growth Area 2** in the Comprehensive Plan. According to the Comprehensive Plan, Growth Area 2 consists of some level of infrastructure or moderate proximity to existing infrastructure (existing streets, utilities and public services).



Summary

- Area is urbanizing and more than 1/6 contiguous to city limits
- Annexation Agreement is required
- Annexation Impact Report is required (more than 10 acres)
- Proposal is consistent with the public health, safety, and welfare, city annexation policies, and the Comprehensive Plan.
- Staff recommends approval of the annexation and “R-4” High Density District
- The Planning Commission shall make a zoning recommendation to City Council.

MONTROSE • COLORADO

CITY OF MONTROSE
Planning Services

MEMO

TO: Planning Commission
FROM: William Reis, Planner I
DATE: February 9, 2022
RE: 21-0139 – Niagara Road Addition
ATTACHMENTS:

- Exhibit A: Maps
- Exhibit B: Zoning Code Excerpts

Public notice requirements have been fulfilled in accordance with Section 4-4-31(D) of the City of Montrose Municipal Code. A sign was posted on the property, letters sent to property owners within 100 feet, and an ad appeared in the Montrose Daily Press.

Planning Commission Consideration:
The Planning Commission is recommending the initial zoning for the Niagara Road Addition, a proposed annexation to the city limits of Montrose. The Planning Commission will consider all of the information in this memo in making a decision.

Application Background:
The Niagara Road Addition is a proposed annexation approximately 0.456 acres in size. The property is located on the northern half of Niagara Road, approximately centered at the intersection with St. Mary's Dr. It is within the City's Urban Growth Boundary, the City of Montrose Water Service Area, and the City of Montrose Sewer Service Area. Annexation of this property will clean-up an orphaned parcel of City Right of Way.

Proposed Zoning: "B-2" Highway Commercial District

Applicant: City of Montrose

Staff Analysis:

1. The City-County IGA gives the City the option to annex properties within the IGA. The area is urbanizing and more than 1/6 of the perimeter is contiguous to the city limits. These factors support annexation.
2. The Petition for Annexation and annexation agreement are not required for this annexation.

3. Zoning Regulations
    a. Municipal Code, Section, 4-4-29(B), Zoning of Additions. "The Planning Commission shall recommend to the Council a zoning district designation for all property annexed to the City not previously subject to City zoning, and shall follow the review procedure set out in Section 4-4-31 in arriving at its recommendation. Proceedings concerning the zoning of property to be annexed may be commenced at any time prior to the effective date of the annexation ordinance or thereafter. *The zoning designation for newly annexed property shall not adversely affect the public health, safety and welfare* (emphasis added)."
    b. Municipal Code, Section 4-4-11.1 (A) Intent: The "B-2" Highway Commercial District is intended to provide for business oriented toward serving the motoring public. This district provides for the convenient exchange of goods and services along the major thoroughfares of the City.
    c. The proposed zoning is compatible with existing zoning and general conditions in the area. The property is adjacent to properties that are zoned "B-2" Highway Commercial District on all sides.
4. The Comprehensive Plan Future Land Use Map designates the area of the Niagara Road Addition as Residential Mixed Density Low. This district provides primarily for single-family homes, as well as small amounts of attached residential dwelling units (such as duplexes and even small groups of townhomes). This low-density residential land use is intended to preserve the traditional building pattern of the existing residential development in Montrose. It will continue to be the predominant density in the City.
5. The property is located within Growth Area 1, which represents the most cost-efficient areas for the City to grow, and comprises of platted but unbuilt lots, annexed but unplatted land, and un-annexed small enclaves, according to the Comprehensive Plan.
6. The "B-2" zoning district does not appear to be adverse to the public health, safety and welfare.

Staff Recommendation:
Staff recommends approval of the annexation and "B-2" Highway Commercial District.

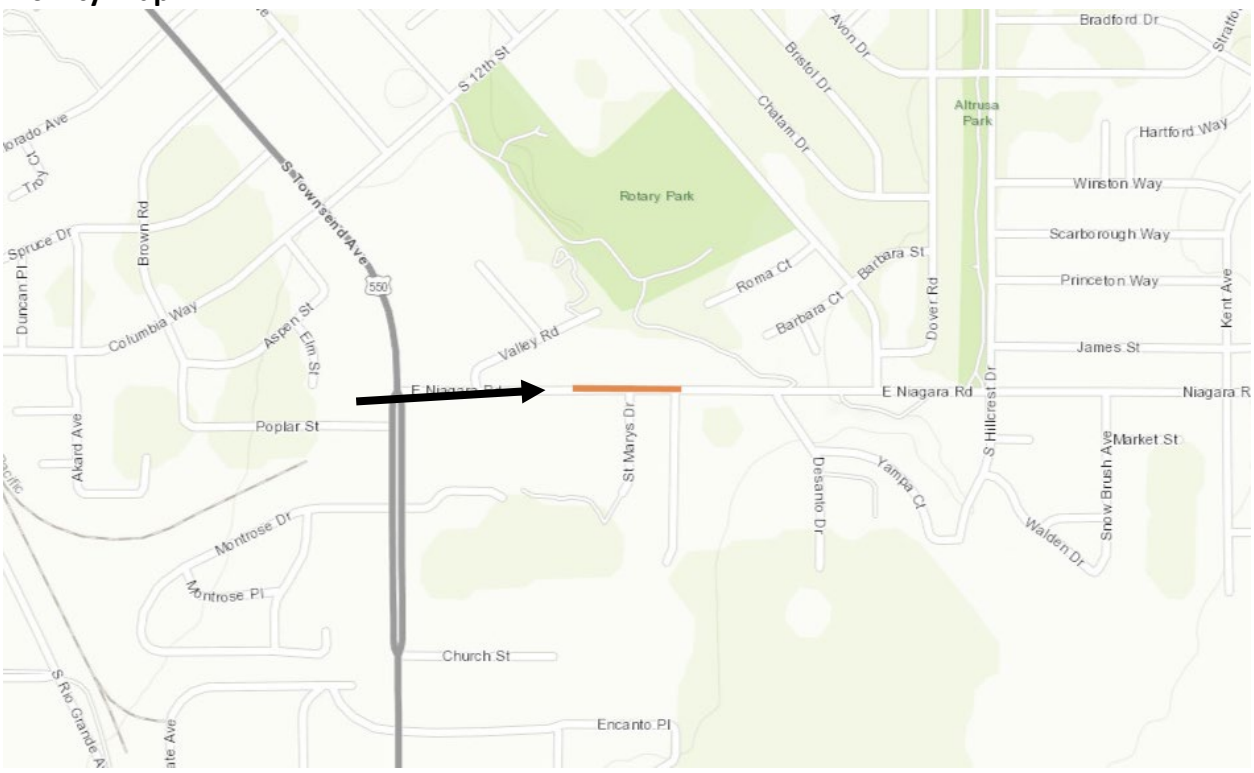
<u>Planning Commission Recommendation Alternatives:</u>

Approval Motion Recommendation:
"I hereby make a motion to recommend to City Council approval the initial zoning request of "B-2" Highway Commercial District. The request meets the Code criteria based on the evidence and testimony presented at this hearing and in the staff report."

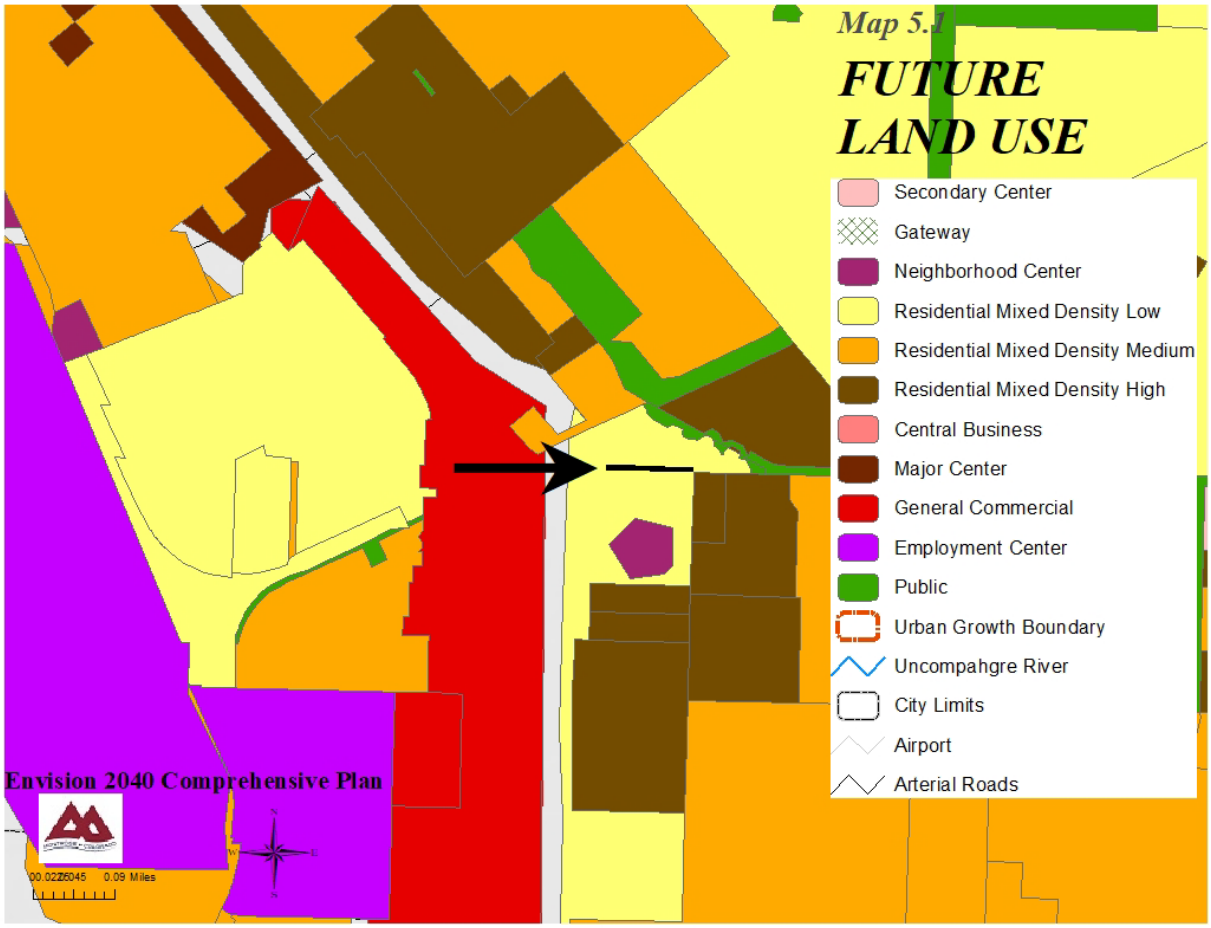
Denial/No Action Motion Recommendation:
"I hereby make a motion to recommend denial of the rezone request. The request does not meet the Code criteria based on the evidence and testimony presented at this hearing and in the staff report."

Exhibit A: Maps

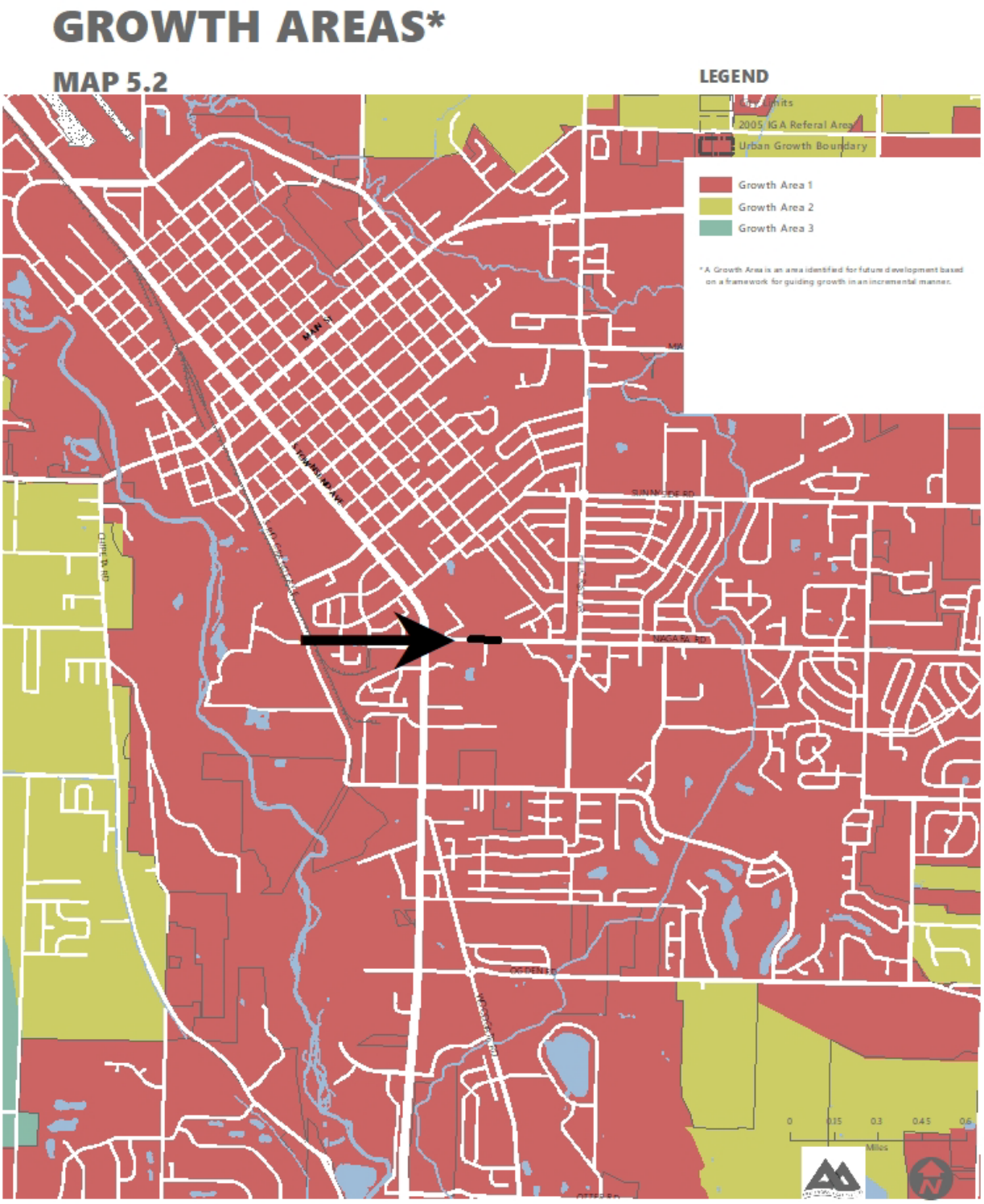
Vicinity Map



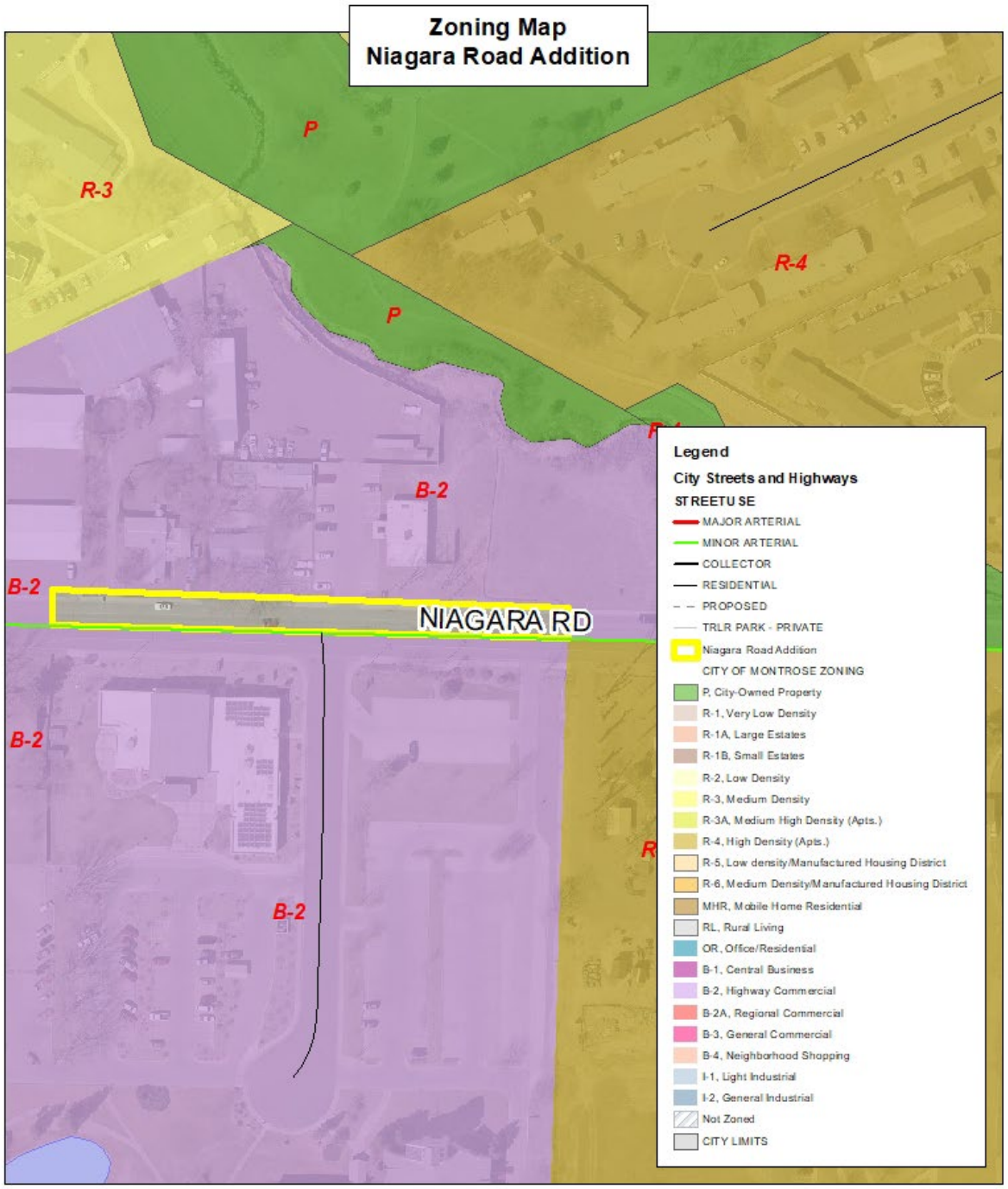
Comprehensive Plan Future Land Use Map



Comprehensive Plan Growth Areas Map



Map created 1-10-22



Map created 1-10-22

NIAGARA ROAD ADDITION

SITUATED IN SECTION 34, TOWNSHIP 49 NORTH, RANGE 9 WEST, NEW MEXICO PRINCIPAL MERIDIAN
CITY OF MONTROSE, COUNTY OF MONTROSE, STATE OF COLORADO

VICINITY MAP
N.T.S.

LEGEND

CITY LIMITS

PROPERTY BOUNDARY / LIMITS OF ANNEXATION

CITY LIMITS

TOTAL PERIMETER = 1073.34'
PERIMETER CONTIGUOUS TO CITY LIMITS = 1073.34'

NOTE:

THIS PLAT DOES NOT CONSTITUTE A BOUNDARY SURVEY. IT IS A COMPILATION OF EXISTING RECORDS FOR THE PURPOSE OF ANNEXATION.

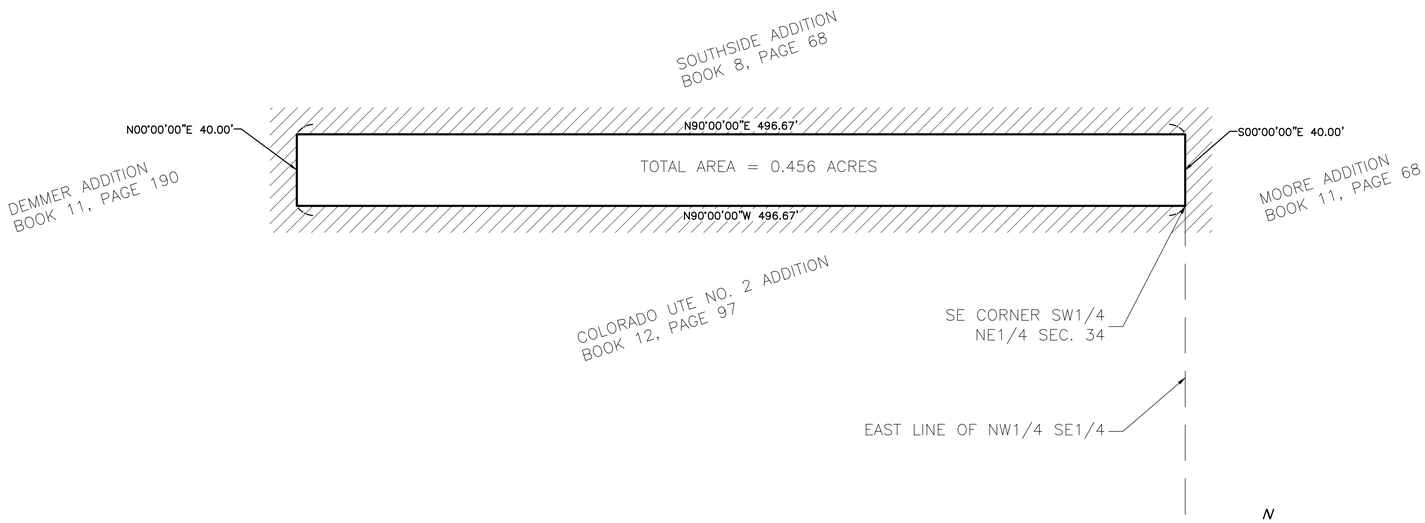
PROPERTY DESCRIPTION

A parcel of land situated in Section 34, Township 49 North, Range 9 West, New Mexico Principal Meridian, County of Montrose, State of Colorado. Being more particularly described as beginning at the SE Corner of the SW1/4 NE1/4 of said Section 34;
Thence along the north line of the Colorado Ute No. 2 addition N90°00'00"W 496.67 feet;
Thence along east line of the Demmer addition N00°00'00"W 40.00 feet;
Thence along the south line of the Southside addition N90°00'00"E 496.67 feet;
Thence along the west line of the Moore addition S00°00'00"E 40.00 feet to the Point of Beginning.

Containing 0.456 Acres more or less as described.

SURVEYOR'S CERTIFICATE

I, Frederick A. Ballard, a Registered Land Surveyor in the State of Colorado, do hereby certify Niagara Road Addition Annexation Map was prepared under my direct supervision.



PRELIMINARY

Frederick A. Ballard, P.L.S.
Registration No. 37690

MAYOR'S CERTIFICATE

This is to certify that the City of Montrose, a municipal corporation in the County of Montrose, State of Colorado has by its Ordinance No. _____ adopted on the _____ day of _____ 20____, annexed the property hereon to the City of Montrose.

_____
Mayor

Attest:_____
City Clerk

CLERK AND RECORDER'S CERTIFICATE

This map was filed for record in the office of the Clerk and Recorder of Montrose County, Colorado, at the time of_____, on the_____ day of _____, 20____ under Reception No. _____.

_____ _____
Clerk and Recorder Deputy
Montrose County, Colorado

N

1" = 40'

Scale in feet

40' 0 40' 80'

NOTICE: According to Colorado Law (13-80-105, CRS) you must commence any legal action based upon any defect in this survey within three (3) years after you first discover such defect. In no event may any action based upon any defect in this survey be commenced more than ten (10) years from the date of the certification shown hereon.

DEL-MONT CONSULTANTS, INC.
ENGINEERING ▼ SURVEYING
125 Colorado Ave ▼ Montrose, CO 81401 ▼ (970) 249-2251 ▼ (970) 249-2342 FAX
www.del-mont.com ▼ service@del-mont.com

FIELD BOOK: N/A	DRAWN BY: BAJ	DATE: 2021-12-03	TITLE: NIAGARA ROAD ADDITION
SHEET: 1 of 1	FILE: 21019V_ANNX_NIAGARA-RD	JOB NO.: 21019	CLIENT: CITY OF MONTROSE
			ADDRESS & PHONE: 433 S. FIRST ST. MONTROSE, CO 81401 970-240-1498
			TYPE: ANNEXATION

Exhibit B: Zoning Code Excerpts

Sec. 4-4-11.1. - "P" Public District.

(A) *Intent.* The Public district provides public recreation facilities, government buildings and facilities, events or conference centers, schools libraries, and other public lands and buildings. Uses are of a public, nonprofit, or charitable nature and provide a local service to the people of the community on a regular basis.

(B) *Uses by Right.*

(1) Government buildings and facilities.

(2) Schools.

(3) Libraries.

(4) Public museums and visitor centers.

(5) Public parks.

(6) Public recreation land and facilities.

(7) Private recreation facilities.

(8) Open space corridors.

(9) Places of worship.

(10) Parking facilities.

(11) Renewable energy facilities.

(12) Accessory uses.

(C) *Conditional Uses.*

(1) Commercial businesses.

(2) Single-family homes.

(3) Multiple-family residences.

(4) Golf courses.

(5) Childcare facilities. A childcare facility shall be a conditional use in all districts if more than eight but less than 16 children under 13 years of age are present on the premises at any one time, including children of the family living in the residence, in accordance with State Statutes and regulations.

(6) Antennas and towers are allowed only as conditional uses in all zones and are subject to the provisions of Section 4-4-21 and the other applicable requirements of City ordinances and regulations.

(Ord. No. 2472 , § 4-4-11.1, 5-7-2019)

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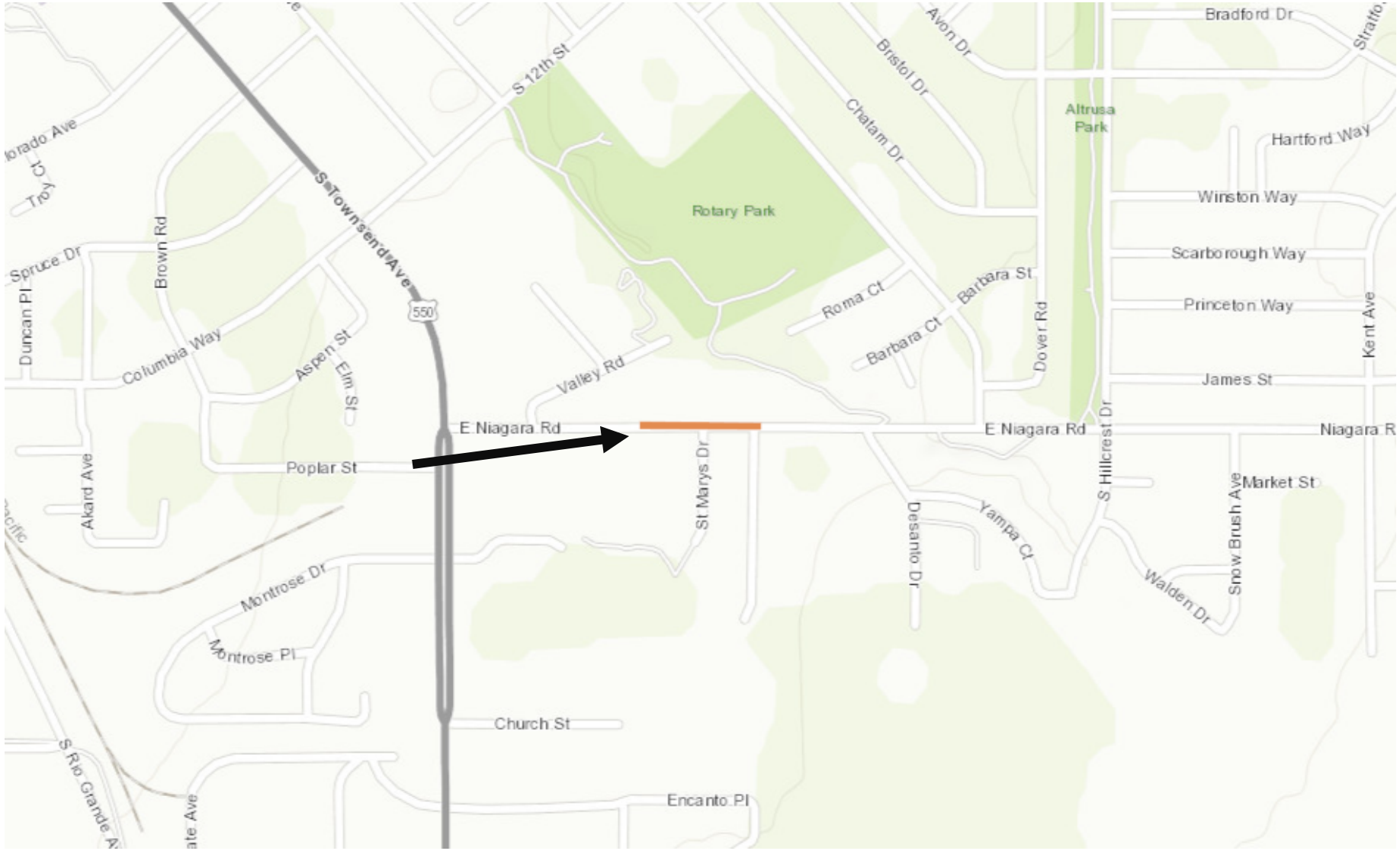
Annexation Schedule

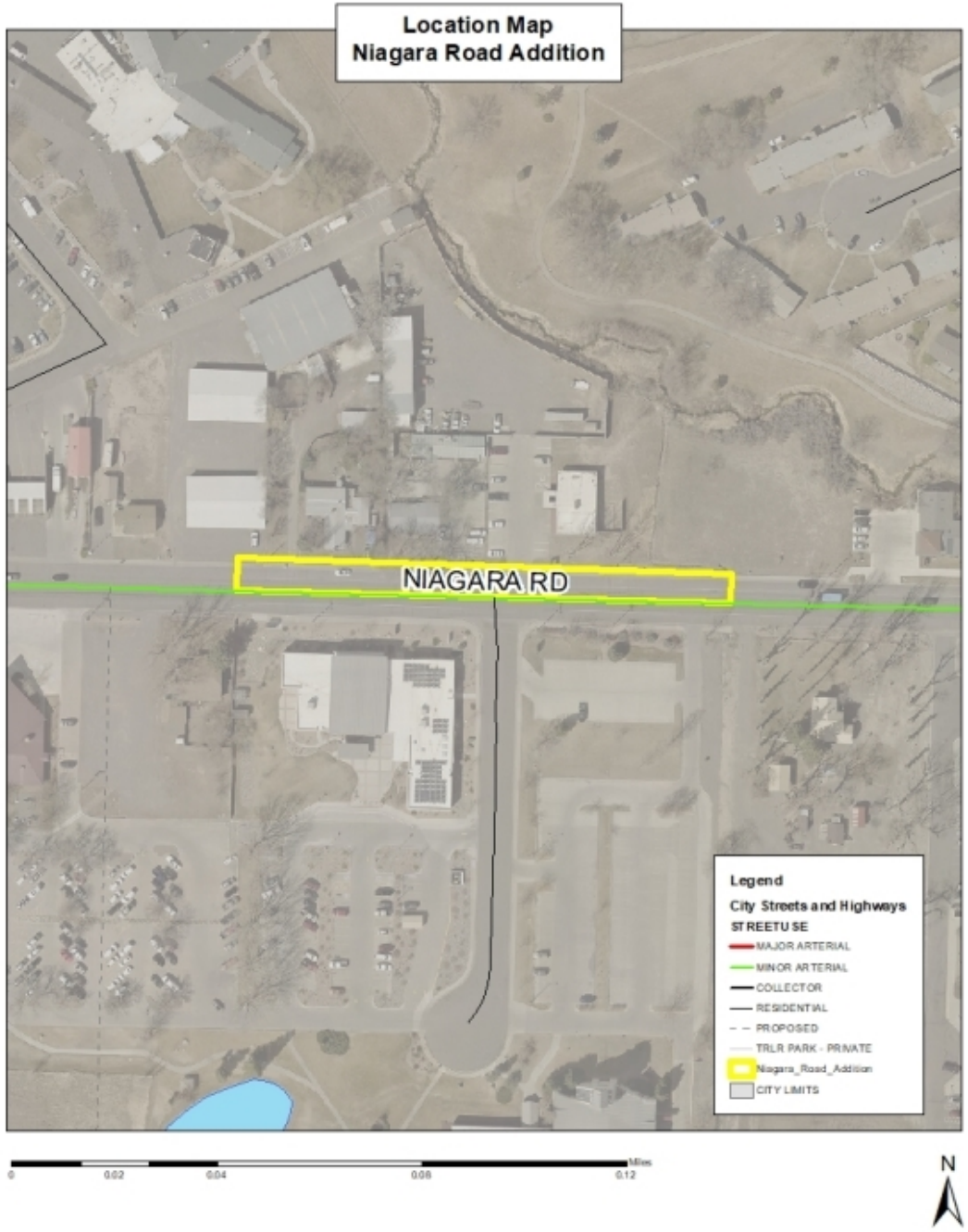
January 18:	Council Work Session Overview
February 9:	Planning Commission zoning hearing
March 1:	City Council Annexation hearing, 1st reading of annexation ordinance, and 1st reading of zoning ordinance
March 15:	2nd reading of annexation and zoning ordinances

General Vicinity Map – Niagara Road Addition



Site Location

- 0.456 acres
- Within the City's Urban Growth Boundary, City of Montrose Water Service Area, & City of Montrose Sewer Service Area
- Area is urbanizing and more than 1/6 of the perimeter is contiguous to city limits

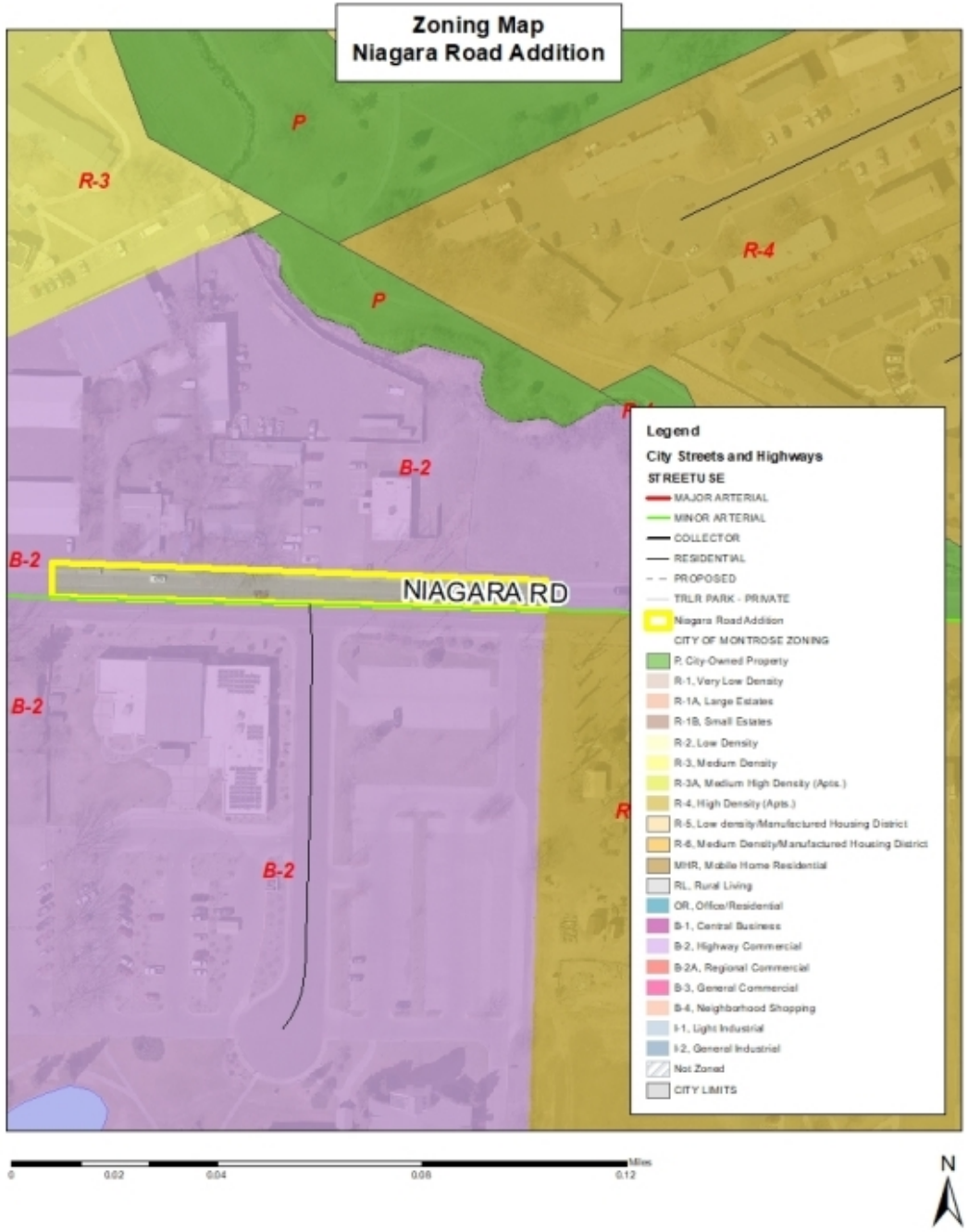


Map created 1-10-22

Site Details

- Zoning of surrounding area is “B-2” Highway Commercial District

- The “B-2” Highway Commercial District is intended to provide for business oriented toward serving the motoring public. The district provides for the convenient exchange of goods and services along the major thoroughfares of the City.



Zoning of Additions – Section 4-4-29 (B)

(B) Zoning of Additions:

"The Planning Commission shall recommend to the Council a zoning district designation for all property annexed to the City not previously subject to City zoning, and shall follow the review procedure set out in Section 4-4-31 in arriving at its recommendation. Proceedings concerning the zoning of property to be annexed may be commenced at any time prior to the effective date of the annexation ordinance or thereafter. *The zoning designation for newly annexed property shall not adversely affect the public health, safety and welfare* (emphasis added)."

Zoning Regulations

- Municipal Code, Section 4-4-13(A) Intent: The “B-2" Highway Commercial District is intended to provide for business oriented toward serving the motoring public. This district provides for the convenient exchange of goods and services along the major thoroughfares of the City.

NIAGARA ROAD ADDITION

SITUATED IN SECTION 34, TOWNSHIP 49 NORTH, RANGE 9 WEST. NEW MEXICO PRINCIPAL MERIDIAN
CITY OF MONTROSE, COUNTY OF MONTROSE, STATE OF COLORADO

VICINITY MAP
N.T.S.

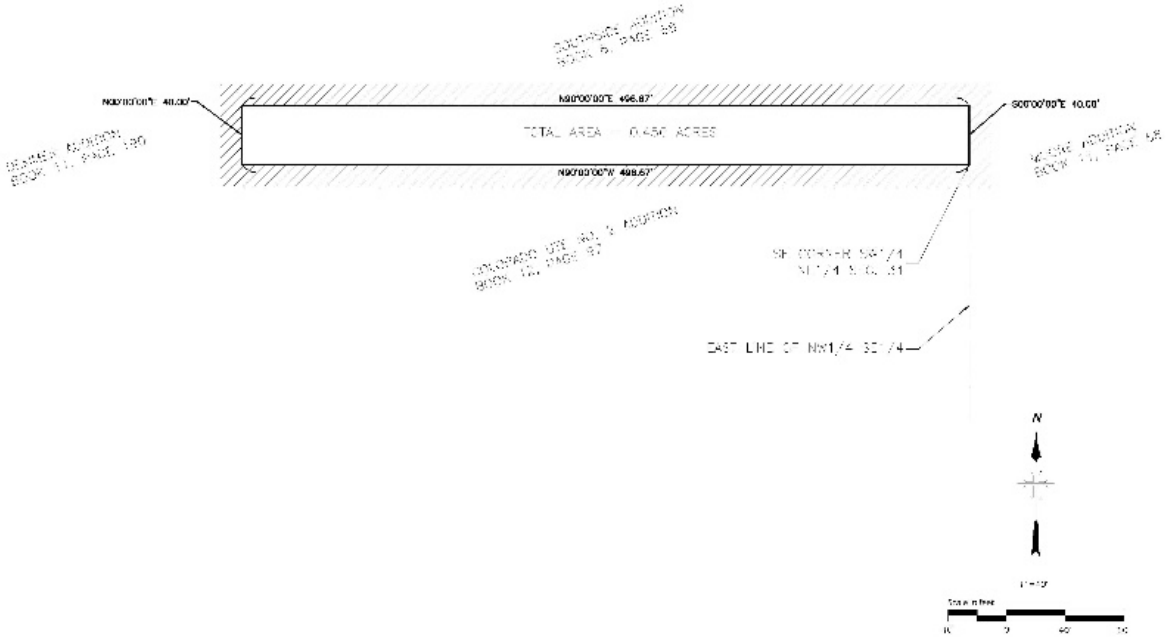
LEGEND

CITY LIMITS

TOTAL PERIMETER = [illegible]

NOTE:

THIS PLAT DOES NOT CONSTITUTE A BOUNDARY SURVEY. IT IS A COMPILATION OF INFORMATION FOUND IN THE FIELD AND OFFICE OF [illegible]



PROPERTY DESCRIPTION

A parcel of land situated in Section 34, Township 49 North, Range 9 West, New Mexico Principal Meridian, County of Montrose, State of Colorado. Being more particularly described as beginning at the SE Corner of the SW1/4 NE1/4 or said Section 34;
Thence along the north line of the Colorado Use No. 2 another N00°00'00"W 496.87 feet;
Thence along said line of the Denver section N00°00'00"W 40.00 feet;
Thence along the south line of the Southside addition N90°00'00"E 496.87 feet;
Thence along the east line of the Moore addition S00°00'00"E 40.00 feet to the Point of Beginning.

Containing 0.456 Acres more or less as described.

SURVEYOR'S CERTIFICATE

I, Frederick A. Ballard, a Registered Land Surveyor in the State of Colorado, do hereby certify Niagara Road Acres Annexation Map was prepared under my direct supervision.

PRELIMINARY

Frederick A. Ballard, P.L.S.
Registration No. 24991

MAYOR'S CERTIFICATE

This is to certify that the City of Montrose, a municipal corporation in the County of Montrose, State of Colorado was by Ordinance No. _____ adopted on the _____ day of _____ 20____, annexed the property hereon to the City of Montrose.

_____
Mayor

Attest: _____
City Clerk

CLERK AND RECORDER'S CERTIFICATE

This map was filed for record in the office of the Clerk and Recorder of Montrose County, Colorado, at the time of _____, on the _____ day of _____ 20____ under Reception No. _____

_____ _____
Clerk and Recorder Deputy
Montrose County, Colorado

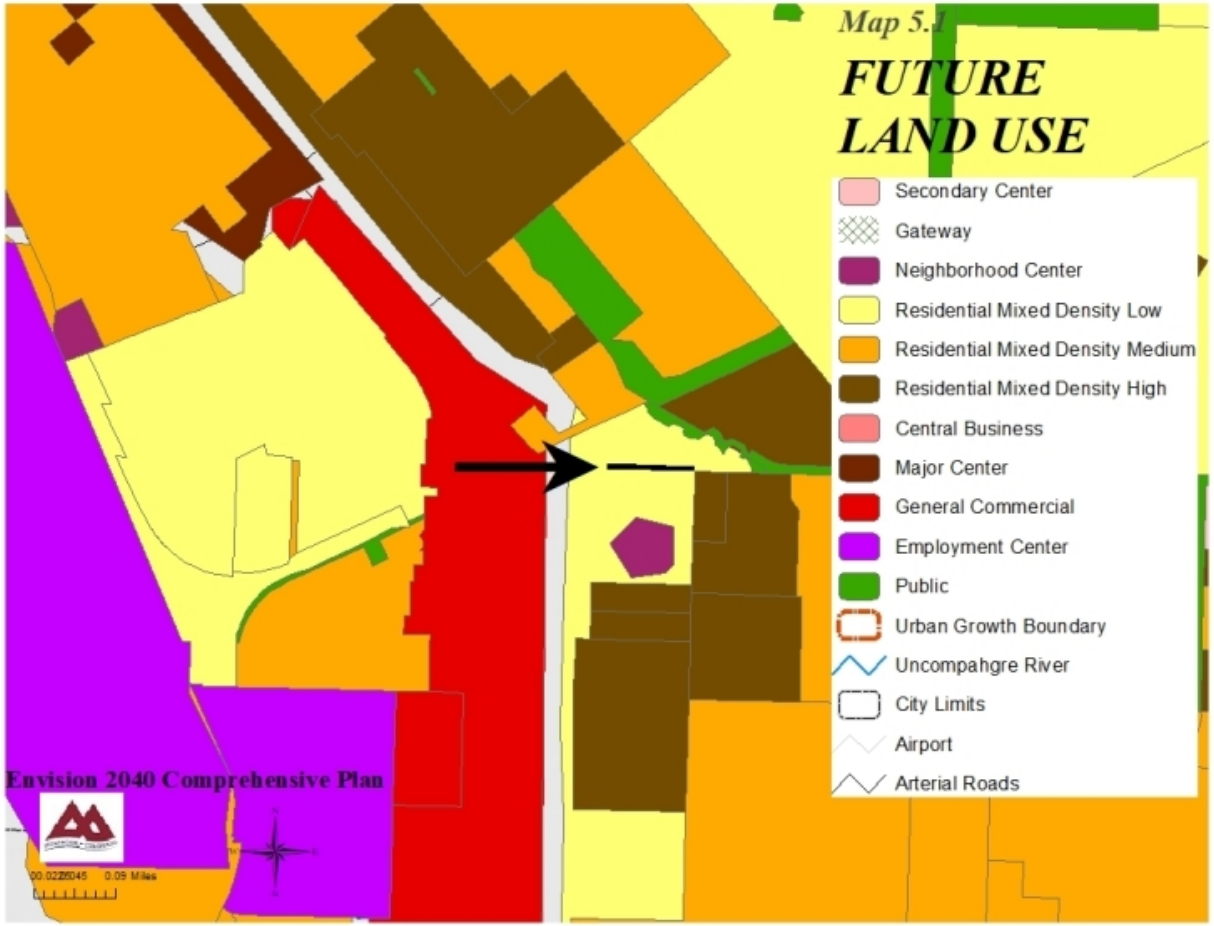
NOTES: Assessing jurisdiction: [illegible] Zoning: [illegible] Flood information: [illegible] Utilities: [illegible] Easements: [illegible] Survey: [illegible]

DMC BELMONT CONSULTANTS, INC. ENGINEERING + SURVEYING			NIAGARA ROAD ADDITION
			CITY OF MONTROSE
			433 S. FIRST ST. MONTROSE, CO 81401 970-249-1498
N/A	BAJ	2021-12-03	
1 of 1	2021 ANX (NIAGARA)	21019	ANNEXATION

Comprehensive Plan – Land Use Chapter 3

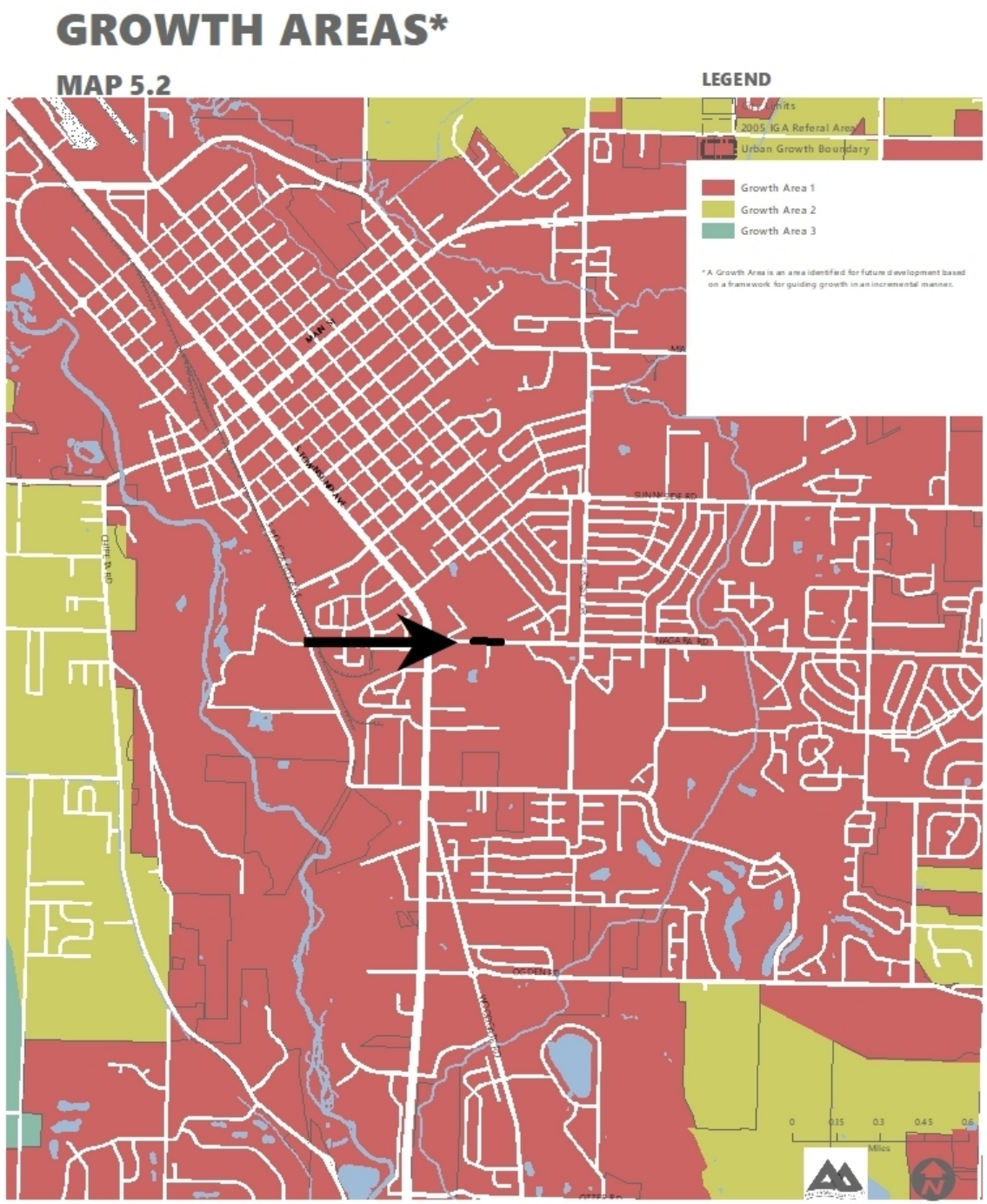
Listed as **Residential Mixed Density Low** in the future land use map.

This low-density residential land use is intended to preserve the traditional building pattern of the existing residential development in Montrose. This district provides primarily for single-family homes, as well as small amounts of attached residential dwelling units.



Growth Area 1

Property is within the most cost-efficient area for the City to grow. Growth Area 1 comprises platted but unbuilt lots, annexed but unplatted land, and un-annexed small enclaves.



Summary

- Area is urbanizing and more than 1/6 contiguous to city limits
- Annexation Agreement is not required
- Proposal is consistent with the public health, safety, and welfare, city annexation policies, and the Comprehensive Plan.
- Staff recommends approval of the annexation and “B-2” Highway Commercial District.
- The Planning Commission shall make a zoning recommendation to City Council.

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