The City of Lee's Summit

Final Agenda

Planning Commission

Thursday, June 11, 2026
5:00 PM
City Council Chambers
City Hall
220 SE Green Street
Lee's Summit, MO 64063

1. **Call to Order**
2. **Roll Call**
3. **Approval of Agenda**
4. **Public Comments**
5. **Approval of Consent Agenda**

   A. TMP-3708 Appl. #PL2026-084 - FINAL PLAT - Lemone-Smith Business & Rail Center, Tract A, 450 SE Thompson Dr; Engineering Solutions, LLC, applicant

   Presenter: Matt Schlicht, P.E., Applicant Representative
   Hector Soto, Jr., AICP, Senior Planner

   B. 2026-7699 Approval of the May 28, 2026, Planning Commission Action Letter

6. **Public Hearing**

   A. 2026-7695 Public Hearing: Application #PL2026-035 - REZONING from PI, PO, and RP-4 to CP-2, and PRELIMINARY DEVELOPMENT PLAN - Dillon's Grocery Store, fuel kiosk with canopy, and retail space, located southwest of the NE Tudor Rd. and NE Douglas St. intersection; Tim Goyette, Phillips Edison & Company, applicant

   Presenter: Tim Goyette, Applicant Representative
   Adair Bright, AICP, Senior Planner

   1) TMP-3707 An ordinance approving a Rezoning from Districts PI (Planned Industrial), RP-4 (Planned Apartment Residential), and PO (Planned Office) to CP-2 (Planned Community Commercial) and Preliminary Development Plan for Dillon's on approximately 15.71 acres of land located near the southwest corner of NE Tudor Road and NE Douglas Street, all in accordance with the provisions of Chapter 33, the Unified Development Ordinance, of the Code of Ordinances for the City of Lee's Summit, Missouri.

   Presenter: Adair Bright, AICP, Senior Planner

7 **Roundtable**
8. **Adjournment**

For your convenience, Planning Commission agendas, as well as videos of Planning Commission meetings, may be viewed on the City's Legislative Information Center website at "lsmo.legistar.com"

Packet Information

File #: TMP-3708, **Version:** 1

Appl. #PL2026-084 - FINAL PLAT - Lemone-Smith Business & Rail Center, Tract A, 450 SE Thompson Dr; Engineering Solutions, LLC, applicant

Issue/Request:
The applicant proposes a final plat for the purpose of establishing a common area tract to house stormwater infrastructure improvements associated with a building expansion project on the adjacent property to the east at 420 SE Thompson Dr.

Proposed Planning Commission Motion:
I move to recommend APPROVAL of Appl. #PL2026-084 - FINAL PLAT - Lemone-Smith Business & Rail Center, Tract A, 450 SE Thompson Dr; Engineering Solutions, LLC, applicant.

Matt Schlicht, P.E., Applicant Representative
Hector Soto, Jr., AICP, Senior Planner

Recommendation: With the conditions of approval contained in the staff report, the application meets the Ignite! Comprehensive Plan and the requirements of the UDO and Design & Construction Manual.

Committee Recommendation: Planning Commission action pending.

LEE'S SUMMIT
MISSOURI
Development Services Department

Development Services Staff Report

File Number	PL2026-084
File Name	FINAL PLAT – Lemone-Smith Business & Rail Center, Tract A
Applicant	Engineering Solutions, LLC
Property Address	450 SE Thompson Rd
Planning Commission Date	June 11, 2026
Heard by	Planning Commission and City Council
Analyst	Hector Soto, Jr., AICP, Senior Planner

Public Notification

Pre-application held: July 22, 2025
Neighborhood meeting conducted: N/A
Newspaper notification published on: N/A
Radius notices mailed to properties within 300 feet on: N/A
Site posted notice on: N/A

Table of Contents

1. Project Data and Facts 2
2. Land Use 4
3. Unified Development Ordinance (UDO) 5
4. Comprehensive Plan 5
5. Analysis 6
6. Recommended Conditions of Approval 6

Attachments

Final Plat, revision dated May 5, 2026

Location Map

1. Project Data and Facts

Project Data	
Applicant/Status	Engineering Solutions, LLC/Applicant
Applicant's Representative	Matt Schlicht, P.E.
Location of Property	450 SE Thompson Rd
Size of Property	±13.49 acres (587,402 sq. ft.)
Zoning	PI (Planned Industrial)
Comprehensive Plan Designation	Industrial
Procedure	The Planning Commission makes a recommendation to the City Council on the final plat within thirty (30) days after the application is submitted to the Planning Commission. The City Council takes final action on the final plat in the form of an ordinance. **Duration of Validity:** Final plat approval shall become null and void if the plat is not recorded within one (1) year from the date of City Council approval. The Director may administratively grant a one (1) year extension, provided no changes have been made to any City ordinance, regulation or approved engineering plans that would require a change in the final plat. The City Council may grant one additional one (1) year extension, provided that additional engineering plans may be required by the City Engineer to comply with current City ordinances and regulations.

Current Land Use

The subject 13.49 acres is part of an undeveloped 102 acres of industrial property.

Figure 1 - Parent tract dashed in yellow. Subject plat site outlined in red.

Description of Applicant's Request

The applicant proposes a final plat for the purpose of establishing a common area tract to house stormwater infrastructure improvements associated with a building expansion project on the adjacent property to the east at 420 SE Thompson Dr.

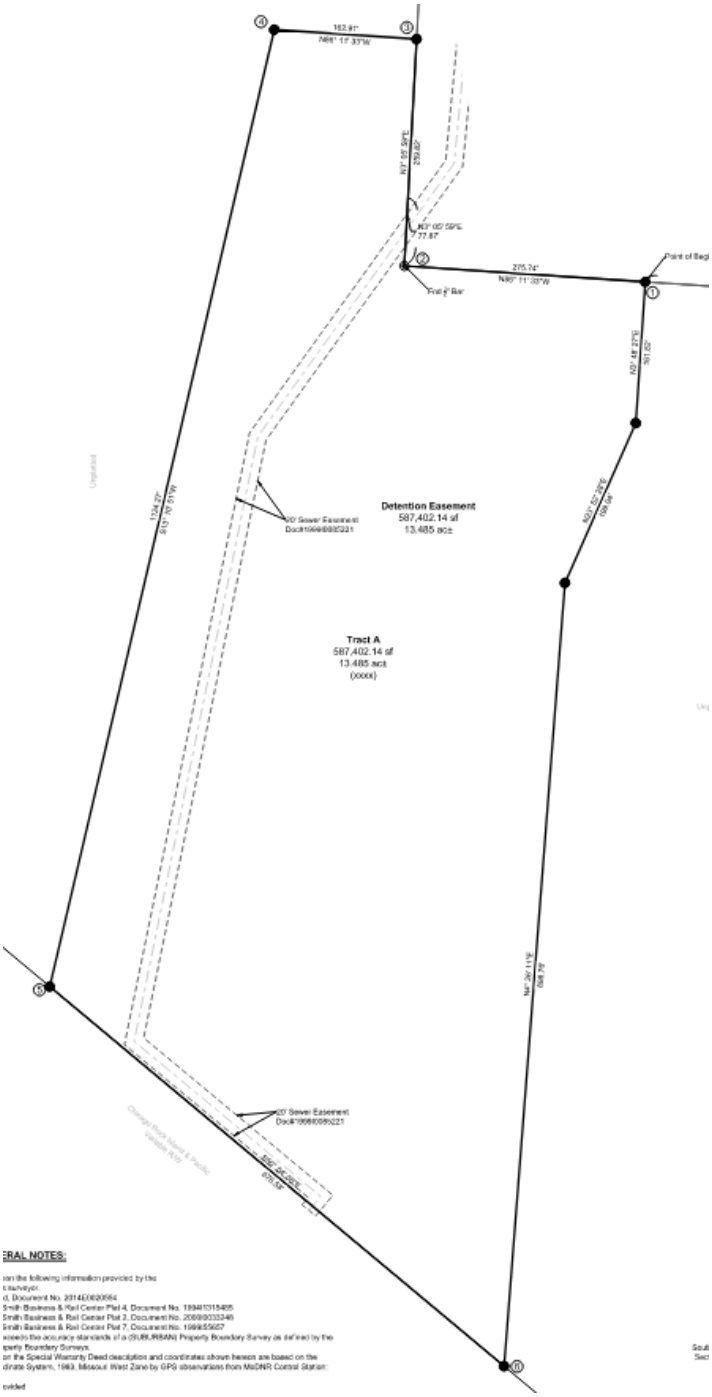


Figure 2 – Final Plat

2. Land Use

Description and Character of Surrounding Area

The subject site is generally located at the southeast intersection of M-291 Hwy South and SE Thompson Dr. The surrounding area is generally characterized as industrial.

Figure 3 - Subject plat boundary outlined in red.

Adjacent Land Uses and Zoning

North:	Undeveloped industrial property / PI
South:	Industrial / PI
East:	Industrial / PI
West:	Undeveloped industrial property / PI

Site Characteristics

The project site is bordered by SE Thompson Dr to the north and east; M-291 Hwy South to the west; and Rock Island Railroad right-of-way to the south. Topographically, the parent tract slopes from its periphery toward the middle and then south where the proposed common area tract plat boundary will serve to house a stormwater detention facility.

Special Considerations
N/A

3. Unified Development Ordinance (UDO)

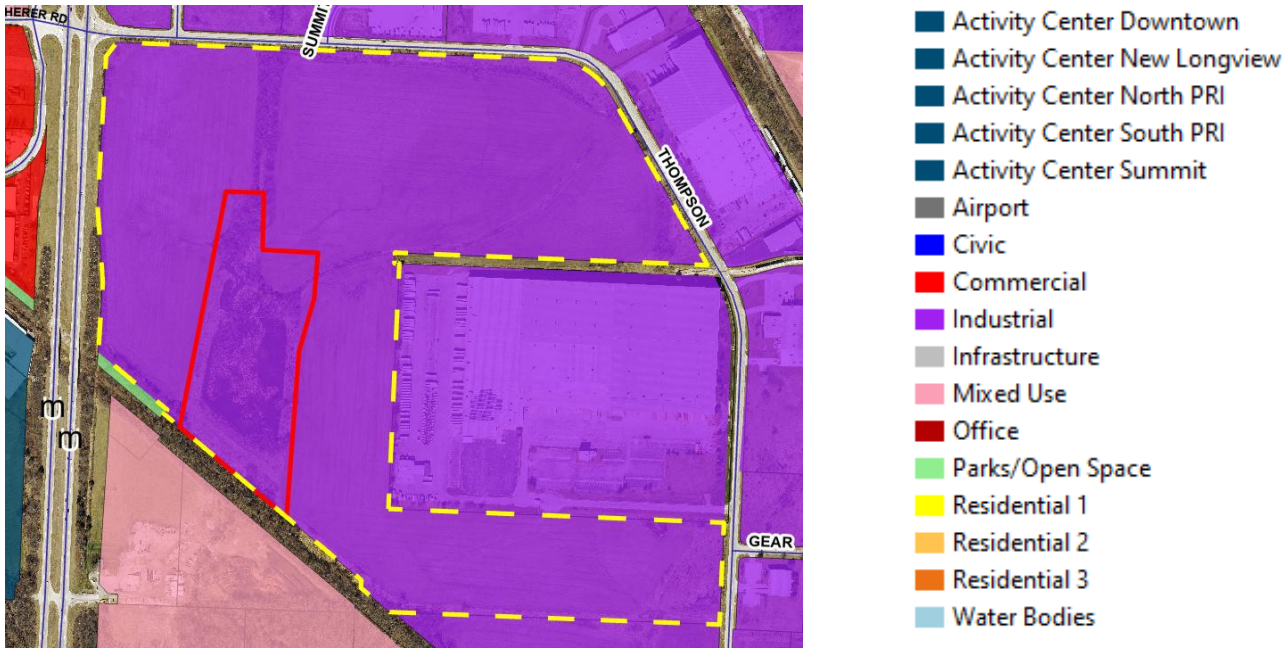
Section	Description
7.140, 7.150	Final Plat

4. Comprehensive Plan

Focus Areas	Goals, Objectives & Policies
Facilities & Infrastructure	Goal: Plan and build City services and infrastructure to promote quality growth and resiliency. Objective: Maintain high-quality infrastructure that supports and entices quality growth and redevelopment.
Land Use & Community Design	Objective: Plan for purposeful growth, revitalization and redevelopment.

Comprehensive Plan

The Ignite! Comprehensive Plan primarily identifies the property surrounding the subject property as Industrial on the Future Land Use Map. The Industrial land use category is intended for areas accommodating light and heavy industrial uses, distribution and warehouse developments. The subject plat is associated with infrastructure improvements to facilitate additional development of the remaining industrial property.



5. Analysis

Background and History

- July 26, 1993 – The Planning Commission approved a preliminary plat (Appl. #1993-167) for *Lemone-Smith Business & Rail Center*.

Compatibility

The proposed plat facilitates continued development of the industrial area in a manner consistent and compatible with existing area industrial development.

Adverse Impacts

The proposed plat will not negatively impact the use or aesthetics of any neighboring property, nor does it negatively impact the health, safety and welfare of the public. The proposed plat positively impacts neighboring properties by establishing a common area tract for the purpose of constructing regional stormwater improvements.

Public Services

The proposed plat will not impede the normal and orderly development and improvement of the surrounding property. The proposed plat is associated with stormwater infrastructure improvements that will allow for the continued development of the surrounding industrial property.

Recommendation

With the conditions of approval below, the application meets the Ignite! Comprehensive Plan and the requirements of the UDO and Design & Construction Manual.

6. Recommended Conditions of Approval

Standard Conditions of Approval

1. All required engineering plans and studies, including water lines, sanitary sewers, storm drainage, streets and erosion and sediment control shall be submitted along with the final plat and approved prior to the approval of the final plat. All public infrastructure must be substantially complete, prior to the issuance of any building permits.
2. All subdivision-related public improvements must have a Certificate of Final Acceptance prior to approval of the final plat, unless security is provided in the manner set forth in the City's Unified Development Ordinance (UDO) Section 7.340. If security is provided, building permits may be issued upon issuance of a Certificate of Substantial Completion of the public infrastructure as outlined in Article 3, Division V, Sections 3.540 and 3.550 and Article 3, Division IV, Section 3.475 of the UDO, respectively.
3. A final plat shall be approved and recorded prior to issuance of any building permit.

BILL NO. 26-

AN ORDINANCE ACCEPTING FINAL PLAT ENTITLED LEMONE-SMITH BUSINESS & RAIL CENTER, TRACT A, AS A SUBDIVISION TO THE CITY OF LEE'S SUMMIT, MISSOURI.

WHEREAS, Application #PL2026-084, submitted by Engineering Solutions, LLC, requesting approval of the final plat entitled "Lemone-Smith Business & Rail Center, Tract A", was referred to the Planning Commission as required by Chapter 33, the City's Unified Development Ordinance, of the Code of Ordinances for the City of Lee's Summit; and,

WHEREAS, the Planning Commission considered the final plat on June 11, 2026, and rendered a report to the City Council recommending that the plat be approved.

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF LEE'S SUMMIT, MISSOURI, as follows:

Section 1. That the final plat entitled "Lemone-Smith Business & Rail Center, Tract A", is a subdivision in Section 17, Township 47N, Range 31W, in Lee's Summit, Missouri more particularly described as follows:

All that part of Section 17, Township 47, Range 31, More particularly described as follows:

Commencing at the Northwest corner of Lot 4A of Lemone-Smith Business & Rail Center Plat 2, Document No. 1993I1215409; thence N86°11'35"W, a distance of 361.69 feet to the Point of Beginning; thence N86°11'33"W, a distance of 275.74 feet; thence N3°05'59"E, a distance of 259.82 feet; thence N86°11'33"W, a distance of 162.91 feet; thence S13°10'51"W, a distance of 1124.27 feet; thence S50°04'05"E, a distance of 676.58 feet; thence N4°26'11"E, a distance of 898.76 feet; thence N23°52"28"E, a distance of 199.94 feet; thence N3°48'27"E, a distance of 161.82 feet to the point of beginning.

Containing: 587,402.14 sf or 13.485 ac±.

SECTION 2. That the proprietor of the above described tract of land ("Proprietor") has caused the same to be subdivided in the manner shown on the accompanying plat, which subdivision shall hereafter be known as "Lemone-Smith Business & Rail Center, Tract A".

SECTION 3. That the roads and streets shown on this plat and not heretofore dedicated to public use as thoroughfares shall be dedicated as depicted on the plat. The City Council hereby authorizes the Director of Development Services, on behalf of the City of Lee's Summit, Missouri, to accept the land or easements dedicated to the City of Lee's Summit for public use and shown on the accompanying plat, upon the subdivider filing and recording a final plat in accordance with Article 7, Subdivisions, Chapter 33, the City's Unified Development Ordinance, of the Code of Ordinances for the City of Lee's Summit; which plat shall conform to the accompanying plat, and hereby authorizes acceptance of the public improvements required by this ordinance and Article 7 of the UDO of the City, upon the Director of Public Works certifying to the Director of Development Services and the City Clerk that the public improvements have been constructed in accordance with City standards and specifications.

SECTION 4. That the approval granted by this ordinance is done under the authority of Section 89.410.2 of the Revised Statutes of Missouri and Section 7.340 of the UDO because all

subdivision-related public improvements required by the UDO have not yet been completed. In lieu of the completion and installation of the subdivision-related public improvements prior to the approval of the plat, the Proprietor will, in accordance with Section 7.340 of the UDO, provide security in a form acceptable to the City to secure the actual construction and installation of said public improvements, and the City hereby accepts same. No building permit shall be issued until the required public improvements are available to each lot for which a building permit is requested in accordance with the Design and Construction Manual.

SECTION 5. That an easement shall be granted to the City of Lee's Summit, Missouri, to locate, construct and maintain or to authorize the location, construction, and maintenance of poles, wires, anchors, conduits, and/or structures for water, gas, sanitary sewer, storm sewer, surface drainage channel, electricity, telephone, cable TV, or any other necessary public utility or services, any or all of them, upon, over, or under those areas outlined or designated upon this plat as "Utility Easements" (U.E.) or within any street or thoroughfare dedicated to public use on this plat. Grantor, on behalf of himself, his heirs, his assigns and successors in interest, shall waive, to the fullest extent allowed by law, including, without limitation, Section 527.188, RSMo. (2006), any right to request restoration of rights previously transferred and vacation of any easement granted by this plat.

SECTION 6. That individual lot owner(s) shall not change or obstruct the drainage flow lines on the lots.

SECTION 7. That the final plat substantially conforms to all applicable requirements of the Code.

SECTION 8. That the City Council for the City of Lee's Summit, Missouri, does hereby approve and accept, as a subdivision to the City of Lee's Summit, Missouri, the final plat entitled "Lemone-Smith Business & Rail Center, Tract A" attached hereto and incorporated herein by reference as Attachment A.

SECTION 10. That this ordinance shall be in full force and effect from and after the date of its passage and adoption, and approval by the Mayor.

PASSED by the City Council for the City of Lee's Summit, Missouri, this _____ day of ___ _____, 2026.

_____
Mayor J. Beto Lopez

ATTEST:

_____
City Clerk Trisha Fowler Arcuri

APPROVED by the Mayor of said City this ____ day of _____, 2026.

_____
Mayor J. Beto Lopez

ATTEST:

_____
City Clerk Trisha Fowler Arcuri

APPROVED AS TO FORM:

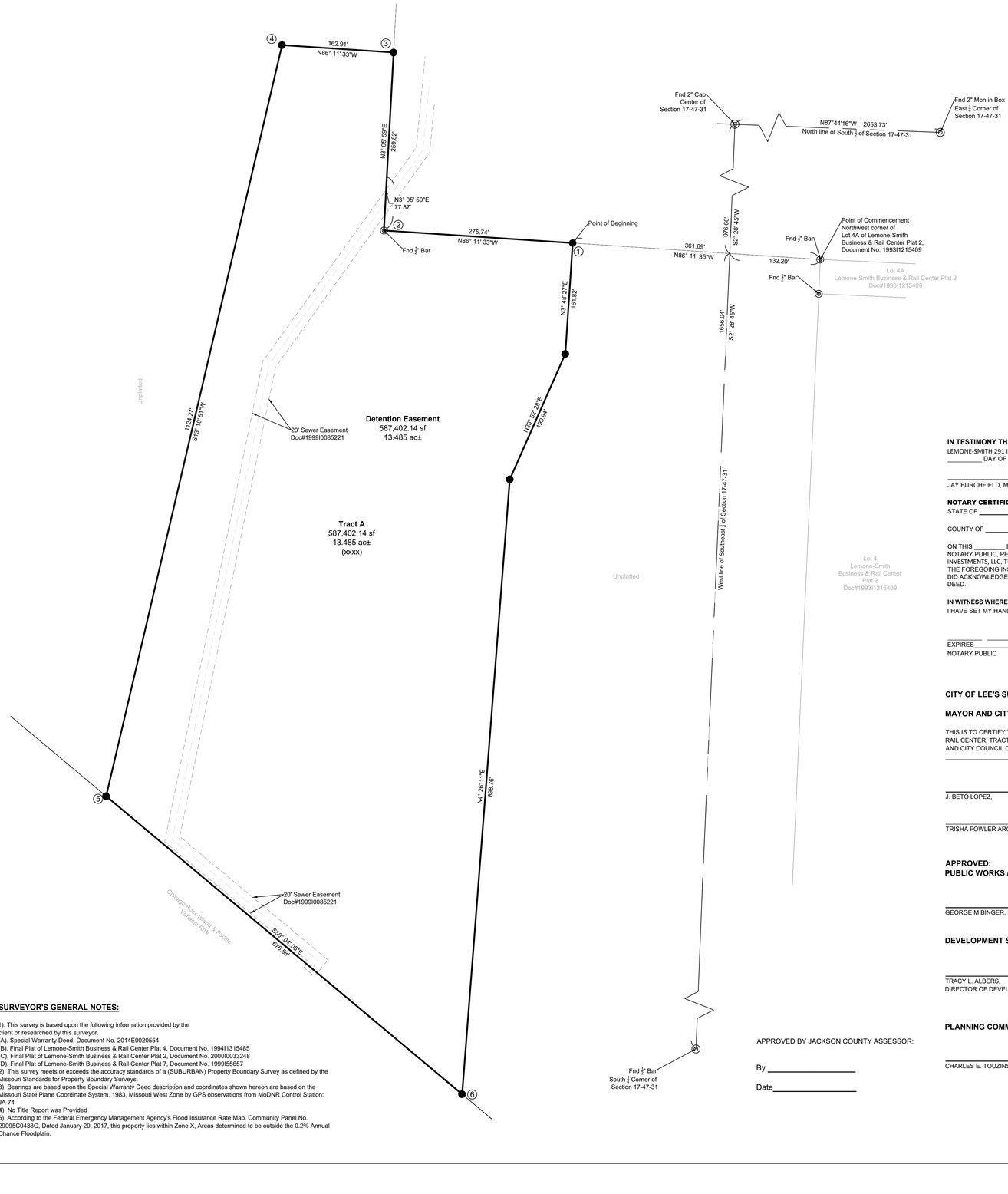
_____
City Attorney Brian Head

Final Plat

Lemone-SmithBusiness & Rail Center, Tract A

Section 17, Township 47, Range 31

Lee's Summit, Jackson County, Missouri



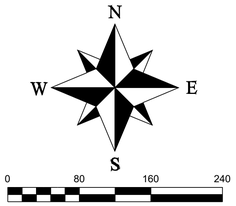
SURVEYOR'S GENERAL NOTES:

1). This survey is based upon the following information provided by the client or researched by this surveyor.
(A). Special Warranty Deed, Document No. 2014E0020554
(B). Final Plat of Lemone-Smith Business & Rail Center Plat 4, Document No. 1994I1315485
(C). Final Plat of Lemone-Smith Business & Rail Center Plat 2, Document No. 2000I0033248
(D). Final Plat of Lemone-Smith Business & Rail Center Plat 7, Document No. 1999I55657
2). This survey meets or exceeds the accuracy standards of a (SUBURBAN) Property Boundary Survey as defined by the Missouri Standards for Property Boundary Surveys.
3). Bearings are based upon the Special Warranty Deed description and coordinates shown hereon are based on the Missouri State Plane Coordinate System, 1983, Missouri West Zone by GPS observations from MoDNR Control Station: JA-74
4). No Title Report was Provided
5). According to the Federal Emergency Management Agency's Flood Insurance Rate Map, Community Panel No. 29095C0438G, Dated January 20, 2017, this property lies within Zone X, Areas determined to be outside the 0.2% Annual Chance Floodplain.

Missouri State Plane Coordinate System
1983, Missouri West Zone
Reference Monument: JA–74
Combined Scale Factor: 0.9998961

	NORTHING	EASTING
1	301801.120	861321.767
2	301807.647	861240.730
3	301885.780	861242.189
4	301889.078	861192.643
5	301555.426	861114.504
6	301423.057	861272.636
JA-74	298235.597	856321.461

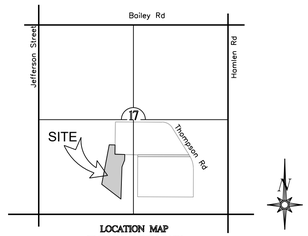
Coordinates Shown in Meters



LEGEND

These standard symbols will be found in the drawing.

- ◎ Found Survey Monument (As Noted)
- ● Set ½" Bar and Cap (2005008319-D)
- (#) State Plane Coordinate Identification
- U/E Utility Easement
- B/L Building Line
- (###) Address



LOCATION MAP
SECTION 17-T47N-R31W

IN TESTIMONY THEREOF:
LEMONE-SMITH 291 INVESTMENTS, LLC, HAS CAUSED THESE PRESENT TO BE SIGNED THIS _____ DAY OF _____ 2026.

_____
JAY BURCHFIELD, MANAGER DATE

NOTARY CERTIFICATION
STATE OF _____)
)SS
COUNTY OF _____)

ON THIS _____ DAY OF _____ 2026, BEFORE ME, THE UNDERSIGNED NOTARY PUBLIC, PERSONALLY APPEARED JAY BURCHFIELD, MANAGER OF LEMONE-SMITH 291 INVESTMENTS, LLC, TO ME KNOWN TO BE THE PERSON DESCRIBED HEREIN AND WHO EXECUTED THE FOREGOING INSTRUMENT ON BEHALF OF SAID COMPANY AND BEING DULY SWORN BY ME DID ACKNOWLEDGE THAT HE EXECUTED THE FOREGOING INSTRUMENT AS HIS FREE ACT AND DEED.

IN WITNESS WHEREOF
I HAVE SET MY HAND AND AFFIXED MY SEAL THE DAY AND YEAR LAST WRITTEN ABOVE.

_____ _____ MY COMMISSION EXPIRES_____
NOTARY PUBLIC

CITY OF LEE'S SUMMIT:

MAYOR AND CITY COUNCIL CERTIFICATION:

THIS IS TO CERTIFY THAT THE ACCOMPANYING PLAT OF LEMONE-SMITH BUSINESS & RAIL CENTER, TRACT A, WAS SUBMITTED TO AND DULY APPROVED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF LEE'S SUMMIT, MISSOURI THIS _____ DAY OF _____ 2026, BY ORDINANCE NO._____

_____
J. BETO LOPEZ, MAYOR DATE

_____
TRISHA FOWLER ARCURI, CITY CLERK DATE

APPROVED:
PUBLIC WORKS / ENGINEERING

_____
GEORGE M BINGER, III P.E. , CITY ENGINEER DATE

DEVELOPMENT SERVICES DEPARTMENT

_____
TRACY L. ALBERS, DATE
DIRECTOR OF DEVELOPMENT SERVICES

PLANNING COMMISSION

_____
CHARLES E. TOUZINSKY, III, SECRETARY DATE

APPROVED BY JACKSON COUNTY ASSESSOR:

By _____

Date_____

PROPERTY DESCRIPTION

All that part of Section 17, Township 47, Range 31, More particularly described as follows:

Commencing at the Northwest corner of Lot 4A of Lemone-Smith Business & Rail Center Plat 2, Document No. 1993I1215409; thence N86°11'35"W, a distance of 361.69 feet to the Point of Beginning; thence N86°11'33"W, a distance of 275.74 feet; thence N3°05'59"E, a distance of 259.82 feet; thence N86°11'33"W, a distance of 162.91 feet; thence S13°10'51"W, a distance of 1124.27 feet; thence S50°04'05"E, a distance of 676.58 feet; thence N4°26'11"E, a distance of 898.76 feet; thence N23°52'28"E, a distance of 199.94 feet; thence N3°48'27"E, a distance of 161.82 feet to the point of beginning.

Containing: 587,402.14 sf or 13.485 ac±.

OWNER / DEVELOPER:
Lemone-Smith Development Co
PO Box 7688
Columbia Mo 65205

DEDICATION:
THE UNDERSIGNED PROPRIETOR OF THE ABOVE DESCRIBED TRACT OF LAND HAS CAUSED THE SAME TO BE SUBDIVIDED IN THE MANNER SHOWN ON THE ACCOMPANYING PLAT, WHICH PLAT AND SUBDIVISION SHALL HEREAFTER BE KNOWN AS

"LEMONE-SMITH BUSINESS & RAIL CENTER, TRACT A"

EASEMENTS:
AN EASEMENT OR LICENSE IS HEREBY GRANTED TO THE CITY OF LEE'S SUMMIT, MISSOURI, TO LOCATE, CONSTRUCT AND MAINTAIN, OR TO AUTHORIZE THE LOCATION, CONSTRUCTION AND MAINTENANCE OF POLES, WIRES, ANCHORS, CONDUITS, AND/OR STRUCTURES FOR WATER, GAS, SANITARY SEWER, STORM SEWER, SURFACE DRAINAGE CHANNEL, ELECTRICITY, TELEPHONE, CABLE TV, OR ANY OTHER NECESSARY PUBLIC UTILITY OR SERVICES, ANY OR ALL OF THEM, UPON, OVER, OR UNDER THOSE AREAS OUTLINED AND DESIGNATED UPON THIS PLAT AS "UTILITY EASEMENTS" (U/E) OR WITHIN ANY STREET OR THOROUGHFARE DEDICATED TO THE PUBLIC USE ON THIS PLAT. GRANTOR, ON BEHALF OF HIMSELF, HIS HEIRS, HIS ASSIGNS AND SUCCESSORS IN INTEREST, HEREBY WAIVES, TO THE FULLEST EXTENT ALLOWED BY LAW, INCLUDING, WITHOUT LIMITATIONS, SECTION 527.188, RSMo (2006), ANY RIGHT TO REQUEST RESTORATION OF RIGHTS PREVIOUSLY TRANSFERRED AND VACATION OF THE EASEMENTS HEREIN GRANTED.

OIL - GAS WELLS:
THERE IS NO VISIBLE EVIDENCE OF ABANDONED OIL OR GAS WELLS LOCATED WITHIN THE PLAT BOUNDARIES, AS IDENTIFIED IN MDNR OIL AND GAS WELL LIST UPDATED FEBRUARY 14, 2024.

FLOODPLAIN:
ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 29095C0438G, DATED JANUARY 20, 2017, THIS PROPERTY LIES WITHIN ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

DRAINAGE NOTE:
THE INDIVIDUAL LOT OWNER(S) SHALL NOT CHANGE OR OBSTRUCT THE DRAINAGE FLOW LINES OR PATHS ON THE LOTS, UNLESS SPECIFIC APPLICATION IS MADE AND APPROVED BY THE CITY ENGINEER.

TRACT A OWNERSHIP AND MAINTENANCE RESPONSIBILITIES SHALL RUN WITH THE PROPERTY OWNERS ASSOCIATION. PRIOR TO THE RECORDING OF THE PLAT OR CONVEYANCE OF ANY OWNERSHIP INTEREST IN THIS PROPERTY, SUBDIVIDER SHALL RECORD COVENANTS THAT ARE REVIEWED AND APPROVED BY THE CITY WHICH COMPLY WITH SECTION 4.290 OF THE UDO, AS APPLICABLE TO THIS PROPERTY AND TRACT A.

ALL STORM WATER CONVEYANCE, RETENTION, OR DETENTION FACILITIES TO BE LOCATED ON COMMON PROPERTY SHALL BE OWNED AND MAINTAINED BY THE PROPERTY OWNERS ASSOCIATION IN ACCORDANCE WITH THE STANDARDS SET FORTH IN THE COVENANTS, CONDITIONS, AND RESTRICTIONS. THESE STORM WATER DETENTION FACILITIES SHALL BE INSPECTED BY THE PROPERTY OWNERS ASSOCIATION ON THE FREQUENCY SPECIFIED IN THE CURRENT CITY OF LEES SUMMIT DESIGN AND CONSTRUCTION MANUAL, TO ASSURE THAT ALL INLET AND OUTLET STRUCTURES ARE FULLY-FUNCTIONAL, THE DETENTION BASIN HAS FULL STORAGE CAPACITY AND ALL LANDSCAPING, VEGETATION AND STRUCTURAL IMPROVEMENTS ARE BEING MAINTAINED IN ACCORDANCE WITH THE CURRENT CITY OF LEES SUMMIT PROPERTY MAINTENANCE CODE.

PLAT CERTIFICATION:

I HEREBY CERTIFY THAT THE FINAL PLAT OF "LEMONE-SMITH BUSINESS & RAIL CENTER, TRACT A", A SUBDIVISION IS BASED ON AN ACTUAL SURVEY MADE ON THE GROUND BY ME OR UNDER MY DIRECT SUPERVISION AND THAT SAID PLAT MEETS OR EXCEEDS THE CURRENT MINIMUM STANDARDS FOR PROPERTY BOUNDARY SURVEYS AS ESTABLISHED BY THE DEPARTMENT OF NATURAL RESOURCES, DIVISION OF GEOLOGY AND LAND SURVEY. I FURTHER CERTIFY THAT I HAVE COMPLIED WITH ALL STATUTES, ORDINANCES AND REGULATIONS GOVERNING THE PRACTICE OF LAND SURVEYING AND ALL PLATTING OF SUBDIVISIONS AS ESTABLISHED BY THE MISSOURI BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS AND PROFESSIONAL LAND SURVEYORS TO THE BEST OF MY PROFESSIONAL ABILITIES, KNOWLEDGE AND BELIEFS.

_____ DATE:_____
MATTHEW J. SCHLICHT, MOPLS 2012000102
ENGINEERING SOLUTIONS, LLC LS-2005008139-D

REVISIONS

DATE	
5/5/25	Staff Review Comments

Lemone-Smith Business & Rail Center,
Tract A
Section 17, Township 47 North, Range 31 West
Lee's Summit, Jackson County, Missouri

Final Plat

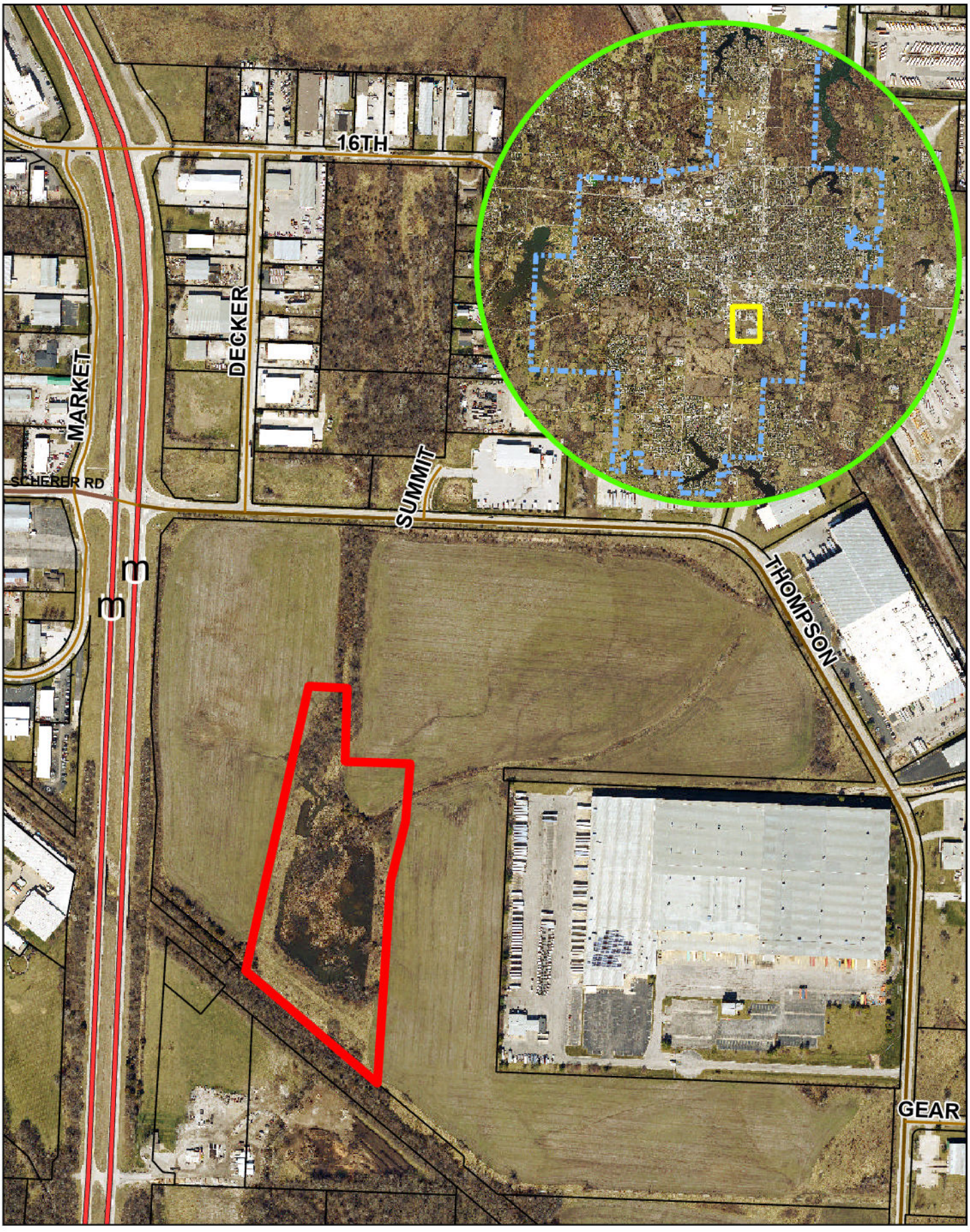
SHEET	SECTION	TOWNSHIP	RANGE
1 OF 1	17	47 N	31 W
DRAWN BY			SCALE
M. Schlicht, PLS, PE			1"=80'

COUNTY	JOB NO.
Jackson	Mid-States
DATE OF PREPARATION	
April 7, 2026	

PROFESSIONAL SEAL

ENGINEERING SOLUTIONS
ENGINEERING & SURVEYING
50 SE 30TH STREET
LEE'S SUMMIT, MO 64082
P:(816) 623-9888 F:(816)623-9849

Appl. #PL2026-084 - FINAL PLAT
Lemone-Smith Business & Rail Center, Tract A



Packet Information

File #: 2026-7699, **Version:** 1

Approval of the May 28, 2026, Planning Commission Action Letter

The City of Lee's Summit

Action Letter

Planning Commission

Thursday, May 28, 2026
5:00 PM
City Council Chambers
City Hall
220 SE Green Street
Lee's Summit, MO 64063

1. **Call to Order**
2. **Roll Call**

Present: 5 - Chairperson Dana Arth
Commissioner Jessica Gronau
Commissioner Payton Hatcher
Commissioner Tanya Jana-Ford
Commissioner Ed Yerington

Absent: 2 - Vice Chair Terry Trafton
Commissioner Chip Touzinsky

3. **Approval of Agenda**

A motion was made by Commissioner Yerington, seconded by Commissioner Jana-Ford, that this agenda be approved. The motion carried unanimously.

4. **Public Comments**

There were no public comments at this time.

5. **Approval of Consent Agenda**

A motion was made by Commissioner Jana-Ford, seconded by Commissioner Yerington, that this Consent Agenda be approved. The motion carried unanimously.

A. 2026-7669 Application #PL2026-111 - SIGN APPLICATION - Lee's Summit Medical Center Building Emergency Signage, 2100 SE Blue Pkwy; Stephen Hill, KC Customs Sign, applicant

B. TMP-3692 Application #PL2025-155 - FINAL PLAT - Retreat at Bailey Farms, 2nd plat, Lots 135 thru 144, 149 thru 176, & Tracts C and D; Summit Homes, applicant

C. TMP-3693 Application #PL2025-168 - FINAL PLAT - Cornerstone at Bailey Farms, 2nd Plat, Lots 177 thru 195, 233 thru 251, & Tracts E and F; Summit Homes, applicant

D. 2026-7674 Approval of the May 14, 2026, Planning Commission Action Letter

6. **Presentation**

Engineering Manager Sue Pyles gave a presentation on Stormwater Systems.

A. 2026-7675 From Runoff to Treatment: Understanding Stormwater Systems in Development

7. **Roundtable**

Assistant Director of Plan Services C. Shannon McGuire gave a tour of the City's updated website.

8. Adjournment

Their being no further business, Chairperson Arth adjourned the meeting at 5:31pm.

For your convenience, Planning Commission agendas, as well as videos of Planning Commission meetings, may be viewed on the City's Legislative Information Center website at "lsmo.legistar.com"

Packet Information

File #: 2026-7695, **Version:** 1

Public Hearing: Application #PL2026-035 - REZONING from PI, PO, and RP-4 to CP-2, and PRELIMINARY DEVELOPMENT PLAN - Dillon's Grocery Store, fuel kiosk with canopy, and retail space, located southwest of the NE Tudor Rd. and NE Douglas St. intersection; Tim Goyette, Phillips Edison & Company, applicant

Issue/Request:
The applicant requests approval of a rezoning from PI (Planned Industrial), RP-4 (Planned Apartment Residential), and PO (Planned Office) to CP-2 (Planned Community Commercial on 21.61 acres. Also proposed is a Preliminary Development Plan on 15.71 acres, encompassing Lots 1 and 4, to allow for the development of a grocery store, retail store, fuel kiosk, and fuel pumps. The fuel kiosk is approximately 240-sf. and allows for a fuel station attendant but is not proposed to be a convenience store. The remaining 5.8 acres, Lots 2, 3, and 5, are shown as conceptual and will require a Preliminary and Final Development Plan at the time of development.

The applicant is requesting modifications to the commercial building design requirements, maximum light pole height, and the landscaping buffer requirements. Analysis is provided in the staff letter.

Proposed Planning Commission Motion:
I move to recommend approval of Application #PL2026-035 - REZONING from PI, PO, and RP-4 to CP-2, and PRELIMINARY DEVELOPMENT PLAN - Dillon's Grocery Store, fuel kiosk with canopy, and retail space, located southwest of the NE Tudor Rd. and NE Douglas St. intersection; Tim Goyette, Phillips Edison & Company, applicant

Tim Goyette, Applicant Representative
Adair Bright, AICP, Senior Planner

Recommendation: With the conditions of approval below, the application meets the goals of the Ignite! Comprehensive plan, the requirements of the UDO, and the Design and Construction Manual (DCM).

1. The development shall occur in accordance with the Preliminary Development Plan with a revision date of May 26, 2026.
2. A modification shall be granted to UDO Sec. 8.050.B.4.i.i allow for the following relief to the fenestration within the pedestrian view zone requirement:
    a. The western façade shall be exempt from the requirement.
    b. The eastern façade shall contain no less than 31% of clear glass within the pedestrian view zone.
3. A modification shall be granted to UDO Sec. 8.080.B to allow for building articulations as submitted in the Preliminary Development Plan with a revision date of May 26, 2026.
4. A modification shall be granted to UDO Sec. 8.250.D.1 to allow for the light poles to be 28’ tall from grade inclusive of the concrete base.
5. A modification shall be granted to UDO Sec. 8.900.A to allow the proposed grade in lieu of installing a

masonry wall, vinyl fence, or berm along the southwestern portion of the property adjacent to the AG zoning along with required landscaping.

6. The western façade shall comply with all applicable requirements of Section 8.080.B. Specifically, the façade shall incorporate no fewer than three (3) different Class 1 or Class 2 building materials, with those materials collectively comprising at least fifty percent (50%) of the primary façade area.
7. Road improvements shall be constructed as stated in the Transportation Impact Analysis conducted by staff dated May 26, 2026.

Committee Recommendation: Planning Commission recommendation pending.

LEE'S SUMMIT
MISSOURI

Development Services Department

Development Services Staff Report

File Number	PL2026-035
File Name	Rezoning & Preliminary Development Plan for Dillon's
Applicant	Phillips Edison & Company
Property Address	917 and 807 NW Main St. 716, 718, 830, 840 and 900 NE Douglas St. Parcel #52-900-04-17-00-0-00-000 Parcel #52-900-04-18-00-0-00-000 Parcel #52-900-04-25-00-0-00-000
Planning Commission Date	June 11, 2026
Heard by	Planning Commission and City Council
Analyst	Adair Bright, AICP, Senior Planner

Public Notification

Pre-application held: October 7, 2025
Neighborhood meeting conducted: March 5, 2026
Newspaper notification published on: May 23, 2026
Radius notices mailed to properties within 300 feet on: May 22, 2026
Site posted notice on: May 21, 2026

Table of Contents

1. Project Data and Facts 2
2. Land Use 5
3. Project Proposal 7
4. Unified Development Ordinance (UDO) 8
5. Comprehensive Plan 9
6. Analysis 10
7. Recommended Conditions of Approval 15

Attachments

Transportation Impact Analysis prepared by Erin Ralovo, PE, PTOE, dated May 26, 2026 – 3 pages

Preliminary Development Plan and Elevations, revision date of May 26, 2026– 22 pages
Traffic Impact Study prepared by Traffic Engineering Consultants, Inc., dated April 2, 2026 – 228 pages
Stormwater Management Report prepared by Pickering Firm, Inc., and sealed on June 1, 2026 – 140 pages
Modification Request Letter, dated May 21, 2026 – 6 pages
Neighborhood Meeting Minutes, dated March 6, 2026 – 10 pages
UDO Sec. 2.260, Rezoning, Preliminary Development Plan, & Conceptual Plan Review Criteria
Location Map

1. Project Data and Facts

Project Data	
Applicant/Status	Phillips Edison & Company / Developer
Applicant's Representative	Tim Goyette
Location of Property	917 and 807 NW Main St. 716, 718, 830, 840 and 900 NE Douglas St. Parcel #52-900-04-17-00-0-00-000 Parcel #52-900-04-18-00-0-00-000 Parcel #52-900-04-25-00-0-00-000
Size of Property	12.91 acres (562,359.6-sf.) – Lot 1 2.13 acres (92,782.8-sf.) – Lot 2 1.21 acres (52,707.6-sf.) – Lot 3 0.14 acres (6,098.4-sf.) – Lot 4 2.46 acres (107,157.6-sf.) – Lot 5 1.21 acres (52,707.6-sf.) – Tract A 1.55 acres (67,518-sf.) – Tract B **± 21.61 acres total (941,331.6-sf.)**
Number of Lots	5 lots & 2 tracts
Building Area	100,229-sf. – Lot 1 (grocery store & fuel kiosk) 8,662-sf. – Lot 2 (conceptual buildings) 5,070-sf. – Lot 3 (conceptual building) 6,000-sf. – Lot 4 (retail store) 10,140-sf. – Lot 5 (conceptual buildings) **130,101-sf. total**
Floor Area Ratio (FAR)	0.17 – Lot 1 (grocery store & fuel kiosk) 0.09 – Lot 2 (conceptual buildings) 0.09 – Lot 3 (conceptual building) 0.98 – Lot 4 (retail store) 0.09 – Lot 5 (future buildings) **0.12 total**
Existing Zoning	PI (Planned Industrial)

	RP-4 (Planned Apartment Residential) PO (Planned Office)
Proposed Zoning	CP-2 (Planned Community Commercial)
Comprehensive Plan Designation	Residential 3 & Mixed Use
Procedure	The Planning Commission makes a recommendation to the City Council on the proposed rezoning and preliminary development plan. The City Council takes final action on the rezoning and preliminary development plan in the form of an ordinance. ***Duration of Validity:*** Rezoning approval by the City Council shall be valid upon approval and has no expiration. Preliminary development plan approval by the City Council shall not be valid for a period longer than twenty-four (24) months from the date of such approval, unless within such period a final development plan application is submitted. The City Council may grant one extension not exceeding twelve (12) months upon written request.

Current Land Use
The subject 21.61-acre property is currently comprised of nine (9) parcels, one of which is developed with two (2) single-family houses while the remaining eight (8) are vacant undeveloped areas. The existing houses are proposed to be demolished as part of this application. The properties have frontage along NE Douglas St., NW Main St., and NW Commerce Dr.

Description of Applicant's Request

The applicant requests approval of a rezoning from PI (Planned Industrial), RP-4 (Planned Apartment Residential), and PO (Planned Office) to CP-2 (Planned Community Commercial on 21.61 acres. Also proposed is a Preliminary Development Plan on 15.71 acres, encompassing Lots 1 and 4, to allow for the development of a grocery store, retail store, fuel kiosk, and fuel pumps. The fuel kiosk is approximately 240-sf. and allows for a fuel station attendant but is not proposed to be a convenience store. The remaining 5.8 acres, Lots 2, 3, and 5, are shown as conceptual and will require a Preliminary and Final Development Plan at the time of development.

The applicant is requesting modifications to the commercial building design requirements, maximum light pole height, and the landscaping buffer requirements. Analysis is provided later in the staff letter.

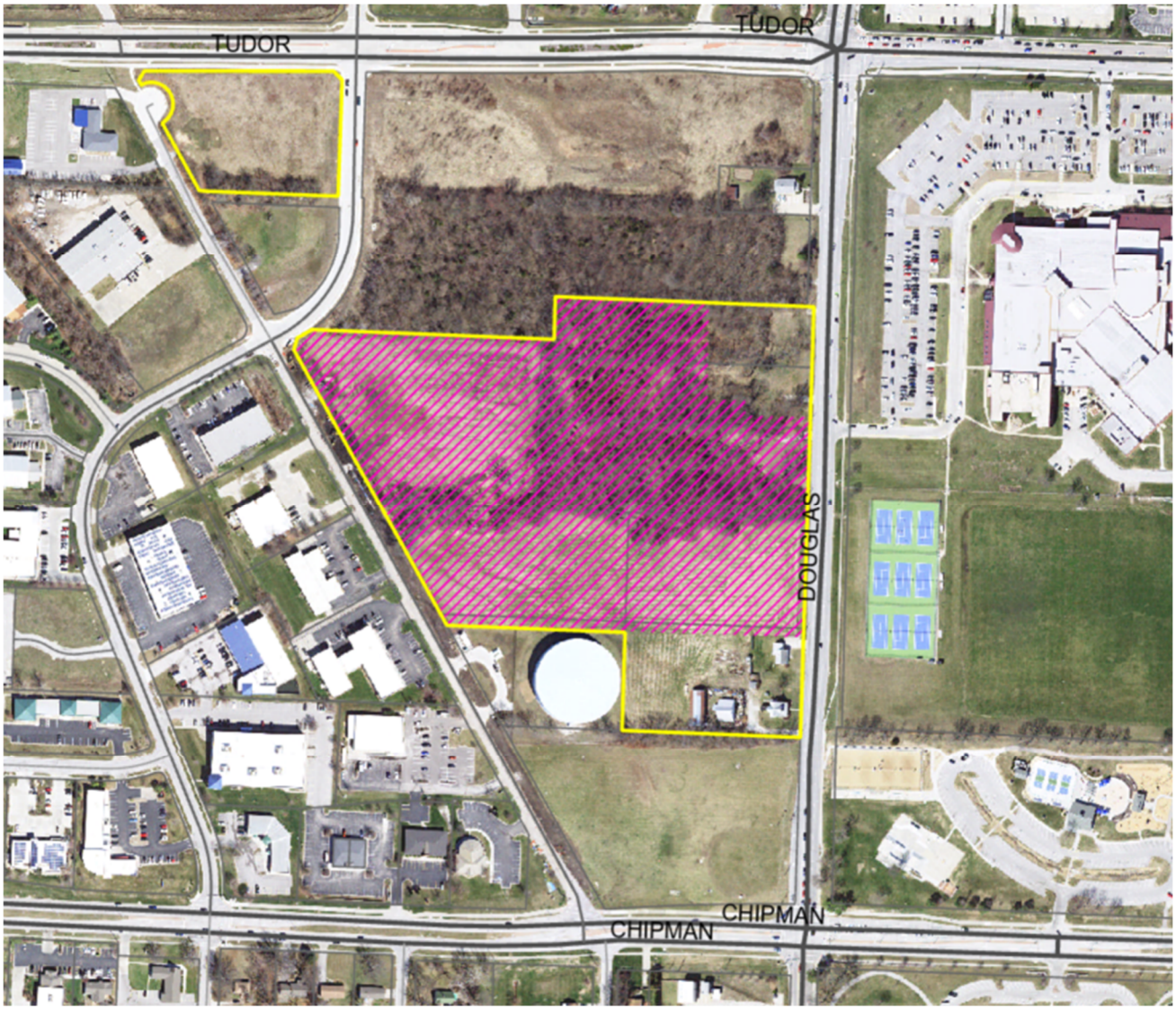


Figure 1 – Preliminary Development Plan area (shown with pink hatching); Rezoning Boundary (shown with yellow outline).

2. Land Use

Description and Character of Surrounding Area

The subject property is located approximately halfway between NE Chipman Road and NE Tudor Road with frontage on both NE Douglas Street and NW Main Street. The property to the north contains multi-family residential apartments (currently developing) and the property to the south consists of two parcels, one containing a water tower and the other containing an underground water storage tank. Both properties to the south are owned and maintained by the City. Across SE Douglas Street, to the east, is Lee's Summit High School, and across NW Main Street, to the west, are office and commercial pad sites.

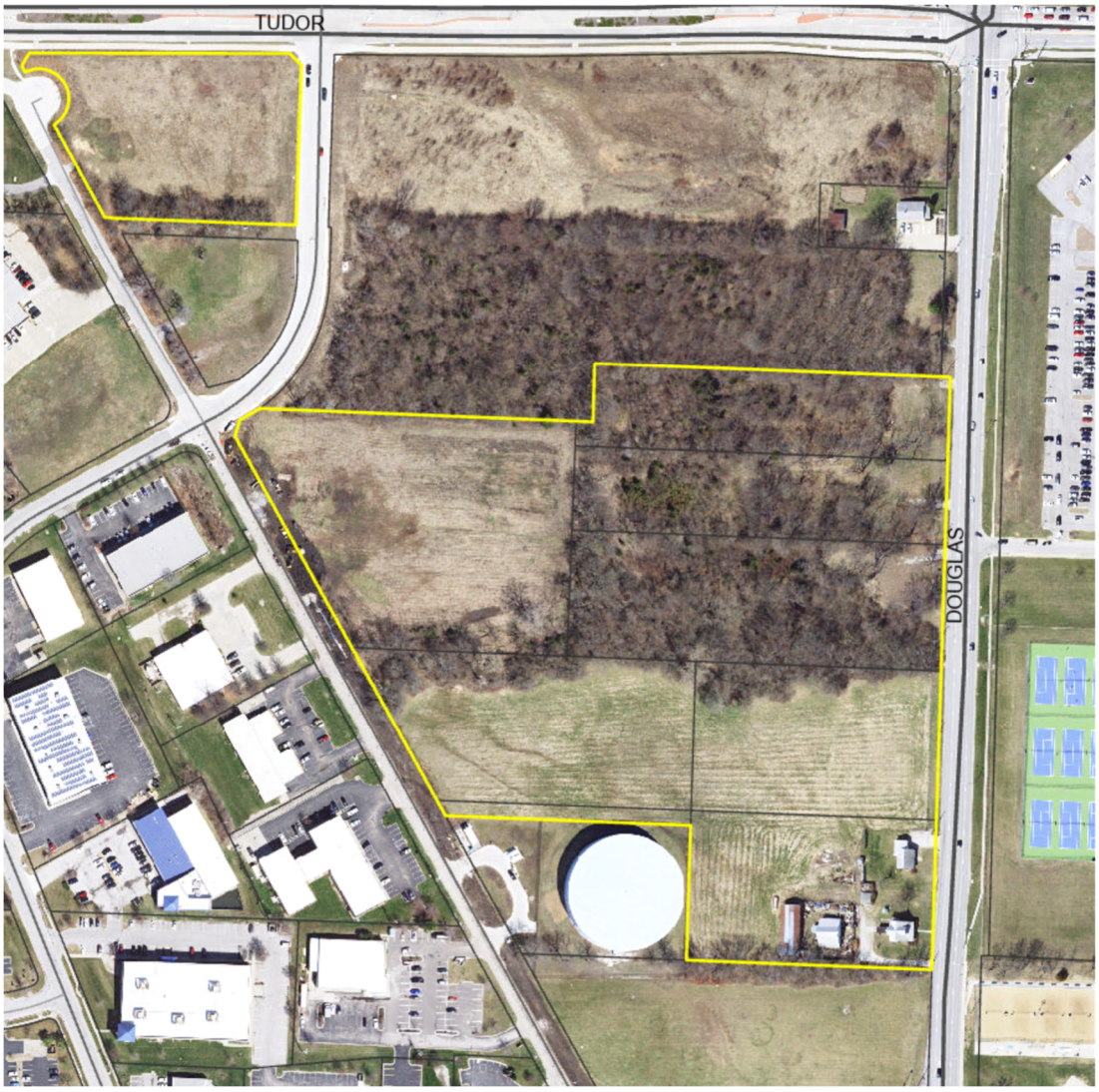


Figure 2 – Aerial map of the surrounding property

Adjacent Land Uses and Zoning

North:	Dwelling, Multi-Family (Apartment) / RP-4 (Planned Apartment Residential)
South:	Water Supply or Storage Facility / PO (Planned Office) and AG (Agricultural)

East (across NE Douglas St.):	School / R-1 (Single-Family Residential)
West (across NW Main St.):	General Office and Commercial / PI (Planned Industrial)

Site Characteristics

The subject 21.61-acre property is currently comprised of nine (9) parcels, one of which is developed with two single-family homes while the remaining eight (8) are vacant undeveloped areas. The properties have frontage along NE Douglas St., NW Main St., and NW Commerce Dr. The site with the subject proposed preliminary development plan is located approximately halfway between NE Chipman Road and NE Tudor Rd. The site is relatively unremarkable and does not contain any notable geographic or landscape features.

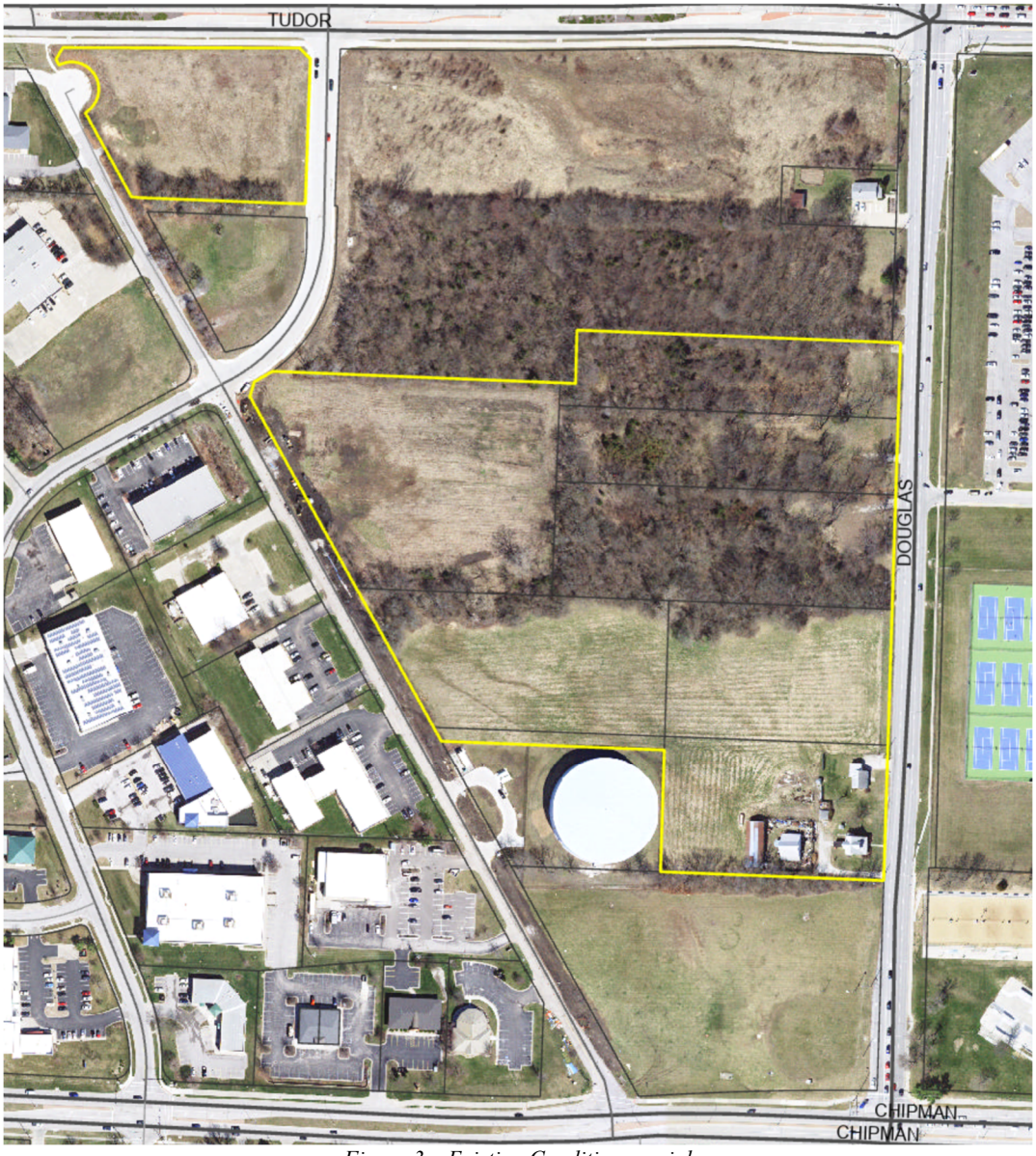


Figure 3 – Existing Conditions aerial

Special Considerations
None

3. Project Proposal

Parking

Proposed		Required	
Total parking spaces:	434	Total parking spaces required:	423
Accessible spaces provided:	13	Accessible spaces required:	9
Parking Reduction requested?	No	Off-site Parking requested?	No

Building Setbacks (Perimeter)

Yard	Required Minimum (CP-2)	Proposed
Front[1]	15’	72’ (along NE Douglas St.); 152’ (along NW Main St.)
Side[1]	10’	103’ (north) 130’ (south)

[1] – Under the UDO, each street frontage is considered to be a front property line. The remaining interior lot lines are considered to be side property lines.

Parking Setbacks (Perimeter)

Yard	Required Minimum	Proposed
Front	20’	24’ (along NE Douglas St.); 83’ (along NW Main St.)
Side	20’ (north) 6’ (south)	28’ (north) 18’ (south)

Structure(s) Design

Number and Proposed Use of Building
2 – Lot 1 (grocery store and fuel kiosk/pumps) 2 – Lot 2 (conceptual buildings) 1 – Lot 3 (conceptual building) 1 – Lot 4 (retail store) 2 – Lot 5 (conceptual buildings)
Building Height
37’ 8” – Lot 1 (grocery store) 13’ 0” – Lot 1 (fuel kiosk) 19’ 0” – Lot 1 (gas canopy) TBD – Lot 2 (conceptual buildings) TBD – Lot 3 (conceptual building)

25’ 4” – Lot 4 (retail store) TBD – Lot 5 (conceptual buildings)
Number of Stories
1 – Lot 1 (grocery store) 1 – Lot 1 (fuel kiosk) 1 – Lot 1 (gas canopy) TBD – Lot 2 (conceptual buildings) TBD – Lot 3 (conceptual building) 1 – Lot 4 (retail store) TBD – Lot 5 (conceptual buildings)

Architecture & Building Design

Building Type	Materials	Roofing
Commercial	Architectural Metal Panels (Class 1); Clear Glass (Class 1); Ground Face CMU (Class 2); Split Face CMU (Class 3); Patterned (Combed) Face CMU (Class 3)	PVC Membrane Roofing System (Class 3)

The applicant is requesting modifications to the architecture and building design requirements as detailed later in the staff report. However, the proposed design does comply with the UDO in regard to front entrance features and roofing material requirements.

4. Unified Development Ordinance (UDO)

Section	Description
2.240, 2.250, 2.260	Rezoning
2.300-2.340	Preliminary Development Plans
2.320	Modifications
4.190	CP-2 (Planned Community Commercial District)
8.050	Architecture & Building Design Standards
8.250	Lighting Standards
8.890	Landscaping (Minimum Requirements)

Neighborhood Meeting
The applicant hosted a neighborhood meeting on March 5, 2026. Eleven (11) members of the public attended. Discussion topics included the following: • Road improvements and traffic; and, • Site access Staff has not received any comments, emails, or phone calls in favor or in opposition to the project.

5. Comprehensive Plan

Focus Areas	Goals, Objectives & Policies
Strong Neighborhoods & Housing Choice	Objective: Increase business activity by designing mutually supportive neighborhoods.
Resilient Economy	Objective: Diversity Lee's Summit economy. Objective: Increase business retention and grow business activity.

The proposed development supports two identified focus areas of the Comprehensive Plan, namely "Strong Neighborhoods & Housing Choice" and "Resilient Economy" along with the goal to develop non-residential uses along major corridors. The proposal complements the currently developing Evren Apartments, just to the north, and increases business activity. The development will serve the surrounding businesses and offer commercial services to new and existing residents and visitors to the area. The development will occupy property along two commercial frontages and be within proximity to two major collectors.

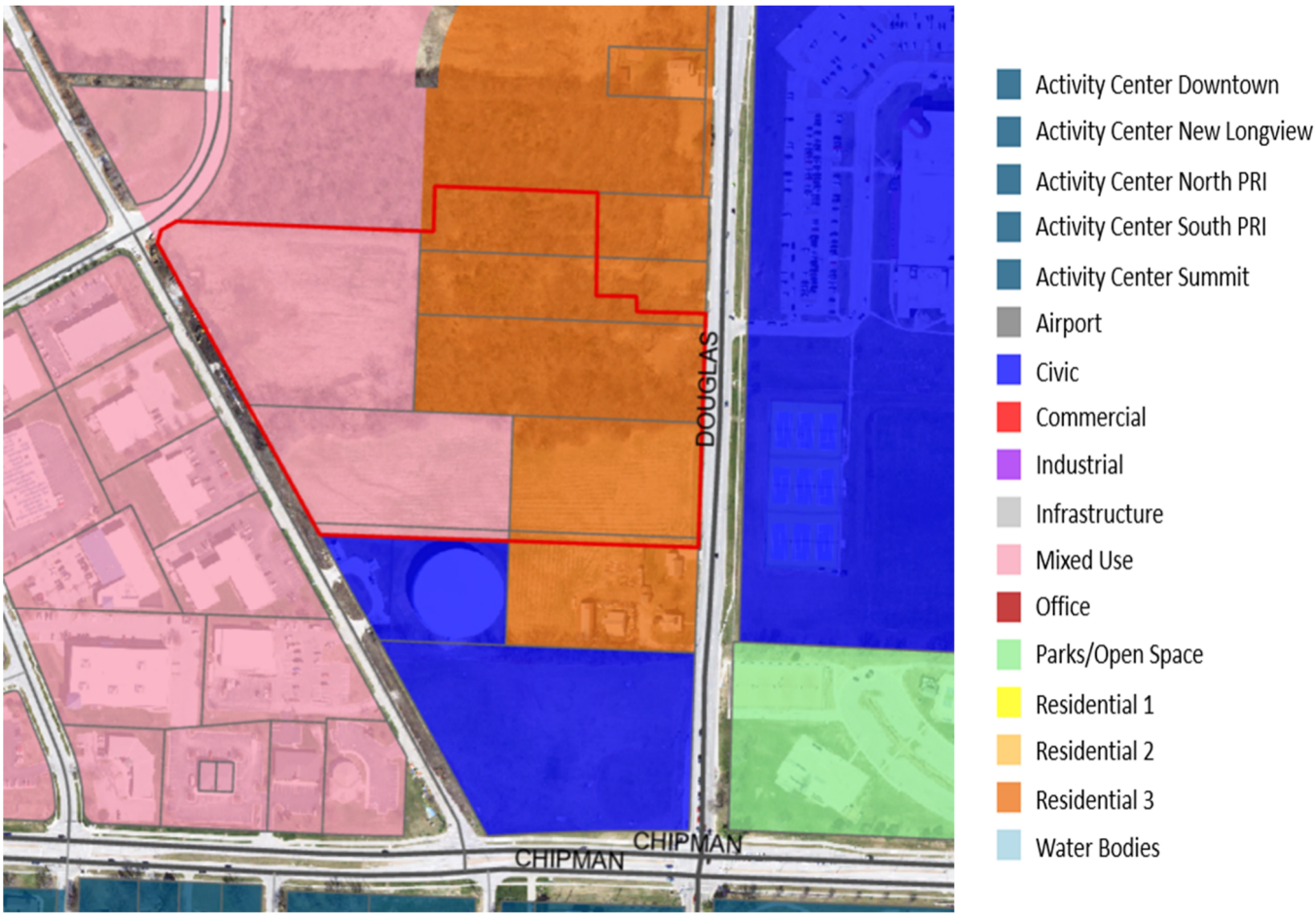


Figure 4 – Future Land Use Map & Legend

In addition to the focus areas and goals, the proposed development was reviewed against the Future Land Use Map, which serves as a guide for generalized land use categories. The map is not intended to be

prescriptive but rather functions as a planning tool to identify appropriate and complementary land use patterns.

When evaluating consistency with the Future Land Use Map, staff considers not only the specific land use designation, but also the overall intent of the map, the character of the surrounding area, and the relationship between existing and proposed uses. The subject property has two future land use designations: Residential 3 and Mixed Use. The Residential 3 category is intended to support mid-rise mixed-use and apartment developments that place more residents near commercial nodes. While the proposed development is not residential in nature and would require an amendment to the Future Land Use Map, there are existing apartments located to the north, and the proposed development would function as a commercial node serving those residents and the surrounding area.

The proposed development is also consistent with the Mixed Use designation, which allows for a combination of retail, office, and residential uses. Based on the surrounding development pattern and the broader intent of the Future Land Use Map, the proposed uses are appropriate for the area.

6. Analysis

Review Criteria

The application was reviewed in accordance with Section 2.260 of the Lee's Summit UDO, which establishes the approval criteria applicable to this request. This section of the UDO identifies 21 criteria for consideration when evaluating a REZ and PDP application. These criteria generally fall into the categories of consistency with the Comprehensive Plan, compatibility with surrounding development, impacts on public health, safety, and welfare, adequacy of public facilities and services, compliance with applicable development standards, and the effectiveness of site design measures intended to mitigate potential impacts.

For ease of reference, the complete list of applicable review criteria and approval standards contained in Section 2.260 of the UDO is included as an attachment to this staff report. Staff's findings and recommendations are based upon an evaluation of the application against these criteria and standards.

Background and History

- June 23, 1914 – The plat for *Summit Park* was recorded by the Jackson County Recorder of Deeds office by Instrument #1914I0096399.
- November 15, 1994 – City Council approved a City-initiated rezoning (Appl. #1994-042) of approximately 80 total acres from R-1 (Single-family) and C-B (Controlled Business) to G-OP (Planned General Office) and M-1P (Planned Light Industrial) by Ordinance No. 4065. The subject grocery store project site comprised a portion of the property rezoned from R-1 and C-B to G-OP.
- November 1, 2001 – The G-OP (Planned General Office) zoning district was converted to the PO (Planned Office) zoning district as part of a reclassification of all zoning districts upon the Unified Development Ordinance (UDO) going into effect.
- December 6, 2020 – The single-family house addresses at 830 NE Douglas Street was demolished (PRDEM2020-2628).

- December 7, 2020 – The single-family house addressed at 840 NE Douglas Street was demolished (PRDEM2020-4203).
- December 7, 2020 – The single-family house addressed at 900 NE Douglas Street was demolished (PRDEM2020-4158).
- November 16, 2023 – The rezoning (PL2023-120) from PO (Planned Office) to RP-4 (Planned Apartment Residential) was approved for properties addressed at 830, 840, and 900 NE Douglas Street along with a Preliminary Development Plan for an apartment complex by Ord. No. 9780.
- December 4, 2023 – A Final Development Plan (PL2023-332) was submitted and later withdrawn by the applicant for the development of an apartment complex at 830, 840, and 900 NE Douglas Street. Submittal of the Final Development Plan locked in the approval of the Preliminary Development Plan (PL2023-120).

Compatibility

The subject property is located approximately halfway between NE Chipman Road and NE Tudor Road with frontage on both NE Douglas Street and NW Main Street. The surrounding area includes multi-family residential to the north, utility uses to the south (water storage facilities), and various office and commercial uses to the west. The proposed commercial uses are compatible with the existing higher intensity residential and will support the existing visitors and residents of the area.

From an architectural standpoint, although the applicant is requesting modifications, the proposed development is not expected to negatively affect the aesthetics of neighboring properties. The proposed building uses a combination of materials and roof articulations along with clear glass, CMU blocks, and architectural metal panels.

Figure 5 – East elevation (front entrance)

Only conceptual building elevations have been provided for the future phases on Lots 2, 3, and 5. As a result, those lots will require Preliminary Development Plan approval through separate applications. This will allow staff to conduct a comprehensive architectural and site design review based on the final building designs.

Future development applications for Lots 2, 3, and 5 will be processed through the Preliminary Development Plan process and will require public hearings at both Planning Commission and City Council for consideration prior to any final approvals.

Adverse Impacts

The proposed development is not expected to seriously injure the appropriate use of, or detrimentally affect, neighboring properties. The site is surrounded by existing commercial and higher-intensity residential uses, and the proposed development is generally consistent with the character and intensity of the surrounding area.

Furthermore, future development on Lots 2, 3, and 5 will require separate Preliminary Development Plan approvals and will return to the Planning Commission and City Council for review. This additional review process will provide opportunities to evaluate site design, architecture, and potential impacts as those phases move forward. The subject development is not expected to create excessive storm water runoff for the area. Onsite detention will be constructed on the western side of the project site.

Public Services

Development of the site will not impede the normal and orderly development and improvement of the surrounding property. The subject property is a vacant site with access to existing water across NE Douglas Street to the east and along NW Main Street to the west. Sanitary sewer will be extended from the existing public main along the northern property line down to the southernmost lot.

Road Improvements

The proposed development will have four (4) points of access with two (2) on NE Douglas Street, one (1) on NW Main Street, and one (1) on NW Commerce Drive. Access 1 will be a signalized intersection lined up with the existing Lee's Summit North access on NE Douglas Street. Access 2 will be a right-in-right-out located about 400-ft. south of access 1 on NE Douglas Street. Access 3 will be a full access on NW Main Street. Access 4 will also be a full access on NW Commerce Drive. The traffic impact study performed by Traffic Engineering Consultants, Inc., identifies several road improvements as follows:

- Signalization of the full access drive and the Lee's Summit North Driveway along NE Douglas Street.
- Addition of a northbound and southbound left turn lane at the signalized intersection on NE Douglas Street.
- Crosswalk installation at the signalized intersection for pedestrian connectivity across NE Douglas Street.
- Access restrictions shall be installed at Access 2 to restrict traffic movements to right-in-right-out only.

The following improvements have also been identified by Staff.

- Construct a 5-ft. wide sidewalk along the west side of NE Douglas Street to match the sidewalk to the north. The sidewalk shall extend along the entire frontage.
- Construct two southbound right turn lanes (150-ft. plus taper) on NE Douglas Street at Access 1 and Access 2.
- Construct a raised concrete median on NE Douglas Street at Access 2. The median shall be a minimum of 4-ft. wide and long enough to restrict left turn access both into and out of the drive.

The traffic improvements identified by staff and Traffic Engineering Consultants, Inc. have been determined to be necessary to accommodate the anticipated traffic generated by the proposed development and to maintain the safe and efficient operation of the surrounding transportation network. These improvements were identified through the traffic impact study and subsequent review by City staff and the City's traffic engineering consultant.

To ensure that the recommended improvements are implemented, a condition of approval has been included requiring the construction of the identified traffic improvements as part of the development. Compliance with this condition will be required prior to issuance of applicable permits or occupancy approvals, as determined by the City. The required improvements are intended to address site access, traffic circulation, roadway capacity, and overall transportation system performance associated with the proposed development.

Modification Requests

- The applicant has requested a modification to UDO Sec. 8.050.B.4.i.i – Application of windows and doors on commercial storefronts.
    - **Requirement –** Fenestrations with clear glass shall occupy no less than 50 percent of the pedestrian view zone. The pedestrian view zone is defined as the 8-foot-tall area of the subject building's primary façade(s) that is between two feet and ten feet above the adjacent sidewalk or ground level.
    - **Proposed –** The applicant is proposing the western façade be exempt from this requirement; therefore, containing zero percent of clear glass within the pedestrian view zone. They are also proposing the eastern façade only contains 31% of clear glass within the pedestrian view zone.
    - **Recommendation –** Staff is supportive of the requested modification. The "storefront" of the subject building is on the east side of the building which is where customers will be entering the facility. The applicant has provided clear glass to signify that being the public area and the internal layout of the grocery store limits the ability to supply additional glass. The intent is being met by highlighting the part of the building that is open and available to pedestrians.
- The applicant has requested a modification to UDO Sec. 8.080.B – Commercial Building Requirements, Major Façade Materials.
    - **Requirement –** Each primary façade shall have no less than 3 different Class 1 or 2 building materials together comprising at least ½ of the façade area.
    - **Proposed –** The applicant is proposing 1 Class 2 building material in two different colors to comprise 92% of the western primary façade.
    - **Recommendation –** Staff does not support the proposed modification. The intent of the material diversity requirement is to create visual interest, reduce the appearance of large uninterrupted wall planes, and enhance the architectural character of street-facing façades. While the applicant proposes two color variations of the same material, the overall material palette remains limited and does not provide the level of façade articulation or visual diversity contemplated by the standard.

      Additionally, the western façade is adjacent to a public street and will be highly visible to motorists, pedestrians, and visitors to the site. The applicant is also proposing a primary drive entrance oriented towards this street, making the façade a prominent architectural feature of the development. Given its visibility and role as a primary building frontage, staff believes a higher level of architectural treatment is warranted.

The proposed design does not satisfy the letter of the code, as it fails to provide the required number of qualifying materials. Furthermore, staff finds that the proposal does not meet the intent of the standard, as the use of a single material in multiple colors does not achieve a comparable level of architectural interest or building articulation. For these reasons, staff recommends denial of the requested modification.

- The applicant has requested a modification to UDO Sec. 8.080.B – Commercial Building Requirements, Wall Articulations.
    - **Requirement –** The primary façade shall have a wall articulation (as provided in Sec. 8.050) no less than once every 60 linear feet.
    - **Proposed –** The applicant is proposing an articulation no less than once every 130 linear feet on the west façade and no less than once every 181 linear feet on the east façade. The applicant has stated that the proposed articulations are more proportional to the proposed structure than the UDO requirement would be.
    - **Recommendation –** Staff is supportive of the proposed modification. The intent of the wall articulation is to provide visual relief opposed to a completely flat façade and the provided articulations provide that relief given the scale of the structure. On the eastern façade, they denote a visual hierarchy that showcases the pedestrian entrance along with the fenestrations. On the western façade, in addition to providing relief, they mask the dock doors and the more utilitarian side of the building.
- The applicant has requested a modification to UDO Sec. 8.250.D.1 – Parking Lot Lighting, Maximum Height.
    - **Requirement –** All light fixtures on properties within or adjoining residential uses and/or districts shall not exceed 15 feet in height within the perimeter area. The perimeter area shall be measured 100 feet from the property line closest to the residential use and/or district. Outside the perimeter area, the overall height may be increased to 20 feet, measured to the top of the fixture from grade.
    - **Proposed –** The applicant is proposing the parking lot light poles be 28 feet in height from grade inclusive of the concrete base.
    - **Recommendation –** Staff is supportive of the proposed modification. The plans show the proposed average finished grade approximately 7 feet lower than the average finished grade of the adjacent residential. Therefore, the perceived height of the light poles, from the adjacent residential, would be about 19 feet tall which is equivalent to the top of the 2nd floor of the apartments. Given the orientation of the apartment buildings, the light poles, if negatively impactful, would impact about four (4) units. However, the light pole height increase is not expected to negatively impact the nearby residents as the lights will utilize a flat lens, include cut-offs, be mounted at 90-degrees (horizontal to the ground), and will not exceed the maximum footcandle at the property line as allowed by the UDO.
- The applicant has requested a modification to UDO Sec. 8.900.A – High Impact Screening.
    - **Requirement –** A 100 percent opaque screen between land uses, which are dissimilar in character. When the proposed plan is considered to have a high impact on surrounding properties or the adjacent property is considered to have an adverse impact, both of the following shall be installed within the 20-foot buffer yard: (1) a six-foot high masonry wall, opaque vinyl fence, or three-foot high berm, (2) and low impact screening.

- **Proposed –** The applicant is proposing to utilize the proposed grade in lieu of installing a masonry wall, vinyl fence, or berm along the southwestern portion of the property adjacent to the AG zoning along with required landscaping.
- **Recommendation –** Staff is supportive of the proposed modification. The adjacent AG zoned property, to the south, generally falls to the west from an elevation of 1,048 to 1,026. The proposed finish grade of the site will be 1,030. Strict application of the code would result in a fence or berm which would not buffer or screen appropriately due to the grade change. Also, the AG zoned property is used for utilities, not an agricultural or residential use which negates the purpose of a high impact buffer. The proposal including the landscaping and the grading will sufficiently achieve the intent of the code to mitigate visual impacts.

Recommendation

With the conditions of approval below, the application meets the goals of the Ignite! Comprehensive plan, the requirements of the UDO, and the Design and Construction Manual (DCM).

7. Recommended Conditions of Approval

Site Specific

1. The development shall occur in accordance with the Preliminary Development Plan with a revision date of May 26, 2026.
2. A modification shall be granted to UDO Sec. 8.050.B.4.i.i allow for the following relief to the fenestration within the pedestrian view zone requirement:
    a. The western façade shall be exempt from the requirement.
    b. The eastern façade shall contain no less than 31% of clear glass within the pedestrian view zone.
3. A modification shall be granted to UDO Sec. 8.080.B to allow for building articulations as submitted in the Preliminary Development Plan with a revision date of May 26, 2026.
4. A modification shall be granted to UDO Sec. 8.250.D.1 to allow for the light poles to be 28’ tall from grade inclusive of the concrete base.
5. A modification shall be granted to UDO Sec. 8.900.A to allow the proposed grade in lieu of installing a masonry wall, vinyl fence, or berm along the southwestern portion of the property adjacent to the AG zoning along with required landscaping.
6. The western façade shall comply with all applicable requirements of Section 8.080.B. Specifically, the façade shall incorporate no fewer than three (3) different Class 1 or Class 2 building materials, with those materials collectively comprising at least fifty percent (50%) of the primary façade area.
7. Road improvements shall be constructed as stated in the Transportation Impact Analysis conducted by staff dated May 26, 2026.

Standard Conditions of Approval

1. All required engineering plans and studies, including water lines, sanitary sewers, storm drainage, streets and erosion and sediment control shall be submitted along with the final development plan. All public infrastructure must be substantially complete, prior to the issuance of any certificates of occupancy.
2. All Engineering Plan Review and Inspection Fees shall be paid prior to approval of the associated engineering plans and prior to the issuance of any site development permits or the start of

construction (excluding land disturbance permit).

3. A Land Disturbance Permit shall be obtained from the City if groundbreaking will take place prior to the issuance of a site development permit, building permit, or prior to the approval of the Final Development Plan / Engineering Plans.
4. All permanent off-site easements, in a form acceptable to the City, shall be executed and recorded with the Jackson County Recorder of Deeds prior to the issuance of a Certificate of Substantial Completion or approval of the final plat. A certified copy shall be submitted to the City for verification.
5. Certain aspects of the development plan will be further reviewed during the Final Development Plan phase of the project. This includes detailed aspects of the design to help ensure that the plan meets the design criteria and specifications contained in the Design and Construction Manual.
6. Private parking lots shall follow Article 8 of the Unified Development Ordinance for pavement thickness and base requirements.
7. Any cut and / or fill operations, which cause public infrastructure to exceed the maximum / minimum depths of cover shall be mitigated by relocating the infrastructure vertically and / or horizontally to meet the specifications contained within the City's Design and Construction Manual.
8. Please be aware that any future repair work to public infrastructure (e.g., water main repair, sanitary sewer repair, storm sewer repair, etc.) within public easements will not necessarily include the repair of pavement, curbing, landscaping, or other private improvements which are located within the easement.
9. Water tap sizes will be evaluated at the time of the Final Development Plan.
10. Sanitary sewer alignment will be refined at the time of the Final Development Plan. Private and/or public easements may be required to connect to the existing public sanitary sewer main. Please note that 8-inch diameter pipe is the minimum size for a public sanitary sewer line.
11. All issues pertaining to life safety and property protection from the hazards of fire, explosion, or other dangerous conditions in new and existing buildings, structures, and premises, as well as the safety of firefighters and emergency responders during emergency operations, shall be in accordance with the International Fire Code (IFC) adopted by the City at the time of building permit application submittal. This shall include compliance with either the 2018 IFC or the 2024 IFC, whichever code edition is in effect at the time the building plans are submitted for review.
12. The installation of underground fuel storage tanks (UST's) shall comply with the 2018 International Fire Code and the requirements of the Missouri Department of Natural Resources.
13. A Hazardous materials permit is required for the using, dispensing, transporting, handling, and/or storing of extremely hazardous substances. "Extremely Hazardous Substances (EHS) Facilities" are defined as facilities subject to the provisions of Superfund Amendments and Reauthorization Act of 1986 (SARA TITLE III), Section 302, for storing, dispensing, using, or handling of listed chemicals in excess of their threshold planning quantities (TPQ). See amended Section 5001.4 of the 2018 International Fire Code.
    a. A permit is required for the sale of gasoline or diesel exceeding the Threshold Planning Quantity (EPA), and for the retail exchange of propane.

LEE'S SUMMIT
MISSOURI

DEVELOPMENT REVIEW FORM
TRANSPORTATION IMPACT

DATE:	May 26, 2026	**CONDUCTED BY:**	Erin Ralovo, PE, PTOE
SUBMITTAL DATE:	February 3, 2026	**PHONE:**	816.969.1800
APPLICATION #:	PL2026035	**EMAIL:**	Erin.Ralovo@cityofls.net
PROJECT NAME:	DILLON'S GROCERY STORE	**PROJECT TYPE:**	Prel Dev Plan (PDP)

SURROUNDING ENVIRONMENT *(Streets, Developments)*

The proposed development is generally located on the west side of NE Douglas Street south of NE Tudor Road. It is generally surrounded by zoned R4 property to the north, Planned Industrial to the west, AG to the south, and Lee's Summit North High School to the east on the east side of NE Douglas Street. A secondary pad site is located on the southwest corner of NW Tudor Road and NW Commerce Drive. This site is flanked by Industrial to the north and south, apartments to the east and the Lee Summit Police Department to the Northeast.

ALLOWABLE ACCESS

The proposed development has four points of access with three being full access and one partial access. Access #1 will be a signalized intersection lining up with the existing Lee's Summit North drive on the east side of Douglas. Access #2 will be a Right-In-Right-Out (RIRO) access located approximately 400 feet to the south of Access #1 on NE Douglas Street. Access #3 will be a full access on NW Main Street, approximately 350 feet south of Commerce Drive. Access #4 will be on Commerce Drive and will serve the secondary pad site.

EXISTING STREET CHARACTERISTICS *(Lanes, Speed limits, Sight Distance, Medians)*

Douglas Street is a four-lane major arterial with a 45-mph speed limit. Douglas is undivided south of Tudor. Douglas has curb and gutter and sidewalk on the east side. Sidewalk on the west side of Douglas will be built with the Evren apartment project just north of this development.
Tudor Road is a four-lane Minor Arterial and has curb and gutter, sidewalk on the north side, and shared-use path on the south side. The speed limit on Tudor Road is 35 mph.

ACCESS MANAGEMENT CODE COMPLIANCE? **YES** ☒ **NO** ☐

All intersection spacing, turn lanes, and other applicable criteria required by the Access Management Code have been satisfied as shown on the development plans.

TRIP GENERATION

PHASE 1: Time Period	Total	In	Out
Weekday	13,723	6,861	6,862
A.M. Peak Hour	607	337	270
P.M. Peak Hour	1,321	661	660

PHASE 2: Time Period	Total	In	Out
Weekday	1,525	762	763
A.M. Peak Hour	110	61	49
P.M. Peak Hour	176	88	88

Trips were generated using ITE Codes in the ITE Trip Generation Manual 12th Edition using ITE codes 850 - Supermarket, 822 - Strip Retail Plaza, and 944 - Gas Station for Phase 1 and code 822 - Strip Retail Plaza for Phase 2.

TRANSPORTATION IMPACT STUDY REQUIRED? **YES** ☒ **NO** ☐

The proposed development likely will generate more than 100 peak hour trips, a minimum condition in the Access Management Code for Traffic Impact Studies. A Traffic Impact Study was prepared by Traffic Engineering Consultants dated April 2, 2026, to assess the traffic impacts of the development on the existing infrastructure and provide public improvement recommendations for the subject development.

Data collection showed that the AM peak hour occurred from 7:00 to 8:00 am and PM peak hour occurred from 4:15 to 5:15 pm. The development is projected to be completed in 2029 and 2027 was selected as the design period for Phase 1 full build-out analysis and 2029 as the design period for Phase 2 full build-out analysis. An average annual growth rate of 2.0% was used to adjust the 2025 traffic volumes.

The project is divided into two phases in the study, but plan sheets show three phases. Phase 1 includes the grocery store, gas station and the pad sites along Douglas. Phase 2 is a separate parcel that sits between Commerce and Main.

A traffic signal warrant analysis was completed for the intersection of Douglas Street and High School Entrance/Access #1. Turning movement counts, pedestrian activity, and speed data were evaluated against the applicable warrants. For this development, the 8-hour warrant was most applicable. Based on these findings, installation of a traffic signal is warranted in the 2027 build condition and is expected to enhance both safety and operations at the intersection.

The study made the following recommendations for the development:

1. Signalization of the full access drive and the Lees Summit North driveway.
2. Addition of a northbound and southbound left turn lane at the full access driveway.
3. Crosswalk for pedestrian connectivity across Douglas.
4. Access restrictions shall be installed at Access #2 to restrict traffic movements to right-in and right-out only.

LIVABLE STREETS *(Resolution 10-17)* **COMPLIANT** ☒ **EXCEPTIONS** ☐

The proposed development will comply with all Livable Streets elements identified in the City's adopted Comprehensive Plan, associated Greenway Master Plan and Bicycle Transportation Plan attachments, and elements otherwise required by ordinances and standards, including but not

limited to sidewalk, landscaping, parking, and accessibility. No exceptions to the Livable Streets Policy adopted by Resolution 10-17 have been proposed.

RECOMMENDATION: **APPROVAL** ☒ **DENIAL** ☐ **N/A** ☐ **STIPULATIONS** ☒
Recommendations for Approval refer only to the transportation impact and do not constitute an endorsement from City Staff.

Staff recommends approval of the proposed development with the following transportation improvement stipulations.

1. Applicant shall construct a 5' sidewalk along the west side of NE Douglas Street to match the sidewalk to the north and to the property limits on the south.

2. Applicant shall install a traffic signal at Access #1/Lee's Summit North entrance prior to Phase 1 of development. Applicant shall construct a northbound left turn lane (200' plus taper) on Douglas Street into the development main drive.

3. Applicant shall construct a southbound left turn lane (200' plus taper) on Douglas Street into the high school drive. City will participate in cost of this turn lane construction unless the applicant is approved for incentives.

4. Applicant shall construct two southbound right turn lanes (150' plus taper) on Douglas Street at Access #1 (Main entrance) and Access #2 (RIRO).

5. Applicant shall construct a raised concrete median on Douglas Street at the RIRO drive. The median shall be a minimum of 4 feet wide and long enough to restrict left turn access either into or out of the drive.

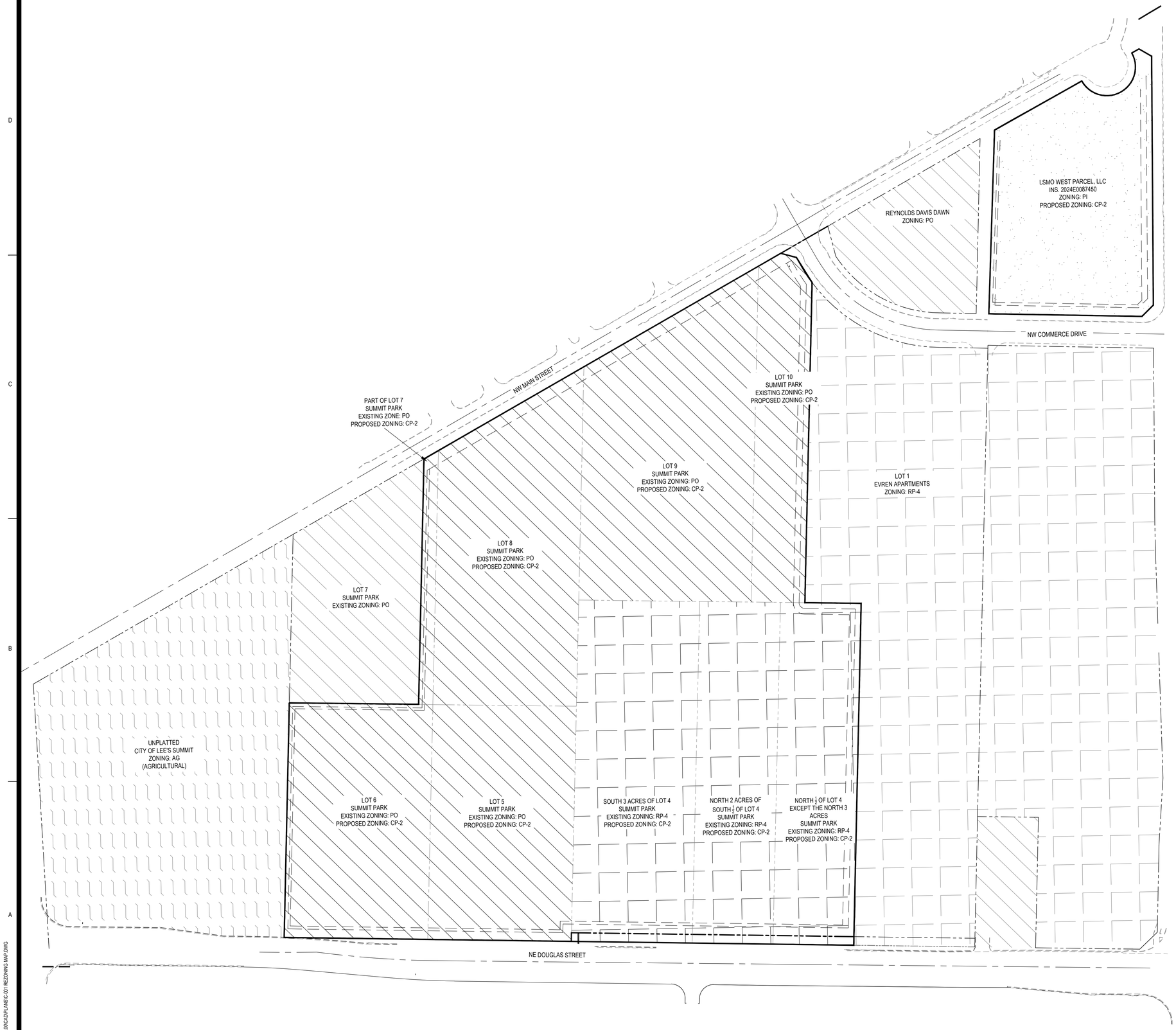
DILLONS

SUMMIT PARK, LOTS 4-10
NE DOUGLAS ST.
LEE'S SUMMIT, MO
PFI PROJECT NO. 27480
MAY 26, 2026

TABLE OF CONTENTS

Sheet Number	Sheet Title
C-000	COVER SHEET
C-001	REZONING MAP
C-002	PHASING PLAN
C-100	EXISTING CONDITIONS AND DEMOLITION PLAN
C-110	SITE PLAN
C-120	GRADING AND DRAINAGE PLAN
C-121	LIGHTING ELEVATION PLAN WEST
C-122	LIGHTING ELEVATION PLAN EAST
C-130	UTILITY PLAN
C-142	FINAL STABILIZATION PLAN
L1.0	LANDSCAPE PLAN
L1.1	LANDSCAPE PLAN
L1.2	LANDSCAPE PLAN
P-100	PHOTOMETRICS PLAN
P-101	PHOTOMETRIC DETAILS
P-102	PHOTOMETRIC DETAILS
	ARCHITECTURAL ELEVATIONS

SITE
Ne Mulberry St
Ne Cedar Dr
Ne Chestnut Cir
Ne Pilgrim Way
Ne Victoria Dr
Nw Capital Dr
Nw Victoria Dr
Nw Skyline Dr
Ne Sycamore St
Ne Green St
Ne Douglas St
Ne Tudor Rd
Ne Woodbury Dr
Ne Independence Ave
Ne English Manor Dr
Ne Swann Rd
Ne Chipman Rd
Nw Chipman Rd
Nw Watson Rd
Ne Maggie Ave
Ne Darwin St
Ne Columbus St
Ne Hamel Pl
Ne Orchard Dr
Ne Forest Ave
Ne Forest St
Ne Short St
Ne Short Ave
Ne Ash St
Ne Sharon Dr
Se Langsford Rd
Nw O Brien Rd
Nw Redwing Dr
Nw Lakeview Blvd
Ne Maple St
Ne 1st St
Se 2nd St
Se High St
Se 3rd St
Sw 2nd St
Ne Douglas St
Ne Olive St
Ne Central St
Ne Lynn St
Ne Fernwood Cir
Ne Ridgeview Dr
Ne Whitehead Dr
Ne Bryce Dr
Ne Independence Ave
Ne Gunnison Ave
Ne Balboa Ave
Ne Woodbury Ct
Ne Swann Ct
Ne Tudor Ct
Ne Mulberry Ct
Ne Thane Ct
Ne Dickens Ct
Ne Grand Cir
Ne Winston Dr
Ne Comstock Ct
Ne Woodbury Dr
Nw Douglas St
Nw Olive St
Nw Main St
Nw Hillcrest Ln
Nw Alderson Pl
Nw Hoon St
Sw Robin Rd
Sw Market St
Sw Green Ave
Sw Border St
Sw 4th St
Nw Douglas St
Nw Chipman Rd
Nw Douglas Rd
Nw Capital Dr
Nw Main St
Nw Hillcrest Ln
Nw Nightshade
Nw Meadowlark
Nw Hamblen Rd
Nw Douglas Rd
Nw Douglas Ct
Nw Conway Ct
Nw Conway Dr
Nw Douglas St
Nw Douglas Rd
Nw Douglas Ct



NORTH

0 40 80 160

1 INCH = 80 FEET

VICINITY MAP

SCALE: NTS

EXISTING ZONE LEGEND	
	PI (PLANNED INDUSTRIAL)
	PO (PLANNED OFFICE)
	RP-4 (PLANNED APARTMENT RESIDENTIAL)
	AG (AGRICULTURAL)

TITLE COMMITMENT DESCRIPTIONS:

COMMITMENT NUMBER: KCC252116
THE NORTH TWO ACRES OF THE SOUTH ½ OF LOT 4, SUMMIT PARK, A SUBDIVISION OF LAND IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, ACCORDING TO THE RECORDED PLAT THEREOF.
AND;
THE NORTH ½ OF LOT 4, EXCEPT THE NORTH 3 ACRES THEREOF, IN SUMMIT PARK, A SUBDIVISION IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, ACCORDING TO THE RECORDED PLAT THEREOF.

COMMITMENT NUMBER: KCC252117
ALL OF LOTS 5, 6, 8, AND LOT 7 EXCEPT THE SOUTH 225 FEET THEREOF IN SUMMIT PARK, A SUBDIVISION IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, AND SUBJECT TO EASEMENTS, RIGHTS OF WAY OF RECORD, AND EXCEPT THAT PART IN ROADS.

COMMITMENT NUMBER: KCC252118
LOT 9, AND THE SOUTH 1.373 ACRES OF 10, SUMMIT PARK, A SUBDIVISION IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, ACCORDING TO THE RECORDED PLAT THEREOF.

COMMITMENT NUMBER: KCC252119
THE SOUTH 3 ACRES OF THE SOUTH HALF OF LOT 4, SUMMIT PARK, A SUBDIVISION IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, MORE SPECIFICALLY DESCRIBED AS BEING ALL OF THE SOUTH 210.6 FEET OF LOT 4, SUMMIT PARK.

COMMITMENT NUMBER: KCC252463
THAT PART OF THE FOLLOWING LYING SOUTH OF NE TUDOR ROAD:
THE NORTH 25.5 ACRES OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4 LYING EAST OF MISSOURI PACIFIC RAILROAD RIGHT-OF-WAY IN SECTION 31, TOWNSHIP 48, RANGE 31, IN THE CITY OF LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, EXCEPT A TRACT DESCRIBED AS FOLLOWS:
ALL THAT PORTION OF THE NORTH 25.5 ACRES OF THE NORTHEAST 1/4 OF SOUTHWEST 1/4, LYING EAST OF MISSOURI-PACIFIC RAILROAD RIGHT OF WAY IN SECTION 31, TOWNSHIP 48, RANGE 31 DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHEAST CORNER OF THE NORTHEAST 1/4 OF SOUTHWEST 1/4 OF SECTION 31, TOWNSHIP 48, RANGE 31, IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI; THENCE SOUTH ALONG THE EAST LINE OF SAID ¼ 1/4 SECTION, A DISTANCE OF 914.5 FEET; THENCE WEST PARALLEL TO THE NORTH LINE OF SAID 1/4 1/4 SECTION, 411.0 FEET TO THE TRUE POINT OF BEGINNING OF THE TRACT HEREIN DESCRIBED, SAID TRUE POINT OF BEGINNING BEING IN THE WESTERLY LINE OF PUBLIC ROAD; THENCE NORTH 31 DEGREES 00 MINUTES WEST ALONG AND WITH THE WESTERLY LINE OF PUBLIC ROAD, A DISTANCE OF 267.0 FEET TO A POINT 688.79 FEET SOUTH OF THE NORTH LINE OF SAID NORTHEAST 1/4 OF SOUTHWEST 1/4 SECTION; THENCE WEST PARALLEL TO SAID NORTH LINE OF 1/4 1/4 SECTION, 731.4 FEET TO A POINT IN THE EASTERLY LINE OF MISSOURI-PACIFIC RAILROAD RIGHT OF WAY; THENCE SOUTHEASTERLY WITH SAID RAILROAD RIGHT OF WAY, ALONG A CURVE TO THE RIGHT (HAVING A RADIUS OF 3175.4 FEET), A DISTANCE OF 234.0 FEET TO A POINT 914.5 FEET SOUTH OF THE NORTH LINE OF SAID NORTHEAST 1/4 OF SOUTHWEST 1/4 SECTION: THENCE EAST ALONG THE SOUTH LINE OF 25.5 ACRES TRACT, 812.7 FEET TO THE TRUE POINT OF BEGINNING, AND EXCEPT THAT PART IN STREETS AND ROADS.

REVISIONS:

1		
2		
3		
4		
5		

PROJECT #: 27480
DATE: MAY 26, 2026
DRAWN BY: EJH
DESIGNER: JPM
CHECKED BY: MLB

Pickering
Pickering Firm, Inc.
Architecture • Engineering
Planning • Surveying
6363 Poplar Avenue, Suite 300
Memphis, TN 38119
901.726.0810

DILLONS
NE DOUGLAS ST.
LEE'S SUMMIT, MO

PHILLIPS EDISON & COMPANY

SEAL:

PRELIMINARY - NOT FOR CONSTRUCTION

SHEET NUMBER:

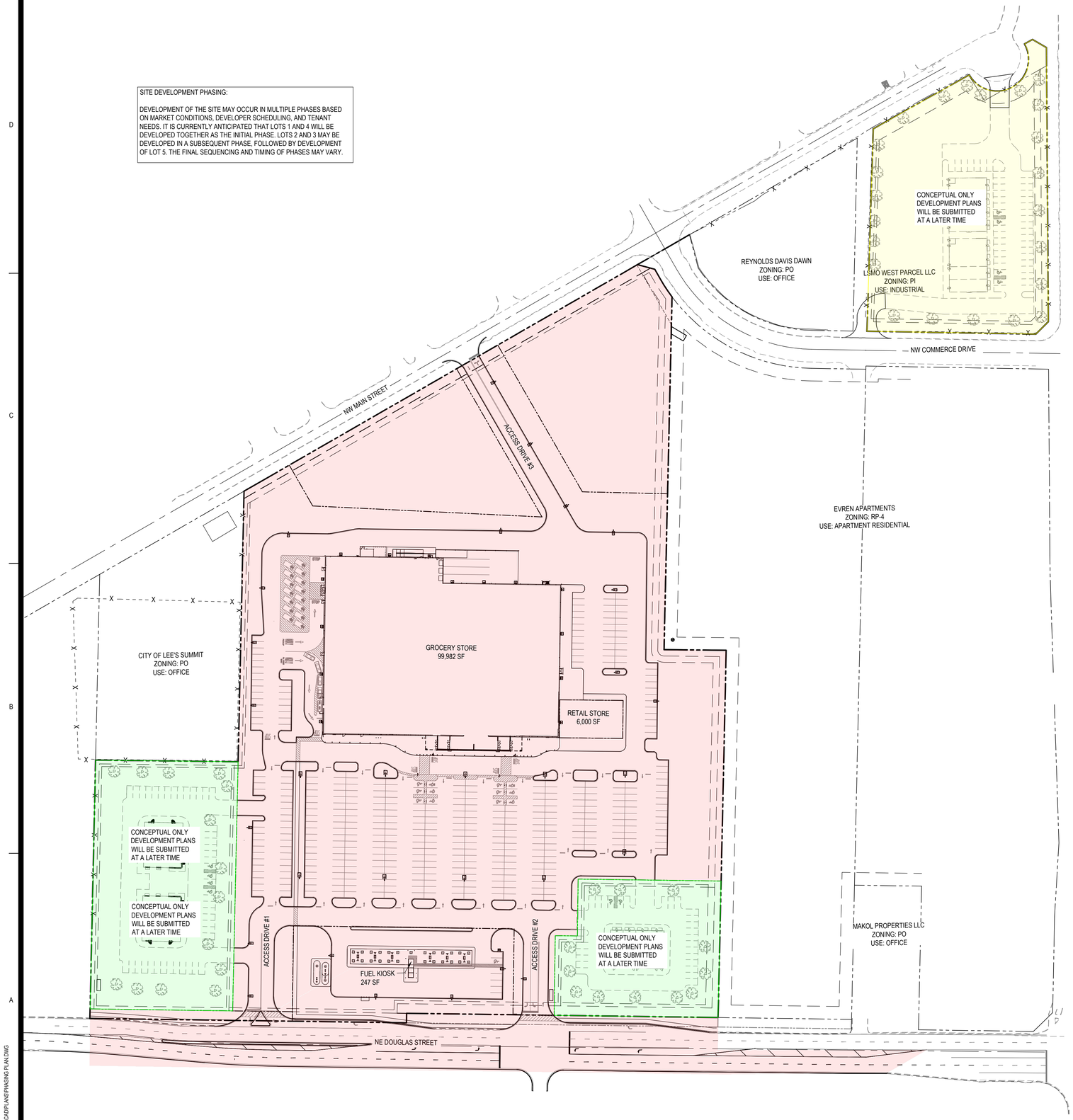
C-001

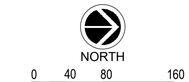
DESCRIPTION:
REZONING MAP

K:\27480.00\CAD\PLANS\C-001 REZONING MAP.DWG

SITE DEVELOPMENT PHASING:

DEVELOPMENT OF THE SITE MAY OCCUR IN MULTIPLE PHASES BASED ON MARKET CONDITIONS, DEVELOPER SCHEDULING, AND TENANT NEEDS. IT IS CURRENTLY ANTICIPATED THAT LOTS 1 AND 4 WILL BE DEVELOPED TOGETHER AS THE INITIAL PHASE. LOTS 2 AND 3 MAY BE DEVELOPED IN A SUBSEQUENT PHASE, FOLLOWED BY DEVELOPMENT OF LOT 5. THE FINAL SEQUENCING AND TIMING OF PHASES MAY VARY.





VICINITY MAP
SCALE: NTS

PHASING MAP LEGEND	
	PHASE 1
	PHASE 2
	PHASE 3

LEGAL DESCRIPTION: A TRACT OF LAND BEING PART OF LOTS 4, 5, 6, 7,8, 9 AND 10 SUMMIT PARK, A SUBDIVISION RECORDED JUNE 23RD, 1914 AS INSTRUMENT NUMBER 191410096399 IN BOOK 6, PAGE 38, LYING AND SITUATED IN THE SOUTH HALF OF SECTION 31, TOWNSHIP 38 NORTH, RANGE 31 WEST OF THE FIFTH PRINCIPAL MERIDIAN, IN THE CITY OF LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, SAID TRACT AS SURVEYED BY BRENT E. THOMPSON, PLS - 2006000161, WITH BHC, MO CLS 2006009875-F, BEING MORE PARTICULARLY DESCRIBED ON THIS 14TH DAY OF JANUARY, 2026 BY METES AND BOUNDS AS FOLLOWS:

(NOTE: FOR COURSE ORIENTATION THE BEARINGS IN THIS DESCRIPTION ARE BASED WEST LINE OF LOT 6, SUMMIT PARK HAVING A BEARING OF NORTH 01° 39' 49" EAST, REFERENCED TO THE MISSOURI STATE PLANE COORDINATE SYSTEM, WEST ZONE, NAD83.)

COMMENCING AT THE SOUTHWEST CORNER OF LOT 6, SUMMIT PARK, MONUMENTED BY A 5/8" REINFORCING ROD;

THENCE NORTH 01° 39' 49" EAST, 225.00 FEET, ON THE WEST LINE OF SAID LOT 6, TO THE POINT OF BEGINNING OF THE TRACT HEREIN DESCRIBED;

THENCE NORTH 87° 44' 22" WEST, 427.40 FEET, DEPARTING SAID WEST LINE, TO A POINT ON THE EASTERLY RIGHT-OF-WAY LINE OF MAIN STREET AS NOW ESTABLISHED, DESCRIBED BY ROADWAY PLAN SET FROM WALTER P MOORE & ASSOCIATES, INC. FOR CITY PROJECT NUMBER 714, DATED SEPTEMBER 24, 2021;

THENCE NORTH 28° 56' 49" WEST, 716.68 FEET, ON SAID EASTERLY RIGHT-OF-WAY LINE, TO ITS INTERSECTION WITH THE SOUTHEASTERLY RIGHT-OF-WAY LINE OF COMMERCE DRIVE AS ESTABLISHED BY RIGHT-OF-WAY DEED, RECORDED AS INSTRUMENT NUMBER 2018E0020780, DATED MARCH 14, 2018;

THENCE NORTH 16° 03' 11" EAST, 28.28 FEET, ON SAID SOUTHEASTERLY RIGHT-OF-WAY LINE;

THENCE NORTH 61° 03' 11" EAST, 18.63 FEET, CONTINUING ON SAID SOUTHEASTERLY RIGHT-OF-WAY LINE, TO THE BEGINNING OF A NON-TANGENT CURVE TO THE LEFT;

THENCE NORTHEASTERLY, CONTINUING ON SAID SOUTHEASTERLY RIGHT-OF-WAY LINE AND ON SAID CURVE TO THE LEFT, HAVING A RADIUS OF 280.00 FEET AND AN ARC LENGTH OF 32.73 FEET, WITH A CHORD BEARING OF NORTH 57° 42' 14" EAST AND A CHORD DISTANCE OF 32.71 FEET, TO ITS INTERSECTION WITH THE SOUTH LINE OF LOT 1, EVREN APARTMENTS, A SUBDIVISION RECORDED SEPTEMBER 5TH, 2025 AND FILED AS INSTRUMENT NUMBER 2025E0065852, IN BOOK I225, PAGE 85;

THENCE SOUTH 87° 41' 50" EAST, 557.34 FEET, ON THE SOUTH LINE OF SAID LOT 1;

THENCE NORTH 01° 39' 49" EAST, 98.11 FEET, CONTINUING ON SAID SOUTH LINE;

THENCE SOUTH 87° 44' 22" EAST, 364.47 FEET, CONTINUING ON SAID SOUTH LINE;

THENCE SOUTH 01° 47' 13" WEST, 225.65 FEET;

THENCE SOUTH 88° 12' 47" EAST, 89.76 FEET;

THENCE SOUTH 01° 47' 13" WEST, 34.94 FEET;

THENCE SOUTH 88° 12' 47" EAST, 125.85 FEET, TO ITS INTERSECTION WITH THE WEST RIGHT-OF-WAY LINE OF DOUGLAS STREET AS ESTABLISHED BY CONVEYANCE OF RIGHT-OF-WAY, RECORDED IN BOOK 555, PAGE 20, DATED OCTOBER 26, 1929;

THENCE SOUTH 01° 47' 13" WEST, 232.85 FEET, ON SAID WEST RIGHT-OF-WAY LINE, TO THE NORTH LINE OF LOT 5;

THENCE SOUTH 01° 47' 13" WEST, 274.71 FEET, PARALLEL WITH AND 15 FEET WEST OF SAID WEST RIGHT-OF-WAY LINE;

THENCE NORTH 87° 44' 22" WEST, 393.62 FEET, TO THE POINT OF BEGINNING OF THE TRACT HEREIN DESCRIBED, SAID TRACT CONTAINING 684,383 SQUARE FEET OR 15.7113 ACRES MORE OR LESS.

REVISIONS:

1		
2		
3		
4		
5		

PROJECT #: 27480
DATE: MAY 26, 2026
DRAWN BY: EJH
DESIGNER: JPM
CHECKED BY: MLB

Pickering
Pickering Firm, Inc.
Architecture • Engineering
Planning • Surveying
6363 Poplar Avenue, Suite 300
Memphis, TN 38119
901.726.0810

DILLONS
NE DOUGLAS ST.
LEE'S SUMMIT, MO

PHILLIPS EDISON & COMPANY

SEAL:

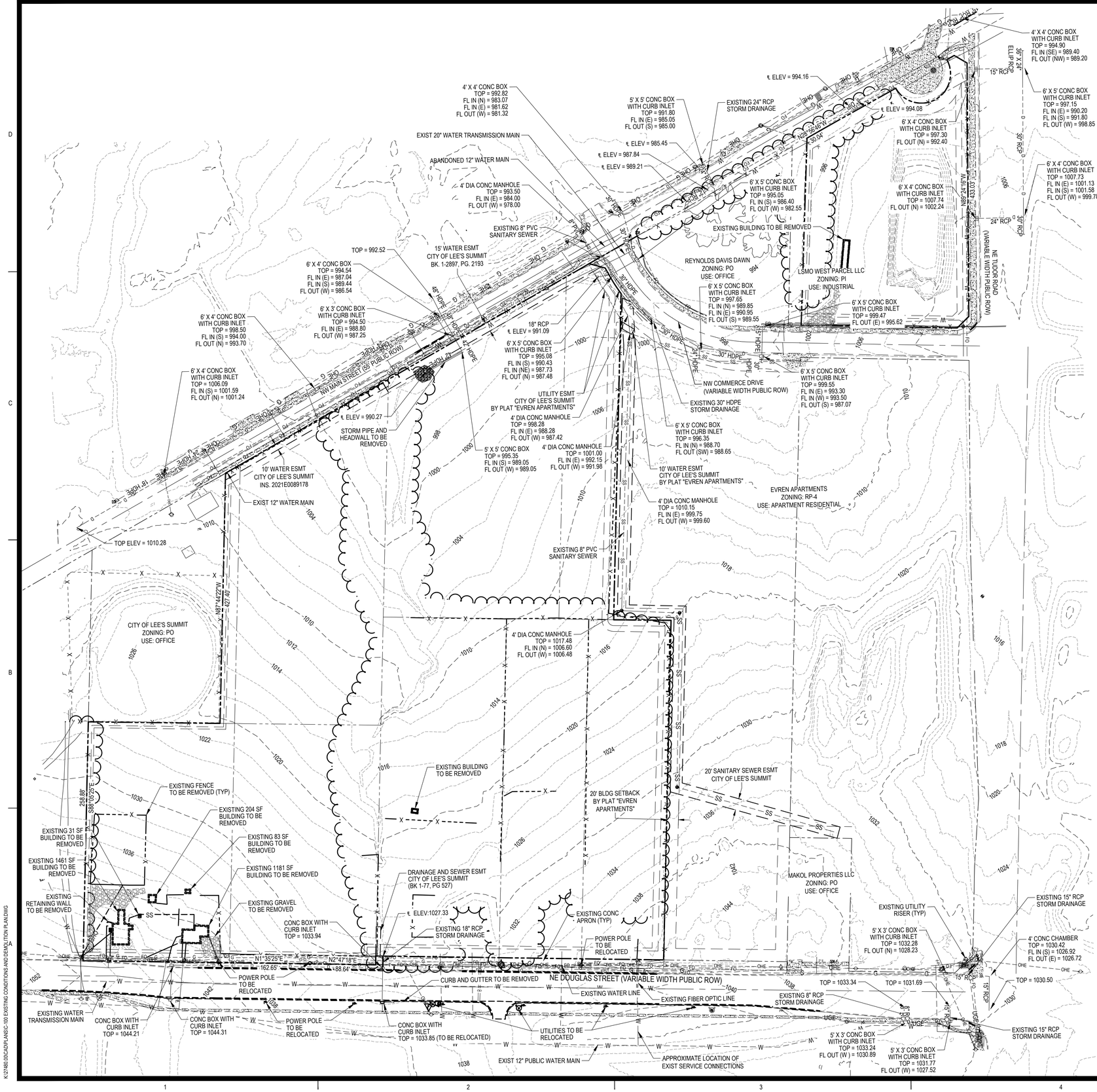
PRELIMINARY - NOT FOR CONSTRUCTION

SHEET NUMBER:

C-002

DESCRIPTION:
PHASING PLAN

K:\27480.00\CAD\PLANS\PHASING PLAN.DWG



NORTH

0 40 80 160

1 INCH = 80 FEET

VICINITY MAP
SCALE: NTS

PICKERING FIRM INCORPORATED UNDERGROUND UTILITIES DISCLAIMER:

INFORMATION REGARDING THE REPUTED PRESENCE, SIZE, CHARACTER AND LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES IS SHOWN HEREON. THERE IS NO CERTAINTY OF THE ACCURACY OF THIS INFORMATION AND IT SHALL BE CONSIDERED IN THAT LIGHT BY THOSE USING THIS DRAWING. THE LOCATION AND ARRANGEMENT OF UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES SHOWN HEREON MAY BE INACCURATE AND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES NOT SHOWN MAY BE ENCOUNTERED. THE OWNER AND THE OWNER'S EMPLOYEES, CONSULTANTS AND CONTRACTORS SHALL HEREBY DISTINCTLY UNDERSTAND THAT THE ENGINEER IS NOT RESPONSIBLE FOR THE CORRECTNESS OR SUFFICIENCY OF THIS INFORMATION REGARDING THE UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES SHOWN HEREON.

SITE TBM #1
ELEVATION: 1015.01
CHISELED SQUARE ON N FACE OF INLET

SITE TBM #2
ELEVATION: 1031.01
CHISELED SQUARE NW FACE PED SIGNAL

SITE TBM #3
ELEVATION:1042.57
CHISELED PLUS ON SW BOLT OF FIRE HYDRANT

SITE TBM #4
ELEVATION:1058.50
CHISELED SQUARE ON N FACE TL CONCRETE BASE

SITE TBM #5
ELEVATION:994.97
RAILROAD SPIKE IN E FACE OF UTILITY POLE

NOTE: BEFORE THE BEGINNING OF CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY THE SITE DATUM WITH ALL SITE TBMS AND IMMEDIATELY REPORT IN WRITING ANY DISCREPANCIES TO THE ENGINEER.

SPECIAL FLOOD HAZARD STATEMENT

ACCORDING TO THE FEMA/FIRM COMMUNITY PANEL NO. 29095C0417G, EFFECTIVE SEPTEMBER 29, 2006 THE PROPERTY SHOWN HEREON IS LOCATED IN A "X" NO SHADING (AREA OF MINIMAL FLOOD HAZARD) OR FLOOD ZONE "D" (AREAS IN WHICH FLOOD HAZARDS ARE UNDETERMINED, BUT POSSIBLE), AS SHOWN ON THE FLOOD INSURANCE RATE MAP (F.I.R.M.).

LINE LEGEND

- EXISTING STORM DRAINAGE
- EXISTING OVERHEAD TELEPHONE LINES
- EXISTING UNDERGROUND TELEPHONE LINES
- EXISTING OVERHEAD ELECTRIC LINES
- EXISTING UNDERGROUND ELECTRIC LINES
- EXISTING NATURAL GAS LINE
- EXISTING WATER LINE
- EXISTING SANITARY SEWER LINE
- EXISTING FENCE

SYMBOL LEGEND

- POWER POLE
- METAL TRAFFIC POLE
- LIGHT POLE
- ELECTRIC BOX
- ANCHOR GUY
- TELEPHONE PEDESTAL
- SANITARY SEWER MANHOLE
- GAS VALVE
- WATER VALVE
- WATER METER/WATER SHUTOFF
- FIRE HYDRANT
- CURB INLET
- DRAIN INLET
- STORM SEWER MANHOLE
- MONITOR WELL
- FOUND IRON PIN/NAIL/SPIKE
- SET IRON PIN/NAIL/SPIKE
- FOUND CONCRETE MONUMENT
- SIGN
- TREE, SHRUB, PLANTING
- FIRE DEPARTMENT CONNECTION
- MONITOR WELL

ABBREVIATIONS

EP	EDGE OF PAVEMENT
ROW	RIGHT OF WAY
℄	CENTERLINE
RCP	REINFORCED CONCRETE PIPE
CONC	CONCRETE
CMP	CORRUGATED METAL PIPE
ℙ	SUBJECT PROPERTY LINE
TC	TOP OF CURB
BC	BOTTOM OF CURB
POB	POINT OF BEGINNING
HCR	HANDICAP RAMP
	HANDICAP PARKING/ACCESS
SCO	SEWER CLEANOUT
INLET	INLET
HDWL	HEADWALL
PB	PLAT BOOK
PG	PAGE
C=	DEED CALL
C&M=	CALL & MEASURED DISTANCE
ESMT	EASEMENT

*NOTE: ALL SYMBOLS, ABBREVIATIONS, OR LINESTYLES DO NOT NECESSARILY APPEAR ON DRAWING(S). USE ONLY AS APPLICABLE.

REVISIONS:

1		
2		
3		
4		
5		

PROJECT #: 27480
DATE: MAY 26, 2026
DRAWN BY: EJH
DESIGNER: JPM
CHECKED BY: MLB

Pickering
Pickering Firm, Inc.
Architecture • Engineering
Planning • Surveying
6363 Poplar Avenue, Suite 300
Memphis, TN 38119
901.726.0810

DILLONS
NE DOUGLAS ST.
LEE'S SUMMIT, MO

PHILLIPS EDISON & COMPANY

SEAL:

PRELIMINARY - NOT FOR CONSTRUCTION

SHEET NUMBER:

C-100

DESCRIPTION:
EXISTING CONDITIONS AND DEMOLITION PLAN

K:\27480.00\CAD\PLANS\C-100 EXISTING CONDITIONS AND DEMOLITION PLAN.DWG

PLATTING NOTE:

LOT 4 IS INTENDED TO BE PLATTED AS THE BUILDING FOOTPRINT ONLY. SHARED ACCESS AND PARKING FOR THE SITE SHALL BE PROVIDED THROUGH A BLANKET ACCESS EASEMENT AND SHARED PARKING AGREEMENT TO BE ESTABLISHED WITH THE FINAL PLAT.

BUILDING AREA CHART

LOT 1 GROCERY STORE BUILDING:	99,982 SF
FUEL KIOSK:	247 SF
LOT 2 CONCEPTUAL BUILDINGS:	8,662 SF
LOT 3 CONCETUAL BUILDING:	5,070 SF
LOT 4 RETAIL STORE:	6,000 SF
LOT 5 CONCEPTUAL BUILDINGS:	10,140 SF

CONCEPT LAYOUT NOTE:

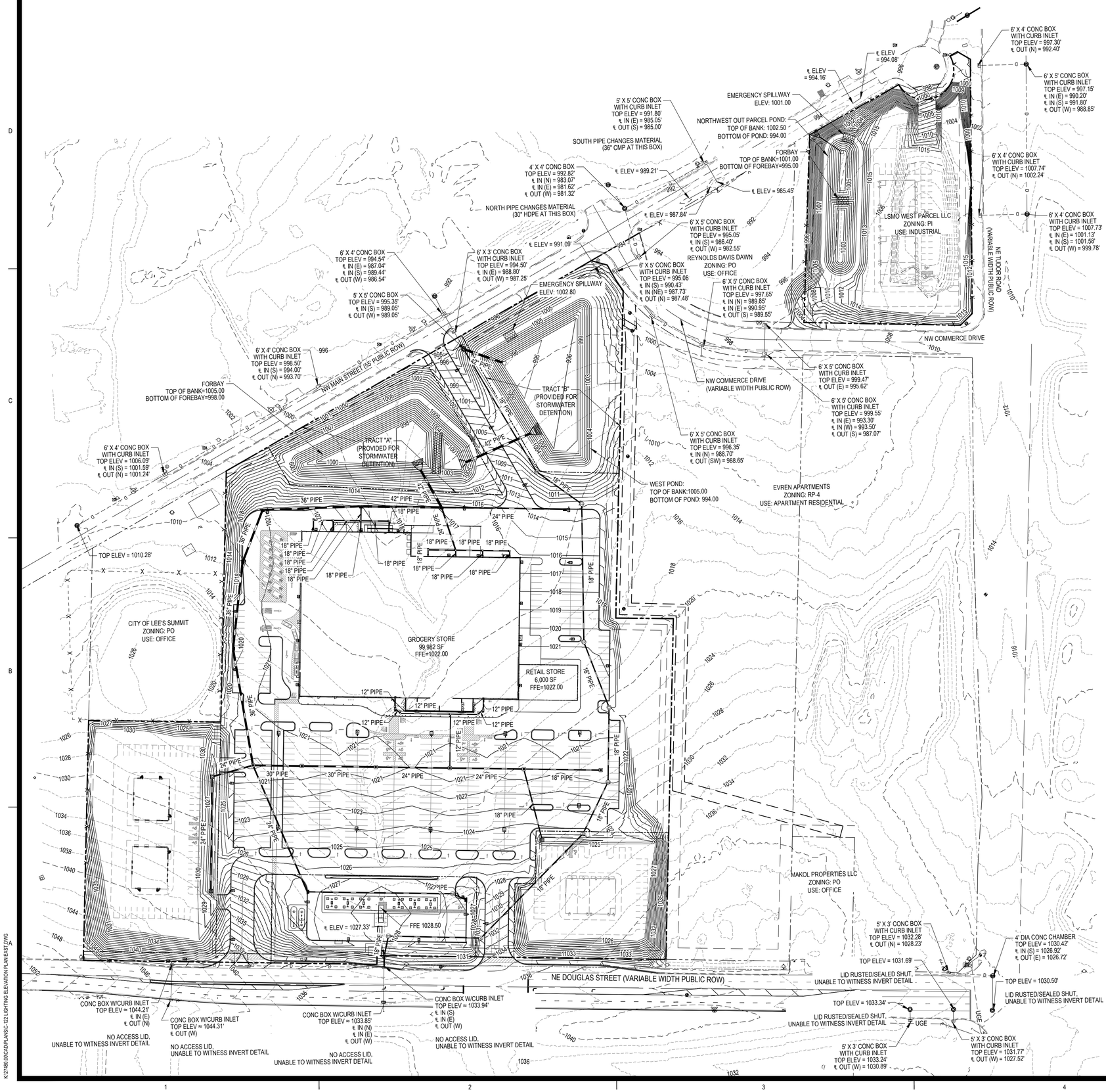
LOTS 2, 3, AND 5 ARE SHOWN AS CONCEPT PLANS FOR FUTURE DEVELOPMENT. THOSE PARCELS ARE TO INDEPENDENTLY CONTAIN THE REQUIRED PARKING AND LANDSCAPING FOR THE BUILDINGS PROPOSED THEREIN. ARCHITECTURAL ELEVATIONS OF BUILDINGS ON CONSTRUCTED ON THE SUBJECT LOTS WILL COMPLY WITH THE UNIFIED DEVELOPMENT ORDINANCE SECTION 8.080. USES TO BE CONSTRUCTED ON THE SUBJECT LOTS ARE TO COMPLY WITH THE USES ALLOWED IN DISTRICT CP-2 AS REFLECTED IN ARTICLE 6 OF THE UNIFIED DEVELOPMENT ORDINANCE.

NORTH

0 40 80 160

1 INCH = 80 FEET

SITE
NW Victoria Dr
NW Skyline Dr
NW Sycamore St
NW Douglas St
NW Main St
NW Tudor Rd
NW Watson Rd
NW Chapman Rd
NW Maggie Ave
NW Orchard St
NW Forest Ave
NW Forest St
NW Short St
NW Ash St
NW Meadowbrook Dr
NW Meadowbrook Ct
NW Redwing Dr
NW Ludowici Blvd
NW Ludowici Ct
NW Ludowici Cir
NW Mason Pl
NW Mason Ln
NW Mason Dr
NW 2nd St
NW 3rd St
NW Cedar Ct
NW Chestnut Ct
NW Pilgrim Way
NW Victoria Ct
NW Skyline Ct
NW Sycamore Ct
NW Douglas Ct
NW Main Ct
NW Tudor Ct
NW Hollywood Dr
NW Hollywood Ct
NW Woodland Dr
NW Woodland Ct
NW Tudor Rd
NW Tudor Ct
NW Chapman Ct
NW Watson Ct
NW Maggie Ct
NW Columbus St
NW Orchard Ct
NW Forest Ct
NW Short Ct
NW Ash St
NW Redwing Ct
NW Ludowici Ct
NW Mason Ct
NW 2nd Ct
NW 3rd Ct
NW Cedar Dr
NW Mulberry St
NW Pilgrim Way
NW Victoria Dr
NW Skyline Dr
NW Sycamore St
NW Douglas St
NW Main St
NW Tudor Rd
NW Watson Rd
NW Chapman Rd
NW Maggie Ave
NW Orchard St
NW Forest Ave
NW Forest St
NW Short St
NW Ash St
NW Meadowbrook Dr
NW Redwing Dr
NW Ludowici Blvd
NW Mason Pl
NW Mason Ln
NW Mason Dr
NW 2nd St
NW 3rd St
NW Cedar Ct
NW Chestnut Ct
NW Pilgrim Way
NW Victoria Ct
NW Skyline Ct
NW Sycamore Ct
NW Douglas Ct
NW Main Ct
NW Tudor Ct
NW Hollywood Dr
NW Hollywood Ct
NW Woodland Dr
NW Woodland Ct
NW Tudor Rd
NW Tudor Ct
NW Chapman Ct
NW Watson Ct
NW Maggie Ct
NW Columbus St
NW Orchard Ct
NW Forest Ct
NW Short Ct
NW Ash St
NW Redwing Ct
NW Ludowici Ct
NW Mason Ct
NW 2nd Ct
NW 3rd Ct
NW Cedar Dr
NW Mulberry St
NE Douglas St
NE Douglas Ln
NE Douglas Ct
NE Douglas Cir
NE Douglas Dr



NORTH

0 40 80 160

1 INCH = 80 FEET

VICINITY MAP

SCALE: NTS

PICKERING FIRM INCORPORATED UNDERGROUND UTILITIES DISCLAIMER:

INFORMATION REGARDING THE REPUTED PRESENCE, SIZE, CHARACTER AND LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES IS SHOWN HEREON. THERE IS NO CERTAINTY OF THE ACCURACY OF THIS INFORMATION AND IT SHALL BE CONSIDERED IN THAT LIGHT BY THOSE USING THIS DRAWING. THE LOCATION AND ARRANGEMENT OF UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES SHOWN HEREON MAY BE INACCURATE AND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES NOT SHOWN MAY BE ENCOUNTERED. THE OWNER AND THE OWNER'S EMPLOYEES, CONSULTANTS AND CONTRACTORS SHALL HEREBY DISTINCTLY UNDERSTAND THAT THE ENGINEER IS NOT RESPONSIBLE FOR THE CORRECTNESS OR SUFFICIENCY OF THIS INFORMATION REGARDING THE UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES SHOWN HEREON.

SITE TBM #1
ELEVATION: 1015.01
CHISELED SQUARE ON N FACE OF INLET

SITE TBM #2
ELEVATION: 1031.01
CHISELED SQUARE NW FACE PED SIGNAL

SITE TBM #3
ELEVATION:1042.57
CHISELED PLUS ON SW BOLT OF FIRE HYDRANT

SITE TBM #4
ELEVATION:1058.50
CHISELED SQUARE ON N FACE TL CONCRETE BASE

SITE TBM #5
ELEVATION:994.97
RAILROAD SPIKE IN E FACE OF UTILITY POLE

NOTE: BEFORE THE BEGINNING OF CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY THE SITE DATUM WITH ALL SITE TBMS AND IMMEDIATELY REPORT IN WRITING ANY DISCREPANCIES TO THE ENGINEER.

SPECIAL FLOOD HAZARD STATEMENT

ACCORDING TO THE FEMA/FIRM COMMUNITY PANEL NO. 29095C0417G, EFFECTIVE SEPTEMBER 29, 2006 THE PROPERTY SHOWN HEREON IS LOCATED IN A "X" NO SHADING (AREA OF MINIMAL FLOOD HAZARD) OR FLOOD ZONE "D" (AREAS IN WHICH FLOOD HAZARDS ARE UNDETERMINED, BUT POSSIBLE), AS SHOWN ON THE FLOOD INSURANCE RATE MAP (F.I.R.M.).

DETENTION TRACT MAINTENANCE:

DETENTION TRACTS "A" AND "B" SHALL BE MAINTAINED BY THE OWNERS OF LOTS 1 THROUGH 4, OR THEIR SUCCESSORS AND ASSIGNS. A MAINTENANCE AGREEMENT OR PROPERTY OWNERS ASSOCIATION SHALL BE ESTABLISHED WITH THE FINAL PLAT TO PROVIDE FOR THE PERPETUAL OPERATION AND MAINTENANCE OF THE DETENTION BASINS AND ASSOCIATED DRAINAGE IMPROVEMENTS.

REVISIONS:

1		
2		
3		
4		
5		

PROJECT #: 27480
DATE: MAY 26, 2026
DRAWN BY: EJH
DESIGNER: JPM
CHECKED BY: MLB

Pickering
Pickering Firm, Inc.
Architecture • Engineering
Planning • Surveying
6363 Poplar Avenue, Suite 300
Memphis, TN 38119
901.726.0810

DILLONS
NE DOUGLAS ST.
LEE'S SUMMIT, MO

PHILLIPS EDISON & COMPANY

SEAL:

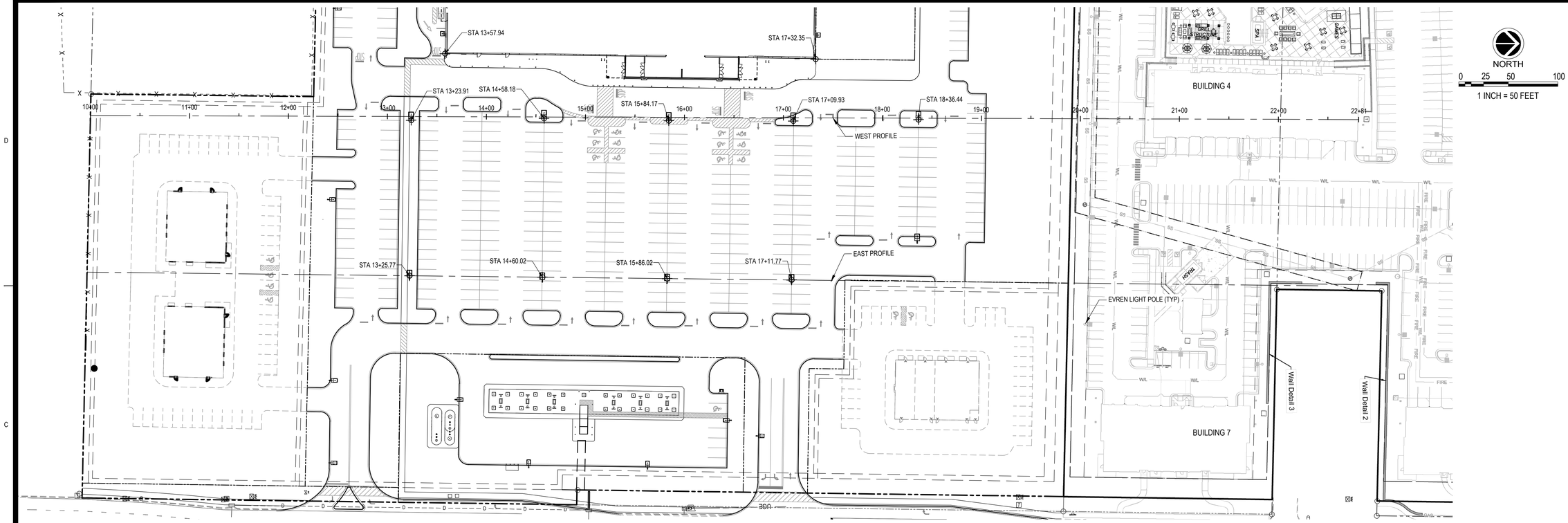
PRELIMINARY - NOT FOR CONSTRUCTION

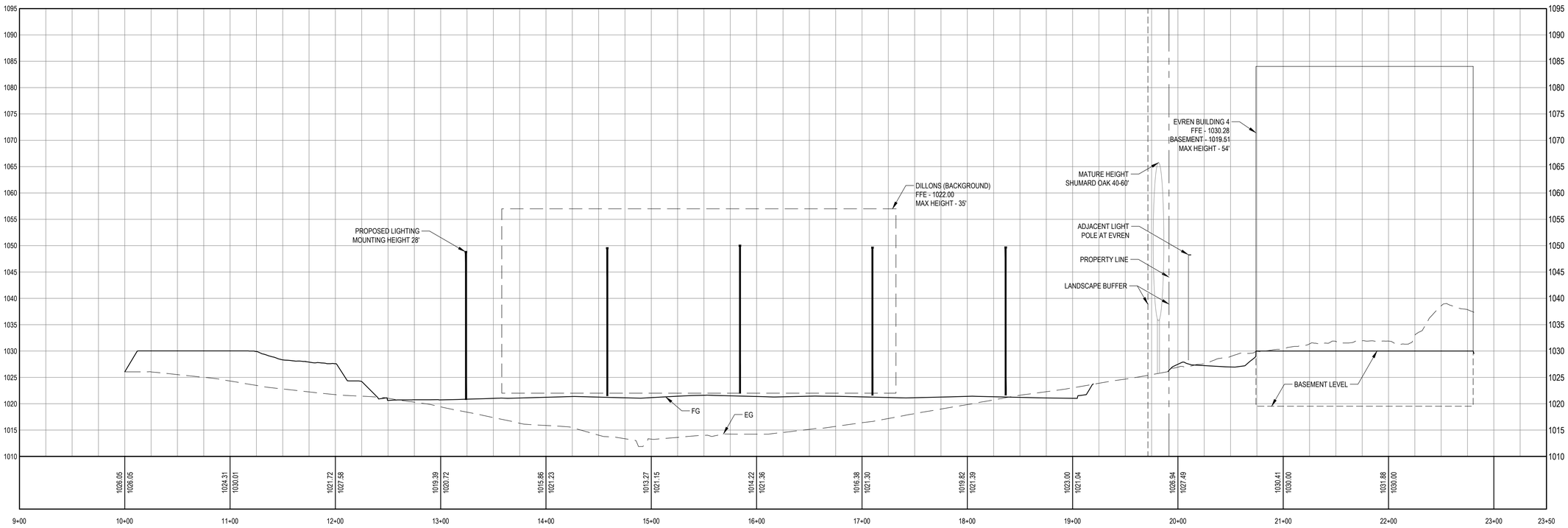
SHEET NUMBER:

C-120

DESCRIPTION:
GRADING AND DRAINAGE PLAN

K:\27480.00\CAD\PLANS\C-120 LIGHTING ELEVATION PLAN EAST.DWG





1 WEST PROFILE
H: 1"=50' V: 1"=10'

REVISIONS:

1		
2		
3		
4		
5		

PROJECT #: 27480
DATE: MAY 26, 2026
DRAWN BY: EJH
DESIGNER: JPM
CHECKED BY: MLB

Pickering
Pickering Firm, Inc.
Architecture • Engineering
Planning • Surveying
6363 Poplar Avenue, Suite 300
Memphis, TN 38119
901.726.0810

DILLONS
NE DOUGLAS ST.
LEE'S SUMMIT, MO

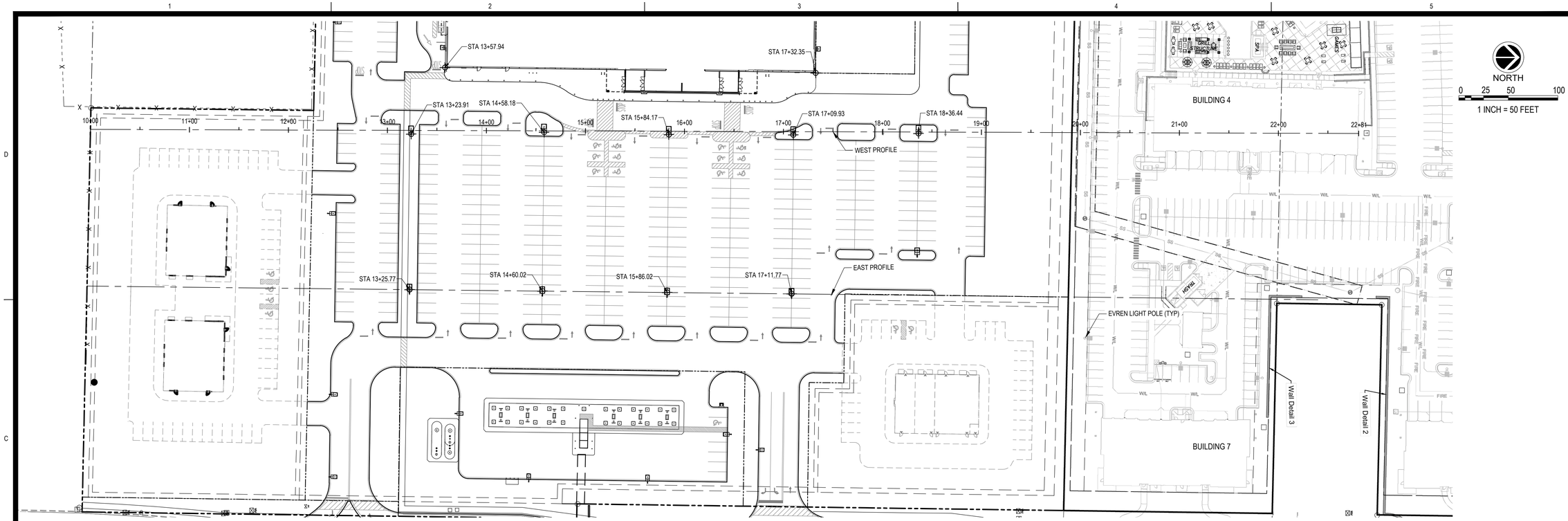
PHILLIPS EDISON & COMPANY

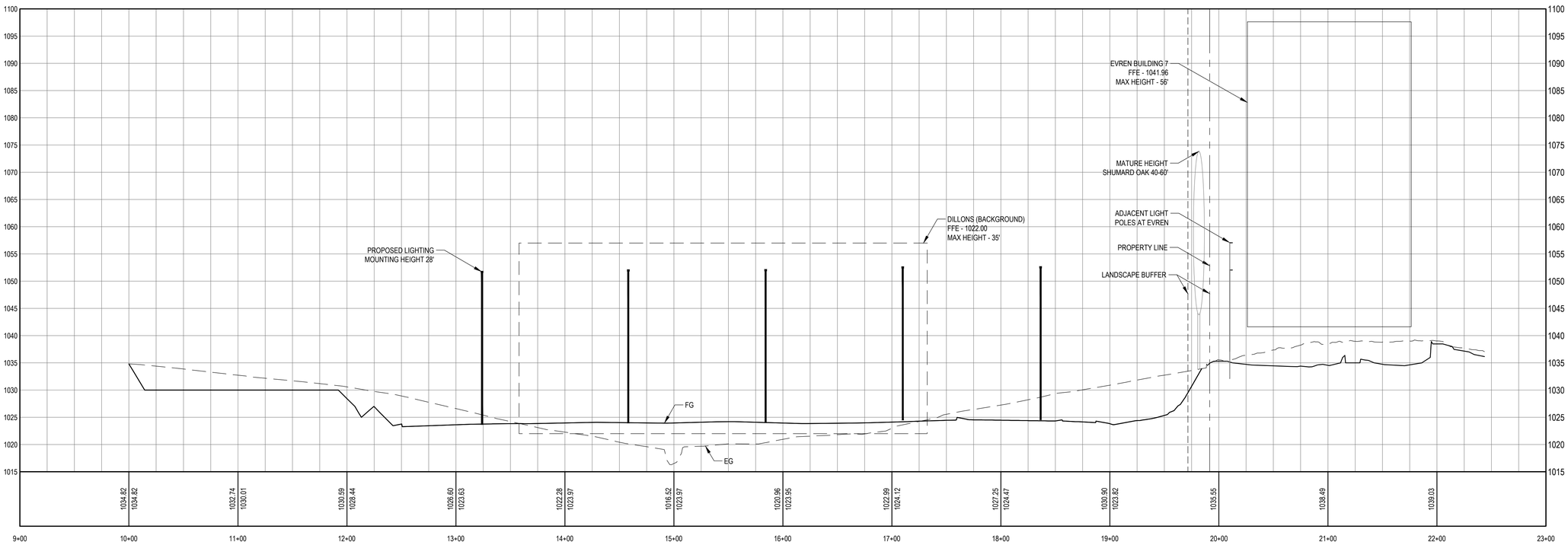
SEAL:
PRELIMINARY - NOT FOR CONSTRUCTION

SHEET NUMBER:
C-121

DESCRIPTION:
LIGHTING ELEVATION PLAN WEST

K:\27480.00\CAD\PLANS\C-121 LIGHTING ELEVATION PLAN EAST.DWG





2 EAST PROFILE
H: 1"=50' V: 1"=10'

REVISIONS:

1		
2		
3		
4		
5		

PROJECT #: 27480
DATE: MAY 26, 2026
DRAWN BY: EJH
DESIGNER: JPM
CHECKED BY: MLB

Pickering
Pickering Firm, Inc.
Architecture • Engineering
Planning • Surveying
6363 Poplar Avenue, Suite 300
Memphis, TN 38119
901.726.0810

DILLONS
NE DOUGLAS ST.
LEE'S SUMMIT, MO

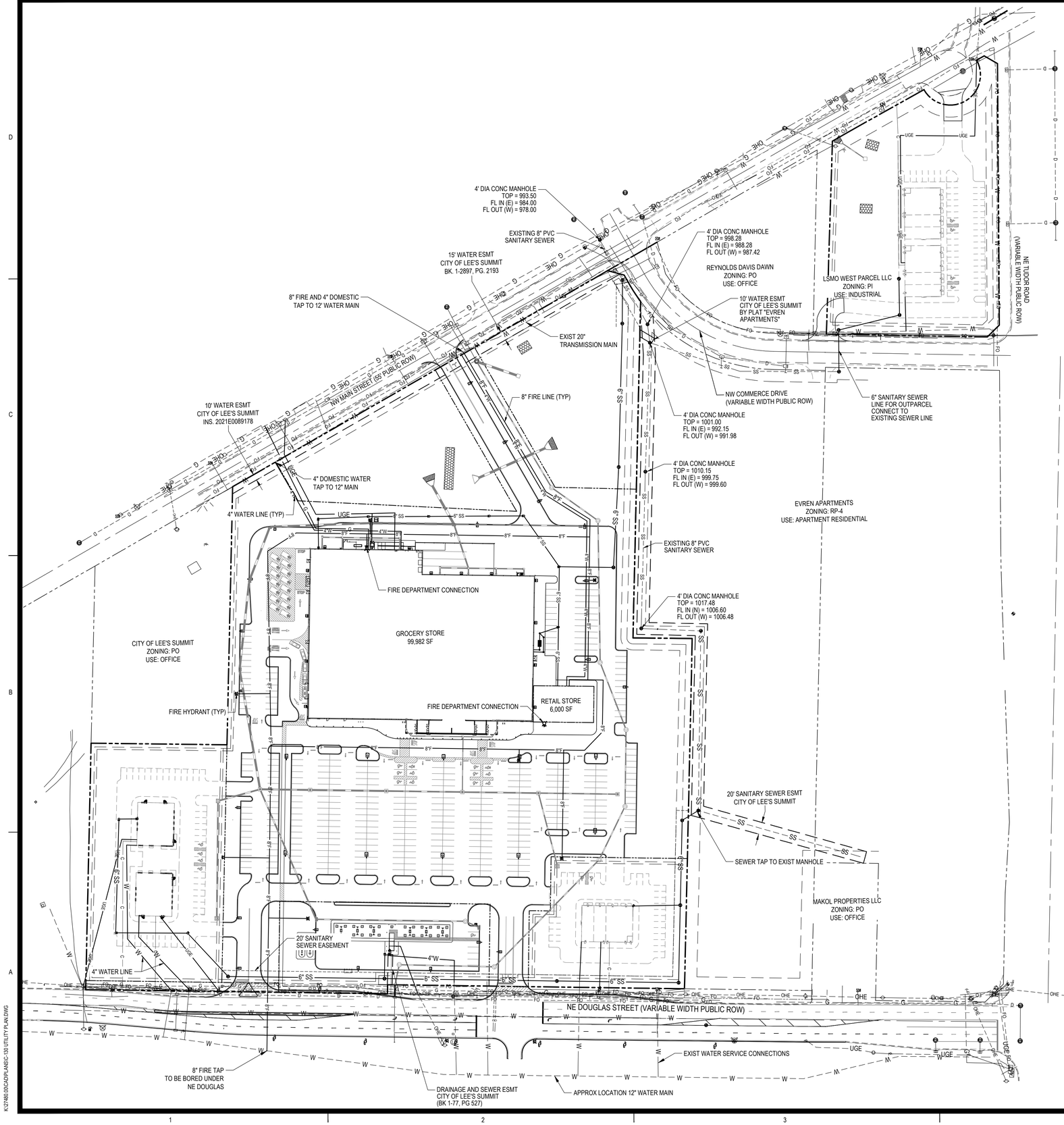
PHILLIPS EDISON & COMPANY

SEAL:
PRELIMINARY - NOT FOR CONSTRUCTION

SHEET NUMBER:
C-122

DESCRIPTION:
LIGHTING ELEVATION PLAN EAST

K:\27480.00\CAD\PLANS\C-122 LIGHTING ELEVATION PLAN EAST.DWG



NORTH

0 40 80 160

1 INCH = 80 FEET

VICINITY MAP

SCALE: NTS

PICKERING FIRM INCORPORATED UNDERGROUND UTILITIES DISCLAIMER:

INFORMATION REGARDING THE REPUTED PRESENCE, SIZE, CHARACTER AND LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES IS SHOWN HEREON. THERE IS NO CERTAINTY OF THE ACCURACY OF THIS INFORMATION AND IT SHALL BE CONSIDERED IN THAT LIGHT BY THOSE USING THIS DRAWING. THE LOCATION AND ARRANGEMENT OF UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES SHOWN HEREON MAY BE INACCURATE AND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES NOT SHOWN MAY BE ENCOUNTERED. THE OWNER AND THE OWNER'S EMPLOYEES, CONSULTANTS AND CONTRACTORS SHALL HEREBY DISTINCTLY UNDERSTAND THAT THE ENGINEER IS NOT RESPONSIBLE FOR THE CORRECTNESS OR SUFFICIENCY OF THIS INFORMATION REGARDING THE UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES SHOWN HEREON.

SITE TBM #1
ELEVATION: 1015.01
CHISELED SQUARE ON N FACE OF INLET

SITE TBM #2
ELEVATION: 1031.01
CHISELED SQUARE NW FACE PED SIGNAL

SITE TBM #3
ELEVATION:1042.57
CHISELED PLUS ON SW BOLT OF FIRE HYDRANT

SITE TBM #4
ELEVATION:1058.50
CHISELED SQUARE ON N FACE TL CONCRETE BASE

SITE TBM #5
ELEVATION:994.97
RAILROAD SPIKE IN E FACE OF UTILITY POLE

NOTE: BEFORE THE BEGINNING OF CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY THE SITE DATUM WITH ALL SITE TBMS AND IMMEDIATELY REPORT IN WRITING ANY DISCREPANCIES TO THE ENGINEER.

SPECIAL FLOOD HAZARD STATEMENT

ACCORDING TO THE FEMA/FIRM COMMUNITY PANEL NO. 29095C0417G, EFFECTIVE SEPTEMBER 29, 2006 THE PROPERTY SHOWN HEREON IS LOCATED IN A "X" NO SHADING (AREA OF MINIMAL FLOOD HAZARD) OR FLOOD ZONE "D" (AREAS IN WHICH FLOOD HAZARDS ARE UNDETERMINED, BUT POSSIBLE), AS SHOWN ON THE FLOOD INSURANCE RATE MAP (F.I.R.M.).

LINE LEGEND

- EXISTING STORM DRAINAGE
- EXISTING OVERHEAD TELEPHONE LINES
- EXISTING UNDERGROUND TELEPHONE LINES
- EXISTING OVERHEAD ELECTRIC LINES
- EXISTING UNDERGROUND ELECTRIC LINES
- EXISTING NATURAL GAS LINE
- EXISTING WATER LINE
- EXISTING SANITARY SEWER LINE
- EXISTING FENCE
- STORM DRAINAGE PIPE
- OVERHEAD TELEPHONE LINES
- UNDERGROUND TELEPHONE LINES
- OVERHEAD ELECTRIC LINES
- UNDERGROUND ELECTRIC LINES
- NATURAL GAS LINE
- WATER LINE
- FIRE LINE
- SANITARY SEWER LINE
- FENCE

REVISIONS:

1		
2		
3		
4		
5		

PROJECT #: 27480

DATE: MAY 26, 2026

DRAWN BY: EJH

DESIGNER: JPM

CHECKED BY: MLB

Pickering
Pickering Firm, Inc.
Architecture • Engineering
Planning • Surveying
6363 Poplar Avenue, Suite 300
Memphis, TN 38119
901.726.0810

DILLONS
NE DOUGLAS ST.
LEE'S SUMMIT, MO

PHILLIPS EDISON & COMPANY

SEAL:

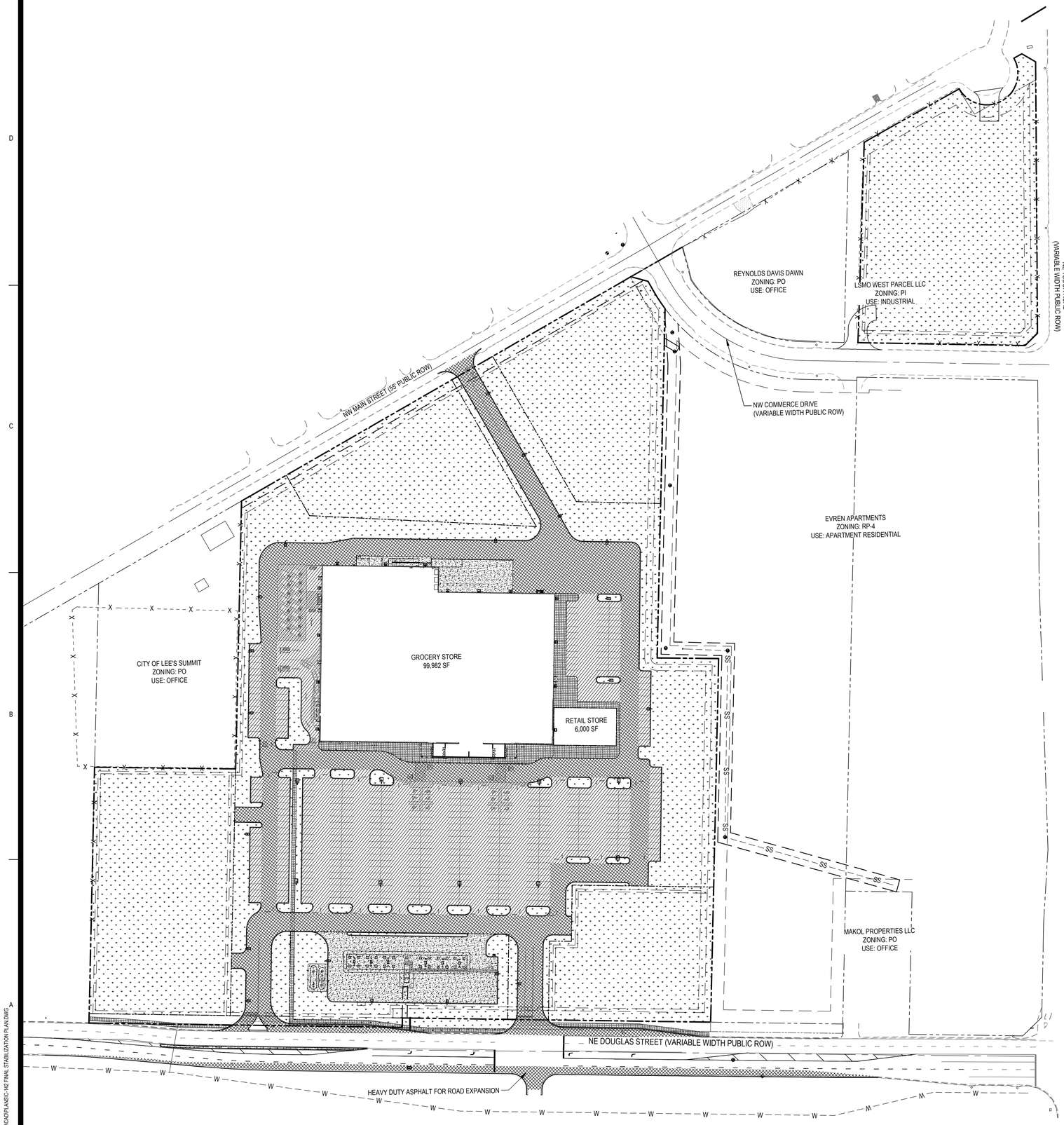
PRELIMINARY - NOT FOR CONSTRUCTION

SHEET NUMBER:

C-130

DESCRIPTION:
UTILITY PLAN

K:\27480.00\CAD\PLANS\C-130 UTILITY PLAN.DWG



NORTH

0 40 80 160

1 INCH = 80 FEET

VICINITY MAP
SCALE: NTS

PICKERING FIRM INCORPORATED UNDERGROUND UTILITIES DISCLAIMER:

INFORMATION REGARDING THE REPUTED PRESENCE, SIZE, CHARACTER AND LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES IS SHOWN HEREON. THERE IS NO CERTAINTY OF THE ACCURACY OF THIS INFORMATION AND IT SHALL BE CONSIDERED IN THAT LIGHT BY THOSE USING THIS DRAWING. THE LOCATION AND ARRANGEMENT OF UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES SHOWN HEREON MAY BE INACCURATE AND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES NOT SHOWN MAY BE ENCOUNTERED. THE OWNER AND THE OWNER'S EMPLOYEES, CONSULTANTS AND CONTRACTORS SHALL HEREBY DISTINCTLY UNDERSTAND THAT THE ENGINEER IS NOT RESPONSIBLE FOR THE CORRECTNESS OR SUFFICIENCY OF THIS INFORMATION REGARDING THE UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES SHOWN HEREON.

SITE TBM #1
ELEVATION: 1015.01
CHISELED SQUARE ON N FACE OF INLET

SITE TBM #2
ELEVATION: 1031.01
CHISELED SQUARE NW FACE PED SIGNAL

SITE TBM #3
ELEVATION:1042.57
CHISELED PLUS ON SW BOLT OF FIRE HYDRANT

SITE TBM #4
ELEVATION:1058.50
CHISELED SQUARE ON N FACE TL CONCRETE BASE

SITE TBM #5
ELEVATION:994.97
RAILROAD SPIKE IN E FACE OF UTILITY POLE

NOTE: BEFORE THE BEGINNING OF CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY THE SITE DATUM WITH ALL SITE TBMS AND IMMEDIATELY REPORT IN WRITING ANY DISCREPANCIES TO THE ENGINEER.

SPECIAL FLOOD HAZARD STATEMENT

ACCORDING TO THE FEMA/FIRM COMMUNITY PANEL NO. 29095C0417G, EFFECTIVE SEPTEMBER 29, 2006 THE PROPERTY SHOWN HEREON IS LOCATED IN A "X" NO SHADING (AREA OF MINIMAL FLOOD HAZARD) OR FLOOD ZONE "D" (AREAS IN WHICH FLOOD HAZARDS ARE UNDETERMINED, BUT POSSIBLE), AS SHOWN ON THE FLOOD INSURANCE RATE MAP (F.I.R.M.).

PAVEMENT HATCH LEGEND

	LIGHT-DUTY ASPHALT PAVEMENT
	HEAVY-DUTY ASPHALT PAVEMENT
	CONCRETE PAVEMENT
	SIDEWALK
	SEED

REVISIONS:

1		
2		
3		
4		
5		

PROJECT #: 27480
DATE: MAY 26, 2026
DRAWN BY: EJH
DESIGNER: JPM
CHECKED BY: MLB

Pickering
Pickering Firm, Inc.
Architecture • Engineering
Planning • Surveying
6363 Poplar Avenue, Suite 300
Memphis, TN 38119
901.726.0810

DILLONS
NE DOUGLAS ST.
LEE'S SUMMIT, MO

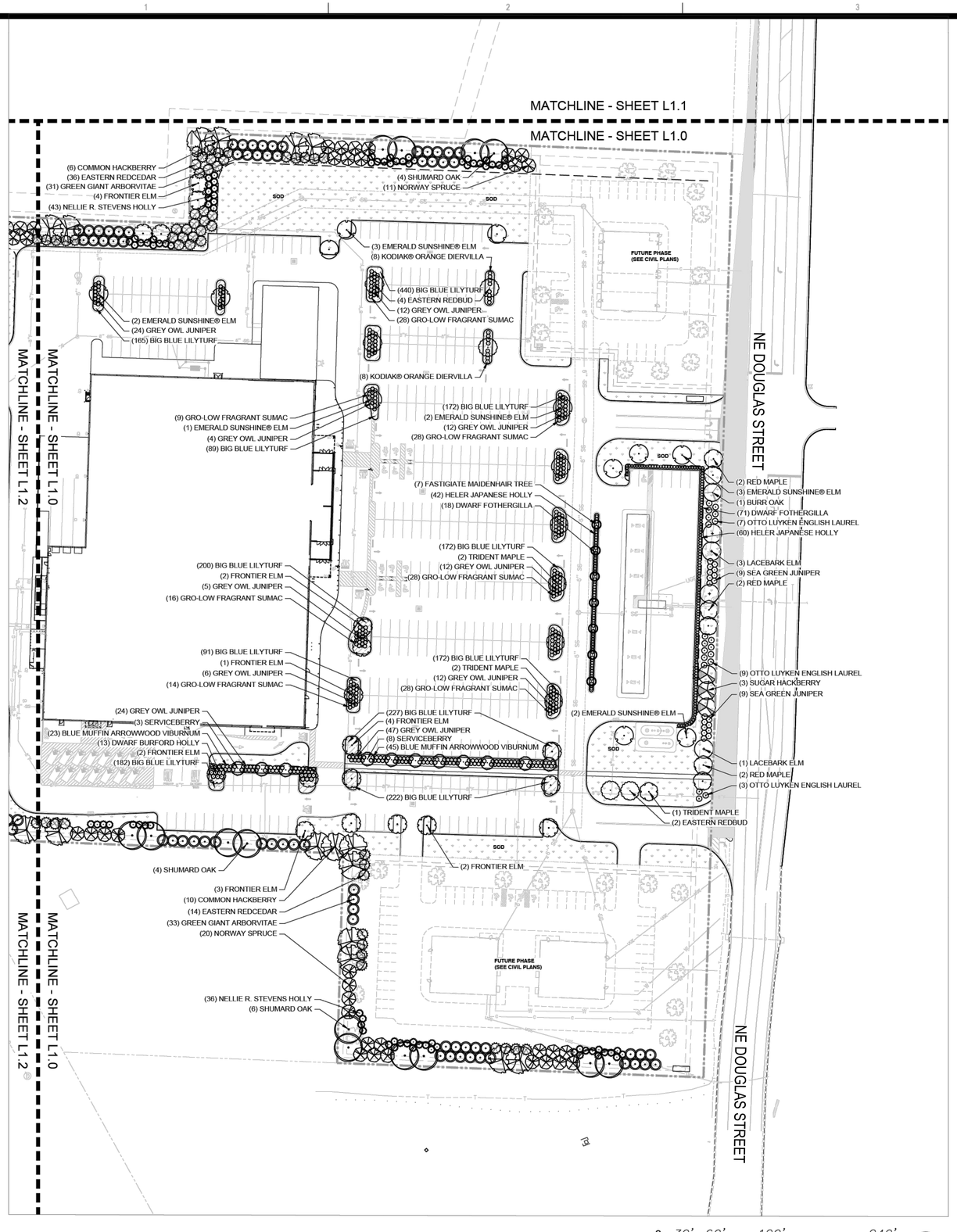
PHILLIPS EDISON & COMPANY

SEAL:
PRELIMINARY - NOT FOR CONSTRUCTION

SHEET NUMBER:
C-142

DESCRIPTION:
FINAL STABILIZATION PLAN

K:\27480.000\CAD\PLANS\C-142 FINAL STABILIZATION PLAN.DWG



1 LANDSCAPE CONCEPTUAL PLAN – SOUTH
SCALE: 1"=60'

0 30' 60' 120' 240'
SCALE: 1" = 60'
NORTH

PLANT SCHEDULE

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONT.	UNIT	COMMENTS	
HIGH IMPACT BUFFER								
	22	Celtis occidentalis	Common Hackberry	2.5" Cal.	B&B	EA	Well branched, full to ground	
	101	Ilex x 'Nellie R. Stevens'	Nellie R. Stevens Holly	8`-10` HT	Pot	EA	6` - 8` Ht. min.	
	67	Juniperus virginiana	Eastern Redcedar	8` Ht.	Pot	EA	Well branched, full to ground	
	52	Picea abies	Norway Spruce	8` Ht.	Pot	EA	Well branched, full to ground	
	18	Quercus shumardii	Shumard Oak	2.5" Cal.	B&B	EA	Well branched, full to ground	
	89	Thuja x 'Green Giant'	Green Giant Arborvitae	8` Ht.	Pot	EA	Well branched, full to ground	
	18	Ulmus x 'Frontier'	Frontier Elm	2.5" Cal.	B&B	EA	Well branched, full to ground	
INTERIOR TREES								
	5	Acer buergerianum	Trident Maple	1.5" Cal.	B&B	EA	Well branched, full to ground	
	11	Amelanchier alnifolia	Serviceberry	1.5" Cal.	B&B	EA	Well branched, full to ground	
	6	Cercis canadensis	Eastern Redbud	1.5" Cal.	B&B	EA	Well branched, full to ground	
	7	Ginkgo biloba 'Fastigiata'	Fastigiate Maidenhair Tree	1.5" Cal.	B&B	EA	Well branched, full to ground	
	13	Ulmus davidiana japonica `JFS-Bieberich`	Emerald Sunshine® Elm	1.5" Cal.	B&B	EA	Well branched, full to ground	
STREET FRONTAGE								
	14	Acer rubrum	Red Maple	3.5" Cal.	B&B	EA	Uniform branching, dominant leader	
	6	Carpinus caroliniana	American Hornbeam	3.5" Cal.	B&B	EA	Well branched, full to ground	
	6	Celtis laevigata	Sugar Hackberry	3.5" Cal.	B&B	EA	Well branched, full to ground	
	56	Juniperus chinensis 'Sea Green'	Sea Green Juniper	3` Ht.	Pot	EA		
	44	Prunus laurocerasus 'Otto Luyken'	Otto Luyken English Laurel	3` Ht.	Pot	EA		
	2	Quercus macrocarpa	Burr Oak	3.5" Cal.	B&B	EA	Well branched, full to ground	
	10	Ulmus parvifolia	Lacebark Elm	3.5" Cal.	B&B	EA	Well branched, full to ground	
SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	UNIT	COMMENTS	
INTERIOR SHRUBS								
	16	Diervilla x 'G2X88544'	Kodiak® Orange Diervilla	24" Ht.				
	89	Fothergilla gardenii	Dwarf Fothergilla	24" Ht.	Pot	EA	Full plant, free of weeds	
	13	Ilex cornuta 'Burfordii Nana'	Dwarf Burford Holly	24" Ht.	Pot	EA	Full plant, free of weeds	
	102	Ilex crenata 'Helleri'	Heler Japanese Holly	24" Ht.	Pot	EA	Full plant, free of weeds	
	158	Juniperus x 'Grey Owl'	Grey Owl Juniper	24" Ht.	Pot	EA	Full plant, free of weeds	
	151	Rhus aromatica 'Gro-Low'	Gro-Low Fragrant Sumac	24" Ht.	Pot	EA	Full plant, free of weeds	
	68	Viburnum dentatum 'Blue Muffin'	Blue Muffin Arrowwood Viburnum	24" Ht.				
SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	UNIT	COMMENTS		SPACING
GROUND COVERS								
	119,525 sf	Festuca arundinacea	Tall Fescue	sod	Fill Area	See Detail		
	2,132	Liriope muscari 'Big Blue'	Big Blue Lilyturf	1 gal.	Fill Area	Weed-free and actively growing		18" o.c.

REVISIONS:

1		
2		
3		
4		
5		

PROJECT #: 27480
DATE: APRIL 7, 2026
DRAWN BY: DT
DESIGNER: DT
CHECKED BY: DT

Pickering
Pickering Firm, Inc.
Architecture • Engineering
Planning • Surveying
6363 Poplar Avenue, Suite 300
Memphis, TN 38119
901.726.0810

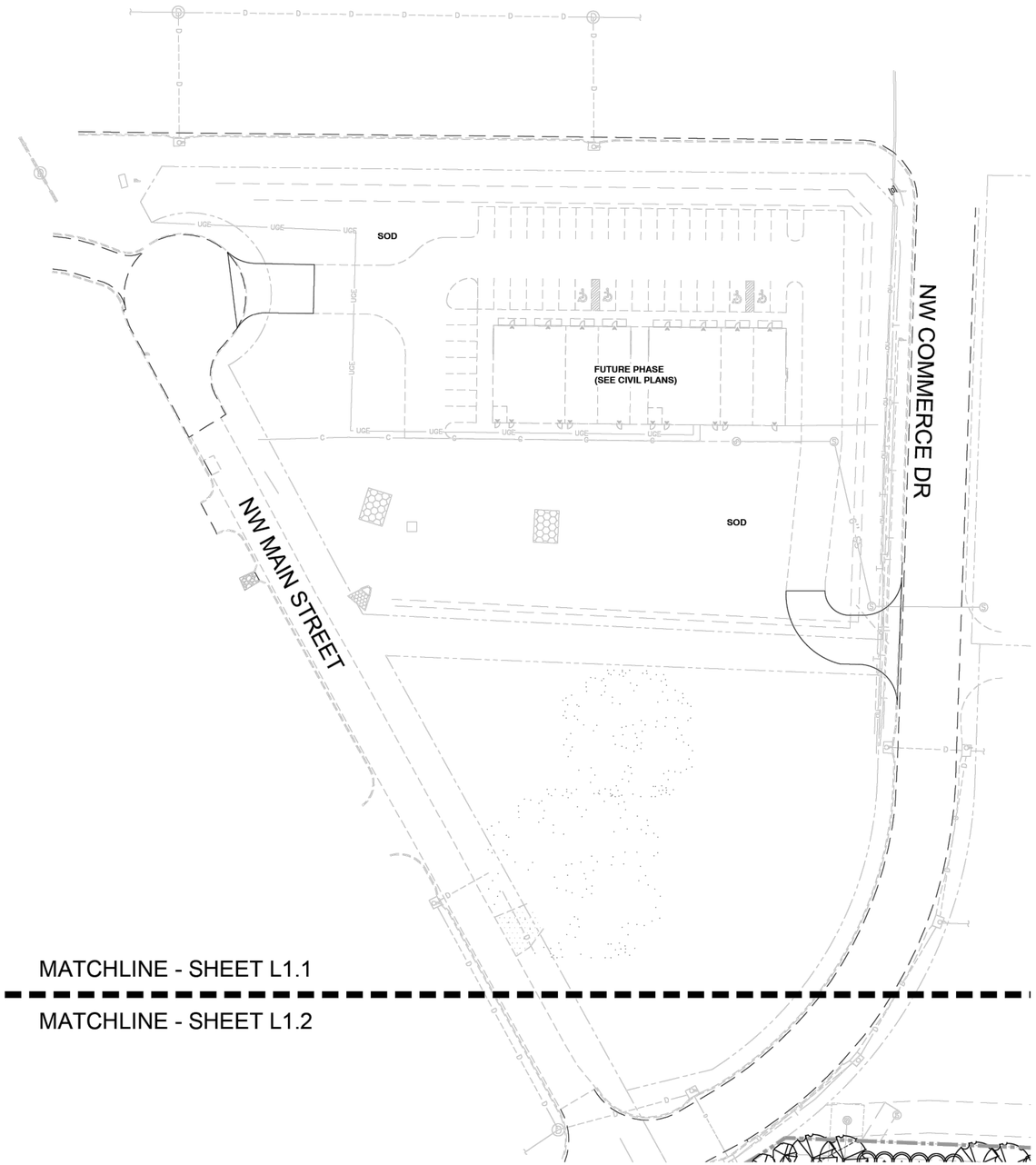
DILLONS
NE DOUGLAS ST.
LEE'S SUMMIT, MO

SEAL:
PRELIMINARY - NOT FOR CONSTRUCTION

SHEET NUMBER:
L1.0

DESCRIPTION:
LANDSCAPE PLAN

M:\07 JOB FILES\25-718 - PICKERING - GROCERY - LEES SUMMIT MO\ACAD\CONSTRUCTION DOCUMENTS\L1.0 PLAN (LEE SUMMIT).DWG



1 LANDSCAPE CONCEPTUAL PLAN – NORTHWEST
SCALE: 1"=40'

0 20' 40' 80' 160'
SCALE: 1" = 40'

NORTH

PLANT SCHEDULE

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONT.	UNIT	COMMENTS	
HIGH IMPACT BUFFER								
	22	Celtis occidentalis	Common Hackberry	2.5" Cal.	B&B	EA	Well branched, full to ground	
	101	Ilex x 'Nellie R. Stevens'	Nellie R. Stevens Holly	8'-10' HT	Pot	EA	6' - 8' Ht. min.	
	67	Juniperus virginiana	Eastern Redcedar	8' Ht.	Pot	EA	Well branched, full to ground	
	52	Picea abies	Norway Spruce	8' Ht.	Pot	EA	Well branched, full to ground	
	18	Quercus shumardii	Shumard Oak	2.5" Cal.	B&B	EA	Well branched, full to ground	
	89	Thuja x 'Green Giant'	Green Giant Arborvitae	8' Ht.	Pot	EA	Well branched, full to ground	
	18	Ulmus x 'Frontier'	Frontier Elm	2.5" Cal.	B&B	EA	Well branched, full to ground	
INTERIOR TREES								
	5	Acer buergerianum	Trident Maple	1.5" Cal.	B&B	EA	Well branched, full to ground	
	11	Amelanchier alnifolia	Serviceberry	1.5" Cal.	B&B	EA	Well branched, full to ground	
	6	Cercis canadensis	Eastern Redbud	1.5" Cal.	B&B	EA	Well branched, full to ground	
	7	Ginkgo biloba 'Fastigiata'	Fastigiate Maidenhair Tree	1.5" Cal.	B&B	EA	Well branched, full to ground	
	13	Ulmus davidiana japonica `JFS-Bieberich`	Emerald Sunshine® Elm	1.5" Cal.	B&B	EA	Well branched, full to ground	
STREET FRONTAGE								
	14	Acer rubrum	Red Maple	3.5" Cal.	B&B	EA	Uniform branching, dominant leader	
	6	Carpinus caroliniana	American Hornbeam	3.5" Cal.	B&B	EA	Well branched, full to ground	
	6	Celtis laevigata	Sugar Hackberry	3.5" Cal.	B&B	EA	Well branched, full to ground	
	56	Juniperus chinensis 'Sea Green'	Sea Green Juniper	3` Ht.	Pot	EA		
	44	Prunus laurocerasus 'Otto Luyken'	Otto Luyken English Laurel	3` Ht.	Pot	EA		
	2	Quercus macrocarpa	Burr Oak	3.5" Cal.	B&B	EA	Well branched, full to ground	
	10	Ulmus parvifolia	Lacebark Elm	3.5" Cal.	B&B	EA	Well branched, full to ground	
SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	UNIT	COMMENTS	
INTERIOR SHRUBS								
	16	Diervilla x 'G2X88544'	Kodiak® Orange Diervilla	24" Ht.				
	89	Fothergilla gardenii	Dwarf Fothergilla	24" Ht	Pot	EA	Full plant, free of weeds	
	13	Ilex cornuta 'Burfordii Nana'	Dwarf Burford Holly	24" Ht.	Pot	EA	Full plant, free of weeds	
	102	Ilex crenata 'Helleri'	Heler Japanese Holly	24" Ht.	Pot	EA	Full plant, free of weeds	
	158	Juniperus x 'Grey Owl'	Grey Owl Juniper	24" Ht.	Pot	EA	Full plant, free of weeds	
	151	Rhus aromatica 'Gro-Low'	Gro-Low Fragrant Sumac	24" Ht.	Pot	EA	Full plant, free of weeds	
	68	Viburnum dentatum 'Blue Muffin'	Blue Muffin Arrowwood Viburnum	24" Ht.				
SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	UNIT	COMMENTS		SPACING
GROUND COVERS								
	119,525 sf	Festuca arundinacea	Tall Fescue	sod	Fill Area	See Detail		
	2,132	Liriope muscari 'Big Blue'	Big Blue Lilyturf	1 gal.	Fill Area	Weed-free and actively growing		18" o.c.

REVISIONS:

1		
2		
3		
4		
5		

PROJECT #: 27480
DATE: APRIL 7, 2026
DRAWN BY: DT
DESIGNER: DT
CHECKED BY: DT

Pickering
Pickering Firm, Inc.
Architecture • Engineering
Planning • Surveying
6363 Poplar Avenue, Suite 300
Memphis, TN 38119
901.726.0810

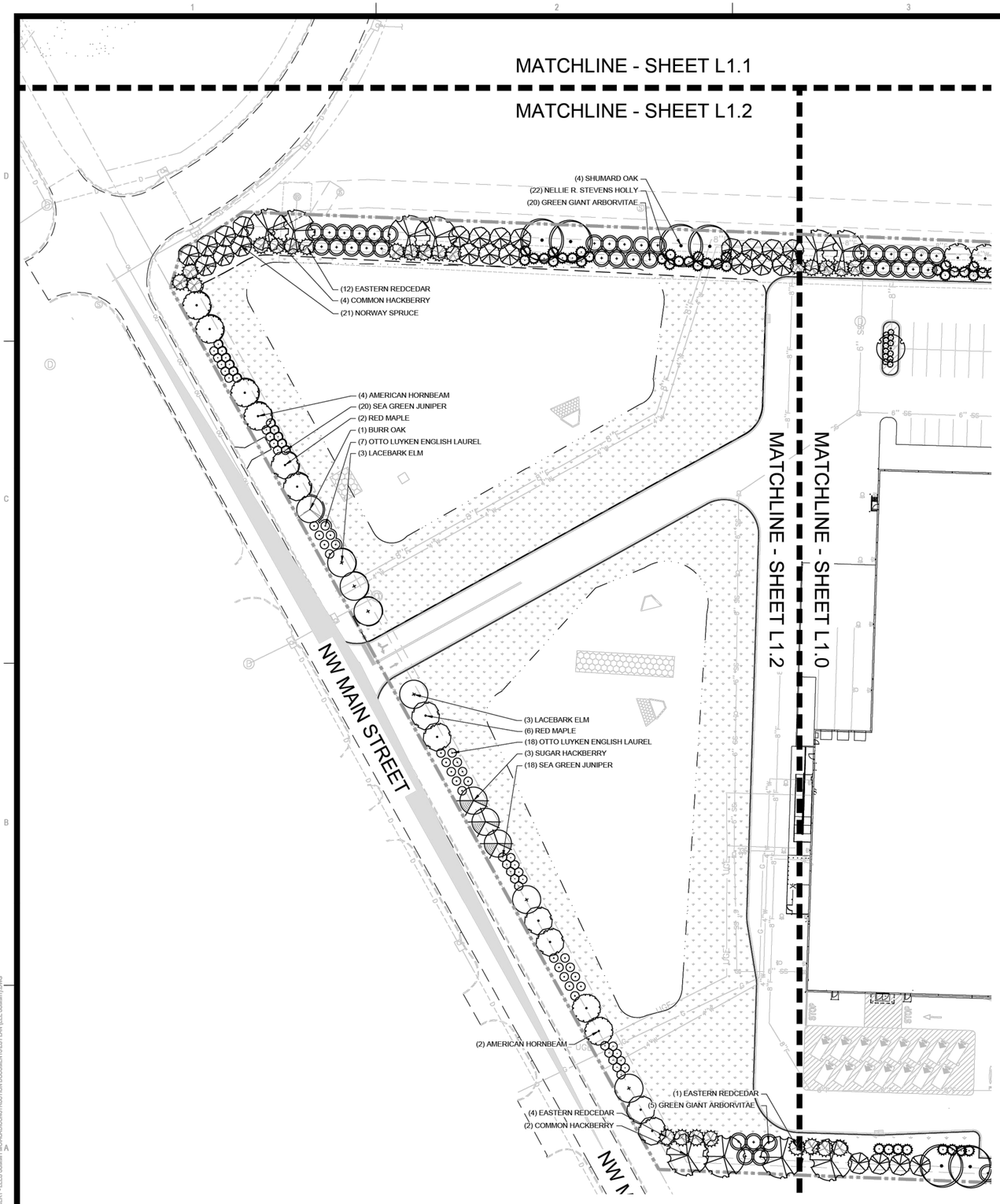
DILLONS
NE DOUGLAS ST.
LEE'S SUMMIT, MO

SEAL:
PRELIMINARY - NOT FOR CONSTRUCTION

SHEET NUMBER:
L1.1

DESCRIPTION:
LANDSCAPE PLAN

M:\07 JOB FILES\3718 - PICKERING - GROCERY - LEES SUMMIT MO\CAD\CONSTRUCTION DOCUMENTS\L5 PLAN (LEE SUMMIT).DWG



1 LANDSCAPE CONCEPTUAL PLAN – SOUTHWEST
SCALE: 1"=40'

0 20' 40' 80' 160'
SCALE: 1" = 40'
NORTH

PLANT SCHEDULE

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONT.	UNIT	COMMENTS	
HIGH IMPACT BUFFER								
	22	Celtis occidentalis	Common Hackberry	2.5" Cal.	B&B	EA	Well branched, full to ground	
	101	Ilex x 'Nellie R. Stevens'	Nellie R. Stevens Holly	8`-10` HT	Pot	EA	6` - 8` Ht. min.	
	67	Juniperus virginiana	Eastern Redcedar	8` Ht.	Pot	EA	Well branched, full to ground	
	52	Picea abies	Norway Spruce	8` Ht.	Pot	EA	Well branched, full to ground	
	18	Quercus shumardii	Shumard Oak	2.5" Cal.	B&B	EA	Well branched, full to ground	
	89	Thuja x 'Green Giant'	Green Giant Arborvitae	8` Ht.	Pot	EA	Well branched, full to ground	
	18	Ulmus x 'Frontier'	Frontier Elm	2.5" Cal.	B&B	EA	Well branched, full to ground	
INTERIOR TREES								
	5	Acer buergerianum	Trident Maple	1.5" Cal.	B&B	EA	Well branched, full to ground	
	11	Amelanchier alnifolia	Serviceberry	1.5" Cal.	B&B	EA	Well branched, full to ground	
	6	Cercis canadensis	Eastern Redbud	1.5" Cal.	B&B	EA	Well branched, full to ground	
	7	Ginkgo biloba 'Fastigiata'	Fastigiate Maidenhair Tree	1.5" Cal.	B&B	EA	Well branched, full to ground	
	13	Ulmus davidiana japonica `JFS-Bieberich`	Emerald Sunshine® Elm	1.5" Cal.	B&B	EA	Well branched, full to ground	
STREET FRONTAGE								
	14	Acer rubrum	Red Maple	3.5" Cal.	B&B	EA	Uniform branching, dominant leader	
	6	Carpinus caroliniana	American Hornbeam	3.5" Cal.	B&B	EA	Well branched, full to ground	
	6	Celtis laevigata	Sugar Hackberry	3.5" Cal.	B&B	EA	Well branched, full to ground	
	56	Juniperus chinensis 'Sea Green'	Sea Green Juniper	3` Ht.	Pot	EA		
	44	Prunus laurocerasus 'Otto Luyken'	Otto Luyken English Laurel	3` Ht.	Pot	EA		
	2	Quercus macrocarpa	Burr Oak	3.5" Cal.	B&B	EA	Well branched, full to ground	
	10	Ulmus parvifolia	Lacebark Elm	3.5" Cal.	B&B	EA	Well branched, full to ground	
SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	UNIT	COMMENTS	
INTERIOR SHRUBS								
	16	Diervilla x 'G2X88544'	Kodiak® Orange Diervilla	24" Ht.				
	89	Fothergilla gardenii	Dwarf Fothergilla	24" Ht	Pot	EA	Full plant, free of weeds	
	13	Ilex cornuta 'Burfordii Nana'	Dwarf Burford Holly	24" Ht.	Pot	EA	Full plant, free of weeds	
	102	Ilex crenata 'Hellen'	Heler Japanese Holly	24" Ht.	Pot	EA	Full plant, free of weeds	
	158	Juniperus x 'Grey Owl'	Grey Owl Juniper	24" Ht.	Pot	EA	Full plant, free of weeds	
	151	Rhus aromatica 'Gro-Low'	Gro-Low Fragrant Sumac	24" Ht.	Pot	EA	Full plant, free of weeds	
	68	Viburnum dentatum 'Blue Muffin'	Blue Muffin Arrowwood Viburnum	24" Ht.				
SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	UNIT	COMMENTS		SPACING
GROUND COVERS								
	119,525 sf	Festuca arundinacea	Tall Fescue	sod	Fill Area	See Detail		
	2,132	Liriope muscari 'Big Blue'	Big Blue Lilyturf	1 gal.	Fill Area	Weed-free and actively growing		18" o.c.

REVISIONS:

1		
2		
3		
4		
5		

PROJECT #: 27480
DATE: APRIL 7, 2026
DRAWN BY: DT
DESIGNER: DT
CHECKED BY: DT

Pickering
Pickering Firm, Inc.
Architecture • Engineering
Planning • Surveying
6363 Poplar Avenue, Suite 300
Memphis, TN 38119
901.726.0810

DILLONS
NE DOUGLAS ST.
LEE'S SUMMIT, MO

SEAL:
PRELIMINARY - NOT FOR CONSTRUCTION

SHEET NUMBER:
L1.2

DESCRIPTION:
LANDSCAPE PLAN

M:\DOT JOB FILES\25718 - PICKERING - GROCERY - LEES SUMMIT MO\ACAD\CONSTRUCTION DOCUMENTS\L0 PLAN (LEE SUMMIT).DWG

Luminaire Schedule

Symbol	Qty	Label	Arrangement	Lum. Watts	Total Watts	Lum. Lumens	LLF	Description	Mounting Height (above finished grade)
-	25	FC1	SINGLE	104	2600	15383	1.000	SCV-LED-15L-SC-50	15
⊢	2	LPA21	Single	147.6	295.2	21545	0.941	GALN-SBSD-740-VOLT-T3-XX	28
⊢	1	LPA31	Single	218.1	218.1	32324	0.941	GALN-SBSD-740-VOLT-T3-XX	28
⊢	2	LPD11	Single	79.6	159.2	8446	0.941	GALN-SBSD-740-VOLT-T3-XX-HSS	28
⊢	9	LPD21	Single	100.9	908.1	13427	0.941	GALN-SBSC-740-VOLT-T3-XX-HSS	28
⊢	1	LPE21	Single	147.6	147.6	16301	0.941	GALN-SBSD-740-VOLT-T4FT-XX-HSS	28
⊢	3	LPE31	Single	218.1	654.3	24657	0.941	GALN-SBSD-740-VOLT-T4FT-XX-HSS	28
⊢	2	LPG41	Single	293.6	587.2	43644	0.941	GALN-SDHD-740-VOLT-SWQ-XX	28
⊢	10	LPG81	Single	584.9	5849	86057	0.941	GALN-SDBD-740-VOLT-SWQ-XX	28
⊢	15	LZ82	Single	124.5	1867.5	19670	0.941	GWS-SA2F-740-VOLT-T4FT-XX	15

Calculation Summary

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
CalcPts@GRADE	Illuminance	Fc	1.3	18.8	0.0	N.A.	N.A.
FUEL CANOPY	Illuminance	Fc	46.2	56.0	22.7	2.0	2.6
ACCESS ROAD 'A'	Illuminance	Fc	3.3	8.2	1.6	2.1	5.1
BUILDING REAR	Illuminance	Fc	3.4	6.5	1.2	2.9	5.4
CLICK-LIST & SIDE PARKING 'B'	Illuminance	Fc	3.1	4.5	2.0	1.6	2.3
ENTRANCE 'A'	Illuminance	Fc	2.5	2.9	1.9	1.3	1.5
ENTRANCE 'B'	Illuminance	Fc	3.3	6.3	1.5	2.2	4.2
FRONT DRIVE	Illuminance	Fc	5.0	8.2	3.1	1.6	2.7
FUEL CENTER DRIVES	Illuminance	Fc	3.5	5.9	1.6	2.2	3.7
FUEL CENTER PARKING	Illuminance	Fc	2.7	3.1	2.5	1.1	1.2
MAIN PARKING	Illuminance	Fc	4.2	9.4	2.0	2.1	4.7
REAR ENTRANCE	Illuminance	Fc	2.0	2.8	1.5	1.4	1.9
SIDE PARKING 'A'	Illuminance	Fc	3.2	5.1	2.1	1.5	2.4

Total Watts = 13286.2

Luminaire Location Summary

LumNo	Label	X	Y	Z	Orient	Tilt
1	FC1	639	93	15	0	0
2	FC1	639	79	15	0	0
3	FC1	625	93	15	0	0
4	FC1	625	79	15	0	0
5	FC1	639	121	15	0	0
6	FC1	639	107	15	0	0
7	FC1	625	121	15	0	0
8	FC1	625	107	15	0	0
9	FC1	639	65	15	0	0
10	FC1	625	51	15	0	0
11	FC1	625	65	15	0	0
12	FC1	625	142	15	0	0
13	FC1	639	164	15	0	0
14	FC1	625	164	15	0	0
15	FC1	639	178	15	0	0
16	FC1	625	178	15	0	0
17	FC1	639	219	15	0	0
18	FC1	625	219	15	0	0
19	FC1	639	233	15	0	0
20	FC1	625	233	15	0	0
21	FC1	639	192	15	0	0
22	FC1	625	192	15	0	0
23	FC1	639	206	15	0	0
24	FC1	625	206	15	0	0
25	FC1	639	51	15	0	0
26	LPA21	-45.75	-454.25	28	0	0
27	LPA21	-46.5	276.5	28	0	0
28	LPA31	664.5	316.5	28	90	0
29	LPD11	430.25	-119	28	90	0
30	LPD11	-37.394	-98.682	28	0	0
31	LPD21	696.25	-114.75	28	90	0
32	LPD21	613	-115.25	28	90	0
33	LPD21	631	12	28	90	0
34	LPD21	699	87	28	180	0
35	LPD21	699	207	28	180	0
36	LPD21	649	291	28	270	0
37	LPD21	-85	383	28	299.055	0
38	LPD21	-182	325	28	299.055	0
39	LPD21	-279	266	28	299.055	0
40	LPE21	223.75	828.75	28	270	0
41	LPE31	51.693	-103	28	90	0
42	LPE31	137.895	-115.25	28	90	0
43	LPE31	237	-115.25	28	90	0
44	LPG41	-45.75	453	28	90	0
45	LPG41	179	458.25	28	90	0
46	LPG81	346	350.5	28	180	0
47	LPG81	347	224.75	28	180	0
48	LPG81	346	98.75	28	180	0
49	LPG81	509	-35.5	28	180	0
50	LPG81	349.25	-35.5	28	180	0
51	LPG81	509.25	350.5	28	180	0
52	LPG81	510.25	224.75	28	180	0
53	LPG81	510.25	98.75	28	180	0
54	LPG81	467	477	28	180	0
55	LPG81	343.25	477	28	180	0
56	LZ82	49	373	15	90	0
57	LZ82	119	373	15	90	0
58	LZ82	189	373	15	90	0
59	LZ82	259	373	15	90	0
60	LZ82	40.5	351	15	180	0
61	LZ82	40.5	301	15	180	0
62	LZ82	40.5	251	15	180	0
63	LZ82	40.5	201	15	180	0
64	LZ82	36.5	-2	15	270	0
65	LZ82	-1	164.5	15	180	0
66	LZ82	-1	101.5	15	180	0
67	LZ82	-1	34.5	15	180	0
68	LZ82	111.5	-2.25	15	270	0
69	LZ82	186.5	-2.5	15	270	0
70	LZ82	261.5	-2.75	15	270	0

Total Quantity: 70

COOPER Lighting Solutions
Applications Engineering
1121 Highway 74 South
Peachtree City, GA 30269
tel no: 770-486-4599
fax no: 770-486-4599
e-mail: mkt-lightingapplications@cooperlighting.com

We make no representation as to its completeness, currency or accuracy because of reliance inherent to CAD and the additional digital data used to produce a lighting application. All digital CAD data appear to be extremely accurate, however, this apparent accuracy is an artifact of the techniques used to generate it, and is in no way intended to imply that the data are accurate to engineering or surveying standards. Luminaire locations may have been altered manually or with the use of a computer. This light level analysis is an estimate only, and is based on estimated reflectance values for interior applications or estimated pole locations and aiming directions for exterior applications. Actual performance of any manufacturer's luminaires may vary from the values calculated. This analysis is a mathematical model and can be only as accurate as is permitted by the third party software and the IES standards used. In addition, actual light levels obtained may be affected by numerous factors not considered in this analysis, including but not limited to, lamp output, input voltage (between variances manufacturing tolerances and maintenance), light loss and many other factors beyond our knowledge. Lighting application drawings are being provided to the recipient of this disclaimer.

Project Name: KROGER 615 DIL #152
Lees Summit, MO

Client: The Kroger Co.
Bill Selkirk

Drawn By: AA

Date: 4/3/2026

Scale: 1" = 40'

Project No: 2600051 r2.AGI

REVISIONS:

1		
2		
3		
4		
5		

PROJECT #: 27480

DATE: MAY 26, 2026

DRAWN BY: EJH

DESIGNER: JPM

CHECKED BY: MLB

Pickering
Pickering Firm, Inc.
Architecture • Engineering
Planning • Surveying
6363 Poplar Avenue, Suite 300
Memphis, TN 38119
901.726.0810

DILLONS
NE DOUGLAS ST.
LEE'S SUMMIT, MO

PHILLIPS EDISON & COMPANY

SEAL:

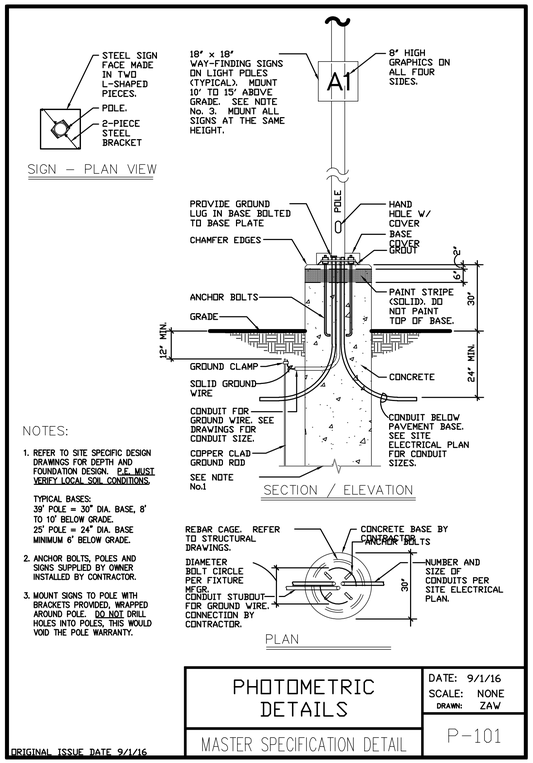
PRELIMINARY - NOT FOR CONSTRUCTION

SHEET NUMBER:

P-100

DESCRIPTION:
PHOTOMETRICS PLAN

K:\27480.00\CAD\PLANS\LIGHTING PLAN.DWG



NOTES:

1. REFER TO SITE SPECIFIC DESIGN DRAWINGS FOR DEPTH AND FOUNDATION DESIGN. P.E. MUST VERIFY LOCAL SOIL CONDITIONS.

   TYPICAL BASES:
   39' POLE = 30" DIA. BASE, 8' TO 10' BELOW GRADE.
   25' POLE = 24" DIA. BASE MINIMUM 6' BELOW GRADE.

2. ANCHOR BOLTS, POLES AND SIGNS SUPPLIED BY OWNER INSTALLED BY CONTRACTOR.

3. MOUNT SIGNS TO POLE WITH BRACKETS PROVIDED, WRAPPED AROUND POLE. DO NOT DRILL HOLES INTO POLES, THIS WOULD VOID THE POLE WARRANTY.

PHOTOMETRIC DETAILS	DATE: 9/1/16 SCALE: NONE DRAWN: ZAW
MASTER SPECIFICATION DETAIL	P-101

ORIGINAL ISSUE DATE 9/1/16

Catalog # _____ Project: _____ Type: _____

Prepared By: _____ Date: _____

Scottsdale Vertex™ (SCV)

Petroleum Canopy Light

IP66

OVERVIEW	
Lumen Package (lm)	9,000 - 23,000
Wattage Range (W)	67 - 188
Efficacy Range (LPW)	109 - 154
Weight lbs (kg)	18.5 (8.4)
Controls	ALBMR, ALBCS, IMSBTxL

QUICK LINKS

Ordering Guide | Performance | Photometrics | Dimensions

FEATURES & SPECIFICATIONS

Construction
- Rugged low-profile die-cast aluminum housing, optical unit, and driver cover.
- Below canopy access to optical chamber and driver housing for serviceability.
- IP66 rated luminaire protects integral components from dust and water.
- Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling.
- Four fasteners secure the door frame to housing. Door frame also provides quick and easy access to the electrical compartment for servicing.
- Shipping weight: 18.5 lbs in carton.

Optical System
- Symmetrical distribution utilizes a clear tempered flat glass lens to uniformly illuminate the area under the gas canopy.
- Combination Forward Throw distribution uses clear tempered flat glass and optical grade PMMA acrylic lens to create an industry leading unique distribution pattern to illuminate the area under the gas canopy and the area between the gas canopy and convenience store eliminating the need for extra floodlights.
- Available in 5000K, 4000K and 3000K color temperatures.
- Minimum CRI of 80.

Electrical
- High-performance factory programmable driver; features include over-voltage, undervoltage, short circuit and over temperature protection.
- Integral 6kV surge protection that meets IEEE C62.41.2 and ANSI C82.77-5 Location Category C Low standards.
- Additional field replaceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).
- Custom lumen and wattage packages available.
- 0-10V dimming (10% - 100%) standard.
- Standard Universal Voltage (120-277 Vac) Input 50/60 Hz or optional High Voltage (347-480 Vac).
- L80 Calculated Life: >100k Hours (See Lumen Maintenance on Page 2).
- Total harmonic distortion: <20%.
- Operating temperature: -40°C to +50°C. (-40°F to +122°F) when mounted to Steel/Aluminum surfaces for 10L, 13L, & 15L Lumen Packages, +45°C for 20L Lumen Package, and +35°C for 23L Lumen Package. If mounted to a non-metallic surface, reduce ambient by 5°C.
- Power factor: >0.90.
- High-efficacy LEDs are mounted to (4) circuit boards to maximize heat dissipation.
- Driver components are fully encased in potting material for moisture resistance. Driver complies with FCC standards.

Hazardous Location
- Designed for lighter than air fuel applications. Product is suitable for Class 1 Division 2 with all lumen packages and distributions only when properly installed per LSI installation instructions. Models with optional controls are not approved for Class 1, Division 2 applications.
  - Gas Groups A, B, C, and D – Group A: Acetylene / Group B: Hydrogen / Group C: Propane and Ethylene / Group D: Benzene, Butane, Methane & Propane.

Installation (Standard)
- Installs in a 12" or 16" deck pan.
- Four fasteners are provided for use in single deck steel canopies. Other suitable fasteners may be required and provided by others.
- Unit is designed to quickly retrofit into existing Scottsdale (4") hole.
- Aluminum locking collar and gasket are included and required for complete seal and support of canopy deck.
- Retrofit panels are available for existing Encores, Richmond, 2x2 Universal, and more.
- Direct mount to surface or recessed J box with hardware bracket kit ordered separately as an accessory.

Warranty
- LSI luminaires carry a 5-year limited warranty. Refer to https://www.lsicorp.com/resources/terms-conditions-warranty/ for more information.

Listings
- Listed to UL 1598 and UL 8750.
- Meets Buy American Act requirements.
- State of California Title 24 Compliant with IMSBT option.
- DesignLights Consortium® (DLC) Premium qualified product. Not all versions of this product may be DLC Premium qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.
- IDA compliant with 3000K or lower color temperature.

©LSI Industries Inc. All Rights Reserved. Specifications and dimensions subject to industry standard tolerances. Specifications subject to change without notice.

Scottsdale Vertex™ (SCV) Petroleum Canopy Light

Type: _____

Have questions? Call us at (800) 436-7800

Back to Quick Links

ORDERING GUIDE

TYPICAL ORDER EXAMPLE: SCV LED 13L SC UNV DIM 50 WHT IMSBT2 REDI

Prefix	Light Source	Lumen Package	Distribution	Voltage	Driver	Color Temperature	Finish	Options	Mounting
SCV - Petroleum Canopy Luminaire	**LED** **Custom Lumen Packages**[1] **23L** - 23,000 Lumens	**10L** - 10,000 Lumens **13L** - 13,000 Lumens **15L** - 15,000 Lumens **20L** - 20,000 Lumens **23L** - 23,000 Lumens **SCFT** - Combination Standard Symmetric and Forward Throw[2]	**SC** - Standard Symmetric	**UNV** - Universal Voltage (120-277VAC) **HV** - 347-480V[3]	**DIM** - 0-10V Dimming[4]	**30** - 3000K **40** - 4000K **50** - 5000K	**WHT** - White **BLK** - Black **BRZ** - Bronze	**Blank** - None **ALBMR2** - AirLink Blue Multi Range Motion and Photo Sensor (8-15' mounting height) **ALBCS2** - AirLink Blue Wireless Motion & Photo Sensor (16-40' mounting height) **IMSBT1L** - Integral Bluetooth® Motion and Photocell Sensor (8-24' mounting height)[4] **IMSBT2L** - Integral Bluetooth® Motion and Photocell Sensor (25-40' mounting height)[4] **HL** - Hazardous Location Class 1 Div 2[5]	**Blank** - None **REDI** - REDIMount integrated junction box system[6]

Need more information? Click here for our glossary

Have additional questions? Call us at (800) 436-7800

ACCESSORY ORDERING INFORMATION

Part Number	Description
673425R2	Retrofit Panel Kit - EC / ECTA / SCF to SCV, for 16" Deck Panel with larger openings[7]
671601R2	Retrofit Panel Kit - EC / ECTA / SCF to SCV, for 12" Deck Panel[8]
673426R2	Retrofit Panel Kit - RECU Richmond to SCV
673427R2	Retrofit Panel Kit - UNV Universal 2x2 to SCV
357282	Retrofit 2x2 Cover Panel Blank (no holes)
354702	Retrofit RC Cover Panel Blank (no holes)
557193WHT	26" X 26" Beauty Plate Kit (with 4" Center hole)
564186WHT	26" X 32" Beauty Plate Kit (with 4" Center hole)

Part Number	Description
687461	Junction Box
1320540	Kit - Hole Plugs and Sealant (enough for 25 retrofits)
671939R2WHT	Rectangular Top Plate Kit (includes top plate and sealant)
675453R2	Surface Mount Box
687462R2	Retrofit Kit - CRU/CRUS to SCV
744355	Retrofit Kit for SCM/SCV to upgrade SC/SCF/EC/ECTA White
752127R2	Bracket SCM/SCV Direct Mount with Hardware

1 Custom lumen and wattage packages available consult factory. Values are within industry standard tolerances but not DLC listed.
2 Will not available with REDIMount.
3 0-10 low voltage wired dimming not available with REDIMount.
4 IMSBTxL is field configurable via the LSI app that can be downloaded from your smartphone's native app store.
5 HL not compatible with AirLink, IMSBTxL, 3000K, or REDIMount.
6 Light fixture engine does not ship with REDIMount attached.
7 Ideal for 9" to 12" openings.
8 Ideal for 8" openings.

©LSI Industries Inc. All Rights Reserved. Specifications and dimensions subject to industry standard tolerances. Specifications subject to change without notice.

Scottsdale Vertex™ (SCV) Petroleum Canopy Light

Type: _____

Have questions? Call us at (800) 436-7800

PERFORMANCE

Back to Quick Links

Delivered Lumens*

Lumen Package	3000K CCT			4000K CCT			5000K CCT			Wattage
	Delivered Lumens	Efficiency	BUG Ratings	Delivered Lumens	Efficiency	BUG Ratings	Delivered Lumens	Efficiency	BUG Ratings	
10L	9,652	144	B3-U0-G1	9,928	148	B3-U0-G1	10,317	154	B3-U0-G1	67
13L	12,567	140	B3-U0-G1	12,927	144	B3-U0-G1	13,443	149	B3-U0-G1	90
15L	13,999	137	B3-U0-G1	14,399	141	B3-U0-G1	14,963	147	B3-U0-G1	102
20L	18,755	141	B4-U0-G1	19,598	147	B4-U0-G1	20,254	152	B4-U0-G1	133
23L	21,783	141	B4-U0-G2	22,406	145	B4-U0-G2	23,284	150	B4-U0-G2	155
23L (SCFT)	20,895	111	B3-U0-G3	23,187	123	B4-U0-G3	23,101	123	B3-U0-G3	188

*LEDs are frequently updated therefore values are nominal.

Recommended Lumen Maintenance - SCV 15L SC[1]

Ambient Temperature °C	Lumen Multiplier				
	Initial[2]	25k hr[3]	50k hr[3]	75k hr[3]	100k hr[3]
25	102%	97%	92%	88%	84%
30	102%	97%	92%	88%	84%
35	102%	97%	92%	88%	84%
40	102%	97%	92%	88%	84%
45	101%	95%	91%	86%	81%
50	101%	95%	90%	85%	80%

Recommended Lumen Maintenance - SCV 23 SCFT[1]

Ambient Temperature °C	Lumen Multiplier				
	Initial[2]	25k hr[3]	50k hr[3]	75k hr[3]	100k hr[3]
25	105%	88%	73%	61%	51%
30	105%	80%	61%	47%	36%
35	105%	70%	47%	32%	21%

Recommended Lumen Maintenance - SCV 23 SC[1]

Ambient emperature °C	Lumen Multiplier				
	Initial[2]	25k hr[3]	50k hr[3]	75k hr[3]	100k hr[3]
25	102%	97%	92%	88%	84%
30	102%	97%	92%	88%	84%
35	102%	97%	92%	88%	84%
40	101%	96%	91%	86%	82%

Electrical Data - Current draw in AMPS*

Lumen Package	Wattage	120V	208V	240V	277V	347V	480V
10L	67	0.56	0.32	0.28	0.24	0.19	0.14
13L	90	0.75	0.43	0.37	0.32	0.26	0.19
15L	102	0.85	0.49	0.42	0.37	0.29	0.21
20L	133	1.1	0.64	0.55	0.48	0.38	0.28
23L (SC)	155	1.29	0.75	0.65	0.56	0.45	0.32
23L (SCFT)	188	1.57	0.9	0.78	0.68	0.54	0.39

*Electrical data at 25°C (77°F). Actual wattage may differ by +/-10%.

1 Lumen maintenance values at 25 °C are calculated per TM-21 based on LM-80 data and in-situ luminaire testing.
2 In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within-six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip).
3 In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times 6X LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip).

©LSI Industries Inc. All Rights Reserved. Specifications and dimensions subject to industry standard tolerances. Specifications subject to change without notice.

K:\27480.00\CAD\PLANS\-101 LIGHTING DETAILS.DWG

Project		Catalog #		Type	
Prepared by		Notes		Date	

McGraw-Edison

GALN Galleon II

Area / Site Luminaire

Product Features

BABA BAA TAA FADC Light Abolition™

Product Certifications

ISM DLC LISTED DLC PREMIUM 3G VIB IP66 CSA CERTIFIED 5 YEAR RoHS Declare

Interactive Menu

- Ordering Information page 2
- Mounting Details page 3
- Optical Distributions page 5
- Product Specifications page 5
- Energy and Performance Data page 6
- Control Options page 17

Quick Facts

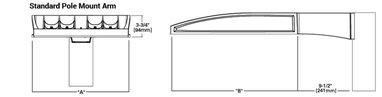
- Lumen packages range from 3,300 - 102,700 (33W - 658W)
- 22 optical distributions
- Efficacy up to 178 LPW

Connected Systems

- Wavelinx LITE Wireless
- Wavelinx PRO Wireless
- AirMesh Wireless

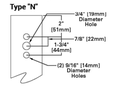
Dimensional Details

Standard Pole Mount Arm



Pole Drilling Pattern

Type "N"



Number of Light Squares	Width "A"	Housing Length "B"	Weight with Standard or QM Arm	EPA with Standard or QM Arm
1-4	16"	22"	29 lb	0.95
5-6	22"	22"	39 lb	0.95
7-9	22"	28-1/8"	48 lb	1.1

NOTE: For arm selection requirements and additional line art, see Mounting Details section.

NOTES:
1. IDA Certified (3000K CCT and warmer only, fixed-mounting options)

McGraw-Edison

GALN Galleon II

Ordering Information

SAMPLE NUMBER: **GALN-SA4C-740-U-T4FT-GM**

Product Family [1, 2]	Light Engine Configuration			Color Temperature	Voltage	Distribution	Mounting	Finish
	Light Square	Square Count	Lumen Output					
GALN–Galleon II **BAA-GALN**–Galleon II Buy American Act Compliant [3] **TAA-GALN**–Galleon II Trade Agreements Act Compliant [3] **BABA-GALN**–Galleon II BABA/IIJA Compliant [3]	**SA**–16 LED Light Square **SB**–25 LED Light Square	**1**–1 Light Square **2**–2 Light Squares **3**–3 Light Squares **4**–4 Light Squares **5**–5 Light Squares **6**–6 Light Squares **7**–7 Light Squares **8**–8 Light Squares **9**–9 Light Squares	**A**–Output Level 1 **B**–Output Level 2 **C**–Output Level 3 **D**–Output Level 4 [4, 5] **Z**–Configured Output[6]	**722**–70CRI, 2700K **727**–70CRI, 2700K **730**–70CRI, 3000K **735**–70CRI, 3500K **740**–70CRI, 4000K **745**–70CRI, 4500K **750**–70CRI, 5000K **827**–80CRI, 2700K **830**–80CRI, 3000K **835**–80CRI, 3500K **840**–80CRI, 4000K **930**–90CRI, 3000K **935**–90CRI, 3500K **940**–90CRI, 4000K **950**–90CRI, 5000K **AMB**–Amber[14, 15]	**UH**–120-277V **H**–347-480V [1, 19] **1**–120V **2**–208V **3**–240V **4**–277V **8**–480V [1, 19] **9**–347V **DV**–277V-480V DuroVolt Drivers [16, 19, 20]	**T1**–Type I **T2**–Type II **T2R**–Type II Roadway **T3**–Type III **T3R**–Type III Roadway **T4FT**–Type IV Forward Throw **T4W**–Type IV Wide **T4VS**–Type V Narrow Square Medium **SWQ**–Type V Square Wide **SL2**–Type II w/Spill Control **SL3**–Type III w/Spill Control **SL4**–Type IV w/Spill Control **SLL**–90° Spill Light Eliminator Left **SLR**–90° Spill Light Eliminator Right **RW**–Rectangular Wide Type I **AFL**–Automotive Frontline **T2BC**–Type II w/ Backlight Control [8] **T3BC**–Type III w/ Backlight Control [8] **T4BC**–Type IV w/ Backlight Control [8] **LBC**–90° Left w/ Backlight Control [8] **RBC**–90° Right w/ Backlight Control [8]	**[blank]**–Standard Pole Mount Arm **QU**–Quick Mount Universal Arm **PA**–Pole Mount Arm with Quick Mount Adaptor **FA**–Pole Mount, Adjustable **SP**–3" Slipfitter, Adjustable [9] **SP2**–2-3/8" Slipfitter, Adjustable [9] **OMA**–Quick Mount Mast Arm, Fixed **MA**–Mast Arm, Fixed **WM**–Wall Mount, Fixed **WA**–Wall Mount, Adjustable **UP**–Upswept Arm	**AP**–Grey **BZ**–Bronze **BK**–Black **DP**–Dark Platinum **GM**–Graphite Metallic **WH**–White **RAL/XK**–Custom Color

Options (Add as Suffix)	Controls and Systems Options (Add as Suffix)	Accessories (Order Separately)[17]
DIM–External 0-10V Dimming Leads [10] **F**–Single Fuse (120, 277 or 347V Specify Voltage) **FF**–Double Fuse (208, 240 or 480V Specify Voltage) **20K**–20kV/10kA 1.44J transient surge protective device [11] **2L**–Two Circuits [12] **HA**–50°C High Ambient [13] **HSS**–Installed House Side Shield [17] **BCS**–Backlight Control Shield [17, 21] **GRSBK**–Glare Reducing Shield, Black [18] **GRSWH**–Glare Reducing Shield, White [18] **LCE**–Light Color Engine Tuned to Match Housing [18] **TH**–Tool-less Door Hardware **CC**–Coastal Construction finish [22] **L90**–Optics Rotated 90° Left **R90**–Optics Rotated 90° Right **3SDCM**–3 Standard Deviation Color Matching [24] **AHD14S**–After Hours Dim, 5 Hours [25] **AHD24S**–After Hours Dim, 6 Hours [25] **AHD25S**–After Hours Dim, 7 Hours [25] **AHD35S**–After Hours Dim, 8 Hours [25] **DALI**–DALI Drivers **CDW**–Non-programmable Drivers [26]	**BPC**–Button Type Photocontrol. Must specify voltage 120V, 208V, 240V or 277V. [4] **PR**–NEMA 3-PIN Photocontrol Receptacle **PR7**–NEMA 7-PIN Photocontrol Receptacle [26] **FADC**–Field Adjustable Dimming Controller [27] **PSC**–Photocontrol Shorting Cap **SPR2**–Dimming Motion Sensor, 9'-20' mounting [28] **SPR4**–Dimming Motion Sensor, 21'-40' mounting [28] **SPR2/X**–Dimming Motion Sensor, limited square count, 9'-20' mounting [28] **SPR4/X**–Dimming Motion Sensor, limited square count, 21'-40' mounting [28] **MS/DIM-L20**–Motion Sensor for Dimming Operation, 9'-20' Mounting [29, 30] **MS/DIM-L40**–Motion Sensor for Dimming Operation, 21'-40' Mounting [29, 30] **WLXIFOX**–WaveLinx LITE, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 7' - 15' Mounting [31, 32, 33, 34] **WLXIFOXPD**–WaveLinx LITE, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 15' - 40' Mounting [31, 32, 33, 34] **WPSZXX**–WaveLinx PRO, SR Driver, Dimming Motion and Daylight, WAC Programmable, 7' - 15' Mounting [31, 32, 33, 34] **WPS40X**–WaveLinx PRO, SR Driver, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting [31, 32, 33, 34] **DMI10-L20**–AirMesh Occupancy Sensor (9'-20' Mounting) [35, 36] **DMI10-L40**–AirMesh Occupancy Sensor (21'-40' Mounting) [35, 36]	**OA/BA1016**–NEMA Photocontrol Multi-Tap - 105-285V **OA/BA1027**–NEMA Photocontrol - 480V **OA/BA1201**–NEMA Photocontrol - 347V **OA/BA1013**–Photocontrol Shorting Cap **OA/BA1014**–120V Photocontrol **MA1252**–10kV Surge Module Replacement **MA1036-XX**–Single Tenon Adapter for 2-3/8" O.D. Tenon **MA1037-XX**–2@180° Tenon Adapter for 2-3/8" O.D. Tenon **MA1197-XX**–3@120° Tenon Adapter for 2-3/8" O.D. Tenon **MA1188-XX**–4@90° Tenon Adapter for 2-3/8" O.D. Tenon **MA1189-XX**–5@90° Tenon Adapter for 2-3/8" O.D. Tenon **MA1190-XX**–3@90° Tenon Adapter for 2-3/8" O.D. Tenon **MA1191-XX**–3@120° Tenon Adapter for 2-3/8" O.D. Tenon **MA1038-XX**–Single Tenon Adapter for 3-1/2" O.D. Tenon **MA1039-XX**–2@180° Tenon Adapter for 3-1/2" O.D. Tenon **MA1192-XX**–3@120° Tenon Adapter for 3-1/2" O.D. Tenon **MA1193-XX**–4@90° Tenon Adapter for 3-1/2" O.D. Tenon **MA1194-XX**–5@90° Tenon Adapter for 3-1/2" O.D. Tenon **MA1195-XX**–3@90° Tenon Adapter for 3-1/2" O.D. Tenon **SRA339**–Adaptor kit for mounting 3" SP arm to 2-3/8" O.D. vertical tenon **FDR-100**–Wireless Configuration Tool for MSCDM [37] **LS/HSS**–Field Installed House Side Shield for SA Light Squares [6, 17] **LS/HSS-SB**–Field Installed House Side Shield for SB Light Squares [6, 17] **LS/BCS**–Backlight Control Shield [6, 21, 22] **LS/GRSBK-2PK**–Glare Reducing Shield, Black [6, 22] **LS/GRSWH-2PK**–Glare Reducing Shield, White [6, 22] **LS/PFS**–Perimeter Shield, Black [6, 38] **WOLC-7P-15A**–WaveLinx Outdoor Control Module [31, 34, 39] **TL2-01-HV**–AirMesh 7-PIN node, 110-480V [31, 34, 36] **CBSSW-450-002**–AirMesh central base station with 5-button control [36]

NOTES:
1. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our white paper WP27300ENUS for additional support information.
2. Designlights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details.
3. Coastal construction finish salt spray tested to over 3,000 hours per ASTM B117, with a scribe rating of 9 per ASTM D1654. Not available with 7in option.
4. Not available with SA Squares, Output Level 4 not available with color temperatures 722, 727, 827, 830 or 930 when HSS is used.
5. 7in option not SC rated. Not available with Coastal Construction (CC) option.
6. Consult factory for configured SKU.
7. Not available with SB1 or SB2A configurations. Not available in combination with 1in high ambient and sensor options at Output Level 3. H voltage not available with sensor options, choose voltage 8 or 9.
8. SF arm limited to 3" O.D. w/min wall thickness .109"). SPT limited to 3-3/4" O.D. w/thick wall.
9. One required for each Light Square.
10. Not available with SB light squares. Not available with SPR or 347V or 480V. Not available with WaveLinx or 250kV surge option.
11. Requires PR7.
12. Replace X with sensor color (WH, BZ or BK.).
13. WAC Gateway required to enable field configurability: Order WAC-PoE and WPOE-120 (10V to PoE injector) power supply if PoE switch is not present. WAC-Gateway-WP.
14. Narrow band 350nm +/- 5nm for wildlife and observatory use. Choose Output Level 1, supplied at 500mA drive current only. Not available with SB light squares. Exact luminance wattage available in IES files. Available with 5WQ, 5WQ, SL2, SL3 and SL4 distributions. Can be used with HSS option.
15. Set of 4 pcs. One set required per Light Square.
16. Not available with 3000K, 4000K, 5000K, or Amber.
17. Not for use with T1, 5WQ, 5WQ, SWQ or VW options.
18. Cannot be used with other control options.
19. Not available in any configuration that is field serviceable outside fixture. Not available with DALI or integrated controls options.
20. Not available if any SPR2 or SPR4 sensor is selected. Motion sensor has an integral photocell.
21. Requires the use of an SPR, SPR2, SPR4 or the PBT or PR photocontrol receptacle with photocontrol accessory. Not available with SB light squares when using Output Level 4.
22. Not for use with T1, T4FT, T4W or DL option. See IES files for details. Not available with SB light squares.
23. Sensor configuration mobile application required for configuration. See controls page for details.
24. Replace X with number of Light Squares controlled by the SPR, referencing the "SPR2X Availability Table" on the controls page.
25. Not available with HSS, CBSSW or CBSSW.
26. Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC PREFERENCES website for more information. Consult factory for other configurations that may be required to meet domestic preference requirements.
27. For BAA or TAA requirements, Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.
28. Sensor is for motion detection and illumination from power quality issues such as loss of neutral, transients and voltage fluctuations. Visit www.signify.com/connected for more information.
29. 480V not to be used with ungrounded or impedance grounded systems.
30. Not available with SA1A or SA1X. Not available with SB1, or any SB configuration using Output Level 1. Not available with any control option except SPR.
31. Not to be used with DALI, PR7, or other motion response control options. Not available with SB light squares when using Output Level 4.
32. Use GALN Product Configurator to specify lumen output, drive current and wattage. Not available with AMB. Not available with SB light squares.
33. Uses the FSP-211 motion sensor. The FSIR-100 configuration tool is required to adjust parameters including high and low modes, time delays, and ramp rates. Refer to the WAC Lighting website for more information. Not available with SB light squares.
34. Controls system is not available with photocontrol receptacles (PR, PR7) or other controls systems (FADC, SPR4).
35. Requires AirMesh central base station CBSSW-450-002 and Synapse commissioning for operation.
36. 3-step MacAdam ellipse binning. Available in 740 CRI/CCT only. Longer lead times apply, consult your lighting representative at Cooper Lighting Solutions for more information.
37. Not available with SB light squares.
38. Only product configurations with these prefixes are built to be compliant with Beday American Act of 1933 (BAA) or the Build America Buy America Act (BABA). BABA is the minimum Government compliance requirement for the Build America Buy America provisions which is part of the Infrastructure Investment and Jobs Act. Please refer to the DOMESTIC PREFERENCES website for more information. For non-standard configurations that may be required to meet domestic preference requirements, please contact the DLC Domestic Preferences team at DLCDomesticPreferences@signify.com. Components shipped separately may be separately analyzed under domestic preference requirements.
39. Select SA light square. Only available with Output Levels 1, 3 or 5. Not compatible with HSS, CBS, BCS or PFS shield options, or LCE.
40. Not compatible with DALI.
41. Uses non-NFC (Near Field Communication) drivers to eliminate field programmability.

REVISIONS:

PROJECT #: 27480

DATE: MAY 26, 2026

DRAWN BY: EJH

DESIGNER: JPM

CHECKED BY: MLB

Pickering

Pickering Firm, Inc.
Architecture • Engineering
Planning • Surveying

6363 Poplar Avenue, Suite 300
Memphis, TN 38119
901.726.0810

DILLONS
NE DOUGLAS ST.
LEE'S SUMMIT, MO

PHILLIPS EDISON & COMPANY

SEAL:

PRELIMINARY - NOT FOR CONSTRUCTION

SHEET NUMBER:

P-101

DESCRIPTION:
PHOTOMETRIC DETAILS

Project		Catalog #		Type	
Prepared by		Notes		Date	

McGraw-Edison

GWS Galleon II Wall Slim

Wall Mount Luminaire

Product Features

Light Ahhitect™

Interactive Menu

- Ordering Information page 2
- Product Specifications page 2
- Energy and Performance Data page 3
- Control Options page 9

Product Certifications

Quick Facts

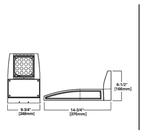
- Lumen packages range from 2,700 - 52,000 (20W - 373W)
- 14 optical distributions
- Efficacy up to 160 LPW

Connected Systems

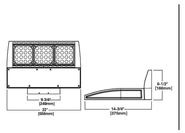
- WaveLinx PRO Wireless
- WaveLinx LITE Wireless

Dimensional Details

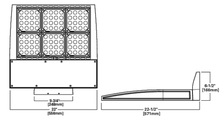
1 Square - Housing



2-3 Square - Housing



4-6 Square - Housing



NOTES:
1. Visit https://www.designlights.org/search/ to confirm qualification. Not all product variations are DLC qualified.
2. IDA Certified for 3000K CCT and warmer only.

McGraw-Edison

GWS Galleon II Wall Slim

Ordering Information

SAMPLE NUMBER: **GWS-SA1C-740-U-T2-GM**

Product Family [1,2]	Light Engine		Color Temperature	Voltage	Distribution and IES NEMA-Type (HxV)	Finish
	Configuration	Drive Current				
GWS-Galleon Wall Slim **BAA-GWS**-Galleon Wall Slim Buy American Act Compliant [18] **TAA-GWS**-Galleon Wall Slim Trade Agreements Act Compliant [18] **BABA-GWS**-Galleon Wall Slim build America Buy America [19]	**SA1**-1 Square **SA2**-2 Squares **SA3**-3 Squares **SA4**-4 Squares **SA5**-5 Squares **SA6**-6 Squares	**A**-350mA [3] **B**-450mA **C**-615mA **D**-800mA **E**-1050mA **F**-1200mA **Z**-Configured [16]	**722**-702CRI, 2200K **727**-702CRI, 2700K **730**-702CRI, 3000K **735**-702CRI, 3500K **740**-702CRI, 4000K **750**-702CRI, 5000K **760**-702CRI, 6000K **827**-802CRI, 2700K **830**-802CRI, 3000K	**U**-120-277V **1**-120V **2**-208V **3**-240V **4**-277V **5**-347V **9**-347V	**T1**-Type I **T2**-Type II **T3**-Type III **T4FT**-Type IV Forward Throw **T4W**-Type IV Wide **SL2**-Type II w/Spill Control **SL3**-Type III w/Spill Control **SL4**-Type IV w/Spill Control **SLL**-90° Spill Light Eliminator Left **SLR**-90° Spill Light Eliminator Right **SW**-Rectangular Wide Type I **SNO**-Type V Square Narrow **SMQ**-Type V Square Medium **SWQ**-Type V Square Wide	**AP**-Grey **BZ**-Bronze **BK**-Black **DP**-Dark Platinum **GM**-Graphite Metallic **WH**-White

Options (Add as Suffix)	Controls and Systems Options (Add as Suffix)	Accessories (Order Separately)
DIM-External 0-10V Dimming Leads* **F**-Single Fuse[7] **FF**-Double Fuse[7] **20K**-20kV surge protective device **2L**-Two Circuits [4,20] **CC**-Coastal Construction **L90**-Optics Rotated 90° Left **R90**-Optics Rotated 90° Right **HSS**-Factory Installed House Side Shield * **GRSBK**-Glare Reducing Shield, Black * **GRSWH**-Glare Reducing Shield, White * **AHD545**-After Hours Dim, 5 Hours[8] **AHD645**-After Hours Dim, 6 Hours[8] **AHD255**-After Hours Dim, 7 Hours[8] **AHD355**-After Hours Dim, 8 Hours[8] **HA**-50°C High Ambient **DALI**-DALI Drivers **WG**-Factory installed Wire Guard [9] **SLD**-Factory installed Vandal Shield **TB**-3-position Terminal Block	**BPC**-Button Type Photocontrol (120, 208, 240 or 277V. Must Specify Voltage) **PR**-NEMA 3-PIN Photocontrol Receptacle **PR7**-NEMA 7-PIN Photocontrol Receptacle[9] **WPSXXX**-WaveLinx PRO, SR Driver, Dimming Motion and Daylight, WAC Programmable, 7' - 15' Mounting [6] **WPSAXX**-WaveLinx PRO, SR Driver, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting [6] **WLLXXX**-WaveLinx LITE, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 7' - 15' Mounting [6] **WLSAXX**-WaveLinx LITE, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 15' - 40' Mounting [6] **SPB1**-Dimming Motion and Daylight Sensor, Bluetooth Programmable, < 8' Mounting[6] **SPB2**-Dimming Motion and Daylight Sensor, Bluetooth Programmable, 8' - 20' Mounting[6] **SPB4**-Dimming Motion and Daylight Sensor, Bluetooth Programmable, 21' - 40' Mounting[6] **DIM10-LOS**-AirMesh Occupancy Sensor <40' Mounting[10] **DIM10-L20**-AirMesh Occupancy Sensor 20'-25' Mounting[10] **DIM10-L40**-AirMesh Occupancy Sensor 21'-40' Mounting[10]	**OARIA1016**-NEMA Photocontrol Multi-Tap - 105-285V **OARIA1027**-NEMA Photocontrol - 480V **OARIA1201**-NEMA Photocontrol - 347V **OARIA1013**-Photocontrol Shorting Cap **OARIA1014**-120V Photocontrol **MA1252**-10kV Surge Module Replacement **WDLC-7P-10A**-WaveLinx Outdoor Control Module [16] **TLT-HVD**-AirMesh 7-PIN node, 110-480V [6] **LS/HSS**-Field Installed House Side Shield *, [9] **LS/GRSBK-2PK**-Glare-Reducing Shield, Black *, [9] **LS/GRSWH-2PK**-Glare Reducing Shield, White *, [9] **LS/PFS**-Perimeter Shield, Black [9] **LS/WG/1**-Field installed Wire Guard, 1 Sq [9] **LS/WG/2**-Field installed Wire Guard, 2 Sq [9] **LS/WG/4**-Field installed Wire Guard, 4 Sq [9] **LS/SLD/1**-Field installed Vandal Shield, 1 Sq **LS/SLD/3**-Field installed Vandal Shield, 3 Sq **LS/SLD/6**-Field installed Vandal Shield, 6 Sq

NOTES:
1. Customer is responsible for engineering analysis to confirm fixture compatibility for all applications. Refer to our white paper WP513001EN for additional support information
2. Actual performance may differ as listed. Values are based on designs using Qualified Products List under Family Models for details
3. Available with SA1 only. Not available with SA1V or dimming
4. Not for use with T4FT, T4W or SL4 optics. See IES files for details.
5. 480V not to be used with ungrounded or impedance grounded systems.
6. Low voltage control lead brought out 10" outside fixture. Not available with DALI or integrated controls options
7. Single fuse (F) specify voltage 120V, 277V or 347V. Double fuse (FF) specify voltage 208V, 240V or 480V
8. 2L is not available with SPB at 347V or 480V. Not available with WaveLinx or Enlighted sensors, or 20kV surge option
9. Not for use with SWQ, SNO, SWC or HW optics. The light square trim plate is painted black when the HSS option is selected
10. Requires the use of BPC photocontrol or the PR7 or PR photocontrol receptacle with photocontrol accessory
11. Not available with HSS
12. Not available if any SPB or WaveLinx sensor is selected
13. Set of 4 pcs. One set required per Light Square
14. Sensor configuration mobile application required for configuration. See controls page for details
15. Requires PR7 receptacle
16. Order one shield per Light Square.
17. WAC Gateway required to enable field-configurability. Order WAC-PoE and WPOE-120 (10V to PoE injector) power supply if needed. WAC not required for Bluetooth Programmable sensors
18. Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.
19. Only product configurations with these prefixes standard products with small adjustments to meet unique requirements such as packaging, labels, wattage adjustments, etc.
20. Available with SA1A for 120V only
21. Only product configurations with these prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or the Build America Buy America Act (BABA). BABA is the minimum Government compliance requirement for the Build America Buy America standards which is part of the Infrastructure and Investment Jobs Act (IIJA). Individual Government Agencies may have more stringent compliance standards. Please refer to the DOMESTIC PREFERENCES website or consult the CLS Domestic Preferences team for more information. Components shipped separately may be separately analyzed under domestic preference requirements.

Product Specifications

Construction

- Single-piece die-cast aluminum housing with integrated heat sink
- Available in three housing sizes: small (1 light square), medium (2 or 3 light squares), and large (4, 5, or 6 light squares)
- Housing and optics IK10 impact rated
- Housing and optics IP66 rated

Optics

- High-efficiency injection-molded AccuLED Optics technology
- 14 optical distributions for wall mount applications
- 3 shielding options include HSS, GRS and PFS
- SLD constructed of Makrolon GP, UV stabilized clear polycarbonate, with a thickness of 3/16" and impact rated IK10; Secured at 4 fastening points and spaced 3/16" from optical lens
- WG constructed of 11-guage wire in a 1"x1" cell pattern; Chrome color poly powder coat finish
- IDA Certified (3000K CCT and warmer only)

Electrical

- Standard with 0-10V dimming
- Standard with 10kV surge module, optional 20kV surge module
- Suitable for operation in -40°C to 40°C ambient environments
- Optional 50°C high ambient (HA) configuration

Mounting

- Gasketed and zinc plated rigid steel mounting attachment for wall mount only

Typical Applications

- Exterior Wall, Walkway

Finish

- 6 standard finishes use super durable TGIC polyester powder coat paint, providing 2.5 mil nominal thickness and salt-spray tested to 3,000 hours per ASTM B117
- RAL and custom color matches available
- Coastal Construction (CC) option available

Compliance

- This Cooper product is manufactured in the US and meets the BABA cost of components rule. To verify a configured product with specific accessories and options meets BABA Domestic Preference Requirements; submit this catalog number to Cooper Lighting Quotation team for validation by our Engineering and Manufacturing teams. Our BABA designation is based on the minimum compliance requirement for BABA. Individual Government Agencies may have more stringent compliance standards
- Please refer to the DOMESTIC PREFERENCES website or consult the CLS Domestic Preferences team for more information. Components shipped separately may be separately analyzed under domestic preference requirements

Warranty

- Five year limited warranty, consult website for details www.cooperlighting.com/legal

REVISIONS:

1		
2		
3		
4		
5		

PROJECT #: 27480
DATE: MAY 26, 2026
DRAWN BY: EJH
DESIGNER: JPM
CHECKED BY: MLB

Pickering Firm, Inc.
Architecture • Engineering
Planning • Surveying
6363 Poplar Avenue, Suite 300
Memphis, TN 38119
901.726.0810

DILLONS
NE DOUGLAS ST.
LEE'S SUMMIT, MO

PHILLIPS EDISON & COMPANY

SEAL:

PRELIMINARY - NOT FOR CONSTRUCTION

SHEET NUMBER:

P-102

DESCRIPTION:
PHOTOMETRIC DETAILS

K:\27480.00\CAD\PLANS\L-101 LIGHTING DETAILS.DWG

FRONT (EAST) ELEVATION AREA = *11,375 SF*

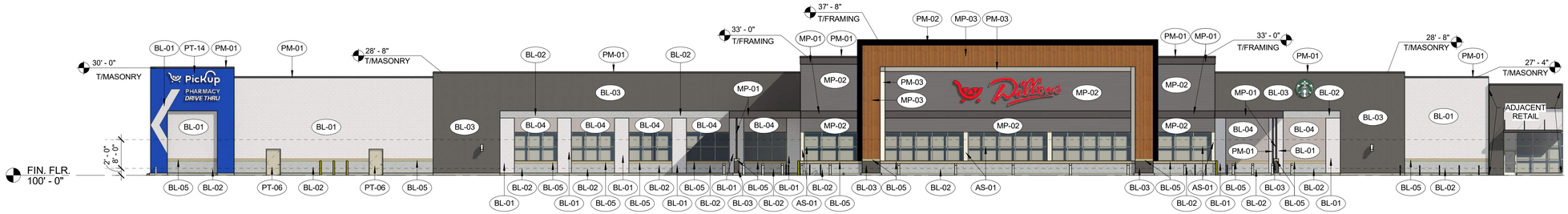
CLASS 1/2 MATERIALS:		
• GLAZING	1,245 SF	11%
• GROUND FACE CMU (BL-01)	2,933 SF	26%
• GROUND FACE CMU (BL-03)	2,328 SF	20%
• GROUND FACE CMU (BL-04)	528 SF	5%
• METAL PANEL (MP-01)	342 SF	3%
• METAL PANEL (MP-02)	1,546 SF	14%
• METAL PANEL (MP-03)	744 SF	6%
CLASS 1/2 TOTAL %		85%
CLASS 3 MATERIALS:		
• COMBED FACE CMU (BL-05)	189 SF	2%
• SPLIT FACE CMU (BL-02)	950 SF	8%
CLASS 4 MATERIALS:		
• METAL TRIM	513 SF	4%
• METAL TRIM (PM-01)	109 SF	1%
• METAL TRIM (PM-02)	219 SF	2%
• METAL TRIM (PM-03)	185 SF	1%
• HOLLOW METAL DOORS	57 SF	1%

LEFT (SOUTH) ELEVATION AREA = *8,204 SF*

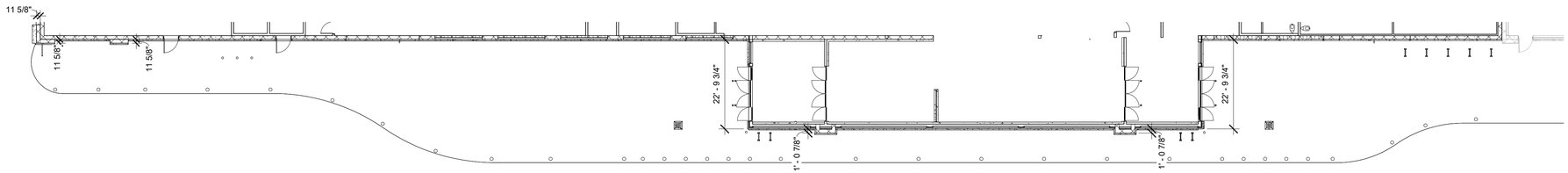
CLASS 1/2 MATERIALS:		
• GLAZING	251 SF	3%
• GROUND FACE CMU (BL-01)	3,720 SF	46%
• GROUND FACE CMU (BL-03)	2,654 SF	32%
• GROUND FACE CMU (BL-04)	0 SF	0%
• METAL PANEL (MP-01)	91 SF	1%
• METAL PANEL (MP-02)	384 SF	5%
• METAL PANEL (MP-03)	44 SF	1%
CLASS 1/2 TOTAL %		88%
CLASS 3 MATERIALS:		
• COMBED FACE CMU (BL-05)	99 SF	1%
• SPLIT FACE CMU (BL-02)	582 SF	7%
CLASS 4 MATERIALS:		
• METAL TRIM (PM-01)	108 SF	1%
• HOLLOW METAL DOORS	271 SF	3%

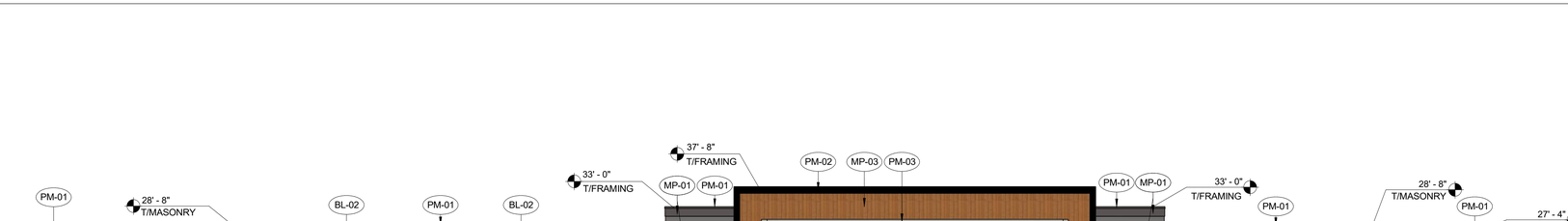
*ALL GLAZING NOTED IS TRANSPARENT.

ROOFING: TPO MEMBRANE, NOT VISIBLE - CLASS 3

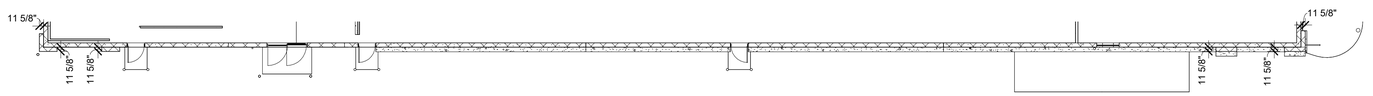


1 FRONT (EAST) ELEVATION
1/16" = 1'-0"





4 LEFT (SOUTH) ELEVATION
1/16" = 1'-0"



SIGNAGE SHOWN FOR REFERENCE ONLY. OWNER'S SIGN CONTRACTOR TO INSTALL NEW SIGNAGE. ALL SIGNS ARE UNDER SEPARATE PERMIT TO BE PULLED BY OWNER'S SIGNAGE CONTRACTOR.

EXTERIOR FINISHES

MATERIAL	DESCRIPTION	MANUFACTURER	FINISH
AE-01	PREFINISHED ALUMINUM STOREFRONT DOOR	STANLEY	CLEAR ANODIZED
AS-01	PREFINISHED ALUMINUM STOREFRONT		CLEAR ANODIZED
BL-01	DECORATIVE, INTEGRALLY COLORED CMU - GROUND FACE	BASALITE	720WR
BL-02	DECORATIVE, INTEGRALLY COLORED CMU - SPLIT FACE	BASALITE	800WR
BL-03	DECORATIVE, INTEGRALLY COLORED CMU - GROUND FACE	BASALITE	807WR
BL-04	DECORATIVE, INTEGRALLY COLORED CMU - GROUND FACE	BASALITE	900WR
BL-05	DECORATIVE, INTEGRALLY COLORED CMU - COMBED FACE PRECISION	BASALITE	923WR
CN-01	PREMANUFACTURED CANOPY	ARCHITECTURAL FABRICATIONS INC.	SLATE GRAY
MP-01	METAL PANEL - SMOOTH	ATAS INT.	SLATE GRAY
MP-02	METAL PANEL - CORRUGATED	ATAS INT.	SILVERSMITH
MP-03	METAL WALL PANEL, WOOD GRAIN FINISH	LONGBOARD	LIGHT CHERRY
PM-01	PREFINISHED METAL		SLATE GRAY
PM-02	PREFINISHED METAL		MATTE BLACK
PM-03	PREFINISHED METAL		WHITE
PT-06	PAINTED METAL	SHERWIN WILLIAMS	MINDFUL GRAY SW7016
PT-07	PAINTED METAL	SHERWIN WILLIAMS	GAUNTLET GRAY SW7019
PT-08	PAINT	SHERWIN WILLIAMS	SW4084 SAFETY YELLOW
PT-12	PAINT	SHERWIN WILLIAMS	WHITE
PT-14	PAINT	SHERWIN WILLIAMS	KROGER BLUE PMS 2728C
SO-01	VINYL SOFFIT PANEL	CERTAINTEED	GRANITE GRAY

BL-01 BL-02 BL-03 BL-04 BL-05 MP-01/PM-01/CN-01 MP-02 MP-03

Naos Design Group, LLC
4949 S. SYRACUSE STREET
SUITE 460
DENVER, COLORADO 80237
(p) 303.759.5777 (f) 720.360.4281
www.naosdg.com

DILLON'S #152

NE DOUGLAS ST
LEE'S SUMMIT, MO

JOB #: 2026002 **DATE:** 03/27/2026
SCALE: 1/16" = 1'-0"

COPYRIGHT © 2026 NAOS DESIGN GROUP, LLC.
THESE DRAWINGS, OR PARTS THEREOF, MAY NOT BE REPRODUCED IN ANY FORM, BY ANY METHOD, FOR ANY PURPOSE, WITHOUT PRIOR WRITTEN CONSENT FROM NAOS

BACK (WEST) ELEVATION AREA = *9,272 SF*

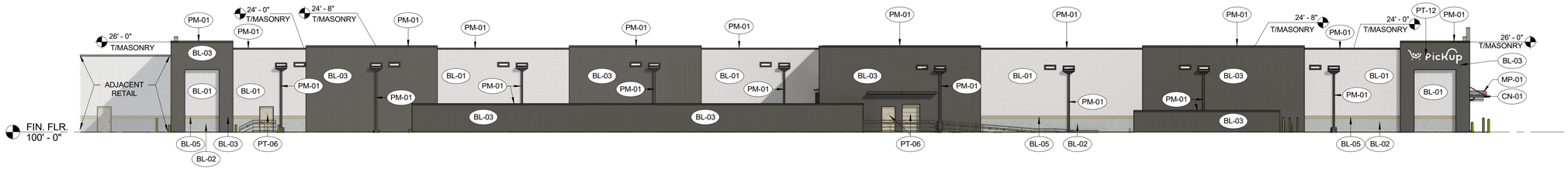
CLASS 1/2 MATERIALS:		
• GLAZING	0 SF	0%
• GROUND FACE CMU (BL-01)	3,255 SF	35%
• GROUND FACE CMU (BL-03)	5,296 SF	57%
• GROUND FACE CMU (BL-04)	0 SF	0%
• METAL PANEL (MP-01)	0 SF	0%
• METAL PANEL (MP-02)	0 SF	0%
• METAL PANEL (MP-03)	0 SF	0%
CLASS 1/2 TOTAL %		92%
CLASS 3 MATERIALS:		
• COMBED FACE CMU (BL-05)	74 SF	1%
• SPLIT FACE CMU (BL-02)	443 SF	5%
CLASS 4 MATERIALS:		
• METAL TRIM (PM-01)	105 SF	1%
• HOLLOW METAL DOORS	99 SF	1%

RIGHT (NORTH) ELEVATION AREA = *8,126 SF*

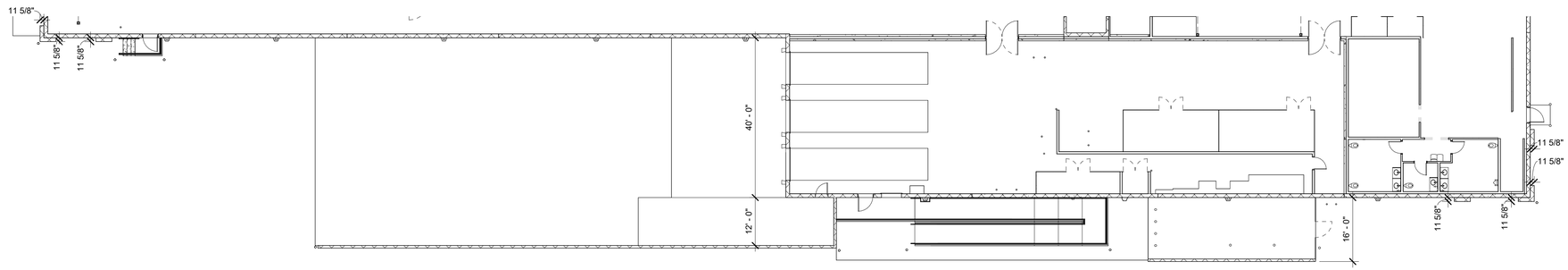
CLASS 1/2 MATERIALS:		
• GLAZING	326 SF	4%
• GROUND FACE CMU (BL-01)	2,985 SF	37%
• GROUND FACE CMU (BL-03)	3,362 SF	42%
• GROUND FACE CMU (BL-04)	0 SF	0%
• METAL PANEL (MP-01)	142 SF	2%
• METAL PANEL (MP-02)	368 SF	4%
• METAL PANEL (MP-03)	44 SF	1%
CLASS 1/2 TOTAL %		90%
CLASS 3 MATERIALS:		
• COMBED FACE CMU (BL-05)	101 SF	1%
• SPLIT FACE CMU (BL-02)	607 SF	7%
CLASS 4 MATERIALS:		
• METAL TRIM (PM-01)	103 SF	1%
• HOLLOW METAL DOORS	88 SF	1%

*ALL GLAZING NOTED IS TRANSPARENT.

ROOFING: TPO MEMBRANE, NOT VISIBLE - CLASS 3



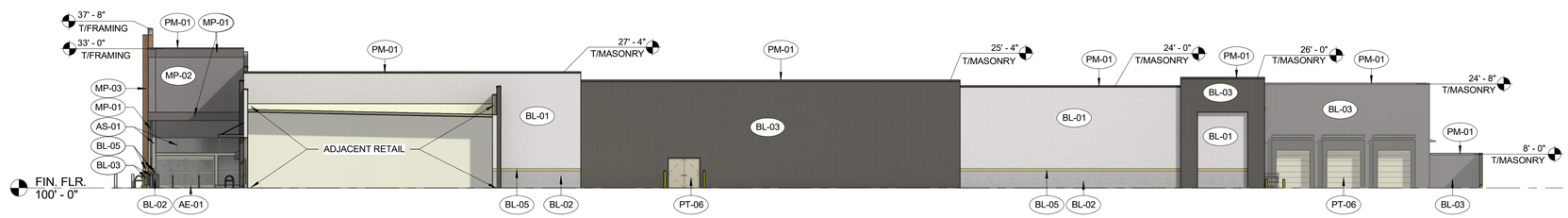
1 BACK (WEST) ELEVATION
1/16" = 1'-0"



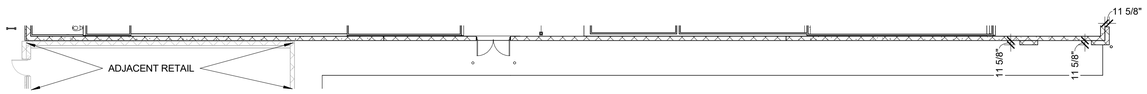
SIGNAGE SHOWN FOR REFERENCE ONLY. OWNER'S SIGN CONTRACTOR TO INSTALL NEW SIGNAGE. ALL SIGNS ARE UNDER SEPARATE PERMIT TO BE PULLED BY OWNER'S SIGNAGE CONTRACTOR.

EXTERIOR FINISHES

MATERIAL	DESCRIPTION	MANUFACTURER	FINISH
AE-01	PREFINISHED ALUMINUM STOREFRONT DOOR	STANLEY	CLEAR ANODIZED
AS-01	PREFINISHED ALUMINUM STOREFRONT		CLEAR ANODIZED
BL-01	DECORATIVE, INTEGRALLY COLORED CMU - GROUND FACE	BASALITE	720WR
BL-02	DECORATIVE, INTEGRALLY COLORED CMU - SPLIT FACE	BASALITE	800WR
BL-03	DECORATIVE, INTEGRALLY COLORED CMU - GROUND FACE	BASALITE	807WR
BL-04	DECORATIVE, INTEGRALLY COLORED CMU - GROUND FACE	BASALITE	900WR
BL-05	DECORATIVE, INTEGRALLY COLORED CMU - COMBED FACE PRECISION	BASALITE	923WR
CN-01	PREMANUFACTURED CANOPY	ARCHITECTURAL FABRICATIONS INC.	SLATE GRAY
MP-01	METAL PANEL - SMOOTH	ATAS INT.	SLATE GRAY
MP-02	METAL PANEL - CORRUGATED	ATAS INT.	SILVERSMITH
MP-03	METAL WALL PANEL, WOOD GRAIN FINISH	LONGBOARD	LIGHT CHERRY
PM-01	PREFINISHED METAL		SLATE GRAY
PM-02	PREFINISHED METAL		MATTE BLACK
PM-03	PREFINISHED METAL		WHITE
PT-06	PAINTED METAL	SHERWIN WILLIAMS	MINDFUL GRAY SW7016
PT-07	PAINTED METAL	SHERWIN WILLIAMS	GAUNTLET GRAY SW7019
PT-08	PAINT	SHERWIN WILLIAMS	SW4084 SAFETY YELLOW
PT-12	PAINT	SHERWIN WILLIAMS	WHITE
PT-14	PAINT	SHERWIN WILLIAMS	KROGER BLUE PMS 2728C
SO-01	VINYL SOFFIT PANEL	CERTAINTEED	GRANITE GRAY



2 RIGHT (NORTH) ELEVATION
1/16" = 1'-0"



Naos Design Group, LLC
4949 S. SYRACUSE STREET
SUITE 460
DENVER, COLORADO 80237
(p) 303.759.5777 (f) 720.360.4281
www.naosdg.com

DILLON'S #152

NE DOUGLAS ST
LEE'S SUMMIT, MO

JOB #: 2026002 **DATE:** 03/27/2026
SCALE: 1/16" = 1'-0"

COPYRIGHT © 2026 NAOS DESIGN GROUP, LLC.
THESE DRAWINGS, OR PARTS THEREOF, MAY NOT BE REPRODUCED IN ANY FORM, BY ANY METHOD, FOR ANY PURPOSE, WITHOUT PRIOR WRITTEN CONSENT FROM NAOS

THESE DOCUMENTS ARE FOR REVIEW ONLY. DOCUMENTS MUST BE APPROVED BY THE JURISDICTION AND THE DEVELOPER. DIMENSIONS AND AREAS ARE APPROXIMATE.

FRONT (EAST) ELEVATION AREA = *3,020 SF*

CLASS 1/2 MATERIALS:		
• GLAZING	840 SF	27%
• GROUND FACE CMU (BL-01)	658 SF	22%
• GROUND FACE CMU (BL-03)	663 SF	22%
CLASS 1/2 TOTAL %		71%
CLASS 3 MATERIALS:		
• COMBED FACE CMU (BL-05)	3 SF	1%
• SPLIT FACE CMU (BL-02)	16 SF	1%
CLASS 4 MATERIALS:		
• METAL TRIM (PM-01)	840 SF	27%

BACK (WEST) ELEVATION AREA = *2,070 SF*

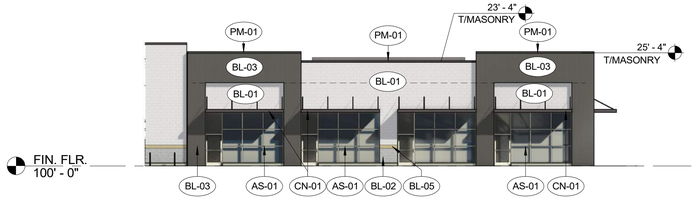
CLASS 1/2 MATERIALS:		
• GROUND FACE CMU (BL-01)	1,257 SF	61%
• GROUND FACE CMU (BL-03)	366 SF	17%
CLASS 1/2 TOTAL %		78%
CLASS 3 MATERIALS:		
• COMBED FACE CMU (BL-05)	44 SF	2%
• SPLIT FACE CMU (BL-02)	264 SF	13%
CLASS 4 MATERIALS:		
• METAL TRIM (PM-01)	22 SF	1%
• HOLLOW METAL DOORS	117 SF	6%

RIGHT (NORTH) ELEVATION AREA = *1,445 SF*

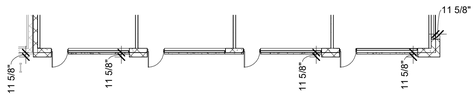
CLASS 1/2 MATERIALS:		
• GLAZING	216 SF	15%
• GROUND FACE CMU (BL-01)	714 SF	50%
• GROUND FACE CMU (BL-03)	323 SF	22%
CLASS 1/2 TOTAL %		97%
CLASS 3 MATERIALS:		
• COMBED FACE CMU (BL-05)	23 SF	1%
• SPLIT FACE CMU (BL-02)	142 SF	1%
CLASS 4 MATERIALS:		
• METAL TRIM (PM-01)	27 SF	1%

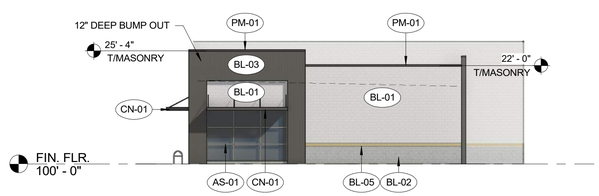
*ALL GLAZING NOTED IS TRANSPARENT.

ROOFING: TPO MEMBRANE, NOT VISIBLE - CLASS 3

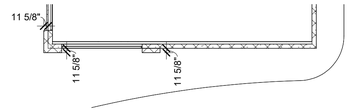


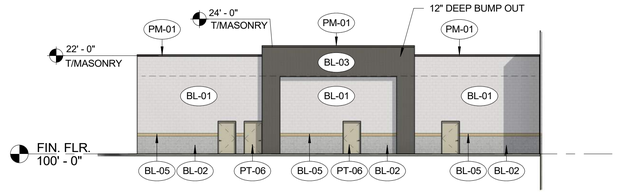
1 FRONT (EAST) RETAIL ELEVATION
1/16" = 1'-0"



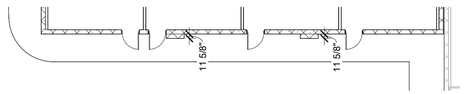


2 RIGHT (NORTH) RETAIL ELEVATION
1/16" = 1'-0"





3 BACK (WEST) RETAIL ELEVATION
1/16" = 1'-0"



SIGNAGE SHOWN FOR REFERENCE ONLY. OWNER'S SIGN CONTRACTOR TO INSTALL NEW SIGNAGE. ALL SIGNS ARE UNDER SEPARATE PERMIT TO BE PULLED BY OWNER'S SIGNAGE CONTRACTOR.

EXTERIOR FINISHES

MATERIAL	DESCRIPTION	MANUFACTURER	FINISH
AE-01	PREFINISHED ALUMINUM STOREFRONT DOOR	STANLEY	CLEAR ANODIZED
AS-01	PREFINISHED ALUMINUM STOREFRONT		CLEAR ANODIZED
BL-01	DECORATIVE, INTEGRALLY COLORED CMU - GROUND FACE	BASALITE	720WR
BL-02	DECORATIVE, INTEGRALLY COLORED CMU - SPLIT FACE	BASALITE	800WR
BL-03	DECORATIVE, INTEGRALLY COLORED CMU - GROUND FACE	BASALITE	807WR
BL-05	DECORATIVE, INTEGRALLY COLORED CMU - COMBED FACE PRECISION	BASALITE	923WR
CN-01	PREMANUFACTURED CANOPY	ARCHITECTURAL FABRICATIONS INC.	SLATE GRAY
PM-01	PREFINISHED METAL		SLATE GRAY
PT-06	PAINTED METAL	SHERWIN WILLIAMS	MINDFUL GRAY SW7016

BL-01 BL-02 BL-03 BL-05 PM-01/CN-01

Naos Design Group, LLC
4949 S. SYRACUSE STREET
SUITE 460
DENVER, COLORADO 80237
(p) 303.759.5777 (f) 720.360.4281
www.naosdg.com

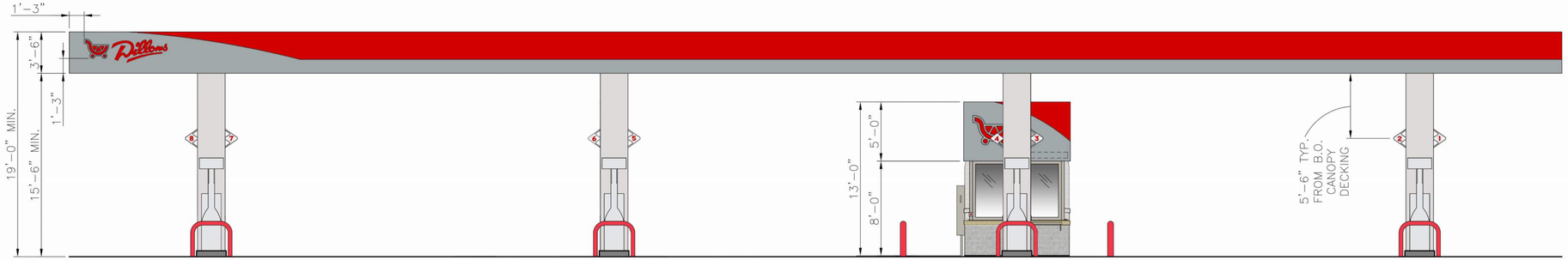
DILLON'S #152

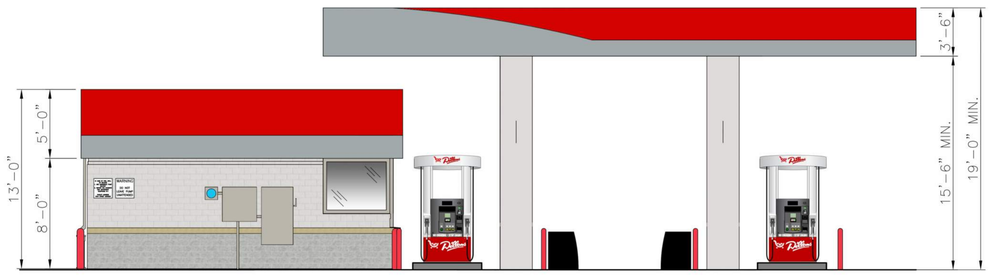
NE DOUGLAS ST
LEE'S SUMMIT, MO

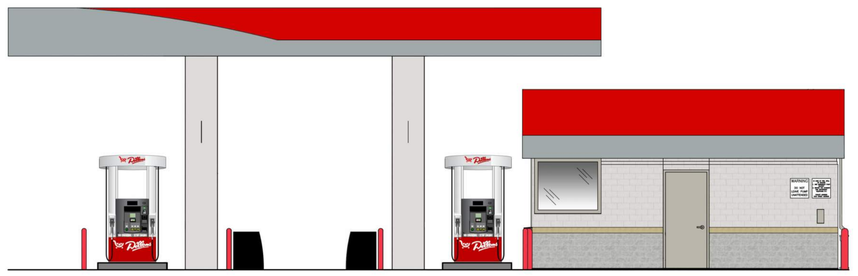
JOB #: 2026002 **DATE:** 03/27/2026
SCALE: 1/16" = 1'-0"

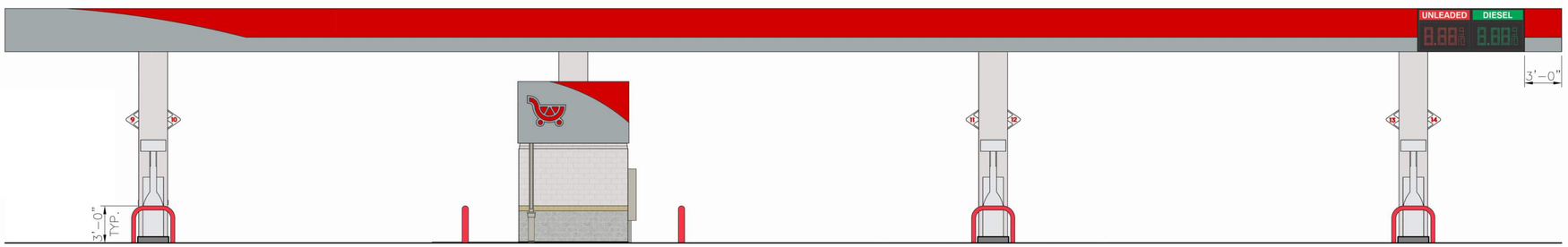
COPYRIGHT © 2026 NAOS DESIGN GROUP, LLC.
THESE DRAWINGS, OR PARTS THEREOF, MAY NOT BE REPRODUCED IN ANY FORM, BY ANY METHOD, FOR ANY PURPOSE, WITHOUT PRIOR WRITTEN CONSENT FROM NAOS

THESE DOCUMENTS ARE FOR REVIEW ONLY. DOCUMENTS MUST BE APPROVED BY THE JURISDICTION AND THE DEVELOPER. DIMENSIONS AND AREAS ARE APPROXIMATE.









Naos Design Group, LLC
4949 S. SYRACUSE STREET
SUITE 460
DENVER, COLORADO 80237
(p) 303.759.5777 (f) 720.360.4281
www.naosdg.com

DILLON'S #152

NE DOUGLAS ST
LEE'S SUMMIT, MO

JOB #: 2026002 **DATE:** 03/27/2026
SCALE:

COPYRIGHT © 2026 NAOS DESIGN GROUP, LLC.
THESE DRAWINGS, OR PARTS THEREOF, MAY NOT BE REPRODUCED IN ANY FORM, BY ANY METHOD, FOR ANY PURPOSE, WITHOUT PRIOR WRITTEN CONSENT FROM NAOS

THESE DOCUMENTS ARE FOR REVIEW ONLY. DOCUMENTS MUST BE APPROVED BY THE JURISDICTION AND THE DEVELOPER. DIMENSIONS AND AREAS ARE APPROXIMATE.

FRONT ELEVATION AREA = *1,825 SF*

CLASS 1/2 MATERIALS:		
• GLAZING	464 SF	25%
• GROUND FACE CMU (BL-01)	601 SF	33%
• GROUND FACE CMU (BL-03)	629 SF	35%
CLASS 1/2 TOTAL %		93%
CLASS 3 MATERIALS:		
• COMBED FACE CMU (BL-05)	12 SF	1%
• SPLIT FACE CMU (BL-02)	75 SF	4%
CLASS 4 MATERIALS:		
• METAL TRIM (PM-01)	44 SF	2%

BACK ELEVATION AREA = *1,666 SF*

CLASS 1/2 MATERIALS:		
• GLAZING	144 SF	9%
• GROUND FACE CMU (BL-01)	850 SF	51%
• GROUND FACE CMU (BL-03)	406 SF	24%
CLASS 1/2 TOTAL %		84%
CLASS 3 MATERIALS:		
• COMBED FACE CMU (BL-05)	35 SF	2%
• SPLIT FACE CMU (BL-02)	205 SF	12%
CLASS 4 MATERIALS:		
• METAL TRIM	26 SF	2%

RIGHT ELEVATION AREA = *1,368 SF*

CLASS 1/2 MATERIALS:		
• GLAZING	368 SF	27%
• GROUND FACE CMU (BL-01)	538 SF	39%
• GROUND FACE CMU (BL-03)	323 SF	24%
CLASS 1/2 TOTAL %		90%
CLASS 3 MATERIALS:		
• COMBED FACE CMU (BL-05)	15 SF	1%
• SPLIT FACE CMU (BL-02)	88 SF	6%
CLASS 4 MATERIALS:		
• METAL TRIM (PM-01)	36 SF	3%

LEFT ELEVATION AREA = *1,458 SF*

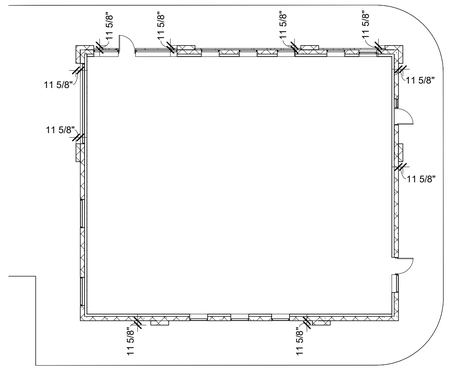
CLASS 1/2 MATERIALS:		
• GLAZING	165 SF	11%
• GROUND FACE CMU (BL-01)	759 SF	52%
• GROUND FACE CMU (BL-03)	323 SF	22%
CLASS 1/2 TOTAL %		85%
CLASS 3 MATERIALS:		
• COMBED FACE CMU (BL-05)	27 SF	2%
• SPLIT FACE CMU (BL-02)	159 SF	11%
CLASS 4 MATERIALS:		
• METAL TRIM (PM-01)	25 SF	2%

*ALL GLAZING NOTED IS TRANSPARENT.

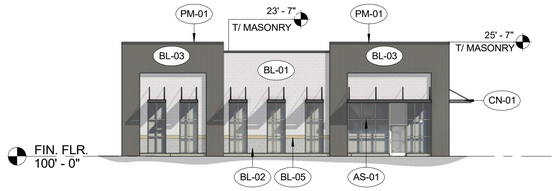
ROOFING: TPO MEMBRANE, NOT VISIBLE - CLASS 3

1 FRONT PERSPECTIVE

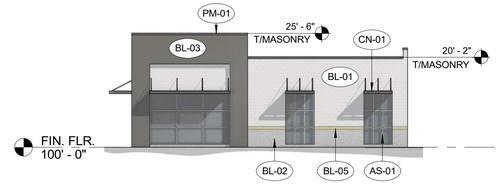
2 BACK PERSPECTIVE



3 LOTS 3 & 4 TYPICAL FLOOR PLAN
1/16" = 1'-0"



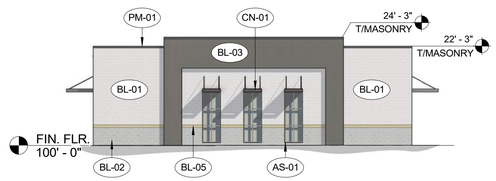
4 FRONT ELEVATION
1/16" = 1'-0"



5 SIDE ELEVATION
1/16" = 1'-0"

SIGNAGE SHOWN FOR REFERENCE ONLY. OWNER'S SIGN CONTRACTOR TO INSTALL NEW SIGNAGE. ALL SIGNS ARE UNDER SEPARATE PERMIT TO BE PULLED BY OWNER'S SIGNAGE CONTRACTOR.

EXTERIOR FINISHES			
MATERIAL	DESCRIPTION	MANUFACTURER	FINISH
AE-01	PREFINISHED ALUMINUM STOREFRONT DOOR	STANLEY	CLEAR ANODIZED
AS-01	PREFINISHED ALUMINUM STOREFRONT		CLEAR ANODIZED
BL-01	DECORATIVE, INTEGRALLY COLORED CMU - GROUND FACE	BASALITE	720WR
BL-02	DECORATIVE, INTEGRALLY COLORED CMU - SPLIT FACE	BASALITE	800WR
BL-03	DECORATIVE, INTEGRALLY COLORED CMU - GROUND FACE	BASALITE	807WR
BL-05	DECORATIVE, INTEGRALLY COLORED CMU - COMBED FACE PRECISION	BASALITE	923WR
CN-01	PREMANUFACTURED CANOPY	ARCHITECTURAL FABRICATIONS INC.	SLATE GRAY
PM-01	PREFINISHED METAL		SLATE GRAY



6 BACK ELEVATION
1/16" = 1'-0"

7 SIDE ELEVATION
1/16" = 1'-0"

BL-01 BL-02 BL-03 BL-05 PM-01/CN-01

Naos Design Group, LLC
4949 S. SYRACUSE STREET
SUITE 460
DENVER, COLORADO 80237
(p) 303.759.5777 (f) 720.360.4281
www.naosdg.com

DILLON'S #152

NE DOUGLAS ST
LEE'S SUMMIT, MO

JOB #: 2026002 **DATE:** 03/27/2026
SCALE: 1/16" = 1'-0"

COPYRIGHT © 2026 NAOS DESIGN GROUP, LLC.
THESE DRAWINGS, OR PARTS THEREOF, MAY NOT BE REPRODUCED IN ANY FORM, BY ANY METHOD, FOR ANY PURPOSE, WITHOUT PRIOR WRITTEN CONSENT FROM NAOS

THESE DOCUMENTS ARE FOR REVIEW ONLY. DOCUMENTS MUST BE APPROVED BY THE JURISDICTION AND THE DEVELOPER. DIMENSIONS AND AREAS ARE APPROXIMATE.

FRONT ELEVATION AREA = *2,131 SF*

CLASS 1/2 MATERIALS:		
• GLAZING	746 SF	35%
• GROUND FACE CMU (BL-01)	670 SF	31%
• GROUND FACE CMU (BL-03)	613 SF	29%
CLASS 1/2 TOTAL %		95%
CLASS 3 MATERIALS:		
• COMBED FACE CMU (BL-05)	6 SF	1%
• SPLIT FACE CMU (BL-02)	33 SF	1%
CLASS 4 MATERIALS:		
• METAL TRIM (PM-01)	63 SF	3%

BACK ELEVATION AREA = *1,959 SF*

CLASS 1/2 MATERIALS:		
• GROUND FACE CMU (BL-01)	1,121 SF	57%
• GROUND FACE CMU (BL-03)	406 SF	21%
CLASS 1/2 TOTAL %		78%
CLASS 3 MATERIALS:		
• COMBED FACE CMU (BL-05)	38 SF	2%
• SPLIT FACE CMU (BL-02)	226 SF	11%
CLASS 4 MATERIALS:		
• METAL TRIM (PM-01)	21 SF	1%
• HOLLOW METAL DOORS	147 SF	8%

RIGHT ELEVATION AREA = *1443 SF*

CLASS 1/2 MATERIALS:		
• GLAZING	216 SF	15%
• GROUND FACE CMU (BL-01)	713 SF	49%
• GROUND FACE CMU (BL-03)	323 SF	22%
CLASS 1/2 TOTAL %		86%
CLASS 3 MATERIALS:		
• COMBED FACE CMU (BL-05)	24 SF	2%
• SPLIT FACE CMU (BL-02)	140 SF	10%
CLASS 4 MATERIALS:		
• METAL TRIM (PM-01)	27 SF	2%

LEFT ELEVATION AREA = *1,443 SF*

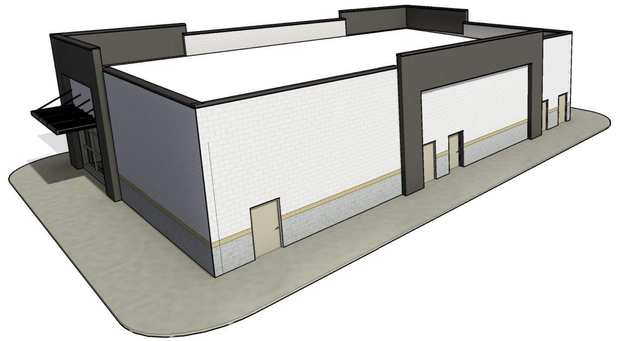
CLASS 1/2 MATERIALS:		
• GLAZING	216 SF	15%
• GROUND FACE CMU (BL-01)	713 SF	49%
• GROUND FACE CMU (BL-03)	323 SF	22%
CLASS 1/2 TOTAL %		86%
CLASS 3 MATERIALS:		
• COMBED FACE CMU (BL-05)	24 SF	2%
• SPLIT FACE CMU (BL-02)	140 SF	10%
CLASS 4 MATERIALS:		
• METAL TRIM (PM-01)	27 SF	2%

*ALL GLAZING NOTED IS TRANSPARENT.

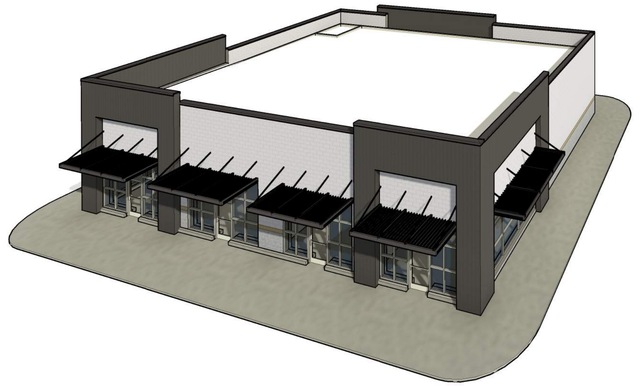
ROOFING: TPO MEMBRANE, NOT VISIBLE - CLASS 3

SIGNAGE SHOWN FOR REFERENCE ONLY. OWNER'S SIGN CONTRACTOR TO INSTALL NEW SIGNAGE. ALL SIGNS ARE UNDER SEPARATE PERMIT TO BE PULLED BY OWNER'S SIGNAGE CONTRACTOR.

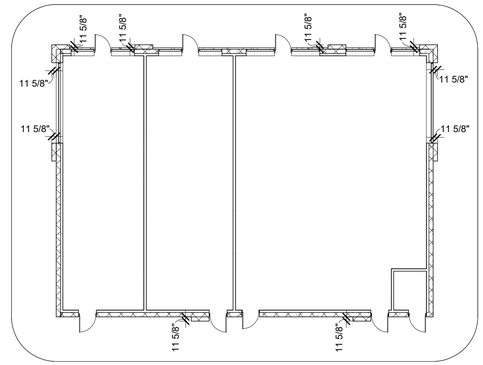
EXTERIOR FINISHES			
MATERIAL	DESCRIPTION	MANUFACTURER	FINISH
AE-01	PREFINISHED ALUMINUM STOREFRONT DOOR	STANLEY	CLEAR ANODIZED
AS-01	PREFINISHED ALUMINUM STOREFRONT		CLEAR ANODIZED
BL-01	DECORATIVE, INTEGRALLY COLORED CMU - GROUND FACE	BASALITE	720WR
BL-02	DECORATIVE, INTEGRALLY COLORED CMU - SPLIT FACE	BASALITE	800WR
BL-03	DECORATIVE, INTEGRALLY COLORED CMU - GROUND FACE	BASALITE	807WR
BL-05	DECORATIVE, INTEGRALLY COLORED CMU - COMBED FACE PRECISION	BASALITE	923WR
CN-01	PREMANUFACTURED CANOPY	ARCHITECTURAL FABRICATIONS INC.	SLATE GRAY
PM-01	PREFINISHED METAL		SLATE GRAY
PT-06	PAINTED METAL	SHERWIN WILLIAMS	MINDFUL GRAY SW7016



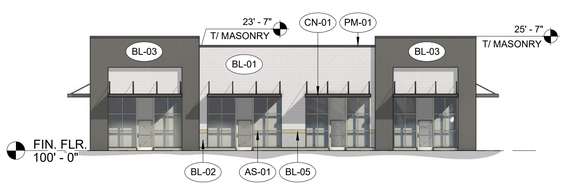
1 BACK PERSPECTIVE



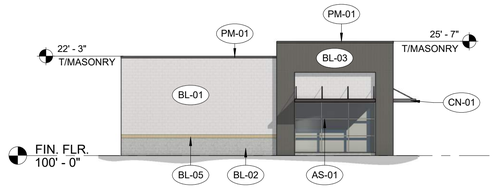
2 FRONT PERSPECTIVE



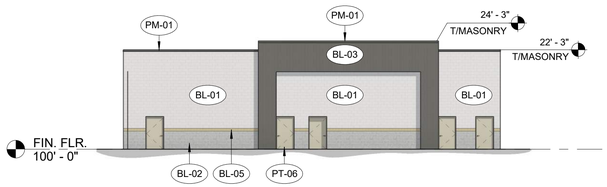
3 LOT 5 FLOOR PLAN
1/16" = 1'-0"



4 FRONT ELEVATION
1/16" = 1'-0"



5 SIDE ELEVATION
1/16" = 1'-0"



6 BACK ELEVATION
1/16" = 1'-0"

7 SIDE ELEVATION
1/16" = 1'-0"

BL-01 BL-02 BL-03 BL-05 PM-01/CN-01

Naos Design Group, LLC
4949 S. SYRACUSE STREET
SUITE 460
DENVER, COLORADO 80237
(p) 303.759.5777 (f) 720.360.4281
www.naosdg.com

DILLON'S #152

NE DOUGLAS ST
LEE'S SUMMIT, MO

JOB #: 2026002 **DATE:** 03/27/2026
SCALE: 1/16" = 1'-0"

COPYRIGHT © 2026 NAOS DESIGN GROUP, LLC.
THESE DRAWINGS, OR PARTS THEREOF, MAY NOT BE REPRODUCED IN ANY FORM, BY ANY METHOD, FOR ANY PURPOSE, WITHOUT PRIOR WRITTEN CONSENT FROM NAOS

THESE DOCUMENTS ARE FOR REVIEW ONLY. DOCUMENTS MUST BE APPROVED BY THE JURISDICTION AND THE DEVELOPER. DIMENSIONS AND AREAS ARE APPROXIMATE.

TRAFFIC IMPACT ANALYSIS

Supermarket — Douglas Street & Tudor Road

Lee's Summit, Missouri

Prepared for:

Pickering Firm, Inc.

April 2026

Prepared by:

Traffic Engineering Consultants, Inc.

STATE OF MISSOURI
DANE
MITCHELL SEILER
NUMBER
PE–2010019595
PROFESSIONAL ENGINEER

Dane M Seiler

Digitally signed by Dane M Seiler
DN: C=US, E=dseiler@tecusa.com, O=Traffic Engineering Consultants, CN=Dane M Seiler
Date: 2026.04.02 14:33:47-05'00'

Table of Contents

1.0 INTRODUCTION 3
2.0 BACKGROUND 3
FIGURE 1.0 SITE LOCATION MAP 4
FIGURE 2.0 SITE PLAN 5
3.0 BACKGROUND TRAFFIC 6
3.1 EXISTING TRAFFIC 6
3.2 FUTURE BACKGROUND TRAFFIC 6
FIGURE 3.0 2025 EXISTING TRAFFIC 7
4.0 PHASE 1 - PROPOSED SITE TRIPS 8
TABLE 1.0 PHASE 1 - PROJECTED SITE GENERATED TRIPS 8
4.1 DISTRIBUTION OF TRIPS 9
4.2 PHASE 1 - TOTAL TRAFFIC 9
FIGURE 4.0 PHASE 1 - BACKGROUND TRAFFIC 10
FIGURE 5.0 PHASE 1 - PROPOSED SITE TRAFFIC 11
FIGURE 6.0 PHASE 1 - PROPOSED PASS BY TRAFFIC 12
FIGURE 7.0 PHASE 1 - PROPOSED TOTAL TRAFFIC 13
5.0 PHASE 1 - CAPACITY ANALYSIS 14
5.1 METHODOLOGY 14
TABLE 2.0 LEVEL-OF-SERVICE CRITERIA 15
5.2 PHASE 1 - SCENARIOS 15
TABLE 3.0 PHASE 1 - INTERSECTION CAPACITY ANALYSIS RESULTS 16
5.2.1 2025 EXISTING TRAFFIC 18
5.2.2 2027 BACKGROUND TRAFFIC 18
5.2.3 PHASE 1 - 2027 TOTAL TRAFFIC 18
6.0 PHASE 2 - PROPOSED SITE TRIPS 19
TABLE 4.0 PHASE 2 - PROJECTED SITE GENERATED TRIPS 19
6.1 PHASE 2 - DISTRIBUTION OF TRIPS 19
6.2 PHASE 2 - TOTAL TRAFFIC 20
FIGURE 8.0 PHASE 2 - BACKGROUND TRAFFIC 21
FIGURE 9.0 PHASE 2 - PROPOSED SITE TRAFFIC 22
FIGURE 10.0 PHASE 2 - PROPOSED TOTAL TRAFFIC 23
7.0 PHASE 2 - CAPACITY ANALYSIS 24
7.1 METHODOLOGY 24

TABLE 5.0 LEVEL-OF-SERVICE CRITERIA 25
7.2 PHASE 2 - SCENARIOS 25
TABLE 6.0 PHASE 2 - INTERSECTION CAPACITY ANALYSIS RESULTS 26
7.2.1 2029 BACKGROUND TRAFFIC 28
7.2.2 PHASE 2 - 2029 TOTAL TRAFFIC 28
8.0 ALTERNATIVE TRANSPORTATION MODES 29
8.1 PEDESTRIAN & BIKING 29
8.2 TRANSIT 29
9.0 CONCLUSIONS AND RECOMMENDATIONS 30
9.1 VEHICULAR RECCOMENDATIONS 30
9.2 PEDESTRIAN & BIKING IMPROVEMENTS 31
10.0 APPENDIX A 32

1.0 INTRODUCTION

Traffic Engineering Consultants, Inc. (TEC) was retained to conduct a traffic impact analysis (TIA) for a proposed Supermarket, Gas Station, and retail development to be constructed in Lee's Summit, Missouri. The study was requested to determine the effects the development would have on the adjacent street system, to review the available access and to provide recommendations for improvements that may be necessary to accommodate the traffic expected to be generated by the development.

2.0 BACKGROUND

The site of the proposed development is located west of Douglas street south of Tudor Road as shown in **Figure 1**. The development will contain approximately 99,000 square foot Supermarket, 14 fueling positions Gas Station, 65,000 square feet of retail. Access to the development, as shown in **Figure 2**, is proposed via three full accesses and one partial access. The development is anticipated to be developed in two phases.

Douglas Street is a four-lane north/south regional high-activity link with a posted speed limit of 45 miles per hour (mph) and has an approximate average daily traffic (ADT) of 22,600 vehicles per day (vpd) within the limits of the project. The roadway is classified as a Major Arterial according to the Mid America Regional Council Functional Classification Map. The road currently does contain sidewalks on the east side and curb & gutter with no transit access or cycling facilities.

Tudor Road is a four-lane east/west local link with a posted speed limit of 35 miles per hour (mph) and has an approximate average daily traffic (ADT) of 6,600 vehicles per day (vpd) within the limits of the project. The roadway is classified as a Minor Arterial according to the Mid America Regional Council Functional Classification Map. The road currently does contain sidewalks on one side, a multiuse path on the south side, a landscaped median, and curb & gutter with no transit access.

Chipman Road is a four-lane east/west regional high-activity link with a posted speed limit of 45 miles per hour (mph) and has an approximate average daily traffic (ADT) of 12,800 vehicles per day (vpd) within the limits of the project. The roadway is classified as a Major Arterial according to the Mid America Regional Council Functional Classification Map. The road currently does contain sidewalks on one side, a multiuse path on the north side, a median, and curb & gutter with no transit access.

FIGURE 1.0 LOCATION MAP

Grocery Store & Gas Station - Douglas Street

Lee's Summit, Missouri

FIGURE 2.0 CONCEPTUAL SITE PLAN

Grocery Store & Gas Station - Douglas Street

Lee's Summit, Missouri

3.0 BACKGROUND TRAFFIC

3.1 EXISTING TRAFFIC

Existing traffic volume data was collected adjacent to the proposed development in November of 2025. AM and PM Peak hour turning movement volumes were collected at the intersections of Commerce Drive and Tudor Road, Douglas Street and Tudor Road, Douglas Street and High School Drive, Douglas Street and Chipman Road, Commerce Drive and Chipman Road. The collected data indicated the A.M. peak hour occurred from 7:00 to 8:00 and P.M. peak hour occurred from 4:15 to 5:15. Given the traffic characteristics in the area and the anticipated trip generation for the proposed development, the weekday peak periods would represent a "worst-case scenario" with regards to traffic impact on the surrounding roadway network. If traffic operations are acceptable during these weekday peak hours, it can be reasoned that conditions would be acceptable throughout the remainder of the day and week. The 2025 existing traffic is summarized in **Figure 3** and detailed printouts of all the traffic count data are included in the appendix.

3.2 FUTURE BACKGROUND TRAFFIC

The 2025 existing traffic was utilized to determine the background traffic for full build out. The development is projected to be completed in 2029 and 2027 was selected as the design period for Phase 1 full build out analysis and 2029 as the design period for Phase 2 full build out analysis. The background traffic was determined for each phase design year by applying an average annual growth rate of 2.0% to the 2025 existing traffic volumes. The full build 2027 projected background traffic is summarized in **Figure 4**. The full build 2029 projected background traffic is summarized in **Figure 8**.

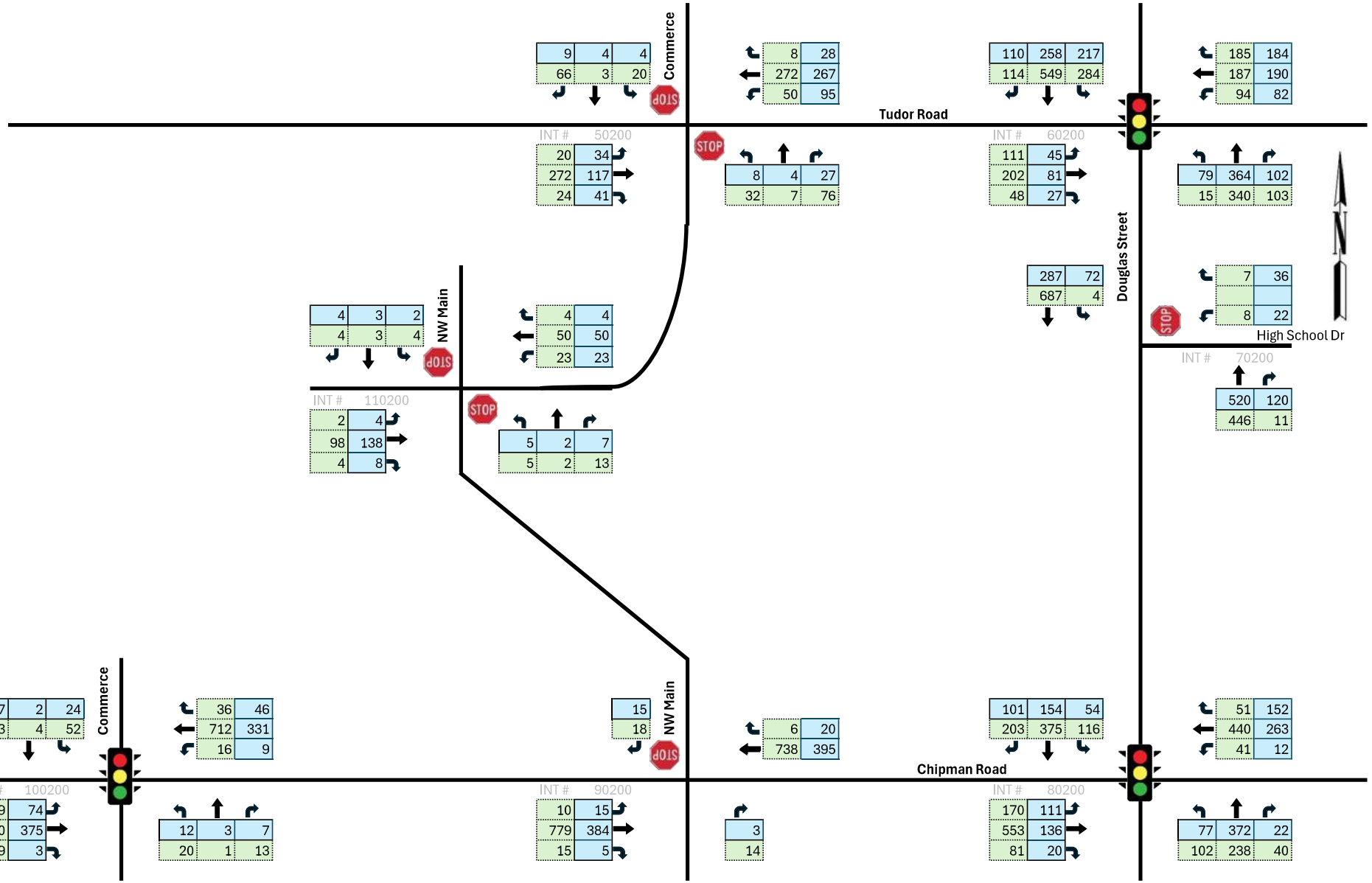


FIGURE 3.0 2025 Existing Traffic

Grocery Store & Gas Station - Douglas Street

Lee's Summit, Missouri

4.0 PHASE 1 - PROPOSED SITE TRIPS

To determine the effects a new development will have on an existing street system, new or additional traffic must be projected. The latest edition of the *Trip Generation Manual, 12th Edition*, published by the Institute of Transportation Engineers, was used to determine the amount of traffic the development is expected to generate. The report is a nationally accepted reference which provides trip rates for determining the traffic expected to be generated by different land use types.

Available information was utilized regarding the anticipated land use to determine the site generated traffic. The 850 – *Supermarket, 822 – Strip Retail Plaza &* 944 – *Gas Stations* category was selected to determine the trip generation of the proposed development. This site has 99,000 Square Foot Supermarket, 50,000 square feet Strip Retail Plaza, and 14 Vehicle Fueling Positions. The trip generation took into consideration both Internal capture, the sharing of trips between uses, and Pass By trips, the pulling of traffic from the existing traffic into the development. The resulting traffic volumes projected to be generated by the proposed development are indicated in **Table 1**.

TABLE 1.0 PHASE 1 - PROJECTED SITE GENERATED TRIPS

Building Type (Land Use)	ITE Land Use Code	Approximate Fueling Positions	Average Weekday Vehicle Trips			Average AM Peak Hour Directional Distribution		Average AM Peak Hour Directional Trips (vph)		Average PM Peak Hour Directional Distribution		Average PM Peak Hour Directional Trips (vph)	
			Per Day	Per Peak Hour of Adjacent Street Traffic									
				One Hour Between 7am & 9am	One Hour Between 4pm & 6pm								
			(vpd)	(vph)	(vph)	IN	OUT	IN	OUT	IN	OUT	IN	OUT
Full Build Out													
Trip Rate*		(1 KSF GFA)	92.29	2.95	8.79								
Supermarket	850					59%	41%	172	120	50%	50%	435	435
		99	9,137	292	870								
Trip Rate*		(1 KSF GFA)	54.45	3.93	6.29								
Strip Retail Plaza	822					55%	45%	86	71	50%	50%	126	126
3.71 Acres /.25 FAR		40	2,178	157	252								
Trip Rate*		(Fueling Positions)	172.01	11.32	14.23								
Gas Station	944					50%	50%	68	68	50%	50%	86	86
		12	2,064	136	171								
Total Trips			13,379	585	1,293			327	258			647	647

Trip Rate Reductions

Reduction Type	Reduction Amount (%)	AM Peak Hour Reduction IN	AM Peak Hour Reduction OUT	AM Peak Hour Total Development Volume IN	AM Peak Hour Total Development Volume OUT	PM Peak Hour Reduction IN	PM Peak Hour Reduction OUT	PM Peak Hour Total Development Volume IN	PM Peak Hour Total Development Volume OUT
Internal Capture[5]	10	33	26	294	233	65	65	582	582

Reduction Type	Reduction Amount (%)		AM Peak Hour Reduction IN	AM Peak Hour Reduction OUT	AM Peak Hour Site Trips Added To Roadway		PM Peak Hour Reduction IN	PM Peak Hour Reduction OUT	PM Peak Hour Site Trips Added To Roadway	
	AM Peak Hour	PM Peak Hour								
Pass-By Trips / Diverted Link** - 850 Supermarket	25%	25%	30	30			109	109		
Pass-By Trips / Diverted Link** - 944 Gasoline/Service	60%	60%	40	41			51	51		
					224	162			422	422

* Trip Rates from "TRIP GENERATION MANUAL", 12th Ed., Institute of Transportation Engineers.

4.1 DISTRIBUTION OF TRIPS

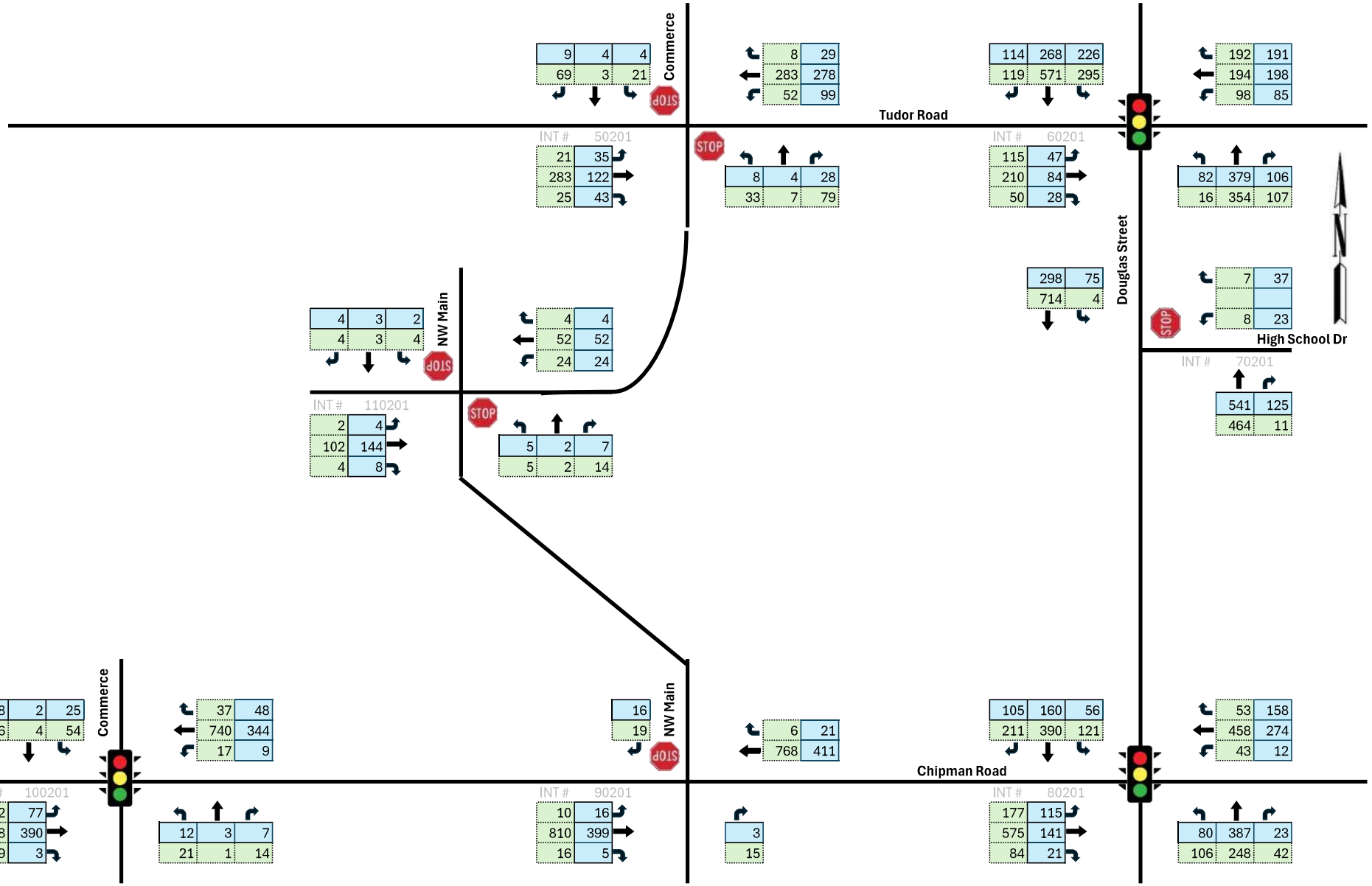
The traffic expected to be generated by the proposed development was then distributed among the points of access as well as the study intersection for the A.M. and P.M. peak hours. The distribution of the site generated traffic was based on anticipated usage of the site and traffic patterns in the area which were obtained from the traffic data that was collected for this study and is summarized in **Figure 5**. The directional distribution of the site generated traffic entering/exiting the proposed development is generally expected to be:

- 15% to/from Tudor Road west of Commerce Drive
- 10% to/from Tudor Road east of Douglas Street
- 20% to/from Douglas Street north of Tudor
- 20% to/from Douglas Street south of Chipman Road
- 20% to/from Chipman Road west of Commerce Drive
- 15% to/from Chipman Road east of Douglas Street

For more detailed direction distribution see **Figure 5.**

4.2 PHASE 1 - TOTAL TRAFFIC

The site trips were then added to the future combined traffic for the 2027 design year. The 2027 phase 1 - total traffic (2027 future background traffic + future development trips + proposed site trips) for each access point as well as the adjacent study intersection is summarized in **Figure 6**.



LEGEND

XXX XXX

PM Peak Hour

AM Peak Hour

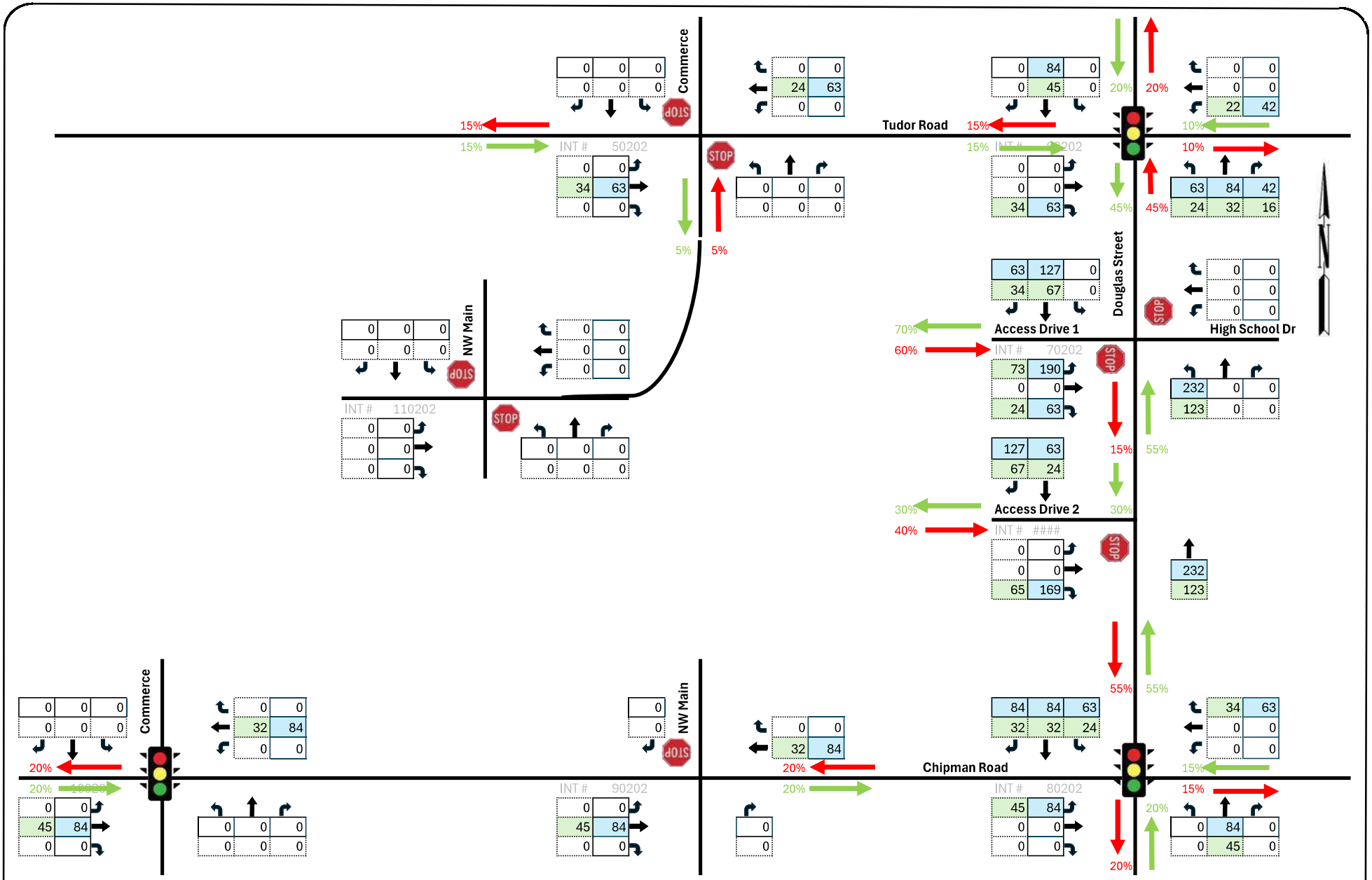
2% Growth Rate

2 Number of Years

FIGURE 4.0 2027 Background Traffic

Grocery Store & Gas Station - Douglas Street

Lee's Summit, Missouri



LEGEND

XXX	XXX

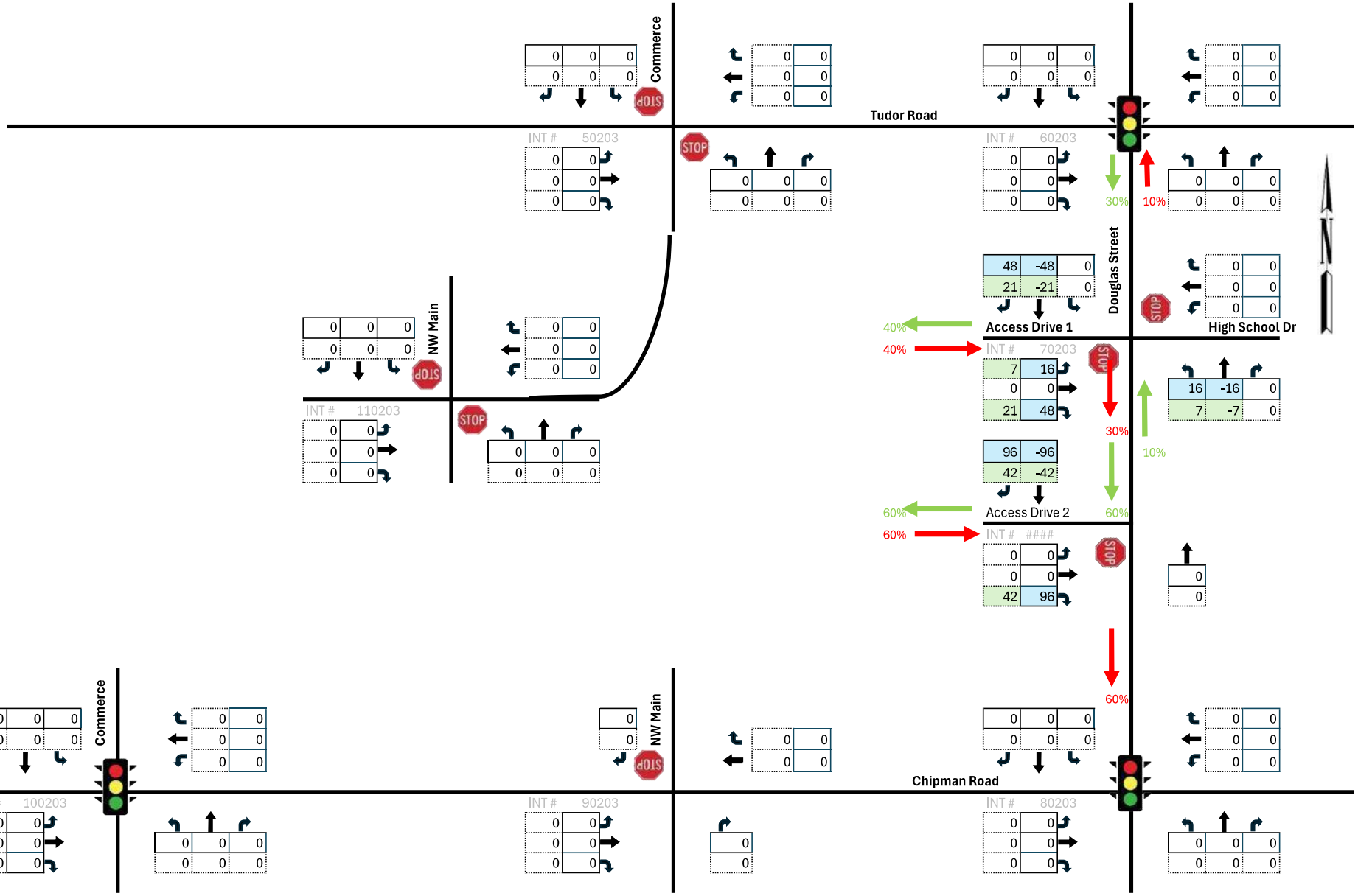
PM Peak Hour
AM Peak Hour

Peak Hour - Primary Site Generated Trips		
	IN (vph)	OUT (vph)
AM Peak Hour	224	162
PM Peak Hour	422	422

FIGURE 5.0 Phase 1 - Proposed Site Trips

Grocery Store & Gas Station - Douglas Street

Lee's Summit, Missouri



Peak Hour - Pass-by Site Generated Trips		
	IN (vph)	OUT (vph)
AM Peak Hour	70	71
PM Peak Hour	160	160

LEGEND

XXX XXX

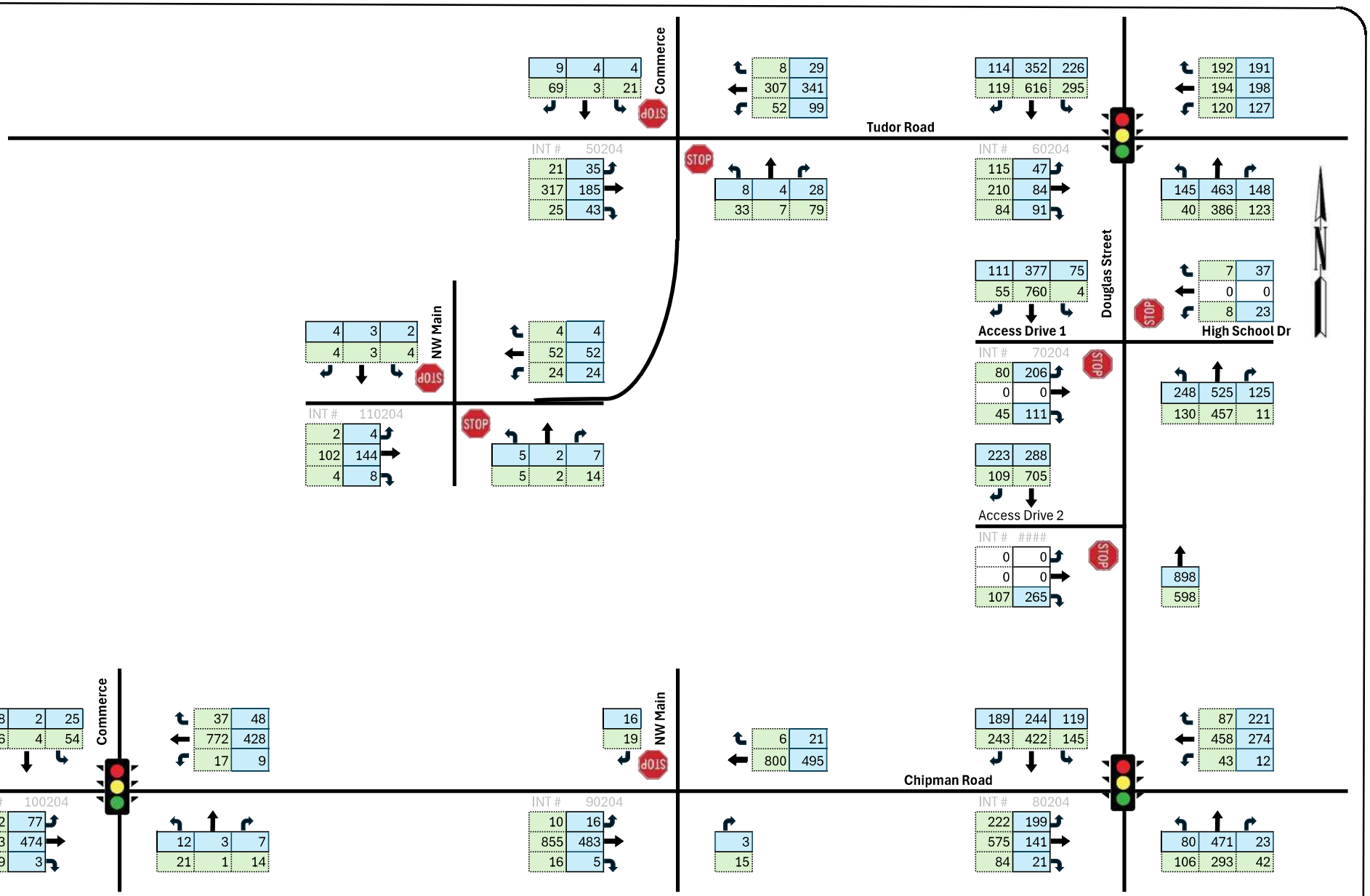
PM Peak Hour

AM Peak Hour

FIGURE 6.0 Phase 1 - Proposed Pass By / Diverted I

Grocery Store & Gas Station - Douglas Street

Lee's Summit, Missouri



Peak Hour - Primary Site Generated Trips		
	IN (vph)	OUT (vph)
AM Peak Hour	294	233
PM Peak Hour	647	582

FIGURE 7.0 Phase 1 - Total Traffic

Grocery Store & Gas Station - Douglas Street

Lee's Summit, Missouri

5.0 PHASE 1 - CAPACITY ANALYSIS

5.1 METHODOLOGY

The capacity analyses were conducted using *Synchro 12,* which is a software package for modeling and optimizing traffic signal timings at signalized intersections and analyzing unsignalized intersections in accordance with the methodology of the latest edition of the *Highway Capacity Manual, 7th Edition.* The *Highway Capacity Manual* is published by the Transportation Research Board of the National Research Council, Washington, D.C. The information has been widely accepted throughout the U.S. as a guide for defining and solving transportation challenges. The information is approved and distributed by the U.S. Department of Transportation, Federal Highway Administration.

The capacity analysis provides a measure of the amount of traffic that a given facility can accommodate. Traffic facilities generally operate poorly at or near capacity. The analysis is intended to estimate the maximum amount of traffic that can be accommodated by a facility while maintaining prescribed operational qualities. The definition of operational criteria is accomplished using levels-of-service. The concept of levels-of-service is defined as a qualitative measure and describes operational conditions in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. Six levels-of-service are defined for each type of facility for which analysis procedures are available. They are given letter designations, from “A” to “F”, with level-of-service “A” representing the best operating conditions and level-of-service “F” the worst.

The average control delay for signalized intersections is estimated for each lane group and aggregated for each approach and for the intersection as a whole. The level-of-service for this type of traffic control is directly related to the control delay value. The criteria for stop controlled or unsignalized intersections have different threshold values than do those for signalized intersections. A higher level of control delay has been determined to be acceptable at a signalized intersection for the same level-of-service. The level-of-service criteria are summarized in **Table 2**.

TABLE 2.0 LEVEL-OF-SERVICE CRITERIA

Level-of-Service	Average Delay (seconds/vehicle)		Traffic Condition
	Unsignalized	Signalized	
A	≤ 10	≤ 10	Free Flow
B	> 10 - 15	> 10 - 20	Stable Flow (slight delays)
C	> 15 - 25	> 20 - 35	Stable Flow (acceptable delays)
D	> 25 - 35	> 35 - 55	Approaching Unstable Flow (tolerable delay, occasionally wait through more than one signal cycle before proceeding)
E	> 35 - 50	> 55 - 80	Unstable Flow (intolerable delay)
F	> 50	> 80	Forced Flow (congested and queues fail to clear)

5.2 PHASE 1 - SCENARIOS

Capacity analyses were conducted for the A.M. and P.M. peak hours at each development driveway as well as the intersections of Commerce Drive / Sloan Road & Tudor Road, Douglas Street & Tudor Road, Douglas Street & High School Entrance, Douglas Street & Chipman Road, Main Street & Chipman Road, Commerce Drive & Chipman Road, and Main Street and Commerce Drive. The intersections were analyzed and reviewed under the existing traffic, 2029 background traffic, and 2029 total traffic. For purposes of this report, an overall intersection level-of-service "C" or better was considered an acceptable level-of-service as per Lee's Summit Guidelines. The results of the capacity analyses conducted are summarized in **Table 3** and the raw data sheets have been included in the appendix.

TABLE 3.0 PHASE 1 - INTERSECTION CAPACITY ANALYSIS RESULTS

Intersection	Traffic Control	Overall / Approach	AM Peak Hour					
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
			2025 Existing Traffic		2027 Background Traffic		2027 Total Traffic	
Commerce Dr / Sloan & Tudor Road	TWSC	OVR	3.8	A	3.9	A	3.8	A
		EB	0.5	A	0.5	A	0.5	A
		WB	1.2	A	1.2	A	1.2	A
		NB	13.5	B	14.0	B	14.8	B
		SB	12.1	B	12.4	B	13.0	B
Douglas St & Tudor Road	SIGNAL	OVR	23.4	C	22.1	C	21.9	C
		EB	43.9	D	49.9	D	51.0	D
		WB	53.8	D	55.2	E	54.0	D
		NB	0.7	A	1.5	A	1.9	A
		SB	11.7	B	9.4	A	10.6	B
Douglas St & High School Entrance / Access Drive 1	TWSC	OVR	0.2	A	0.2	A	12.3	B
		EB					126.8	F
		WB	14.3	B	14.7	B	25.2	D
		NB	0.0	A	0.0	A	2.5	A
		SB	0.1	A	0.1	A	0.1	A
Douglas St & Access Drive 2	TWSC	OVR					1.0	A
		EB					13.4	B
		NB					0.0	A
		SB					0.0	A
Douglas St & Chipman Road	SIGNAL	OVR	31.1	C	31.7	C	34.7	C
		EB	24.9	C	25.5	C	31.5	C
		WB	41.0	D	41.7	D	44.7	D
		NB	24.5	C	24.7	C	25.4	C
		SB	34.3	C	34.9	C	36.2	D
NW Main St & Chipman Road	TWSC	OVR	0.3	A	0.2	A	0.2	A
		EB	0.1	A	0.1	A	0.1	A
		WB	0.0	A	0.0	A	0.0	A
		SB	9.3	A	9.3	A	9.4	A
Commerce Drive & Chipman Road	SIGNAL	OVR	13.4	B	13.5	B	13.5	B
		EB	18.8	B	19.0	B	19.1	B
		WB	2.7	A	2.8	A	2.8	A
		NB	32.6	C	32.7	C	32.7	C
		SB	36.7	D	36.9	D	36.9	D
NW Main St & Commerce Drive	TWSC	OVR	2.3	A	2.3	A	2.3	A
		EB	0.1	A	0.1	A	0.1	A
		WB	2.2	A	2.2	A	2.2	A
		NB	9.4	A	9.4	A	9.4	A
		SB	9.7	A	9.7	A	9.7	A
Douglas St & High School Entrance / Access Drive 1	PRO SIGNAL	OVR					5.7	A
		EB					55.0	D
		WB					51.9	D
		NB					0.5	A
		SB					0.5	A

			PM Peak Hour					
			2025 Existing Traffic		2027 Background Traffic		2027 Total Traffic	
Commerce Dr / Sloan & Tudor Road	TWSC	OVR	2.6	A	2.6	A	2.3	A
		EB	1.4	A	1.4	A	1.1	A
		WB	1.9	A	1.9	A	1.7	A
		NB	11.4	B	11.5	B	12.6	B
		SB	13.0	B	13.3	B	14.8	B
Douglas St & Tudor Road	SIGNAL	OVR	21.9	C	22.1	C	21.9	C
		EB	46.3	D	45.9	D	51.0	D
		WB	54.8	D	55.2	E	54.1	D
		NB	1.4	A	1.5	A	1.9	A
		SB	9.1	A	9.4	A	10.6	B
Douglas St & High School Entrance / Access Drive 1	TWSC	OVR	1.7	A	1.7	A	10.4	B
		EB					47.6	D
		WB	16.0	C	16.8	C	40.5	D
		NB	0.0	A	0.0	A	1.0	A
		SB	2.4	A	2.4	A	0.4	A
Douglas St & Access Drive 2	TWSC	OVR					2.3	A
		EB					13.9	B
		NB					0.0	A
		SB					0.0	A
Douglas St & Chipman Road	SIGNAL	OVR	27.1	C	28.2	C	34.9	C
		EB	29.5	C	29.4	C	43.5	D
		WB	32.4	C	32.8	C	52.6	D
		NB	25.4	C	25.6	C	26.8	C
		SB	20.2	C	24.9	C	30.5	C
NW Main St & Chipman Road	TWSC	OVR	0.3	A	0.3	A	0.3	A
		EB	0.3	A	0.3	A	0.3	A
		WB	0.0	A	0.0	A	0.0	A
		SB	9.7	A	9.8	A	9.3	A
Commerce Drive & Chipman Road	SIGNAL	OVR	14.1	B	14.2	B	13.1	B
		EB	20.8	C	20.8	C	19.8	B
		WB	2.2	A	2.2	A	2.0	A
		NB	32.2	C	32.2	C	32.2	C
		SB	33.5	C	33.6	C	33.6	C
NW Main St & Commerce Drive	TWSC	OVR	1.7	A	1.7	A	1.7	A
		EB	0.2	A	0.2	A	0.2	A
		WB	2.3	A	2.3	A	2.3	A
		NB	9.9	A	10.0	B	10.0	B
		SB	9.8	A	9.8	A	9.8	A
Douglas St & High School Entrance / Access Drive 1	PRO SIGNAL	OVR					10.4	B
		EB					47.6	D
		WB					40.5	D
		NB					1.0	A
		SB					0.4	A

	Signal	Unsignalized
LEVEL OF SERVICE A - C		
LEVEL OF SERVICE D - E		
LEVEL OF SERVICE F		

5.2.1 2025 EXISTING TRAFFIC

The analyses conducted under the 2025 existing traffic indicated that the overall intersections operate at an acceptable level-of-service "C" or better during the a.m. and p.m. peak hours.

5.2.2 2027 BACKGROUND TRAFFIC

The analyses conducted under the 2027 background traffic indicated that the overall intersections operate at an acceptable level-of-service "C" or better during the a.m. and p.m. peak hours.

5.2.3 PHASE 1 - 2027 TOTAL TRAFFIC

The analyses conducted under the 2027 phase 1 total traffic indicated that the overall intersections operate at an acceptable level-of-service "C" or better during the a.m. and p.m. peak hours. The intersection of Douglas Street and High School Entrance / Access Drive 1 did have level of service F for the side street during the a.m. and p.m. peak hours. A signal was modeled for the intersection during the peak hours and found that a signal would meet the level of service requirements. The results for a signal at that intersection where included in **Table 3**.

6.0 PHASE 2 - PROPOSED SITE TRIPS

To determine the effects a new development will have on an existing street system, new or additional traffic must be projected. The latest edition of the *Trip Generation Manual, 12th Edition*, published by the Institute of Transportation Engineers, was used to determine the amount of traffic the development is expected to generate. The report is a nationally accepted reference which provides trip rates for determining the traffic expected to be generated by different land use types.

Available information was utilized regarding the anticipated land use to determine the site generated traffic. The 850 – *Supermarket, 822 – Strip Retail Plaza &* 944 – *Gas Stations* category was selected to determine the trip generation of the proposed development. This site has 99,000 Square Foot Supermarket, 50,000 square feet Strip Retail Plaza, and 14 Vehicle Fueling Positions. The trip generation took into consideration both Internal capture, the sharing of trips between uses, and Pass By trips, the pulling of traffic from the existing traffic into the development. The resulting traffic volumes projected to be generated by the proposed development are indicated in **Table 4**.

TABLE 4.0 PHASE 2 - PROJECTED SITE GENERATED TRIPS

Building Type (Land Use)	ITE Land Use Code	Approximate Fueling Positions	Average Weekday Vehicle Trips			Average AM Peak Hour Directional Distribution		Average AM Peak Hour Directional Trips (vph)		Average PM Peak Hour Directional Distribution		Average PM Peak Hour Directional Trips (vph)	
			Per Day	Per Peak Hour of Adjacent Street Traffic									
				One Hour Between 7am & 9am	One Hour Between 4pm & 6pm								
			(vpd)	(vph)	(vph)	IN	OUT	IN	OUT	IN	OUT	IN	OUT
Trip Rate*		(1 KSF GFA)	54.45	3.93	6.29								
Strip Retail Plaza	822					55%	45%	61	50	50%	50%	88	88
2.61 Acres /.25 FAR		28	1,525	110	176								
Total Trips			1,525	110	176			61	50			88	88

6.1 PHASE 2 - DISTRIBUTION OF TRIPS

The traffic expected to be generated by the proposed development was then distributed among the points of access as well as the study intersection for the A.M. and P.M. peak hours. The distribution of the site generated traffic was based on anticipated usage of the site and traffic patterns in the area which were obtained from the traffic data that was collected for this study and is summarized in **Figure 9**. The directional distribution of the site generated traffic entering/exiting the proposed development is generally expected to be:

- 20% to/from Tudor Road west of Commerce Drive
- 20% to/from Tudor Road east of Douglas Street
- 30% / 20% to/from Douglas Street north of Tudor
- 10% / 20% to/from Douglas Street south of Chipman Road
- 10% / 15% to/from Chipman Road west of Commerce Drive
- 20% to/from Chipman Road east of Douglas Street

For more detailed direction distribution see **Figure 9.**

6.2 PHASE 2 - TOTAL TRAFFIC

The site trips were then added to the future combined traffic for the 2029 design year. The 2029 phase 2 - total traffic (2029 future background traffic + phase 1 development trips + phase 2 development trips) for each access point as well as the adjacent study intersection is summarized in **Figure 10**.

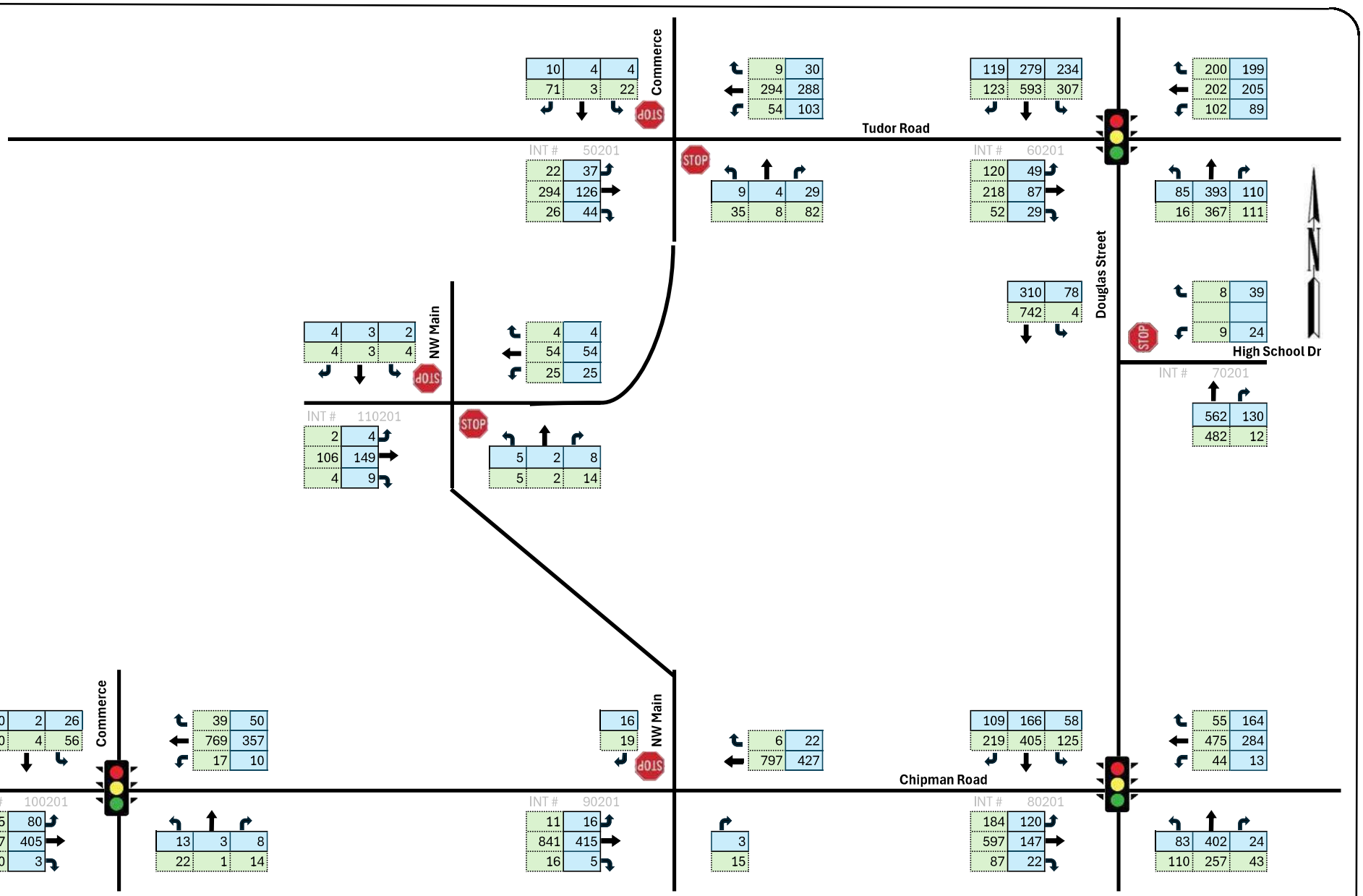
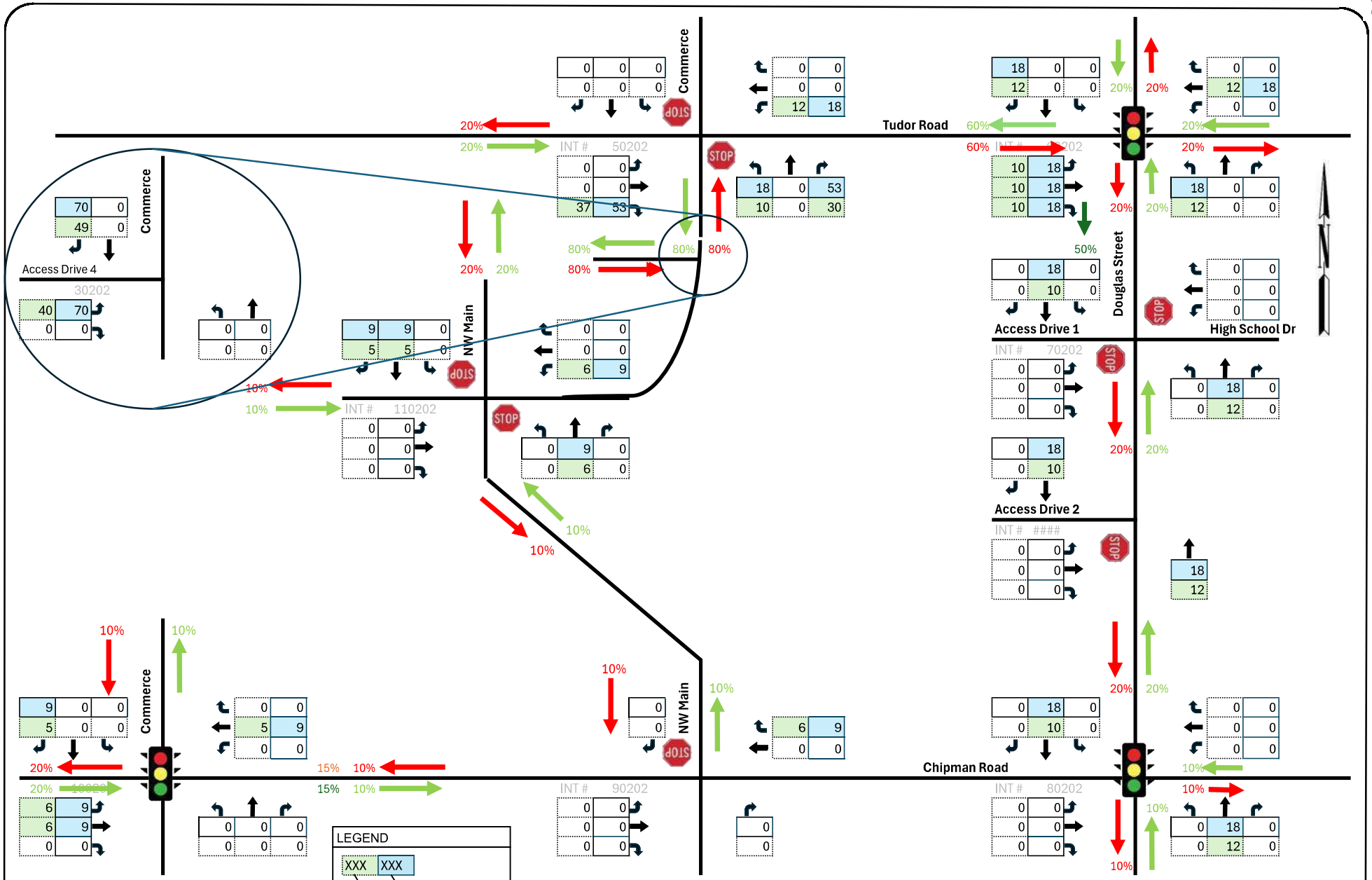


FIGURE 8.0 2029 Background Traffic

2% Growth Rate
4 Number of Years

Grocery Store & Gas Station - Douglas Street

Lee's Summit, Missouri



Peak Hour - Primary Site Generated Trips		
	IN (vph)	OUT (vph)
AM Peak Hour	61	88
PM Peak Hour	50	88

FIGURE 9.0 Phase 2 - Proposed Site Trips

Grocery Store & Gas Station - Douglas Street

Lee's Summit, Missouri

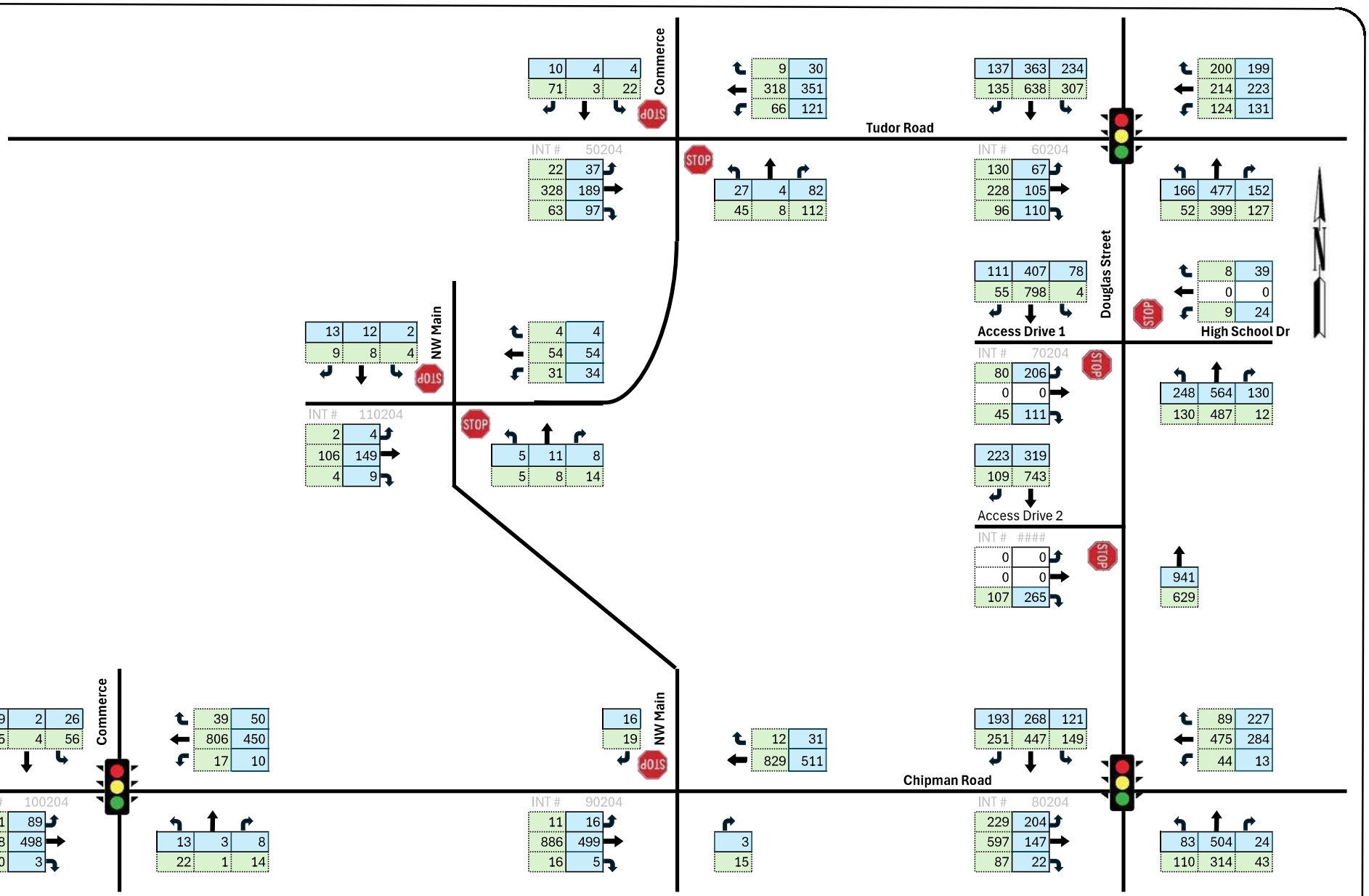


FIGURE 10.0 Phase 2 - Total Traffic

Grocery Store & Gas Station - Douglas Street

Lee's Summit, Missouri

7.0 PHASE 2 - CAPACITY ANALYSIS

7.1 METHODOLOGY

The capacity analyses were conducted using *Synchro 12,* which is a software package for modeling and optimizing traffic signal timings at signalized intersections and analyzing unsignalized intersections in accordance with the methodology of the latest edition of the *Highway Capacity Manual, 7th Edition.* The *Highway Capacity Manual* is published by the Transportation Research Board of the National Research Council, Washington, D.C. The information has been widely accepted throughout the U.S. as a guide for defining and solving transportation challenges. The information is approved and distributed by the U.S. Department of Transportation, Federal Highway Administration.

The capacity analysis provides a measure of the amount of traffic that a given facility can accommodate. Traffic facilities generally operate poorly at or near capacity. The analysis is intended to estimate the maximum amount of traffic that can be accommodated by a facility while maintaining prescribed operational qualities. The definition of operational criteria is accomplished using levels-of-service. The concept of levels-of-service is defined as a qualitative measure and describes operational conditions in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. Six levels-of-service are defined for each type of facility for which analysis procedures are available. They are given letter designations, from “A” to “F”, with level-of-service “A” representing the best operating conditions and level-of-service “F” the worst.

The average control delay for signalized intersections is estimated for each lane group and aggregated for each approach and for the intersection as a whole. The level-of-service for this type of traffic control is directly related to the control delay value. The criteria for stop controlled or unsignalized intersections have different threshold values than do those for signalized intersections. A higher level of control delay has been determined to be acceptable at a signalized intersection for the same level-of-service. The level-of-service criteria are summarized in **Table 5**.

TABLE 5.0 LEVEL-OF-SERVICE CRITERIA

Level-of-Service	Average Delay (seconds/vehicle)		Traffic Condition
	Unsignalized	Signalized	
A	≤ 10	≤ 10	Free Flow
B	> 10 - 15	> 10 - 20	Stable Flow (slight delays)
C	> 15 - 25	> 20 - 35	Stable Flow (acceptable delays)
D	> 25 - 35	> 35 - 55	Approaching Unstable Flow (tolerable delay, occasionally wait through more than one signal cycle before proceeding)
E	> 35 - 50	> 55 - 80	Unstable Flow (intolerable delay)
F	> 50	> 80	Forced Flow (congested and queues fail to clear)

7.2 PHASE 2 - SCENARIOS

Capacity analyses were conducted for the A.M. and P.M. peak hours at each development driveway as well as the intersections of Commerce Drive / Sloan Road & Tudor Road, Douglas Street & Tudor Road, Douglas Street & High School Entrance, Douglas Street & Chipman Road, Main Street & Chipman Road, Commerce Drive & Chipman Road, and Main Street and Commerce Drive. The intersections were analyzed and reviewed under the existing traffic, 2029 background traffic, and 2029 total traffic. For purposes of this report, an overall intersection level-of-service "C" or better was considered an acceptable level-of-service as per Lee's Summit Guidelines. The results of the capacity analyses conducted are summarized in **Table 6** and the raw data sheets have been included in the appendix.

TABLE 6.0 PHASE 2 - INTERSECTION CAPACITY ANALYSIS RESULTS

Intersection	Traffic Control	Overall / Approach	AM Peak Hour					
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
			2025 Existing Traffic		2029 Background Traffic		2029 Total Traffic	
Commerce Dr / Sloan & Tudor Road	TWSC	OVR	3.8	A	4.0	A	4.7	A
		EB	0.5	A	0.5	A	0.4	A
		WB	1.2	A	1.2	A	1.4	A
		NB	13.5	B	14.6	B	17.9	C
		SB	12.1	B	12.8	B	14.0	B
Douglas St & Tudor Road	SIGNAL	OVR	23.4	C	24.0	C	25.1	C
		EB	43.9	D	43.1	D	44.2	D
		WB	53.8	D	54.5	D	54.7	D
		NB	0.7	A	0.8	A	2.0	A
		SB	11.7	B	12.9	B	14.6	B
Douglas St & High School Entrance / Access Drive 1	PRO SIGNAL	OVR					5.5	A
		EB					55.1	E
		WB					51.9	D
		NB					0.5	A
		SB					0.5	A
Douglas St & Access Drive 2	TWSC	OVR					1.0	A
		EB					13.7	B
		NB					0.0	A
		SB					0.0	A
Douglas St & Chipman Road	SIGNAL	OVR	31.1	C	32.3	C	30.9	C
		EB	24.9	C	26.2	C	25.4	C
		WB	41.0	D	42.4	D	42.7	D
		NB	24.5	C	24.9	C	27.8	C
		SB	34.3	C	35.6	D	29.9	C
NW Main St & Chipman Road	TWSC	OVR	0.3	A	0.2	A	0.2	A
		EB	0.1	A	0.1	A	0.1	A
		WB	0.0	A	0.0	A	0.0	A
		SB	9.3	A	11.6	B	11.8	B
Commerce Drive & Chipman Road	SIGNAL	OVR	13.4	B	13.7	B	13.9	B
		EB	18.8	B	19.2	B	19.6	B
		WB	2.7	A	2.8	A	2.9	A
		NB	32.6	C	32.7	C	32.8	C
		SB	36.7	D	37.2	D	37.4	D
NW Main St & Commerce Drive	TWSC	OVR	2.3	A	2.2	A	2.9	A
		EB	0.1	A	0.1	A	0.1	A
		WB	2.2	A	2.3	A	2.6	A
		NB	9.4	A	9.4	A	9.9	A
		SB	9.7	A	9.8	A	9.9	A
Commerce Drive & Access Drive 4	TWSC	OVR					1.4	A
		EB					10.2	B
		NB					0.0	A
		SB					0.0	A

			PM Peak Hour					
			2025 Existing Traffic		2029 Background Traffic		2029 Total Traffic	
Commerce Dr / Sloan & Tudor Road	TWSC	OVR	2.6	A	2.7	A	3.4	A
		EB	1.4	A	1.4	A	0.9	A
		WB	1.9	A	1.9	A	2.0	A
		NB	11.4	B	11.8	B	14.9	B
		SB	13.0	B	13.4	B	16.1	C
Douglas St & Tudor Road	SIGNAL	OVR	21.9	C	22.3	C	22.9	C
		EB	46.3	D	45.6	D	48.2	D
		WB	54.8	D	55.5	E	54.2	D
		NB	1.4	A	1.5	A	2.4	A
		SB	9.1	A	9.7	A	11.9	B
Douglas St & High School Entrance / Access Drive 1	PRO SIGNAL	OVR					9.8	A
		EB					47.8	D
		WB					41.4	D
		NB					0.9	A
		SB					0.4	A
Douglas St & Access Drive 2	TWSC	OVR					2.1	A
		EB					13.7	B
		NB					0.0	A
		SB					0.0	A
Douglas St & Chipman Road	SIGNAL	OVR	27.1	C	29.4	C	32.6	C
		EB	29.5	C	29.3	C	35.0	C
		WB	32.4	C	33.3	C	33.5	C
		NB	25.4	C	25.8	C	37.4	D
		SB	20.2	C	29.7	C	25.1	C
NW Main St & Chipman Road	TWSC	OVR	0.3	A	0.3	A	0.4	A
		EB	0.3	A	0.3	A	0.3	A
		WB	0.0	A	0.0	A	0.0	A
		SB	9.7	A	9.9	A	10.3	B
Commerce Drive & Chipman Road	SIGNAL	OVR	14.1	B	14.2	B	13.7	B
		EB	20.8	C	20.9	C	20.4	C
		WB	2.2	A	2.3	A	2.2	A
		NB	32.2	C	32.2	C	32.2	C
		SB	33.5	C	33.7	C	34.0	C
NW Main St & Commerce Drive	TWSC	OVR	1.7	A	1.7	A	2.7	A
		EB	0.2	A	0.2	A	0.2	A
		WB	2.3	A	2.3	A	2.8	A
		NB	9.9	A	10.0	B	10.7	B
		SB	9.8	A	9.9	A	10.1	B
Commerce Drive & Access Drive 4	TWSC	OVR					2.2	A
		EB					10.4	B
		NB					0.0	A
		SB					0.0	A

	Signal	Unsignalized
LEVEL OF SERVICE A - C		
LEVEL OF SERVICE D - E		
LEVEL OF SERVICE F		

7.2.1 2029 BACKGROUND TRAFFIC

The analyses conducted under the 2029 background traffic indicated that the overall intersections operate at an acceptable level-of-service "C" or better during the a.m. and p.m. peak hours.

7.2.2 PHASE 2 - 2029 TOTAL TRAFFIC

The analyses conducted under the 2029 phase 2 total traffic indicated that the overall intersections operate at an acceptable level-of-service "C" or better during the a.m. and p.m. peak hours. A signal was modeled for the intersection of Douglas Street and High School Entrance / Access Drive 1 during the peak hours since it was found that a signal would meet the level of service requirements. The results for a signal at that intersection were included in **Table 6**.

8.0 ALTERNATIVE TRANSPORTATION MODES

8.1 PEDESTRIAN & BIKING

Bike and pedestrian accommodations were reviewed in the vicinity of the proposed development. All new driveways with planned sidewalks will be constructed to meet ADA and accommodate connectivity. In reviewing the Lee's Summit Comprehensive Plan indicates the need for trails along Tudor Road and Chipman Road. Those trails currently exist within the vicinity of the development. Sidewalks should be installed along Douglas Street within the development to allow for increased pedestrian activity and meet city code. In addition, a new signal at Douglas Street and the High School Entrance / Access Drive 1 should include crosswalks to allow for pedestrian connectivity.

8.2 TRANSIT

There are currently no fixed route transit services within the vicinity of the development.

9.0 CONCLUSIONS AND RECOMMENDATIONS

9.1 VEHICULAR RECCOMENDATIONS

TEC was requested to conduct a traffic impact study on a proposed supermarket, retail and gas station development in Lee's Summit, Missouri. Existing traffic volume data was collected adjacent to the proposed development. The development was analyzed as full build out in 2029. The proposed development traffic was then determined and added to the background design traffic for conducting reviews and analyses.

A traffic signal warrant analysis was completed for the intersection of Douglas Street and High School Entrance / Access Drive 1 in accordance with the criteria outlined in the MUTCD. Turning-movement counts, pedestrian activity, and speed data were evaluated against the applicable warrants. For this development the Eight-Hour was most applicable.

Based on these findings, installation of a traffic signal is warranted in the 2027 build condition and is expected to enhance both safety and operations at the intersection. Alternative traffic control options—such as all-way stop control and minor geometric improvements—were reviewed but are not anticipated to provide the same level of safety and operational benefit as a properly timed and coordinated traffic signal.

Improvements are needed at the intersection of Douglas Street and High School Entrance / Access Drive 1 in order to handle the anticipated traffic demands.

1. Signalization to meet the capacity needs (see Signal Warrants in Appendix)
2. Addition of Northbound and Southbound left turn lane as required by the city of Lee's Summit
3. With Signalization, installation of a crosswalk for pedestrian connectivity.

In addition to these improvements, access restrictions shall be installed at Access Drive 2 in order to restrict traffic movements to right in and right out only.

Several intersections operate at approach Level of Service D under existing conditions, and the addition of development traffic generally maintains that same approach Level of Service D threshold under proposed conditions. In some cases, delay increases while the approach remains at Level of Service D. In

a limited number of instances, certain approaches at signalized intersections exceed the Level of Service D threshold and operate at Level of Service E by less than one second. These occurrences are at signalized intersections where timing is intentionally weighted to prioritize major roadway traffic and maintain efficient progression along the mainline corridor. While signal timing could be adjusted to meet the approach Level of Service threshold, it is typical practice for side street approaches to experience somewhat greater delay in order to optimize overall traffic flow on the primary roadway.
It should also be noted that in no instance did the overall intersection Level of Service fall below Level of Service C, and where adjustments were needed, signal timing modifications were able to bring operations back within the applicable threshold.

Sight Distance at Proposed Entrances and Roadway Intersections – Careful consideration should be given to sight distance obstructions when planning any future development, aesthetics enhancements, such as berms, fencing, or landscaping. To ensure that these improvements do not obstruct the view of entering and exiting traffic at the developments access with public roads. It is generally recommended that all improvements higher than 3.0 feet above the elevation of the nearest pavement edge be held back at least 20 feet from the traveled roadway. Conditions may vary and will need to be reviewed by the site engineer on a case-by-case basis.

Based on these findings, installation of a traffic signal is warranted in the 2027 build condition and is expected to enhance both safety and operations at the intersection. A signal is close to being warranted today based upon existing traffic. Alternative traffic control options—such as all-way stop control and minor geometric improvements—were reviewed but are not anticipated to provide the same level of safety and operational benefit as a properly timed and coordinated traffic signal. A roundabout could be considered in lieu of a traffic signal.

9.2 PEDESTRIAN & BIKING IMPROVEMENTS

Bike and pedestrian accommodations were reviewed in the vicinity of the proposed development. All new driveways with planned sidewalks will be constructed to meet ADA and accommodate connectivity. New sidewalk shall be installed along Douglas Street to meet city code, and with a new signal at Douglas Street and High School Entrance / Access Drive 1, crosswalks should be install to accommodate pedestrian connectivity.

10.0 APPENDIX A

Supermarket — Douglas Street & Tudor Road

Lee's Summit, Missouri

Existing

- Existing Traffic Counts
- AM Existing Synchro
- PM Existing Synchro

Phase 1 - 2027

- AM Peak Calculations
- AM Background Traffic Synchro
- AM Total Traffic Synchro
- AM Total Traffic Synchro w/ Signal
- PM Peak Calculations
- PM Background Traffic Synchro
- PM Total Traffic Synchro
- PM Total Traffic Synchro w/ Signal

Prepared by:

Traffic Engineering Consultants, Inc.

Phase 2 - 2029

- AM Peak Calculations
- AM Background Traffic Synchro
- AM Total Traffic Synchro w/ Signal
- PM Peak Calculations
- PM Background Traffic Synchro
- PM Total Traffic Synchro w/ Signal

Prepared by:

Traffic Engineering Consultants, Inc.

EXISTING INFORMATION

Supermarket — Douglas Street & Tudor Road

Lee's Summit, Missouri

Existing

- Existing Traffic Counts
- AM Existing Synchro
- PM Existing Synchro

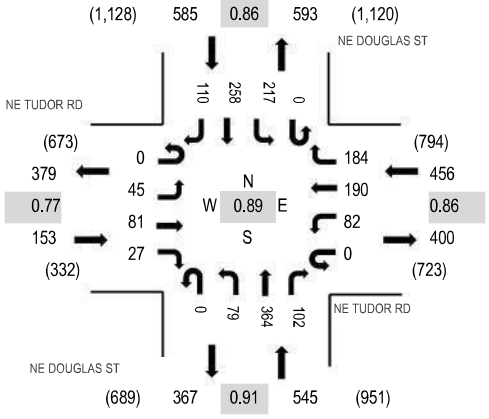
Prepared by:

Traffic Engineering Consultants, Inc.

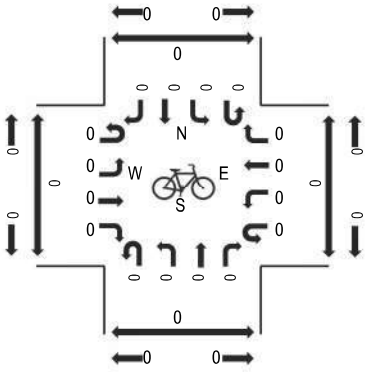
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 1 NE DOUGLAS ST & NE TUDOR RD AM
Date: Thursday, December 4, 2025
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:15 AM - 07:30 AM

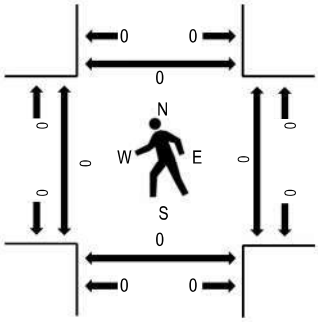
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

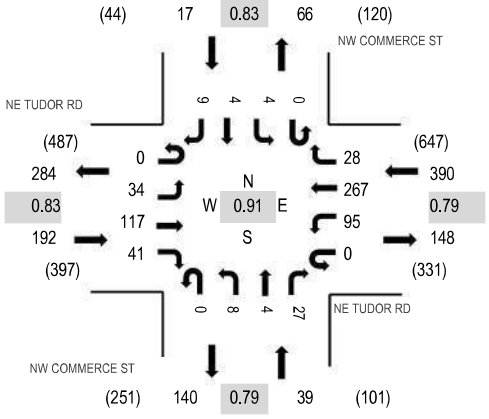
Traffic Counts - Motorized Vehicles

Interval Start Time	NE TUDOR RD Eastbound				NE TUDOR RD Westbound				NE DOUGLAS ST Northbound				NE DOUGLAS ST 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	10	24	9	0	14	44	56	0	10	80	38	0	68	72	17	442	1,739	0	0	0	0
7:15 AM	0	13	21	8	0	29	45	58	0	17	99	26	0	72	68	30	486	1,650	0	0	0	0
7:30 AM	0	10	18	6	0	18	57	23	0	25	89	12	0	27	55	34	374	1,527	0	0	0	0
7:45 AM	0	12	18	4	0	21	44	47	0	27	96	26	0	50	63	29	437	1,505	0	0	0	0
8:00 AM	0	12	14	2	0	15	44	32	0	9	80	23	0	37	53	32	353	1,466	0	0	0	0
8:15 AM	0	25	19	4	0	12	37	39	0	7	75	15	0	40	62	28	363		0	0	0	0
8:30 AM	0	18	22	5	0	11	34	38	0	8	74	14	0	39	62	27	352		0	0	0	0
8:45 AM	0	20	35	3	0	15	28	33	0	6	81	14	0	51	78	34	398		0	0	0	0
Count Total	0	120	171	41	0	135	333	326	0	109	674	168	0	384	513	231	3,205		0	0	0	0
Peak Hour	0	45	81	27	0	82	190	184	0	79	364	102	0	217	258	110	1,739		0	0	0	0

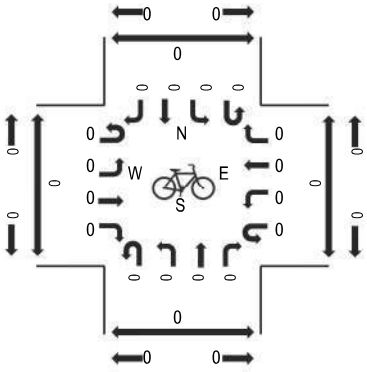
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 2 NW COMMERCE ST & NE TUDOR RD AM
Date: Thursday, December 4, 2025
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

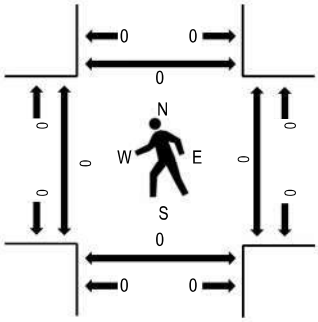
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

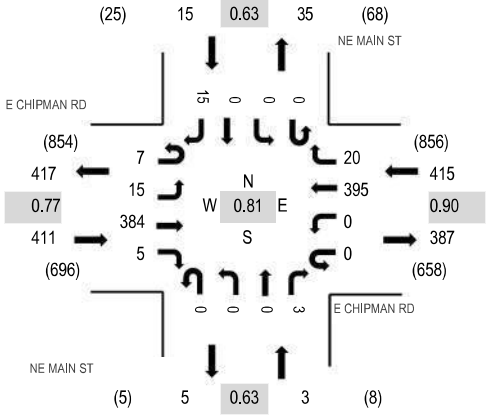
Traffic Counts - Motorized Vehicles

Interval Start Time	NE TUDOR RD Eastbound				NE TUDOR RD Westbound				NW COMMERCE ST Northbound				NW COMMERCE ST 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	4	43	9	0	14	44	4	0	3	0	4	0	0	1	1	127	619	0	0	0	0
7:15 AM	0	4	39	5	0	24	60	4	0	2	2	6	0	2	2	0	150	638	0	0	0	0
7:30 AM	0	1	22	6	0	22	90	11	0	3	0	9	0	0	2	1	167	629	0	0	0	0
7:45 AM	0	17	27	18	0	22	75	5	0	3	1	5	0	0	0	2	175	589	0	0	0	0
8:00 AM	0	12	29	12	0	27	42	8	0	0	1	7	0	2	0	6	146	570	0	0	0	0
8:15 AM	0	9	35	8	0	15	42	4	0	4	3	11	0	2	2	6	141		0	0	0	0
8:30 AM	0	9	24	5	0	21	40	3	0	4	1	12	0	1	1	6	127		0	0	0	0
8:45 AM	0	13	36	10	0	24	42	4	0	8	0	12	0	3	1	3	156		0	0	0	0
Count Total	0	69	255	73	0	169	435	43	0	27	8	66	0	10	9	25	1,189		0	0	0	0
Peak Hour	0	34	117	41	0	95	267	28	0	8	4	27	0	4	4	9	638		0	0	0	0

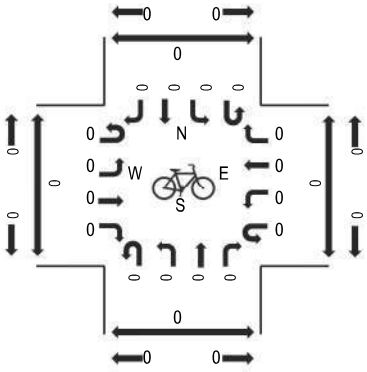
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 3 NE MAIN ST & E CHIPMAN RD AM
Date: Thursday, December 4, 2025
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:45 AM - 09:00 AM

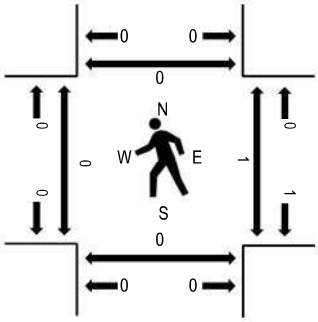
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

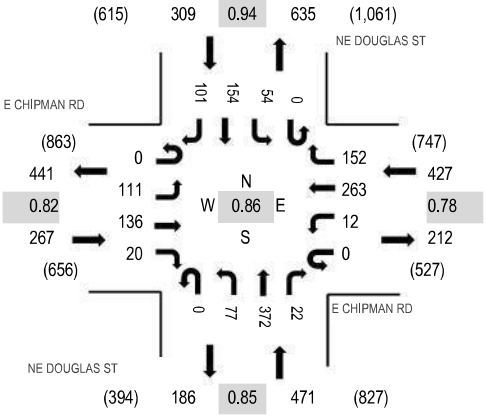
Traffic Counts - Motorized Vehicles

Interval Start Time	E CHIPMAN RD Eastbound				E CHIPMAN RD Westbound				NE MAIN ST Northbound				NE MAIN ST 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	1	0	54	0	0	0	84	2	0	0	0	2	0	0	0	0	143	741	0	0	1	0
7:15 AM	1	3	66	0	0	0	119	3	0	0	0	1	0	0	0	4	197	779	0	0	0	0
7:30 AM	0	3	65	0	0	0	107	4	0	0	0	1	0	0	0	3	183	785	0	0	0	0
7:45 AM	4	7	81	0	0	0	111	11	0	0	0	1	0	0	0	3	218	802	0	0	0	1
8:00 AM	2	1	85	3	0	0	80	5	0	0	0	2	0	0	0	3	181	844	0	0	0	0
8:15 AM	2	3	83	1	0	0	106	5	0	0	0	0	0	0	0	3	203		0	1	0	0
8:30 AM	3	4	89	1	0	0	94	3	0	0	0	0	0	0	0	6	200		0	0	0	0
8:45 AM	0	7	127	0	0	0	115	7	0	0	0	1	0	0	0	3	260		0	0	0	0
Count Total	13	28	650	5	0	0	816	40	0	0	0	8	0	0	0	25	1,585		0	1	1	1
Peak Hour	7	15	384	5	0	0	395	20	0	0	0	3	0	0	0	15	844		0	1	0	0

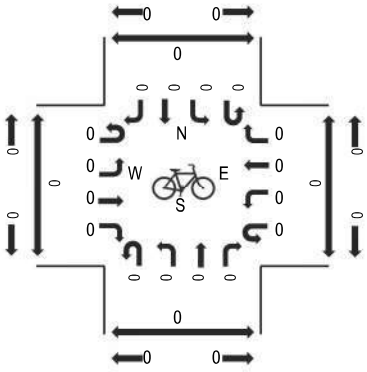
(303) 216-2439
www.alltrafficdata.net

Location: 4 NE DOUGLAS ST & E CHIPMAN RD AM
Date: Thursday, December 4, 2025
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:15 AM - 07:30 AM

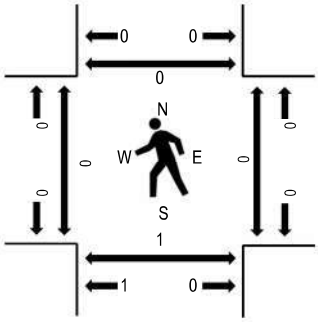
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

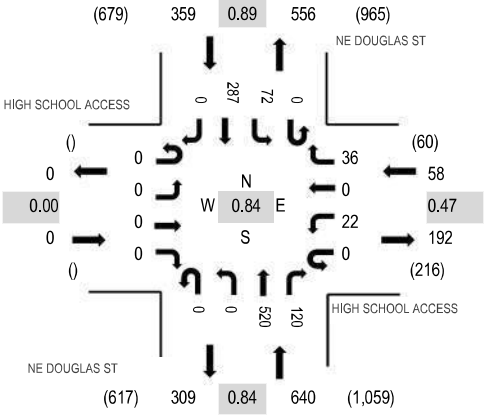
Traffic Counts - Motorized Vehicles

Interval Start Time	E CHIPMAN RD Eastbound				E CHIPMAN RD Westbound				NE DOUGLAS ST Northbound				NE DOUGLAS ST 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	21	28	5	0	2	56	55	0	15	79	2	0	11	37	18	329	1,474	0	0	1	0
7:15 AM	0	34	30	5	0	2	73	62	0	18	110	10	0	14	40	29	427	1,465	0	0	0	0
7:30 AM	0	25	34	6	0	4	57	14	0	22	89	7	0	12	34	32	336	1,379	0	0	0	0
7:45 AM	0	31	44	4	0	4	77	21	0	22	94	3	0	17	43	22	382	1,377	0	0	0	0
8:00 AM	0	13	64	8	0	4	53	20	0	12	73	5	0	16	30	22	320	1,371	0	0	0	0
8:15 AM	0	27	46	11	0	6	62	10	0	18	74	8	0	11	36	32	341		0	0	0	0
8:30 AM	0	34	59	9	0	5	57	14	0	17	60	7	0	10	41	21	334		0	0	0	0
8:45 AM	0	33	73	12	0	7	69	13	0	19	55	8	0	8	39	40	376		0	0	0	0
Count Total	0	218	378	60	0	34	504	209	0	143	634	50	0	99	300	216	2,845		0	0	1	0
Peak Hour	0	111	136	20	0	12	263	152	0	77	372	22	0	54	154	101	1,474		0	0	1	0

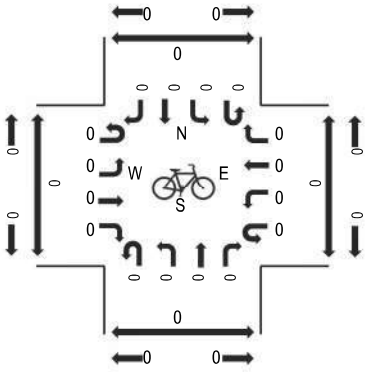
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 5 NE DOUGLAS ST & HIGH SCHOOL ACCESS AM
Date: Thursday, December 4, 2025
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:15 AM - 07:30 AM

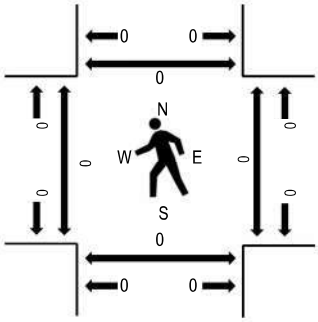
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

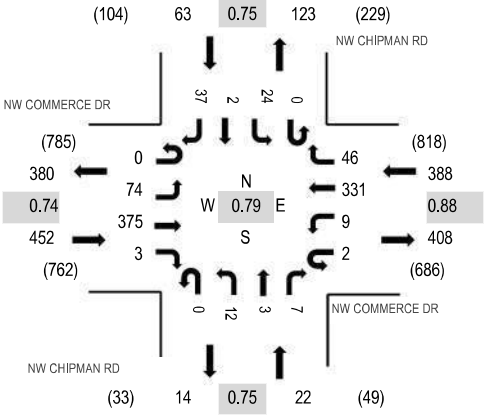
Traffic Counts - Motorized Vehicles

Interval Start Time	HIGH SCHOOL ACCESS Eastbound				HIGH SCHOOL ACCESS Westbound				NE DOUGLAS ST Northbound				NE DOUGLAS ST 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	0	0	0	10	0	14	0	0	111	49	0	44	57	0	285	1,057	0	0	0	0
7:15 AM	0	0	0	0	0	10	0	21	0	0	128	62	0	24	71	0	316	951	0	0	0	0
7:30 AM	0	0	0	0	0	1	0	0	0	0	131	3	0	2	78	0	215	821	0	0	0	0
7:45 AM	0	0	0	0	0	1	0	1	0	0	150	6	0	2	81	0	241	780	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	106	3	0	5	65	0	179	741	0	0	0	0
8:15 AM	0	0	0	0	0	1	0	0	0	0	105	1	0	3	76	0	186		0	1	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	97	2	0	1	74	0	174		0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	0	100	5	0	4	92	0	202		0	0	0	0
Count Total	0	0	0	0	0	23	0	37	0	0	928	131	0	85	594	0	1,798		0	1	0	0
Peak Hour	0	0	0	0	0	22	0	36	0	0	520	120	0	72	287	0	1,057		0	0	0	0

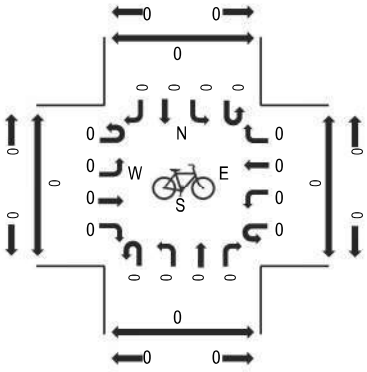
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 6 NW CHIPMAN RD & NW COMMERCE DR AM
Date: Thursday, December 4, 2025
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:45 AM - 09:00 AM

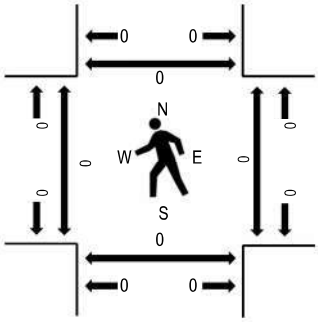
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

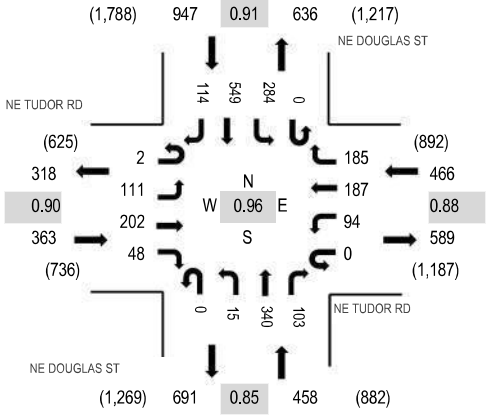
Traffic Counts - Motorized Vehicles

Interval Start Time	NW COMMERCE DR Eastbound				NW COMMERCE DR Westbound				NW CHIPMAN RD Northbound				NW CHIPMAN 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	7	52	0	0	2	72	8	0	4	0	2	0	1	2	5	155	808	0	0	1	0
7:15 AM	0	13	62	2	0	3	107	13	0	5	2	2	0	6	0	6	221	855	0	0	0	0
7:30 AM	0	10	55	0	0	4	93	10	0	4	1	1	0	6	1	6	191	838	0	0	0	0
7:45 AM	0	25	83	1	0	4	98	16	0	1	1	4	0	4	0	4	241	875	0	0	0	0
8:00 AM	0	12	84	1	1	1	72	13	0	3	0	3	0	3	1	8	202	925	0	0	0	0
8:15 AM	0	19	72	0	1	1	77	13	0	2	1	1	0	8	1	8	204		0	0	0	0
8:30 AM	0	18	94	0	0	4	78	6	0	5	0	2	0	10	0	11	228		0	0	0	0
8:45 AM	0	25	125	2	0	3	104	14	0	2	2	1	0	3	0	10	291		0	0	0	0
Count Total	0	129	627	6	2	22	701	93	0	26	7	16	0	41	5	58	1,733		0	0	1	0
Peak Hour	0	74	375	3	2	9	331	46	0	12	3	7	0	24	2	37	925		0	0	0	0

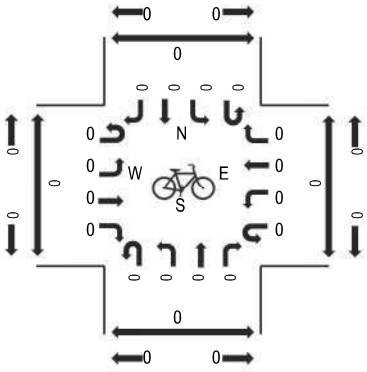
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 1 NE DOUGLAS ST & NE TUDOR RD PM
Date: Thursday, December 4, 2025
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

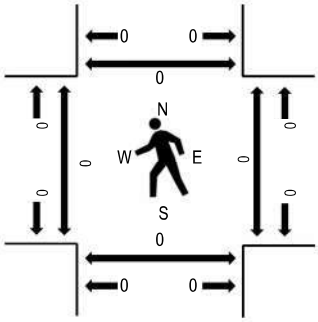
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

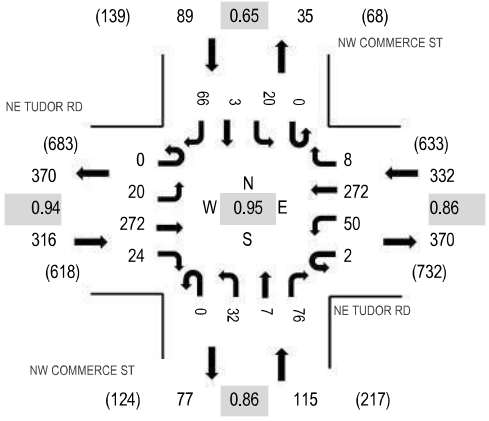
Traffic Counts - Motorized Vehicles

Interval Start Time	NE TUDOR RD Eastbound				NE TUDOR RD Westbound				NE DOUGLAS ST Northbound				NE DOUGLAS ST 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	1	33	56	10	0	29	50	46	0	12	86	22	0	55	138	19	557	2,207	1	0	2	0
4:15 PM	1	26	51	11	0	25	50	45	0	3	83	19	0	69	153	24	560	2,234	0	0	0	0
4:30 PM	1	32	51	16	0	23	32	35	0	1	70	22	0	69	162	30	544	2,208	0	0	0	0
4:45 PM	0	29	46	9	0	17	57	49	0	6	88	31	0	71	108	35	546	2,181	0	0	0	0
5:00 PM	0	24	54	12	0	29	48	56	0	5	99	31	0	75	126	25	584	2,091	0	0	0	0
5:15 PM	0	38	60	7	0	28	43	33	0	1	63	16	0	91	121	33	534		0	0	0	0
5:30 PM	0	28	53	6	0	22	47	40	0	5	81	32	0	70	103	30	517		0	0	0	0
5:45 PM	0	25	51	5	0	20	37	31	0	4	77	25	0	67	89	25	456		0	0	0	0
Count Total	3	235	422	76	0	193	364	335	0	37	647	198	0	567	1,000	221	4,298		1	0	2	0
Peak Hour	2	111	202	48	0	94	187	185	0	15	340	103	0	284	549	114	2,234		0	0	0	0

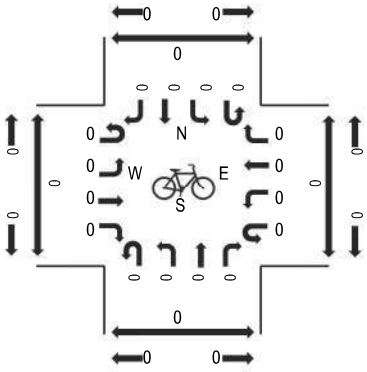
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 2 NW COMMERCE ST & NE TUDOR RD PM
Date: Thursday, December 4, 2025
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 04:45 PM - 05:00 PM

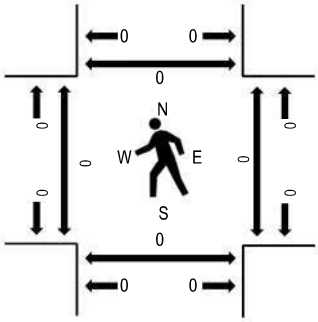
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

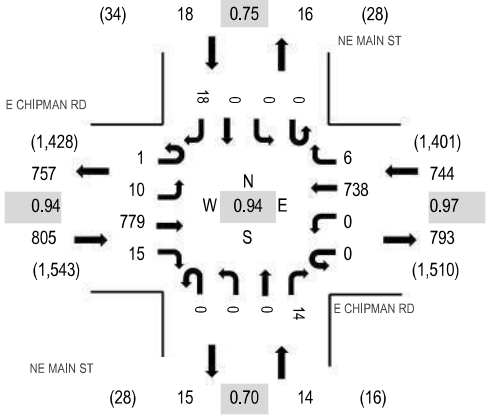
Traffic Counts - Motorized Vehicles

Interval Start Time	NE TUDOR RD Eastbound				NE TUDOR RD Westbound				NW COMMERCE ST Northbound				NW COMMERCE ST 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	7	75	4	1	8	68	6	0	8	0	24	0	1	2	4	208	826	0	0	1	0
4:15 PM	0	4	69	5	0	10	66	3	0	3	1	16	0	3	1	8	189	837	0	0	0	0
4:30 PM	0	4	76	3	0	9	64	0	0	6	4	12	0	6	0	20	204	852	0	0	0	0
4:45 PM	0	7	64	7	1	29	66	2	0	11	0	24	0	4	0	10	225	849	0	0	0	0
5:00 PM	0	4	59	8	1	7	76	4	0	5	2	19	0	8	1	25	219	781	0	0	0	0
5:15 PM	0	5	73	6	0	5	66	2	0	10	1	21	0	2	2	11	204		0	0	0	0
5:30 PM	0	5	69	1	1	8	66	1	0	7	1	19	0	3	0	20	201		0	0	0	0
5:45 PM	0	4	58	1	0	7	55	1	0	3	0	20	0	3	0	5	157		0	0	0	0
Count Total	0	40	543	35	4	83	527	19	0	53	9	155	0	30	6	103	1,607		0	0	1	0
Peak Hour	0	20	272	24	2	50	272	8	0	32	7	76	0	20	3	66	852		0	0	0	0

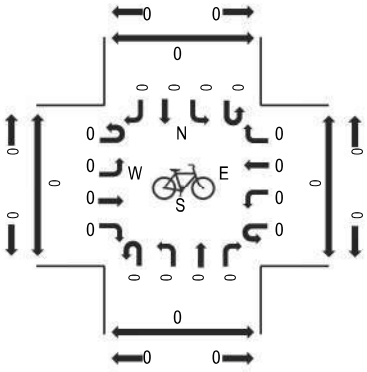
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 3 NE MAIN ST & E CHIPMAN RD PM
Date: Thursday, December 4, 2025
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 04:45 PM - 05:00 PM

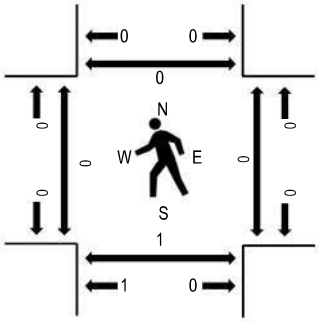
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

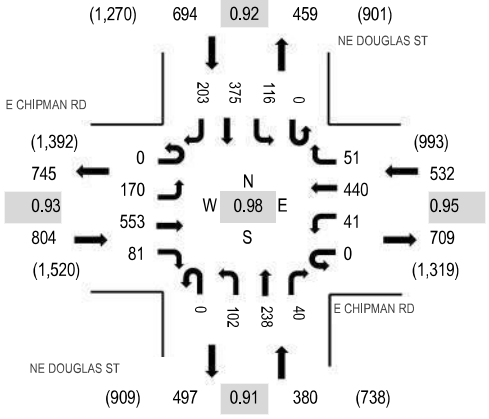
Traffic Counts - Motorized Vehicles

Interval Start Time	E CHIPMAN RD Eastbound				E CHIPMAN RD Westbound				NE MAIN ST Northbound				NE MAIN ST 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	2	196	4	0	0	181	2	0	0	0	0	0	0	0	4	389	1,579	0	0	0	0
4:15 PM	0	2	199	4	0	0	185	2	0	0	0	4	0	0	0	1	397	1,581	0	0	0	0
4:30 PM	0	2	179	5	0	0	180	0	0	0	0	5	0	0	0	2	373	1,530	0	0	0	0
4:45 PM	1	3	212	0	0	0	191	1	0	0	0	4	0	0	0	8	420	1,533	0	0	1	0
5:00 PM	0	3	189	6	0	0	182	3	0	0	0	1	0	0	0	7	391	1,415	0	0	0	0
5:15 PM	0	2	161	4	0	0	169	2	0	0	0	2	0	0	0	6	346		0	0	0	0
5:30 PM	1	2	194	2	0	0	172	2	0	0	0	0	0	0	0	3	376		0	0	0	0
5:45 PM	3	0	164	3	0	0	129	0	0	0	0	0	0	0	0	3	302		0	0	0	0
Count Total	5	16	1,494	28	0	0	1,389	12	0	0	0	16	0	0	0	34	2,994		0	0	1	0
Peak Hour	1	10	779	15	0	0	738	6	0	0	0	14	0	0	0	18	1,581		0	0	1	0

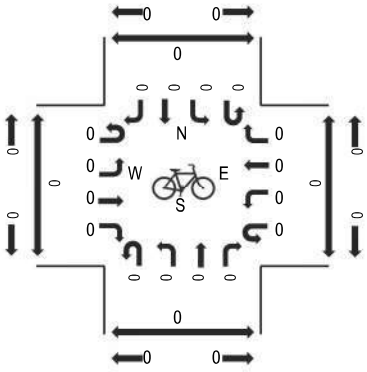
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 4 NE DOUGLAS ST & E CHIPMAN RD PM
Date: Thursday, December 4, 2025
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 04:15 PM - 04:30 PM

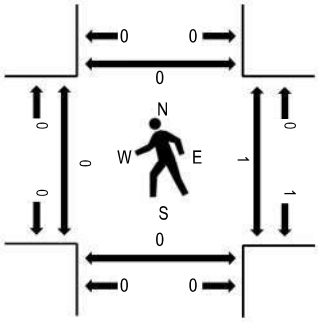
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

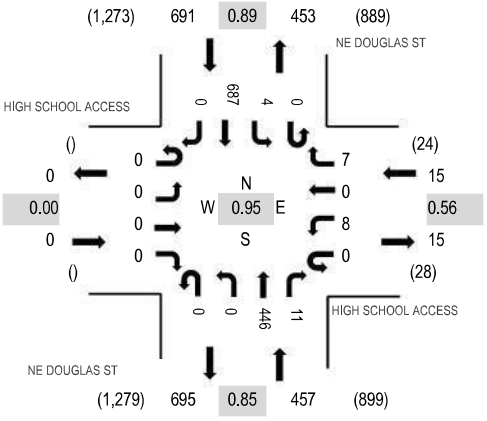
Traffic Counts - Motorized Vehicles

Interval Start Time	E CHIPMAN RD Eastbound				E CHIPMAN RD Westbound				NE DOUGLAS ST Northbound				NE DOUGLAS ST 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	35	131	26	0	7	115	18	0	21	70	5	0	45	81	45	599	2,399	0	1	0	0
4:15 PM	0	46	154	12	0	10	108	11	0	24	45	13	0	26	109	55	613	2,410	0	0	0	0
4:30 PM	0	31	124	22	0	15	104	10	0	25	54	11	0	36	97	57	586	2,314	0	0	0	0
4:45 PM	0	45	149	23	0	6	117	13	0	25	65	10	0	30	71	47	601	2,271	0	1	0	0
5:00 PM	0	48	126	24	0	10	111	17	0	28	74	6	0	24	98	44	610	2,122	0	0	0	0
5:15 PM	0	22	109	27	0	2	93	15	0	29	56	3	0	25	91	45	517		0	0	0	0
5:30 PM	0	41	124	34	0	2	98	13	0	29	60	9	0	28	62	43	543		0	0	0	0
5:45 PM	0	42	107	18	0	3	80	15	0	19	55	2	0	22	59	30	452		0	0	0	0
Count Total	0	310	1,024	186	0	55	826	112	0	200	479	59	0	236	668	366	4,521		0	2	0	0
Peak Hour	0	170	553	81	0	41	440	51	0	102	238	40	0	116	375	203	2,410		0	1	0	0

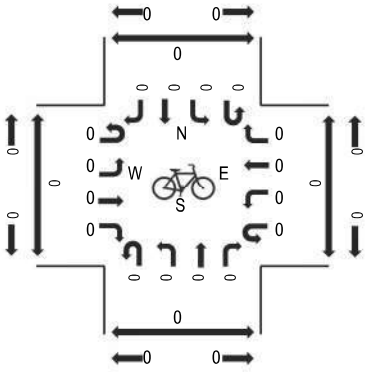
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 5 NE DOUGLAS ST & HIGH SCHOOL ACCESS PM
Date: Thursday, December 4, 2025
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

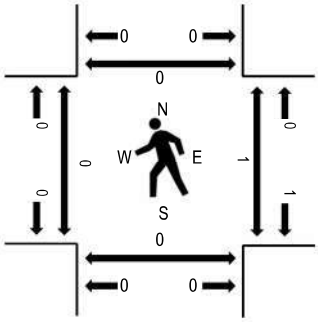
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

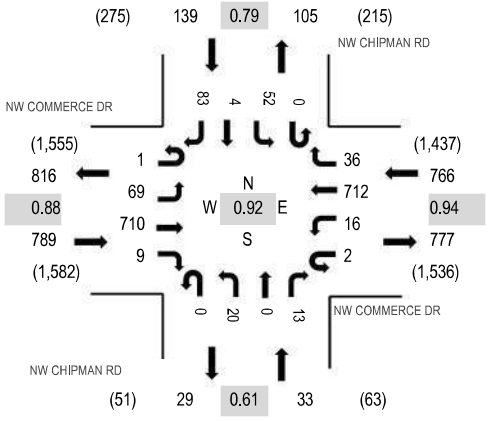
Traffic Counts - Motorized Vehicles

Interval Start Time	HIGH SCHOOL ACCESS Eastbound				HIGH SCHOOL ACCESS Westbound				NE DOUGLAS ST Northbound				NE DOUGLAS ST 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	0	0	0	2	0	1	0	0	123	2	0	0	175	0	303	1,160	0	1	0	0
4:15 PM	0	0	0	0	0	4	0	4	0	0	103	1	0	2	186	0	300	1,163	0	0	0	0
4:30 PM	0	0	0	0	0	2	0	0	0	0	89	4	0	0	196	0	291	1,116	0	0	0	0
4:45 PM	0	0	0	0	0	2	0	3	0	0	121	1	0	1	138	0	266	1,078	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	133	5	0	1	167	0	306	1,036	0	1	0	0
5:15 PM	0	0	0	0	0	0	0	1	0	0	87	5	0	1	159	0	253		0	0	0	0
5:30 PM	0	0	0	0	0	3	0	2	0	0	114	2	0	2	130	0	253		0	1	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	108	1	0	0	115	0	224		0	0	0	0
Count Total	0	0	0	0	0	13	0	11	0	0	878	21	0	7	1,266	0	2,196		0	3	0	0
Peak Hour	0	0	0	0	0	8	0	7	0	0	446	11	0	4	687	0	1,163		0	1	0	0

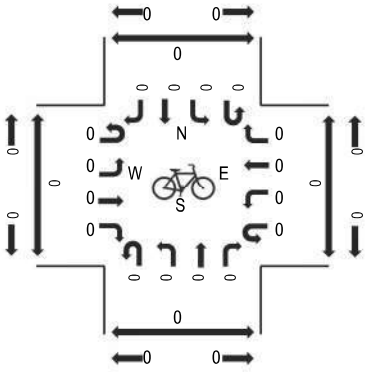
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 6 NW CHIPMAN RD & NW COMMERCE DR PM
Date: Thursday, December 4, 2025
Peak Hour: 04:15 PM - 05:15 PM
Peak 15-Minutes: 04:45 PM - 05:00 PM

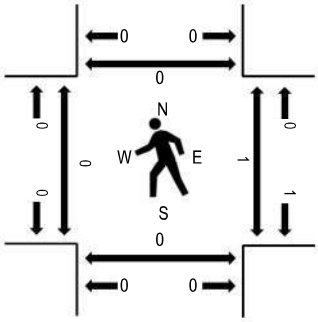
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	NW COMMERCE DR Eastbound				NW COMMERCE DR Westbound				NW CHIPMAN RD Northbound				NW CHIPMAN 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	9	190	4	0	3	168	8	0	5	0	3	0	12	1	30	433	1,713	0	0	0	0
4:15 PM	0	17	180	2	0	3	181	6	0	2	0	2	0	9	0	16	418	1,727	0	0	0	0
4:30 PM	1	8	159	3	1	1	169	8	0	3	0	2	0	15	3	21	394	1,708	0	0	0	0
4:45 PM	0	26	200	2	0	4	187	12	0	7	0	1	0	8	0	21	468	1,727	0	1	0	0
5:00 PM	0	18	171	2	1	8	175	10	0	8	0	8	0	20	1	25	447	1,644	0	0	0	0
5:15 PM	0	17	169	3	1	2	162	6	0	5	0	2	0	14	1	17	399		0	0	0	0
5:30 PM	1	16	179	1	2	2	165	10	0	6	0	2	0	10	2	17	413		0	0	0	0
5:45 PM	0	34	169	1	0	0	132	10	0	7	0	0	0	6	2	24	385		0	0	0	0
Count Total	2	145	1,417	18	5	23	1,339	70	0	43	0	20	0	94	10	171	3,357		0	1	0	0
Peak Hour	1	69	710	9	2	16	712	36	0	20	0	13	0	52	4	83	1,727		0	1	0	0

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	272	24	50	272	8	32	7	76	20	3	66
Future Vol, veh/h	20	272	24	50	272	8	32	7	76	20	3	66
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	190	-	-	120	-	150	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	296	26	54	296	9	35	8	83	22	3	72

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	304	0	0	322	0	0	610	765	161	599	770	148
Stage 1	-	-	-	-	-	-	352	352	-	404	404	-
Stage 2	-	-	-	-	-	-	258	413	-	195	365	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1253	-	-	1235	-	-	378	332	856	385	330	872
Stage 1	-	-	-	-	-	-	638	630	-	594	597	-
Stage 2	-	-	-	-	-	-	724	592	-	788	622	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1253	-	-	1235	-	-	323	312	856	319	310	872
Mov Cap-2 Maneuver	-	-	-	-	-	-	323	312	-	319	310	-
Stage 1	-	-	-	-	-	-	627	619	-	568	571	-
Stage 2	-	-	-	-	-	-	632	566	-	691	611	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.5	1.22	13.53	12.13
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	547	1253	-	-	1235	-	-	601
HCM Lane V/C Ratio	0.229	0.017	-	-	0.044	-	-	0.161
HCM Ctrl Dly (s/v)	13.5	7.9	-	-	8	-	-	12.1
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.9	0.1	-	-	0.1	-	-	0.6

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	779	738	6	0	18
Future Vol, veh/h	10	779	738	6	0	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	-	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	11	847	802	7	0	20

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	809	0	-	0	-	404
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	-	-	3.32
Pot Cap-1 Maneuver	813	-	-	-	0	596
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	813	-	-	-	-	596
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.12	0	11.25
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	813	-	-	-	596
HCM Lane V/C Ratio	0.013	-	-	-	0.033
HCM Ctrl Dly (s/v)	9.5	-	-	-	11.2
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	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	2	98	4	23	50	4	5	2	13	4	3	4
Future Vol, veh/h	2	98	4	23	50	4	5	2	13	4	3	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	107	4	25	54	4	5	2	14	4	3	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	59	0	0	111	0	0	219	222	109	218	222	57
Stage 1	-	-	-	-	-	-	113	113	-	107	107	-
Stage 2	-	-	-	-	-	-	106	109	-	112	115	-
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	1545	-	-	1479	-	-	737	677	945	738	677	1010
Stage 1	-	-	-	-	-	-	892	802	-	899	807	-
Stage 2	-	-	-	-	-	-	900	805	-	893	800	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1545	-	-	1479	-	-	717	664	945	711	664	1010
Mov Cap-2 Maneuver	-	-	-	-	-	-	717	664	-	711	664	-
Stage 1	-	-	-	-	-	-	891	801	-	883	793	-
Stage 2	-	-	-	-	-	-	876	791	-	876	799	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.14	2.23	9.39	9.69
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	842	34	-	-	530	-	-	780
HCM Lane V/C Ratio	0.026	0.001	-	-	0.017	-	-	0.015
HCM Ctrl Dly (s/v)	9.4	7.3	0	-	7.5	0	-	9.7
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	7	446	11	4	687
Future Vol, veh/h	8	7	446	11	4	687
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	8	485	12	4	747

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	873	248	0	0	497	0
Stage 1	491	-	-	-	-	-
Stage 2	382	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	290	752	-	-	1063	-
Stage 1	581	-	-	-	-	-
Stage 2	659	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	288	752	-	-	1063	-
Mov Cap-2 Maneuver	288	-	-	-	-	-
Stage 1	581	-	-	-	-	-
Stage 2	656	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	14.27	0	0.09
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	404	21	-
HCM Lane V/C Ratio	-	-	0.04	0.004	-
HCM Ctrl Dly (s/v)	-	-	14.3	8.4	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	111	136	20	12	263	152	77	372	22	54	154	101
Future Volume (veh/h)	111	136	20	12	263	152	77	372	22	54	154	101
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	121	148	22	13	286	165	84	404	24	59	167	110
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	149	1217	178	26	1144	510	506	1335	79	421	720	610
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Prop Arrive On Green	0.17	0.78	0.78	0.01	0.32	0.32	0.04	0.39	0.39	0.05	0.51	0.51
Unsig. Movement Delay												
Ln Grp Delay, s/veh	58.9	8.5	8.5	72.6	30.5	32.5	21.0	26.3	26.3	21.1	20.2	19.7
Ln Grp LOS	E	A	A	E	C	C	C	C	C	C	C	B
Approach Vol, veh/h		291			464			512			336	
Approach Delay, s/veh		29.5			32.4			25.4			20.2	
Approach LOS		C			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	4.0	2.0	4.0	1.1	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	9.3	52.0	6.8	51.9	10.1	51.2	15.1	43.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green (Gmax), s	6.0	47.0	9.0	38.0	7.0	46.0	22.0	25.0
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.3	3.8	4.8	3.8	4.8
Max Q Clear (g_c+I1), s	4.4	11.8	2.9	3.4	5.4	7.9	9.9	11.5
Green Ext Time (g_e), s	0.0	2.7	0.0	1.0	0.0	1.4	0.2	2.0
Prob of Phs Call (p_c)	0.86	1.00	0.35	1.00	0.94	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.01	0.00	1.00	0.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3409		3111		1870		3554

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		202		455		1585		1585

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0

Lane Assignment	L (Pr/Pm)		L (Prot)		L (Pr/Pm)		L (Prot)	
Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	59	0	13	0	84	0	121	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	2.4	0.0	0.9	0.0	3.4	0.0	7.9	0.0
Cycle Q Clear Time (g_c), s	2.4	0.0	0.9	0.0	3.4	0.0	7.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	960	0	0	0	1102	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	46.2	0.0	0.0	0.0	46.2	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	37.2	0.0	0.0	0.0	40.3	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.6	0.0	0.0	0.0	0.5	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	421	0	26	0	506	0	149	0
V/C Ratio (X)	0.14	0.00	0.50	0.00	0.17	0.00	0.81	0.00
Avail Cap (c_a), veh/h	446	0	134	0	534	0	327	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	20.9	0.0	58.7	0.0	20.8	0.0	49.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	13.9	0.0	0.2	0.0	9.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	21.1	0.0	72.6	0.0	21.0	0.0	58.9	0.0
1st-Term Q (Q1), veh/ln	1.0	0.0	0.4	0.0	1.4	0.0	3.2	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.0	0.0	0.0	0.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	1.0	0.0	0.5	0.0	1.4	0.0	3.7	0.0
%ile Storage Ratio (RQ%)	0.02	0.00	0.06	0.00	0.11	0.00	0.27	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	2
Grp Vol (v), veh/h	0	210	0	83	0	167	0	286
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1870	0	1777
Q Serve Time (g_s), s	0.0	9.8	0.0	1.4	0.0	5.9	0.0	7.1
Cycle Q Clear Time (g_c), s	0.0	9.8	0.0	1.4	0.0	5.9	0.0	7.1
Lane Grp Cap (c), veh/h	0	696	0	695	0	720	0	1144
V/C Ratio (X)	0.00	0.30	0.00	0.12	0.00	0.23	0.00	0.25
Avail Cap (c_a), veh/h	0	696	0	695	0	720	0	1144
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	25.2	0.0	8.1	0.0	19.4	0.0	30.0
Incr Delay (d2), s/veh	0.0	1.1	0.0	0.4	0.0	0.8	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.3	0.0	8.5	0.0	20.2	0.0	30.5
1st-Term Q (Q1), veh/ln	0.0	4.1	0.0	0.5	0.0	2.5	0.0	3.1

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.1	0.0	0.2	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.4	0.0	0.6	0.0	2.7	0.0	3.1
%ile Storage Ratio (RQ%)	0.00	0.32	0.00	0.03	0.00	0.06	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	218	0	87	0	110	0	165
Grp Sat Flow (s), veh/h/ln	0	1834	0	1789	0	1585	0	1585
Q Serve Time (g_s), s	0.0	9.8	0.0	1.4	0.0	4.5	0.0	9.5
Cycle Q Clear Time (g_c), s	0.0	9.8	0.0	1.4	0.0	4.5	0.0	9.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.11	0.00	0.25	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	718	0	700	0	610	0	510
V/C Ratio (X)	0.00	0.30	0.00	0.12	0.00	0.18	0.00	0.32
Avail Cap (c_a), veh/h	0	718	0	700	0	610	0	510
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	25.2	0.0	8.1	0.0	19.1	0.0	30.8
Incr Delay (d2), s/veh	0.0	1.1	0.0	0.4	0.0	0.6	0.0	1.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.3	0.0	8.5	0.0	19.7	0.0	32.5
1st-Term Q (Q1), veh/ln	0.0	4.3	0.0	0.5	0.0	1.6	0.0	3.6
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.1	0.0	0.1	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.5	0.0	0.6	0.0	1.7	0.0	3.9
%ile Storage Ratio (RQ%)	0.00	0.34	0.00	0.03	0.00	0.24	0.00	0.49
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	27.1
HCM 7th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	81	27	82	190	184	79	364	102	217	258	110
Future Volume (veh/h)	45	81	27	82	190	184	79	364	102	217	258	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	49	88	29	89	207	200	86	396	111	236	280	120
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	149	460	205	298	271	242	696	2104	939	716	1526	638
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.13	0.13	0.06	0.15	0.15	0.08	1.00	1.00	0.07	0.62	0.62
Unsig. Movement Delay												
Ln Grp Delay, s/veh	45.1	46.8	46.6	42.2	54.7	60.6	8.3	0.2	0.3	7.6	9.9	10.0
Ln Grp LOS	D	D	D	D	D	E	A	A	A	A	A	A
Approach Vol, veh/h		166			496			593			636	
Approach Delay, s/veh		46.3			54.8			1.4			9.1	
Approach LOS		D			D			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	3.0	1.1	4.0	1.1	4.0
Phs Duration (G+Y+Rc), s	13.1	75.6	11.3	20.0	9.2	79.5	8.5	22.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green (Gmax), s	31.5	29.5	10.5	30.5	6.5	54.5	15.5	25.5
Max Allow Headway (MAH), s	3.8	5.0	3.8	4.9	3.8	5.3	3.8	5.4
Max Q Clear (g_c+I1), s	7.9	2.0	7.1	4.7	4.3	8.0	4.8	16.7
Green Ext Time (g_e), s	0.7	3.1	0.1	0.6	0.0	2.7	0.1	1.6
Prob of Phs Call (p_c)	1.00	1.00	0.95	1.00	0.94	1.00	0.80	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.37

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		3554		2443		1777

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1585		1021		1585

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0

Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	
Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	236	0	89	0	86	0	49	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	5.9	0.0	5.1	0.0	2.3	0.0	2.8	0.0
Cycle Q Clear Time (g_c), s	5.9	0.0	5.1	0.0	2.3	0.0	2.8	0.0
Perm LT Sat Flow (s_l), veh/h/ln	892	0	1275	0	985	0	978	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	72.5	0.0	15.8	0.0	71.1	0.0	15.5	0.0
Perm LT Serve Time (g_u), s	71.1	0.0	12.9	0.0	69.0	0.0	3.6	0.0
Perm LT Q Serve Time (g_ps), s	0.5	0.0	0.2	0.0	0.2	0.0	0.6	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	716	0	298	0	696	0	149	0
V/C Ratio (X)	0.33	0.00	0.30	0.00	0.12	0.00	0.33	0.00
Avail Cap (c_a), veh/h	1056	0	353	0	722	0	320	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	7.3	0.0	41.6	0.0	8.2	0.0	43.9	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.6	0.0	0.1	0.0	1.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	7.6	0.0	42.2	0.0	8.3	0.0	45.1	0.0
1st-Term Q (Q1), veh/ln	2.1	0.0	2.3	0.0	0.8	0.0	1.3	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	2.2	0.0	2.3	0.0	0.8	0.0	1.3	0.0
%ile Storage Ratio (RQ%)	0.16	0.00	0.39	0.00	0.14	0.00	0.20	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	1	0	1
Grp Vol (v), veh/h	0	396	0	88	0	202	0	207
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	0.0	0.0	2.7	0.0	5.8	0.0	13.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	2.7	0.0	5.8	0.0	13.4
Lane Grp Cap (c), veh/h	0	2104	0	460	0	1110	0	271
V/C Ratio (X)	0.00	0.19	0.00	0.19	0.00	0.18	0.00	0.76
Avail Cap (c_a), veh/h	0	2104	0	903	0	1110	0	378
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	46.6	0.0	9.5	0.0	48.8
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.2	0.0	0.4	0.0	5.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.2	0.0	46.8	0.0	9.9	0.0	54.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.2	0.0	2.2	0.0	5.9

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	1.2	0.0	2.3	0.0	6.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.03	0.00	0.09	0.00	0.12
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	111	0	29	0	198	0	200
Grp Sat Flow (s), veh/h/ln	0	1585	0	1585	0	1687	0	1585
Q Serve Time (g_s), s	0.0	0.0	0.0	1.9	0.0	6.0	0.0	14.7
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	1.9	0.0	6.0	0.0	14.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.61	0.00	1.00
Lane Grp Cap (c), veh/h	0	939	0	205	0	1053	0	242
V/C Ratio (X)	0.00	0.12	0.00	0.14	0.00	0.19	0.00	0.83
Avail Cap (c_a), veh/h	0	939	0	403	0	1053	0	337
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	46.3	0.0	9.6	0.0	49.3
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.3	0.0	0.4	0.0	11.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.3	0.0	46.6	0.0	10.0	0.0	60.6
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.8	0.0	2.2	0.0	5.8
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	0.8	0.0	2.3	0.0	6.6
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.14	0.00	0.08	0.00	0.12
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	21.9
HCM 7th LOS	C

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	34	117	41	95	267	28	8	4	27	4	4	9
Future Vol, veh/h	34	117	41	95	267	28	8	4	27	4	4	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	190	-	-	120	-	150	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	37	127	45	103	290	30	9	4	29	4	4	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	321	0	0	172	0	0	577	751	86	636	742	145
Stage 1	-	-	-	-	-	-	223	223	-	497	497	-
Stage 2	-	-	-	-	-	-	354	527	-	140	246	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1236	-	-	1403	-	-	400	338	956	362	342	876
Stage 1	-	-	-	-	-	-	759	718	-	524	543	-
Stage 2	-	-	-	-	-	-	636	526	-	849	702	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1236	-	-	1403	-	-	351	304	956	311	307	876
Mov Cap-2 Maneuver	-	-	-	-	-	-	351	304	-	311	307	-
Stage 1	-	-	-	-	-	-	736	696	-	485	503	-
Stage 2	-	-	-	-	-	-	578	488	-	793	681	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1.42	1.89	11.37	12.96
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	607	1236	-	-	1403	-	-	470
HCM Lane V/C Ratio	0.07	0.03	-	-	0.074	-	-	0.039
HCM Ctrl Dly (s/v)	11.4	8	-	-	7.8	-	-	13
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0.2	-	-	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	375	3	9	331	46	12	3	7	24	2	37
Future Volume (veh/h)	74	375	3	9	331	46	12	3	7	24	2	37
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	80	408	3	10	360	50	13	3	8	26	2	40
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	103	2142	16	21	1715	236	259	66	139	185	30	248
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.59	0.59	0.02	1.00	1.00	0.28	0.28	0.28	0.28	0.28	0.28
Unsig. Movement Delay												
Ln Grp Delay, s/veh	67.7	11.6	11.6	73.9	0.5	0.5	32.2	0.0	0.0	33.5	0.0	0.0
Ln Grp LOS	E	B	B	E	A	A	C			C		
Approach Vol, veh/h		491			420			24			68	
Approach Delay, s/veh		20.8			2.2			32.2			33.5	
Approach LOS		C			A			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		8.0	2.0	4.0		8.0	2.0	4.0
Phs Duration (G+Y+Rc), s		38.0	5.9	76.1		38.0	11.4	70.6
Change Period (Y+Rc), s		5.0	4.5	5.0		5.0	4.5	5.0
Max Green (Gmax), s		33.0	9.5	63.0		33.0	18.5	54.0
Max Allow Headway (MAH), s		5.4	3.8	5.2		5.5	3.8	5.3
Max Q Clear (g_c+I1), s		3.2	2.7	8.2		5.7	7.3	2.0
Green Ext Time (g_e), s		0.1	0.0	2.7		0.3	0.1	2.7
Prob of Phs Call (p_c)		1.00	0.28	1.00		1.00	0.93	1.00
Prob of Max Out (p_x)		0.00	0.00	0.00		0.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		773	1781			523	1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		239		3616		108		3137

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		506		27		902		432

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0

Lane Assignment		L+T+R	L (Prot)			L+T+R	L (Prot)	
Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	24	10	0	0	68	80	0
Grp Sat Flow (s), veh/h/ln	0	1518	1781	0	0	1534	1781	0
Q Serve Time (g_s), s	0.0	0.0	0.7	0.0	0.0	0.5	5.3	0.0
Cycle Q Clear Time (g_c), s	0.0	1.2	0.7	0.0	0.0	3.7	5.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1386	0	0	0	1426	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1821	0	0	0	1835	0	0
Perm LT Eff Green (g_p), s	0.0	33.0	0.0	0.0	0.0	33.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	29.3	0.0	0.0	0.0	31.8	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0
Time to First Blk (g_f), s	0.0	1.7	0.0	0.0	0.0	3.2	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	1.2	0.0	0.0	0.0	3.2	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.54	1.00	0.00	0.00	0.38	1.00	0.00
Lane Grp Cap (c), veh/h	0	464	21	0	0	463	103	0
V/C Ratio (X)	0.00	0.05	0.48	0.00	0.00	0.15	0.78	0.00
Avail Cap (c_a), veh/h	0	464	141	0	0	463	275	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	32.0	58.2	0.0	0.0	32.9	55.8	0.0
Incr Delay (d2), s/veh	0.0	0.2	15.7	0.0	0.0	0.7	12.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.2	73.9	0.0	0.0	33.5	67.7	0.0
1st-Term Q (Q1), veh/ln	0.0	0.5	0.3	0.0	0.0	1.5	2.4	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.0	0.0	0.1	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.5	0.4	0.0	0.0	1.6	2.7	0.0
%ile Storage Ratio (RQ%)	0.00	0.07	0.11	0.00	0.00	0.17	0.77	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	200	0	0	0	203
Grp Sat Flow (s), veh/h/ln	0	0	0	1777	0	0	0	1777
Q Serve Time (g_s), s	0.0	0.0	0.0	6.2	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	6.2	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	1053	0	0	0	971
V/C Ratio (X)	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.21
Avail Cap (c_a), veh/h	0	0	0	1053	0	0	0	971
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	11.2	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	11.6	0.0	0.0	0.0	0.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment				T+R				T+R
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	211	0	0	0	207
Grp Sat Flow (s), veh/h/ln	0	0	0	1866	0	0	0	1793
Q Serve Time (g_s), s	0.0	0.0	0.0	6.2	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	6.2	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.33	0.00	0.01	0.00	0.59	0.00	0.24
Lane Grp Cap (c), veh/h	0	0	0	1105	0	0	0	980
V/C Ratio (X)	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.21
Avail Cap (c_a), veh/h	0	0	0	1105	0	0	0	980
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	11.2	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	11.6	0.0	0.0	0.0	0.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	14.1
HCM 7th LOS	B

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	384	395	20	0	15
Future Vol, veh/h	15	384	395	20	0	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	-	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	16	417	429	22	0	16

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	451	0	-	0	-	226
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	-	-	3.32
Pot Cap-1 Maneuver	1106	-	-	-	0	778
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1106	-	-	-	-	778
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.31	0	9.73
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1106	-	-	-	778
HCM Lane V/C Ratio	0.015	-	-	-	0.021
HCM Ctrl Dly (s/v)	8.3	-	-	-	9.7
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	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	138	8	23	50	4	5	2	7	2	3	4
Future Vol, veh/h	4	138	8	23	50	4	5	2	7	2	3	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	150	9	25	54	4	5	2	8	2	3	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	59	0	0	159	0	0	269	272	154	266	274	57
Stage 1	-	-	-	-	-	-	163	163	-	107	107	-
Stage 2	-	-	-	-	-	-	106	109	-	160	167	-
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	1545	-	-	1421	-	-	684	635	892	686	633	1010
Stage 1	-	-	-	-	-	-	839	763	-	899	807	-
Stage 2	-	-	-	-	-	-	900	805	-	842	760	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1545	-	-	1421	-	-	663	621	892	664	620	1010
Mov Cap-2 Maneuver	-	-	-	-	-	-	663	621	-	664	620	-
Stage 1	-	-	-	-	-	-	836	761	-	883	792	-
Stage 2	-	-	-	-	-	-	876	791	-	830	758	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.2	2.26	9.89	9.79
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	752	47	-	-	530	-	-	762
HCM Lane V/C Ratio	0.02	0.003	-	-	0.018	-	-	0.013
HCM Ctrl Dly (s/v)	9.9	7.3	0	-	7.6	0	-	9.8
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0

Intersection	
Int Delay, s/veh	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	22	36	520	120	72	287
Future Vol, veh/h	22	36	520	120	72	287
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	39	565	130	78	312

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	943	348	0	0	696	0
Stage 1	630	-	-	-	-	-
Stage 2	313	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	261	648	-	-	896	-
Stage 1	493	-	-	-	-	-
Stage 2	715	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	236	648	-	-	896	-
Mov Cap-2 Maneuver	236	-	-	-	-	-
Stage 1	493	-	-	-	-	-
Stage 2	647	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	16	0	2.36
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	390	722	-
HCM Lane V/C Ratio	-	-	0.162	0.087	-
HCM Ctrl Dly (s/v)	-	-	16	9.4	0.6
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.6	0.3	-

2027 INFORMATION

Supermarket — Douglas Street & Tudor Road

Lee's Summit, Missouri

2027 Phase 1

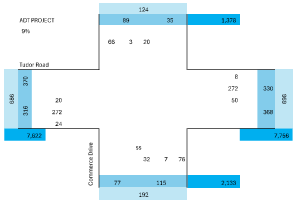
- AM Peak Calculations
- AM Background Traffic Synchro
- AM Total Traffic Synchro
- AM Total Traffic Synchro w/ Signal
- PM Peak Calculations
- PM Background Traffic Synchro
- PM Total Traffic Synchro
- PM Total Traffic Synchro w/ Signal

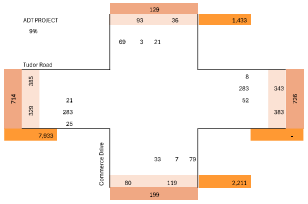
Prepared by:

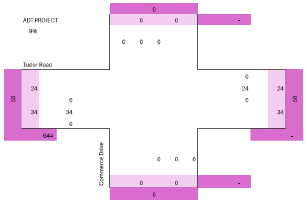
Traffic Engineering Consultants, Inc.

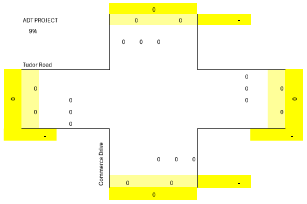
PHASE 1 - AM PEAK HOUR CALCULATIONS

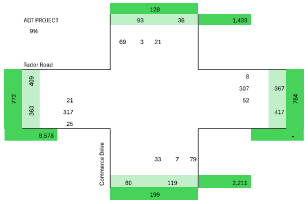
N/S	Commerce Drive			SITE TRIP AM PEAK HOUR					PASS BY AM PEAK HOUR					TOTAL
E/W	Tudor Road													
GR	2.0%			IN	224				IN	70				
YRS	2			OUT	162				OUT	71				
INT #	50200													
MVMT	EXT TRFC	GRW x	BKGRD TRFC	DIR %	INV OUT	DIR %	INV OUT	TL	DIR %	INV OUT	DIR %	INV OUT	TL	TOTAL TRAFFIC
EBL	20	1.04	21					0					0	21
EBT	272	1.04	283	15%	224			34					0	317
EBR	24	1.04	25					0					0	25
WBL	50	1.04	52					0					0	52
WBT	272	1.04	283	15%	162			24					0	307
WBR	8	1.04	8					0					0	8
NBL	32	1.04	33					0					0	33
NBT	7	1.04	7					0					0	7
NBR	76	1.04	79					0					0	79
SBL	20	1.04	21					0					0	21
SBT	3	1.04	3					0					0	3
SBR	66	1.04	69					0					0	69



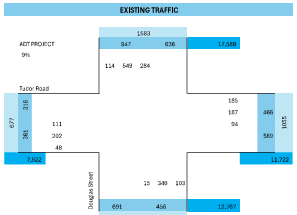


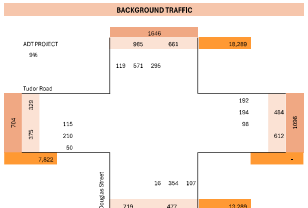


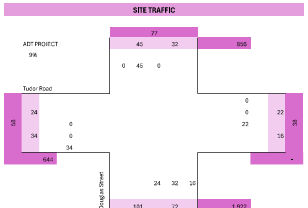


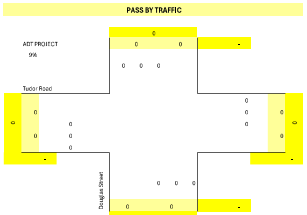


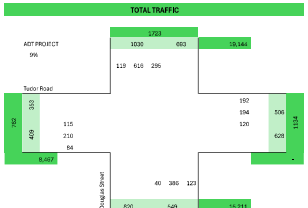
N/S	Douglas Street			SITE TRIP AM PEAK HOUR					PASS BY AM PEAK HOUR					TOTAL
E/W	Tudor Road													
GR	2.0%			IN	224				IN	70				
YRS	2			OUT	162				OUT	71				
INT #	60200													
MVMT	EXT TRFC	GRW x	BKGRD TRFC	DIR %	INV OUT	DIR %	INV OUT	TL	DIR %	INV OUT	DIR %	INV OUT	TL	TOTAL TRAFFIC
EBL	111	1.04	115					0					0	115
EBT	202	1.04	210					0					0	210
EBR	48	1.04	50	15%	224			34					0	84
WBL	94	1.04	98	10%	224			22					0	120
WBT	187	1.04	194					0					0	194
WBR	185	1.04	192					0					0	192
NBL	15	1.04	16	15%	162			24					0	40
NBT	340	1.04	354	20%	162			32					0	386
NBR	103	1.04	107	10%	162			16					0	123
SBL	284	1.04	295					0					0	295
SBT	549	1.04	571	20%	224			45					0	616
SBR	114	1.04	119					0					0	119



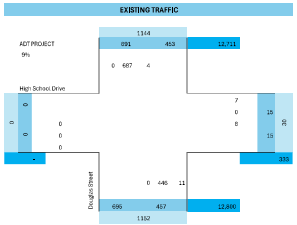


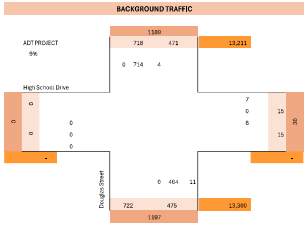


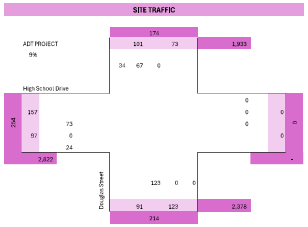


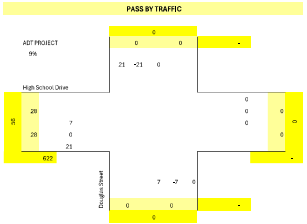


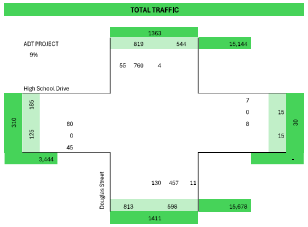
N/S	Douglas Street			SITE TRIP AM PEAK HOUR					PASS BY AM PEAK HOUR					TOTAL
E/W	High School Drive													
GR	2.0%			IN	224				IN	70				
YRS	2			OUT	162				OUT	71				
INT #	70200													
MVMT	EXT TRFC	GRW x	BKGRD TRFC	DIR %	INV OUT	DIR %	INV OUT	TL	DIR %	INV OUT	DIR %	INV OUT	TL	TOTAL TRAFFIC
EBL	0	1.04	0	45%	162			73	**10%**	**71**			7	80
EBT	0	1.04	0					0					0	0
EBR	0	1.04	0	15%	162			24	**30%**	**71**			21	45
WBL	8	1.04	8					0					0	8
WBT	0	1.04	0					0					0	0
WBR	7	1.04	7					0					0	7
NBL	0	1.04	0	55%	224			123	**10%**	**70**			7	130
NBT	446	1.04	464					0	**-10%**	**70**			-7	457
NBR	11	1.04	11					0					0	11
SBL	4	1.04	4					0					0	4
SBT	687	1.04	714	30%	224			67	**-30%**	**70**			-21	760
SBR		1.04	0	15%	224			34	**30%**	**70**			21	55



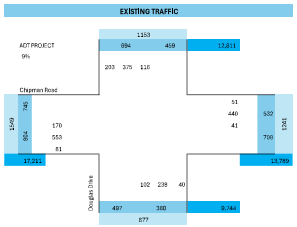


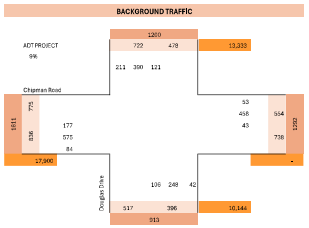


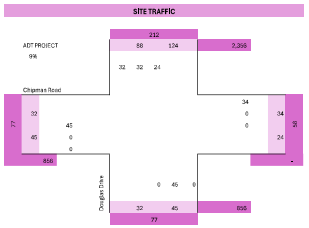


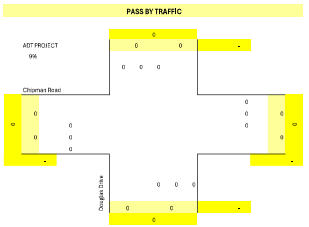


N/S	Douglas Drive			SITE TRIP AM PEAK HOUR						PASS BY AM PEAK HOUR						TOTAL
E/W	Chipman Road			IN 224						IN 70						
GR	2.0%			OUT 162						OUT 71						
INT #	80200															
	EXT	GRW	BKGRD	DIR	INV	DIR	INV			DIR	INV	DIR	INV			TOTAL
MVMT	TRFC	x	TRFC	%	OUT	%	OUT	TL		%	OUT	%	OUT	TL		TRAFFIC
EBL	170	1.04	177	20%	224			45						0		222
EBT	553	1.04	575					0						0		575
EBR	81	1.04	84					0						0		84
WBL	41	1.04	43					0						0		43
WBT	440	1.04	458		224			0						0		458
WBR	51	1.04	53	15%	224			34						0		87
NBL	102	1.04	106		224			0						0		106
NBT	238	1.04	248	20%	224			45						0		293
NBR	40	1.04	42					0						0		42
SBL	116	1.04	121	15%	162			24						0		145
SBT	375	1.04	390	20%	162			32						0		422
SBR	203	1.04	211	20%	162			32						0		243

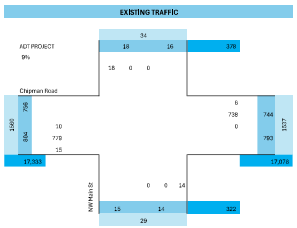


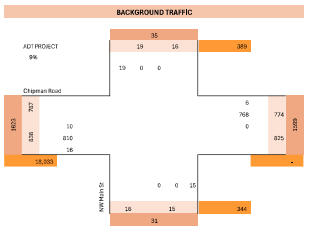


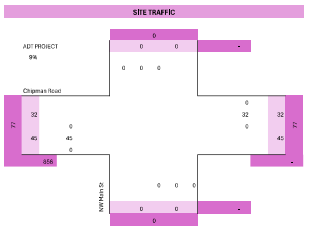


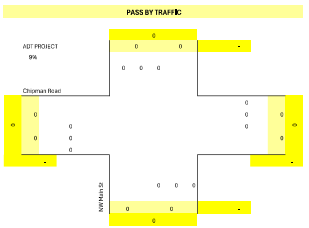


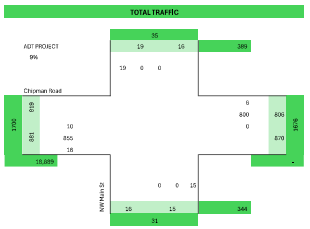
N/S	NW Main St			SITE TRIP AM PEAK HOUR						PASS BY AM PEAK HOUR						TOTAL
E/W	Chipman Road			IN 224						IN 70						
GR	2.0%			OUT 162						OUT 71						
INT #	90200															
	EXT	GRW	BKGRD	DIR	INV	DIR	INV			DIR	INV	DIR	INV			TOTAL
MVMT	TRFC	x	TRFC	%	OUT	%	OUT	TL		%	OUT	%	OUT	TL		TRAFFIC
EBL	10	1.04	10					0						0		10
EBT	779	1.04	810	20%	224			45						0		855
EBR	15	1.04	16					0						0		16
WBL		1.04	0					0						0		0
WBT	738	1.04	768	20%	162			32						0		800
WBR	6	1.04	6					0						0		6
NBL		1.04	0					0						0		0
NBT		1.04	0					0						0		0
NBR	14	1.04	15					0						0		15
SBL		1.04	0					0						0		0
SBT		1.04	0					0						0		0
SBR	18	1.04	19					0						0		19



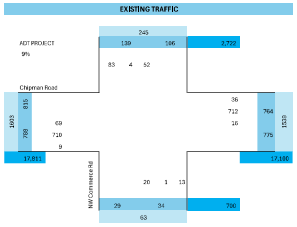


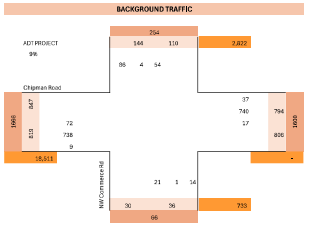


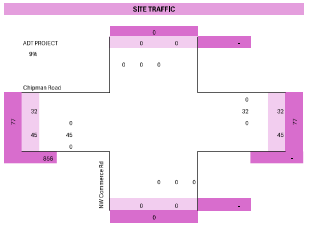


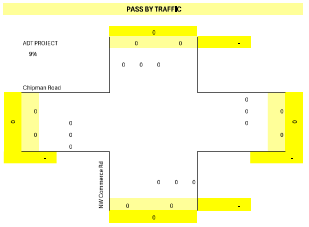


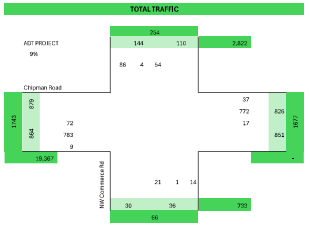
N/S	NW Commerce Rd			SITE TRIP AM PEAK HOUR						PASS BY AM PEAK HOUR						TOTAL
E/W	Chipman Road			IN 224						IN 70						
GR	2.0%			OUT 162						OUT 71						
INT #	100200															
	EXT	GRW	BKGRD	DIR	INV	DIR	INV			DIR	INV	DIR	INV			TOTAL
MVMT	TRFC	x	TRFC	%	OUT	%	OUT	TL		%	OUT	%	OUT	TL		TRAFFIC
EBL	69	1.04	72					0						0		72
EBT	710	1.04	738	20%	224			45						0		783
EBR	9	1.04	9					0						0		9
WBL	16	1.04	17					0						0		17
WBT	712	1.04	740	20%	162			32						0		772
WBR	36	1.04	37					0						0		37
NBL	20	1.04	21					0						0		21
NBT	1	1.04	1					0						0		1
NBR	13	1.04	14					0						0		14
SBL	52	1.04	54					0						0		54
SBT	4	1.04	4					0						0		4
SBR	83	1.04	86					0						0		86



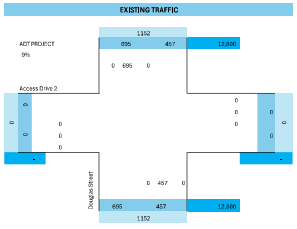


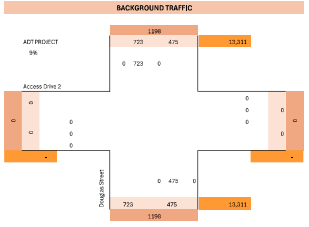


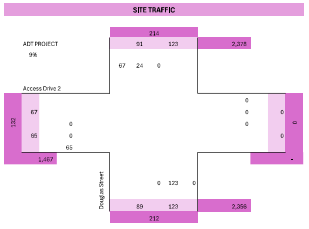


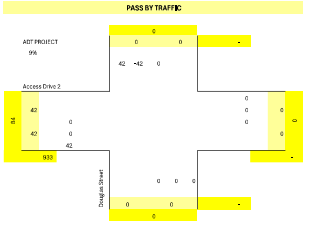


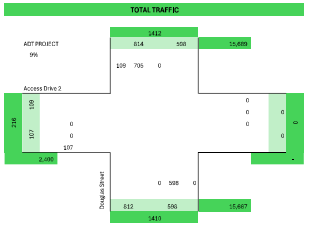
N/S	Douglas Street			SITE TRIP AM PEAK HOUR						PASS BY AM PEAK HOUR						TOTAL
E/W	Access Drive 2			IN 224						IN 70						
GR	2.0%			OUT 162						OUT 71						
INT #	10200															
	EXT	GRW	BKGRD	DIR	INV	DIR	INV			DIR	INV	DIR	INV			TOTAL
MVMT	TRFC	x	TRFC	%	OUT	%	OUT	TL		%	OUT	%	OUT	TL		TRAFFIC
EBL		1.04	0					0						0		0
EBT		1.04	0					0						0		0
EBR		1.04	0	40%	162			65		60%	71			-42		107
WBL		1.04	0					0						0		0
WBT		1.04	0					0						0		0
WBR		1.04	0					0						0		0
NBL		1.04	0					0						0		0
NBT	457	1.04	475	55%	224			123						0		598
NBR		1.04	0					0						0		0
SBL		1.04	0					0						0		0
SBT	695	1.04	723	15%	162			24		-60%	70			-42		705
SBR		1.04	0	30%	224			67		60%	70			42		109





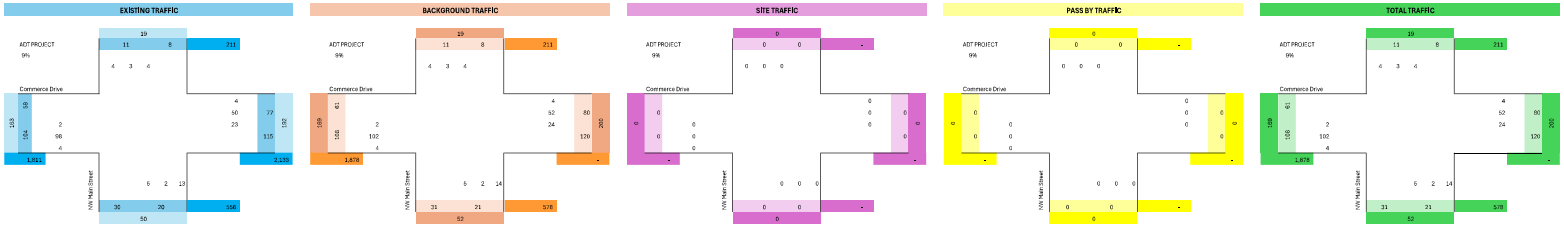






N/S	NW Main Street	SITE TRIP AM PEAK HOUR		PASS BY AM PEAK HOUR		TOTAL
E/W	Commerce Drive					
GR	2.0%	IN	224	IN	70	
YRS	2	OUT	162	OUT	71	
INT #	110200					

MVMT	EXT TRFC	GRW x	BKGRD TRFC	DIR %	INV OUT	DIR %	INV OUT	TL	DIR %	INV OUT	DIR %	INV OUT	TL	TOTAL TRAFFIC
EBL	2	1.04	2					0					0	2
EBT	98	1.04	102					0					0	102
EBR	4	1.04	4					0					0	4
WBL	23	1.04	24					0					0	24
WBT	50	1.04	52					0					0	52
WBR	4	1.04	4					0					0	4
NBL	5	1.04	5					0					0	5
NBT	2	1.04	2					0					0	2
NBR	13	1.04	14					0					0	14
SBL	4	1.04	4					0					0	4
SBT	3	1.04	3					0					0	3
SBR	4	1.04	4					0					0	4



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	177	575	84	43	458	53	106	248	42	121	390	211
Future Volume (veh/h)	177	575	84	43	458	53	106	248	42	121	390	211
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	192	625	91	47	498	58	115	270	46	132	424	229
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	219	1113	162	61	955	426	304	1192	200	502	725	614
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Prop Arrive On Green	0.25	0.72	0.72	0.03	0.27	0.27	0.05	0.39	0.39	0.03	0.26	0.26
Unsig. Movement Delay												
Ln Grp Delay, s/veh	60.5	16.2	16.2	76.2	39.3	34.0	23.5	25.1	25.2	21.3	39.4	34.2
Ln Grp LOS	E	B	B	E	D	C	C	C	C	C	D	C
Approach Vol, veh/h		908			603			431			785	
Approach Delay, s/veh		25.5			41.7			24.7			34.9	
Approach LOS		C			D			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	4.0	2.0	4.0	1.1	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	11.0	52.0	9.1	47.9	11.5	51.5	19.7	37.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green (Gmax), s	6.0	47.0	9.0	38.0	7.0	46.0	22.0	25.0
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.3	3.8	4.8	3.8	5.1
Max Q Clear (g_c+I1), s	7.4	9.2	5.1	13.5	6.6	25.7	14.4	16.3
Green Ext Time (g_e), s	0.0	2.0	0.0	4.8	0.0	3.4	0.3	2.3
Prob of Phs Call (p_c)	0.99	1.00	0.79	1.00	0.98	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.93	0.00	1.00	0.00	0.05	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3043		3113		1870		3554

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		512		453		1585		1585

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0

Lane Assignment	L (Pr/Pm)		L (Prot)		L (Pr/Pm)		L (Prot)	
Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	132	0	47	0	115	0	192	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	5.4	0.0	3.1	0.0	4.6	0.0	12.4	0.0
Cycle Q Clear Time (g_c), s	5.4	0.0	3.1	0.0	4.6	0.0	12.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1064	0	0	0	779	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	46.5	0.0	0.0	0.0	46.5	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	39.8	0.0	0.0	0.0	22.8	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	1.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	502	0	61	0	304	0	219	0
V/C Ratio (X)	0.26	0.00	0.78	0.00	0.38	0.00	0.88	0.00
Avail Cap (c_a), veh/h	502	0	134	0	312	0	327	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	21.1	0.0	57.5	0.0	22.8	0.0	44.4	0.0
Incr Delay (d2), s/veh	0.3	0.0	18.7	0.0	0.8	0.0	16.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	21.3	0.0	76.2	0.0	23.5	0.0	60.5	0.0
1st-Term Q (Q1), veh/ln	2.3	0.0	1.4	0.0	1.9	0.0	4.8	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.3	0.0	0.1	0.0	1.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	2.3	0.0	1.7	0.0	2.0	0.0	5.8	0.0
%ile Storage Ratio (RQ%)	0.06	0.00	0.22	0.00	0.15	0.00	0.43	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	2
Grp Vol (v), veh/h	0	156	0	356	0	424	0	498
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1870	0	1777
Q Serve Time (g_s), s	0.0	7.0	0.0	11.4	0.0	23.7	0.0	14.3
Cycle Q Clear Time (g_c), s	0.0	7.0	0.0	11.4	0.0	23.7	0.0	14.3
Lane Grp Cap (c), veh/h	0	696	0	635	0	725	0	955
V/C Ratio (X)	0.00	0.22	0.00	0.56	0.00	0.58	0.00	0.52
Avail Cap (c_a), veh/h	0	696	0	635	0	725	0	955
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.3	0.0	12.6	0.0	36.0	0.0	37.3
Incr Delay (d2), s/veh	0.0	0.7	0.0	3.6	0.0	3.4	0.0	2.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.1	0.0	16.2	0.0	39.4	0.0	39.3
1st-Term Q (Q1), veh/ln	0.0	3.0	0.0	3.2	0.0	11.4	0.0	6.2

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.6	0.0	0.7	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.1	0.0	3.8	0.0	12.1	0.0	6.5
%ile Storage Ratio (RQ%)	0.00	0.23	0.00	0.21	0.00	0.29	0.00	0.09
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	160	0	360	0	229	0	58
Grp Sat Flow (s), veh/h/ln	0	1778	0	1789	0	1585	0	1585
Q Serve Time (g_s), s	0.0	7.2	0.0	11.5	0.0	14.2	0.0	3.3
Cycle Q Clear Time (g_c), s	0.0	7.2	0.0	11.5	0.0	14.2	0.0	3.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.29	0.00	0.25	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	696	0	640	0	614	0	426
V/C Ratio (X)	0.00	0.23	0.00	0.56	0.00	0.37	0.00	0.14
Avail Cap (c_a), veh/h	0	696	0	640	0	614	0	426
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.4	0.0	12.6	0.0	32.5	0.0	33.3
Incr Delay (d2), s/veh	0.0	0.8	0.0	3.6	0.0	1.7	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.2	0.0	16.2	0.0	34.2	0.0	34.0
1st-Term Q (Q1), veh/ln	0.0	3.1	0.0	3.2	0.0	5.8	0.0	1.3
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.6	0.0	0.3	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.2	0.0	3.9	0.0	6.1	0.0	1.4
%ile Storage Ratio (RQ%)	0.00	0.24	0.00	0.21	0.00	0.85	0.00	0.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	31.7
HCM 7th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	115	210	50	98	194	192	16	354	107	295	571	119
Future Volume (veh/h)	115	210	50	98	194	192	16	354	107	295	571	119
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	125	228	54	107	211	209	17	385	116	321	621	129
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	222	596	266	297	281	250	442	1822	813	707	1756	364
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.17	0.17	0.06	0.16	0.16	0.04	1.00	1.00	0.10	0.60	0.60
Unsig. Movement Delay												
Ln Grp Delay, s/veh	41.4	44.8	43.4	39.4	54.0	61.6	13.2	0.3	0.4	10.3	13.1	13.2
Ln Grp LOS	D	D	D	D	D	E	B	A	A	B	B	B
Approach Vol, veh/h		407			527			518			1071	
Approach Delay, s/veh		43.6			54.0			0.7			12.3	
Approach LOS		D			D			A			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	3.0	1.1	4.0	1.1	4.0
Phs Duration (G+Y+Rc), s	17.1	66.0	12.3	24.6	6.7	76.4	13.5	23.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green (Gmax), s	31.5	29.5	10.5	30.5	6.5	54.5	15.5	25.5
Max Allow Headway (MAH), s	3.8	5.0	3.8	5.0	3.8	5.3	3.8	5.4
Max Q Clear (g_c+I1), s	11.7	2.0	8.0	8.8	2.5	15.0	9.0	17.3
Green Ext Time (g_e), s	0.9	3.1	0.1	1.5	0.0	5.5	0.1	1.6
Prob of Phs Call (p_c)	1.00	1.00	0.97	1.00	0.43	1.00	0.98	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00	0.76	0.00	0.07	0.46

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		3554		2930		1777

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1585		608		1585

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0

Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	
Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	321	0	107	0	17	0	125	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	9.7	0.0	6.0	0.0	0.5	0.0	7.0	0.0
Cycle Q Clear Time (g_c), s	9.7	0.0	6.0	0.0	0.5	0.0	7.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	897	0	1097	0	712	0	967	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	63.5	0.0	19.0	0.0	61.5	0.0	19.0	0.0
Perm LT Serve Time (g_u), s	61.5	0.0	13.3	0.0	59.0	0.0	3.6	0.0
Perm LT Q Serve Time (g_ps), s	1.1	0.0	0.6	0.0	0.1	0.0	2.3	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	707	0	297	0	442	0	222	0
V/C Ratio (X)	0.45	0.00	0.36	0.00	0.04	0.00	0.56	0.00
Avail Cap (c_a), veh/h	988	0	337	0	506	0	319	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	9.8	0.0	38.7	0.0	13.1	0.0	39.1	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.7	0.0	0.0	0.0	2.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	10.3	0.0	39.4	0.0	13.2	0.0	41.4	0.0
1st-Term Q (Q1), veh/ln	3.6	0.0	2.6	0.0	0.2	0.0	3.0	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	3.7	0.0	2.7	0.0	0.2	0.0	3.2	0.0
%ile Storage Ratio (RQ%)	0.27	0.00	0.45	0.00	0.04	0.00	0.49	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	1	0	1
Grp Vol (v), veh/h	0	385	0	228	0	376	0	211
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	0.0	0.0	6.8	0.0	12.9	0.0	13.6
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	6.8	0.0	12.9	0.0	13.6
Lane Grp Cap (c), veh/h	0	1822	0	596	0	1065	0	281
V/C Ratio (X)	0.00	0.21	0.00	0.38	0.00	0.35	0.00	0.75
Avail Cap (c_a), veh/h	0	1822	0	903	0	1065	0	378
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	44.4	0.0	12.2	0.0	48.3
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.4	0.0	0.9	0.0	5.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.3	0.0	44.8	0.0	13.1	0.0	54.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.0	0.0	5.0	0.0	6.0

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	3.1	0.0	5.3	0.0	6.5
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.08	0.00	0.19	0.00	0.12
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	116	0	54	0	374	0	209
Grp Sat Flow (s), veh/h/ln	0	1585	0	1585	0	1761	0	1585
Q Serve Time (g_s), s	0.0	0.0	0.0	3.5	0.0	13.0	0.0	15.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	3.5	0.0	13.0	0.0	15.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.35	0.00	1.00
Lane Grp Cap (c), veh/h	0	813	0	266	0	1056	0	250
V/C Ratio (X)	0.00	0.14	0.00	0.20	0.00	0.35	0.00	0.83
Avail Cap (c_a), veh/h	0	813	0	403	0	1056	0	337
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	43.0	0.0	12.2	0.0	49.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.4	0.0	0.9	0.0	12.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.4	0.0	43.4	0.0	13.2	0.0	61.6
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.4	0.0	5.0	0.0	6.1
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	1.4	0.0	5.2	0.0	6.9
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.26	0.00	0.19	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	23.7
HCM 7th LOS	C

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	21	283	25	52	283	8	33	7	79	21	3	69
Future Vol, veh/h	21	283	25	52	283	8	33	7	79	21	3	69
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	190	-	-	120	-	150	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	308	27	57	308	9	36	8	86	23	3	75

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	316	0	0	335	0	0	635	796	167	624	801	154
Stage 1	-	-	-	-	-	-	367	367	-	421	421	-
Stage 2	-	-	-	-	-	-	268	429	-	203	380	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1241	-	-	1221	-	-	363	318	847	370	316	865
Stage 1	-	-	-	-	-	-	625	621	-	581	587	-
Stage 2	-	-	-	-	-	-	714	582	-	780	612	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1241	-	-	1221	-	-	307	298	847	304	296	865
Mov Cap-2 Maneuver	-	-	-	-	-	-	307	298	-	304	296	-
Stage 1	-	-	-	-	-	-	614	609	-	554	560	-
Stage 2	-	-	-	-	-	-	618	555	-	679	601	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.51	1.23	13.95	12.44
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	531	1241	-	-	1221	-	-	585
HCM Lane V/C Ratio	0.244	0.018	-	-	0.046	-	-	0.173
HCM Ctrl Dly (s/v)	14	8	-	-	8.1	-	-	12.4
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.9	0.1	-	-	0.1	-	-	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	738	9	17	740	37	21	1	14	54	4	86
Future Volume (veh/h)	72	738	9	17	740	37	21	1	14	54	4	86
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	78	802	10	18	804	40	23	1	15	59	4	93
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	100	2104	26	33	1887	94	262	22	148	183	28	251
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.59	0.59	0.04	1.00	1.00	0.28	0.28	0.28	0.28	0.28	0.28
Unsig. Movement Delay												
Ln Grp Delay, s/veh	68.0	14.3	14.3	70.0	1.4	1.3	32.7	0.0	0.0	36.9	0.0	0.0
Ln Grp LOS	E	B	B	E	A	A	C			D		
Approach Vol, veh/h		890			862			39			156	
Approach Delay, s/veh		19.0			2.8			32.7			36.9	
Approach LOS		B			A			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		8.0	2.0	4.0		8.0	2.0	4.0
Phs Duration (G+Y+Rc), s		38.0	6.8	75.2		38.0	11.3	70.7
Change Period (Y+Rc), s		5.0	4.5	5.0		5.0	4.5	5.0
Max Green (Gmax), s		33.0	9.5	63.0		33.0	18.5	54.0
Max Allow Headway (MAH), s		5.5	3.8	5.2		5.5	3.8	5.3
Max Q Clear (g_c+I1), s		4.2	3.2	16.3		11.6	7.2	2.0
Green Ext Time (g_e), s		0.2	0.0	6.1		0.8	0.1	6.5
Prob of Phs Call (p_c)		1.00	0.45	1.00		1.00	0.93	1.00
Prob of Max Out (p_x)		0.00	0.01	0.00		0.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		779	1781			516	1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		79		3594		103		3445

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		537		45		913		171

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0

Lane Assignment		L+T+R	L (Prot)			L+T+R	L (Prot)	
Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	39	18	0	0	156	78	0
Grp Sat Flow (s), veh/h/ln	0	1395	1781	0	0	1531	1781	0
Q Serve Time (g_s), s	0.0	0.0	1.2	0.0	0.0	6.3	5.2	0.0
Cycle Q Clear Time (g_c), s	0.0	2.2	1.2	0.0	0.0	9.6	5.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1319	0	0	0	1419	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1299	0	0	0	1836	0	0
Perm LT Eff Green (g_p), s	0.0	33.0	0.0	0.0	0.0	33.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	23.4	0.0	0.0	0.0	30.8	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	6.3	0.0	0.0
Time to First Blk (g_f), s	0.0	1.4	0.0	0.0	0.0	3.3	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	1.4	0.0	0.0	0.0	3.3	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.59	1.00	0.00	0.00	0.38	1.00	0.00
Lane Grp Cap (c), veh/h	0	431	33	0	0	462	100	0
V/C Ratio (X)	0.00	0.09	0.54	0.00	0.00	0.34	0.78	0.00
Avail Cap (c_a), veh/h	0	431	141	0	0	462	275	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	32.3	57.2	0.0	0.0	34.9	55.9	0.0
Incr Delay (d2), s/veh	0.0	0.4	12.7	0.0	0.0	2.0	12.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.7	70.0	0.0	0.0	36.9	68.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.8	0.5	0.0	0.0	3.7	2.3	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.0	0.0	0.3	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.9	0.6	0.0	0.0	3.9	2.7	0.0
%ile Storage Ratio (RQ%)	0.00	0.11	0.18	0.00	0.00	0.43	0.75	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	396	0	0	0	415
Grp Sat Flow (s), veh/h/ln	0	0	0	1777	0	0	0	1777
Q Serve Time (g_s), s	0.0	0.0	0.0	14.3	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	14.3	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	1040	0	0	0	974
V/C Ratio (X)	0.00	0.00	0.00	0.38	0.00	0.00	0.00	0.43
Avail Cap (c_a), veh/h	0	0	0	1040	0	0	0	974
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	13.3	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.1	0.0	0.0	0.0	1.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	14.3	0.0	0.0	0.0	1.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.6	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	5.9	0.0	0.0	0.0	0.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment				T+R				T+R
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	416	0	0	0	429
Grp Sat Flow (s), veh/h/ln	0	0	0	1862	0	0	0	1840
Q Serve Time (g_s), s	0.0	0.0	0.0	14.3	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	14.3	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.38	0.00	0.02	0.00	0.60	0.00	0.09
Lane Grp Cap (c), veh/h	0	0	0	1090	0	0	0	1008
V/C Ratio (X)	0.00	0.00	0.00	0.38	0.00	0.00	0.00	0.43
Avail Cap (c_a), veh/h	0	0	0	1090	0	0	0	1008
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	13.3	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	14.3	0.0	0.0	0.0	1.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.9	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	6.2	0.0	0.0	0.0	0.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	13.5
HCM 7th LOS	B

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	810	768	6	0	19
Future Vol, veh/h	10	810	768	6	0	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	-	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	11	880	835	7	0	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	841	0	-	0	-	421
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	-	-	3.32
Pot Cap-1 Maneuver	790	-	-	-	0	581
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	790	-	-	-	-	581
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.12	0	11.42
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	790	-	-	-	581
HCM Lane V/C Ratio	0.014	-	-	-	0.036
HCM Ctrl Dly (s/v)	9.6	-	-	-	11.4
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	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	2	102	4	24	52	4	5	2	14	4	3	4
Future Vol, veh/h	2	102	4	24	52	4	5	2	14	4	3	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	111	4	26	57	4	5	2	15	4	3	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	61	0	0	115	0	0	228	230	113	227	230	59
Stage 1	-	-	-	-	-	-	117	117	-	111	111	-
Stage 2	-	-	-	-	-	-	110	113	-	116	120	-
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	1542	-	-	1474	-	-	728	669	940	728	669	1007
Stage 1	-	-	-	-	-	-	887	798	-	894	804	-
Stage 2	-	-	-	-	-	-	895	802	-	888	797	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1542	-	-	1474	-	-	707	656	940	700	656	1007
Mov Cap-2 Maneuver	-	-	-	-	-	-	707	656	-	700	656	-
Stage 1	-	-	-	-	-	-	886	797	-	878	789	-
Stage 2	-	-	-	-	-	-	871	787	-	870	796	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.14	2.25	9.41	9.74
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	839	33	-	-	532	-	-	771
HCM Lane V/C Ratio	0.027	0.001	-	-	0.018	-	-	0.015
HCM Ctrl Dly (s/v)	9.4	7.3	0	-	7.5	0	-	9.7
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	7	464	11	4	714
Future Vol, veh/h	8	7	464	11	4	714
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	8	504	12	4	776

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	907	258	0	0	516	0
Stage 1	510	-	-	-	-	-
Stage 2	397	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	275	741	-	-	1046	-
Stage 1	568	-	-	-	-	-
Stage 2	648	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	274	741	-	-	1046	-
Mov Cap-2 Maneuver	274	-	-	-	-	-
Stage 1	568	-	-	-	-	-
Stage 2	645	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	14.69	0	0.09
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	388	20	-
HCM Lane V/C Ratio	-	-	0.042	0.004	-
HCM Ctrl Dly (s/v)	-	-	14.7	8.5	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	226	575	84	43	458	90	106	297	42	148	426	247
Future Volume (veh/h)	226	575	84	43	458	90	106	297	42	148	426	247
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	246	625	91	47	498	98	115	323	46	161	463	268
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	267	1113	162	61	859	383	278	1225	173	474	725	614
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Prop Arrive On Green	0.30	0.72	0.72	0.03	0.24	0.24	0.05	0.39	0.39	0.03	0.26	0.26
Unsig. Movement Delay												
Ln Grp Delay, s/veh	76.0	16.2	16.2	76.0	43.0	38.4	24.4	25.7	25.7	22.5	41.2	35.7
Ln Grp LOS	E	B	B	E	D	D	C	C	C	C	D	D
Approach Vol, veh/h		962			643			484			892	
Approach Delay, s/veh		31.5			44.7			25.4			36.2	
Approach LOS		C			D			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	4.0	2.0	4.0	1.1	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	11.0	52.0	9.1	47.9	11.5	51.5	23.0	34.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green (Gmax), s	6.0	47.0	12.0	35.0	7.0	46.0	18.0	29.0
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.3	3.8	4.8	3.8	5.0
Max Q Clear (g_c+I1), s	8.0	10.5	5.1	13.5	6.6	28.4	18.0	16.8
Green Ext Time (g_e), s	0.0	2.4	0.0	4.6	0.0	3.7	0.0	2.9
Prob of Phs Call (p_c)	1.00	1.00	0.79	1.00	0.98	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.02	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3127		3113		1870		3554

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		441		453		1585		1585

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0

Lane Assignment	L (Pr/Pm)		L (Prot)		L (Pr/Pm)		L (Prot)	
Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	161	0	47	0	115	0	246	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	6.0	0.0	3.1	0.0	4.6	0.0	16.0	0.0
Cycle Q Clear Time (g_c), s	6.0	0.0	3.1	0.0	4.6	0.0	16.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1013	0	0	0	725	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	46.5	0.0	0.0	0.0	46.5	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	38.5	0.0	0.0	0.0	20.1	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	2.7	0.0	0.0	0.0	5.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	474	0	61	0	278	0	267	0
V/C Ratio (X)	0.34	0.00	0.77	0.00	0.41	0.00	0.92	0.00
Avail Cap (c_a), veh/h	474	0	178	0	286	0	267	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	22.0	0.0	57.5	0.0	23.4	0.0	41.3	0.0
Incr Delay (d2), s/veh	0.4	0.0	18.5	0.0	1.0	0.0	34.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	22.5	0.0	76.0	0.0	24.4	0.0	76.0	0.0
1st-Term Q (Q1), veh/ln	2.8	0.0	1.4	0.0	1.9	0.0	6.0	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.3	0.0	0.1	0.0	2.6	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	2.9	0.0	1.7	0.0	2.0	0.0	8.5	0.0
%ile Storage Ratio (RQ%)	0.12	0.00	0.22	0.00	0.15	0.00	0.64	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	2
Grp Vol (v), veh/h	0	182	0	356	0	463	0	498
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1870	0	1777
Q Serve Time (g_s), s	0.0	8.3	0.0	11.4	0.0	26.4	0.0	14.8
Cycle Q Clear Time (g_c), s	0.0	8.3	0.0	11.4	0.0	26.4	0.0	14.8
Lane Grp Cap (c), veh/h	0	696	0	635	0	725	0	859
V/C Ratio (X)	0.00	0.26	0.00	0.56	0.00	0.64	0.00	0.58
Avail Cap (c_a), veh/h	0	696	0	635	0	725	0	859
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.7	0.0	12.6	0.0	37.0	0.0	40.1
Incr Delay (d2), s/veh	0.0	0.9	0.0	3.6	0.0	4.3	0.0	2.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.7	0.0	16.2	0.0	41.2	0.0	43.0
1st-Term Q (Q1), veh/ln	0.0	3.5	0.0	3.2	0.0	12.6	0.0	6.5

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.6	0.0	0.9	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.7	0.0	3.8	0.0	13.5	0.0	6.8
%ile Storage Ratio (RQ%)	0.00	0.28	0.00	0.21	0.00	0.55	0.00	0.10
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	187	0	360	0	268	0	98
Grp Sat Flow (s), veh/h/ln	0	1791	0	1789	0	1585	0	1585
Q Serve Time (g_s), s	0.0	8.5	0.0	11.5	0.0	16.9	0.0	6.0
Cycle Q Clear Time (g_c), s	0.0	8.5	0.0	11.5	0.0	16.9	0.0	6.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.25	0.00	0.25	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	701	0	640	0	614	0	383
V/C Ratio (X)	0.00	0.27	0.00	0.56	0.00	0.44	0.00	0.26
Avail Cap (c_a), veh/h	0	701	0	640	0	614	0	383
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.8	0.0	12.6	0.0	33.5	0.0	36.8
Incr Delay (d2), s/veh	0.0	0.9	0.0	3.6	0.0	2.2	0.0	1.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.7	0.0	16.2	0.0	35.7	0.0	38.4
1st-Term Q (Q1), veh/ln	0.0	3.6	0.0	3.2	0.0	6.9	0.0	2.3
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.6	0.0	0.4	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.8	0.0	3.9	0.0	7.3	0.0	2.5
%ile Storage Ratio (RQ%)	0.00	0.28	0.00	0.21	0.00	1.02	0.00	0.32
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	34.7
HCM 7th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	115	210	87	123	194	192	43	390	125	295	620	119
Future Volume (veh/h)	115	210	87	123	194	192	43	390	125	295	620	119
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	125	228	95	134	211	209	47	424	136	321	674	129
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	222	549	245	302	281	250	432	1821	812	682	1739	332
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.15	0.15	0.08	0.16	0.16	0.07	1.00	1.00	0.10	0.58	0.58
Unsig. Movement Delay												
Ln Grp Delay, s/veh	41.6	46.3	46.6	39.4	54.0	61.6	12.6	0.3	0.4	10.3	14.5	14.5
Ln Grp LOS	D	D	D	D	D	E	B	A	A	B	B	B
Approach Vol, veh/h		448			554			607			1124	
Approach Delay, s/veh		45.1			53.3			1.3			13.3	
Approach LOS		D			D			A			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	3.0	1.1	4.0	1.1	4.0
Phs Duration (G+Y+Rc), s	17.1	66.0	13.9	23.0	8.5	74.6	13.5	23.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green (Gmax), s	31.5	29.5	10.5	30.5	6.5	54.5	15.5	25.5
Max Allow Headway (MAH), s	3.8	5.0	3.8	4.9	3.8	5.3	3.8	5.4
Max Q Clear (g_c+I1), s	11.7	2.0	9.5	9.0	3.5	16.6	9.0	17.3
Green Ext Time (g_e), s	0.9	3.4	0.0	1.7	0.0	6.0	0.1	1.6
Prob of Phs Call (p_c)	1.00	1.00	0.99	1.00	0.79	1.00	0.98	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00	1.00	0.00	0.07	0.46

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		3554		2976		1777

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1585		569		1585

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0

Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	
Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	321	0	134	0	47	0	125	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	9.7	0.0	7.5	0.0	1.5	0.0	7.0	0.0
Cycle Q Clear Time (g_c), s	9.7	0.0	7.5	0.0	1.5	0.0	7.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	850	0	1057	0	678	0	967	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	63.5	0.0	18.5	0.0	61.5	0.0	18.5	0.0
Perm LT Serve Time (g_u), s	61.5	0.0	11.6	0.0	55.5	0.0	3.6	0.0
Perm LT Q Serve Time (g_ps), s	1.2	0.0	1.0	0.0	0.4	0.0	2.2	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	682	0	302	0	432	0	222	0
V/C Ratio (X)	0.47	0.00	0.44	0.00	0.11	0.00	0.56	0.00
Avail Cap (c_a), veh/h	963	0	318	0	470	0	319	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	9.8	0.0	38.4	0.0	12.5	0.0	39.4	0.0
Incr Delay (d2), s/veh	0.5	0.0	1.0	0.0	0.1	0.0	2.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	10.3	0.0	39.4	0.0	12.6	0.0	41.6	0.0
1st-Term Q (Q1), veh/ln	3.6	0.0	3.3	0.0	0.6	0.0	3.1	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	3.7	0.0	3.4	0.0	0.6	0.0	3.2	0.0
%ile Storage Ratio (RQ%)	0.27	0.00	0.57	0.00	0.10	0.00	0.49	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	1	0	1
Grp Vol (v), veh/h	0	424	0	228	0	402	0	211
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	0.0	0.0	7.0	0.0	14.6	0.0	13.6
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	7.0	0.0	14.6	0.0	13.6
Lane Grp Cap (c), veh/h	0	1821	0	549	0	1038	0	281
V/C Ratio (X)	0.00	0.23	0.00	0.42	0.00	0.39	0.00	0.75
Avail Cap (c_a), veh/h	0	1821	0	903	0	1038	0	378
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	45.8	0.0	13.4	0.0	48.3
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.5	0.0	1.1	0.0	5.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.3	0.0	46.3	0.0	14.5	0.0	54.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.1	0.0	5.7	0.0	6.0

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	3.1	0.0	6.0	0.0	6.5
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.08	0.00	0.22	0.00	0.12
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	136	0	95	0	401	0	209
Grp Sat Flow (s), veh/h/ln	0	1585	0	1585	0	1768	0	1585
Q Serve Time (g_s), s	0.0	0.0	0.0	6.5	0.0	14.6	0.0	15.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	6.5	0.0	14.6	0.0	15.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.32	0.00	1.00
Lane Grp Cap (c), veh/h	0	812	0	245	0	1033	0	250
V/C Ratio (X)	0.00	0.17	0.00	0.39	0.00	0.39	0.00	0.83
Avail Cap (c_a), veh/h	0	812	0	403	0	1033	0	337
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	45.6	0.0	13.4	0.0	49.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	1.0	0.0	1.1	0.0	12.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.4	0.0	46.6	0.0	14.5	0.0	61.6
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.6	0.0	5.7	0.0	6.1
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.3	0.0	0.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	2.6	0.0	6.0	0.0	6.9
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.48	0.00	0.22	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	24.0
HCM 7th LOS	C

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	21	320	25	52	310	8	33	7	79	21	3	69
Future Vol, veh/h	21	320	25	52	310	8	33	7	79	21	3	69
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	190	-	-	120	-	150	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	348	27	57	337	9	36	8	86	23	3	75

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	346	0	0	375	0	0	690	866	188	673	871	168
Stage 1	-	-	-	-	-	-	407	407	-	450	450	-
Stage 2	-	-	-	-	-	-	283	459	-	223	421	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1210	-	-	1180	-	-	331	290	823	341	288	846
Stage 1	-	-	-	-	-	-	592	596	-	558	570	-
Stage 2	-	-	-	-	-	-	700	565	-	759	587	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1210	-	-	1180	-	-	279	271	823	278	269	846
Mov Cap-2 Maneuver	-	-	-	-	-	-	279	271	-	278	269	-
Stage 1	-	-	-	-	-	-	581	584	-	531	543	-
Stage 2	-	-	-	-	-	-	604	538	-	658	576	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.46	1.15	14.82	12.97
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	495	1210	-	-	1180	-	-	552
HCM Lane V/C Ratio	0.261	0.019	-	-	0.048	-	-	0.183
HCM Ctrl Dly (s/v)	14.8	8	-	-	8.2	-	-	13
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	1	0.1	-	-	0.2	-	-	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	787	9	17	776	37	21	1	14	54	4	86
Future Volume (veh/h)	72	787	9	17	776	37	21	1	14	54	4	86
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	78	855	10	18	843	40	23	1	15	59	4	93
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	100	2106	25	33	1892	90	262	22	148	183	28	251
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.59	0.59	0.04	1.00	1.00	0.28	0.28	0.28	0.28	0.28	0.28
Unsig. Movement Delay												
Ln Grp Delay, s/veh	68.0	14.7	14.7	70.0	1.5	1.4	32.7	0.0	0.0	36.9	0.0	0.0
Ln Grp LOS	E	B	B	E	A	A	C			D		
Approach Vol, veh/h		943			901			39			156	
Approach Delay, s/veh		19.1			2.8			32.7			36.9	
Approach LOS		B			A			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		8.0	2.0	4.0		8.0	2.0	4.0
Phs Duration (G+Y+Rc), s		38.0	6.8	75.2		38.0	11.3	70.7
Change Period (Y+Rc), s		5.0	4.5	5.0		5.0	4.5	5.0
Max Green (Gmax), s		33.0	9.5	63.0		33.0	18.5	54.0
Max Allow Headway (MAH), s		5.5	3.8	5.2		5.5	3.8	5.3
Max Q Clear (g_c+I1), s		4.2	3.2	17.5		11.6	7.2	2.0
Green Ext Time (g_e), s		0.2	0.0	6.6		0.8	0.1	6.9
Prob of Phs Call (p_c)		1.00	0.45	1.00		1.00	0.93	1.00
Prob of Max Out (p_x)		0.00	0.01	0.00		0.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		779	1781			516	1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		79		3598		103		3454

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		537		42		913		164

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0

Lane Assignment		L+T+R	L (Prot)			L+T+R	L (Prot)	
Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	39	18	0	0	156	78	0
Grp Sat Flow (s), veh/h/ln	0	1395	1781	0	0	1531	1781	0
Q Serve Time (g_s), s	0.0	0.0	1.2	0.0	0.0	6.3	5.2	0.0
Cycle Q Clear Time (g_c), s	0.0	2.2	1.2	0.0	0.0	9.6	5.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1319	0	0	0	1419	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1299	0	0	0	1836	0	0
Perm LT Eff Green (g_p), s	0.0	33.0	0.0	0.0	0.0	33.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	23.4	0.0	0.0	0.0	30.8	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	6.3	0.0	0.0
Time to First Blk (g_f), s	0.0	1.4	0.0	0.0	0.0	3.3	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	1.4	0.0	0.0	0.0	3.3	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.59	1.00	0.00	0.00	0.38	1.00	0.00
Lane Grp Cap (c), veh/h	0	431	33	0	0	462	100	0
V/C Ratio (X)	0.00	0.09	0.54	0.00	0.00	0.34	0.78	0.00
Avail Cap (c_a), veh/h	0	431	141	0	0	462	275	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	32.3	57.2	0.0	0.0	34.9	55.9	0.0
Incr Delay (d2), s/veh	0.0	0.4	12.7	0.0	0.0	2.0	12.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.7	70.0	0.0	0.0	36.9	68.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.8	0.5	0.0	0.0	3.7	2.3	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.0	0.0	0.3	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.9	0.6	0.0	0.0	3.9	2.7	0.0
%ile Storage Ratio (RQ%)	0.00	0.11	0.18	0.00	0.00	0.43	0.75	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	422	0	0	0	434
Grp Sat Flow (s), veh/h/ln	0	0	0	1777	0	0	0	1777
Q Serve Time (g_s), s	0.0	0.0	0.0	15.5	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	15.5	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	1040	0	0	0	974
V/C Ratio (X)	0.00	0.00	0.00	0.41	0.00	0.00	0.00	0.45
Avail Cap (c_a), veh/h	0	0	0	1040	0	0	0	974
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	13.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.2	0.0	0.0	0.0	1.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	14.7	0.0	0.0	0.0	1.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.1	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	6.4	0.0	0.0	0.0	0.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment				T+R				T+R
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	443	0	0	0	449
Grp Sat Flow (s), veh/h/ln	0	0	0	1863	0	0	0	1841
Q Serve Time (g_s), s	0.0	0.0	0.0	15.5	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	15.5	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.38	0.00	0.02	0.00	0.60	0.00	0.09
Lane Grp Cap (c), veh/h	0	0	0	1090	0	0	0	1009
V/C Ratio (X)	0.00	0.00	0.00	0.41	0.00	0.00	0.00	0.45
Avail Cap (c_a), veh/h	0	0	0	1090	0	0	0	1009
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	13.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.1	0.0	0.0	0.0	1.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	14.7	0.0	0.0	0.0	1.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.3	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	6.7	0.0	0.0	0.0	0.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	13.5
HCM 7th LOS	B

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	859	804	6	0	19
Future Vol, veh/h	10	859	804	6	0	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	-	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	11	934	874	7	0	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	880	0	-	0	-	440
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	-	-	3.32
Pot Cap-1 Maneuver	763	-	-	-	0	565
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	763	-	-	-	-	565
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.11	0	11.62
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	763	-	-	-	565
HCM Lane V/C Ratio	0.014	-	-	-	0.037
HCM Ctrl Dly (s/v)	9.8	-	-	-	11.6
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	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	2	102	4	24	52	4	5	2	14	4	3	4
Future Vol, veh/h	2	102	4	24	52	4	5	2	14	4	3	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	111	4	26	57	4	5	2	15	4	3	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	61	0	0	115	0	0	228	230	113	227	230	59
Stage 1	-	-	-	-	-	-	117	117	-	111	111	-
Stage 2	-	-	-	-	-	-	110	113	-	116	120	-
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	1542	-	-	1474	-	-	728	669	940	728	669	1007
Stage 1	-	-	-	-	-	-	887	798	-	894	804	-
Stage 2	-	-	-	-	-	-	895	802	-	888	797	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1542	-	-	1474	-	-	707	656	940	700	656	1007
Mov Cap-2 Maneuver	-	-	-	-	-	-	707	656	-	700	656	-
Stage 1	-	-	-	-	-	-	886	797	-	878	789	-
Stage 2	-	-	-	-	-	-	871	787	-	870	796	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.14	2.25	9.41	9.74
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	839	33	-	-	532	-	-	771
HCM Lane V/C Ratio	0.027	0.001	-	-	0.018	-	-	0.015
HCM Ctrl Dly (s/v)	9.4	7.3	0	-	7.5	0	-	9.7
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0

Intersection	
Int Delay, s/veh	19.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	90	0	50	8	0	7	144	456	11	4	765	60
Future Vol, veh/h	90	0	50	8	0	7	144	456	11	4	765	60
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	98	0	54	9	0	8	157	496	12	4	832	65

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1434	1693	448	1239	1720	254	897	0	0	508	0	0
Stage 1	873	873	-	815	815	-	-	-	-	-	-	-
Stage 2	561	821	-	424	905	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 94	92	558	132	89	746	753	-	-	1053	-	-
Stage 1	311	366	-	338	389	-	-	-	-	-	-	-
Stage 2	480	387	-	578	353	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 74	73	558	94	70	746	753	-	-	1053	-	-
Mov Cap-2 Maneuver	~ 74	73	-	94	70	-	-	-	-	-	-	-
Stage 1	310	364	-	267	308	-	-	-	-	-	-	-
Stage 2	376	306	-	519	352	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	205.78	29.83	2.6	0.07
HCM LOS	F	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	753	-	-	74	558	94	746	16	-	-
HCM Lane V/C Ratio	0.208	-	-	1.327	0.097	0.093	0.01	0.004	-	-
HCM Ctrl Dly (s/v)	11	-	-	$ 313.4	12.1	47.3	9.9	8.4	0	-
HCM Lane LOS	B	-	-	F	B	E	A	A	A	-
HCM 95th %tile Q(veh)	0.8	-	-	7.7	0.3	0.3	0	0	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	119	0	611	704	120
Future Vol, veh/h	0	119	0	611	704	120
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	129	0	664	765	130

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	448	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	558	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	558	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	13.38	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	558	-	-
HCM Lane V/C Ratio	-	0.232	-	-
HCM Ctrl Dly (s/v)	-	13.4	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.9	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	226	575	84	43	458	90	106	297	42	148	426	247
Future Volume (veh/h)	226	575	84	43	458	90	106	297	42	148	426	247
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	246	625	91	47	498	98	115	323	46	161	463	268
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	270	1113	162	61	852	380	357	1225	173	474	725	614
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Prop Arrive On Green	0.30	0.72	0.72	0.03	0.24	0.24	0.05	0.39	0.39	0.10	0.78	0.78
Unsig. Movement Delay												
Ln Grp Delay, s/veh	66.3	16.2	16.2	76.2	43.2	38.6	21.4	25.7	25.7	21.4	14.0	11.3
Ln Grp LOS	E	B	B	E	D	D	C	C	C	C	B	B
Approach Vol, veh/h		962			643			484			892	
Approach Delay, s/veh		29.0			44.9			24.7			14.5	
Approach LOS		C			D			C			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	4.0	2.0	4.0	1.1	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	11.0	52.0	9.1	47.9	11.5	51.5	23.2	33.8
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green (Gmax), s	6.0	47.0	9.0	38.0	7.0	46.0	22.0	25.0
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.3	3.8	4.8	3.8	5.0
Max Q Clear (g_c+I1), s	8.0	10.5	5.1	13.5	6.6	15.2	17.9	16.9
Green Ext Time (g_e), s	0.0	2.4	0.0	4.8	0.0	4.2	0.3	2.3
Prob of Phs Call (p_c)	1.00	1.00	0.79	1.00	0.98	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.93	0.00	1.00	0.00	0.84	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3127		3113		1870		3554

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		441		453		1585		1585

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0

Lane Assignment	L (Pr/Pm)		L (Prot)		L (Pr/Pm)		L (Prot)	
Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	161	0	47	0	115	0	246	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	6.0	0.0	3.1	0.0	4.6	0.0	15.9	0.0
Cycle Q Clear Time (g_c), s	6.0	0.0	3.1	0.0	4.6	0.0	15.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1013	0	0	0	725	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	46.5	0.0	0.0	0.0	46.5	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	38.5	0.0	0.0	0.0	33.3	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	3.2	0.0	0.0	0.0	2.5	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	474	0	61	0	357	0	270	0
V/C Ratio (X)	0.34	0.00	0.78	0.00	0.32	0.00	0.91	0.00
Avail Cap (c_a), veh/h	474	0	134	0	365	0	327	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	20.9	0.0	57.5	0.0	20.9	0.0	41.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	18.7	0.0	0.5	0.0	25.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	21.4	0.0	76.2	0.0	21.4	0.0	66.3	0.0
1st-Term Q (Q1), veh/ln	2.6	0.0	1.4	0.0	1.9	0.0	5.9	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.3	0.0	0.1	0.0	1.9	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	2.7	0.0	1.7	0.0	2.0	0.0	7.8	0.0
%ile Storage Ratio (RQ%)	0.11	0.00	0.22	0.00	0.15	0.00	0.58	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	2
Grp Vol (v), veh/h	0	182	0	356	0	463	0	498
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1870	0	1777
Q Serve Time (g_s), s	0.0	8.3	0.0	11.4	0.0	13.2	0.0	14.9
Cycle Q Clear Time (g_c), s	0.0	8.3	0.0	11.4	0.0	13.2	0.0	14.9
Lane Grp Cap (c), veh/h	0	696	0	635	0	725	0	852
V/C Ratio (X)	0.00	0.26	0.00	0.56	0.00	0.64	0.00	0.58
Avail Cap (c_a), veh/h	0	696	0	635	0	725	0	852
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.7	0.0	12.6	0.0	9.7	0.0	40.3
Incr Delay (d2), s/veh	0.0	0.9	0.0	3.6	0.0	4.3	0.0	2.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.7	0.0	16.2	0.0	14.0	0.0	43.2
1st-Term Q (Q1), veh/ln	0.0	3.5	0.0	3.2	0.0	3.3	0.0	6.5

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.6	0.0	0.9	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.7	0.0	3.8	0.0	4.1	0.0	6.8
%ile Storage Ratio (RQ%)	0.00	0.28	0.00	0.21	0.00	0.17	0.00	0.10
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	187	0	360	0	268	0	98
Grp Sat Flow (s), veh/h/ln	0	1791	0	1789	0	1585	0	1585
Q Serve Time (g_s), s	0.0	8.5	0.0	11.5	0.0	6.9	0.0	6.0
Cycle Q Clear Time (g_c), s	0.0	8.5	0.0	11.5	0.0	6.9	0.0	6.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.25	0.00	0.25	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	701	0	640	0	614	0	380
V/C Ratio (X)	0.00	0.27	0.00	0.56	0.00	0.44	0.00	0.26
Avail Cap (c_a), veh/h	0	701	0	640	0	614	0	380
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.8	0.0	12.6	0.0	9.0	0.0	37.0
Incr Delay (d2), s/veh	0.0	0.9	0.0	3.6	0.0	2.2	0.0	1.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.7	0.0	16.2	0.0	11.3	0.0	38.6
1st-Term Q (Q1), veh/ln	0.0	3.6	0.0	3.2	0.0	1.8	0.0	2.3
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.6	0.0	0.4	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.8	0.0	3.9	0.0	2.2	0.0	2.5
%ile Storage Ratio (RQ%)	0.00	0.28	0.00	0.21	0.00	0.31	0.00	0.32
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	27.4
HCM 7th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	115	210	87	123	194	192	43	390	125	295	620	119
Future Volume (veh/h)	115	210	87	123	194	192	43	390	125	295	620	119
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	125	228	95	134	211	209	47	424	136	321	674	129
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	222	549	245	302	281	250	432	1821	812	682	1739	332
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.15	0.15	0.08	0.16	0.16	0.07	1.00	1.00	0.10	0.58	0.58
Unsig. Movement Delay												
Ln Grp Delay, s/veh	41.6	46.3	46.6	39.4	54.0	61.6	12.6	0.3	0.4	10.3	14.5	14.5
Ln Grp LOS	D	D	D	D	D	E	B	A	A	B	B	B
Approach Vol, veh/h		448			554			607			1124	
Approach Delay, s/veh		45.1			53.3			1.3			13.3	
Approach LOS		D			D			A			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	3.0	1.1	4.0	1.1	4.0
Phs Duration (G+Y+Rc), s	17.1	66.0	13.9	23.0	8.5	74.6	13.5	23.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green (Gmax), s	31.5	29.5	10.5	30.5	6.5	54.5	15.5	25.5
Max Allow Headway (MAH), s	3.8	5.0	3.8	4.9	3.8	5.3	3.8	5.4
Max Q Clear (g_c+I1), s	11.7	2.0	9.5	9.0	3.5	16.6	9.0	17.3
Green Ext Time (g_e), s	0.9	3.4	0.0	1.7	0.0	6.0	0.1	1.6
Prob of Phs Call (p_c)	1.00	1.00	0.99	1.00	0.79	1.00	0.98	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00	1.00	0.00	0.07	0.46

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		3554		2976		1777

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1585		569		1585

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0

Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	
Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	321	0	134	0	47	0	125	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	9.7	0.0	7.5	0.0	1.5	0.0	7.0	0.0
Cycle Q Clear Time (g_c), s	9.7	0.0	7.5	0.0	1.5	0.0	7.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	850	0	1057	0	678	0	967	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	63.5	0.0	18.5	0.0	61.5	0.0	18.5	0.0
Perm LT Serve Time (g_u), s	61.5	0.0	11.6	0.0	55.5	0.0	3.6	0.0
Perm LT Q Serve Time (g_ps), s	1.2	0.0	1.0	0.0	0.4	0.0	2.2	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	682	0	302	0	432	0	222	0
V/C Ratio (X)	0.47	0.00	0.44	0.00	0.11	0.00	0.56	0.00
Avail Cap (c_a), veh/h	963	0	318	0	470	0	319	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.98	0.00	1.00	0.00
Uniform Delay (d1), s/veh	9.8	0.0	38.4	0.0	12.5	0.0	39.4	0.0
Incr Delay (d2), s/veh	0.5	0.0	1.0	0.0	0.1	0.0	2.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	10.3	0.0	39.4	0.0	12.6	0.0	41.6	0.0
1st-Term Q (Q1), veh/ln	3.6	0.0	3.3	0.0	0.6	0.0	3.1	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	3.7	0.0	3.4	0.0	0.6	0.0	3.2	0.0
%ile Storage Ratio (RQ%)	0.27	0.00	0.57	0.00	0.10	0.00	0.49	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	1	0	1
Grp Vol (v), veh/h	0	424	0	228	0	402	0	211
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	0.0	0.0	7.0	0.0	14.6	0.0	13.6
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	7.0	0.0	14.6	0.0	13.6
Lane Grp Cap (c), veh/h	0	1821	0	549	0	1038	0	281
V/C Ratio (X)	0.00	0.23	0.00	0.42	0.00	0.39	0.00	0.75
Avail Cap (c_a), veh/h	0	1821	0	903	0	1038	0	378
Upstream Filter (I)	0.00	0.98	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	45.8	0.0	13.4	0.0	48.3
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.5	0.0	1.1	0.0	5.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.3	0.0	46.3	0.0	14.5	0.0	54.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.1	0.0	5.7	0.0	6.0

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	3.1	0.0	6.0	0.0	6.5
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.08	0.00	0.22	0.00	0.12
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	136	0	95	0	401	0	209
Grp Sat Flow (s), veh/h/ln	0	1585	0	1585	0	1768	0	1585
Q Serve Time (g_s), s	0.0	0.0	0.0	6.5	0.0	14.6	0.0	15.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	6.5	0.0	14.6	0.0	15.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.32	0.00	1.00
Lane Grp Cap (c), veh/h	0	812	0	245	0	1033	0	250
V/C Ratio (X)	0.00	0.17	0.00	0.39	0.00	0.39	0.00	0.83
Avail Cap (c_a), veh/h	0	812	0	403	0	1033	0	337
Upstream Filter (I)	0.00	0.98	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	45.6	0.0	13.4	0.0	49.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	1.0	0.0	1.1	0.0	12.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.4	0.0	46.6	0.0	14.5	0.0	61.6
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.6	0.0	5.7	0.0	6.1
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.3	0.0	0.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	2.6	0.0	6.0	0.0	6.9
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.48	0.00	0.22	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	24.0
HCM 7th LOS	C

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	21	320	25	52	310	8	33	7	79	21	3	69
Future Vol, veh/h	21	320	25	52	310	8	33	7	79	21	3	69
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	190	-	-	120	-	150	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	348	27	57	337	9	36	8	86	23	3	75

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	346	0	0	375	0	0	690	866	188	673	871	168
Stage 1	-	-	-	-	-	-	407	407	-	450	450	-
Stage 2	-	-	-	-	-	-	283	459	-	223	421	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1210	-	-	1180	-	-	331	290	823	341	288	846
Stage 1	-	-	-	-	-	-	592	596	-	558	570	-
Stage 2	-	-	-	-	-	-	700	565	-	759	587	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1210	-	-	1180	-	-	279	271	823	278	269	846
Mov Cap-2 Maneuver	-	-	-	-	-	-	279	271	-	278	269	-
Stage 1	-	-	-	-	-	-	581	584	-	531	543	-
Stage 2	-	-	-	-	-	-	604	538	-	658	576	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.46	1.15	14.82	12.97
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	495	1210	-	-	1180	-	-	552
HCM Lane V/C Ratio	0.261	0.019	-	-	0.048	-	-	0.183
HCM Ctrl Dly (s/v)	14.8	8	-	-	8.2	-	-	13
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	1	0.1	-	-	0.2	-	-	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	787	9	17	776	37	21	1	14	54	4	86
Future Volume (veh/h)	72	787	9	17	776	37	21	1	14	54	4	86
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	78	855	10	18	843	40	23	1	15	59	4	93
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	100	2106	25	33	1892	90	262	22	148	183	28	251
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.59	0.59	0.04	1.00	1.00	0.28	0.28	0.28	0.28	0.28	0.28
Unsig. Movement Delay												
Ln Grp Delay, s/veh	68.0	14.7	14.7	70.0	1.5	1.4	32.7	0.0	0.0	36.9	0.0	0.0
Ln Grp LOS	E	B	B	E	A	A	C			D		
Approach Vol, veh/h		943			901			39			156	
Approach Delay, s/veh		19.1			2.8			32.7			36.9	
Approach LOS		B			A			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		8.0	2.0	4.0		8.0	2.0	4.0
Phs Duration (G+Y+Rc), s		38.0	6.8	75.2		38.0	11.3	70.7
Change Period (Y+Rc), s		5.0	4.5	5.0		5.0	4.5	5.0
Max Green (Gmax), s		33.0	9.5	63.0		33.0	18.5	54.0
Max Allow Headway (MAH), s		5.5	3.8	5.2		5.5	3.8	5.3
Max Q Clear (g_c+I1), s		4.2	3.2	17.5		11.6	7.2	2.0
Green Ext Time (g_e), s		0.2	0.0	6.6		0.8	0.1	6.9
Prob of Phs Call (p_c)		1.00	0.45	1.00		1.00	0.93	1.00
Prob of Max Out (p_x)		0.00	0.01	0.00		0.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		779	1781			516	1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		79		3598		103		3454

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		537		42		913		164

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0

Lane Assignment		L+T+R	L (Prot)			L+T+R	L (Prot)	
Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	39	18	0	0	156	78	0
Grp Sat Flow (s), veh/h/ln	0	1395	1781	0	0	1531	1781	0
Q Serve Time (g_s), s	0.0	0.0	1.2	0.0	0.0	6.3	5.2	0.0
Cycle Q Clear Time (g_c), s	0.0	2.2	1.2	0.0	0.0	9.6	5.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1319	0	0	0	1419	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1299	0	0	0	1836	0	0
Perm LT Eff Green (g_p), s	0.0	33.0	0.0	0.0	0.0	33.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	23.4	0.0	0.0	0.0	30.8	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	6.3	0.0	0.0
Time to First Blk (g_f), s	0.0	1.4	0.0	0.0	0.0	3.3	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	1.4	0.0	0.0	0.0	3.3	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.59	1.00	0.00	0.00	0.38	1.00	0.00
Lane Grp Cap (c), veh/h	0	431	33	0	0	462	100	0
V/C Ratio (X)	0.00	0.09	0.54	0.00	0.00	0.34	0.78	0.00
Avail Cap (c_a), veh/h	0	431	141	0	0	462	275	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	32.3	57.2	0.0	0.0	34.9	55.9	0.0
Incr Delay (d2), s/veh	0.0	0.4	12.7	0.0	0.0	2.0	12.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.7	70.0	0.0	0.0	36.9	68.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.8	0.5	0.0	0.0	3.7	2.3	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.0	0.0	0.3	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.9	0.6	0.0	0.0	3.9	2.7	0.0
%ile Storage Ratio (RQ%)	0.00	0.11	0.18	0.00	0.00	0.43	0.75	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	422	0	0	0	434
Grp Sat Flow (s), veh/h/ln	0	0	0	1777	0	0	0	1777
Q Serve Time (g_s), s	0.0	0.0	0.0	15.5	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	15.5	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	1040	0	0	0	974
V/C Ratio (X)	0.00	0.00	0.00	0.41	0.00	0.00	0.00	0.45
Avail Cap (c_a), veh/h	0	0	0	1040	0	0	0	974
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	13.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.2	0.0	0.0	0.0	1.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	14.7	0.0	0.0	0.0	1.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.1	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	6.4	0.0	0.0	0.0	0.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment				T+R				T+R
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	443	0	0	0	449
Grp Sat Flow (s), veh/h/ln	0	0	0	1863	0	0	0	1841
Q Serve Time (g_s), s	0.0	0.0	0.0	15.5	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	15.5	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.38	0.00	0.02	0.00	0.60	0.00	0.09
Lane Grp Cap (c), veh/h	0	0	0	1090	0	0	0	1009
V/C Ratio (X)	0.00	0.00	0.00	0.41	0.00	0.00	0.00	0.45
Avail Cap (c_a), veh/h	0	0	0	1090	0	0	0	1009
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	13.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.1	0.0	0.0	0.0	1.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	14.7	0.0	0.0	0.0	1.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.3	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	6.7	0.0	0.0	0.0	0.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	13.5
HCM 7th LOS	B

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	859	804	6	0	19
Future Vol, veh/h	10	859	804	6	0	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	-	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	11	934	874	7	0	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	880	0	-	0	-	440
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	-	-	3.32
Pot Cap-1 Maneuver	763	-	-	-	0	565
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	763	-	-	-	-	565
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.11	0	11.62
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	763	-	-	-	565
HCM Lane V/C Ratio	0.014	-	-	-	0.037
HCM Ctrl Dly (s/v)	9.8	-	-	-	11.6
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	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	2	102	4	24	52	4	5	2	14	4	3	4
Future Vol, veh/h	2	102	4	24	52	4	5	2	14	4	3	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	111	4	26	57	4	5	2	15	4	3	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	61	0	0	115	0	0	228	230	113	227	230	59
Stage 1	-	-	-	-	-	-	117	117	-	111	111	-
Stage 2	-	-	-	-	-	-	110	113	-	116	120	-
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	1542	-	-	1474	-	-	728	669	940	728	669	1007
Stage 1	-	-	-	-	-	-	887	798	-	894	804	-
Stage 2	-	-	-	-	-	-	895	802	-	888	797	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1542	-	-	1474	-	-	707	656	940	700	656	1007
Mov Cap-2 Maneuver	-	-	-	-	-	-	707	656	-	700	656	-
Stage 1	-	-	-	-	-	-	886	797	-	878	789	-
Stage 2	-	-	-	-	-	-	871	787	-	870	796	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.14	2.25	9.41	9.74
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	839	33	-	-	532	-	-	771
HCM Lane V/C Ratio	0.027	0.001	-	-	0.018	-	-	0.015
HCM Ctrl Dly (s/v)	9.4	7.3	0	-	7.5	0	-	9.7
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	0	50	8	0	7	144	456	11	4	765	60
Future Volume (veh/h)	90	0	50	8	0	7	144	456	11	4	765	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	98	0	54	9	0	8	157	496	12	4	832	65
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	182	0	145	140	0	145	572	2926	71	796	2826	221
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Prop Arrive On Green	0.09	0.00	0.09	0.09	0.00	0.09	1.00	1.00	1.00	1.00	1.00	1.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	56.2	0.0	52.8	53.6	0.0	49.9	1.2	0.3	0.2	0.0	0.4	0.5
Ln Grp LOS	E		D	D		D	A	A	A	A	A	A
Approach Vol, veh/h		152			17			665			901	
Approach Delay, s/veh		55.0			51.9			0.5			0.5	
Approach LOS		E			D			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		6.0		6.0
Phs Duration (G+Y+Rc), s		104.0		16.0		104.0		16.0
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green (Gmax), s		92.0		18.0		92.0		18.0
Max Allow Headway (MAH), s		5.7		4.4		5.3		4.7
Max Q Clear (g_c+I1), s		2.0		10.8		2.0		6.6
Green Ext Time (g_e), s		5.5		0.3		7.2		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.12		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		621		1407		891		1350

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3546		0		3425		0

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		86		1585		268		1585

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3

Lane Assignment		L		L		L		L
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	157	0	98	0	4	0	9
Grp Sat Flow (s), veh/h/ln	0	621	0	1407	0	891	0	1350
Q Serve Time (g_s), s	0.0	0.0	0.0	8.2	0.0	0.0	0.0	0.8
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	8.8	0.0	0.0	0.0	4.6
Perm LT Sat Flow (s_l), veh/h/ln	0	621	0	1407	0	891	0	1350
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	99.0	0.0	11.0	0.0	99.0	0.0	11.0
Perm LT Serve Time (g_u), s	0.0	99.0	0.0	10.4	0.0	99.0	0.0	7.1
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	8.2	0.0	0.0	0.0	0.8
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	572	0	182	0	796	0	140
V/C Ratio (X)	0.00	0.27	0.00	0.54	0.00	0.01	0.00	0.06
Avail Cap (c_a), veh/h	0	572	0	265	0	796	0	219
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.92	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	53.8	0.0	0.0	0.0	53.4
Incr Delay (d2), s/veh	0.0	1.2	0.0	2.4	0.0	0.0	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	1.2	0.0	56.2	0.0	0.0	0.0	53.6
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.3
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	3.0	0.0	0.0	0.0	0.3
%ile Storage Ratio (RQ%)	0.00	0.05	0.00	0.47	0.00	0.00	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	248	0	0	0	454	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1870	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1466	0	0	0	1543	0	0
V/C Ratio (X)	0.00	0.17	0.00	0.00	0.00	0.29	0.00	0.00
Avail Cap (c_a), veh/h	0	1466	0	0	0	1543	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.92	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.3	0.0	0.0	0.0	0.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	260	0	54	0	443	0	8
Grp Sat Flow (s), veh/h/ln	0	1855	0	1585	0	1822	0	1585
Q Serve Time (g_s), s	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.6
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.05	0.00	1.00	0.00	0.15	0.00	1.00
Lane Grp Cap (c), veh/h	0	1530	0	145	0	1503	0	145
V/C Ratio (X)	0.00	0.17	0.00	0.37	0.00	0.29	0.00	0.06
Avail Cap (c_a), veh/h	0	1530	0	238	0	1503	0	238
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.92	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	51.3	0.0	0.0	0.0	49.8
Incr Delay (d2), s/veh	0.0	0.2	0.0	1.6	0.0	0.5	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.2	0.0	52.8	0.0	0.5	0.0	49.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.2
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	1.6	0.0	0.2	0.0	0.2
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.25	0.00	0.01	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	5.7
HCM 7th LOS	A

Notes
User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	119	0	611	704	120
Future Vol, veh/h	0	119	0	611	704	120
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	129	0	664	765	130

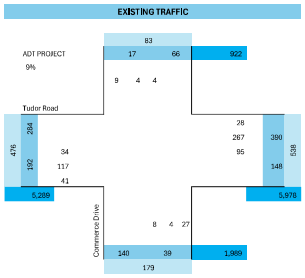
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	448	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	558	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	558	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

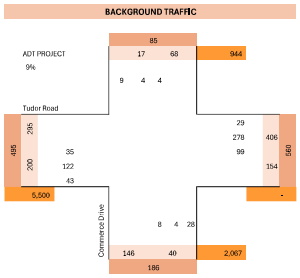
Approach	EB	NB	SB
HCM Ctrl Dly, s/v	13.38	0	0
HCM LOS	B		

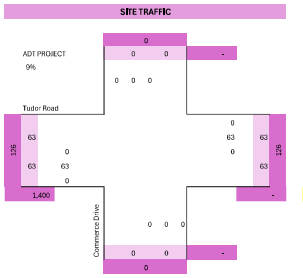
Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	558	-	-
HCM Lane V/C Ratio	-	0.232	-	-
HCM Ctrl Dly (s/v)	-	13.4	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.9	-	-

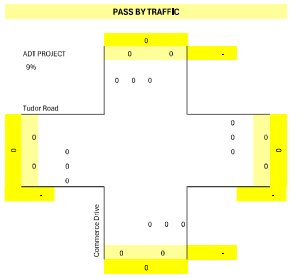
PHASE 1 - PM PEAK HOUR CALCULATIONS

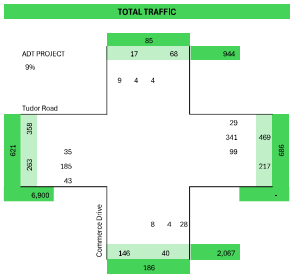
N/S	Commerce Drive			SITE TRIP				PASS BY				TOTAL
E/W	Tudor Road			PM PEAK HOUR				PM PEAK HOUR				
GR	2.0%			IN	422			IN	160			
YRS	2			OUT	422			OUT	160			
INT #	60200											
	EXT	GRW	BKGRD	DIR	IN/	DIR	IN/	DIR	IN/	DIR	IN/	TOTAL
MVMT	TRFC	x	TRFC	%	OUT	%	OUT	TL	%	OUT	%	OUT	TL	TRAFFIC
EBL	34	1.04	35					0					0	35
EBT	117	1.04	122	15%	422			63					0	185
EBR	41	1.04	43					0					0	43
WBL	95	1.04	99					0					0	99
WBT	267	1.04	278	15%	422			63					0	341
WBR	28	1.04	29					0					0	29
NBL	8	1.04	8					0					0	8
NBT	4	1.04	4					0					0	4
NBR	27	1.04	28					0					0	28
SBL	4	1.04	4					0					0	4
SBT	4	1.04	4					0					0	4
SBR	9	1.04	9					0					0	9



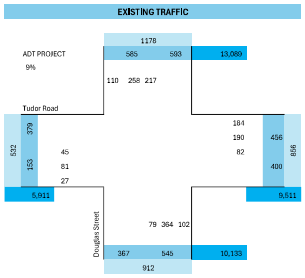


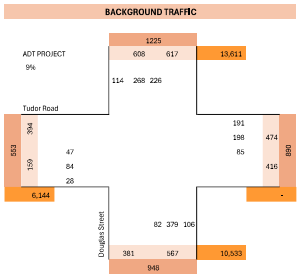


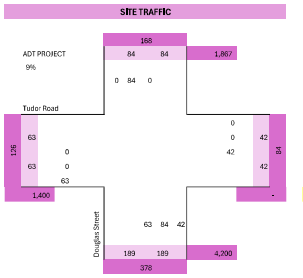


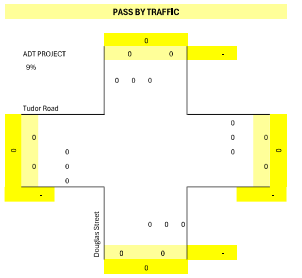


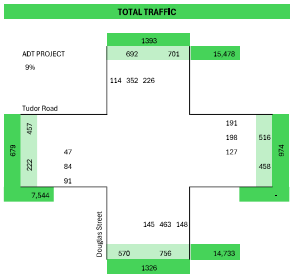
N/S	Douglas Street			SITE TRIP				PASS BY				TOTAL
E/W	Tudor Road			PM PEAK HOUR				PM PEAK HOUR				
GR	2.0%			IN	422			IN	160			
YRS	2			OUT	422			OUT	160			
INT #	60200											
	EXT	GRW	BKGRD	DIR	IN/	DIR	IN/	DIR	IN/	DIR	IN/	TOTAL
MVMT	TRFC	x	TRFC	%	OUT	%	OUT	TL	%	OUT	%	OUT	TL	TRAFFIC
EBL	45	1.04	47					0					0	47
EBT	81	1.04	84					0					0	84
EBR	27	1.04	28	15%	422			63					0	91
WBL	82	1.04	85	10%	422			42					0	127
WBT	190	1.04	198					0					0	198
WBR	184	1.04	191					0					0	191
NBL	79	1.04	82	15%	422			63					0	145
NBT	364	1.04	379	20%	422			84					0	463
NBR	102	1.04	106	10%	422			42					0	148
SBL	217	1.04	226					0					0	226
SBT	258	1.04	268	20%	422			84					0	352
SBR	110	1.04	114					0					0	114



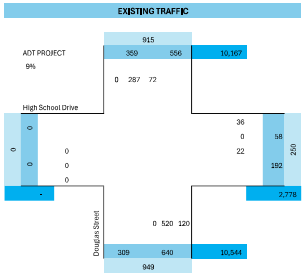


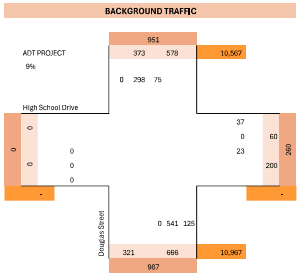


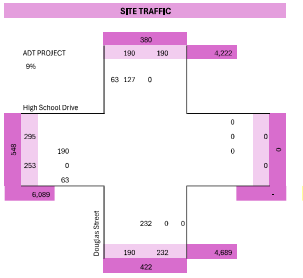


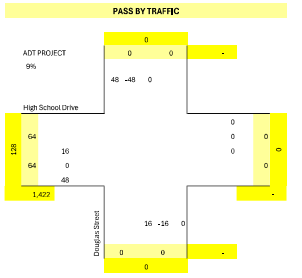


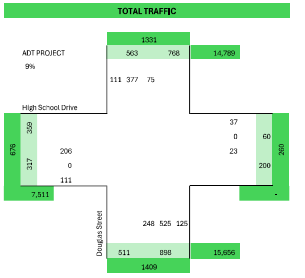
N/S	Douglas Street			SITE TRIP				PASS BY				TOTAL
E/W	High School Drive			PM PEAK HOUR				PM PEAK HOUR				
GR	2.0%			IN	422			IN	160			
YRS	2			OUT	422			OUT	160			
INT #	70200											
	EXT	GRW	BKGRD	DIR	IN/	DIR	IN/	DIR	IN/	DIR	IN/	TOTAL
MVMT	TRFC	x	TRFC	%	OUT	%	OUT	TL	%	OUT	%	OUT	TL	TRAFFIC
EBL	0	1.04	0	45%	422			190	10%	160			16	206
EBT	0	1.04	0					0					0	0
EBR	0	1.04	0	15%	422			63	30%	160			48	111
WBL	22	1.04	23					0					0	23
WBT		1.04	0					0					0	0
WBR	36	1.04	37					0					0	37
NBL	0	1.04	0	55%	422			232	10%	160			16	248
NBT	520	1.04	541					0	-10%	160			-16	525
NBR	120	1.04	125					0					0	125
SBL	72	1.04	75					0					0	75
SBT	287	1.04	298	30%	422			127	-30%	160			-48	377
SBR		1.04	0	15%	422			63	30%	160			48	111



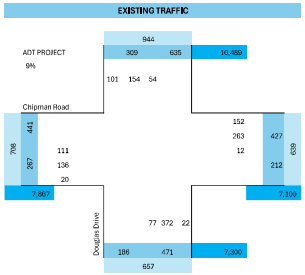


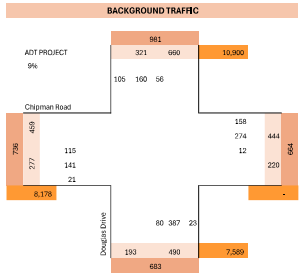


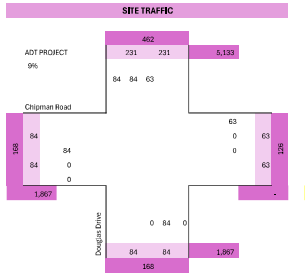


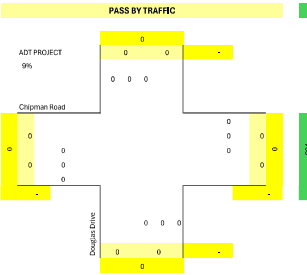


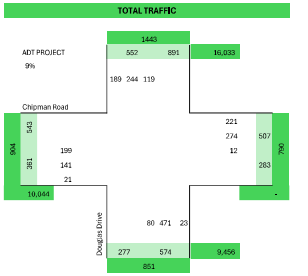
N/S	Douglas Drive			SITE TRIP				PASS BY				TOTAL
E/W	Chipman Road			PM PEAK HOUR				PM PEAK HOUR				
GR	2.0%			IN	422			IN	160			
YRS	2			OUT	422			OUT	160			
INT #	80200											
MVMT	EXT TRFC	GRW x	BKGRD TRFC	DIR %	IN/ OUT	DIR %	IN/ OUT	TL	DIR %	IN/ OUT	DIR %	IN/ OUT	TL	TOTAL TRAFFIC
EBL	111	1.04	115	20%	422			84					0	199
EBT	136	1.04	141					0					0	141
EBR	20	1.04	21					0					0	21
WBL	12	1.04	12					0					0	12
WBT	263	1.04	274		422			0					0	274
WBR	152	1.04	158	15%	422			63					0	221
NBL	77	1.04	80		422			0					0	80
NBT	372	1.04	387	20%	422			84					0	471
NBR	22	1.04	23					0					0	23
SBL	54	1.04	56	15%	422			63					0	119
SBT	154	1.04	160	20%	422			84					0	244
SBR	101	1.04	105	20%	422			84					0	189



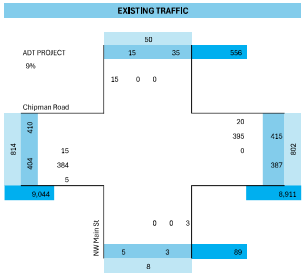


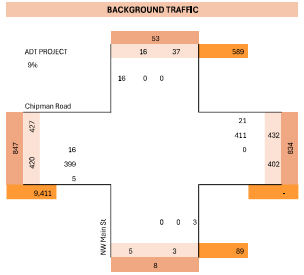


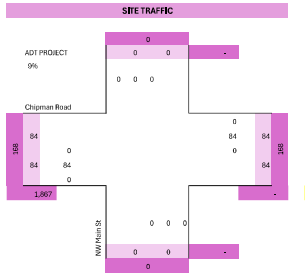


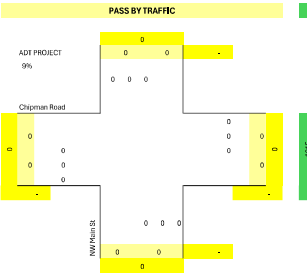


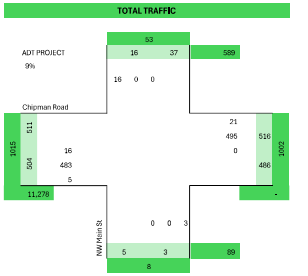
N/S	NW Main St			SITE TRIP				PASS BY				TOTAL
E/W	Chipman Road			PM PEAK HOUR				PM PEAK HOUR				
GR	2.0%			IN	422			IN	160			
YRS	2			OUT	422			OUT	160			
INT #	90200											
MVMT	EXT TRFC	GRW x	BKGRD TRFC	DIR %	IN/ OUT	DIR %	IN/ OUT	TL	DIR %	IN/ OUT	DIR %	IN/ OUT	TL	TOTAL TRAFFIC
EBL	15	1.04	16					0					0	16
EBT	384	1.04	399	20%	422			84					0	483
EBR	5	1.04	5					0					0	5
WBL		1.04	0					0					0	0
WBT	395	1.04	411	20%	422			84					0	495
WBR	20	1.04	21					0					0	21
NBL		1.04	0					0					0	0
NBT		1.04	0					0					0	0
NBR	3	1.04	3					0					0	3
SBL		1.04	0					0					0	0
SBT		1.04	0					0					0	0
SBR	15	1.04	16					0					0	16



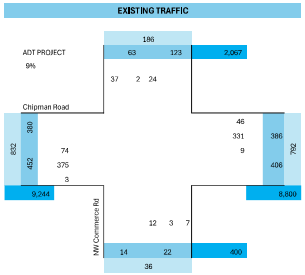


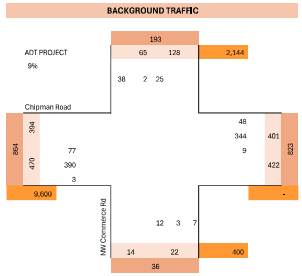


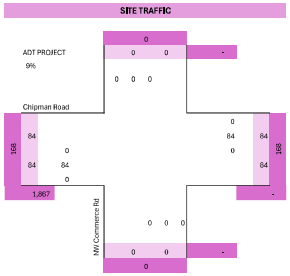




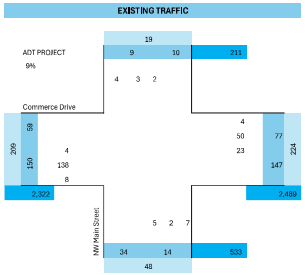
N/S	NW Commerce Rd			SITE TRIP					PASS BY					TOTAL
E/W	Chipman Road			PM PEAK HOUR					PM PEAK HOUR					
GR	2.0%			IN	422				IN	160				
YRS	2			OUT	422				OUT	160				
INT #	100200													
MVMT	EXT TRFC	GRW x	BKGRD TRFC	DIR %	IN/ OUT	DIR %	IN/ OUT	TL	DIR %	IN/ OUT	DIR %	IN/ OUT	TL	TOTAL TRAFFIC
EBL	74	1.04	77					0					0	77
EBT	375	1.04	390	20%	422			84					0	474
EBR	3	1.04	3					0					0	3
WBL	9	1.04	9					0					0	9
WBT	331	1.04	344	20%	422			84					0	428
WBR	46	1.04	48					0					0	48
NBL	12	1.04	12					0					0	12
NBT	3	1.04	3					0					0	3
NBR	7	1.04	7					0					0	7
SBL	24	1.04	25					0					0	25
SBT	2	1.04	2					0					0	2
SBR	37	1.04	38					0					0	38

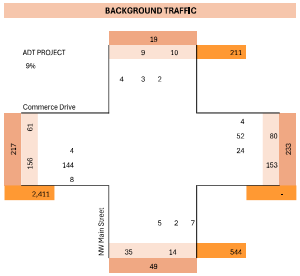


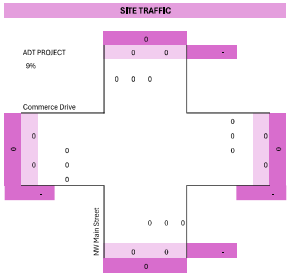


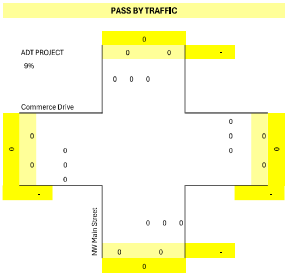

SITE TRAFFIC
ADT PROJECT
9%
Chipman Road
NW Commerce Rd
0
0
0

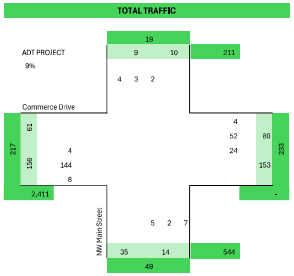
N/S	NW Main Street			SITE TRIP PM PEAK HOUR					PASS BY PM PEAK HOUR					TOTAL
E/W	Commerce Drive													
GR	2.0%			IN	422				IN	160				
YRS	2			OUT	422				OUT	160				
INT #	110200													
MVMT	EXT TRFC	GRW x	BKGRD TRFC	DIR %	IN/ OUT	DIR %	IN/ OUT	TL	DIR %	IN/ OUT	DIR %	IN/ OUT	TL	TOTAL TRAFFIC
EBL	4	1.04	4					0					0	4
EBT	138	1.04	144					0					0	144
EBR	8	1.04	8					0					0	8
WBL	23	1.04	24					0					0	24
WBT	50	1.04	52					0					0	52
WBR	4	1.04	4					0					0	4
NBL	5	1.04	5					0					0	5
NBT	2	1.04	2					0					0	2
NBR	7	1.04	7					0					0	7
SBL	2	1.04	2					0					0	2
SBT	3	1.04	3					0					0	3
SBR	4	1.04	4					0					0	4











Warrant 1, Eight-Hour Vehicular Volume (MUTCD Section 4C.02) - MoDOT EPG 902.3.2

EXISTING TRAFFIC

N/S Street	Douglas Street	**WARRANT RESULT:**	SIGNAL NOT WARRANTED
E/W Street	High School Drive		

Condition A — Minimum Vehicular Volume									
Number of lanes for moving traffic on each approach		Vehicles per hour on major street (total of both approaches)				Vehicles per hour on higher-volume minor-street approach (one direction only)			
Major Street	Minor Street	100% [a]	80% [b]	70% [c]	56% [d]	100% [a]	80% [b]	70% [c]	56% [d]
1	1	500	400	350	280	150	120	105	84
2+	1	600	480	420	336	150	120	105	84
2+	2+	600	480	420	336	200	160	140	112
1	2+	500	400	350	280	200	160	140	112

Condition B — Interruption of Continuous Traffic									
Number of lanes for moving traffic on each approach		Vehicles per hour on major street (total of both approaches)				Vehicles per hour on higher-volume minor-street approach (one direction only)			
Major Street	Minor Street	100% [a]	80% [b]	70% [c]	56% [d]	100% [a]	80% [b]	70% [c]	56% [d]
1	1	750	600	525	420	75	60	53	42
2+	1	900	720	630	504	75	60	53	42
2+	2+	900	720	630	504	100	80	70	56
1	2+	750	600	525	420	100	80	70	56

Number of lanes for moving traffic on each approach		Vehicles per hour on major street (total of both approaches)				Vehicles per hour on higher-volume minor-street approach (one direction only)			
Major Street	Minor Street								
			PM PEAK	8TH HR			PM PEAK	8TH HR	
1	1	NB/SB	1424	1280		EB	318	286	

Condition A	VOLUME	STAND.	MET	VOLUME	STAND.	MET	WARRANT
100%	1280	500	YES	286	150	YES	YES
80%	1280	400	YES	286	120	YES	YES
70%	1280	350	YES	286	105	YES	YES
56%	1280	280	YES	286	84	YES	YES
Condition B							
100%	1280	750	YES	286	75	YES	YES
80%	1280	600	YES	286	60	YES	YES
70%	1280	525	YES	286	53	YES	YES
56%	1280	420	YES	286	42	YES	YES

Source **MODOT Traffic Volume Map**

Count Time	NB	SB	Traffic Volume	% of 24 Hr
1	39	42	81	0.35%
2	20	23	43	0.19%
3	20	15	35	0.15%
4	29	15	44	0.19%
5	69	27	96	0.42%
6	235	81	316	1.38%
7	520	230	750	3.27%
8	696	664	1360	5.92%
9	559	718	1277	5.56%
10	637	745	1382	6.02%
11	686	810	1496	6.52%
12	696	918	1614	7.03%
13	716	987	1703	7.42%
14	725	1002	1727	7.52%
15	843	1060	1903	8.29%
16	716	1064	1780	7.75%
17	735	1060	1795	7.82%
18	657	925	1582	6.89%
19	627	745	1372	5.98%
20	392	503	895	3.90%
21	294	361	655	2.85%
22	235	299	534	2.33%
23	167	200	367	1.60%
24	69	81	150	0.65%
TOTAL	10382	12575	22957	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	115	141	21	12	274	158	80	387	23	56	160	105
Future Volume (veh/h)	115	141	21	12	274	158	80	387	23	56	160	105
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	125	153	23	13	298	172	87	421	25	61	174	114
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	153	1214	179	26	1135	506	488	1335	79	413	719	609
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.17	0.78	0.78	0.01	0.32	0.32	0.04	0.39	0.39	0.04	0.38	0.38
Unsig. Movement Delay												
Ln Grp Delay, s/veh	58.7	8.5	8.5	72.6	30.9	33.0	21.1	26.5	26.5	21.4	25.9	25.2
Ln Grp LOS	E	A	A	E	C	C	C	C	C	C	C	C
Approach Vol, veh/h		301			483			533			349	
Approach Delay, s/veh		29.4			32.8			25.6			24.9	
Approach LOS		C			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	4.0	2.0	4.0	1.1	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	9.3	52.0	6.8	51.9	10.2	51.1	15.3	43.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green (Gmax), s	6.0	47.0	9.0	38.0	7.0	46.0	22.0	25.0
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.3	3.8	4.8	3.8	4.8
Max Q Clear (g_c+I1), s	4.5	12.3	2.9	3.5	5.5	9.6	10.1	11.9
Green Ext Time (g_e), s	0.0	2.9	0.0	1.0	0.0	1.4	0.2	2.1
Prob of Phs Call (p_c)	0.87	1.00	0.35	1.00	0.94	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.01	0.00	1.00	0.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3409		3106		1870		3554

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		202		459		1585		1585

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0

Lane Assignment	L (Pr/Pm)		L (Prot)		L (Pr/Pm)		L (Prot)	
Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	61	0	13	0	87	0	125	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	2.5	0.0	0.9	0.0	3.5	0.0	8.1	0.0
Cycle Q Clear Time (g_c), s	2.5	0.0	0.9	0.0	3.5	0.0	8.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	944	0	0	0	1091	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	46.1	0.0	0.0	0.0	46.1	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	36.7	0.0	0.0	0.0	38.5	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.7	0.0	0.0	0.0	0.7	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	413	0	26	0	488	0	153	0
V/C Ratio (X)	0.15	0.00	0.50	0.00	0.18	0.00	0.82	0.00
Avail Cap (c_a), veh/h	438	0	134	0	514	0	327	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	21.3	0.0	58.7	0.0	20.9	0.0	48.7	0.0
Incr Delay (d2), s/veh	0.2	0.0	13.9	0.0	0.2	0.0	10.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	21.4	0.0	72.6	0.0	21.1	0.0	58.7	0.0
1st-Term Q (Q1), veh/ln	1.0	0.0	0.4	0.0	1.5	0.0	3.3	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.0	0.0	0.0	0.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	1.1	0.0	0.5	0.0	1.5	0.0	3.8	0.0
%ile Storage Ratio (RQ%)	0.02	0.00	0.06	0.00	0.11	0.00	0.28	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	2
Grp Vol (v), veh/h	0	219	0	86	0	174	0	298
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1870	0	1777
Q Serve Time (g_s), s	0.0	10.3	0.0	1.4	0.0	7.6	0.0	7.5
Cycle Q Clear Time (g_c), s	0.0	10.3	0.0	1.4	0.0	7.6	0.0	7.5
Lane Grp Cap (c), veh/h	0	696	0	694	0	719	0	1135
V/C Ratio (X)	0.00	0.31	0.00	0.12	0.00	0.24	0.00	0.26
Avail Cap (c_a), veh/h	0	696	0	694	0	719	0	1135
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	25.3	0.0	8.1	0.0	25.1	0.0	30.3
Incr Delay (d2), s/veh	0.0	1.2	0.0	0.4	0.0	0.8	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.5	0.0	8.5	0.0	25.9	0.0	30.9
1st-Term Q (Q1), veh/ln	0.0	4.3	0.0	0.5	0.0	3.4	0.0	3.2

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.1	0.0	0.2	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.6	0.0	0.6	0.0	3.5	0.0	3.3
%ile Storage Ratio (RQ%)	0.00	0.34	0.00	0.03	0.00	0.08	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	227	0	90	0	114	0	172
Grp Sat Flow (s), veh/h/ln	0	1834	0	1788	0	1585	0	1585
Q Serve Time (g_s), s	0.0	10.3	0.0	1.5	0.0	5.7	0.0	9.9
Cycle Q Clear Time (g_c), s	0.0	10.3	0.0	1.5	0.0	5.7	0.0	9.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.11	0.00	0.26	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	718	0	699	0	609	0	506
V/C Ratio (X)	0.00	0.32	0.00	0.13	0.00	0.19	0.00	0.34
Avail Cap (c_a), veh/h	0	718	0	699	0	609	0	506
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	25.3	0.0	8.1	0.0	24.5	0.0	31.2
Incr Delay (d2), s/veh	0.0	1.2	0.0	0.4	0.0	0.7	0.0	1.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.5	0.0	8.5	0.0	25.2	0.0	33.0
1st-Term Q (Q1), veh/ln	0.0	4.5	0.0	0.6	0.0	2.2	0.0	3.8
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.1	0.0	0.1	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.7	0.0	0.6	0.0	2.3	0.0	4.1
%ile Storage Ratio (RQ%)	0.00	0.35	0.00	0.04	0.00	0.32	0.00	0.52
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	28.2
HCM 7th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	84	28	85	198	191	82	379	106	226	268	114
Future Volume (veh/h)	47	84	28	85	198	191	82	379	106	226	268	114
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	51	91	30	92	215	208	89	412	115	246	291	124
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	150	474	211	304	280	250	680	2074	925	705	1514	630
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.13	0.13	0.06	0.16	0.16	0.08	1.00	1.00	0.07	0.62	0.62
Unsig. Movement Delay												
Ln Grp Delay, s/veh	44.8	46.4	46.2	41.6	55.0	61.4	8.7	0.2	0.3	7.8	10.3	10.3
Ln Grp LOS	D	D	D	D	D	E	A	A	A	A	B	B
Approach Vol, veh/h		172			515			616			661	
Approach Delay, s/veh		45.9			55.2			1.5			9.4	
Approach LOS		D			E			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	3.0	1.1	4.0	1.1	4.0
Phs Duration (G+Y+Rc), s	13.5	74.5	11.5	20.5	9.2	78.8	8.6	23.4
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green (Gmax), s	31.5	29.5	10.5	30.5	6.5	54.5	15.5	25.5
Max Allow Headway (MAH), s	3.8	5.0	3.8	4.9	3.8	5.3	3.8	5.4
Max Q Clear (g_c+I1), s	8.3	2.0	7.3	4.7	4.4	8.3	4.9	17.3
Green Ext Time (g_e), s	0.7	3.3	0.1	0.6	0.0	2.8	0.1	1.6
Prob of Phs Call (p_c)	1.00	1.00	0.95	1.00	0.95	1.00	0.82	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.45

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		3554		2446		1777

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1585		1018		1585

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0

Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	
Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	246	0	92	0	89	0	51	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	6.3	0.0	5.3	0.0	2.4	0.0	2.9	0.0
Cycle Q Clear Time (g_c), s	6.3	0.0	5.3	0.0	2.4	0.0	2.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	876	0	1270	0	971	0	964	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	71.8	0.0	16.4	0.0	70.0	0.0	16.0	0.0
Perm LT Serve Time (g_u), s	70.0	0.0	13.3	0.0	67.9	0.0	3.6	0.0
Perm LT Q Serve Time (g_ps), s	0.7	0.0	0.2	0.0	0.2	0.0	0.7	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	705	0	304	0	680	0	150	0
V/C Ratio (X)	0.35	0.00	0.30	0.00	0.13	0.00	0.34	0.00
Avail Cap (c_a), veh/h	1039	0	356	0	706	0	319	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	7.5	0.0	41.1	0.0	8.6	0.0	43.5	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.6	0.0	0.1	0.0	1.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	7.8	0.0	41.6	0.0	8.7	0.0	44.8	0.0
1st-Term Q (Q1), veh/ln	2.3	0.0	2.3	0.0	0.9	0.0	1.3	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	2.3	0.0	2.4	0.0	0.9	0.0	1.4	0.0
%ile Storage Ratio (RQ%)	0.17	0.00	0.40	0.00	0.15	0.00	0.21	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	1	0	1
Grp Vol (v), veh/h	0	412	0	91	0	209	0	215
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	0.0	0.0	2.7	0.0	6.1	0.0	13.9
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	2.7	0.0	6.1	0.0	13.9
Lane Grp Cap (c), veh/h	0	2074	0	474	0	1100	0	280
V/C Ratio (X)	0.00	0.20	0.00	0.19	0.00	0.19	0.00	0.77
Avail Cap (c_a), veh/h	0	2074	0	903	0	1100	0	378
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	46.2	0.0	9.9	0.0	48.5
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.2	0.0	0.4	0.0	6.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.2	0.0	46.4	0.0	10.3	0.0	55.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.2	0.0	2.3	0.0	6.2

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	1.2	0.0	2.5	0.0	6.7
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.03	0.00	0.09	0.00	0.12
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	115	0	30	0	206	0	208
Grp Sat Flow (s), veh/h/ln	0	1585	0	1585	0	1687	0	1585
Q Serve Time (g_s), s	0.0	0.0	0.0	2.0	0.0	6.3	0.0	15.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	2.0	0.0	6.3	0.0	15.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.60	0.00	1.00
Lane Grp Cap (c), veh/h	0	925	0	211	0	1044	0	250
V/C Ratio (X)	0.00	0.12	0.00	0.14	0.00	0.20	0.00	0.83
Avail Cap (c_a), veh/h	0	925	0	403	0	1044	0	337
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	45.9	0.0	9.9	0.0	49.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.3	0.0	0.4	0.0	12.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.3	0.0	46.2	0.0	10.3	0.0	61.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.8	0.0	2.3	0.0	6.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	0.8	0.0	2.4	0.0	6.9
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.15	0.00	0.09	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	22.1
HCM 7th LOS	C

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	35	122	43	99	278	29	8	4	28	4	4	9
Future Vol, veh/h	35	122	43	99	278	29	8	4	28	4	4	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	190	-	-	120	-	150	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	38	133	47	108	302	32	9	4	30	4	4	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	334	0	0	179	0	0	601	781	90	662	773	151
Stage 1	-	-	-	-	-	-	232	232	-	517	517	-
Stage 2	-	-	-	-	-	-	368	549	-	145	255	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1222	-	-	1394	-	-	384	325	950	347	328	868
Stage 1	-	-	-	-	-	-	750	711	-	509	532	-
Stage 2	-	-	-	-	-	-	624	515	-	843	695	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1222	-	-	1394	-	-	335	290	950	296	294	868
Mov Cap-2 Maneuver	-	-	-	-	-	-	335	290	-	296	294	-
Stage 1	-	-	-	-	-	-	727	689	-	470	491	-
Stage 2	-	-	-	-	-	-	564	475	-	786	673	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1.41	1.9	11.51	13.27
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	596	1222	-	-	1394	-	-	454
HCM Lane V/C Ratio	0.073	0.031	-	-	0.077	-	-	0.041
HCM Ctrl Dly (s/v)	11.5	8	-	-	7.8	-	-	13.3
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0.3	-	-	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	390	3	9	344	48	12	3	7	25	2	38
Future Volume (veh/h)	77	390	3	9	344	48	12	3	7	25	2	38
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	84	424	3	10	374	52	13	3	8	27	2	41
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	107	2143	15	21	1706	235	259	66	139	187	29	247
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.59	0.59	0.02	1.00	1.00	0.28	0.28	0.28	0.28	0.28	0.28
Unsig. Movement Delay												
Ln Grp Delay, s/veh	67.3	11.7	11.7	73.9	0.5	0.5	32.2	0.0	0.0	33.6	0.0	0.0
Ln Grp LOS	E	B	B	E	A	A	C			C		
Approach Vol, veh/h		511			436			24			70	
Approach Delay, s/veh		20.8			2.2			32.2			33.6	
Approach LOS		C			A			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		8.0	2.0	4.0		8.0	2.0	4.0
Phs Duration (G+Y+Rc), s		38.0	5.9	76.1		38.0	11.7	70.3
Change Period (Y+Rc), s		5.0	4.5	5.0		5.0	4.5	5.0
Max Green (Gmax), s		33.0	9.5	63.0		33.0	18.5	54.0
Max Allow Headway (MAH), s		5.4	3.8	5.2		5.4	3.8	5.3
Max Q Clear (g_c+I1), s		3.2	2.7	8.5		5.8	7.6	2.0
Green Ext Time (g_e), s		0.1	0.0	2.8		0.3	0.1	2.8
Prob of Phs Call (p_c)		1.00	0.28	1.00		1.00	0.94	1.00
Prob of Max Out (p_x)		0.00	0.00	0.00		0.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		774	1781			528	1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		239		3617		107		3136

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		506		26		898		433

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0

Lane Assignment		L+T+R	L (Prot)			L+T+R	L (Prot)	
Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	24	10	0	0	70	84	0
Grp Sat Flow (s), veh/h/ln	0	1519	1781	0	0	1533	1781	0
Q Serve Time (g_s), s	0.0	0.0	0.7	0.0	0.0	0.6	5.6	0.0
Cycle Q Clear Time (g_c), s	0.0	1.2	0.7	0.0	0.0	3.8	5.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1385	0	0	0	1426	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1821	0	0	0	1835	0	0
Perm LT Eff Green (g_p), s	0.0	33.0	0.0	0.0	0.0	33.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	29.2	0.0	0.0	0.0	31.8	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0
Time to First Blk (g_f), s	0.0	1.7	0.0	0.0	0.0	3.2	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	1.2	0.0	0.0	0.0	3.2	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.54	1.00	0.00	0.00	0.39	1.00	0.00
Lane Grp Cap (c), veh/h	0	464	21	0	0	463	107	0
V/C Ratio (X)	0.00	0.05	0.48	0.00	0.00	0.15	0.78	0.00
Avail Cap (c_a), veh/h	0	464	141	0	0	463	275	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	32.0	58.2	0.0	0.0	32.9	55.6	0.0
Incr Delay (d2), s/veh	0.0	0.2	15.7	0.0	0.0	0.7	11.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.2	73.9	0.0	0.0	33.6	67.3	0.0
1st-Term Q (Q1), veh/ln	0.0	0.5	0.3	0.0	0.0	1.6	2.5	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.0	0.0	0.1	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.5	0.4	0.0	0.0	1.6	2.9	0.0
%ile Storage Ratio (RQ%)	0.00	0.07	0.11	0.00	0.00	0.18	0.81	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	208	0	0	0	211
Grp Sat Flow (s), veh/h/ln	0	0	0	1777	0	0	0	1777
Q Serve Time (g_s), s	0.0	0.0	0.0	6.5	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	6.5	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	1053	0	0	0	966
V/C Ratio (X)	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.22
Avail Cap (c_a), veh/h	0	0	0	1053	0	0	0	966
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	11.3	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	11.7	0.0	0.0	0.0	0.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment				T+R				T+R
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	219	0	0	0	215
Grp Sat Flow (s), veh/h/ln	0	0	0	1866	0	0	0	1792
Q Serve Time (g_s), s	0.0	0.0	0.0	6.5	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	6.5	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.33	0.00	0.01	0.00	0.59	0.00	0.24
Lane Grp Cap (c), veh/h	0	0	0	1105	0	0	0	975
V/C Ratio (X)	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.22
Avail Cap (c_a), veh/h	0	0	0	1105	0	0	0	975
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	11.3	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	11.7	0.0	0.0	0.0	0.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	14.2
HCM 7th LOS	B

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	16	399	411	21	0	16
Future Vol, veh/h	16	399	411	21	0	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	-	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	17	434	447	23	0	17

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	470	0	-	0	-	235
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	-	-	3.32
Pot Cap-1 Maneuver	1088	-	-	-	0	767
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1088	-	-	-	-	767
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.32	0	9.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1088	-	-	-	767
HCM Lane V/C Ratio	0.016	-	-	-	0.023
HCM Ctrl Dly (s/v)	8.4	-	-	-	9.8
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	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	144	8	24	52	4	5	2	7	2	3	4
Future Vol, veh/h	4	144	8	24	52	4	5	2	7	2	3	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	157	9	26	57	4	5	2	8	2	3	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	61	0	0	165	0	0	280	283	161	277	285	59
Stage 1	-	-	-	-	-	-	170	170	-	111	111	-
Stage 2	-	-	-	-	-	-	110	113	-	166	174	-
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	1542	-	-	1413	-	-	672	626	884	675	624	1007
Stage 1	-	-	-	-	-	-	832	758	-	894	804	-
Stage 2	-	-	-	-	-	-	895	802	-	836	755	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1542	-	-	1413	-	-	651	612	884	652	611	1007
Mov Cap-2 Maneuver	-	-	-	-	-	-	651	612	-	652	611	-
Stage 1	-	-	-	-	-	-	830	756	-	877	788	-
Stage 2	-	-	-	-	-	-	870	787	-	824	753	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.19	2.28	9.95	9.84
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	742	46	-	-	532	-	-	753
HCM Lane V/C Ratio	0.021	0.003	-	-	0.018	-	-	0.013
HCM Ctrl Dly (s/v)	10	7.3	0	-	7.6	0	-	9.8
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0

Intersection	
Int Delay, s/veh	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	23	37	541	125	75	298
Future Vol, veh/h	23	37	541	125	75	298
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	40	588	136	82	324

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	981	362	0	0	724	0
Stage 1	656	-	-	-	-	-
Stage 2	325	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	247	635	-	-	874	-
Stage 1	478	-	-	-	-	-
Stage 2	705	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	221	635	-	-	874	-
Mov Cap-2 Maneuver	221	-	-	-	-	-
Stage 1	478	-	-	-	-	-
Stage 2	632	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	16.8	0	2.44
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	370	724	-
HCM Lane V/C Ratio	-	-	0.176	0.093	-
HCM Ctrl Dly (s/v)	-	-	16.8	9.5	0.7
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.6	0.3	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	206	141	21	12	274	226	80	478	23	124	251	196
Future Volume (veh/h)	206	141	21	12	274	226	80	478	23	124	251	196
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	224	153	23	13	298	246	87	520	25	135	273	213
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	251	1171	173	26	891	398	392	1352	65	393	745	631
HCM Platoon Ratio	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Prop Arrive On Green	0.24	0.63	0.63	0.01	0.25	0.25	0.04	0.39	0.39	0.03	0.27	0.27
Unsig. Movement Delay												
Ln Grp Delay, s/veh	66.1	14.7	14.7	72.6	37.8	46.9	21.3	27.7	27.7	21.9	33.1	32.7
Ln Grp LOS	E	B	B	E	D	D	C	C	C	C	C	C
Approach Vol, veh/h		400			557			632			621	
Approach Delay, s/veh		43.5			42.6			26.8			30.5	
Approach LOS		D			D			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	4.0	2.0	4.0	1.1	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	11.0	52.0	6.8	50.2	10.2	52.8	21.9	35.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green (Gmax), s	6.0	47.0	9.0	38.0	7.0	46.0	22.0	25.0
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.3	3.8	4.7	3.8	4.7
Max Q Clear (g_c+I1), s	7.4	15.0	2.9	4.4	5.5	16.2	16.6	18.5
Green Ext Time (g_e), s	0.0	3.6	0.0	1.0	0.0	2.4	0.3	1.5
Prob of Phs Call (p_c)	0.99	1.00	0.35	1.00	0.94	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.01	0.00	1.00	0.00	0.31	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3452		3106		1870		3554

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		166		459		1585		1585

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0

Lane Assignment	L (Pr/Pm)		L (Prot)		L (Pr/Pm)		L (Prot)	
Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	135	0	13	0	87	0	224	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	5.4	0.0	0.9	0.0	3.5	0.0	14.6	0.0
Cycle Q Clear Time (g_c), s	5.4	0.0	0.9	0.0	3.5	0.0	14.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	862	0	0	0	910	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	47.0	0.0	0.0	0.0	47.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	34.0	0.0	0.0	0.0	33.6	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	2.5	0.0	0.0	0.0	1.4	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	393	0	26	0	392	0	251	0
V/C Ratio (X)	0.34	0.00	0.50	0.00	0.22	0.00	0.89	0.00
Avail Cap (c_a), veh/h	393	0	134	0	418	0	327	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	21.4	0.0	58.7	0.0	21.0	0.0	45.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	13.9	0.0	0.3	0.0	21.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	21.9	0.0	72.6	0.0	21.3	0.0	66.1	0.0
1st-Term Q (Q1), veh/ln	2.3	0.0	0.4	0.0	1.5	0.0	5.9	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.1	0.0	0.0	0.0	1.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	2.4	0.0	0.5	0.0	1.5	0.0	7.3	0.0
%ile Storage Ratio (RQ%)	0.10	0.00	0.06	0.00	0.11	0.00	0.55	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	2
Grp Vol (v), veh/h	0	267	0	86	0	273	0	298
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1870	0	1777
Q Serve Time (g_s), s	0.0	12.9	0.0	2.4	0.0	14.2	0.0	8.2
Cycle Q Clear Time (g_c), s	0.0	12.9	0.0	2.4	0.0	14.2	0.0	8.2
Lane Grp Cap (c), veh/h	0	696	0	670	0	745	0	891
V/C Ratio (X)	0.00	0.38	0.00	0.13	0.00	0.37	0.00	0.33
Avail Cap (c_a), veh/h	0	696	0	670	0	745	0	891
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	26.1	0.0	14.3	0.0	31.7	0.0	36.8
Incr Delay (d2), s/veh	0.0	1.6	0.0	0.4	0.0	1.4	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	27.7	0.0	14.7	0.0	33.1	0.0	37.8
1st-Term Q (Q1), veh/ln	0.0	5.5	0.0	0.9	0.0	6.8	0.0	3.6

2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.1	0.0	0.3	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.8	0.0	1.0	0.0	7.1	0.0	3.7
%ile Storage Ratio (RQ%)	0.00	0.43	0.00	0.06	0.00	0.29	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	278	0	90	0	213	0	246
Grp Sat Flow (s), veh/h/ln	0	1841	0	1788	0	1585	0	1585
Q Serve Time (g_s), s	0.0	13.0	0.0	2.4	0.0	13.0	0.0	16.5
Cycle Q Clear Time (g_c), s	0.0	13.0	0.0	2.4	0.0	13.0	0.0	16.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.09	0.00	0.26	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	721	0	674	0	631	0	398
V/C Ratio (X)	0.00	0.39	0.00	0.13	0.00	0.34	0.00	0.62
Avail Cap (c_a), veh/h	0	721	0	674	0	631	0	398
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	26.1	0.0	14.3	0.0	31.2	0.0	39.9
Incr Delay (d2), s/veh	0.0	1.6	0.0	0.4	0.0	1.4	0.0	7.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	27.7	0.0	14.7	0.0	32.7	0.0	46.9
1st-Term Q (Q1), veh/ln	0.0	5.7	0.0	1.0	0.0	5.3	0.0	6.4
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.1	0.0	0.3	0.0	0.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	6.0	0.0	1.1	0.0	5.5	0.0	7.2
%ile Storage Ratio (RQ%)	0.00	0.45	0.00	0.06	0.00	0.78	0.00	0.92
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	84	96	130	198	191	150	470	151	226	359	114
Future Volume (veh/h)	47	84	96	130	198	191	150	470	151	226	359	114
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	51	91	104	141	215	208	163	511	164	246	390	124
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	151	384	171	310	280	250	631	2064	921	641	1606	505
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.11	0.11	0.08	0.16	0.16	0.11	1.00	1.00	0.08	0.60	0.60
Unsig. Movement Delay												
Ln Grp Delay, s/veh	47.1	49.3	54.5	41.9	55.0	61.4	8.7	0.3	0.4	8.4	11.6	11.6
Ln Grp LOS	D	D	D	D	D	E	A	A	A	A	B	B
Approach Vol, veh/h		246			564			838			760	
Approach Delay, s/veh		51.0			54.1			1.9			10.6	
Approach LOS		D			D			A			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	3.0	1.1	4.0	1.1	4.0
Phs Duration (G+Y+Rc), s	13.7	74.2	14.6	17.5	11.0	76.9	8.7	23.4
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green (Gmax), s	31.5	29.5	10.5	30.5	6.5	54.5	15.5	25.5
Max Allow Headway (MAH), s	3.8	5.0	3.8	4.6	3.8	5.3	3.8	5.4
Max Q Clear (g_c+I1), s	8.5	2.0	10.2	9.5	6.6	10.3	5.0	17.3
Green Ext Time (g_e), s	0.7	4.3	0.0	0.8	0.0	3.5	0.1	1.6
Prob of Phs Call (p_c)	1.00	1.00	0.99	1.00	1.00	1.00	0.82	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.45

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		3554		2661		1777

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1585		836		1585

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0

Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	
Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	246	0	141	0	163	0	51	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	6.5	0.0	8.2	0.0	4.6	0.0	3.0	0.0
Cycle Q Clear Time (g_c), s	6.5	0.0	8.2	0.0	4.6	0.0	3.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	764	0	1188	0	887	0	964	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	69.9	0.0	15.0	0.0	69.7	0.0	13.0	0.0
Perm LT Serve Time (g_u), s	69.7	0.0	10.2	0.0	64.2	0.0	3.6	0.0
Perm LT Q Serve Time (g_ps), s	0.1	0.0	0.6	0.0	1.2	0.0	0.5	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	641	0	310	0	631	0	151	0
V/C Ratio (X)	0.38	0.00	0.45	0.00	0.26	0.00	0.34	0.00
Avail Cap (c_a), veh/h	971	0	316	0	631	0	319	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	8.1	0.0	40.9	0.0	8.5	0.0	45.8	0.0
Incr Delay (d2), s/veh	0.4	0.0	1.0	0.0	0.2	0.0	1.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	8.4	0.0	41.9	0.0	8.7	0.0	47.1	0.0
1st-Term Q (Q1), veh/ln	2.4	0.0	3.6	0.0	1.5	0.0	1.3	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	2.5	0.0	3.7	0.0	1.6	0.0	1.4	0.0
%ile Storage Ratio (RQ%)	0.18	0.00	0.62	0.00	0.27	0.00	0.22	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	1	0	1
Grp Vol (v), veh/h	0	511	0	91	0	259	0	215
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	0.0	0.0	2.8	0.0	8.1	0.0	13.9
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	2.8	0.0	8.1	0.0	13.9
Lane Grp Cap (c), veh/h	0	2064	0	384	0	1073	0	280
V/C Ratio (X)	0.00	0.25	0.00	0.24	0.00	0.24	0.00	0.77
Avail Cap (c_a), veh/h	0	2064	0	903	0	1073	0	378
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	49.0	0.0	11.0	0.0	48.5
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.3	0.0	0.5	0.0	6.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.3	0.0	49.3	0.0	11.6	0.0	55.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.3	0.0	3.1	0.0	6.2

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	1.3	0.0	3.3	0.0	6.7
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.03	0.00	0.12	0.00	0.12
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	164	0	104	0	255	0	208
Grp Sat Flow (s), veh/h/ln	0	1585	0	1585	0	1720	0	1585
Q Serve Time (g_s), s	0.0	0.0	0.0	7.5	0.0	8.3	0.0	15.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	7.5	0.0	8.3	0.0	15.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.49	0.00	1.00
Lane Grp Cap (c), veh/h	0	921	0	171	0	1038	0	250
V/C Ratio (X)	0.00	0.18	0.00	0.61	0.00	0.25	0.00	0.83
Avail Cap (c_a), veh/h	0	921	0	403	0	1038	0	337
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	51.1	0.0	11.1	0.0	49.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	3.4	0.0	0.6	0.0	12.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.4	0.0	54.5	0.0	11.6	0.0	61.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.0	0.0	3.1	0.0	6.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.2	0.0	0.2	0.0	0.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	3.1	0.0	3.3	0.0	6.9
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.57	0.00	0.12	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	21.9
HCM 7th LOS	C

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	35	190	43	99	346	29	8	4	28	4	4	9
Future Vol, veh/h	35	190	43	99	346	29	8	4	28	4	4	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	190	-	-	120	-	150	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	38	207	47	108	376	32	9	4	30	4	4	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	408	0	0	253	0	0	711	929	127	773	921	188
Stage 1	-	-	-	-	-	-	306	306	-	591	591	-
Stage 2	-	-	-	-	-	-	405	623	-	182	329	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1148	-	-	1309	-	-	320	266	900	289	269	822
Stage 1	-	-	-	-	-	-	679	660	-	460	493	-
Stage 2	-	-	-	-	-	-	593	477	-	803	645	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1148	-	-	1309	-	-	276	236	900	244	239	822
Mov Cap-2 Maneuver	-	-	-	-	-	-	276	236	-	244	239	-
Stage 1	-	-	-	-	-	-	656	638	-	422	452	-
Stage 2	-	-	-	-	-	-	533	437	-	745	623	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1.08	1.67	12.57	14.81
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	519	1148	-	-	1309	-	-	385
HCM Lane V/C Ratio	0.084	0.033	-	-	0.082	-	-	0.048
HCM Ctrl Dly (s/v)	12.6	8.2	-	-	8	-	-	14.8
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0.3	-	-	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	481	3	9	435	48	12	3	7	25	2	38
Future Volume (veh/h)	77	481	3	9	435	48	12	3	7	25	2	38
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	84	523	3	10	473	52	13	3	8	27	2	41
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	107	2146	12	21	1757	192	259	66	139	187	29	247
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.59	0.59	0.02	1.00	1.00	0.28	0.28	0.28	0.28	0.28	0.28
Unsig. Movement Delay												
Ln Grp Delay, s/veh	67.3	12.2	12.2	73.9	0.7	0.7	32.2	0.0	0.0	33.6	0.0	0.0
Ln Grp LOS	E	B	B	E	A	A	C			C		
Approach Vol, veh/h		610			535			24			70	
Approach Delay, s/veh		19.8			2.0			32.2			33.6	
Approach LOS		B			A			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		8.0	2.0	4.0		8.0	2.0	4.0
Phs Duration (G+Y+Rc), s		38.0	5.9	76.1		38.0	11.7	70.3
Change Period (Y+Rc), s		5.0	4.5	5.0		5.0	4.5	5.0
Max Green (Gmax), s		33.0	9.5	63.0		33.0	18.5	54.0
Max Allow Headway (MAH), s		5.4	3.8	5.2		5.4	3.8	5.3
Max Q Clear (g_c+I1), s		3.2	2.7	10.3		5.8	7.6	2.0
Green Ext Time (g_e), s		0.1	0.0	3.5		0.3	0.1	3.6
Prob of Phs Call (p_c)		1.00	0.28	1.00		1.00	0.94	1.00
Prob of Max Out (p_x)		0.00	0.00	0.00		0.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		774	1781			528	1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		239		3623		107		3230

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		506		21		898		354

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0

Lane Assignment		L+T+R	L (Prot)			L+T+R	L (Prot)	
Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	24	10	0	0	70	84	0
Grp Sat Flow (s), veh/h/ln	0	1519	1781	0	0	1533	1781	0
Q Serve Time (g_s), s	0.0	0.0	0.7	0.0	0.0	0.6	5.6	0.0
Cycle Q Clear Time (g_c), s	0.0	1.2	0.7	0.0	0.0	3.8	5.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1385	0	0	0	1426	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1821	0	0	0	1835	0	0
Perm LT Eff Green (g_p), s	0.0	33.0	0.0	0.0	0.0	33.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	29.2	0.0	0.0	0.0	31.8	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0
Time to First Blk (g_f), s	0.0	1.7	0.0	0.0	0.0	3.2	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	1.2	0.0	0.0	0.0	3.2	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.54	1.00	0.00	0.00	0.39	1.00	0.00
Lane Grp Cap (c), veh/h	0	464	21	0	0	463	107	0
V/C Ratio (X)	0.00	0.05	0.48	0.00	0.00	0.15	0.78	0.00
Avail Cap (c_a), veh/h	0	464	141	0	0	463	275	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	32.0	58.2	0.0	0.0	32.9	55.6	0.0
Incr Delay (d2), s/veh	0.0	0.2	15.7	0.0	0.0	0.7	11.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.2	73.9	0.0	0.0	33.6	67.3	0.0
1st-Term Q (Q1), veh/ln	0.0	0.5	0.3	0.0	0.0	1.6	2.5	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.0	0.0	0.1	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.5	0.4	0.0	0.0	1.6	2.9	0.0
%ile Storage Ratio (RQ%)	0.00	0.07	0.11	0.00	0.00	0.18	0.81	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	256	0	0	0	259
Grp Sat Flow (s), veh/h/ln	0	0	0	1777	0	0	0	1777
Q Serve Time (g_s), s	0.0	0.0	0.0	8.3	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	8.3	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	1053	0	0	0	966
V/C Ratio (X)	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.27
Avail Cap (c_a), veh/h	0	0	0	1053	0	0	0	966
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	11.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	12.2	0.0	0.0	0.0	0.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.2	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment				T+R				T+R
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	270	0	0	0	266
Grp Sat Flow (s), veh/h/ln	0	0	0	1867	0	0	0	1807
Q Serve Time (g_s), s	0.0	0.0	0.0	8.3	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	8.3	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.33	0.00	0.01	0.00	0.59	0.00	0.20
Lane Grp Cap (c), veh/h	0	0	0	1106	0	0	0	983
V/C Ratio (X)	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.27
Avail Cap (c_a), veh/h	0	0	0	1106	0	0	0	983
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	11.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	12.2	0.0	0.0	0.0	0.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	13.1
HCM 7th LOS	B

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	16	490	502	21	0	16
Future Vol, veh/h	16	490	502	21	0	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	-	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	17	533	546	23	0	17

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	568	0	-	0	-	284
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	-	-	3.32
Pot Cap-1 Maneuver	1000	-	-	-	0	713
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1000	-	-	-	-	713
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.27	0	10.18
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1000	-	-	-	713
HCM Lane V/C Ratio	0.017	-	-	-	0.024
HCM Ctrl Dly (s/v)	8.7	-	-	-	10.2
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	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	144	8	24	52	4	5	2	7	2	3	4
Future Vol, veh/h	4	144	8	24	52	4	5	2	7	2	3	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	157	9	26	57	4	5	2	8	2	3	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	61	0	0	165	0	0	280	283	161	277	285	59
Stage 1	-	-	-	-	-	-	170	170	-	111	111	-
Stage 2	-	-	-	-	-	-	110	113	-	166	174	-
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	1542	-	-	1413	-	-	672	626	884	675	624	1007
Stage 1	-	-	-	-	-	-	832	758	-	894	804	-
Stage 2	-	-	-	-	-	-	895	802	-	836	755	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1542	-	-	1413	-	-	651	612	884	652	611	1007
Mov Cap-2 Maneuver	-	-	-	-	-	-	651	612	-	652	611	-
Stage 1	-	-	-	-	-	-	830	756	-	877	788	-
Stage 2	-	-	-	-	-	-	870	787	-	824	753	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.19	2.28	9.95	9.84
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	742	46	-	-	532	-	-	753
HCM Lane V/C Ratio	0.021	0.003	-	-	0.018	-	-	0.013
HCM Ctrl Dly (s/v)	10	7.3	0	-	7.6	0	-	9.8
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0

Intersection	
Int Delay, s/veh	221.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	221	0	119	23	0	37	267	524	125	75	383	119
Future Vol, veh/h	221	0	119	23	0	37	267	524	125	75	383	119
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	240	0	129	25	0	40	290	570	136	82	416	129

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1509	1930	273	1589	1927	353	546	0	0	705	0	0
Stage 1	644	644	-	1218	1218	-	-	-	-	-	-	-
Stage 2	865	1286	-	371	709	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 83	66	725	72	66	644	1020	-	-	889	-	-
Stage 1	428	466	-	191	251	-	-	-	-	-	-	-
Stage 2	315	233	-	621	436	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 51	43	725	39	43	644	1020	-	-	889	-	-
Mov Cap-2 Maneuver	~ 51	43	-	39	43	-	-	-	-	-	-	-
Stage 1	389	423	-	137	180	-	-	-	-	-	-	-
Stage 2	~ 211	167	-	464	396	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	$ 1207.81	84.28	2.89	1.64
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1020	-	-	51	725	39	644	351	-	-
HCM Lane V/C Ratio	0.285	-	-	4.756	0.178	0.648	0.062	0.092	-	-
HCM Ctrl Dly (s/v)	9.9	-	-	$ 1852.2	11	202.2	11	9.5	0.6	-
HCM Lane LOS	A	-	-	F	B	F	B	A	A	-
HCM 95th %tile Q(veh)	1.2	-	-	27	0.6	2.3	0.2	0.3	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	283	0	916	288	237
Future Vol, veh/h	0	283	0	916	288	237
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	308	0	996	313	258

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	285	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	711	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	711	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	13.86	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	711	-	-
HCM Lane V/C Ratio	-	0.432	-	-
HCM Ctrl Dly (s/v)	-	13.9	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	2.2	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	206	141	21	12	274	226	80	478	23	124	251	196
Future Volume (veh/h)	206	141	21	12	274	226	80	478	23	124	251	196
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	224	153	23	13	298	246	87	520	25	135	273	213
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	254	1378	204	26	1123	501	362	1122	54	326	615	521
HCM Platoon Ratio	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.67	1.67	1.67
Prop Arrive On Green	0.24	0.74	0.74	0.01	0.32	0.32	0.05	0.32	0.32	0.08	0.55	0.55
Unsig. Movement Delay												
Ln Grp Delay, s/veh	54.8	9.1	9.2	72.6	31.2	36.6	25.7	34.8	34.8	26.8	22.9	22.7
Ln Grp LOS	D	A	A	E	C	D	C	C	C	C	C	C
Approach Vol, veh/h		400			557			632			621	
Approach Delay, s/veh		34.7			34.6			33.6			23.6	
Approach LOS		C			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	4.0	2.0	4.0	1.1	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	11.0	44.0	6.8	58.2	10.6	44.4	22.1	42.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green (Gmax), s	6.0	39.0	17.0	38.0	7.0	38.0	30.0	25.0
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.3	3.8	4.7	3.8	4.7
Max Q Clear (g_c+I1), s	8.0	16.4	2.9	3.7	5.9	12.5	16.6	17.1
Green Ext Time (g_e), s	0.0	3.3	0.0	1.0	0.0	2.4	0.5	1.8
Prob of Phs Call (p_c)	0.99	1.00	0.35	1.00	0.94	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3452		3106		1870		3554

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		166		459		1585		1585

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0

Lane Assignment	L (Pr/Pm)		L (Prot)		L (Pr/Pm)		L (Prot)	
Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	135	0	13	0	87	0	224	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	6.0	0.0	0.9	0.0	3.9	0.0	14.6	0.0
Cycle Q Clear Time (g_c), s	6.0	0.0	0.9	0.0	3.9	0.0	14.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	862	0	0	0	910	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	39.0	0.0	0.0	0.0	39.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	24.6	0.0	0.0	0.0	29.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	3.2	0.0	0.0	0.0	1.1	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	326	0	26	0	362	0	254	0
V/C Ratio (X)	0.41	0.00	0.50	0.00	0.24	0.00	0.88	0.00
Avail Cap (c_a), veh/h	326	0	252	0	384	0	445	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	25.9	0.0	58.7	0.0	25.4	0.0	44.8	0.0
Incr Delay (d2), s/veh	0.8	0.0	13.9	0.0	0.3	0.0	10.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	26.8	0.0	72.6	0.0	25.7	0.0	54.8	0.0
1st-Term Q (Q1), veh/ln	2.5	0.0	0.4	0.0	1.6	0.0	5.8	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.1	0.0	0.0	0.0	0.7	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	2.6	0.0	0.5	0.0	1.7	0.0	6.5	0.0
%ile Storage Ratio (RQ%)	0.11	0.00	0.06	0.00	0.13	0.00	0.49	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	2
Grp Vol (v), veh/h	0	267	0	86	0	273	0	298
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1870	0	1777
Q Serve Time (g_s), s	0.0	14.3	0.0	1.6	0.0	10.5	0.0	7.5
Cycle Q Clear Time (g_c), s	0.0	14.3	0.0	1.6	0.0	10.5	0.0	7.5
Lane Grp Cap (c), veh/h	0	577	0	788	0	615	0	1123
V/C Ratio (X)	0.00	0.46	0.00	0.11	0.00	0.44	0.00	0.27
Avail Cap (c_a), veh/h	0	577	0	788	0	615	0	1123
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	32.2	0.0	8.9	0.0	20.5	0.0	30.6
Incr Delay (d2), s/veh	0.0	2.7	0.0	0.3	0.0	2.3	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	34.8	0.0	9.1	0.0	22.9	0.0	31.2
1st-Term Q (Q1), veh/ln	0.0	6.2	0.0	0.6	0.0	4.0	0.0	3.2

2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.1	0.0	0.4	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	6.6	0.0	0.7	0.0	4.4	0.0	3.3
%ile Storage Ratio (RQ%)	0.00	0.49	0.00	0.04	0.00	0.18	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	278	0	90	0	213	0	246
Grp Sat Flow (s), veh/h/ln	0	1841	0	1788	0	1585	0	1585
Q Serve Time (g_s), s	0.0	14.4	0.0	1.7	0.0	9.4	0.0	15.1
Cycle Q Clear Time (g_c), s	0.0	14.4	0.0	1.7	0.0	9.4	0.0	15.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.09	0.00	0.26	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	598	0	793	0	521	0	501
V/C Ratio (X)	0.00	0.46	0.00	0.11	0.00	0.41	0.00	0.49
Avail Cap (c_a), veh/h	0	598	0	793	0	521	0	501
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	32.2	0.0	8.9	0.0	20.3	0.0	33.2
Incr Delay (d2), s/veh	0.0	2.6	0.0	0.3	0.0	2.4	0.0	3.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	34.8	0.0	9.2	0.0	22.7	0.0	36.6
1st-Term Q (Q1), veh/ln	0.0	6.4	0.0	0.7	0.0	3.1	0.0	5.8
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.1	0.0	0.3	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	6.8	0.0	0.7	0.0	3.4	0.0	6.3
%ile Storage Ratio (RQ%)	0.00	0.51	0.00	0.04	0.00	0.48	0.00	0.80
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	31.2
HCM 7th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	84	96	130	198	191	150	470	151	226	359	114
Future Volume (veh/h)	47	84	96	130	198	191	150	470	151	226	359	114
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	51	91	104	141	215	208	163	511	164	246	390	124
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	151	384	171	310	280	250	631	2064	921	641	1606	505
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.11	0.11	0.08	0.16	0.16	0.11	1.00	1.00	0.08	0.60	0.60
Unsig. Movement Delay												
Ln Grp Delay, s/veh	47.1	49.3	54.5	41.9	55.0	61.4	8.7	0.3	0.4	8.4	11.6	11.6
Ln Grp LOS	D	D	D	D	D	E	A	A	A	A	B	B
Approach Vol, veh/h		246			564			838			760	
Approach Delay, s/veh		51.0			54.1			1.9			10.6	
Approach LOS		D			D			A			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	3.0	1.1	4.0	1.1	4.0
Phs Duration (G+Y+Rc), s	13.7	74.2	14.6	17.5	11.0	76.9	8.7	23.4
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green (Gmax), s	31.5	29.5	10.5	30.5	6.5	54.5	15.5	25.5
Max Allow Headway (MAH), s	3.8	5.0	3.8	4.6	3.8	5.3	3.8	5.4
Max Q Clear (g_c+I1), s	8.5	2.0	10.2	9.5	6.6	10.3	5.0	17.3
Green Ext Time (g_e), s	0.7	4.3	0.0	0.8	0.0	3.5	0.1	1.6
Prob of Phs Call (p_c)	1.00	1.00	0.99	1.00	1.00	1.00	0.82	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.45

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		3554		2661		1777

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1585		836		1585

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0

Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	
Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	246	0	141	0	163	0	51	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	6.5	0.0	8.2	0.0	4.6	0.0	3.0	0.0
Cycle Q Clear Time (g_c), s	6.5	0.0	8.2	0.0	4.6	0.0	3.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	764	0	1188	0	887	0	964	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	69.9	0.0	15.0	0.0	69.7	0.0	13.0	0.0
Perm LT Serve Time (g_u), s	69.7	0.0	10.2	0.0	64.2	0.0	3.6	0.0
Perm LT Q Serve Time (g_ps), s	0.1	0.0	0.6	0.0	1.2	0.0	0.5	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	641	0	310	0	631	0	151	0
V/C Ratio (X)	0.38	0.00	0.45	0.00	0.26	0.00	0.34	0.00
Avail Cap (c_a), veh/h	971	0	316	0	631	0	319	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.91	0.00	1.00	0.00
Uniform Delay (d1), s/veh	8.1	0.0	40.9	0.0	8.5	0.0	45.8	0.0
Incr Delay (d2), s/veh	0.4	0.0	1.0	0.0	0.2	0.0	1.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	8.4	0.0	41.9	0.0	8.7	0.0	47.1	0.0
1st-Term Q (Q1), veh/ln	2.4	0.0	3.6	0.0	1.5	0.0	1.3	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	2.5	0.0	3.7	0.0	1.6	0.0	1.4	0.0
%ile Storage Ratio (RQ%)	0.18	0.00	0.62	0.00	0.27	0.00	0.22	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	1	0	1
Grp Vol (v), veh/h	0	511	0	91	0	259	0	215
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	0.0	0.0	2.8	0.0	8.1	0.0	13.9
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	2.8	0.0	8.1	0.0	13.9
Lane Grp Cap (c), veh/h	0	2064	0	384	0	1073	0	280
V/C Ratio (X)	0.00	0.25	0.00	0.24	0.00	0.24	0.00	0.77
Avail Cap (c_a), veh/h	0	2064	0	903	0	1073	0	378
Upstream Filter (I)	0.00	0.91	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	49.0	0.0	11.0	0.0	48.5
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.3	0.0	0.5	0.0	6.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.3	0.0	49.3	0.0	11.6	0.0	55.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.3	0.0	3.1	0.0	6.2

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	1.3	0.0	3.3	0.0	6.7
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.03	0.00	0.12	0.00	0.12
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	164	0	104	0	255	0	208
Grp Sat Flow (s), veh/h/ln	0	1585	0	1585	0	1720	0	1585
Q Serve Time (g_s), s	0.0	0.0	0.0	7.5	0.0	8.3	0.0	15.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	7.5	0.0	8.3	0.0	15.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.49	0.00	1.00
Lane Grp Cap (c), veh/h	0	921	0	171	0	1038	0	250
V/C Ratio (X)	0.00	0.18	0.00	0.61	0.00	0.25	0.00	0.83
Avail Cap (c_a), veh/h	0	921	0	403	0	1038	0	337
Upstream Filter (I)	0.00	0.91	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	51.1	0.0	11.1	0.0	49.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	3.4	0.0	0.6	0.0	12.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.4	0.0	54.5	0.0	11.6	0.0	61.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.0	0.0	3.1	0.0	6.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.2	0.0	0.2	0.0	0.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	3.1	0.0	3.3	0.0	6.9
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.57	0.00	0.12	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	21.9
HCM 7th LOS	C

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	35	190	43	99	346	29	8	4	28	4	4	9
Future Vol, veh/h	35	190	43	99	346	29	8	4	28	4	4	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	190	-	-	120	-	150	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	38	207	47	108	376	32	9	4	30	4	4	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	408	0	0	253	0	0	711	929	127	773	921	188
Stage 1	-	-	-	-	-	-	306	306	-	591	591	-
Stage 2	-	-	-	-	-	-	405	623	-	182	329	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1148	-	-	1309	-	-	320	266	900	289	269	822
Stage 1	-	-	-	-	-	-	679	660	-	460	493	-
Stage 2	-	-	-	-	-	-	593	477	-	803	645	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1148	-	-	1309	-	-	276	236	900	244	239	822
Mov Cap-2 Maneuver	-	-	-	-	-	-	276	236	-	244	239	-
Stage 1	-	-	-	-	-	-	656	638	-	422	452	-
Stage 2	-	-	-	-	-	-	533	437	-	745	623	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1.08	1.67	12.57	14.81
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	519	1148	-	-	1309	-	-	385
HCM Lane V/C Ratio	0.084	0.033	-	-	0.082	-	-	0.048
HCM Ctrl Dly (s/v)	12.6	8.2	-	-	8	-	-	14.8
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0.3	-	-	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	481	3	9	435	48	12	3	7	25	2	38
Future Volume (veh/h)	77	481	3	9	435	48	12	3	7	25	2	38
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	84	523	3	10	473	52	13	3	8	27	2	41
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	107	2146	12	21	1757	192	259	66	139	187	29	247
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.59	0.59	0.02	1.00	1.00	0.28	0.28	0.28	0.28	0.28	0.28
Unsig. Movement Delay												
Ln Grp Delay, s/veh	67.3	12.2	12.2	73.9	0.7	0.7	32.2	0.0	0.0	33.6	0.0	0.0
Ln Grp LOS	E	B	B	E	A	A	C			C		
Approach Vol, veh/h		610			535			24			70	
Approach Delay, s/veh		19.8			2.0			32.2			33.6	
Approach LOS		B			A			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		8.0	2.0	4.0		8.0	2.0	4.0
Phs Duration (G+Y+Rc), s		38.0	5.9	76.1		38.0	11.7	70.3
Change Period (Y+Rc), s		5.0	4.5	5.0		5.0	4.5	5.0
Max Green (Gmax), s		33.0	9.5	63.0		33.0	18.5	54.0
Max Allow Headway (MAH), s		5.4	3.8	5.2		5.4	3.8	5.3
Max Q Clear (g_c+I1), s		3.2	2.7	10.3		5.8	7.6	2.0
Green Ext Time (g_e), s		0.1	0.0	3.5		0.3	0.1	3.6
Prob of Phs Call (p_c)		1.00	0.28	1.00		1.00	0.94	1.00
Prob of Max Out (p_x)		0.00	0.00	0.00		0.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		774	1781			528	1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		239		3623		107		3230

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		506		21		898		354

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0

Lane Assignment		L+T+R	L (Prot)			L+T+R	L (Prot)	
Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	24	10	0	0	70	84	0
Grp Sat Flow (s), veh/h/ln	0	1519	1781	0	0	1533	1781	0
Q Serve Time (g_s), s	0.0	0.0	0.7	0.0	0.0	0.6	5.6	0.0
Cycle Q Clear Time (g_c), s	0.0	1.2	0.7	0.0	0.0	3.8	5.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1385	0	0	0	1426	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1821	0	0	0	1835	0	0
Perm LT Eff Green (g_p), s	0.0	33.0	0.0	0.0	0.0	33.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	29.2	0.0	0.0	0.0	31.8	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0
Time to First Blk (g_f), s	0.0	1.7	0.0	0.0	0.0	3.2	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	1.2	0.0	0.0	0.0	3.2	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.54	1.00	0.00	0.00	0.39	1.00	0.00
Lane Grp Cap (c), veh/h	0	464	21	0	0	463	107	0
V/C Ratio (X)	0.00	0.05	0.48	0.00	0.00	0.15	0.78	0.00
Avail Cap (c_a), veh/h	0	464	141	0	0	463	275	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	32.0	58.2	0.0	0.0	32.9	55.6	0.0
Incr Delay (d2), s/veh	0.0	0.2	15.7	0.0	0.0	0.7	11.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.2	73.9	0.0	0.0	33.6	67.3	0.0
1st-Term Q (Q1), veh/ln	0.0	0.5	0.3	0.0	0.0	1.6	2.5	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.0	0.0	0.1	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.5	0.4	0.0	0.0	1.6	2.9	0.0
%ile Storage Ratio (RQ%)	0.00	0.07	0.11	0.00	0.00	0.18	0.81	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	256	0	0	0	259
Grp Sat Flow (s), veh/h/ln	0	0	0	1777	0	0	0	1777
Q Serve Time (g_s), s	0.0	0.0	0.0	8.3	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	8.3	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	1053	0	0	0	966
V/C Ratio (X)	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.27
Avail Cap (c_a), veh/h	0	0	0	1053	0	0	0	966
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	11.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	12.2	0.0	0.0	0.0	0.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.2	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment				T+R				T+R
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	270	0	0	0	266
Grp Sat Flow (s), veh/h/ln	0	0	0	1867	0	0	0	1807
Q Serve Time (g_s), s	0.0	0.0	0.0	8.3	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	8.3	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.33	0.00	0.01	0.00	0.59	0.00	0.20
Lane Grp Cap (c), veh/h	0	0	0	1106	0	0	0	983
V/C Ratio (X)	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.27
Avail Cap (c_a), veh/h	0	0	0	1106	0	0	0	983
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	11.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	12.2	0.0	0.0	0.0	0.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	13.1
HCM 7th LOS	B

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	16	490	502	21	0	16
Future Vol, veh/h	16	490	502	21	0	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	-	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	17	533	546	23	0	17

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	568	0	-	0	-	284
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	-	-	3.32
Pot Cap-1 Maneuver	1000	-	-	-	0	713
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1000	-	-	-	-	713
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.27	0	10.18
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1000	-	-	-	713
HCM Lane V/C Ratio	0.017	-	-	-	0.024
HCM Ctrl Dly (s/v)	8.7	-	-	-	10.2
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	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	144	8	24	52	4	5	2	7	2	3	4
Future Vol, veh/h	4	144	8	24	52	4	5	2	7	2	3	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	157	9	26	57	4	5	2	8	2	3	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	61	0	0	165	0	0	280	283	161	277	285	59
Stage 1	-	-	-	-	-	-	170	170	-	111	111	-
Stage 2	-	-	-	-	-	-	110	113	-	166	174	-
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	1542	-	-	1413	-	-	672	626	884	675	624	1007
Stage 1	-	-	-	-	-	-	832	758	-	894	804	-
Stage 2	-	-	-	-	-	-	895	802	-	836	755	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1542	-	-	1413	-	-	651	612	884	652	611	1007
Mov Cap-2 Maneuver	-	-	-	-	-	-	651	612	-	652	611	-
Stage 1	-	-	-	-	-	-	830	756	-	877	788	-
Stage 2	-	-	-	-	-	-	870	787	-	824	753	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.19	2.28	9.95	9.84
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	742	46	-	-	532	-	-	753
HCM Lane V/C Ratio	0.021	0.003	-	-	0.018	-	-	0.013
HCM Ctrl Dly (s/v)	10	7.3	0	-	7.6	0	-	9.8
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	221	0	119	23	0	37	267	524	125	75	383	119
Future Volume (veh/h)	221	0	119	23	0	37	267	524	125	75	383	119
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	240	0	129	25	0	40	290	570	136	82	416	129
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	329	0	344	246	0	344	663	1992	474	579	1921	589
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Prop Arrive On Green	0.22	0.00	0.22	0.22	0.00	0.22	1.00	1.00	1.00	1.00	1.00	1.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	51.3	0.0	40.7	44.6	0.0	37.9	2.1	0.6	0.6	0.5	0.4	0.4
Ln Grp LOS	D		D	D		D	A	A	A	A	A	A
Approach Vol, veh/h		369			65			996			627	
Approach Delay, s/veh		47.6			40.5			1.0			0.4	
Approach LOS		D			D			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		6.0		6.0
Phs Duration (G+Y+Rc), s		88.9		31.1		88.9		31.1
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green (Gmax), s		75.0		35.0		75.0		35.0
Max Allow Headway (MAH), s		5.3		4.4		5.4		5.0
Max Q Clear (g_c+I1), s		2.0		25.0		2.0		12.4
Green Ext Time (g_e), s		8.0		1.1		4.6		0.2
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.09		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		862		1367		742		1261

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2848		0		2746		0

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		677		1585		843		1585

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3

Lane Assignment		L		L		L		L
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	290	0	240	0	82	0	25
Grp Sat Flow (s), veh/h/ln	0	862	0	1367	0	742	0	1261
Q Serve Time (g_s), s	0.0	0.0	0.0	20.5	0.0	0.0	0.0	2.1
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	23.0	0.0	0.0	0.0	10.4
Perm LT Sat Flow (s_l), veh/h/ln	0	862	0	1367	0	742	0	1261
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	83.9	0.0	26.1	0.0	83.9	0.0	26.1
Perm LT Serve Time (g_u), s	0.0	83.9	0.0	23.6	0.0	83.9	0.0	17.7
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	20.5	0.0	0.0	0.0	2.1
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	663	0	329	0	579	0	246
V/C Ratio (X)	0.00	0.44	0.00	0.73	0.00	0.14	0.00	0.10
Avail Cap (c_a), veh/h	0	663	0	431	0	579	0	340
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.96	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	46.9	0.0	0.0	0.0	44.5
Incr Delay (d2), s/veh	0.0	2.1	0.0	4.3	0.0	0.5	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	2.1	0.0	51.3	0.0	0.5	0.0	44.6
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	7.0	0.0	0.0	0.0	0.7
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.4	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.4	0.0	7.3	0.0	0.1	0.0	0.7
%ile Storage Ratio (RQ%)	0.00	0.10	0.00	1.15	0.00	0.02	0.00	0.08
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	355	0	0	0	282	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1870	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1243	0	0	0	1308	0	0
V/C Ratio (X)	0.00	0.29	0.00	0.00	0.00	0.22	0.00	0.00
Avail Cap (c_a), veh/h	0	1243	0	0	0	1308	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.96	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.6	0.0	0.0	0.0	0.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	351	0	129	0	263	0	40
Grp Sat Flow (s), veh/h/ln	0	1748	0	1585	0	1719	0	1585
Q Serve Time (g_s), s	0.0	0.0	0.0	8.3	0.0	0.0	0.0	2.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	8.3	0.0	0.0	0.0	2.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.39	0.00	1.00	0.00	0.49	0.00	1.00
Lane Grp Cap (c), veh/h	0	1223	0	344	0	1202	0	344
V/C Ratio (X)	0.00	0.29	0.00	0.37	0.00	0.22	0.00	0.12
Avail Cap (c_a), veh/h	0	1223	0	462	0	1202	0	462
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.96	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	40.0	0.0	0.0	0.0	37.7
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.7	0.0	0.4	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.6	0.0	40.7	0.0	0.4	0.0	37.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.3	0.0	0.0	0.0	1.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.1	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	3.3	0.0	0.1	0.0	1.0
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.52	0.00	0.00	0.00	0.11
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	10.4
HCM 7th LOS	B

Notes
User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	283	0	916	288	237
Future Vol, veh/h	0	283	0	916	288	237
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	308	0	996	313	258

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	285	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	711	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	711	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	13.86	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	711	-	-
HCM Lane V/C Ratio	-	0.432	-	-
HCM Ctrl Dly (s/v)	-	13.9	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	2.2	-	-

2029 INFORMATION

Supermarket — Douglas Street & Tudor Road

Lee's Summit, Missouri

Phase 2 - 2029

- AM Peak Calculations
- AM Background Traffic Synchro
- AM Total Traffic Synchro w/ Signal
- PM Peak Calculations
- PM Background Traffic Synchro
- PM Total Traffic Synchro w/ Signal

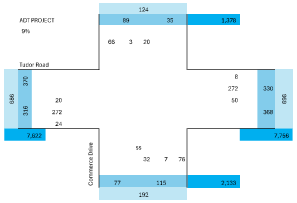
Prepared by:

Traffic Engineering Consultants, Inc.

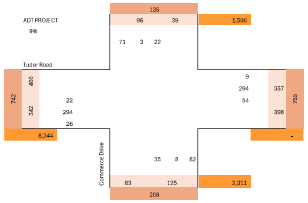
PHASE 2 - AM PEAK HOUR CALCULATIONS

N/S	Commerce Drive			PH 2 SITE TRIP AM PEAK HOUR					PH 1 VOLUME AM PEAK HOUR					TOTAL
E/W	Tudor Road			IN 0 IN 61										
GR	2.0%			OUT 0 OUT 50										
YRS	4													
INT #	50200													
	EXT	GRW	BKGRD	DIR	INV	DIR	INV		DIR	INV	DIR	INV		TOTAL
MVMT	TRFC	x	TRFC	%	OUT	%	OUT	TL	%	OUT	%	OUT	TL	TRAFFIC
EBL	20	1.08	22					0					0	22
EBT	272	1.08	294					0					34	326
EBR	24	1.08	26			60%	61	37					0	63
WBL	50	1.08	54			20%	61	12					0	66
WBT	272	1.08	294					0					24	318
WBR	8	1.08	9					0					0	9
NBL	32	1.08	35			20%	50	10					0	45
NBT	7	1.08	8					0					0	8
NBR	76	1.08	82			60%	50	30					0	112
SBL	20	1.08	22					0					0	22
SBT	3	1.08	3					0					0	3
SBR	66	1.08	71					0					0	71

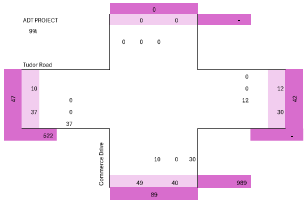
EXISTING TRAFFIC



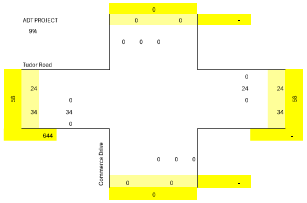
BACKGROUND TRAFFIC



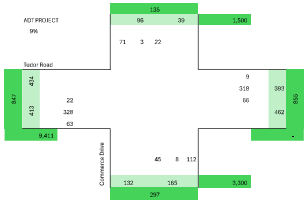
SITE TRAFFIC



PASS BY TRAFFIC

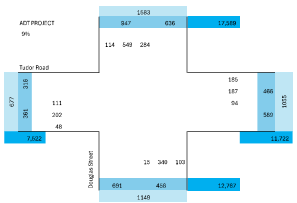


TOTAL TRAFFIC

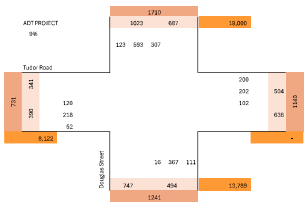


N/S	Douglas Street			PH 2 SITE TRIP AM PEAK HOUR					PHASE 1 VOLUME AM PEAK HOUR					TOTAL
E/W	Tudor Road			IN 0 IN 61										
GR	2.0%			OUT 0 OUT 50										
YRS	4													
INT #	60200													
	EXT	GRW	BKGRD	DIR	INV	DIR	INV		DIR	INV	DIR	INV		TOTAL
MVMT	TRFC	x	TRFC	%	OUT	%	OUT	TL	%	OUT	%	OUT	TL	TRAFFIC
EBL	111	1.08	120			20%	50	10					0	130
EBT	202	1.08	218			20%	50	10					0	228
EBR	48	1.08	52			20%	50	10					34	96
WBL	94	1.08	102	20%	0			0					22	124
WBT	187	1.08	202			20%	61	12					0	214
WBR	185	1.08	200					0					0	200
NBL	15	1.08	16			20%	61	12					24	52
NBT	340	1.08	367	30%	0			0					32	399
NBR	103	1.08	111	20%	0			0					16	127
SBL	284	1.08	307					0					0	307
SBT	549	1.08	593	30%	0			0					45	638
SBR	114	1.08	123			20%	61	12					0	135

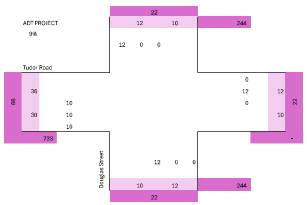
EXISTING TRAFFIC



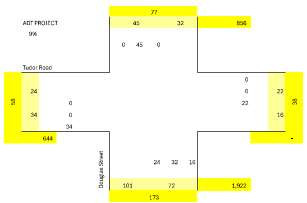
BACKGROUND TRAFFIC



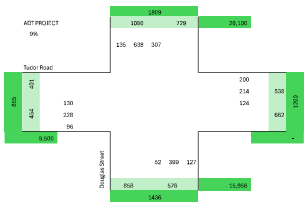
SITE TRAFFIC



PASS BY TRAFFIC

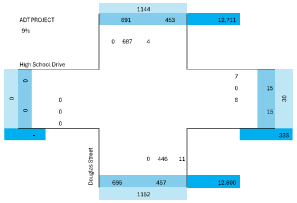


TOTAL TRAFFIC

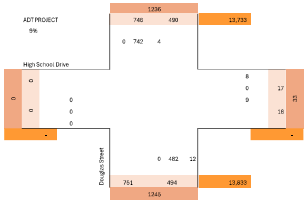


N/S	Douglas Street			PH 2 SITE TRIP AM PEAK HOUR					PHASE 1 VOLUME AM PEAK HOUR					TOTAL
E/W	High School Drive			IN 0 IN 61										
GR	2.0%			OUT 0 OUT 50										
YRS	4													
INT #	70100													
	EXT	GRW	BKGRD	DIR	INV	DIR	INV		DIR	INV	DIR	INV		TOTAL
MVMT	TRFC	x	TRFC	%	OUT	%	OUT	TL	%	OUT	%	OUT	TL	TRAFFIC
EBL	0	1.08	0	50%	0			0					80	80
EBT	0	1.08	0					0					0	0
EBR	0	1.08	0					0					45	45
WBL	8	1.08	9					0					0	9
WBT	0	1.08	0					0					0	0
WBR	7	1.08	8					0					0	8
NBL	0	1.08	0	50%	0			0					130	130
NBT	446	1.08	482			20%	61	12					-7	487
NBR	11	1.08	12					0					0	12
SBL	4	1.08	4					0					0	4
SBT	687	1.08	742	50%	0	20%	50	10					46	796
SBR		1.08	0					0					55	55

EXISTING TRAFFIC

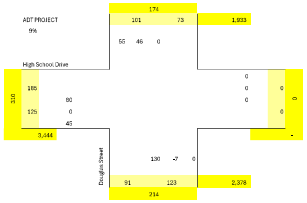


BACKGROUND TRAFFIC

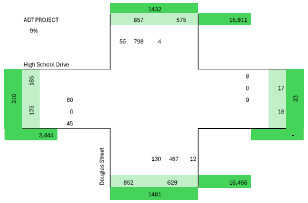


SITE TRAFFIC

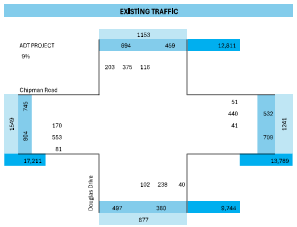
PASS BY TRAFFIC

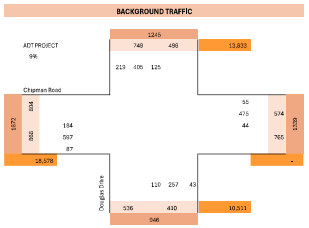


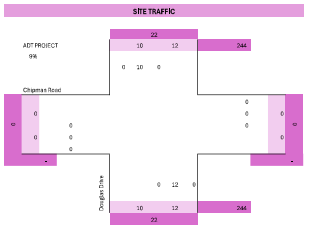
TOTAL TRAFFIC

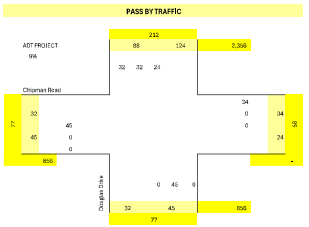


N/S	Douglas Drive			PH 2 SITE TRIP AM PEAK HOUR						PHASE 1 VOLUME AM PEAK HOUR				TOTAL
E/W	Chipman Road			IN 0 IN 61										
GR	2.0%			OUT 0 OUT 50										
YRS	4													
INT #	80200													
	EXT	GRW	BKGRD	DIR	INV	DIR	INV			DIR	INV	DIR	INV	TOTAL
MVMT	TRFC	x	TRFC	%	OUT	%	OUT	TL		%	OUT	%	OUT	TL	TRAFFIC
EBL	170	1.08	184	15%	0			0					45	229
EBT	553	1.08	597					0					0	597
EBR	81	1.08	87					0					0	87
WBL	41	1.08	44					0					0	44
WBT	440	1.08	475					0					0	475
WBR	51	1.08	55	15%	0			0					34	89
NBL	102	1.08	110					0					0	110
NBT	238	1.08	257	20%	0	20%	61	12					45	314
NBR	40	1.08	43					0					0	43
SBL	116	1.08	125	15%	0			0					24	149
SBT	375	1.08	405	20%	0	30%	50	10					32	447
SBR	203	1.08	219	15%	0			0					32	251

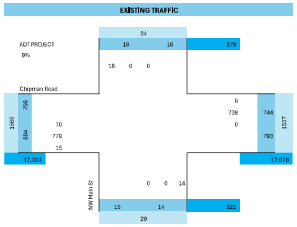


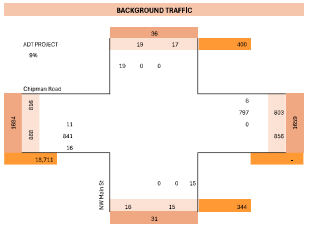


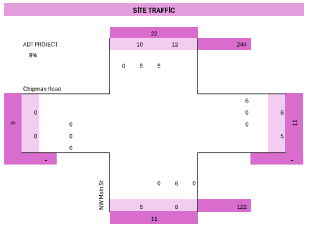


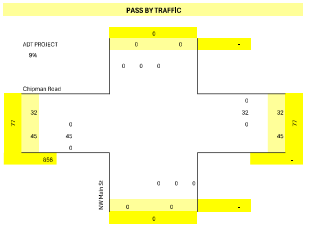


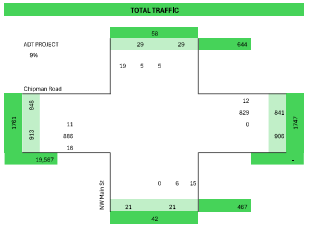
N/S	NW Main St			PH 2 SITE TRIP AM PEAK HOUR						PHASE 1 VOLUME AM PEAK HOUR				TOTAL
E/W	Chipman Road			IN 0 IN 61										
GR	2.0%			OUT 0 OUT 50										
YRS	4													
INT #	90200													
	EXT	GRW	BKGRD	DIR	INV	DIR	INV			DIR	INV	DIR	INV	TOTAL
MVMT	TRFC	x	TRFC	%	OUT	%	OUT	TL		%	OUT	%	OUT	TL	TRAFFIC
LBL	10	1.08	11					0					0	11
LBT	779	1.08	841	15%	0			0					45	886
LBR	15	1.08	16					0					0	16
WBL		1.08	0					0					0	0
WBT	738	1.08	797	15%	0			0					32	829
WBR	6	1.08	6			10%	61	6					0	12
NBL		1.08	0					0					0	0
NBT		1.08	0			10%	61	6					0	6
NBR	14	1.08	15					0					0	15
SBL		1.08	0			10%	50	5					0	5
SBT		1.08	0			10%	50	5					0	5
SBR	18	1.08	19					0					0	19



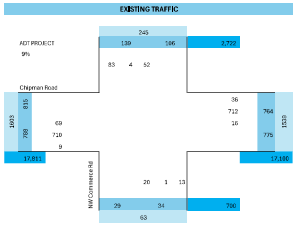


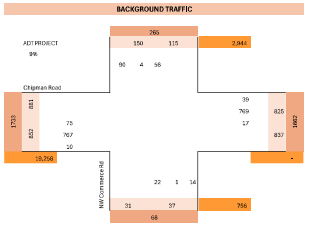


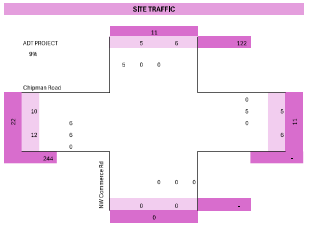


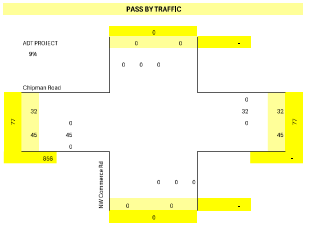


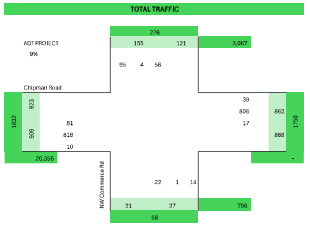
N/S	NW Commerce Rd			PH 2 SITE TRIP AM PEAK HOUR						PHASE 1 VOLUME AM PEAK HOUR				TOTAL
E/W	Chipman Road			IN 0 IN 61										
GR	2.0%			OUT 0 OUT 50										
YRS	4													
INT #	100200													
	EXT	GRW	BKGRD	DIR	INV	DIR	INV			DIR	INV	DIR	INV	TOTAL
MVMT	TRFC	x	TRFC	%	OUT	%	OUT	TL		%	OUT	%	OUT	TL	TRAFFIC
EBL	69	1.08	75			10%	61	6					0	81
EBT	710	1.08	767	15%	0	10%	61	6					45	818
EBR	9	1.08	10					0					0	10
WBL	16	1.08	17					0					0	17
WBT	712	1.08	769	15%	0	10%	50	5					32	806
WBR	36	1.08	39					0					0	39
NBL	20	1.08	22					0					0	22
NBT	1	1.08	1					0					0	1
NBR	13	1.08	14					0					0	14
SBL	52	1.08	56					0					0	56
SBT	4	1.08	4					0					0	4
SBR	83	1.08	90			10%	50	5					0	95



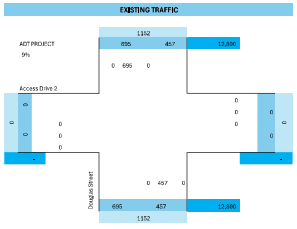


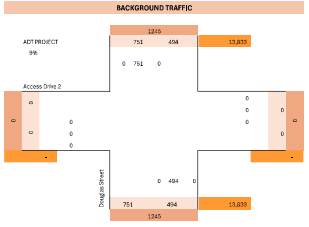


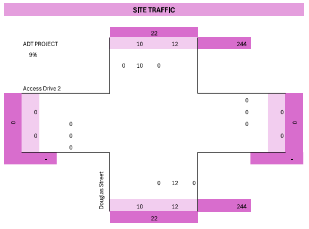


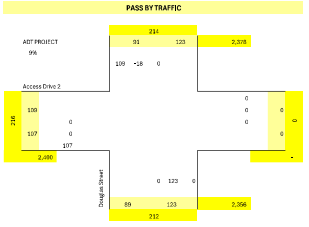


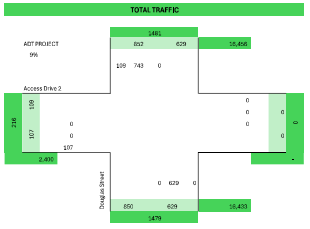
N/S	Douglas Street			PH 2 SITE TRIP AM PEAK HOUR						PHASE 1 VOLUME AM PEAK HOUR				TOTAL
E/W	Access Drive 2			IN 0 IN 61										
GR	2.0%			OUT 0 OUT 50										
YRS	4													
INT #	10200													
	EXT	GRW	BKGRD	DIR	INV	DIR	INV			DIR	INV	DIR	INV	TOTAL
MVMT	TRFC	x	TRFC	%	OUT	%	OUT	TL		%	OUT	%	OUT	TL	TRAFFIC
EBL		1.08	0					0					0	0
EBT		1.08	0					0					0	0
EBR		1.08	0	50%	0			0					107	107
WBL		1.08	0					0					0	0
WBT		1.08	0					0					0	0
WBR		1.08	0					0					0	0
NBL		1.08	0					0					0	0
NBT	457	1.08	494			20%	61	12					123	629
NBR		1.08	0					0					0	0
SBL		1.08	0					0					0	0
SBT	695	1.08	751			20%	50	10					-18	743
SBR		1.08	0	50%	0			0					109	109











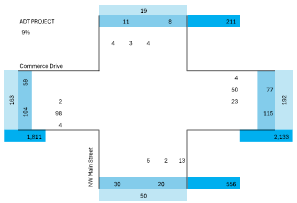
N/S	NW Main Street
E/W	Commerce Drive
GR	2.0%
YRS	4
INT #	110200

PH 2 SITE TRIP AM PEAK HOUR						
IN	0	IN	61			
OUT	0	OUT	50			
DIR %	INV OUT	DIR %	INV OUT	TL		
				0		
				0		
				0		
		10%	61	6		
				0		
				0		
				0		
		10%	61	6		
				0		
				0		
		10%	50	5		
		10%	50	5		

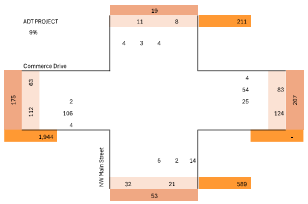
PHASE 1 VOLUME AM PEAK HOUR					
DIR %	INV OUT	DIR %	INV OUT	TL	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	

MVMT	EXT TRFC	GRW x	BKGRD TRFC	TOTAL TRAFFIC
EBL	2	1.08	2	2
EBT	98	1.08	106	106
EBR	4	1.08	4	4
WBL	23	1.08	25	31
WBT	50	1.08	54	54
WBR	4	1.08	4	4
NBL	5	1.08	5	5
NBT	2	1.08	2	8
NBR	13	1.08	14	14
SBL	4	1.08	4	4
SBT	3	1.08	3	8
SBR	4	1.08	4	9

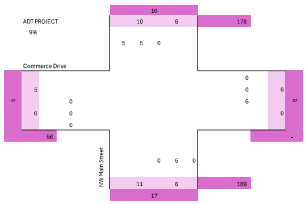
EXISTING TRAFFIC



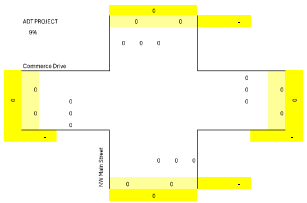
BACKGROUND TRAFFIC



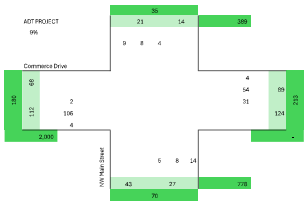
SITE TRAFFIC



PASS BY TRAFFIC



TOTAL TRAFFIC



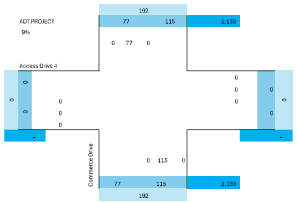
N/S	Commerce Drive
E/W	Access Drive 4
GR	2.0%
YRS	4
INT #	302120

PH 2 SITE TRIP AM PEAK HOUR						
IN	0	IN	61			
OUT	0	OUT	50			
DIR %	INV OUT	DIR %	INV OUT	TL		
		80%	50	40		
				0		
				0		
				0		
				0		
				0		
				0		
				0		
				0		
				0		
				0		
				0		
		80%	61	49		

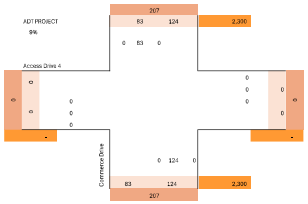
PHASE 1 VOLUME AM PEAK HOUR					
DIR %	INV OUT	DIR %	INV OUT	TL	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	

MVMT	EXT TRFC	GRW x	BKGRD TRFC	TOTAL TRAFFIC
LBL		1.08	0	40
LBT		1.08	0	0
EBR		1.08	0	0
WBL		1.08	0	0
WBT		1.08	0	0
WBR		1.08	0	0
NBL		1.08	0	0
NBT	115	1.08	124	124
NBR		1.08	0	0
SBL		1.08	0	0
SBT	77	1.08	83	83
SBR		1.08	0	49

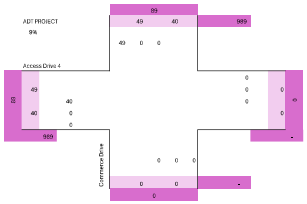
EXISTING TRAFFIC



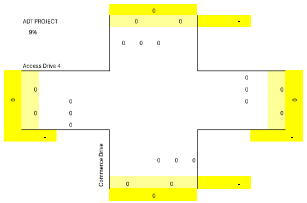
BACKGROUND TRAFFIC



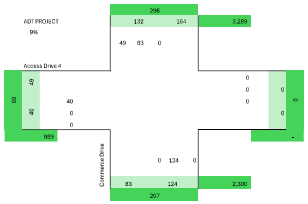
SITE TRAFFIC



PASS BY TRAFFIC



TOTAL TRAFFIC



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	184	597	87	44	475	55	110	257	43	125	405	219
Future Volume (veh/h)	184	597	87	44	475	55	110	257	43	125	405	219
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	200	649	95	48	516	60	120	279	47	136	440	238
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	227	1110	162	62	940	419	296	1194	199	496	721	611
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Prop Arrive On Green	0.25	0.71	0.71	0.03	0.26	0.26	0.06	0.39	0.39	0.03	0.26	0.26
Unsig. Movement Delay												
Ln Grp Delay, s/veh	61.5	16.7	16.7	75.8	40.3	34.5	24.0	25.2	25.3	21.5	40.4	34.7
Ln Grp LOS	E	B	B	E	D	C	C	C	C	C	D	C
Approach Vol, veh/h		944			624			446			814	
Approach Delay, s/veh		26.2			42.4			24.9			35.6	
Approach LOS		C			D			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	4.0	2.0	4.0	1.1	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	11.0	52.0	9.2	47.8	11.7	51.3	20.3	36.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green (Gmax), s	6.0	47.0	9.0	38.0	7.0	46.0	22.0	25.0
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.3	3.8	4.8	3.8	5.1
Max Q Clear (g_c+I1), s	7.5	9.5	5.2	14.3	6.8	26.9	15.0	17.0
Green Ext Time (g_e), s	0.0	2.1	0.0	5.0	0.0	3.5	0.3	2.3
Prob of Phs Call (p_c)	0.99	1.00	0.80	1.00	0.98	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	0.08	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3049		3111		1870		3554

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		507		455		1585		1585

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0

Lane Assignment	L (Pr/Pm)		L (Prot)		L (Pr/Pm)		L (Prot)	
Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	136	0	48	0	120	0	200	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	5.5	0.0	3.2	0.0	4.8	0.0	13.0	0.0
Cycle Q Clear Time (g_c), s	5.5	0.0	3.2	0.0	4.8	0.0	13.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1054	0	0	0	762	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	46.3	0.0	0.0	0.0	46.3	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	39.5	0.0	0.0	0.0	21.4	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	1.0	0.0	0.0	0.0	4.6	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	496	0	62	0	296	0	227	0
V/C Ratio (X)	0.27	0.00	0.77	0.00	0.41	0.00	0.88	0.00
Avail Cap (c_a), veh/h	496	0	134	0	300	0	327	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	21.3	0.0	57.4	0.0	23.1	0.0	43.9	0.0
Incr Delay (d2), s/veh	0.3	0.0	18.3	0.0	0.9	0.0	17.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	21.5	0.0	75.8	0.0	24.0	0.0	61.5	0.0
1st-Term Q (Q1), veh/ln	2.4	0.0	1.4	0.0	2.0	0.0	5.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.3	0.0	0.1	0.0	1.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	2.4	0.0	1.8	0.0	2.1	0.0	6.1	0.0
%ile Storage Ratio (RQ%)	0.06	0.00	0.22	0.00	0.16	0.00	0.45	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	2
Grp Vol (v), veh/h	0	161	0	370	0	440	0	516
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1870	0	1777
Q Serve Time (g_s), s	0.0	7.3	0.0	12.3	0.0	24.9	0.0	15.0
Cycle Q Clear Time (g_c), s	0.0	7.3	0.0	12.3	0.0	24.9	0.0	15.0
Lane Grp Cap (c), veh/h	0	696	0	634	0	721	0	940
V/C Ratio (X)	0.00	0.23	0.00	0.58	0.00	0.61	0.00	0.55
Avail Cap (c_a), veh/h	0	696	0	634	0	721	0	940
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.4	0.0	12.8	0.0	36.5	0.0	38.0
Incr Delay (d2), s/veh	0.0	0.8	0.0	3.9	0.0	3.8	0.0	2.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.2	0.0	16.7	0.0	40.4	0.0	40.3
1st-Term Q (Q1), veh/ln	0.0	3.1	0.0	3.4	0.0	11.9	0.0	6.5

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.7	0.0	0.8	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.2	0.0	4.1	0.0	12.7	0.0	6.8
%ile Storage Ratio (RQ%)	0.00	0.24	0.00	0.22	0.00	0.30	0.00	0.10
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	165	0	374	0	238	0	60
Grp Sat Flow (s), veh/h/ln	0	1779	0	1789	0	1585	0	1585
Q Serve Time (g_s), s	0.0	7.5	0.0	12.3	0.0	14.9	0.0	3.5
Cycle Q Clear Time (g_c), s	0.0	7.5	0.0	12.3	0.0	14.9	0.0	3.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.29	0.00	0.25	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	697	0	638	0	611	0	419
V/C Ratio (X)	0.00	0.24	0.00	0.59	0.00	0.39	0.00	0.14
Avail Cap (c_a), veh/h	0	697	0	638	0	611	0	419
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.5	0.0	12.8	0.0	32.8	0.0	33.7
Incr Delay (d2), s/veh	0.0	0.8	0.0	3.9	0.0	1.9	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.3	0.0	16.7	0.0	34.7	0.0	34.5
1st-Term Q (Q1), veh/ln	0.0	3.2	0.0	3.4	0.0	6.0	0.0	1.3
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.7	0.0	0.3	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.3	0.0	4.1	0.0	6.3	0.0	1.4
%ile Storage Ratio (RQ%)	0.00	0.25	0.00	0.22	0.00	0.89	0.00	0.18
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	32.3
HCM 7th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	218	52	102	202	200	16	367	111	307	593	123
Future Volume (veh/h)	120	218	52	102	202	200	16	367	111	307	593	123
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	130	237	57	111	220	217	17	399	121	334	645	134
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	225	615	274	302	289	258	423	1776	792	698	1736	360
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.17	0.17	0.07	0.16	0.16	0.04	1.00	1.00	0.11	0.59	0.59
Unsig. Movement Delay												
Ln Grp Delay, s/veh	41.0	44.4	42.9	38.9	54.4	62.4	13.9	0.3	0.4	10.8	13.8	13.8
Ln Grp LOS	D	D	D	D	D	E	B	A	A	B	B	B
Approach Vol, veh/h		424			548			537			1113	
Approach Delay, s/veh		43.1			54.5			0.8			12.9	
Approach LOS		D			D			A			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	3.0	1.1	4.0	1.1	4.0
Phs Duration (G+Y+Rc), s	17.8	64.5	12.5	25.3	6.7	75.6	13.7	24.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green (Gmax), s	31.5	29.5	10.5	30.5	6.5	54.5	15.5	25.5
Max Allow Headway (MAH), s	3.8	5.0	3.8	5.0	3.8	5.3	3.8	5.4
Max Q Clear (g_c+I1), s	12.3	2.0	8.1	9.1	2.6	15.8	9.2	17.9
Green Ext Time (g_e), s	1.0	3.2	0.1	1.6	0.0	5.8	0.2	1.6
Prob of Phs Call (p_c)	1.00	1.00	0.98	1.00	0.43	1.00	0.99	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00	0.78	0.00	0.09	0.55

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		3554		2930		1777

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1585		608		1585

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0

Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	
Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	334	0	111	0	17	0	130	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	10.3	0.0	6.1	0.0	0.6	0.0	7.2	0.0
Cycle Q Clear Time (g_c), s	10.3	0.0	6.1	0.0	0.6	0.0	7.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	882	0	1085	0	693	0	952	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	62.0	0.0	19.5	0.0	60.0	0.0	19.5	0.0
Perm LT Serve Time (g_u), s	60.0	0.0	13.7	0.0	57.3	0.0	3.6	0.0
Perm LT Q Serve Time (g_ps), s	1.2	0.0	0.7	0.0	0.1	0.0	2.5	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	698	0	302	0	423	0	225	0
V/C Ratio (X)	0.48	0.00	0.37	0.00	0.04	0.00	0.58	0.00
Avail Cap (c_a), veh/h	968	0	339	0	487	0	319	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	10.3	0.0	38.2	0.0	13.9	0.0	38.7	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.7	0.0	0.0	0.0	2.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	10.8	0.0	38.9	0.0	13.9	0.0	41.0	0.0
1st-Term Q (Q1), veh/ln	3.9	0.0	2.7	0.0	0.2	0.0	3.1	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	4.0	0.0	2.8	0.0	0.2	0.0	3.3	0.0
%ile Storage Ratio (RQ%)	0.29	0.00	0.47	0.00	0.04	0.00	0.51	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	1	0	1
Grp Vol (v), veh/h	0	399	0	237	0	391	0	220
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	0.0	0.0	7.1	0.0	13.8	0.0	14.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	7.1	0.0	13.8	0.0	14.2
Lane Grp Cap (c), veh/h	0	1776	0	615	0	1053	0	289
V/C Ratio (X)	0.00	0.22	0.00	0.39	0.00	0.37	0.00	0.76
Avail Cap (c_a), veh/h	0	1776	0	903	0	1053	0	378
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	44.0	0.0	12.8	0.0	48.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.4	0.0	1.0	0.0	6.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.3	0.0	44.4	0.0	13.8	0.0	54.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.1	0.0	5.4	0.0	6.3

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	3.2	0.0	5.7	0.0	6.8
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.08	0.00	0.21	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	121	0	57	0	388	0	217
Grp Sat Flow (s), veh/h/ln	0	1585	0	1585	0	1761	0	1585
Q Serve Time (g_s), s	0.0	0.0	0.0	3.7	0.0	13.8	0.0	15.9
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	3.7	0.0	13.8	0.0	15.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.35	0.00	1.00
Lane Grp Cap (c), veh/h	0	792	0	274	0	1043	0	258
V/C Ratio (X)	0.00	0.15	0.00	0.21	0.00	0.37	0.00	0.84
Avail Cap (c_a), veh/h	0	792	0	403	0	1043	0	337
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	42.6	0.0	12.8	0.0	48.7
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.4	0.0	1.0	0.0	13.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.4	0.0	42.9	0.0	13.8	0.0	62.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.5	0.0	5.3	0.0	6.3
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.3	0.0	1.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	1.5	0.0	5.6	0.0	7.3
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.27	0.00	0.21	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	24.0
HCM 7th LOS	C

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	294	26	54	294	9	35	8	82	22	3	71
Future Vol, veh/h	22	294	26	54	294	9	35	8	82	22	3	71
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	190	-	-	120	-	150	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	24	320	28	59	320	10	38	9	89	24	3	77

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	329	0	0	348	0	0	660	828	174	649	833	160
Stage 1	-	-	-	-	-	-	382	382	-	437	437	-
Stage 2	-	-	-	-	-	-	279	447	-	212	396	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1227	-	-	1208	-	-	348	305	839	355	303	857
Stage 1	-	-	-	-	-	-	613	611	-	568	578	-
Stage 2	-	-	-	-	-	-	704	572	-	770	603	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1227	-	-	1208	-	-	292	284	839	287	283	857
Mov Cap-2 Maneuver	-	-	-	-	-	-	292	284	-	287	283	-
Stage 1	-	-	-	-	-	-	601	599	-	541	550	-
Stage 2	-	-	-	-	-	-	606	544	-	665	591	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.51	1.23	14.63	12.81
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	509	1227	-	-	1208	-	-	565
HCM Lane V/C Ratio	0.267	0.019	-	-	0.049	-	-	0.185
HCM Ctrl Dly (s/v)	14.6	8	-	-	8.1	-	-	12.8
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	1.1	0.1	-	-	0.2	-	-	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	767	10	17	769	39	22	1	14	56	4	90
Future Volume (veh/h)	75	767	10	17	769	39	22	1	14	56	4	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	82	834	11	18	836	42	24	1	15	61	4	98
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	105	2102	28	33	1877	94	263	21	142	181	28	253
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.59	0.59	0.04	1.00	1.00	0.28	0.28	0.28	0.28	0.28	0.28
Unsig. Movement Delay												
Ln Grp Delay, s/veh	67.5	14.6	14.5	70.0	1.5	1.4	32.7	0.0	0.0	37.2	0.0	0.0
Ln Grp LOS	E	B	B	E	A	A	C			D		
Approach Vol, veh/h		927			896			40			163	
Approach Delay, s/veh		19.2			2.8			32.7			37.2	
Approach LOS		B			A			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		8.0	2.0	4.0		8.0	2.0	4.0
Phs Duration (G+Y+Rc), s		38.0	6.8	75.2		38.0	11.6	70.4
Change Period (Y+Rc), s		5.0	4.5	5.0		5.0	4.5	5.0
Max Green (Gmax), s		33.0	9.5	63.0		33.0	18.5	54.0
Max Allow Headway (MAH), s		5.5	3.8	5.2		5.5	3.8	5.3
Max Q Clear (g_c+I1), s		4.3	3.2	17.1		12.1	7.4	2.0
Green Ext Time (g_e), s		0.2	0.0	6.4		0.9	0.1	6.9
Prob of Phs Call (p_c)		1.00	0.45	1.00		1.00	0.93	1.00
Prob of Max Out (p_x)		0.00	0.01	0.00		0.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		783	1781			509	1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		77		3591		102		3443

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		516		47		921		173

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0

Lane Assignment		L+T+R	L (Prot)			L+T+R	L (Prot)	
Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	40	18	0	0	163	82	0
Grp Sat Flow (s), veh/h/ln	0	1376	1781	0	0	1532	1781	0
Q Serve Time (g_s), s	0.0	0.0	1.2	0.0	0.0	6.7	5.4	0.0
Cycle Q Clear Time (g_c), s	0.0	2.3	1.2	0.0	0.0	10.1	5.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1313	0	0	0	1419	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1256	0	0	0	1836	0	0
Perm LT Eff Green (g_p), s	0.0	33.0	0.0	0.0	0.0	33.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	22.9	0.0	0.0	0.0	30.7	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	6.7	0.0	0.0
Time to First Blk (g_f), s	0.0	1.3	0.0	0.0	0.0	3.3	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	1.3	0.0	0.0	0.0	3.3	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.60	1.00	0.00	0.00	0.37	1.00	0.00
Lane Grp Cap (c), veh/h	0	427	33	0	0	463	105	0
V/C Ratio (X)	0.00	0.09	0.54	0.00	0.00	0.35	0.78	0.00
Avail Cap (c_a), veh/h	0	427	141	0	0	463	275	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	32.3	57.2	0.0	0.0	35.1	55.7	0.0
Incr Delay (d2), s/veh	0.0	0.4	12.7	0.0	0.0	2.1	11.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.7	70.0	0.0	0.0	37.2	67.5	0.0
1st-Term Q (Q1), veh/ln	0.0	0.9	0.5	0.0	0.0	3.9	2.4	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.1	0.0	0.0	0.3	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.9	0.6	0.0	0.0	4.1	2.8	0.0
%ile Storage Ratio (RQ%)	0.00	0.11	0.18	0.00	0.00	0.45	0.79	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	413	0	0	0	431
Grp Sat Flow (s), veh/h/ln	0	0	0	1777	0	0	0	1777
Q Serve Time (g_s), s	0.0	0.0	0.0	15.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	15.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	1040	0	0	0	969
V/C Ratio (X)	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.45
Avail Cap (c_a), veh/h	0	0	0	1040	0	0	0	969
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	13.4	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.1	0.0	0.0	0.0	1.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	14.6	0.0	0.0	0.0	1.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.9	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	6.2	0.0	0.0	0.0	0.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment				T+R				T+R
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	432	0	0	0	447
Grp Sat Flow (s), veh/h/ln	0	0	0	1862	0	0	0	1839
Q Serve Time (g_s), s	0.0	0.0	0.0	15.1	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	15.1	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.37	0.00	0.03	0.00	0.60	0.00	0.09
Lane Grp Cap (c), veh/h	0	0	0	1090	0	0	0	1003
V/C Ratio (X)	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.45
Avail Cap (c_a), veh/h	0	0	0	1090	0	0	0	1003
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	13.4	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.1	0.0	0.0	0.0	1.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	14.5	0.0	0.0	0.0	1.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.2	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	6.5	0.0	0.0	0.0	0.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	13.7
HCM 7th LOS	B

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	11	841	797	6	0	19
Future Vol, veh/h	11	841	797	6	0	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	-	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	12	914	866	7	0	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	873	0	-	0	-	436
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	-	-	3.32
Pot Cap-1 Maneuver	769	-	-	-	0	568
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	769	-	-	-	-	568
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.13	0	11.58
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	769	-	-	-	568
HCM Lane V/C Ratio	0.016	-	-	-	0.036
HCM Ctrl Dly (s/v)	9.8	-	-	-	11.6
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	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	2	106	4	25	54	4	5	2	14	4	3	4
Future Vol, veh/h	2	106	4	25	54	4	5	2	14	4	3	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	115	4	27	59	4	5	2	15	4	3	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	63	0	0	120	0	0	236	239	117	236	239	61
Stage 1	-	-	-	-	-	-	122	122	-	115	115	-
Stage 2	-	-	-	-	-	-	115	117	-	121	124	-
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	1540	-	-	1468	-	-	718	662	935	719	662	1004
Stage 1	-	-	-	-	-	-	882	795	-	890	800	-
Stage 2	-	-	-	-	-	-	890	798	-	884	793	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1540	-	-	1468	-	-	697	648	935	690	648	1004
Mov Cap-2 Maneuver	-	-	-	-	-	-	697	648	-	690	648	-
Stage 1	-	-	-	-	-	-	881	794	-	872	785	-
Stage 2	-	-	-	-	-	-	866	783	-	866	792	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.13	2.26	9.45	9.79
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	832	32	-	-	535	-	-	764
HCM Lane V/C Ratio	0.027	0.001	-	-	0.019	-	-	0.016
HCM Ctrl Dly (s/v)	9.4	7.3	0	-	7.5	0	-	9.8
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	9	8	482	12	4	742
Future Vol, veh/h	9	8	482	12	4	742
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	9	524	13	4	807

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	942	268	0	0	537	0
Stage 1	530	-	-	-	-	-
Stage 2	412	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	261	730	-	-	1027	-
Stage 1	554	-	-	-	-	-
Stage 2	637	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	260	730	-	-	1027	-
Mov Cap-2 Maneuver	260	-	-	-	-	-
Stage 1	554	-	-	-	-	-
Stage 2	633	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	15.16	0	0.09
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	373	19	-
HCM Lane V/C Ratio	-	-	0.05	0.004	-
HCM Ctrl Dly (s/v)	-	-	15.2	8.5	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	233	597	87	44	475	92	110	319	43	151	450	254
Future Volume (veh/h)	233	597	87	44	475	92	110	319	43	151	450	254
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	253	649	95	48	516	100	120	347	47	164	489	276
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	279	1188	174	62	925	413	268	1154	155	434	671	569
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Prop Arrive On Green	0.31	0.76	0.76	0.03	0.26	0.26	0.06	0.37	0.37	0.07	0.48	0.48
Unsig. Movement Delay												
Ln Grp Delay, s/veh	61.6	13.1	13.1	75.5	40.8	36.4	26.2	28.2	28.3	24.8	33.5	26.8
Ln Grp LOS	E	B	B	E	D	D	C	C	C	C	C	C
Approach Vol, veh/h		997			664			514			929	
Approach Delay, s/veh		25.4			42.7			27.8			29.9	
Approach LOS		C			D			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	4.0	2.0	4.0	1.1	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	11.0	49.0	9.2	50.8	11.9	48.1	23.8	36.2
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green (Gmax), s	6.0	44.0	12.0	38.0	7.0	43.0	25.0	25.0
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.3	3.8	4.8	3.8	5.1
Max Q Clear (g_c+I1), s	8.0	11.5	5.2	12.2	7.1	27.1	18.4	17.1
Green Ext Time (g_e), s	0.0	2.5	0.0	5.1	0.0	3.8	0.4	2.3
Prob of Phs Call (p_c)	1.00	1.00	0.80	1.00	0.98	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.02	0.00	1.00	0.00	0.14	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3148		3111		1870		3554

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		423		455		1585		1585

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0

Lane Assignment	L (Pr/Pm)		L (Prot)		L (Pr/Pm)		L (Prot)	
Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	164	0	48	0	120	0	253	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	6.0	0.0	3.2	0.0	5.1	0.0	16.4	0.0
Cycle Q Clear Time (g_c), s	6.0	0.0	3.2	0.0	5.1	0.0	16.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	990	0	0	0	702	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	43.1	0.0	0.0	0.0	43.1	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	34.5	0.0	0.0	0.0	17.9	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	4.1	0.0	0.0	0.0	5.2	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	434	0	62	0	268	0	279	0
V/C Ratio (X)	0.38	0.00	0.77	0.00	0.45	0.00	0.91	0.00
Avail Cap (c_a), veh/h	434	0	178	0	269	0	371	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	24.2	0.0	57.4	0.0	25.1	0.0	40.4	0.0
Incr Delay (d2), s/veh	0.5	0.0	18.1	0.0	1.2	0.0	21.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	24.8	0.0	75.5	0.0	26.2	0.0	61.6	0.0
1st-Term Q (Q1), veh/ln	0.6	0.0	1.4	0.0	2.1	0.0	6.1	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.3	0.0	0.1	0.0	1.6	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.6	0.0	1.8	0.0	2.2	0.0	7.7	0.0
%ile Storage Ratio (RQ%)	0.03	0.00	0.22	0.00	0.17	0.00	0.57	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	2
Grp Vol (v), veh/h	0	195	0	370	0	489	0	516
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1870	0	1777
Q Serve Time (g_s), s	0.0	9.3	0.0	10.1	0.0	25.1	0.0	15.1
Cycle Q Clear Time (g_c), s	0.0	9.3	0.0	10.1	0.0	25.1	0.0	15.1
Lane Grp Cap (c), veh/h	0	652	0	678	0	671	0	925
V/C Ratio (X)	0.00	0.30	0.00	0.55	0.00	0.73	0.00	0.56
Avail Cap (c_a), veh/h	0	652	0	678	0	671	0	925
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	27.0	0.0	10.0	0.0	26.7	0.0	38.4
Incr Delay (d2), s/veh	0.0	1.2	0.0	3.1	0.0	6.8	0.0	2.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.2	0.0	13.1	0.0	33.5	0.0	40.8
1st-Term Q (Q1), veh/ln	0.0	4.0	0.0	2.7	0.0	10.2	0.0	6.6

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.6	0.0	1.3	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.2	0.0	3.3	0.0	11.5	0.0	6.9
%ile Storage Ratio (RQ%)	0.00	0.31	0.00	0.18	0.00	0.47	0.00	0.10
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	199	0	374	0	276	0	100
Grp Sat Flow (s), veh/h/ln	0	1794	0	1789	0	1585	0	1585
Q Serve Time (g_s), s	0.0	9.5	0.0	10.2	0.0	14.2	0.0	6.0
Cycle Q Clear Time (g_c), s	0.0	9.5	0.0	10.2	0.0	14.2	0.0	6.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.24	0.00	0.25	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	658	0	683	0	569	0	413
V/C Ratio (X)	0.00	0.30	0.00	0.55	0.00	0.49	0.00	0.24
Avail Cap (c_a), veh/h	0	658	0	683	0	569	0	413
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	27.1	0.0	10.0	0.0	23.8	0.0	35.0
Incr Delay (d2), s/veh	0.0	1.2	0.0	3.1	0.0	2.9	0.0	1.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.3	0.0	13.1	0.0	26.8	0.0	36.4
1st-Term Q (Q1), veh/ln	0.0	4.1	0.0	2.8	0.0	4.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.6	0.0	0.5	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.3	0.0	3.3	0.0	5.3	0.0	0.2
%ile Storage Ratio (RQ%)	0.00	0.32	0.00	0.18	0.00	0.75	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	30.9
HCM 7th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	228	98	128	214	200	54	402	129	307	644	135
Future Volume (veh/h)	130	228	98	128	214	200	54	402	129	307	644	135
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	141	248	107	139	233	217	59	437	140	334	700	147
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	235	587	262	308	290	259	405	1751	781	670	1663	349
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.17	0.17	0.08	0.16	0.16	0.07	0.99	0.99	0.11	0.57	0.57
Unsig. Movement Delay												
Ln Grp Delay, s/veh	40.8	45.4	45.9	38.5	57.4	62.2	13.7	0.8	0.9	11.2	16.0	16.0
Ln Grp LOS	D	D	D	D	E	E	B	A	A	B	B	B
Approach Vol, veh/h		496			589			636			1181	
Approach Delay, s/veh		44.2			54.7			2.0			14.6	
Approach LOS		D			D			A			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	3.0	1.1	4.0	1.1	4.0
Phs Duration (G+Y+Rc), s	17.9	63.6	14.1	24.3	8.8	72.8	14.4	24.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green (Gmax), s	31.5	29.5	10.5	30.5	6.5	54.5	15.5	25.5
Max Allow Headway (MAH), s	3.8	5.0	3.8	4.9	3.8	5.3	3.8	5.4
Max Q Clear (g_c+I1), s	12.5	2.3	9.7	9.5	3.9	18.3	9.8	17.9
Green Ext Time (g_e), s	1.0	3.6	0.0	1.9	0.0	6.4	0.2	1.6
Prob of Phs Call (p_c)	1.00	1.00	0.99	1.00	0.86	1.00	0.99	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00	1.00	0.00	0.17	0.56

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		3554		2923		1779

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1585		614		1584

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0

Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	
Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	334	0	139	0	59	0	141	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	10.5	0.0	7.7	0.0	1.9	0.0	7.8	0.0
Cycle Q Clear Time (g_c), s	10.5	0.0	7.7	0.0	1.9	0.0	7.8	0.0
Perm LT Sat Flow (s_l), veh/h/ln	836	0	1026	0	650	0	940	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	61.1	0.0	19.6	0.0	59.1	0.0	19.6	0.0
Perm LT Serve Time (g_u), s	58.8	0.0	12.3	0.0	51.9	0.0	3.6	0.0
Perm LT Q Serve Time (g_ps), s	1.5	0.0	1.1	0.0	0.7	0.0	2.8	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	670	0	308	0	405	0	235	0
V/C Ratio (X)	0.50	0.00	0.45	0.00	0.15	0.00	0.60	0.00
Avail Cap (c_a), veh/h	938	0	321	0	438	0	319	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.98	0.00	1.00	0.00
Uniform Delay (d1), s/veh	10.6	0.0	37.5	0.0	13.5	0.0	38.4	0.0
Incr Delay (d2), s/veh	0.6	0.0	1.0	0.0	0.2	0.0	2.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	11.2	0.0	38.5	0.0	13.7	0.0	40.8	0.0
1st-Term Q (Q1), veh/ln	4.0	0.0	3.4	0.0	0.7	0.0	3.4	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.1	0.0	0.0	0.0	0.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	4.1	0.0	3.4	0.0	0.8	0.0	3.6	0.0
%ile Storage Ratio (RQ%)	0.30	0.00	0.58	0.00	0.13	0.00	0.55	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	1	0	1
Grp Vol (v), veh/h	0	437	0	248	0	425	0	233
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	0.3	0.0	7.5	0.0	16.3	0.0	15.1
Cycle Q Clear Time (g_c), s	0.0	0.3	0.0	7.5	0.0	16.3	0.0	15.1
Lane Grp Cap (c), veh/h	0	1751	0	587	0	1011	0	290
V/C Ratio (X)	0.00	0.25	0.00	0.42	0.00	0.42	0.00	0.80
Avail Cap (c_a), veh/h	0	1751	0	903	0	1011	0	378
Upstream Filter (I)	0.00	0.98	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.5	0.0	44.9	0.0	14.7	0.0	48.3
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.5	0.0	1.3	0.0	9.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.8	0.0	45.4	0.0	16.0	0.0	57.4
1st-Term Q (Q1), veh/ln	0.0	0.1	0.0	3.3	0.0	6.4	0.0	6.7

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	3.4	0.0	6.8	0.0	7.4
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.08	0.00	0.25	0.00	0.14
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	140	0	107	0	422	0	217
Grp Sat Flow (s), veh/h/ln	0	1585	0	1585	0	1760	0	1585
Q Serve Time (g_s), s	0.0	0.2	0.0	7.3	0.0	16.3	0.0	15.9
Cycle Q Clear Time (g_c), s	0.0	0.2	0.0	7.3	0.0	16.3	0.0	15.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.35	0.00	1.00
Lane Grp Cap (c), veh/h	0	781	0	262	0	1001	0	259
V/C Ratio (X)	0.00	0.18	0.00	0.41	0.00	0.42	0.00	0.84
Avail Cap (c_a), veh/h	0	781	0	403	0	1001	0	337
Upstream Filter (I)	0.00	0.98	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.5	0.0	44.8	0.0	14.7	0.0	48.7
Incr Delay (d2), s/veh	0.0	0.5	0.0	1.0	0.0	1.3	0.0	13.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.9	0.0	45.9	0.0	16.0	0.0	62.2
1st-Term Q (Q1), veh/ln	0.0	0.1	0.0	2.9	0.0	6.4	0.0	6.3
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.4	0.0	1.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	2.9	0.0	6.7	0.0	7.3
%ile Storage Ratio (RQ%)	0.00	0.04	0.00	0.53	0.00	0.25	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	25.1
HCM 7th LOS	C

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	330	63	66	320	9	45	8	112	22	3	71
Future Vol, veh/h	22	330	63	66	320	9	45	8	112	22	3	71
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	190	-	-	120	-	150	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	24	359	68	72	348	10	49	9	122	24	3	77

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	358	0	0	427	0	0	760	942	214	723	966	174
Stage 1	-	-	-	-	-	-	441	441	-	491	491	-
Stage 2	-	-	-	-	-	-	319	501	-	232	475	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1198	-	-	1129	-	-	295	262	791	314	253	839
Stage 1	-	-	-	-	-	-	565	575	-	528	546	-
Stage 2	-	-	-	-	-	-	667	541	-	750	556	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1198	-	-	1129	-	-	243	240	791	236	232	839
Mov Cap-2 Maneuver	-	-	-	-	-	-	243	240	-	236	232	-
Stage 1	-	-	-	-	-	-	554	564	-	494	512	-
Stage 2	-	-	-	-	-	-	563	506	-	613	544	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.43	1.4	17.83	14.02
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	458	1198	-	-	1129	-	-	503
HCM Lane V/C Ratio	0.392	0.02	-	-	0.064	-	-	0.207
HCM Ctrl Dly (s/v)	17.8	8.1	-	-	8.4	-	-	14
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	1.8	0.1	-	-	0.2	-	-	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	822	10	17	809	39	22	1	14	56	4	95
Future Volume (veh/h)	81	822	10	17	809	39	22	1	14	56	4	95
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	88	893	11	18	879	42	24	1	15	61	4	103
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	112	2104	26	33	1869	89	261	21	141	176	28	259
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.59	0.59	0.04	1.00	1.00	0.28	0.28	0.28	0.28	0.28	0.28
Unsig. Movement Delay												
Ln Grp Delay, s/veh	66.8	15.0	14.9	70.0	1.7	1.6	32.8	0.0	0.0	37.4	0.0	0.0
Ln Grp LOS	E	B	B	E	A	A	C			D		
Approach Vol, veh/h		992			939			40			168	
Approach Delay, s/veh		19.6			2.9			32.8			37.4	
Approach LOS		B			A			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		8.0	2.0	4.0		8.0	2.0	4.0
Phs Duration (G+Y+Rc), s		38.0	6.8	75.2		38.0	12.0	70.0
Change Period (Y+Rc), s		5.0	4.5	5.0		5.0	4.5	5.0
Max Green (Gmax), s		33.0	9.5	63.0		33.0	18.5	54.0
Max Allow Headway (MAH), s		5.5	3.8	5.2		5.5	3.8	5.3
Max Q Clear (g_c+I1), s		4.3	3.2	18.4		12.4	7.8	2.0
Green Ext Time (g_e), s		0.2	0.0	7.0		0.9	0.1	7.4
Prob of Phs Call (p_c)		1.00	0.45	1.00		1.00	0.95	1.00
Prob of Max Out (p_x)		0.00	0.01	0.00		0.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		776	1781			492	1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		77		3595		102		3453

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		512		44		941		165

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0

Lane Assignment		L+T+R	L (Prot)			L+T+R	L (Prot)	
Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	40	18	0	0	168	88	0
Grp Sat Flow (s), veh/h/ln	0	1365	1781	0	0	1534	1781	0
Q Serve Time (g_s), s	0.0	0.0	1.2	0.0	0.0	6.9	5.8	0.0
Cycle Q Clear Time (g_c), s	0.0	2.3	1.2	0.0	0.0	10.4	5.8	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1307	0	0	0	1419	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1229	0	0	0	1837	0	0
Perm LT Eff Green (g_p), s	0.0	33.0	0.0	0.0	0.0	33.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	22.6	0.0	0.0	0.0	30.7	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	6.9	0.0	0.0
Time to First Blk (g_f), s	0.0	1.3	0.0	0.0	0.0	3.5	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	1.3	0.0	0.0	0.0	3.5	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.60	1.00	0.00	0.00	0.36	1.00	0.00
Lane Grp Cap (c), veh/h	0	423	33	0	0	463	112	0
V/C Ratio (X)	0.00	0.09	0.54	0.00	0.00	0.36	0.79	0.00
Avail Cap (c_a), veh/h	0	423	141	0	0	463	275	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	32.3	57.2	0.0	0.0	35.2	55.4	0.0
Incr Delay (d2), s/veh	0.0	0.4	12.7	0.0	0.0	2.2	11.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.8	70.0	0.0	0.0	37.4	66.8	0.0
1st-Term Q (Q1), veh/ln	0.0	0.9	0.5	0.0	0.0	4.0	2.6	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.1	0.0	0.0	0.3	0.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.9	0.6	0.0	0.0	4.3	3.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.11	0.18	0.00	0.00	0.47	0.84	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	441	0	0	0	452
Grp Sat Flow (s), veh/h/ln	0	0	0	1777	0	0	0	1777
Q Serve Time (g_s), s	0.0	0.0	0.0	16.4	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	16.4	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	1040	0	0	0	962
V/C Ratio (X)	0.00	0.00	0.00	0.42	0.00	0.00	0.00	0.47
Avail Cap (c_a), veh/h	0	0	0	1040	0	0	0	962
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	13.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.3	0.0	0.0	0.0	1.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	15.0	0.0	0.0	0.0	1.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.4	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	6.8	0.0	0.0	0.0	0.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment				T+R				T+R
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	463	0	0	0	469
Grp Sat Flow (s), veh/h/ln	0	0	0	1862	0	0	0	1841
Q Serve Time (g_s), s	0.0	0.0	0.0	16.4	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	16.4	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.37	0.00	0.02	0.00	0.61	0.00	0.09
Lane Grp Cap (c), veh/h	0	0	0	1090	0	0	0	996
V/C Ratio (X)	0.00	0.00	0.00	0.42	0.00	0.00	0.00	0.47
Avail Cap (c_a), veh/h	0	0	0	1090	0	0	0	996
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	13.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.2	0.0	0.0	0.0	1.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	14.9	0.0	0.0	0.0	1.6
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.7	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	7.1	0.0	0.0	0.0	0.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	13.9
HCM 7th LOS	B

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	11	890	832	12	5	19
Future Vol, veh/h	11	890	832	12	5	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	-	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	12	967	904	13	5	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	917	0	-	0	1418	459
Stage 1	-	-	-	-	911	-
Stage 2	-	-	-	-	508	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	739	-	-	-	128	549
Stage 1	-	-	-	-	353	-
Stage 2	-	-	-	-	569	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	739	-	-	-	126	549
Mov Cap-2 Maneuver	-	-	-	-	126	-
Stage 1	-	-	-	-	347	-
Stage 2	-	-	-	-	569	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.12	0	11.81
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	739	-	-	-	549
HCM Lane V/C Ratio	0.016	-	-	-	0.038
HCM Ctrl Dly (s/v)	9.9	-	-	-	11.8
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	106	4	31	54	4	5	8	14	4	8	9
Future Vol, veh/h	2	106	4	31	54	4	5	8	14	4	8	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	115	4	34	59	4	5	9	15	4	9	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	63	0	0	120	0	0	252	252	117	252	252	61
Stage 1	-	-	-	-	-	-	122	122	-	128	128	-
Stage 2	-	-	-	-	-	-	130	130	-	124	124	-
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	1540	-	-	1468	-	-	701	651	935	701	651	1004
Stage 1	-	-	-	-	-	-	882	795	-	875	790	-
Stage 2	-	-	-	-	-	-	873	788	-	880	793	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1540	-	-	1468	-	-	668	635	935	663	635	1004
Mov Cap-2 Maneuver	-	-	-	-	-	-	668	635	-	663	635	-
Stage 1	-	-	-	-	-	-	881	794	-	855	771	-
Stage 2	-	-	-	-	-	-	835	769	-	855	792	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.13	2.62	9.86	9.88
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	770	32	-	-	618	-	-	761
HCM Lane V/C Ratio	0.038	0.001	-	-	0.023	-	-	0.03
HCM Ctrl Dly (s/v)	9.9	7.3	0	-	7.5	0	-	9.9
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	0	48	9	0	8	145	486	12	4	807	58
Future Volume (veh/h)	88	0	48	9	0	8	145	486	12	4	807	58
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	96	0	52	10	0	9	158	528	13	4	877	63
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	180	0	144	141	0	144	552	2927	72	774	2848	205
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Prop Arrive On Green	0.09	0.00	0.09	0.09	0.00	0.09	1.00	1.00	1.00	1.00	1.00	1.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	56.3	0.0	52.8	53.6	0.0	50.1	1.3	0.3	0.3	0.0	0.5	0.5
Ln Grp LOS	E		D	D		D	A	A	A	A	A	A
Approach Vol, veh/h		148			19			699			944	
Approach Delay, s/veh		55.1			51.9			0.5			0.5	
Approach LOS		E			D			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		6.0		6.0
Phs Duration (G+Y+Rc), s		104.1		15.9		104.1		15.9
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green (Gmax), s		92.0		18.0		92.0		18.0
Max Allow Headway (MAH), s		5.7		4.4		5.3		4.7
Max Q Clear (g_c+I1), s		2.0		10.7		2.0		6.5
Green Ext Time (g_e), s		5.9		0.3		7.8		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.11		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		596		1406		865		1352

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3544		0		3448		0

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		87		1585		248		1585

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3

Lane Assignment		L		L		L		L
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	158	0	96	0	4	0	10
Grp Sat Flow (s), veh/h/ln	0	596	0	1406	0	865	0	1352
Q Serve Time (g_s), s	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.8
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	8.7	0.0	0.0	0.0	4.5
Perm LT Sat Flow (s_l), veh/h/ln	0	596	0	1406	0	865	0	1352
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	99.1	0.0	10.9	0.0	99.1	0.0	10.9
Perm LT Serve Time (g_u), s	0.0	99.1	0.0	10.3	0.0	99.1	0.0	7.2
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.8
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	552	0	180	0	774	0	141
V/C Ratio (X)	0.00	0.29	0.00	0.53	0.00	0.01	0.00	0.07
Avail Cap (c_a), veh/h	0	552	0	264	0	774	0	221
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.91	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	53.8	0.0	0.0	0.0	53.4
Incr Delay (d2), s/veh	0.0	1.3	0.0	2.4	0.0	0.0	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	1.3	0.0	56.3	0.0	0.0	0.0	53.6
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.3
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	3.0	0.0	0.0	0.0	0.3
%ile Storage Ratio (RQ%)	0.00	0.05	0.00	0.46	0.00	0.00	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	264	0	0	0	476	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1870	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1468	0	0	0	1545	0	0
V/C Ratio (X)	0.00	0.18	0.00	0.00	0.00	0.31	0.00	0.00
Avail Cap (c_a), veh/h	0	1468	0	0	0	1545	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.91	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.3	0.0	0.0	0.0	0.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	277	0	52	0	464	0	9
Grp Sat Flow (s), veh/h/ln	0	1855	0	1585	0	1826	0	1585
Q Serve Time (g_s), s	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.6
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.05	0.00	1.00	0.00	0.14	0.00	1.00
Lane Grp Cap (c), veh/h	0	1532	0	144	0	1508	0	144
V/C Ratio (X)	0.00	0.18	0.00	0.36	0.00	0.31	0.00	0.06
Avail Cap (c_a), veh/h	0	1532	0	238	0	1508	0	238
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.91	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	51.3	0.0	0.0	0.0	49.9
Incr Delay (d2), s/veh	0.0	0.3	0.0	1.5	0.0	0.5	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.3	0.0	52.8	0.0	0.5	0.0	50.1
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.2
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	1.5	0.0	0.2	0.0	0.3
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.24	0.00	0.01	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	5.5
HCM 7th LOS	A

Notes
User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	116	0	638	742	122
Future Vol, veh/h	0	116	0	638	742	122
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	126	0	693	807	133

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	470	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	540	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	540	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	13.68	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	540	-	-
HCM Lane V/C Ratio	-	0.233	-	-
HCM Ctrl Dly (s/v)	-	13.7	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.9	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	40	0	0	124	83	49
Future Vol, veh/h	40	0	0	124	83	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	43	0	0	135	90	53

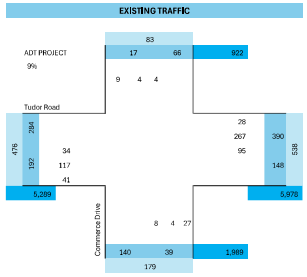
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	252	117	143	0	-	0
Stage 1	117	-	-	-	-	-
Stage 2	135	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	737	935	1439	-	-	-
Stage 1	908	-	-	-	-	-
Stage 2	892	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	737	935	1439	-	-	-
Mov Cap-2 Maneuver	737	-	-	-	-	-
Stage 1	908	-	-	-	-	-
Stage 2	892	-	-	-	-	-

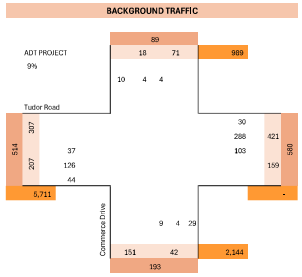
Approach	EB	NB	SB
HCM Ctrl Dly, s/v	10.19	0	0
HCM LOS	B		

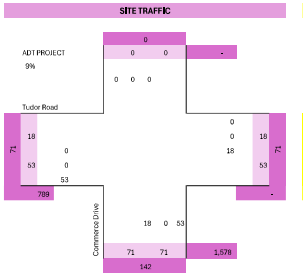
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1439	-	737	-	-
HCM Lane V/C Ratio	-	-	0.059	-	-
HCM Ctrl Dly (s/v)	0	-	10.2	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

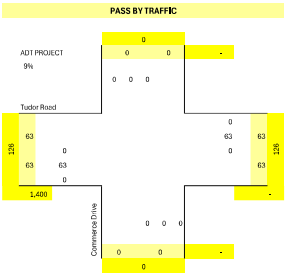
PHASE 2 - PM PEAK HOUR CALCULATIONS

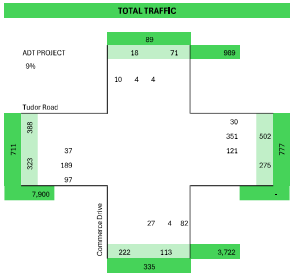
N/S	Commerce Drive			PH 2 SITE TRIP PM PEAK HOUR					PHASE 1 VOLUME PM PEAK HOUR					TOTAL
E/W	Tudor Road			IN 0		IN 88								
GR	2.0%			OUT 0		OUT 88								
YRS	4													
INT #	60200													
MVMT	EXT TRFC	GRW x	BKGRD TRFC	DIR %	IN/ OUT	DIR %	IN/ OUT	TL	DIR %	IN/ OUT	DIR %	IN/ OUT	TL	TOTAL TRAFFIC
EBL	34	1.08	37					0					0	37
EBT	117	1.08	126					0					63	189
EBR	41	1.08	44			60%	88	53					0	97
WBL	95	1.08	103			20%	88	18					0	121
WBT	267	1.08	288					0					63	351
WBR	28	1.08	30					0					0	30
NBL	8	1.08	9			20%	88	18					0	27
NBT	4	1.08	4					0					0	4
NBR	27	1.08	29			60%	88	53					0	82
SBL	4	1.08	4					0					0	4
SBT	4	1.08	4					0					0	4
SBR	9	1.08	10					0					0	10



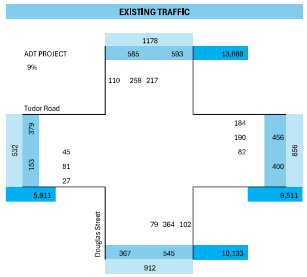


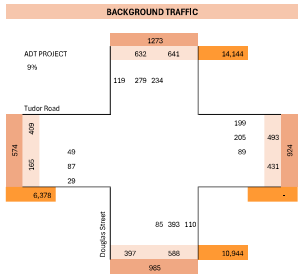


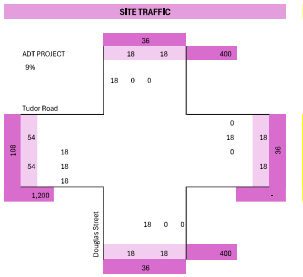


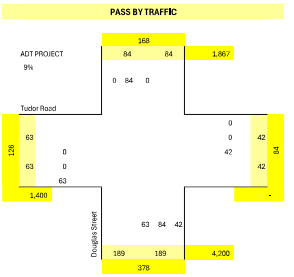


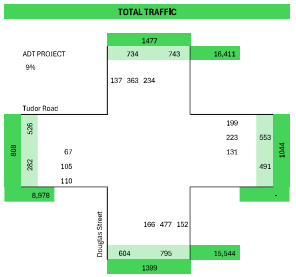
N/S	Douglas Street			PH 2 SITE TRIP PM PEAK HOUR					PHASE 1 VOLUME PM PEAK HOUR					TOTAL
E/W	Tudor Road			IN 0		IN 88								
GR	2.0%			OUT 0		OUT 88								
YRS	4													
INT #	60200													
MVMT	EXT TRFC	GRW x	BKGRD TRFC	DIR %	IN/ OUT	DIR %	IN/ OUT	TL	DIR %	IN/ OUT	DIR %	IN/ OUT	TL	TOTAL TRAFFIC
EBL	45	1.08	49			20%	88	18					0	67
EBT	81	1.08	87			20%	88	18					0	105
EBR	27	1.08	29			20%	88	18					63	110
WBL	82	1.08	89	20%	0			0					42	131
WBT	190	1.08	205			20%	88	18					0	223
WBR	184	1.08	199					0					0	199
NBL	79	1.08	85			20%	88	18					63	166
NBT	364	1.08	393	30%	0			0					84	477
NBR	102	1.08	110	20%	0			0					42	152
SBL	217	1.08	234					0					0	234
SBT	258	1.08	279	30%	0			0					84	363
SBR	110	1.08	119			20%	88	18					0	137



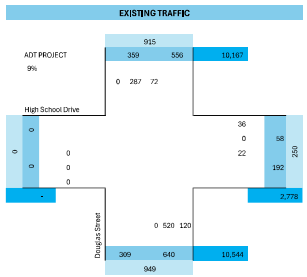


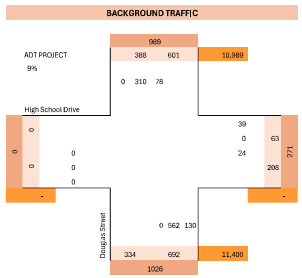


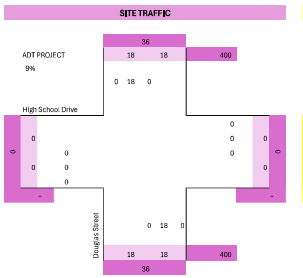


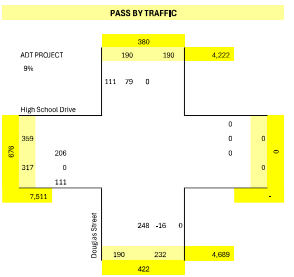


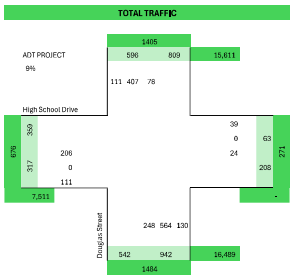
N/S	Douglas Street			PH 2 SITE TRIP PM PEAK HOUR					PHASE 1 VOLUME PM PEAK HOUR					TOTAL
E/W	High School Drive			IN 0		IN 88								
GR	2.0%			OUT 0		OUT 88								
YRS	4													
INT #	70200													
MVMT	EXT TRFC	GRW x	BKGRD TRFC	DIR %	IN/ OUT	DIR %	IN/ OUT	TL	DIR %	IN/ OUT	DIR %	IN/ OUT	TL	TOTAL TRAFFIC
EBL	0	1.08	0	50%	0			0					206	206
EBT	0	1.08	0					0					0	0
EBR	0	1.08	0					0					111	111
WBL	22	1.08	24					0					0	24
WBT		1.08	0					0					0	0
WBR	36	1.08	39					0					0	39
NBL	0	1.08	0	50%	0			0					248	248
NBT	520	1.08	562			20%	88	18					-16	564
NBR	120	1.08	130					0					0	130
SBL	72	1.08	78					0					0	78
SBT	287	1.08	310	50%	0	20%	88	18					79	407
SBR		1.08	0					0					111	111



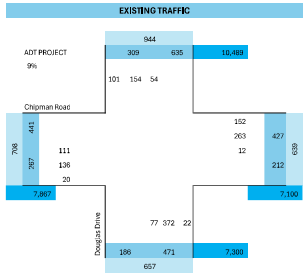


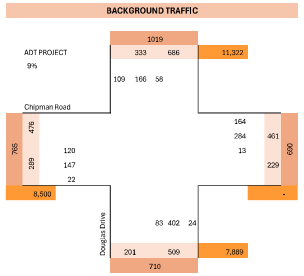


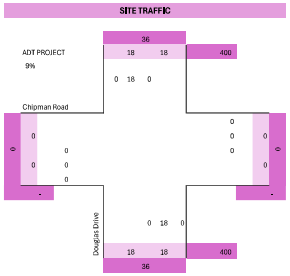


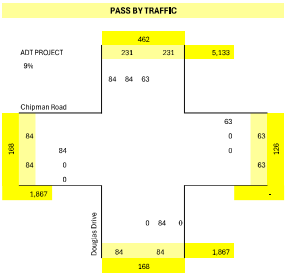


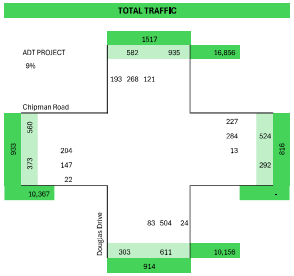
N/S	Douglas Drive			PH 2 SITE TRIP					PHASE 1 VOLUME					TOTAL
E/W	Chipman Road			PM PEAK HOUR					PM PEAK HOUR					
GR	2.0%			IN	0	IN	88							
YRS	4			OUT	0	OUT	88							
INT #	80200													
MVMT	EXT TRFC	GRW x	BKGRD TRFC	DIR %	IN/ OUT	DIR %	IN/ OUT	TL	DIR %	IN/ OUT	DIR %	IN/ OUT	TL	TOTAL TRAFFIC
EBL	111	1.08	120	15%	0			0					84	204
EBT	136	1.08	147					0					0	147
EBR	20	1.08	22					0					0	22
WBL	12	1.08	13					0					0	13
WBT	263	1.08	284					0					0	284
WBR	152	1.08	164	15%	0			0					63	227
NBL	77	1.08	83					0					0	83
NBT	372	1.08	402	20%	0	20%	88	18					84	504
NBR	22	1.08	24					0					0	24
SBL	54	1.08	58	15%	0			0					63	121
SBT	154	1.08	166	20%	0	20%	88	18					84	268
SBR	101	1.08	109	15%	0			0					84	193



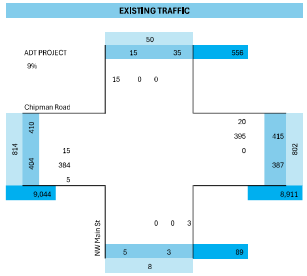


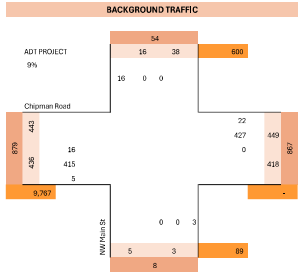


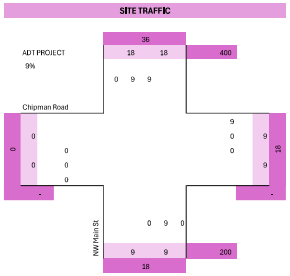


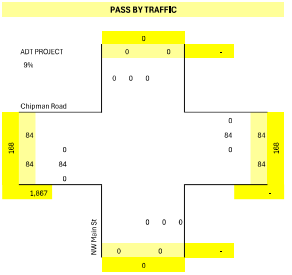


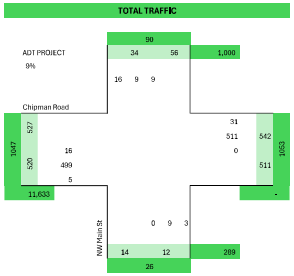
N/S	NW Main St			PH 2 SITE TRIP					PHASE 1 VOLUME					TOTAL
E/W	Chipman Road			PM PEAK HOUR					PM PEAK HOUR					
GR	2.0%			IN	0	IN	88							
YRS	4			OUT	0	OUT	88							
INT #	90200													
MVMT	EXT TRFC	GRW x	BKGRD TRFC	DIR %	IN/ OUT	DIR %	IN/ OUT	TL	DIR %	IN/ OUT	DIR %	IN/ OUT	TL	TOTAL TRAFFIC
EBL	15	1.08	16					0					0	16
EBT	384	1.08	415	15%	0			0					84	499
EBR	5	1.08	5					0					0	5
WBL		1.08	0					0					0	0
WBT	395	1.08	427	15%	0			0					84	511
WBR	20	1.08	22			10%	88	9					0	31
NBL		1.08	0					0					0	0
NBT		1.08	0			10%	88	9					0	9
NBR	3	1.08	3					0					0	3
SBL		1.08	0			10%	88	9					0	9
SBT		1.08	0			10%	88	9					0	9
SBR	15	1.08	16					0					0	16





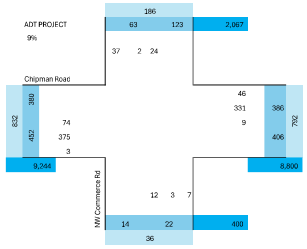




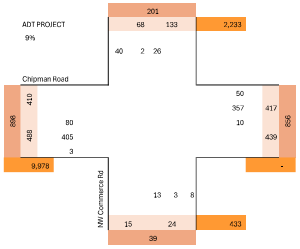


N/S	NW Commerce Rd			PH 2 SITE TRIP					PHASE 1 VOLUME					TOTAL
E/W	Chipman Road			PM PEAK HOUR					PM PEAK HOUR					
GR	2.0%			IN	0	IN	88							
YRS	4			OUT	0	OUT	88							
INT #	100200													
MVMT	EXT TRFC	GRW x	BKGRD TRFC	DIR %	IN/ OUT	DIR %	IN/ OUT	TL	DIR %	IN/ OUT	DIR %	IN/ OUT	TL	TOTAL TRAFFIC
EBL	74	1.08	80			10%	88	9					0	89
EBT	375	1.08	405	15%	0	10%	88	9					84	498
EBR	3	1.08	3					0					0	3
WBL	9	1.08	10					0					0	10
WBT	331	1.08	357	15%	0	10%	88	9					84	450
WBR	46	1.08	50					0					0	50
NBL	12	1.08	13					0					0	13
NBT	3	1.08	3					0					0	3
NBR	7	1.08	8					0					0	8
SBL	24	1.08	26					0					0	26
SBT	2	1.08	2					0					0	2
SBR	37	1.08	40			10%	88	9					0	49

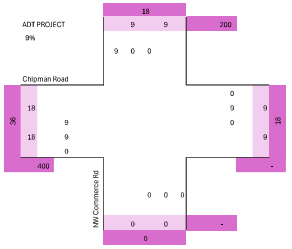
EXISTING TRAFFIC



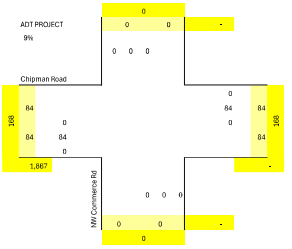
BACKGROUND TRAFFIC



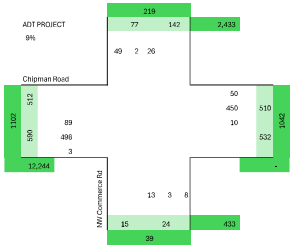
SITE TRAFFIC



PASS BY TRAFFIC

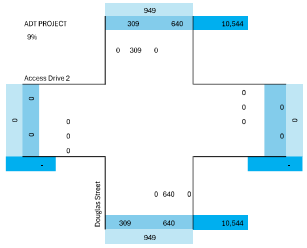


TOTAL TRAFFIC

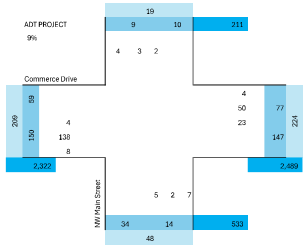


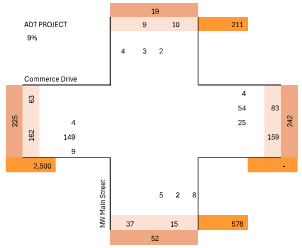
N/S	Douglas Street			PH 2 SITE TRIP					PHASE 1 VOLUME					TOTAL
E/W	Access Drive 2			PM PEAK HOUR					PM PEAK HOUR					
GR	2.0%			IN	0	IN	88							
YRS	4			OUT	0	OUT	88							
INT #	10200													
MVMT	EXT TRFC	GRW x	BKGRD TRFC	DIR %	IN/ OUT	DIR %	IN/ OUT	TL	DIR %	IN/ OUT	DIR %	IN/ OUT	TL	TOTAL TRAFFIC
EBL		1.08	0					0					0	0
EBT		1.08	0					0					0	0
EBR		1.08	0	50%	0			0					265	265
WBL		1.08	0					0					0	0
WBT		1.08	0					0					0	0
WBR		1.08	0					0					0	0
NBL		1.08	0					0					0	0
NBT	640	1.08	691			20%	88	18					232	941
NBR		1.08	0					0					0	0
SBL		1.08	0					0					0	0
SBT	309	1.08	334			20%	88	18					-33	319
SBR		1.08	0	50%	0			0					223	223

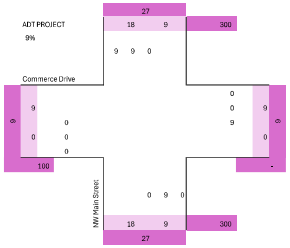
EXISTING TRAFFIC

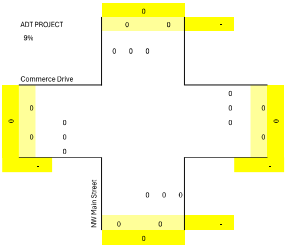

ADT PROJECT
9%
Access Drive 2
Douglas Street
949
309
640
10,544
0
309
0
0
0
0
0
0

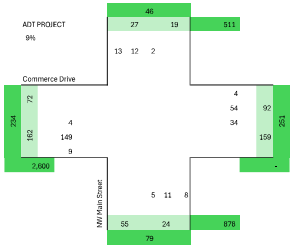
N/S	NW Main Street			PH 2 SITE TRIP					PHASE 1 VOLUME					TOTAL
E/W	Commerce Drive			PM PEAK HOUR					PM PEAK HOUR					
GR	2.0%			IN	0	IN	88							
YRS	4			OUT	0	OUT	88							
INT #	110200													
	EXT	GRW	BKGRD	DIR	IN/	DIR	IN/		DIR	IN/	DIR	IN/		TOTAL
MVMT	TRFC	x	TRFC	%	OUT	%	OUT	TL	%	OUT	%	OUT	TL	TRAFFIC
EBL	4	1.08	4					0					0	4
EBT	138	1.08	149					0					0	149
EBR	8	1.08	9					0					0	9
WBL	23	1.08	25			10%	88	9					0	34
WBT	50	1.08	54					0					0	54
WBR	4	1.08	4					0					0	4
NBL	5	1.08	5					0					0	5
NBT	2	1.08	2			10%	88	9					0	11
NBR	7	1.08	8					0					0	8
SBL	2	1.08	2					0					0	2
SBT	3	1.08	3			10%	88	9					0	12
SBR	4	1.08	4			10%	88	9					0	13



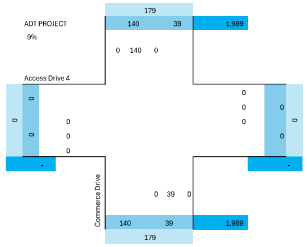


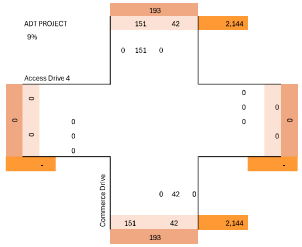


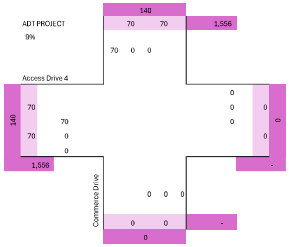


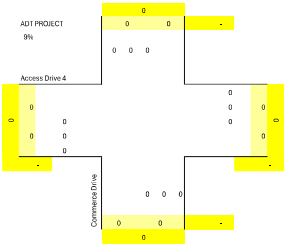


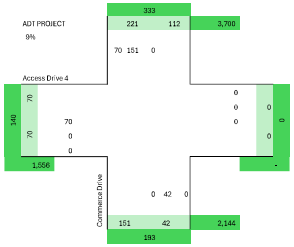
N/S	Commerce Drive			PH 2 SITE TRIP					PHASE 1 VOLUME					TOTAL
E/W	Access Drive 4			PM PEAK HOUR					PM PEAK HOUR					
GR	2.0%			IN	0	IN	88							
YRS	4			OUT	0	OUT	88							
INT #	30200													
	EXT	GRW	BKGRD	DIR	IN/	DIR	IN/		DIR	IN/	DIR	IN/		TOTAL
MVMT	TRFC	x	TRFC	%	OUT	%	OUT	TL	%	OUT	%	OUT	TL	TRAFFIC
EBL		1.08	0			80%	88	70					0	70
EBT		1.08	0					0					0	0
EBR		1.08	0					0					0	0
WBL		1.08	0					0					0	0
WBT		1.08	0					0					0	0
WBR		1.08	0					0					0	0
NBL		1.08	0					0					0	0
NBT	39	1.08	42					0					0	42
NBR		1.08	0					0					0	0
SBL		1.08	0					0					0	0
SBT	140	1.08	151					0					0	151
SBR		1.08	0			80%	88	70					0	70











Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	147	22	13	284	164	83	402	24	58	166	109
Future Volume (veh/h)	120	147	22	13	284	164	83	402	24	58	166	109
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	130	160	24	14	309	178	90	437	26	63	180	118
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	158	1210	179	28	1124	501	472	1335	79	406	717	608
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Prop Arrive On Green	0.18	0.78	0.78	0.02	0.32	0.32	0.04	0.39	0.39	0.02	0.26	0.26
Unsig. Movement Delay												
Ln Grp Delay, s/veh	58.5	8.6	8.7	72.2	31.3	33.6	21.2	26.7	26.7	21.8	31.7	30.8
Ln Grp LOS	E	A	A	E	C	C	C	C	C	C	C	C
Approach Vol, veh/h		314			501			553			361	
Approach Delay, s/veh		29.3			33.3			25.8			29.7	
Approach LOS		C			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	4.0	2.0	4.0	1.1	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	9.4	52.0	6.9	51.7	10.4	51.0	15.7	42.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green (Gmax), s	6.0	47.0	9.0	38.0	7.0	46.0	22.0	25.0
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.3	3.8	4.8	3.8	4.8
Max Q Clear (g_c+I1), s	4.6	12.8	2.9	3.6	5.7	11.2	10.4	12.4
Green Ext Time (g_e), s	0.0	3.0	0.0	1.1	0.0	1.5	0.2	2.1
Prob of Phs Call (p_c)	0.88	1.00	0.37	1.00	0.95	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	0.01	0.00	1.00	0.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3409		3106		1870		3554

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		202		458		1585		1585

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0

Lane Assignment	L (Pr/Pm)		L (Prot)		L (Pr/Pm)		L (Prot)	
Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	63	0	14	0	90	0	130	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	2.6	0.0	0.9	0.0	3.7	0.0	8.4	0.0
Cycle Q Clear Time (g_c), s	2.6	0.0	0.9	0.0	3.7	0.0	8.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	929	0	0	0	1081	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	46.0	0.0	0.0	0.0	46.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	36.2	0.0	0.0	0.0	36.8	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.7	0.0	0.0	0.0	0.8	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	406	0	28	0	472	0	158	0
V/C Ratio (X)	0.16	0.00	0.51	0.00	0.19	0.00	0.82	0.00
Avail Cap (c_a), veh/h	430	0	134	0	496	0	327	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	21.6	0.0	58.6	0.0	21.0	0.0	48.4	0.0
Incr Delay (d2), s/veh	0.2	0.0	13.6	0.0	0.2	0.0	10.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	21.8	0.0	72.2	0.0	21.2	0.0	58.5	0.0
1st-Term Q (Q1), veh/ln	1.1	0.0	0.4	0.0	1.5	0.0	3.5	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.0	0.0	0.0	0.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	1.1	0.0	0.5	0.0	1.6	0.0	3.9	0.0
%ile Storage Ratio (RQ%)	0.03	0.00	0.07	0.00	0.12	0.00	0.29	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	2
Grp Vol (v), veh/h	0	227	0	90	0	180	0	309
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1870	0	1777
Q Serve Time (g_s), s	0.0	10.7	0.0	1.5	0.0	9.2	0.0	7.8
Cycle Q Clear Time (g_c), s	0.0	10.7	0.0	1.5	0.0	9.2	0.0	7.8
Lane Grp Cap (c), veh/h	0	696	0	692	0	717	0	1124
V/C Ratio (X)	0.00	0.33	0.00	0.13	0.00	0.25	0.00	0.27
Avail Cap (c_a), veh/h	0	696	0	692	0	717	0	1124
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	25.5	0.0	8.3	0.0	30.9	0.0	30.7
Incr Delay (d2), s/veh	0.0	1.2	0.0	0.4	0.0	0.8	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.7	0.0	8.6	0.0	31.7	0.0	31.3
1st-Term Q (Q1), veh/ln	0.0	4.5	0.0	0.6	0.0	4.3	0.0	3.4

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.1	0.0	0.2	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.8	0.0	0.7	0.0	4.5	0.0	3.5
%ile Storage Ratio (RQ%)	0.00	0.36	0.00	0.04	0.00	0.11	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	236	0	94	0	118	0	178
Grp Sat Flow (s), veh/h/ln	0	1834	0	1788	0	1585	0	1585
Q Serve Time (g_s), s	0.0	10.8	0.0	1.6	0.0	7.0	0.0	10.4
Cycle Q Clear Time (g_c), s	0.0	10.8	0.0	1.6	0.0	7.0	0.0	10.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.11	0.00	0.26	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	718	0	696	0	608	0	501
V/C Ratio (X)	0.00	0.33	0.00	0.13	0.00	0.19	0.00	0.36
Avail Cap (c_a), veh/h	0	718	0	696	0	608	0	501
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	25.5	0.0	8.3	0.0	30.1	0.0	31.6
Incr Delay (d2), s/veh	0.0	1.2	0.0	0.4	0.0	0.7	0.0	2.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.7	0.0	8.7	0.0	30.8	0.0	33.6
1st-Term Q (Q1), veh/ln	0.0	4.7	0.0	0.6	0.0	2.8	0.0	4.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.1	0.0	0.1	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.9	0.0	0.7	0.0	2.9	0.0	4.3
%ile Storage Ratio (RQ%)	0.00	0.37	0.00	0.04	0.00	0.41	0.00	0.54
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	29.4
HCM 7th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	87	29	89	205	199	85	393	110	234	279	119
Future Volume (veh/h)	49	87	29	89	205	199	85	393	110	234	279	119
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	53	95	32	97	223	216	92	427	120	254	303	129
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	151	487	217	311	288	257	663	2042	911	693	1498	624
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.14	0.14	0.06	0.16	0.16	0.08	1.00	1.00	0.08	0.61	0.61
Unsig. Movement Delay												
Ln Grp Delay, s/veh	44.5	46.1	45.9	41.0	55.3	62.2	9.1	0.2	0.3	8.0	10.7	10.8
Ln Grp LOS	D	D	D	D	E	E	A	A	A	A	B	B
Approach Vol, veh/h		180			536			639			686	
Approach Delay, s/veh		45.6			55.5			1.5			9.7	
Approach LOS		D			E			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	3.0	1.1	4.0	1.1	4.0
Phs Duration (G+Y+Rc), s	13.8	73.5	11.8	20.9	9.3	78.0	8.7	24.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green (Gmax), s	31.5	29.5	10.5	30.5	6.5	54.5	15.5	25.5
Max Allow Headway (MAH), s	3.8	5.0	3.8	4.9	3.8	5.3	3.8	5.4
Max Q Clear (g_c+I1), s	8.6	2.0	7.5	4.8	4.6	8.7	5.0	17.9
Green Ext Time (g_e), s	0.7	3.4	0.1	0.6	0.0	2.9	0.1	1.6
Prob of Phs Call (p_c)	1.00	1.00	0.96	1.00	0.95	1.00	0.83	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.54

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		3554		2446		1777

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1585		1018		1585

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0

Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	
Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	254	0	97	0	92	0	53	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	6.6	0.0	5.5	0.0	2.6	0.0	3.0	0.0
Cycle Q Clear Time (g_c), s	6.6	0.0	5.5	0.0	2.6	0.0	3.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	860	0	1264	0	956	0	950	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	71.0	0.0	17.0	0.0	69.0	0.0	16.4	0.0
Perm LT Serve Time (g_u), s	69.0	0.0	13.6	0.0	66.8	0.0	3.6	0.0
Perm LT Q Serve Time (g_ps), s	0.8	0.0	0.3	0.0	0.2	0.0	0.8	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	693	0	311	0	663	0	151	0
V/C Ratio (X)	0.37	0.00	0.31	0.00	0.14	0.00	0.35	0.00
Avail Cap (c_a), veh/h	1022	0	359	0	689	0	319	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	7.7	0.0	40.5	0.0	9.0	0.0	43.1	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.6	0.0	0.1	0.0	1.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	8.0	0.0	41.0	0.0	9.1	0.0	44.5	0.0
1st-Term Q (Q1), veh/ln	2.4	0.0	2.4	0.0	0.9	0.0	1.3	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	2.5	0.0	2.5	0.0	0.9	0.0	1.4	0.0
%ile Storage Ratio (RQ%)	0.18	0.00	0.42	0.00	0.16	0.00	0.22	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	1	0	1
Grp Vol (v), veh/h	0	427	0	95	0	218	0	223
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	0.0	0.0	2.8	0.0	6.5	0.0	14.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	2.8	0.0	6.5	0.0	14.4
Lane Grp Cap (c), veh/h	0	2042	0	487	0	1089	0	288
V/C Ratio (X)	0.00	0.21	0.00	0.20	0.00	0.20	0.00	0.77
Avail Cap (c_a), veh/h	0	2042	0	903	0	1089	0	378
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	45.9	0.0	10.3	0.0	48.1
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.2	0.0	0.4	0.0	7.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.2	0.0	46.1	0.0	10.7	0.0	55.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.3	0.0	2.5	0.0	6.4

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	1.3	0.0	2.6	0.0	7.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.03	0.00	0.10	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	120	0	32	0	214	0	216
Grp Sat Flow (s), veh/h/ln	0	1585	0	1585	0	1687	0	1585
Q Serve Time (g_s), s	0.0	0.0	0.0	2.1	0.0	6.7	0.0	15.9
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	2.1	0.0	6.7	0.0	15.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.60	0.00	1.00
Lane Grp Cap (c), veh/h	0	911	0	217	0	1034	0	257
V/C Ratio (X)	0.00	0.13	0.00	0.15	0.00	0.21	0.00	0.84
Avail Cap (c_a), veh/h	0	911	0	403	0	1034	0	337
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	45.6	0.0	10.3	0.0	48.7
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.3	0.0	0.5	0.0	13.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.3	0.0	45.9	0.0	10.8	0.0	62.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.8	0.0	2.5	0.0	6.3
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	1.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	0.9	0.0	2.6	0.0	7.2
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.16	0.00	0.10	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	22.3
HCM 7th LOS	C

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	37	126	44	103	288	30	9	4	29	4	4	10
Future Vol, veh/h	37	126	44	103	288	30	9	4	29	4	4	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	190	-	-	120	-	150	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	40	137	48	112	313	33	10	4	32	4	4	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	346	0	0	185	0	0	624	811	92	688	802	157
Stage 1	-	-	-	-	-	-	241	241	-	537	537	-
Stage 2	-	-	-	-	-	-	383	570	-	151	265	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1210	-	-	1387	-	-	370	312	947	333	316	861
Stage 1	-	-	-	-	-	-	741	705	-	496	521	-
Stage 2	-	-	-	-	-	-	612	504	-	836	688	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1210	-	-	1387	-	-	320	277	947	282	281	861
Mov Cap-2 Maneuver	-	-	-	-	-	-	320	277	-	282	281	-
Stage 1	-	-	-	-	-	-	716	681	-	456	479	-
Stage 2	-	-	-	-	-	-	550	463	-	776	665	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1.44	1.91	11.81	13.38
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	574	1210	-	-	1387	-	-	449
HCM Lane V/C Ratio	0.08	0.033	-	-	0.081	-	-	0.044
HCM Ctrl Dly (s/v)	11.8	8.1	-	-	7.8	-	-	13.4
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0.3	-	-	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	405	3	10	357	50	13	3	8	26	2	40
Future Volume (veh/h)	80	405	3	10	357	50	13	3	8	26	2	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	87	440	3	11	388	54	14	3	9	28	2	43
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	111	2140	15	23	1699	235	257	62	145	186	29	248
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.59	0.59	0.03	1.00	1.00	0.28	0.28	0.28	0.28	0.28	0.28
Unsig. Movement Delay												
Ln Grp Delay, s/veh	66.9	11.8	11.8	73.0	0.5	0.6	32.2	0.0	0.0	33.7	0.0	0.0
Ln Grp LOS	E	B	B	E	A	A	C			C		
Approach Vol, veh/h		530			453			26			73	
Approach Delay, s/veh		20.9			2.3			32.2			33.7	
Approach LOS		C			A			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		8.0	2.0	4.0		8.0	2.0	4.0
Phs Duration (G+Y+Rc), s		38.0	6.0	76.0		38.0	12.0	70.0
Change Period (Y+Rc), s		5.0	4.5	5.0		5.0	4.5	5.0
Max Green (Gmax), s		33.0	9.5	63.0		33.0	18.5	54.0
Max Allow Headway (MAH), s		5.4	3.8	5.2		5.5	3.8	5.3
Max Q Clear (g_c+I1), s		3.3	2.7	8.8		6.0	7.8	2.0
Green Ext Time (g_e), s		0.1	0.0	2.9		0.4	0.1	2.9
Prob of Phs Call (p_c)		1.00	0.31	1.00		1.00	0.94	1.00
Prob of Max Out (p_x)		0.00	0.00	0.00		0.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		768	1781			525	1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		224		3618		105		3136

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		526		25		903		433

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0

Lane Assignment		L+T+R	L (Prot)			L+T+R	L (Prot)	
Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	26	11	0	0	73	87	0
Grp Sat Flow (s), veh/h/ln	0	1518	1781	0	0	1533	1781	0
Q Serve Time (g_s), s	0.0	0.0	0.7	0.0	0.0	0.8	5.8	0.0
Cycle Q Clear Time (g_c), s	0.0	1.3	0.7	0.0	0.0	4.0	5.8	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1383	0	0	0	1424	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1821	0	0	0	1835	0	0
Perm LT Eff Green (g_p), s	0.0	33.0	0.0	0.0	0.0	33.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	29.0	0.0	0.0	0.0	31.7	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0
Time to First Blk (g_f), s	0.0	1.7	0.0	0.0	0.0	3.2	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	1.3	0.0	0.0	0.0	3.2	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.54	1.00	0.00	0.00	0.38	1.00	0.00
Lane Grp Cap (c), veh/h	0	464	23	0	0	463	111	0
V/C Ratio (X)	0.00	0.06	0.48	0.00	0.00	0.16	0.78	0.00
Avail Cap (c_a), veh/h	0	464	141	0	0	463	275	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	32.0	58.1	0.0	0.0	33.0	55.5	0.0
Incr Delay (d2), s/veh	0.0	0.2	15.0	0.0	0.0	0.7	11.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.2	73.0	0.0	0.0	33.7	66.9	0.0
1st-Term Q (Q1), veh/ln	0.0	0.6	0.3	0.0	0.0	1.6	2.6	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.0	0.0	0.1	0.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.6	0.4	0.0	0.0	1.7	2.9	0.0
%ile Storage Ratio (RQ%)	0.00	0.07	0.12	0.00	0.00	0.19	0.83	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	216	0	0	0	219
Grp Sat Flow (s), veh/h/ln	0	0	0	1777	0	0	0	1777
Q Serve Time (g_s), s	0.0	0.0	0.0	6.8	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	6.8	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	1051	0	0	0	963
V/C Ratio (X)	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.23
Avail Cap (c_a), veh/h	0	0	0	1051	0	0	0	963
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	11.4	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	11.8	0.0	0.0	0.0	0.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment				T+R				T+R
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	227	0	0	0	223
Grp Sat Flow (s), veh/h/ln	0	0	0	1866	0	0	0	1792
Q Serve Time (g_s), s	0.0	0.0	0.0	6.8	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	6.8	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.35	0.00	0.01	0.00	0.59	0.00	0.24
Lane Grp Cap (c), veh/h	0	0	0	1103	0	0	0	971
V/C Ratio (X)	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.23
Avail Cap (c_a), veh/h	0	0	0	1103	0	0	0	971
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	11.4	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	11.8	0.0	0.0	0.0	0.6
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	14.2
HCM 7th LOS	B

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	16	415	427	22	0	16
Future Vol, veh/h	16	415	427	22	0	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	-	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	17	451	464	24	0	17

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	488	0	-	0	-	244
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	-	-	3.32
Pot Cap-1 Maneuver	1071	-	-	-	0	757
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1071	-	-	-	-	757
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.31	0	9.87
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1071	-	-	-	757
HCM Lane V/C Ratio	0.016	-	-	-	0.023
HCM Ctrl Dly (s/v)	8.4	-	-	-	9.9
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	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	149	9	25	54	4	5	2	8	2	3	4
Future Vol, veh/h	4	149	9	25	54	4	5	2	8	2	3	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	162	10	27	59	4	5	2	9	2	3	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	63	0	0	172	0	0	290	293	167	287	296	61
Stage 1	-	-	-	-	-	-	176	176	-	115	115	-
Stage 2	-	-	-	-	-	-	115	117	-	172	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	1540	-	-	1405	-	-	662	618	877	665	616	1004
Stage 1	-	-	-	-	-	-	826	754	-	890	800	-
Stage 2	-	-	-	-	-	-	890	798	-	830	750	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1540	-	-	1405	-	-	640	604	877	641	602	1004
Mov Cap-2 Maneuver	-	-	-	-	-	-	640	604	-	641	602	-
Stage 1	-	-	-	-	-	-	824	751	-	872	784	-
Stage 2	-	-	-	-	-	-	865	782	-	817	748	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.18	2.29	9.97	9.9
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	741	44	-	-	535	-	-	744
HCM Lane V/C Ratio	0.022	0.003	-	-	0.019	-	-	0.013
HCM Ctrl Dly (s/v)	10	7.3	0	-	7.6	0	-	9.9
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0

Intersection	
Int Delay, s/veh	1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	24	39	562	130	78	310
Future Vol, veh/h	24	39	562	130	78	310
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	26	42	611	141	85	337

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1020	376	0	0	752	0
Stage 1	682	-	-	-	-	-
Stage 2	338	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	233	621	-	-	853	-
Stage 1	464	-	-	-	-	-
Stage 2	694	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	207	621	-	-	853	-
Mov Cap-2 Maneuver	207	-	-	-	-	-
Stage 1	464	-	-	-	-	-
Stage 2	618	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	17.64	0	2.51
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	353	724	-
HCM Lane V/C Ratio	-	-	0.194	0.099	-
HCM Ctrl Dly (s/v)	-	-	17.6	9.7	0.7
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.7	0.3	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	204	147	22	13	284	227	83	504	24	121	268	193
Future Volume (veh/h)	204	147	22	13	284	227	83	504	24	121	268	193
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	222	160	24	14	309	247	90	548	26	132	291	210
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	251	1405	207	28	1161	518	342	1028	49	319	592	502
HCM Platoon Ratio	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.67	1.67	1.67
Prop Arrive On Green	0.24	0.76	0.76	0.02	0.33	0.33	0.05	0.30	0.30	0.11	0.53	0.53
Unsig. Movement Delay												
Ln Grp Delay, s/veh	56.9	8.5	8.5	72.2	30.3	35.3	27.8	39.0	38.9	26.9	25.0	24.1
Ln Grp LOS	E	A	A	E	C	D	C	D	D	C	C	C
Approach Vol, veh/h		406			570			664			633	
Approach Delay, s/veh		35.0			33.5			37.4			25.1	
Approach LOS		C			C			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	4.0	2.0	4.0	1.1	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	13.1	40.7	6.9	59.3	10.9	43.0	21.9	44.2
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green (Gmax), s	13.0	31.0	5.0	51.0	6.0	38.0	28.0	28.0
Max Allow Headway (MAH), s	3.8	5.3	3.8	5.3	3.8	4.7	3.8	4.7
Max Q Clear (g_c+I1), s	8.1	17.9	2.9	3.7	6.2	13.9	16.4	16.9
Green Ext Time (g_e), s	0.1	2.9	0.0	1.1	0.0	2.5	0.5	2.2
Prob of Phs Call (p_c)	0.99	1.00	0.37	1.00	0.95	1.00	1.00	1.00
Prob of Max Out (p_x)	0.36	0.00	1.00	0.00	1.00	0.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3454		3106		1870		3554

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		164		458		1585		1585

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0

Lane Assignment	L (Pr/Pm)		L (Prot)		L (Pr/Pm)		L (Prot)	
Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	132	0	14	0	90	0	222	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	6.1	0.0	0.9	0.0	4.2	0.0	14.4	0.0
Cycle Q Clear Time (g_c), s	6.1	0.0	0.9	0.0	4.2	0.0	14.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	839	0	0	0	897	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	35.7	0.0	0.0	0.0	35.7	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	19.8	0.0	0.0	0.0	26.1	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	2.8	0.0	0.0	0.0	1.1	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	319	0	28	0	342	0	251	0
V/C Ratio (X)	0.41	0.00	0.51	0.00	0.26	0.00	0.88	0.00
Avail Cap (c_a), veh/h	391	0	74	0	344	0	416	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	26.0	0.0	58.6	0.0	27.4	0.0	44.9	0.0
Incr Delay (d2), s/veh	0.9	0.0	13.6	0.0	0.4	0.0	12.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	26.9	0.0	72.2	0.0	27.8	0.0	56.9	0.0
1st-Term Q (Q1), veh/ln	2.5	0.0	0.4	0.0	1.8	0.0	5.8	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.1	0.0	0.0	0.0	0.8	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	2.5	0.0	0.5	0.0	1.8	0.0	6.6	0.0
%ile Storage Ratio (RQ%)	0.10	0.00	0.07	0.00	0.14	0.00	0.50	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	2
Grp Vol (v), veh/h	0	282	0	90	0	291	0	309
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1870	0	1777
Q Serve Time (g_s), s	0.0	15.9	0.0	1.6	0.0	11.9	0.0	7.7
Cycle Q Clear Time (g_c), s	0.0	15.9	0.0	1.6	0.0	11.9	0.0	7.7
Lane Grp Cap (c), veh/h	0	529	0	804	0	592	0	1161
V/C Ratio (X)	0.00	0.53	0.00	0.11	0.00	0.49	0.00	0.27
Avail Cap (c_a), veh/h	0	529	0	804	0	592	0	1161
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	35.2	0.0	8.2	0.0	22.1	0.0	29.8
Incr Delay (d2), s/veh	0.0	3.8	0.0	0.3	0.0	2.9	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	39.0	0.0	8.5	0.0	25.0	0.0	30.3
1st-Term Q (Q1), veh/ln	0.0	6.9	0.0	0.6	0.0	4.5	0.0	3.3

2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.1	0.0	0.5	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.4	0.0	0.7	0.0	4.9	0.0	3.4
%ile Storage Ratio (RQ%)	0.00	0.55	0.00	0.04	0.00	0.20	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	292	0	94	0	210	0	247
Grp Sat Flow (s), veh/h/ln	0	1841	0	1788	0	1585	0	1585
Q Serve Time (g_s), s	0.0	15.9	0.0	1.7	0.0	9.6	0.0	14.9
Cycle Q Clear Time (g_c), s	0.0	15.9	0.0	1.7	0.0	9.6	0.0	14.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.09	0.00	0.26	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	548	0	809	0	502	0	518
V/C Ratio (X)	0.00	0.53	0.00	0.12	0.00	0.42	0.00	0.48
Avail Cap (c_a), veh/h	0	548	0	809	0	502	0	518
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	35.2	0.0	8.3	0.0	21.6	0.0	32.2
Incr Delay (d2), s/veh	0.0	3.7	0.0	0.3	0.0	2.6	0.0	3.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	38.9	0.0	8.5	0.0	24.1	0.0	35.3
1st-Term Q (Q1), veh/ln	0.0	7.1	0.0	0.7	0.0	3.2	0.0	5.7
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.1	0.0	0.4	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.7	0.0	0.7	0.0	3.5	0.0	6.2
%ile Storage Ratio (RQ%)	0.00	0.57	0.00	0.04	0.00	0.50	0.00	0.78
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	32.6
HCM 7th LOS	C

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	105	110	131	223	199	166	477	152	234	363	137
Future Volume (veh/h)	67	105	110	131	223	199	166	477	152	234	363	137
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	73	114	120	142	242	216	180	518	165	254	395	149
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	175	465	207	326	302	258	590	1968	878	626	1473	549
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.13	0.13	0.08	0.17	0.17	0.11	1.00	1.00	0.08	0.58	0.58
Unsig. Movement Delay												
Ln Grp Delay, s/veh	44.4	47.1	51.6	39.8	56.6	60.9	10.2	0.3	0.4	9.4	13.1	13.1
Ln Grp LOS	D	D	D	D	E	E	B	A	A	A	B	B
Approach Vol, veh/h		307			600			863			798	
Approach Delay, s/veh		48.2			54.2			2.4			11.9	
Approach LOS		D			D			A			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	3.0	1.1	4.0	1.1	4.0
Phs Duration (G+Y+Rc), s	14.3	70.9	14.5	20.2	11.0	74.3	10.3	24.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green (Gmax), s	31.5	27.5	12.5	30.5	6.5	52.5	16.5	26.5
Max Allow Headway (MAH), s	3.8	5.0	3.8	4.6	3.8	5.3	3.8	5.4
Max Q Clear (g_c+I1), s	9.1	2.0	10.0	10.5	7.6	11.4	6.2	18.2
Green Ext Time (g_e), s	0.7	4.3	0.1	1.0	0.0	3.8	0.1	1.8
Prob of Phs Call (p_c)	1.00	1.00	0.99	1.00	1.00	1.00	0.91	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.46

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		3554		2533		1814

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1585		944		1553

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0

Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	
Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	254	0	142	0	180	0	73	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	7.1	0.0	8.0	0.0	5.6	0.0	4.2	0.0
Cycle Q Clear Time (g_c), s	7.1	0.0	8.0	0.0	5.6	0.0	4.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	758	0	1146	0	862	0	934	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	67.3	0.0	17.5	0.0	66.4	0.0	15.7	0.0
Perm LT Serve Time (g_u), s	66.4	0.0	12.2	0.0	60.4	0.0	3.8	0.0
Perm LT Q Serve Time (g_ps), s	0.4	0.0	0.7	0.0	1.5	0.0	1.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	626	0	326	0	590	0	175	0
V/C Ratio (X)	0.41	0.00	0.44	0.00	0.30	0.00	0.42	0.00
Avail Cap (c_a), veh/h	947	0	363	0	590	0	334	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	0.91	0.00	1.00	0.00
Uniform Delay (d1), s/veh	8.9	0.0	38.9	0.0	9.9	0.0	42.8	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.9	0.0	0.3	0.0	1.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	9.4	0.0	39.8	0.0	10.2	0.0	44.4	0.0
1st-Term Q (Q1), veh/ln	2.7	0.0	3.5	0.0	1.9	0.0	1.9	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	2.7	0.0	3.6	0.0	1.9	0.0	1.9	0.0
%ile Storage Ratio (RQ%)	0.20	0.00	0.61	0.00	0.33	0.00	0.30	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	1	0	1
Grp Vol (v), veh/h	0	518	0	114	0	276	0	237
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	0.0	0.0	3.5	0.0	9.2	0.0	15.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	3.5	0.0	9.2	0.0	15.4
Lane Grp Cap (c), veh/h	0	1968	0	465	0	1033	0	296
V/C Ratio (X)	0.00	0.26	0.00	0.25	0.00	0.27	0.00	0.80
Avail Cap (c_a), veh/h	0	1968	0	903	0	1033	0	392
Upstream Filter (I)	0.00	0.91	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	46.8	0.0	12.4	0.0	48.1
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.3	0.0	0.6	0.0	8.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.3	0.0	47.1	0.0	13.1	0.0	56.6
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.5	0.0	3.6	0.0	6.8

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	1.6	0.0	3.8	0.0	7.5
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.04	0.00	0.14	0.00	0.14
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	165	0	120	0	268	0	221
Grp Sat Flow (s), veh/h/ln	0	1585	0	1585	0	1700	0	1591
Q Serve Time (g_s), s	0.0	0.0	0.0	8.5	0.0	9.4	0.0	16.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	8.5	0.0	9.4	0.0	16.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.56	0.00	0.98
Lane Grp Cap (c), veh/h	0	878	0	207	0	989	0	265
V/C Ratio (X)	0.00	0.19	0.00	0.58	0.00	0.27	0.00	0.84
Avail Cap (c_a), veh/h	0	878	0	403	0	989	0	351
Upstream Filter (I)	0.00	0.91	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	49.0	0.0	12.5	0.0	48.4
Incr Delay (d2), s/veh	0.0	0.4	0.0	2.5	0.0	0.7	0.0	12.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.4	0.0	51.6	0.0	13.1	0.0	60.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.4	0.0	3.5	0.0	6.4
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.2	0.0	0.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	3.5	0.0	3.7	0.0	7.3
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.64	0.00	0.14	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

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	37	189	97	121	351	30	27	4	82	4	4	10
Future Vol, veh/h	37	189	97	121	351	30	27	4	82	4	4	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	190	-	-	120	-	150	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	40	205	105	132	382	33	29	4	89	4	4	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	414	0	0	311	0	0	795	1016	155	830	1036	191
Stage 1	-	-	-	-	-	-	339	339	-	645	645	-
Stage 2	-	-	-	-	-	-	456	677	-	185	391	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1141	-	-	1246	-	-	279	237	863	263	230	819
Stage 1	-	-	-	-	-	-	649	639	-	427	466	-
Stage 2	-	-	-	-	-	-	554	450	-	799	605	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1141	-	-	1246	-	-	233	204	863	199	199	819
Mov Cap-2 Maneuver	-	-	-	-	-	-	233	204	-	199	199	-
Stage 1	-	-	-	-	-	-	627	616	-	382	417	-
Stage 2	-	-	-	-	-	-	484	403	-	686	584	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.95	1.98	14.79	16.11
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	490	1141	-	-	1246	-	-	343
HCM Lane V/C Ratio	0.251	0.035	-	-	0.106	-	-	0.057
HCM Ctrl Dly (s/v)	14.8	8.3	-	-	8.2	-	-	16.1
HCM Lane LOS	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	1	0.1	-	-	0.4	-	-	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	498	3	10	450	50	13	3	8	26	2	49
Future Volume (veh/h)	89	498	3	10	450	50	13	3	8	26	2	49
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	97	541	3	11	489	54	14	3	9	28	2	53
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	122	2143	12	23	1729	190	257	62	144	165	29	271
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.59	0.59	0.03	1.00	1.00	0.28	0.28	0.28	0.28	0.28	0.28
Unsig. Movement Delay												
Ln Grp Delay, s/veh	66.0	12.4	12.3	73.0	0.7	0.7	32.2	0.0	0.0	34.0	0.0	0.0
Ln Grp LOS	E	B	B	E	A	A	C			C		
Approach Vol, veh/h		641			554			26			83	
Approach Delay, s/veh		20.5			2.2			32.2			34.0	
Approach LOS		C			A			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		8.0	2.0	4.0		8.0	2.0	4.0
Phs Duration (G+Y+Rc), s		38.0	6.0	76.0		38.0	12.7	69.3
Change Period (Y+Rc), s		5.0	4.5	5.0		5.0	4.5	5.0
Max Green (Gmax), s		33.0	9.5	63.0		33.0	18.5	54.0
Max Allow Headway (MAH), s		5.4	3.8	5.2		5.5	3.8	5.3
Max Q Clear (g_c+I1), s		3.3	2.7	10.6		6.6	8.4	2.0
Green Ext Time (g_e), s		0.1	0.0	3.7		0.4	0.1	3.7
Prob of Phs Call (p_c)		1.00	0.31	1.00		1.00	0.96	1.00
Prob of Max Out (p_x)		0.00	0.00	0.00		0.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		768	1781			453	1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		224		3623		104		3228

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		525		20		985		355

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0

Lane Assignment		L+T+R	L (Prot)			L+T+R	L (Prot)	
Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	26	11	0	0	83	97	0
Grp Sat Flow (s), veh/h/ln	0	1518	1781	0	0	1542	1781	0
Q Serve Time (g_s), s	0.0	0.0	0.7	0.0	0.0	0.7	6.4	0.0
Cycle Q Clear Time (g_c), s	0.0	1.3	0.7	0.0	0.0	4.6	6.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1370	0	0	0	1424	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	1821	0	0	0	1839	0	0
Perm LT Eff Green (g_p), s	0.0	33.0	0.0	0.0	0.0	33.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	28.4	0.0	0.0	0.0	31.7	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0
Time to First Blk (g_f), s	0.0	1.7	0.0	0.0	0.0	3.9	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	1.3	0.0	0.0	0.0	3.9	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.54	1.00	0.00	0.00	0.34	1.00	0.00
Lane Grp Cap (c), veh/h	0	463	23	0	0	464	122	0
V/C Ratio (X)	0.00	0.06	0.48	0.00	0.00	0.18	0.79	0.00
Avail Cap (c_a), veh/h	0	463	141	0	0	464	275	0
Upstream Filter (I)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	32.0	58.1	0.0	0.0	33.2	55.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	15.0	0.0	0.0	0.8	10.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.2	73.0	0.0	0.0	34.0	66.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.6	0.3	0.0	0.0	1.9	2.9	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.0	0.0	0.1	0.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.6	0.4	0.0	0.0	2.0	3.3	0.0
%ile Storage Ratio (RQ%)	0.00	0.07	0.12	0.00	0.00	0.22	0.92	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	265	0	0	0	268
Grp Sat Flow (s), veh/h/ln	0	0	0	1777	0	0	0	1777
Q Serve Time (g_s), s	0.0	0.0	0.0	8.6	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	8.6	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	1051	0	0	0	952
V/C Ratio (X)	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.28
Avail Cap (c_a), veh/h	0	0	0	1051	0	0	0	952
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	11.8	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	12.4	0.0	0.0	0.0	0.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment				T+R				T+R
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	279	0	0	0	275
Grp Sat Flow (s), veh/h/ln	0	0	0	1867	0	0	0	1806
Q Serve Time (g_s), s	0.0	0.0	0.0	8.6	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	8.6	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.35	0.00	0.01	0.00	0.64	0.00	0.20
Lane Grp Cap (c), veh/h	0	0	0	1104	0	0	0	967
V/C Ratio (X)	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.28
Avail Cap (c_a), veh/h	0	0	0	1104	0	0	0	967
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	11.8	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	12.3	0.0	0.0	0.0	0.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	16	499	511	31	9	16
Future Vol, veh/h	16	499	511	31	9	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	-	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	17	542	555	34	10	17

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	589	0	-	0	878	295
Stage 1	-	-	-	-	572	-
Stage 2	-	-	-	-	306	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	982	-	-	-	287	702
Stage 1	-	-	-	-	528	-
Stage 2	-	-	-	-	720	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	982	-	-	-	282	702
Mov Cap-2 Maneuver	-	-	-	-	282	-
Stage 1	-	-	-	-	518	-
Stage 2	-	-	-	-	720	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.27	0	10.26
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	982	-	-	-	702
HCM Lane V/C Ratio	0.018	-	-	-	0.025
HCM Ctrl Dly (s/v)	8.7	-	-	-	10.3
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	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	4	149	9	34	54	4	5	11	8	2	12	13
Future Vol, veh/h	4	149	9	34	54	4	5	11	8	2	12	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	162	10	37	59	4	5	12	9	2	13	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	63	0	0	172	0	0	315	313	167	311	315	61
Stage 1	-	-	-	-	-	-	176	176	-	135	135	-
Stage 2	-	-	-	-	-	-	139	137	-	177	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	1540	-	-	1405	-	-	638	603	877	641	601	1004
Stage 1	-	-	-	-	-	-	826	754	-	869	785	-
Stage 2	-	-	-	-	-	-	864	783	-	825	750	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1540	-	-	1405	-	-	597	584	877	603	582	1004
Mov Cap-2 Maneuver	-	-	-	-	-	-	597	584	-	603	582	-
Stage 1	-	-	-	-	-	-	824	751	-	845	763	-
Stage 2	-	-	-	-	-	-	814	762	-	801	748	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.18	2.82	10.67	10.12
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	661	44	-	-	656	-	-	732
HCM Lane V/C Ratio	0.039	0.003	-	-	0.026	-	-	0.04
HCM Ctrl Dly (s/v)	10.7	7.3	0	-	7.6	0	-	10.1
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	206	0	111	24	0	39	248	564	130	78	407	111
Future Volume (veh/h)	206	0	111	24	0	39	248	564	130	78	407	111
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	224	0	121	26	0	42	270	613	141	85	442	121
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	313	0	328	240	0	328	661	2036	467	563	2010	546
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Prop Arrive On Green	0.21	0.00	0.21	0.21	0.00	0.21	1.00	1.00	1.00	1.00	1.00	1.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	51.1	0.0	41.5	45.3	0.0	38.9	1.9	0.6	0.6	0.5	0.4	0.4
Ln Grp LOS	D		D	D		D	A	A	A	A	A	A
Approach Vol, veh/h		345			68			1024			648	
Approach Delay, s/veh		47.8			41.4			0.9			0.4	
Approach LOS		D			D			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		6.0		6.0
Phs Duration (G+Y+Rc), s		90.1		29.9		90.1		29.9
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green (Gmax), s		75.0		35.0		75.0		35.0
Max Allow Headway (MAH), s		5.3		4.5		5.4		5.0
Max Q Clear (g_c+I1), s		2.0		23.8		2.0		12.0
Green Ext Time (g_e), s		8.5		1.1		4.9		0.2
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.05		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		847		1365		710		1270

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2870		0		2833		0

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		659		1585		769		1585

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3

Lane Assignment		L		L		L		L
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	270	0	224	0	85	0	26
Grp Sat Flow (s), veh/h/ln	0	847	0	1365	0	710	0	1270
Q Serve Time (g_s), s	0.0	0.0	0.0	19.2	0.0	0.0	0.0	2.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	21.8	0.0	0.0	0.0	10.0
Perm LT Sat Flow (s_l), veh/h/ln	0	847	0	1365	0	710	0	1270
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	85.1	0.0	24.9	0.0	85.1	0.0	24.9
Perm LT Serve Time (g_u), s	0.0	85.1	0.0	22.3	0.0	85.1	0.0	17.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	19.2	0.0	0.0	0.0	2.2
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	661	0	313	0	563	0	240
V/C Ratio (X)	0.00	0.41	0.00	0.72	0.00	0.15	0.00	0.11
Avail Cap (c_a), veh/h	0	661	0	429	0	563	0	347
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.95	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	47.6	0.0	0.0	0.0	45.1
Incr Delay (d2), s/veh	0.0	1.9	0.0	3.5	0.0	0.5	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	1.9	0.0	51.1	0.0	0.5	0.0	45.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.5	0.0	0.0	0.0	0.7
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.3	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.3	0.0	6.8	0.0	0.1	0.0	0.7
%ile Storage Ratio (RQ%)	0.00	0.09	0.00	1.07	0.00	0.02	0.00	0.08
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	379	0	0	0	290	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1870	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1261	0	0	0	1327	0	0
V/C Ratio (X)	0.00	0.30	0.00	0.00	0.00	0.22	0.00	0.00
Avail Cap (c_a), veh/h	0	1261	0	0	0	1327	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.95	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.6	0.0	0.0	0.0	0.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	375	0	121	0	273	0	42
Grp Sat Flow (s), veh/h/ln	0	1752	0	1585	0	1732	0	1585
Q Serve Time (g_s), s	0.0	0.0	0.0	7.9	0.0	0.0	0.0	2.6
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	7.9	0.0	0.0	0.0	2.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.38	0.00	1.00	0.00	0.44	0.00	1.00
Lane Grp Cap (c), veh/h	0	1243	0	328	0	1229	0	328
V/C Ratio (X)	0.00	0.30	0.00	0.37	0.00	0.22	0.00	0.13
Avail Cap (c_a), veh/h	0	1243	0	462	0	1229	0	462
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.95	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	40.8	0.0	0.0	0.0	38.7
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.7	0.0	0.4	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.6	0.0	41.5	0.0	0.4	0.0	38.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.1	0.0	0.0	0.0	1.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.1	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	3.1	0.0	0.1	0.0	1.0
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.49	0.00	0.00	0.00	0.12
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	9.8
HCM 7th LOS	A

Notes
User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	265	0	941	319	223
Future Vol, veh/h	0	265	0	941	319	223
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	288	0	1023	347	242

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	295	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	702	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	702	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	13.65	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	702	-	-
HCM Lane V/C Ratio	-	0.41	-	-
HCM Ctrl Dly (s/v)	-	13.7	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	2	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	70	0	0	42	151	70
Future Vol, veh/h	70	0	0	42	151	70
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	76	0	0	46	164	76

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	248	202	240	0	-	0
Stage 1	202	-	-	-	-	-
Stage 2	46	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	741	839	1326	-	-	-
Stage 1	832	-	-	-	-	-
Stage 2	977	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	741	839	1326	-	-	-
Mov Cap-2 Maneuver	741	-	-	-	-	-
Stage 1	832	-	-	-	-	-
Stage 2	977	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	10.42	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1326	-	741	-	-
HCM Lane V/C Ratio	-	-	0.103	-	-
HCM Ctrl Dly (s/v)	0	-	10.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

STORM WATER MANAGEMENT REPORT

Retail Development
NE Douglas St.
Lee Summit, Missouri

Pickering Job Number:
27480.00

Prepared for:

Phillips Edison & Company
11501 Northlake Drive
Cincinnati, OH 45249

Prepared by:

Pickering Firm, Inc.
6363 Poplar Avenue, Suite 300
Memphis, Tennessee 38119
(901) 726-0810
www.pickeringfirm.com

TABLE OF CONTENTS

General Information……..2

Design Methodology…….2

Existing Conditions……...3

Proposed Conditions…….……...4

Detention Analysis……7

Water Quality – Macro Analysis……7

Conclusion / Recommendations……..8

List of Tables:

Table 1 – Rainfall Depths for Jackson County, Missouri

Table 2 – Existing Site Conditions

Table 3 – Existing Peak Runoff Summary

Table 4 – Allowable Peak Runoff Summary

Table 5 – Proposed Site Conditions

Table 6 – Proposed Peak Runoff Summary

Table 7 – Extended Dry Detention Basin Volume

Table 8 – Extended Dry Detention Basin Routing Results

Table 9 – Release Rate Summary

Appendices:

Appendix A – Site Location Map
Appendix B – FEMA Firmette
Appendix C – NRCS Soils Reports
Appendix D – Pre-Development Drainage Map
Appendix E – Post-Development Drainage Map
Appendix F – Existing and Proposed Conditions Analysis
Appendix G – Water Quality Worksheets

Project Description

The proposed sites are located as follows Site 1 is located at the NW corner of NE Douglas Street and E Chipman Road in Lee Summit, Jackson County, Missouri and Site 2 is located at the SW corner of NE Tudor Rd and NW Commerce Dr in Lee Summit, Jackson County, Missouri. Site 1 is a 19.1-acre property will be a commercial development consisting of a grocery store, retail store, Parking lot, utilities, and ancillary stormwater facilities. Site 2 is a 2.45-acre property will be a commercial development consisting of a commercial store, Parking lot, utilities, and ancillary stormwater facilities. The Property's are in section 31, Township 48 North, Range 31 West.

Floodplain Information

Site 1:
According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) map number 29095C0417G (dated: January 20, 2017) the site lies outside of the 100-year inundation zone, Zone X, defined to be an area of minimal flood hazard. Refer to Appendix A for site location map and Appendix B for the FEMA Firm Panel.

Site 2:
According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) map number 29095C0417G (dated: January 20, 2017) the site lies outside of the 100-year inundation zone, Zone X, defined to be an area of minimal flood hazard. Refer to Appendix A for site location map and Appendix B for the FEMA Firm Panel.

Soil Classification
Site 1:
Soil classification published by the Unted States Department of Agriculture/Natural Resources Conservation Service (USDA/NRCS) website for Jackson County, MO on January 20, 2026, indicate the existing site is made up of two soil types:

10082	Arisburg-Urban land complex, 1 to 5 percent slopes
10180	Udarents- Urban land-Sampsel complex, 2 to 5 percent slopes

Refer to Appendix C for a detailed soil report.

Site 2:
Soil classification published by the Unted States Department of Agriculture/Natural Resources Conservation Service (USDA/NRCS) website for Jackson County, MO on March 2, 2026, indicate the existing site is made up of three soil types:

10120	Sharpsburg silt loam, 2 to 5 percent slopes

10128	Sharpsburg-Urban land complex, 2 to 5 percent slopes
10129	Sharpsburg-Urban land complex, 5 to 9 percent slopes

Refer to Appendix C for a detailed soil report.

Site Hydrology

Site 1:
On-site stormwater runoff is collected on the property in an on-site dry detention basin on the west of the site. From there, runoff discharges into the existing storm pipe system that crosses NW Commerce drive on the west side of the lot. According to the Missouri Department of conversation, the entire property and contributing drainage areas are tributary to Blue River watershed.

Site 2:
On-site stormwater runoff is collected on the property in an on-site dry detention basin on the south of the site. From there, runoff discharges into the existing ditch that follows NW Main St. on the west side of the lot. According to the Missouri Department of conversation, the entire property and contributing drainage areas are tributary to Blue River watershed.

Additional Permit Requirements

USACE Jurisdictional Determination was not completed for this project; according to the EPA watershed map, there are no "Waters of the United States" on the property or adjacent properties. As referenced above, the site is not located within any Special Flood Hazard Areas (SFHA).

DESIGN METHODOLOGY

Storm water runoff volumes and peak flow rates were calculated using the procedure defined in Technical Release 55 (TR-55) by the United States Department of Agriculture (USDA) Soil Conservation Service (SCS), now Natural Resources Conservation Service (NRCS). Hydraflow Hydrographs was also utilized to establish the distribution of precipitation rates for the various design storms as well as the detention pond design. Hydraulic soil group determinations for the contributing drainage area were determined using the Web Soil Survey internet service provided by the USDA.

Existing Conditions

Site 1:

The 19.1-acre property is undeveloped, grassland and woodland area. Stormwater runoff currently flows from the east side of the property to either the north or the west sides of the property where it is collected by existing storm sewer crossing NW Main Street, respectively – drainage areas, time of concentration path, and discharge point are identified on the Pre-Development Drainage Map on Appendix D. There is a small stream located on the property but the stream is not subject to the stream buffer requirements.

According to NRCS Web Soil Survey, 34.3% of the property consists of 10082 – Arisburg-Urban land complex, 1 to 5 percent slopes in Hydrologic Soil Group (HSG) C, and 65.7% of the property consists of Udarents-Urban land-Sampsel complex, 2 to 5 percents slopes (HSG C). The existing site was broken into one drainage area. A CN was calculated for the pre-development area using the following land type: woods & grass combination with good coverage and a soil HSG Type C having a CN of 74. The existing conditions calculations are summarized in Tables 2 and 3 below.

Table 2 – Existing Site Conditions

	West
Area (Ac)	19.1
CN	74
Time of Concentration (Tc) (min)	9.00

Table 3 – Existing Peak Runoff Summary

Storm Event	**Peak Discharge (cfs)**
2-yr	10.48
10-yr	25.78
100-yr	59.32

Following the 6-hr storm method of mitigating additional runoff, the proposed development must meet the allowable release rate requirements. The requirements for the site are 0.2 cfs of runoff per acre for the 2-year storm, 0.6 cfs per acre for the 10-year storm, and 3.0 cfs per acre for the 100-year storm. The allowable release rates for the 19.1 acre site where 19.1 acres is being disturbed can be seen in table 4 below.

Table 4 – Allowable Peak Runoff Summary

Storm Event	Peak Discharge (cfs)
2-yr	3.82
10-yr	11.46
100-yr	57.30

Site 2:

The 2.45-acre property is undeveloped, grassland and woodland area. Stormwater runoff currently flows from the north side of the property to the south where it is collected in a ditch that runs along NW Main St, respectively – drainage areas, time of concentration path, and discharge point are identified on the Pre- and Post-Detention Basin Map on Appendix D.

According to NRCS Web Soil Survey, 11.5% of the property consists of 10120 – Sharpsburg silt loam, 2 to 5 percent slopes in Hydrologic Soil Group (HSG) C, 7.3% of the property consists of 10128 – Sharpsburg-Urban land complex, 2 to 5 percents slopes in HSG D, and 81.2% of the property consists of 10129 – Sharpsburg-Urban land complex, 2 to 5 percent slopes in HSG D. The existing site was broken into one drainage area. A CN was calculated for the pre-development area using the following land type: woods & grass combination with good coverage and a soil HSG Type D having a CN of 74. The existing conditions calculations are summarized in Tables 2 and 3 below.

Table 2 – Existing Site Conditions

	West
Area (Ac)	2.45
CN	74
Time of Concentration (Tc) (min)	5.00

Table 3 – Existing Peak Runoff Summary

Storm Event	Peak Discharge (cfs)
2-yr	4.16
10-yr	6.64
100-yr	11.10

Following the 6-hr storm method of mitigating additional runoff, the proposed development must meet the allowable release rate requirements. The requirements for the site are 0.2 cfs of runoff per acre for the 2-year storm, 0.6 cfs per acre for the 10-year storm, and 3.0 cfs per acre for the 100-year storm. The allowable release rates for the 2.45 acre site can be seen in table 4 below.

Table 4 – Allowable Peak Runoff Summary

Storm Event	Peak Discharge (cfs)
2-yr	0.49
10-yr	1.47
100-yr	7.35

Proposed Conditions

Site 1:

Construction generated by the proposed project consists of a grocery store, fuel station and retail store buildings with associated parking infrastructure, utilities, and drainage facilities. The 19.1-acre contributing drainage area is divided into two drainage types, detained and undetained. The undetained drainage area is 2.1 acres draining on to NW Main Street and existing storm systems. There will also be a conveyance of 8.6 acres of offsite drainage area to the existing storm system that crosses NW Main Street.

Stormwater runoff generated on site will be collected by curb and gutter, conveyed through a proposed storm pipe network and eventually discharging into a dry detention basin on the west side of the property. Runoff will ultimately be released into the existing storm system crossing NW Main Street. The proposed conditions calculations are summarized in Tables 5 and 6.

The proposed dry detention basin has one outfall. Proposed detention has been designed to meet the requirements for the 6-hr method prior to discharging into the existing storm sewer system. Composite CNs were utilized for the proposed site; land cover description for the proposed site is a combination of impervious area which has a CN of 98 for Soil HSG Type C and new grass cover which has a CN of 74 for Soil HSG Type C. The roofs of the buildings will route through downspouts, which are collected by pipes and into the proposed pipe network. Time of concentration for the site was set at the minimum of 5 minutes to obtain the most conservative values. The tables below show the peak runoff generated from the site for each design storm.

Table 5 – Proposed Site Conditions

	West
Area (Ac)	19.1
CN	87.6
Time of Concentration (Tc) (min)	5.00

Table 6 – Proposed Peak Runoff Summary

Storm Event	Peak Discharge (cfs)
2-yr Q_{out} (cfs)	2.15
10-yr Q_{out} (cfs)	4.29
100-yr Q_{out} (cfs)	14.09

Refer to Appendix G for supporting runoff calculations for proposed conditions.

Detention

The proposed detention will include a single dry detention basin with forebay. Runoff accumulated into the dry detention basin will exit the system through a control structure. The control structure will be a riser top set at 1005.00'. The Riser will have 4 windows 12"x24" set at the elevation 1001.40. The riser will also have a 6" in diameter hole set at 1001.00. It will also have a 11' tall perforated riser set at 994.00 with 6 holes 3" in diameter. The runoff will exit the control structure through a proposed 42" concrete pipe connecting to the existing storm system crossing NW Main Street. There will also be a 20' wide emergency spillway set at 1002.80.

Table 7 outlines the stage-storage volume for the proposed dry detention basin:

Table 7 – Dry Detention Basin Volume

Elevation (FT)	Area (SF)	Cumulative Vol (CF)
994.00	0.00	0.00
995.00	2,821.00	940.00
996.00	12,955.00	8,213.00
997.00	18,659.00	23,932.00

998.00	23,887.00	45,149.00
999.00	29,035.00	71,566.00
1000.00	33,525.00	102,816.00
1001.00	37,955.00	138,530.00
1002.00	42,109.00	178,540.00
1003.00	46,476.00	222,810.00
1004.00	51,034.00	271,543.00
1005.00	55,707.00	324,891.00

Stormwater Report

Below is a summary of the dry detention basin characteristics:

Bottom Elevation – 994.00' **Top Elevation** – 1005.00'

Outlet –Riser structure with 4 windows 12"x24" set at the elevation 1001.40. The riser will also have a 6" in diameter hole on the riser set at 1001. The runoff will exit the control structure through a proposed 42" concrete pipe leading to the existing storm system.

Primary Outfall – 42" RCP, 73 LF @ 6.79% FL Upstream – 994.00'

FL Downstream – 989.05'

Tables 8 below give a summary of the peak basin stages for each design storm. Refer to the attached storm modeling results in Appendix G for supporting basin routing calculations.

Table 8 – Dry Detention Basin Routing Results

Storm Event	Max Water Depth (ft)	WSE Proposed	Freeboard (ft)	Peak Qin (cfs)	Peak Qout (cfs)
1.37" Storm	2.53	996.53	8.47	13.65	**0.71**
2-yr	5.13	999.13	5.87	21.72	**2.15**
10-yr	6.97	1000.97	4.09	38.86	**4.29**
100-yr	7.93	1001.93	3.07	70.53	**14.09**

Detention Analysis

The results of the dry detention basin routing were analyzed for the 2-yr, 10-yr and 100-yr design storms. The following Table 9 compares peak flows for the Allowable Release Rate requirements and Proposed Conditions. Detailed results of the routing analysis can be found in Appendix G. Proposed Out includes a combination of the peak outflows from the dry detention basin and the undetained areas.

Table 9 - Release Rate Summary

StormEvent	Allowable Peak Runoff – Total Site(cfs)	Proposed Peak Runoff – Total Site(cfs)	Net Discharge Pre vs. Post – Total Site (cfs)
2-yr	3.82	2.15	**-1.67**
10-yr	11.46	4.29	**-7.17**
100-yr	57.30	14.09	**-43.21**

Water Quality – Macro Analysis

Along with the detention analysis, the site was also analyzed per the MARC BMP Manual to ensure that the quality of the stormwater would also be considered. The existing conditions of the site consist of woodlands and grass, with soil condition of HSG C, producing an existing area-weighted curve number for the property of 74. The proposed conditions of the site include urban commercial development leading to the detention basin and areas of undetained grass cover, both with soil conditions of HSG C, producing a proposed area-weighted curve number of 87.61. To meet water quality requirements the use of a forebay that drains into a dry detention basin and the planting of native vegetation. See Appendix H to see the BMP Worksheets.

The outlet structure for the detention basin was designed using the Design Procedure Form: Dry Detention Basin Main Worksheet to ensure that the basin met water quality storage volume and release rates. Using the design storm of 1.37”, the outlet structure was designed to release the storm. See Appendix G for the analysis of the 1.37” storm event and Appendix H.

Proposed Conditions

Site 2:

Construction generated by the proposed project consists of a commercial building with associated parking infrastructure, utilities, and drainage facilities. The 2.45-acre contributing drainage area is detained drainage area in a dry detention basin at the south of the site.

Stormwater runoff generated on site will be collected by curb and gutter, conveyed through a proposed storm pipe network eventually discharged into a dry detention basin on the south side of the property. Runoff will ultimately be released into the existing ditch running alonf NW Main Street. The proposed conditions calculations are summarized in Tables 5 and 6.

The proposed dry detention basin has one outfall. Proposed detention has been designed to meet the requirements for the 6-hr method prior to discharging into the existing storm sewer system. Composite CNs were utilized for the proposed site; land cover description for the proposed site is a combination of impervious area which has a CN of 98 and new grass cover which has a CN of 74. The roofs of the buildings will route through downspouts, which are collected by pipes and into the proposed pipe network. Time of concentration for the site was set at the minimum of 5 minutes to obtain the most conservative values. The tables below show the peak runoff generated from the site for each design storm.

Table 5 – Proposed Site Conditions

	West
Area (Ac)	2.45
CN	94
Time of Concentration (Tc) (min)	5.00

Table 6 – Proposed Peak Runoff Summary

Storm Event	**Peak Discharge (cfs)**
2-yr Q_{out} (cfs)	0.361
10-yr Q_{out} (cfs)	0.801
100-yr Q_{out} (cfs)	4.752

Refer to Appendix G for supporting runoff calculations for proposed conditions.

Detention

The proposed detention will include a single dry detention basin. Runoff accumulated into the dry detention basin will exit the system through a control structure. The control structure will be a riser top set at 1002.50’. The Riser will have 3 windows 6”x12” set at the elevation 999.00. It

will also have a 8.5’ tall perforated riser set at 994.00 with 6 holes 2” in diameter. The runoff will exit the control structure through a proposed 12” concrete pipe discharging into an existing ditch running along NW Main St.. There will also be a 20’ wide emergency spillway set at 1001.00.

Table 7 outlines the stage-storage volume for the proposed dry detention basin:

Table 7 – Dry Detention Basin Volume

Elevation (FT)	Area (SF)	Cumulative Vol (CF)
994.00	0.00	0.00
995.00	1,893.00	631.00
996.00	3,106.00	3,105.00
997.00	4,377.00	6,828.00
998.00	5,703.00	11,853.00
999.00	7,087.00	18,235.00
1000.00	8,527.00	26,030.00
1001.00	10,028.00	35,296.00
1002.00	11,582.00	46,091.00
1002.50	12,380.00	52,079.00

Stormwater Report

Below is a summary of the dry detention basin characteristics:

Bottom Elevation – 994.00’ **Top Elevation** – 1002.50’

Outlet –Riser structure with 3 windows 6”x12” set at the elevation 999.00. The runoff will exit the control structure through a proposed 12” concrete pipe leading to the existing ditch.

Primary Outfall – 12” RCP, 46.91 LF @ 1.00% FL Upstream – 994.00’

FL Downstream – 993.50’

Tables 8 below give a summary of the peak basin stages for each design storm. Refer to the attached storm modeling results in Appendix G for supporting basin routing calculations.

Table 8 – Dry Detention Basin Routing Results

Storm Event	Max Water Depth (ft)	WSE Proposed	Freeboard (ft)	Peak Qin (cfs)	Peak Qout (cfs)
1.37" Storm	2.21	996.21	6.29	3.35	**0.14**
2-yr	4.06	998.06	4.44	4.16	**0.36**
10-yr	5.10	999.10	3.40	6.64	**0.80**
100-yr	5.63	999.63	2.87	11.10	**4.75**

Detention Analysis

The results of the dry detention basin routing were analyzed for the 2-yr, 10-yr and 100-yr design storms. The following Table 9 compares peak flows for the Allowable Release Rate requirements and Proposed Conditions. Detailed results of the routing analysis can be found in Appendix G. Proposed Out includes a combination of the peak outflows from the dry detention basin and the undetained areas.

Table 9 - Release Rate Summary

StormEvent	Allowable Peak Runoff – Total Site(cfs)	Proposed Peak Runoff – Total Site(cfs)	Net Discharge Pre vs. Post – Total Site (cfs)
2-yr	0.49	0.36	**-0.13**
10-yr	1.47	0.80	**-0.67**
100-yr	7.35	4.75	**-2.6**

Water Quality – Macro Analysis

Along with the detention analysis, the site was also analyzed per the MARC BMP Manual to ensure that the quality of the stormwater would also be considered. The existing conditions of the site consist of woodlands and grass, with soil condition of HSG C and HSG D, producing an existing area-weighted curve number for the property of 74. The proposed conditions of the site include urban commercial development leading to the detention basin and areas of undetained grass cover, both with soil conditions of HSG C and HSG D, producing a proposed area-

weighted curve number of 94. To meet water quality requirements the use of a combination of a BMP train of two Contech Hydrodynamic Separators running into a dry detention basin and the planting of native vegetation. See Appendix H to see the BMP Worksheets.

The outlet structure for the detention basin was designed using the Design Procedure Form: Dry Detention Basin Main Worksheet to ensure that the basin met water quality storage volume and release rates. Using the design storm of 1.37", the outlet structure was designed to release the storm. See Appendix G for the analysis of the 1.37" storm event and Appendix H.

Conclusion & Recommendations

Site 1:

The proposed commercial development consists of a grocery store, fuel station, retail store buildings, associated parking lots, utilities, and drainage facilities. The total property area consists of 19.1 acres of total area. Installation of a dry detention basin on the site is recommended to meet release rate and BMP requirements. As shown in Table 9 above and the supporting detention calculations, release rate is reduced for the 2-yr, 10-yr, and 100-yr storm events when comparing the post-development versus pre-development conditions and meets the allowable release rate requirements for detention as outlined in the 6-hr storm detention method found in APWA 5600. Therefore, we recommend approval of this Storm Drainage Study

Site 2:

The proposed commercial development consists of a commercial buildings, associated parking lots, utilities, and drainage facilities. The total property area consists of 2.45 acres of total area. Installation of an dry detention basin on the site is recommended to meet release rate and BMP requirements. As shown in Table 9 above and the supporting detention calculations, release rate is reduced for the 2-yr, 10-yr, and 100-yr storm events when comparing the post-development versus pre-development conditions and meets the allowable release rate requirements for detention as outlined in the 6-hr storm detention method found in APWA 5600. Therefore, we recommend approval of this Storm Drainage Study

Appendix A – Site Location Map

NORTH

0 500 1000 2000

1 INCH = 1000 FEET

Pickering

Pickering Firm, Inc.
Architecture • Engineering
Planning • Surveying

1700 Kirk Road, Suite 120
Little Rock, AR 72223
501.246.3578

PROJECT NO: 27480.00

SITE LOCATION
EXHIBIT A.1

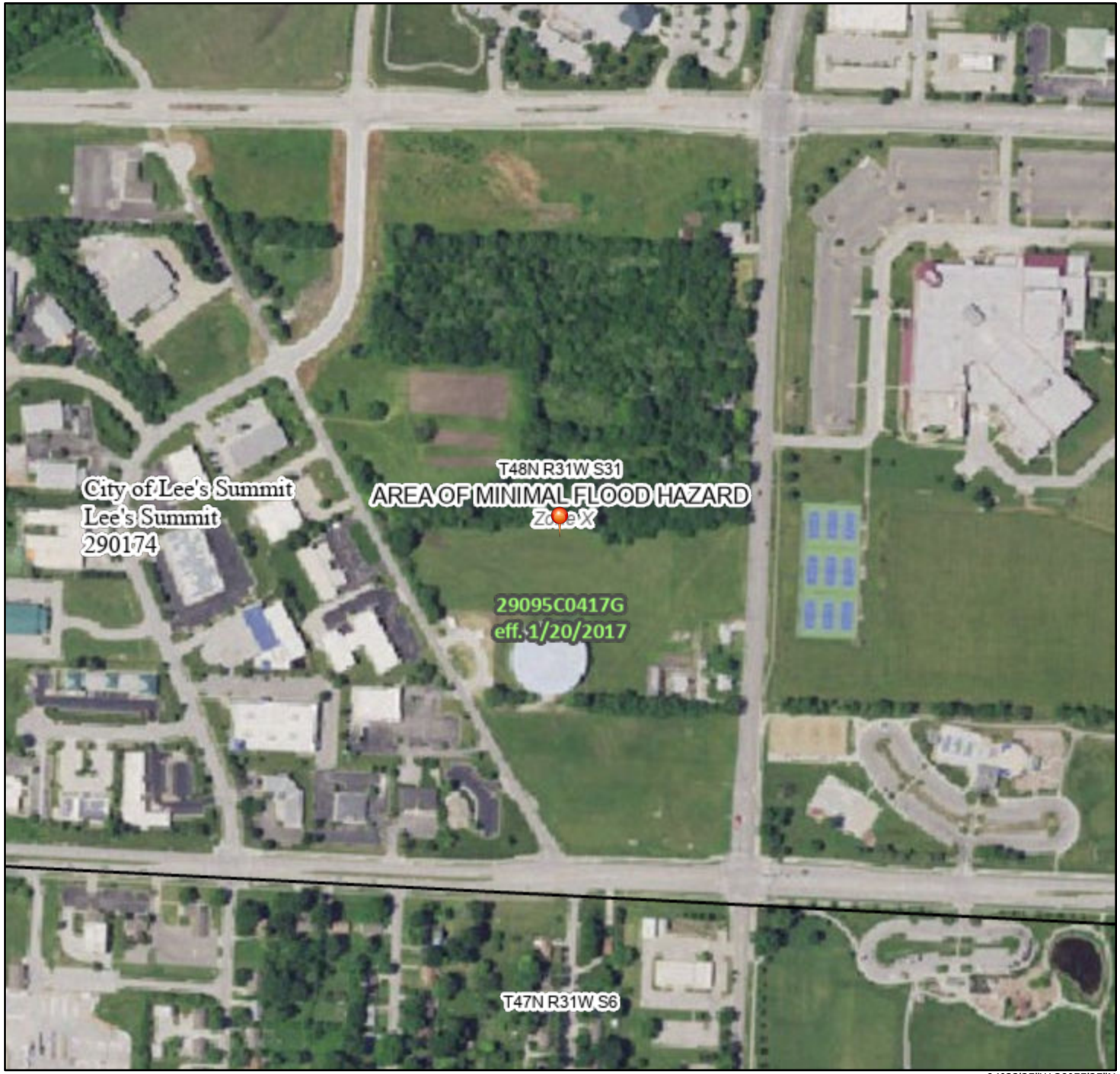
LEE SUMMIT, JACKSON CO., MO
04/08/2025

Appendix B – FEMA Firmette

National Flood Hazard Layer FIRMette

FEMA

94°23'12"W 38°55'53"N



0 250 500 1,000 1,500 2,000 Feet

1:6,000

94°22'35"W 38°55'25"N

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

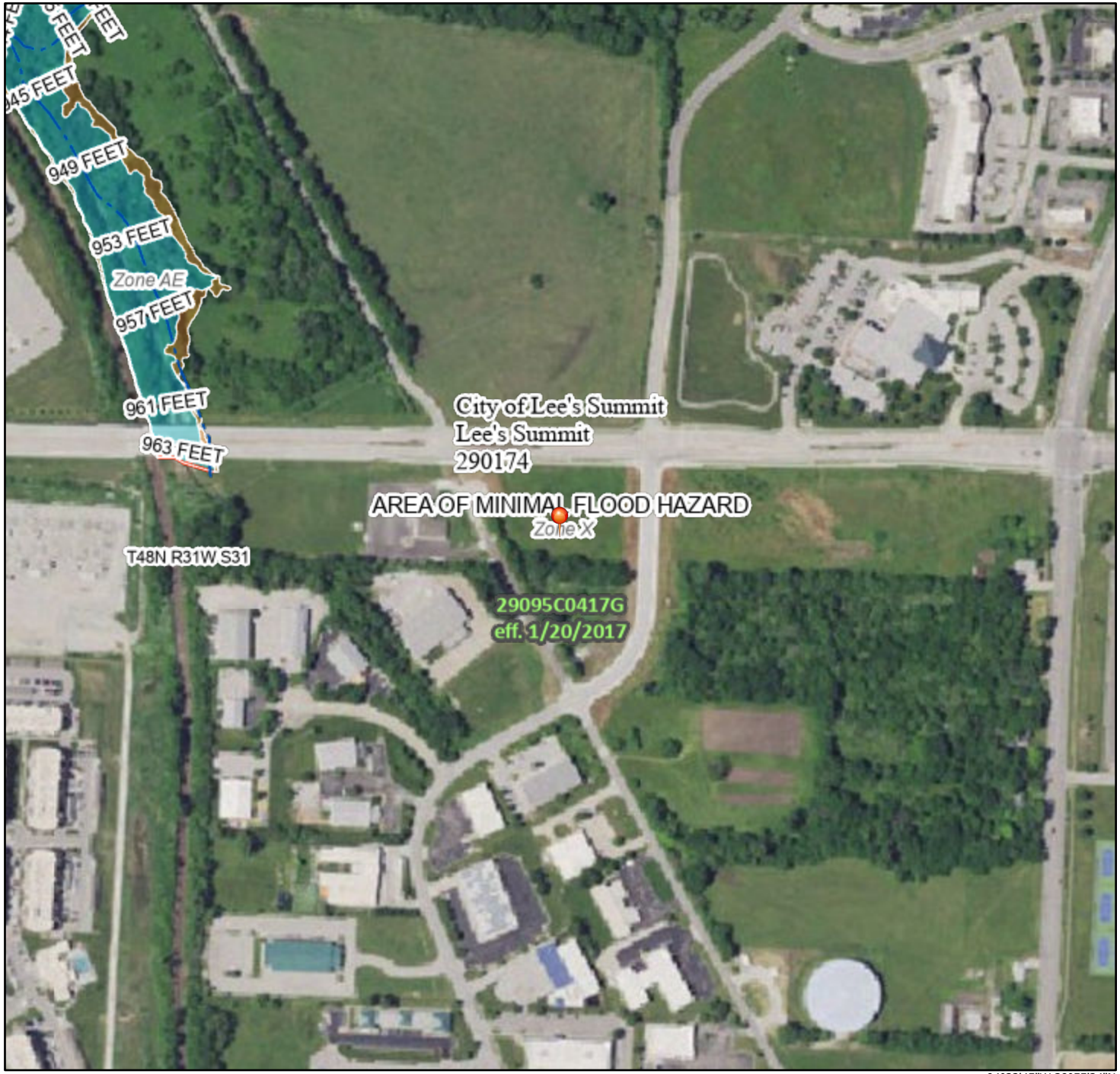
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 1/16/2026 at 2:22 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

National Flood Hazard Layer FIRMette

FEMA

94°23'22"W 38°56'2"N



94°22'45"W 38°55'34"N

Feet 1:6,000

0 250 500 1,000 1,500 2,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

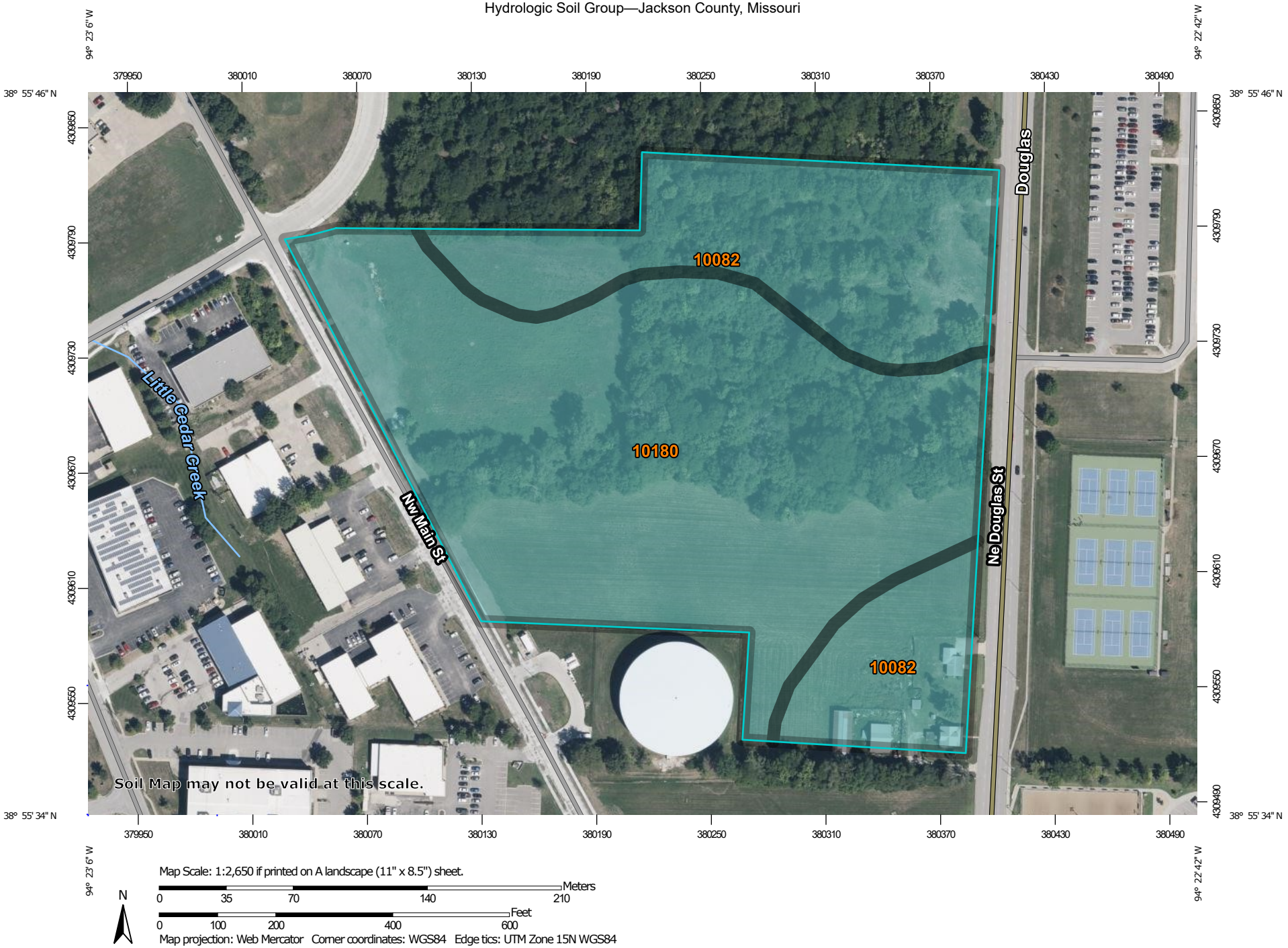
The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/2/2026 at 8:28 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Appendix C – NRCS Soils Report


94° 23' 6" W
94° 22' 42" W
379950
380010
380070
380130
380190
380250
380310
380370
380430
380490
38° 55' 46" N
38° 55' 34" N
4309850
4309790
4309730
4309670
4309610
4309550
4309490
10082
10180
10082
Douglas
Ne Douglas St
Nw Main St
Little Cedar Creek
Soil Map may not be valid at this scale.
Map Scale: 1:2,650 if printed on A landscape (11" x 8.5") sheet.
N
Meters
0 35 70 140 210
Feet
0 100 200 400 600
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Jackson County, Missouri
Survey Area Data: Version 28, Sep 2, 2025

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 30, 2022—Sep 8, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
10082	Arisburg-Urban land complex, 1 to 5 percent slopes	C	6.7	34.3%
10180	Udarents-Urban land-Sampsel complex, 2 to 5 percent slopes	C	12.9	65.7%
Totals for Area of Interest			**19.7**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

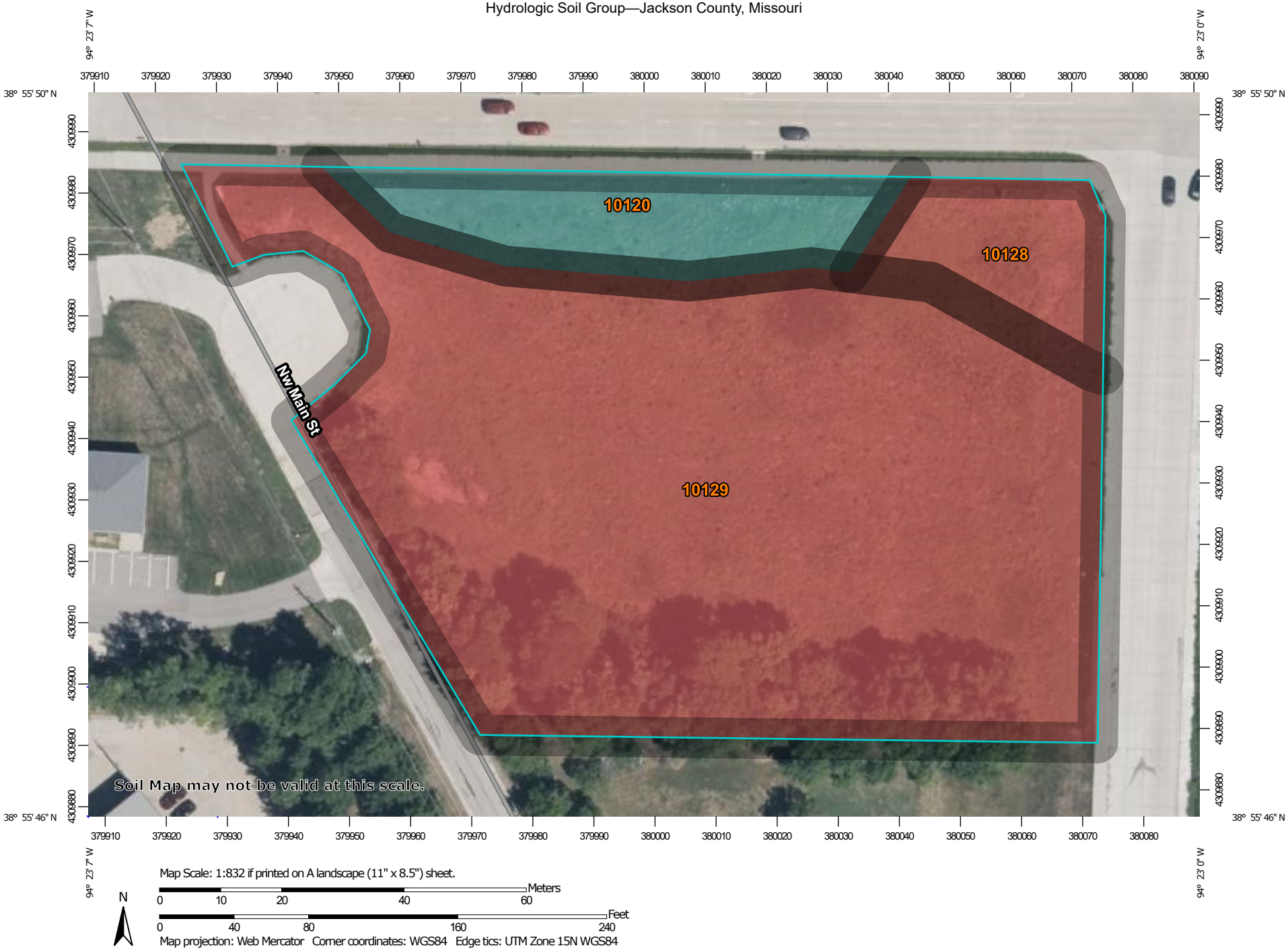
If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher



Map Scale: 1:832 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 10 20 40 60

Feet
0 40 80 160 240

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Soil Rating Lines

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Soil Rating Points

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Jackson County, Missouri
Survey Area Data: Version 28, Sep 2, 2025

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 30, 2022—Sep 8, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
10120	Sharpsburg silt loam, 2 to 5 percent slopes	C	0.3	11.5%
10128	Sharpsburg-Urban land complex, 2 to 5 percent slopes	D	0.2	7.3%
10129	Sharpsburg-Urban land complex, 5 to 9 percent slopes	D	2.3	81.2%
Totals for Area of Interest			**2.8**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Appendix D – Pre-Development Drainage map

OFFSITE NORTH
AREA=2.0 AC
CN=74
TC=5 MIN

NE DOUGLAS STREET (VARIABLE WIDTH PUBLIC ROW)

OFFSITE ROAD
AREA=2.4 AC
CN=98
TC=5 MIN

EX-WEST
AREA=19.1 AC
CN=74
TC=9 MIN

OFFSITE EAST
AREA=6.2 AC
CN=74
TC=10 MIN

PRIMARY
DISCHARGE POINT
(EX-EST) EXISTING
STORM SYSTEM

NORTH
0 30 60 120
1 INCH = 60 FEET

REVISIONS:

1		
2		
3		
4		
5		

PROJECT #:	27480
DATE:	APRIL 08, 2026
DRAWN BY:	EJH
DESIGNER:	JPM
CHECKED BY:	MLB

Pickering
Pickering Firm, Inc.
Architecture • Engineering
Planning • Surveying
6363 Poplar Avenue, Suite 300
Memphis, TN 38119
901.726.0810

DILLONS
NE DOUGLAS ST.
LEE'S SUMMIT, MO

PHILLIPS EDISON & COMPANY

SEAL:

PRELIMINARY
- NOT FOR
CONSTRUCTION

SHEET NUMBER:

C-1

DESCRIPTION:
EXISTING DRAINAGE BASIN PLAN

K:\27480.00\CAD\PLANS\PRE AND POST DETENTION.DWG

Appendix E – Post-Development Drainage Map

OFFSITE NORTH
AREA=2.0 AC
CN=74
TC 5 MIN

UNDETAINED
WEST
AREA=2.1 AC
CN=80
TC=5 MIN

WEST POND
AREA=17.0 AC
CN=87.76
TC=5 MIN

OFFSITE
ROAD
AREA=2.4 AC
CN=98
TC=5 MIN

OFFSITE EAST
AREA=6.2 AC
CN=74
TC=10 MIN

PROPOSED BASIN OUTLET STRUCTURE (SEE REPORT FOR DETAILS)

PRIMARY DISCHARGE POINT (DETAINED) EXISTING STORM SYSTEM

NE DOUGLAS STREET (VARIABLE WIDTH PUBLIC ROW)

NE MAIN STREET (50' PUBLIC ROW)

NORTH
0 30 60 120
1 INCH = 60 FEET

REVISIONS:

1		
2		
3		
4		
5		

PROJECT #: 27480
DATE: APRIL 08, 2026
DRAWN BY: EJH
DESIGNER: JPM
CHECKED BY: MLB

Pickering
Pickering Firm, Inc.
Architecture • Engineering
Planning • Surveying
6363 Poplar Avenue, Suite 300
Memphis, TN 38119
901.726.0810

DILLONS
NE DOUGLAS ST.
LEE'S SUMMIT, MO

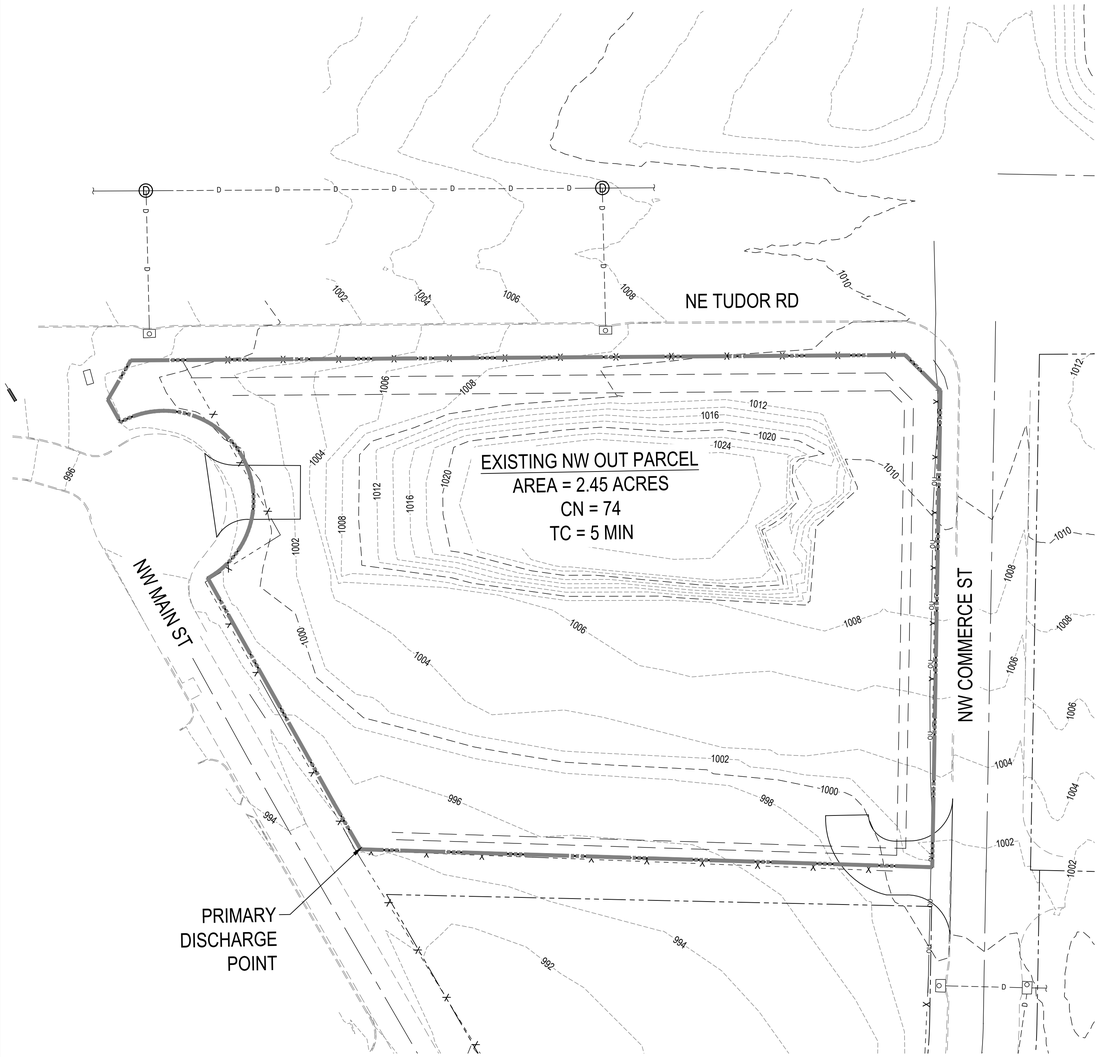
PHILLIPS EDISON & COMPANY

SEAL:
PRELIMINARY - NOT FOR CONSTRUCTION

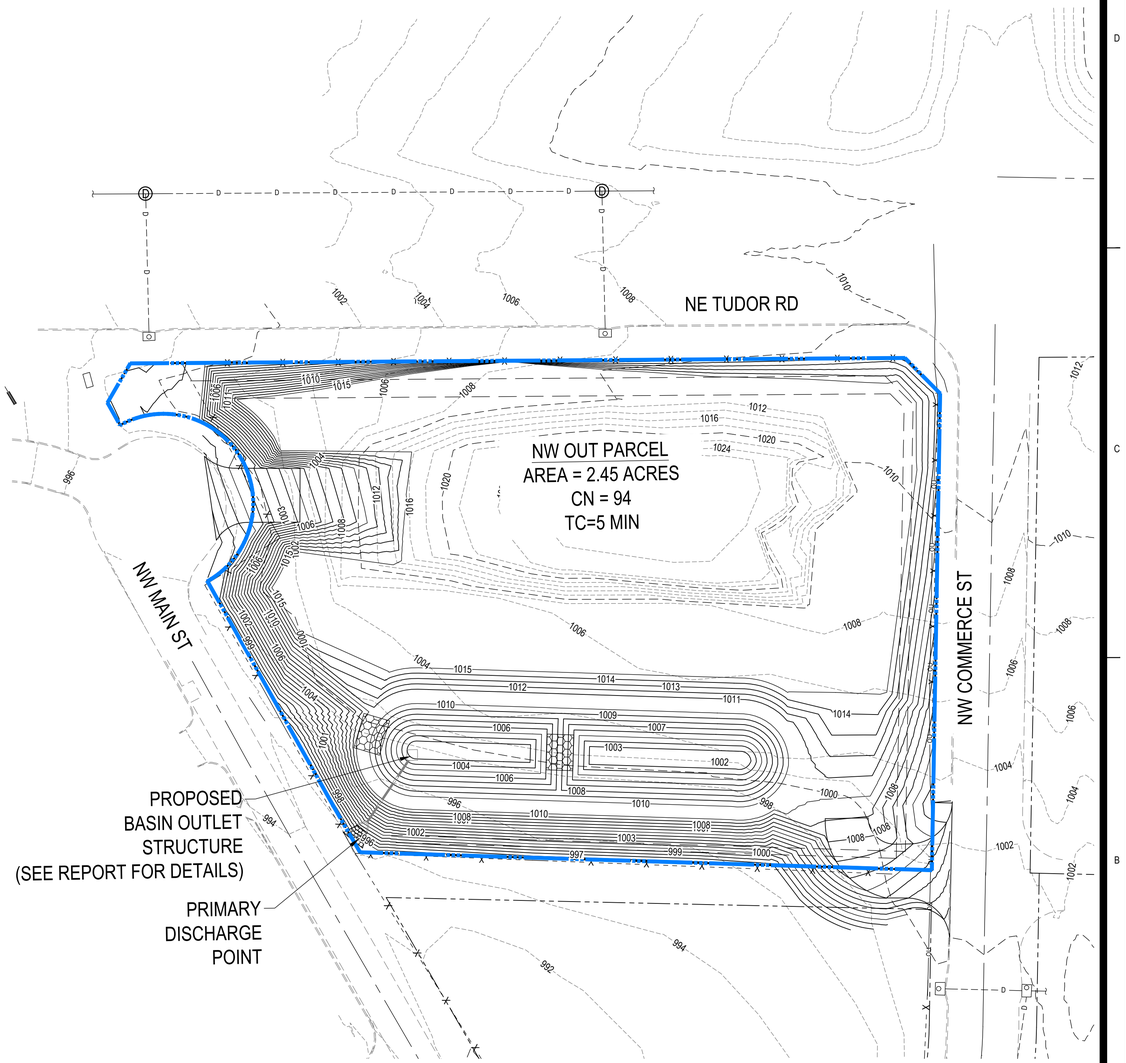
SHEET NUMBER:
C-2

DESCRIPTION:
PROPOSED DRAINAGE BASIN PLAN

K:\27480.000\CAD\PLANS\PRE AND POST DETENTION.DWG



1 NW OUTPARCEL PRE DRAINAGE BASINS
1"=40'



2 NW OUTPARCEL POST DRAINAGE BASINS
1"=40'

NORTH
0 20 40 80
1 INCH = 40 FEET

REVISIONS:

1		
2		
3		
4		
5		

PROJECT #: 27480
DATE: APRIL 08, 2026
DRAWN BY: EJH
DESIGNER: JPM
CHECKED BY: MLB

Pickering
Pickering Firm, Inc.
Architecture • Engineering
Planning • Surveying
6363 Poplar Avenue, Suite 300
Memphis, TN 38119
901.726.0810

DILLONS
NE DOUGLAS ST.
LEE'S SUMMIT, MO

PHILLIPS EDISON & COMPANY

SEAL:
PRELIMINARY - NOT FOR CONSTRUCTION

SHEET NUMBER:
C-3

DESCRIPTION:
OUT PARCEL DRAINAGE BASIN PLAN

K:\27480.00\CAD\PLANS\PRE AND POST DETENTION.DWG

Appendix F – Existing and Proposed Conditions Analysis

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2026

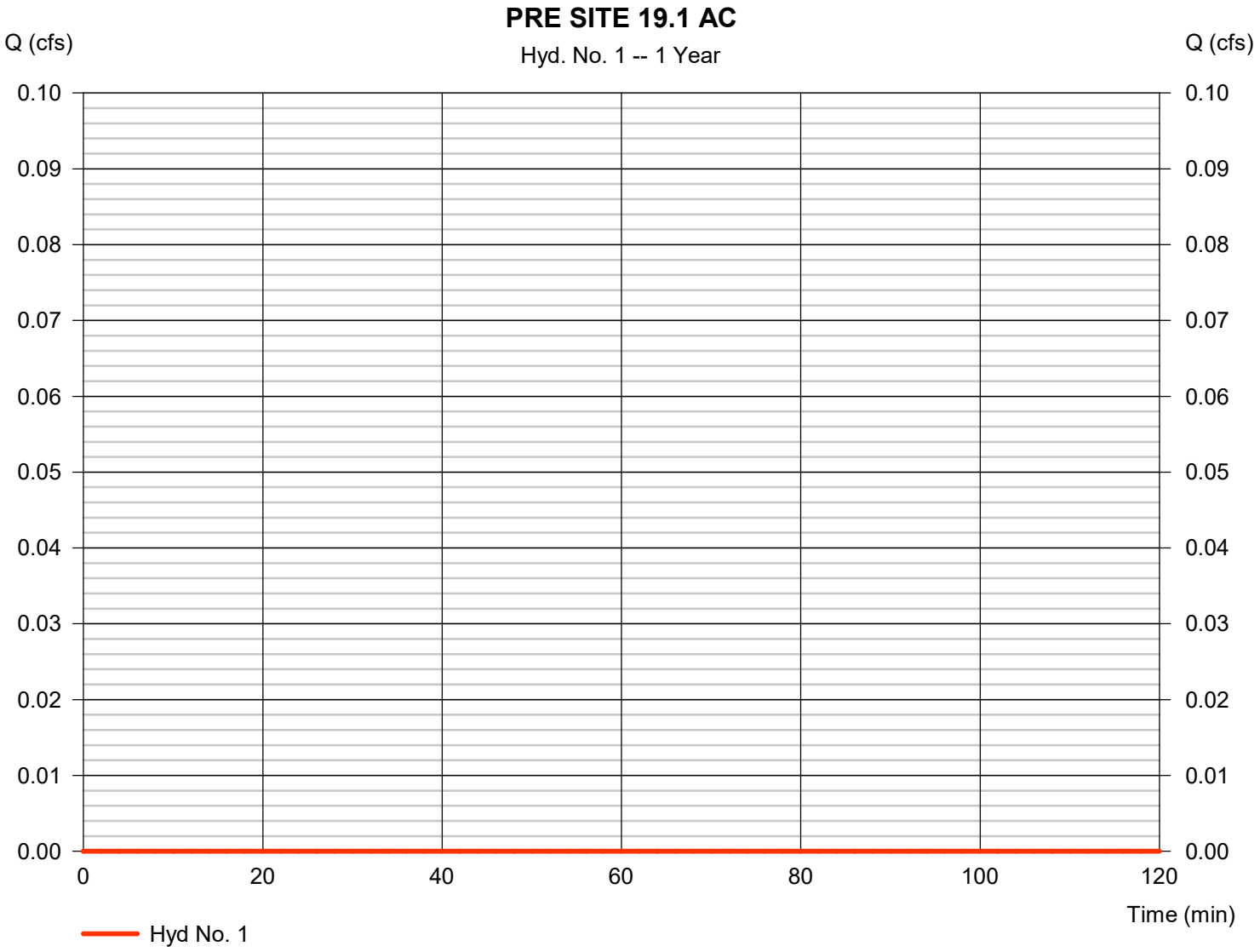
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	0.000	2	n/a	0	------	------	------	PRE SITE 19.1 AC
2	SCS Runoff	0.000	2	n/a	0	------	------	------	OFFSITE EAST 6.2 AC
3	SCS Runoff	0.000	2	n/a	0	------	------	------	OFFSITE ROAD 2.4 AC
4	SCS Runoff	0.000	2	n/a	0	------	------	------	OFFSITE NORTH 2 AC
5	Combine	0.000	2	n/a	0	2, 3, 4	------	------	OFFSITE
6	SCS Runoff	0.000	2	n/a	0	------	------	------	PRE NW OUTPARCEL 2.45 AC
8	SCS Runoff	0.000	2	n/a	0	------	------	------	direct west 2.1 AC 6hr
9	SCS Runoff	0.000	2	n/a	0	------	------	------	POST WEST 17.0 AC 6 hr
12	Reservoir	0.000	2	n/a	0	9	994.00	0.000	WEST POND
13	Combine	0.000	2	n/a	0	8, 12	------	------	POST WEST TOTAL
15	Combine	0.000	2	n/a	0	2, 3, 4, 8, 9,	------	------	TOTAL POST BEFORE DETENTION
17	Reservoir	0.000	2	n/a	0	9	1002.80	213,956	EMERGENCY SPILLWAY
20	SCS Runoff	0.710	2	718	1,605	------	------	------	direct west 2.1 AC 24 hr
21	SCS Runoff	13.65	2	718	27,311	------	------	------	POST WEST 17 AC 24 hr
23	Combine	13.65	2	718	27,311	21,	------	------	TO WEST POND 24HR WQ
24	Reservoir	0.309	2	988	27,268	23	996.53	16,618	WQ DESIGN 24HR
25	Combine	0.710	2	718	1,605	8, 12, 20,	------	------	POST WEST TOTAL 24HR WQ
27	SCS Runoff	0.000	2	n/a	0	------	------	------	NW OUT PARCEL 2.45 AC 6-HR
28	Reservoir	0.000	2	n/a	0	27	994.00	0.000	NW OUT PARCEL POND 6HR
30	Reservoir	0.000	2	n/a	0	27	999.00	0.000	NW EMERGENCY SPILLEAY

Hydrograph Report

Hyd. No. 1

PRE SITE 19.1 AC

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.000 cfs
Storm frequency	=	1 yrs	Time to peak	=	n/a
Time interval	=	2 min	Hyd. volume	=	0 cuft
Drainage area	=	19.100 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	9.00 min
Total precip.	=	0.00 in	Distribution	=	SCS 6-Hr
Storm duration	=	6.00 hrs	Shape factor	=	484

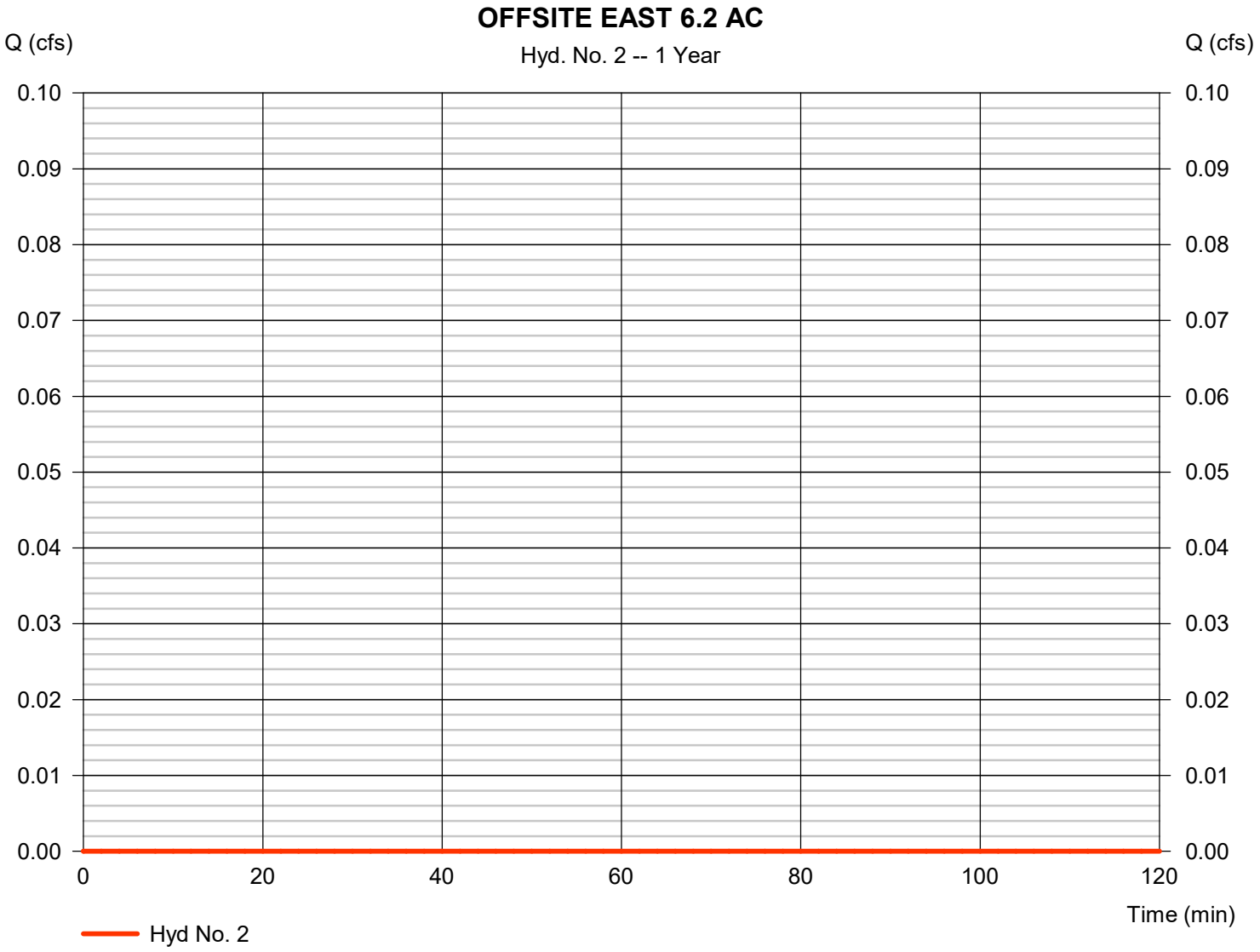


Hydrograph Report

Hyd. No. 2

OFFSITE EAST 6.2 AC

Hydrograph type	= SCS Runoff	Peak discharge	= 0.000 cfs
Storm frequency	= 1 yrs	Time to peak	= n/a
Time interval	= 2 min	Hyd. volume	= 0 cuft
Drainage area	= 6.200 ac	Curve number	= 74
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 10.00 min
Total precip.	= 0.00 in	Distribution	= SCS 6-Hr
Storm duration	= 6.00 hrs	Shape factor	= 484



Hydrograph Report

Hyd. No. 3

OFFSITE ROAD 2.4 AC

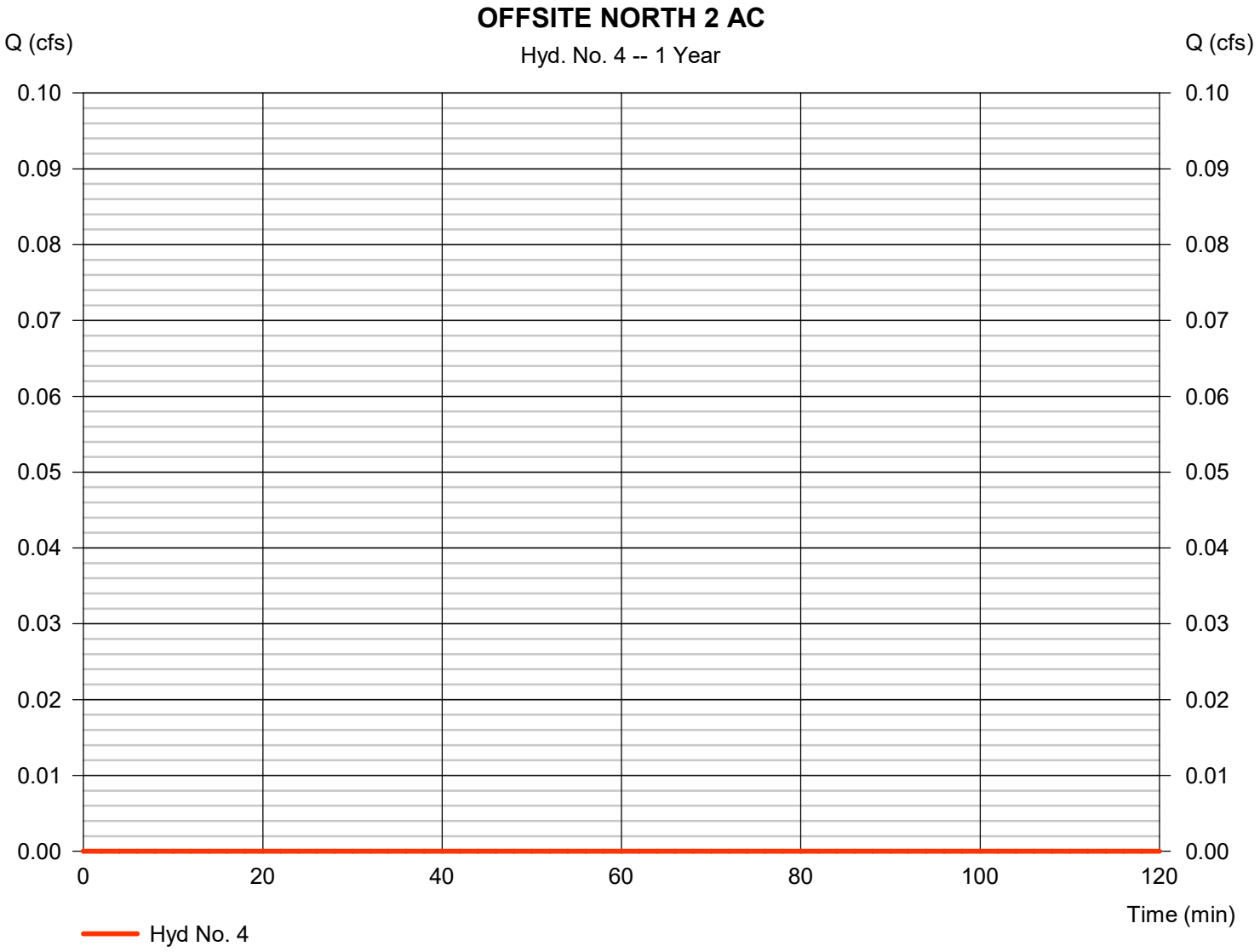
Hydrograph type	= SCS Runoff	Peak discharge	= 0.000 cfs
Storm frequency	= 1 yrs	Time to peak	= n/a
Time interval	= 2 min	Hyd. volume	= 0 cuft
Drainage area	= 2.400 ac	Curve number	= 98
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 0.00 in	Distribution	= SCS 6-Hr
Storm duration	= 6.00 hrs	Shape factor	= 484

Hydrograph Report

Hyd. No. 4

OFFSITE NORTH 2 AC

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.000 cfs
Storm frequency	=	1 yrs	Time to peak	=	n/a
Time interval	=	2 min	Hyd. volume	=	0 cuft
Drainage area	=	2.000 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	0.00 in	Distribution	=	SCS 6-Hr
Storm duration	=	6.00 hrs	Shape factor	=	484

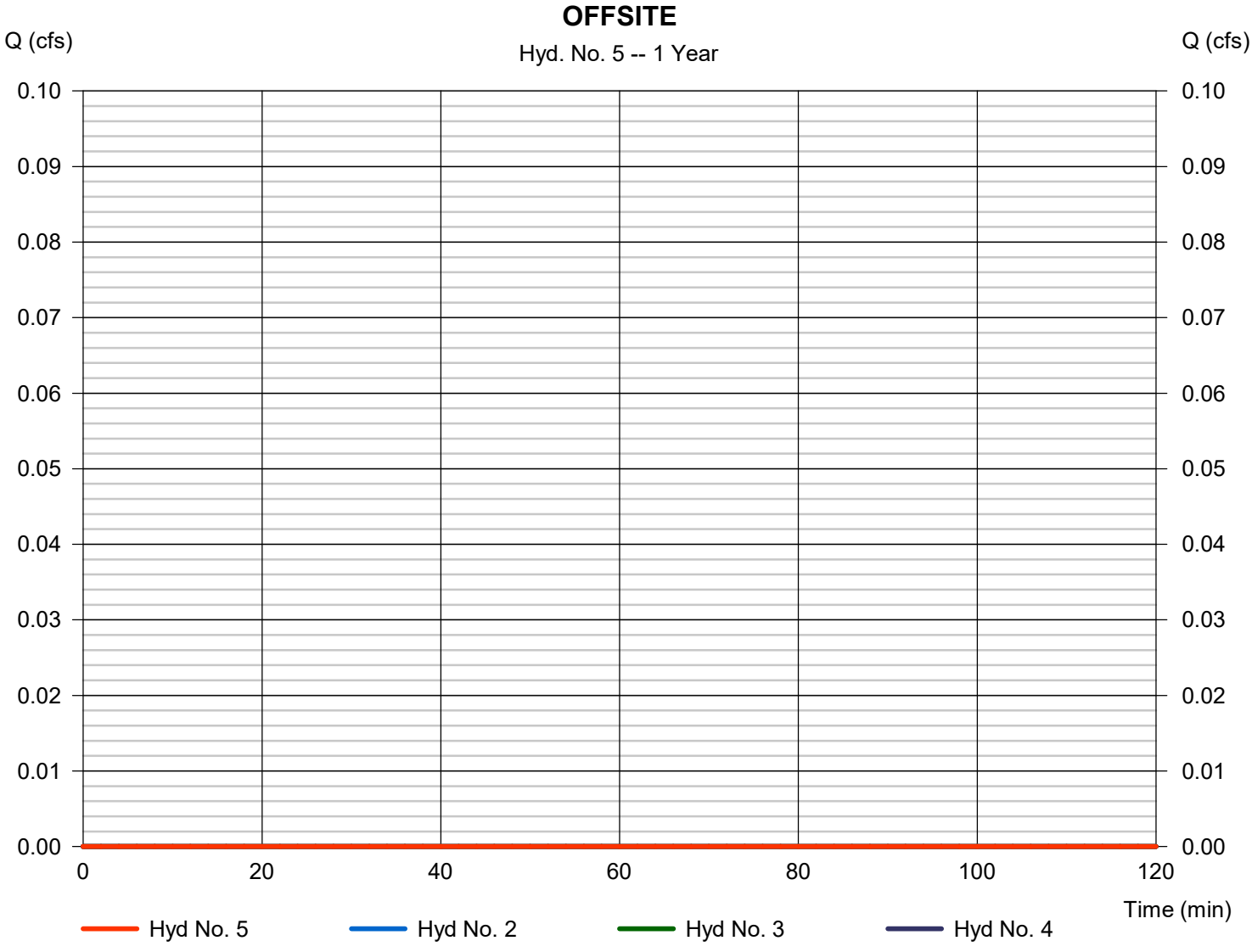


Hydrograph Report

Hyd. No. 5

OFFSITE

Hydrograph type	= Combine	Peak discharge	= 0.000 cfs
Storm frequency	= 1 yrs	Time to peak	= n/a
Time interval	= 2 min	Hyd. volume	= 0 cuft
Inflow hyds.	= 2, 3, 4	Contrib. drain. area	= 10.600 ac

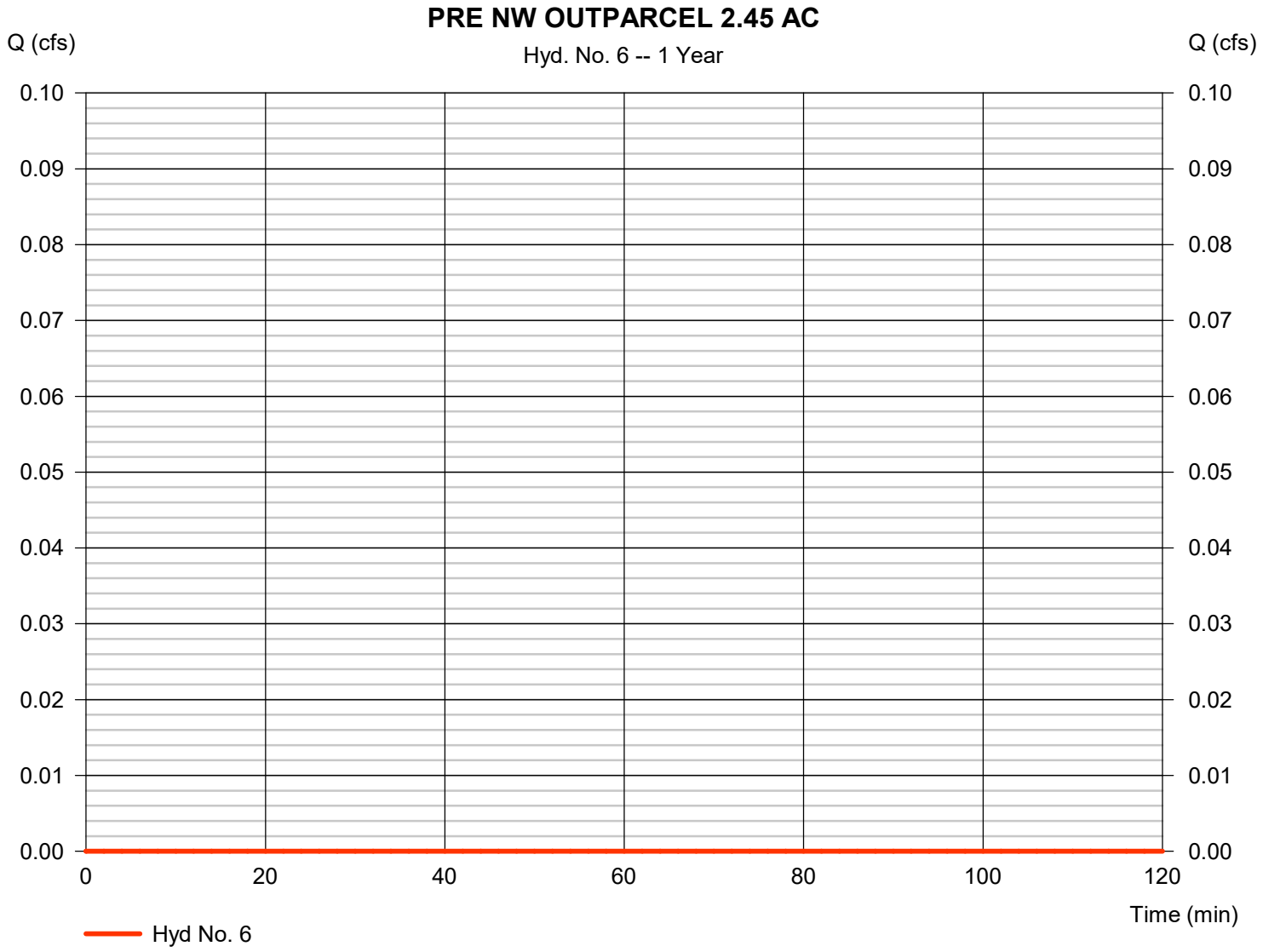


Hydrograph Report

Hyd. No. 6

PRE NW OUTPARCEL 2.45 AC

Hydrograph type	= SCS Runoff	Peak discharge	= 0.000 cfs
Storm frequency	= 1 yrs	Time to peak	= n/a
Time interval	= 2 min	Hyd. volume	= 0 cuft
Drainage area	= 2.450 ac	Curve number	= 74
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 0.00 in	Distribution	= SCS 6-Hr
Storm duration	= 6.00 hrs	Shape factor	= 484

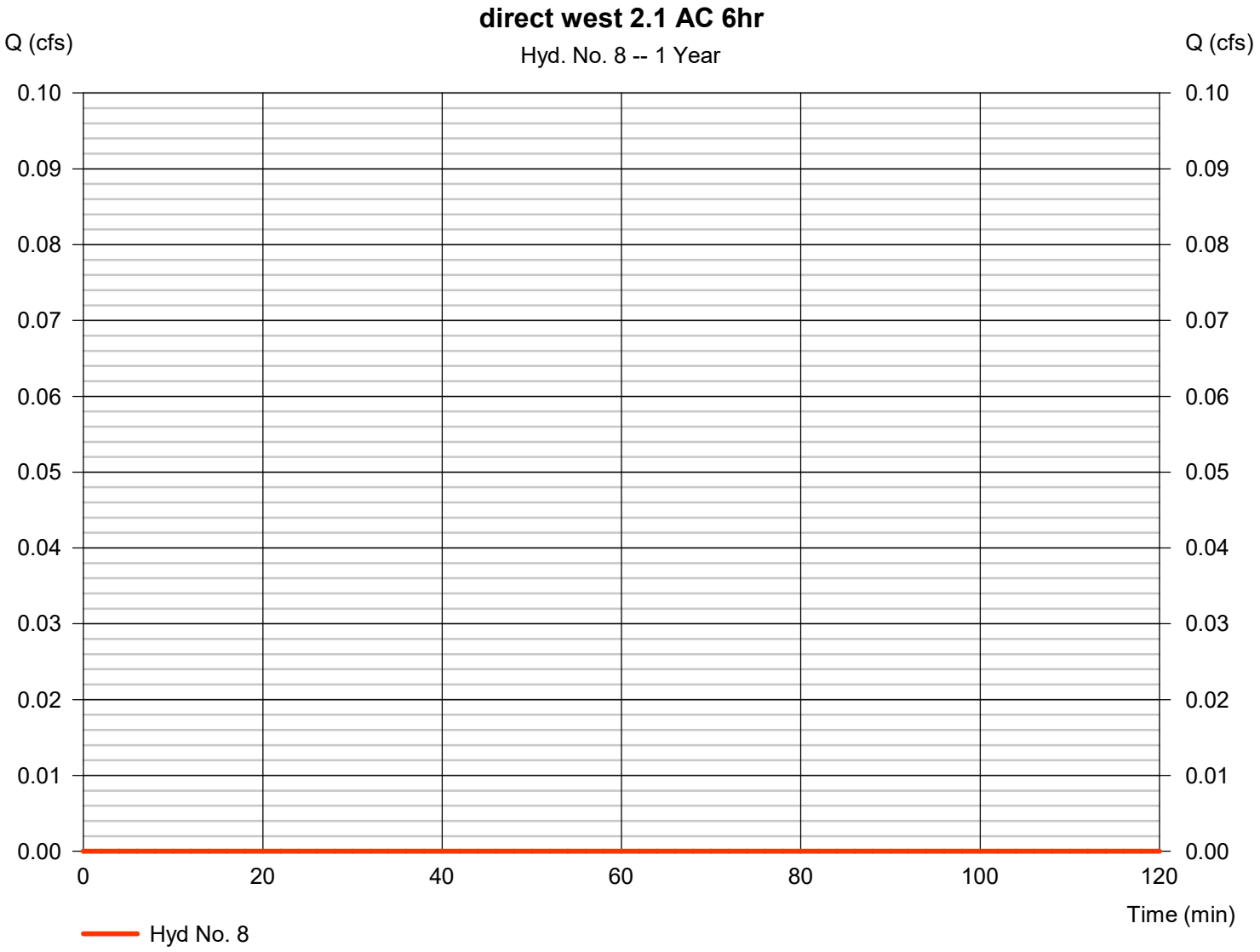


Hydrograph Report

Hyd. No. 8

direct west 2.1 AC 6hr

Hydrograph type	= SCS Runoff	Peak discharge	= 0.000 cfs
Storm frequency	= 1 yrs	Time to peak	= n/a
Time interval	= 2 min	Hyd. volume	= 0 cuft
Drainage area	= 2.100 ac	Curve number	= 80
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 0.00 in	Distribution	= SCS 6-Hr
Storm duration	= 6.00 hrs	Shape factor	= 484

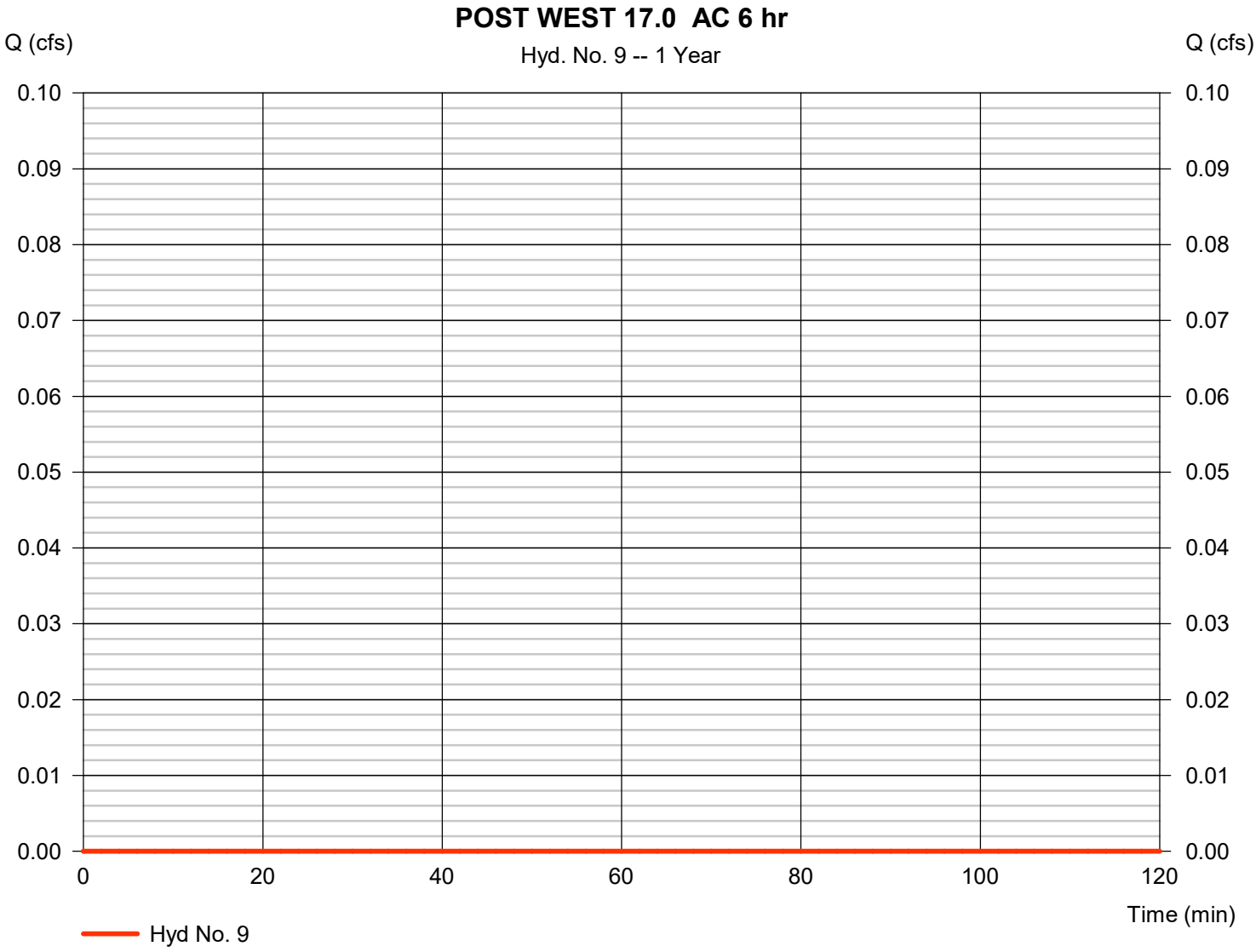


Hydrograph Report

Hyd. No. 9

POST WEST 17.0 AC 6 hr

Hydrograph type	= SCS Runoff	Peak discharge	= 0.000 cfs
Storm frequency	= 1 yrs	Time to peak	= n/a
Time interval	= 2 min	Hyd. volume	= 0 cuft
Drainage area	= 17.000 ac	Curve number	= 87.6
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 0.00 in	Distribution	= SCS 6-Hr
Storm duration	= 6.00 hrs	Shape factor	= 484



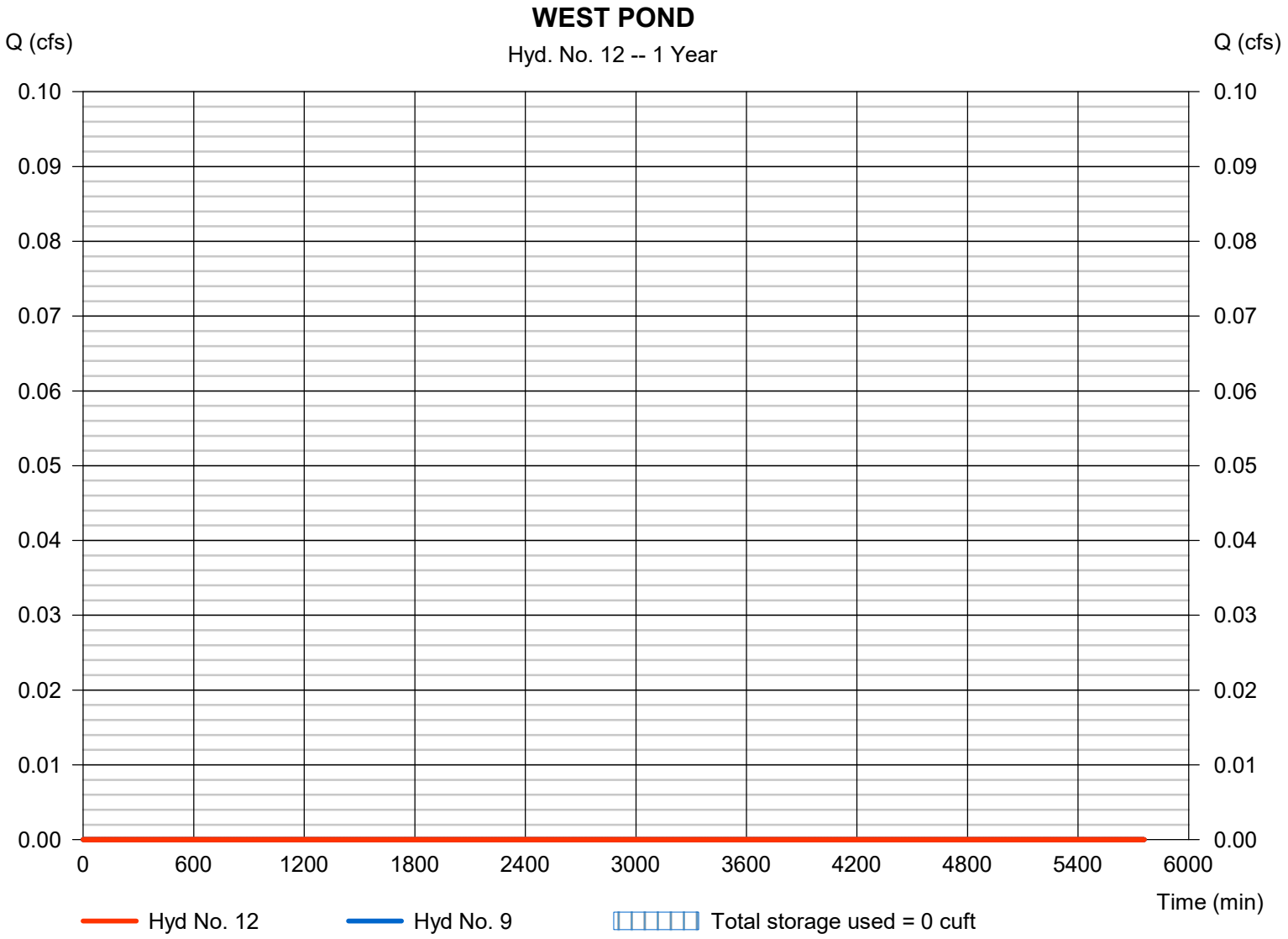
Hydrograph Report

Hyd. No. 12

WEST POND

Hydrograph type	=	Reservoir	Peak discharge	=	0.000 cfs
Storm frequency	=	1 yrs	Time to peak	=	n/a
Time interval	=	2 min	Hyd. volume	=	0 cuft
Inflow hyd. No.	=	9 - POST WEST 17.0 AC 6 hr	Max. Elevation	=	994.00 ft
Reservoir name	=	WEST POND retention	Max. Storage	=	0 cuft

Storage Indication method used.



Pond Report

Pond No. 6 - WEST POND retention

Pond Data

Contours -User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 994.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	994.00	00	0	0
1.00	995.00	2,821	940	940
2.00	996.00	12,955	7,273	8,213
3.00	997.00	18,659	15,719	23,932
4.00	998.00	23,887	21,218	45,149
5.00	999.00	29,035	26,417	71,566
6.00	1000.00	33,525	31,250	102,816
7.00	1001.00	37,955	35,713	138,530
8.00	1002.00	42,109	40,010	178,540
9.00	1003.00	46,476	44,270	222,810
10.00	1004.00	51,034	48,732	271,543
11.00	1005.00	55,707	53,348	324,891

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 42.00	6.00	12.00	3.00
Span (in)	= 42.00	6.00	24.00	3.00
No. Barrels	= 1	1	4	6
Invert El. (ft)	= 994.00	1001.00	1001.40	994.00
Length (ft)	= 25.00	0.00	0.00	11.00
Slope (%)	= 1.00	0.00	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	Yes	Yes	Yes

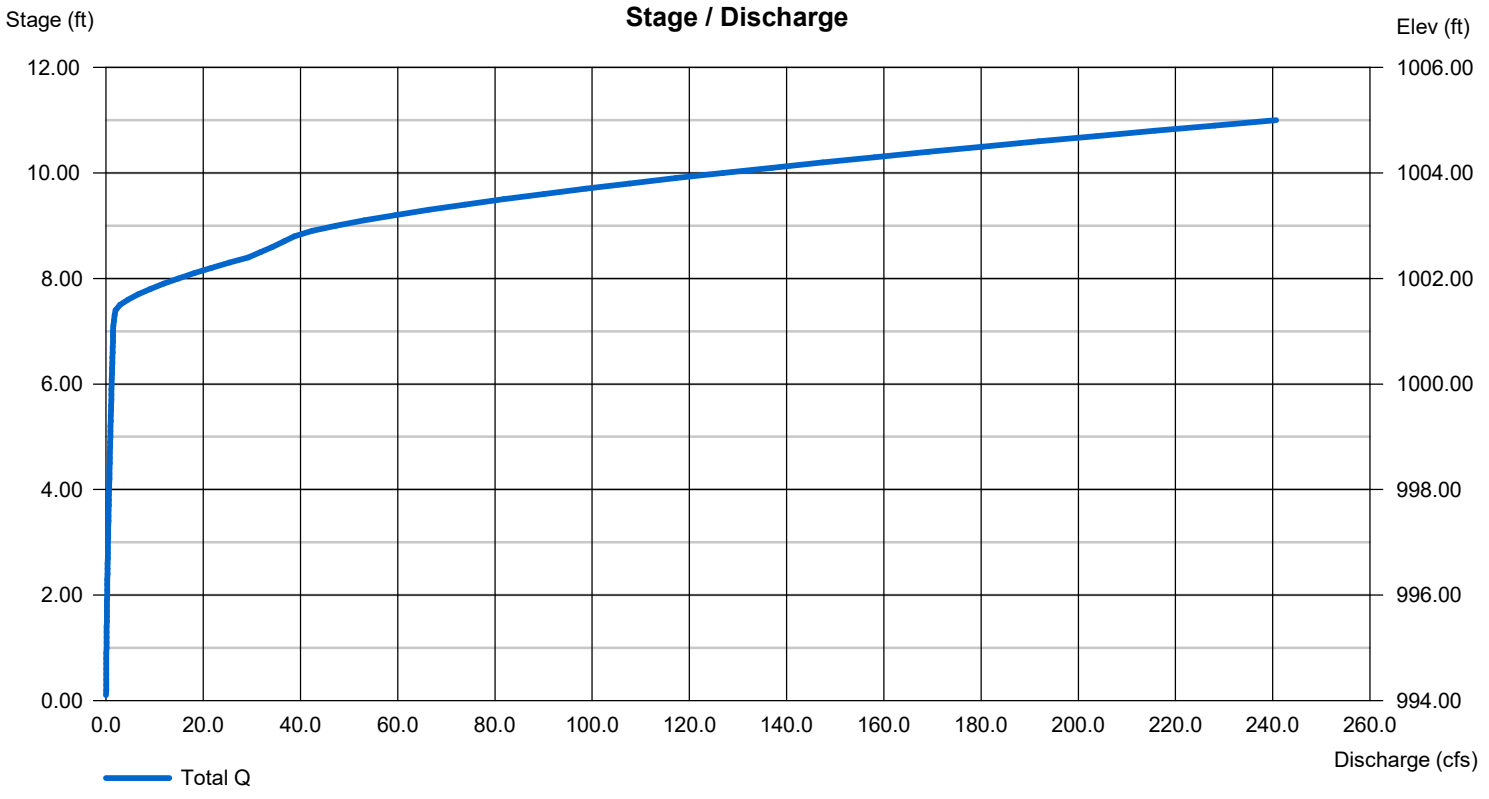
Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 20.00	20.00	0.00	0.00
Crest El. (ft)	= 1005.00	1002.80	0.00	0.00
Weir Coeff.	= 3.33	2.60	3.33	3.33
Weir Type	= 1	Broad	---	---
Multi-Stage	= Yes	No	No	No

Exfil.(in/hr) = 0.000 (by Contour)

TW Elev. (ft) = 0.00

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).

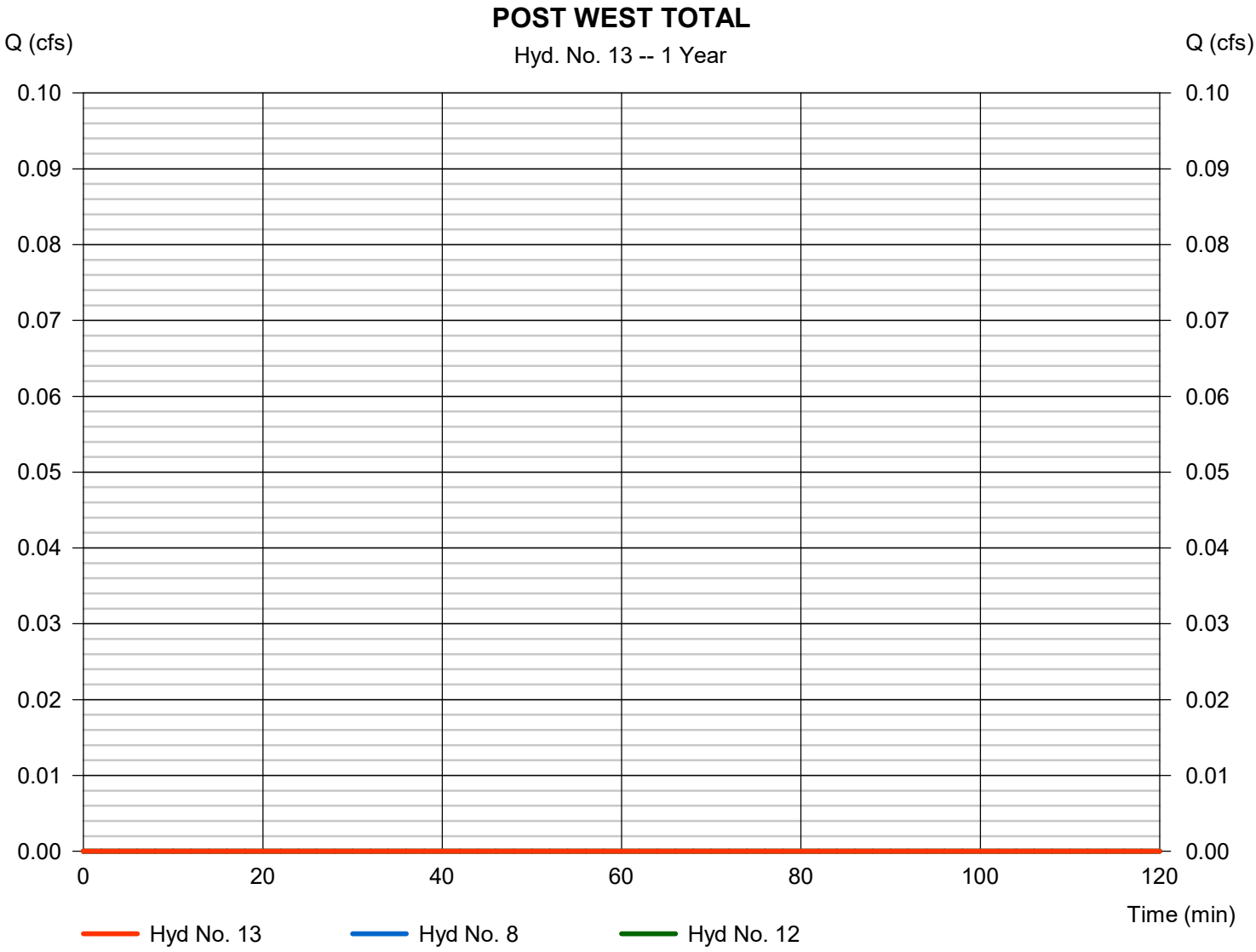


Hydrograph Report

Hyd. No. 13

POST WEST TOTAL

Hydrograph type	= Combine	Peak discharge	= 0.000 cfs
Storm frequency	= 1 yrs	Time to peak	= n/a
Time interval	= 2 min	Hyd. volume	= 0 cuft
Inflow hyds.	= 8, 12	Contrib. drain. area	= 2.100 ac

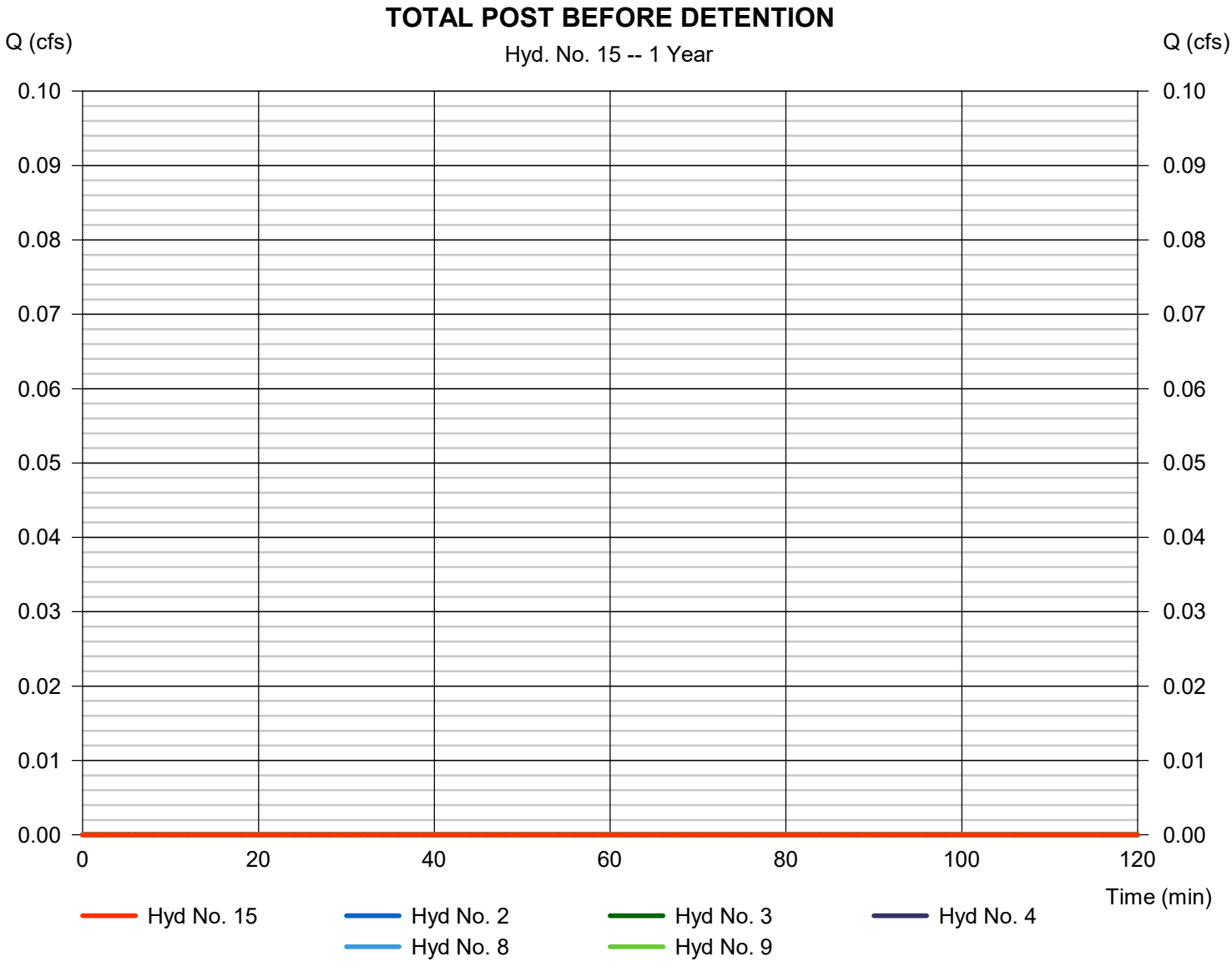


Hydrograph Report

Hyd. No. 15

TOTAL POST BEFORE DETENTION

Hydrograph type	= Combine	Peak discharge	= 0.000 cfs
Storm frequency	= 1 yrs	Time to peak	= n/a
Time interval	= 2 min	Hyd. volume	= 0 cuft
Inflow hyds.	= 2, 3, 4, 8, 9	Contrib. drain. area	= 29.700 ac



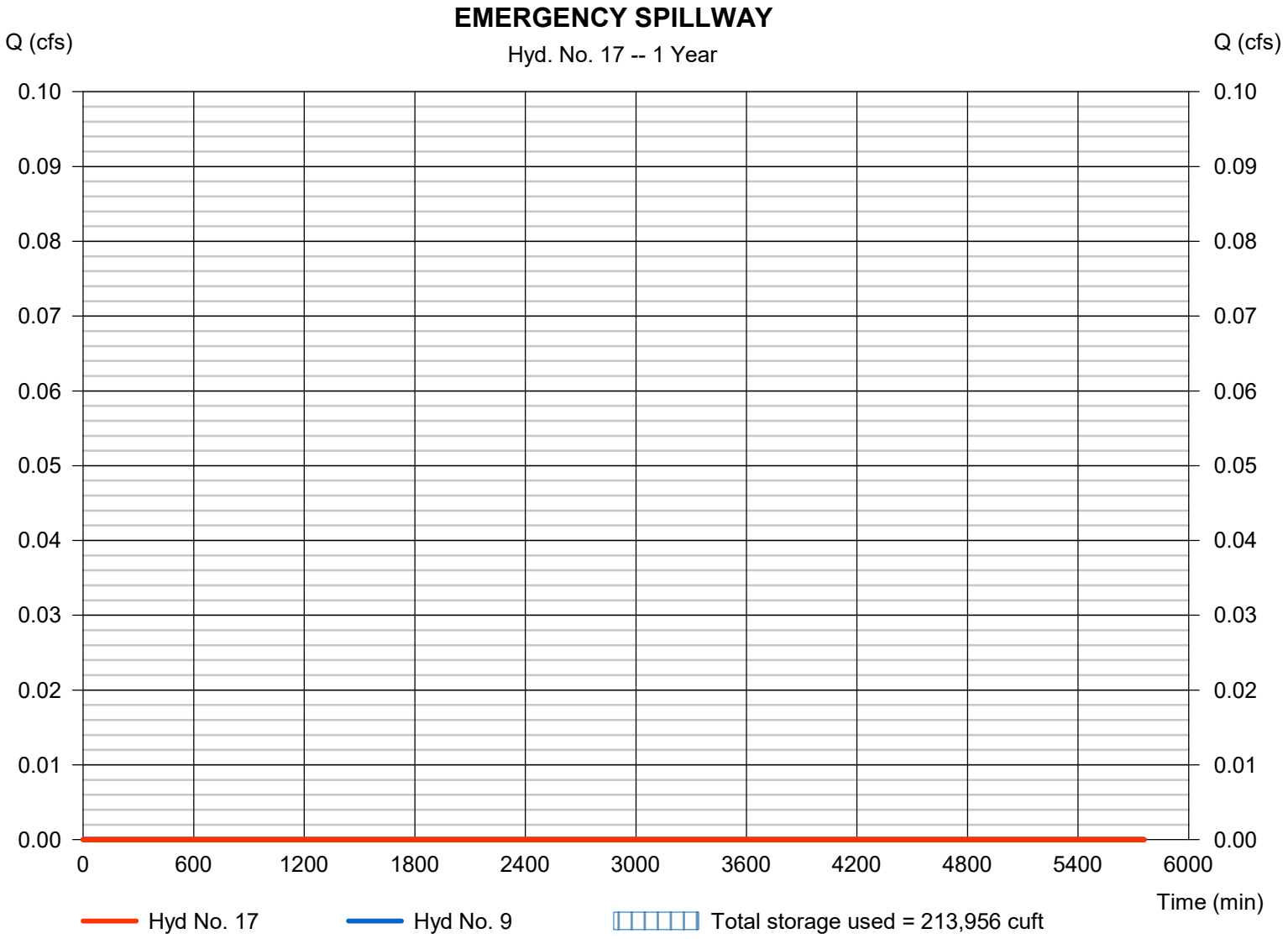
Hydrograph Report

Hyd. No. 17

EMERGENCY SPILLWAY

Hydrograph type	=	Reservoir	Peak discharge	=	0.000 cfs
Storm frequency	=	1 yrs	Time to peak	=	n/a
Time interval	=	2 min	Hyd. volume	=	0 cuft
Inflow hyd. No.	=	9 - POST WEST 17.0 AC 6 hr	Max. Elevation	=	1002.80 ft
Reservoir name	=	EMERGENCY SPILLWAY	Max. Storage	=	213,956 cuft

Storage Indication method used. Wet pond routing start elevation = 1002.80 ft.



Pond Report

Pond No. 4 - EMERGENCY SPILLWAY

Pond Data

Contours -User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 994.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	994.00	00	0	0
1.00	995.00	2,821	940	940
2.00	996.00	12,955	7,273	8,213
3.00	997.00	18,659	15,719	23,932
4.00	998.00	23,887	21,218	45,149
5.00	999.00	29,035	26,417	71,566
6.00	1000.00	33,525	31,250	102,816
7.00	1001.00	37,955	35,713	138,530
8.00	1002.00	42,109	40,010	178,540
9.00	1003.00	46,476	44,270	222,810
10.00	1004.00	51,034	48,732	271,543
11.00	1005.00	55,707	53,348	324,891

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 42.00	Inactive	Inactive	Inactive
Span (in)	= 42.00	6.00	24.00	3.00
No. Barrels	= 1	1	4	6
Invert El. (ft)	= 994.00	1001.00	1001.40	994.00
Length (ft)	= 25.00	0.00	0.00	11.00
Slope (%)	= 1.00	0.00	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	Yes	Yes	Yes

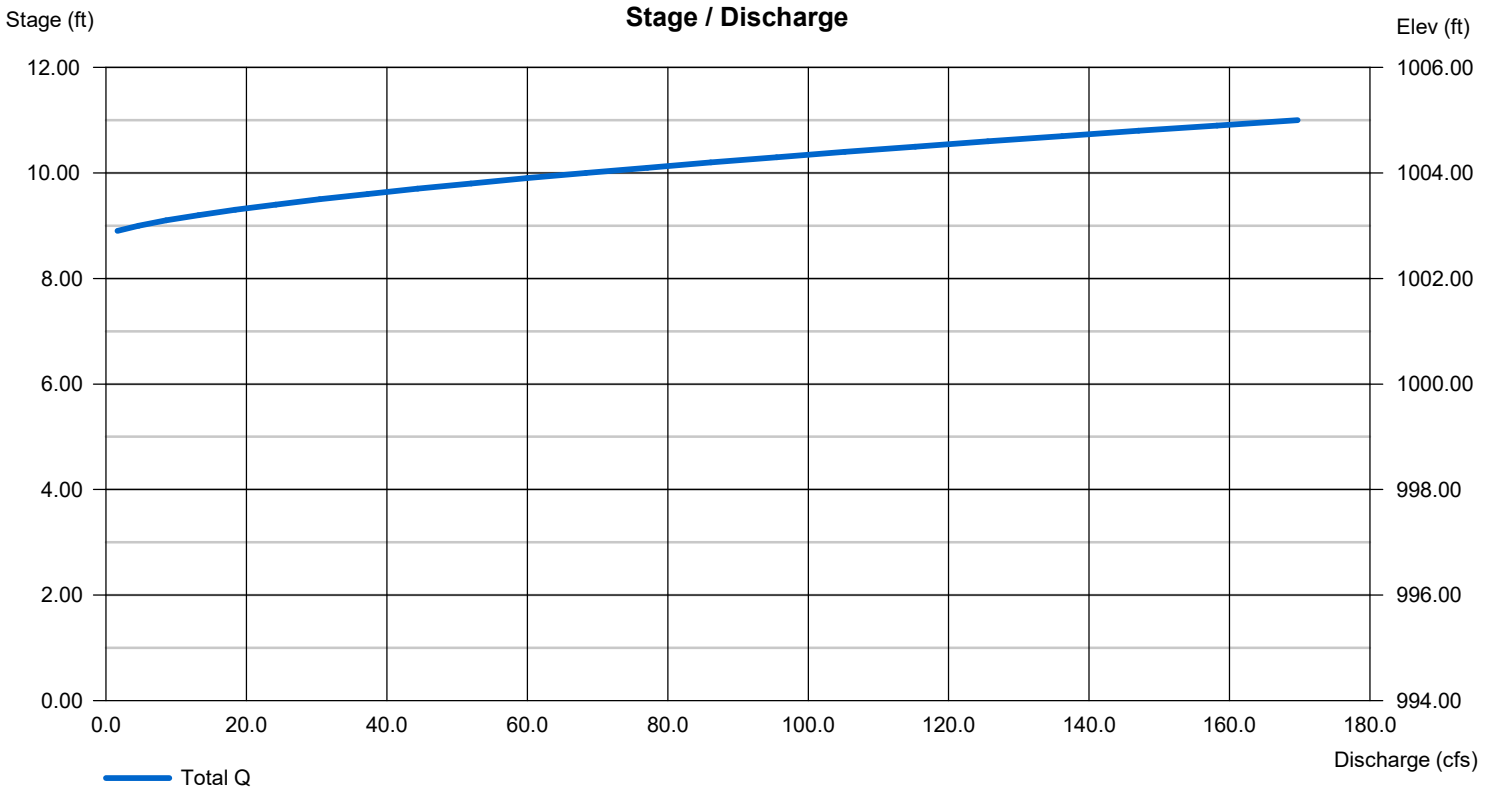
Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 20.00	20.00	0.00	0.00
Crest El. (ft)	= 1005.00	1002.80	0.00	0.00
Weir Coeff.	= 3.33	2.60	3.33	3.33
Weir Type	= 1	Broad	---	---
Multi-Stage	= Yes	No	No	No

Exfil.(in/hr) = 0.000 (by Contour)

TW Elev. (ft) = 0.00

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).

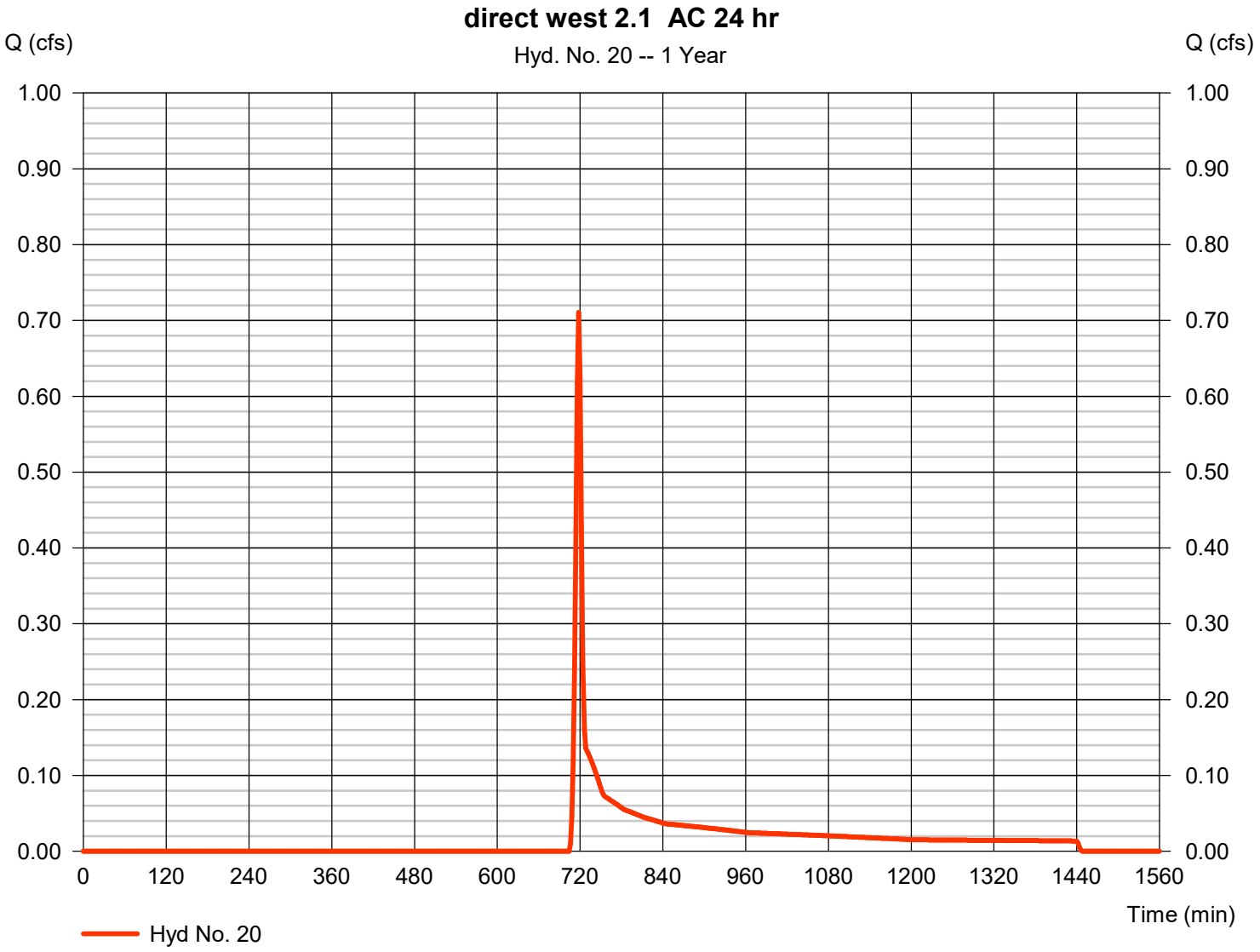


Hydrograph Report

Hyd. No. 20

direct west 2.1 AC 24 hr

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.710 cfs
Storm frequency	=	1 yrs	Time to peak	=	718 min
Time interval	=	2 min	Hyd. volume	=	1,605 cuft
Drainage area	=	2.100 ac	Curve number	=	80
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	1.37 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

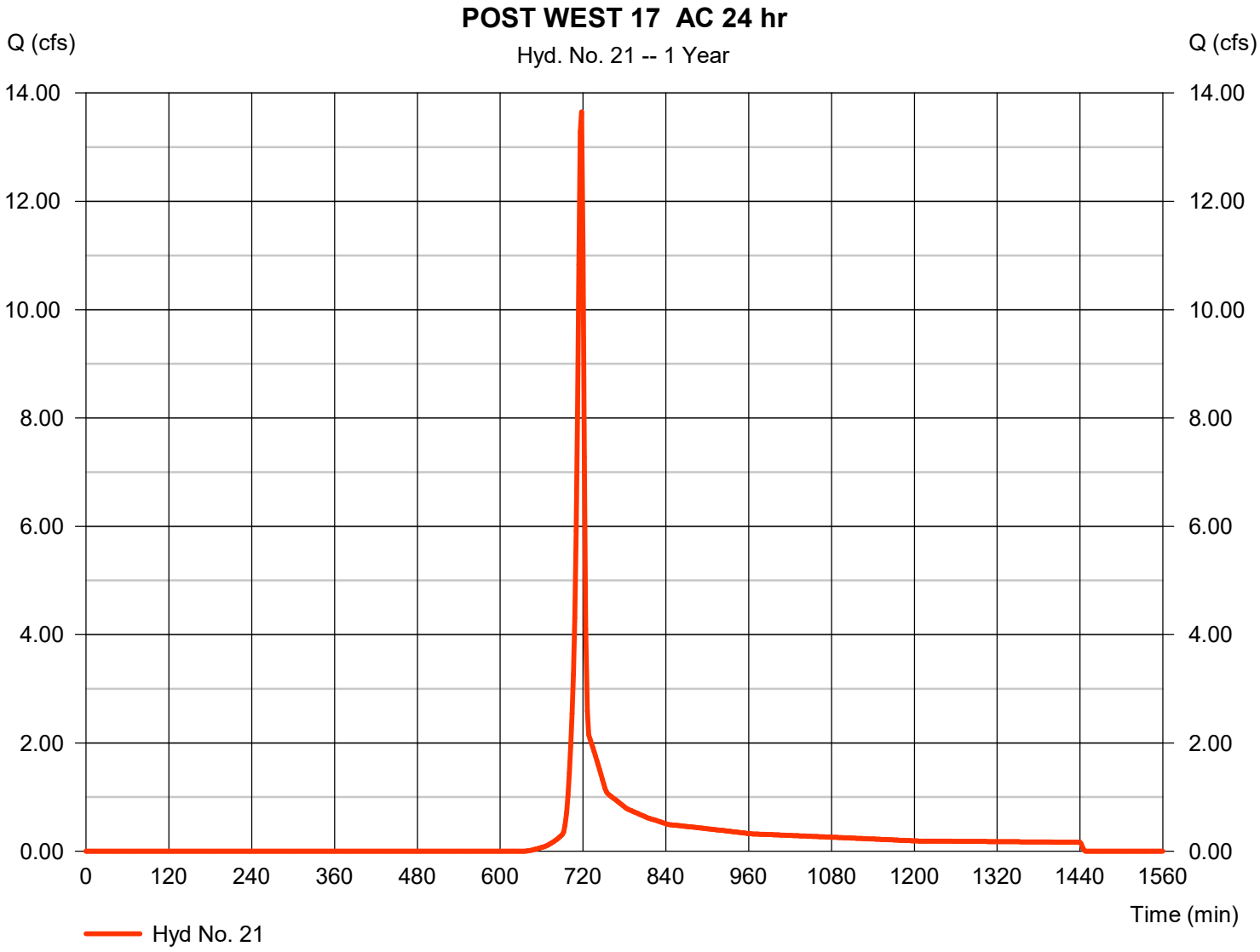


Hydrograph Report

Hyd. No. 21

POST WEST 17 AC 24 hr

Hydrograph type	= SCS Runoff	Peak discharge	= 13.65 cfs
Storm frequency	= 1 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 27,311 cuft
Drainage area	= 17.000 ac	Curve number	= 87.6
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 1.37 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

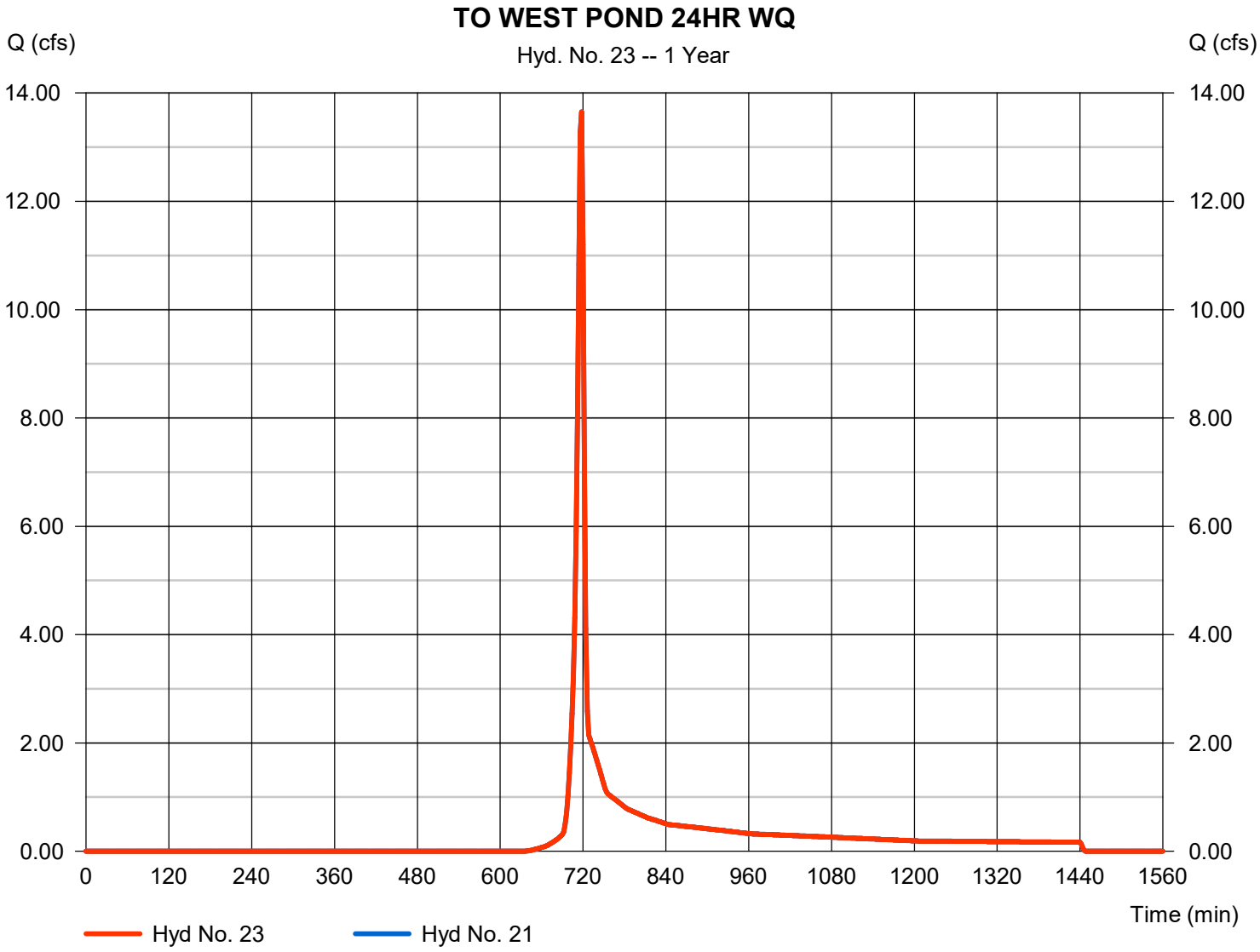


Hydrograph Report

Hyd. No. 23

TO WEST POND 24HR WQ

Hydrograph type	= Combine	Peak discharge	= 13.65 cfs
Storm frequency	= 1 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 27,311 cuft
Inflow hyds.	= 21	Contrib. drain. area	= 17.000 ac



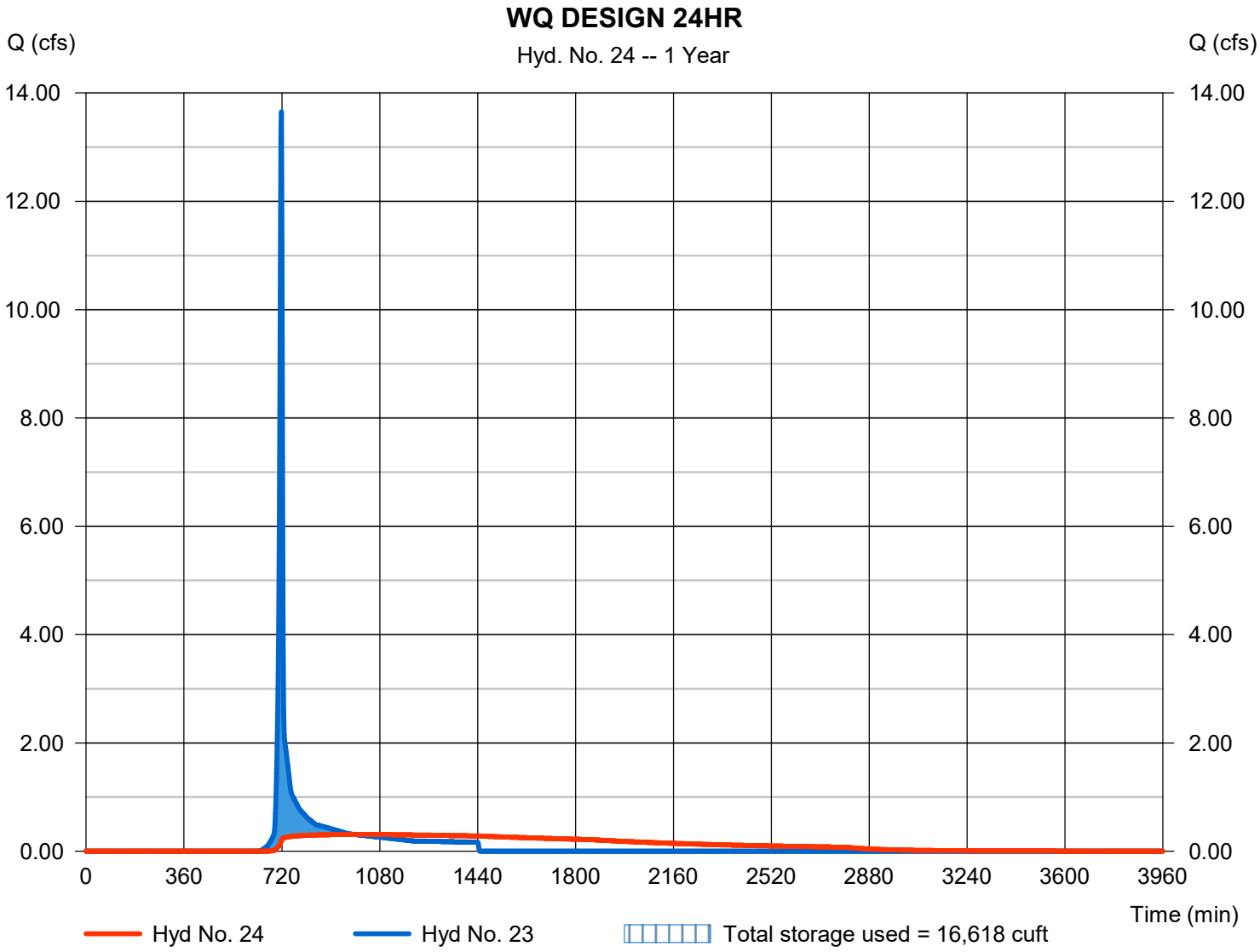
Hydrograph Report

Hyd. No. 24

WQ DESIGN 24HR

Hydrograph type	=	Reservoir	Peak discharge	=	0.309 cfs
Storm frequency	=	1 yrs	Time to peak	=	988 min
Time interval	=	2 min	Hyd. volume	=	27,268 cuft
Inflow hyd. No.	=	23 - TO WEST POND 24HR WQ	Max. Elevation	=	996.53 ft
Reservoir name	=	WEST POND retention	Max. Storage	=	16,618 cuft

Storage Indication method used.



Pond Report

Pond No. 6 - WEST POND retention

Pond Data

Contours -User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 994.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	994.00	00	0	0
1.00	995.00	2,821	940	940
2.00	996.00	12,955	7,273	8,213
3.00	997.00	18,659	15,719	23,932
4.00	998.00	23,887	21,218	45,149
5.00	999.00	29,035	26,417	71,566
6.00	1000.00	33,525	31,250	102,816
7.00	1001.00	37,955	35,713	138,530
8.00	1002.00	42,109	40,010	178,540
9.00	1003.00	46,476	44,270	222,810
10.00	1004.00	51,034	48,732	271,543
11.00	1005.00	55,707	53,348	324,891

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 42.00	6.00	12.00	3.00
Span (in)	= 42.00	6.00	24.00	3.00
No. Barrels	= 1	1	4	6
Invert El. (ft)	= 994.00	1001.00	1001.40	994.00
Length (ft)	= 25.00	0.00	0.00	11.00
Slope (%)	= 1.00	0.00	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	Yes	Yes	Yes

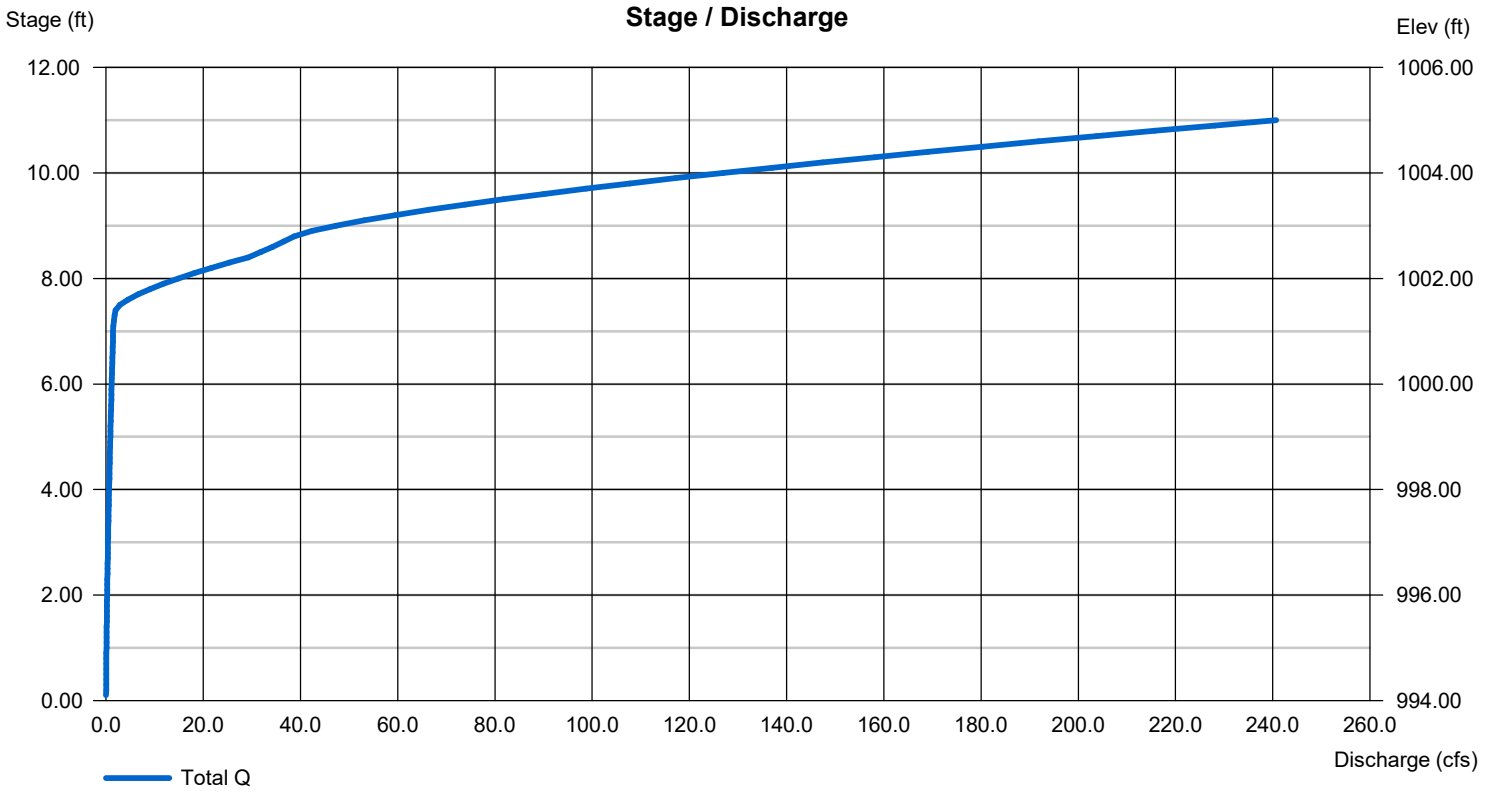
Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 20.00	20.00	0.00	0.00
Crest El. (ft)	= 1005.00	1002.80	0.00	0.00
Weir Coeff.	= 3.33	2.60	3.33	3.33
Weir Type	= 1	Broad	---	---
Multi-Stage	= Yes	No	No	No

Exfil.(in/hr) = 0.000 (by Contour)

TW Elev. (ft) = 0.00

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).

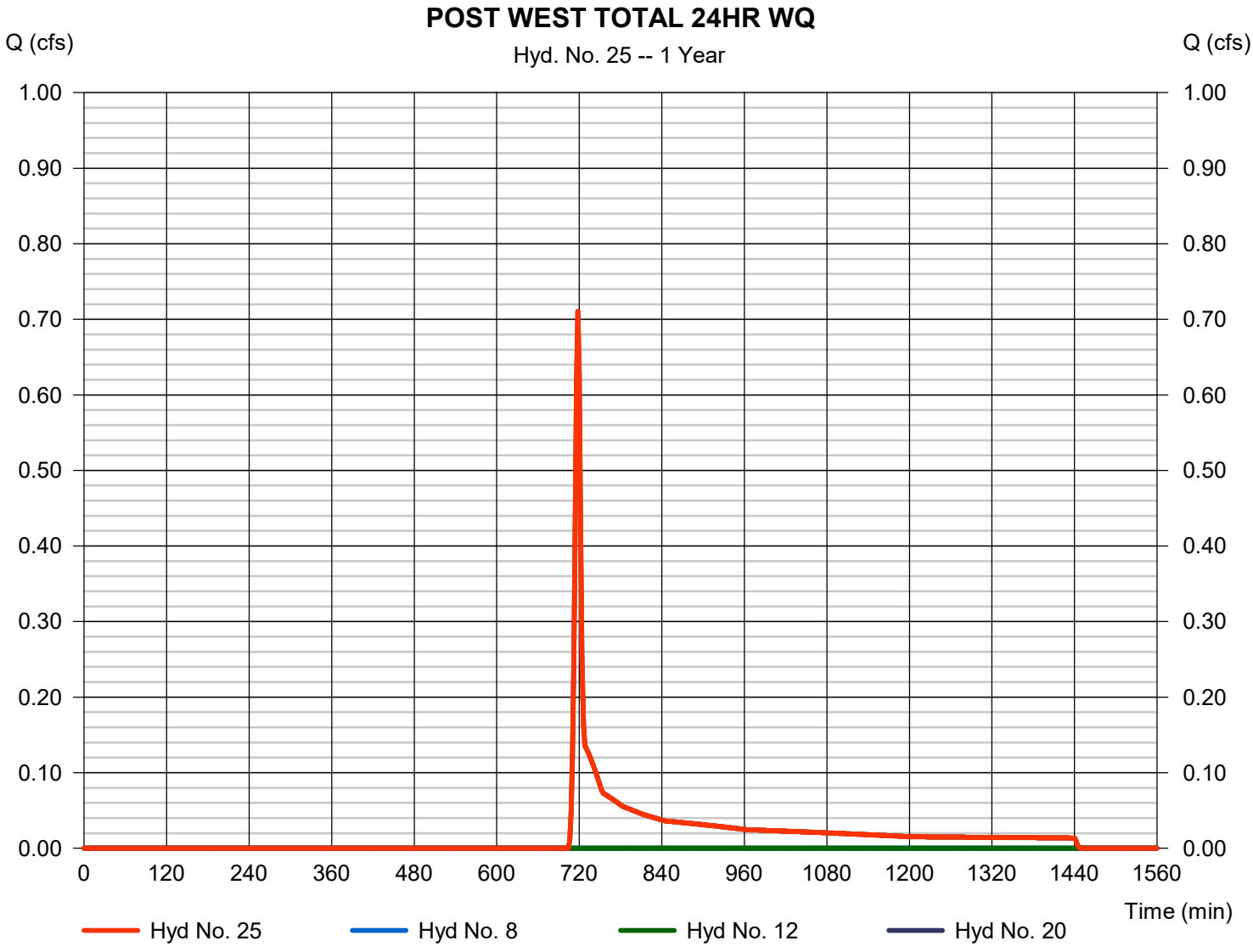


Hydrograph Report

Hyd. No. 25

POST WEST TOTAL 24HR WQ

Hydrograph type	= Combine	Peak discharge	= 0.710 cfs
Storm frequency	= 1 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 1,605 cuft
Inflow hyds.	= 8, 12, 20	Contrib. drain. area	= 4.200 ac

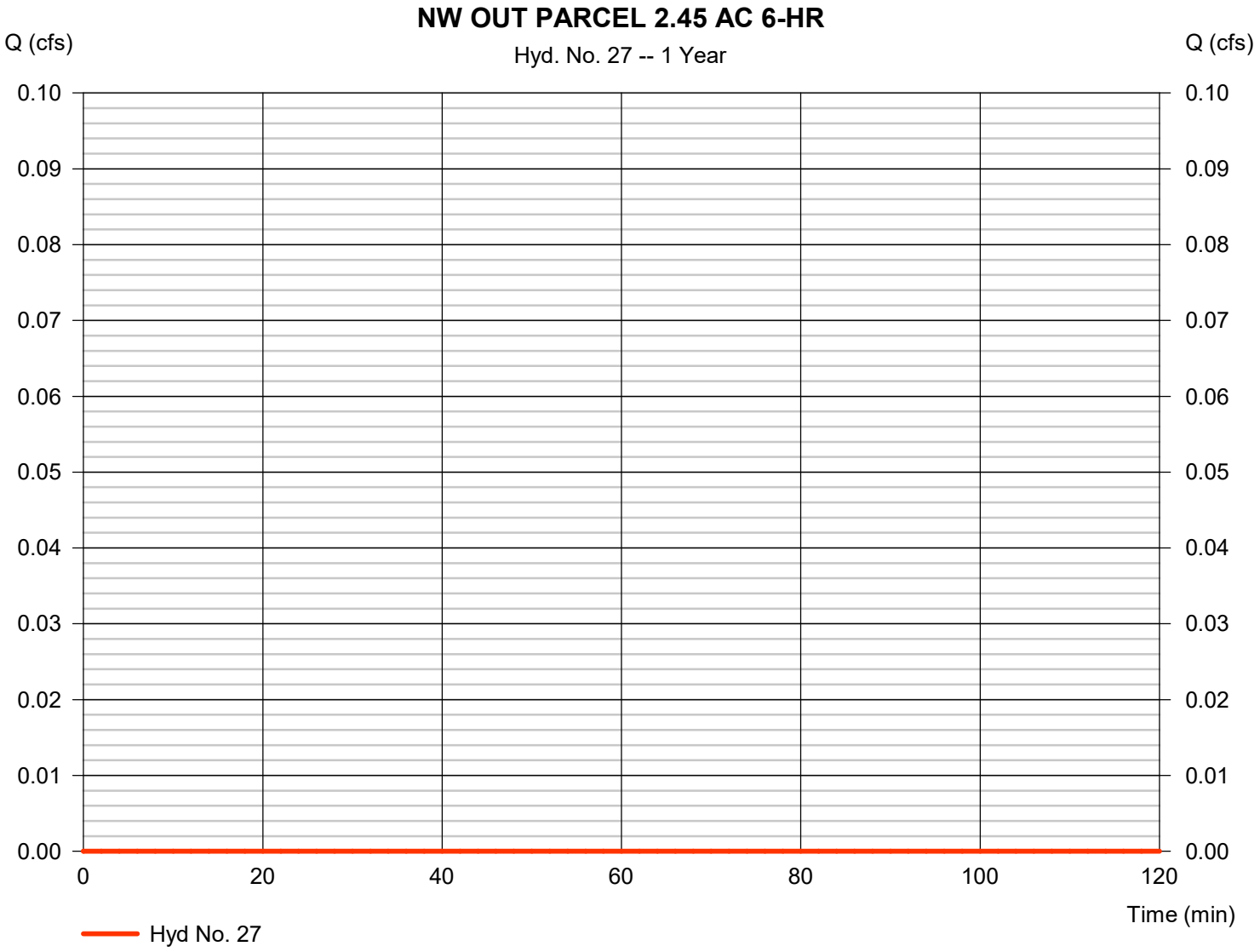


Hydrograph Report

Hyd. No. 27

NW OUT PARCEL 2.45 AC 6-HR

Hydrograph type	= SCS Runoff	Peak discharge	= 0.000 cfs
Storm frequency	= 1 yrs	Time to peak	= n/a
Time interval	= 2 min	Hyd. volume	= 0 cuft
Drainage area	= 2.450 ac	Curve number	= 94
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 0.00 in	Distribution	= SCS 6-Hr
Storm duration	= 6.00 hrs	Shape factor	= 484



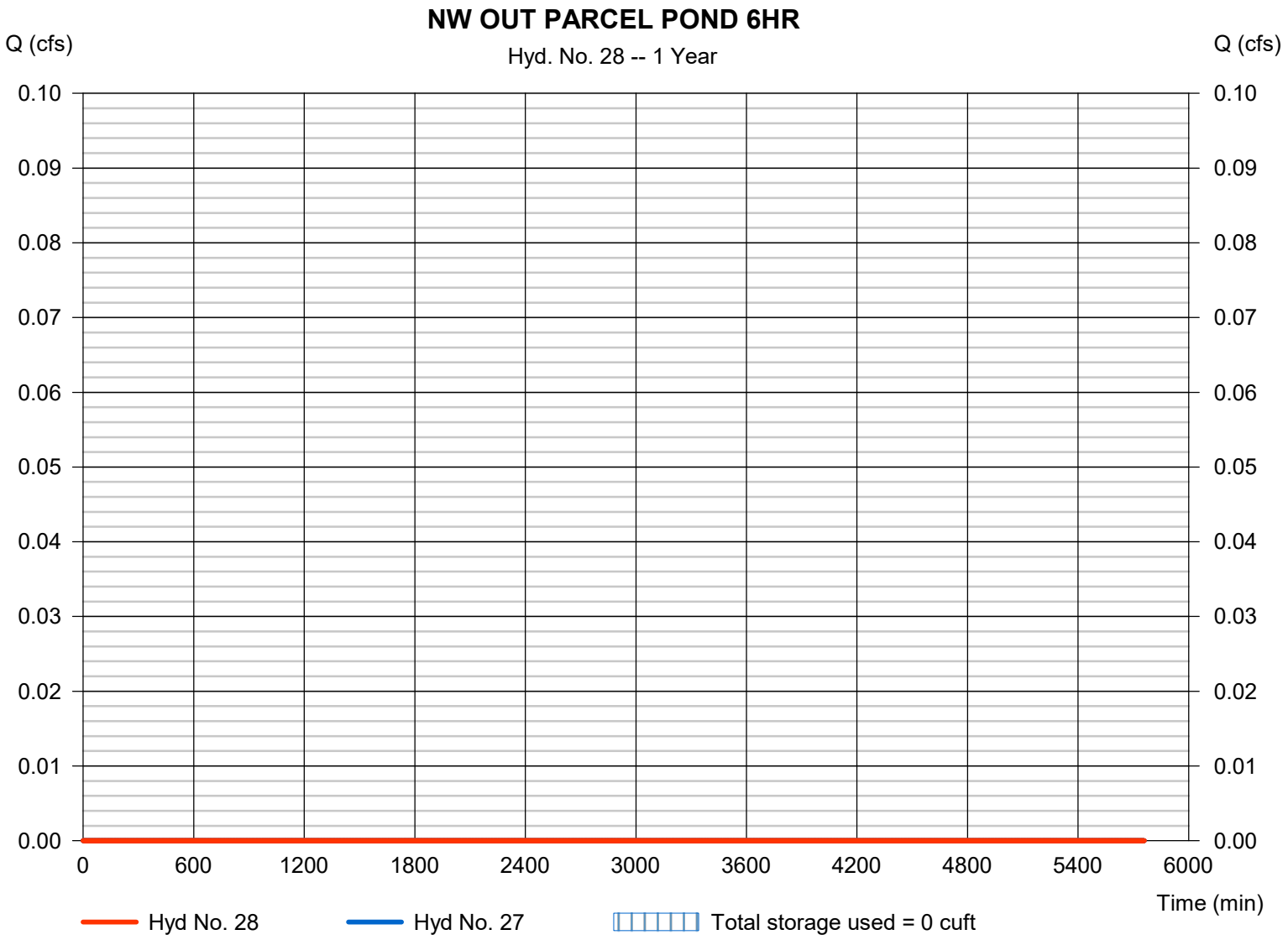
Hydrograph Report

Hyd. No. 28

NW OUT PARCEL POND 6HR

Hydrograph type	=	Reservoir	Peak discharge	=	0.000 cfs
Storm frequency	=	1 yrs	Time to peak	=	n/a
Time interval	=	2 min	Hyd. volume	=	0 cuft
Inflow hyd. No.	=	27 - NW OUT PARCEL 2.45 AC 6HR	Max. Elevation	=	994.00 ft
Reservoir name	=	NW OUT PARCEL POND	Max. Storage	=	0 cuft

Storage Indication method used.



Pond Report

Pond No. 8 - NW OUT PARCEL POND

Pond Data

Contours -User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 994.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	994.00	00	0	0
1.00	995.00	1,893	631	631
2.00	996.00	3,106	2,474	3,105
3.00	997.00	4,377	3,723	6,828
4.00	998.00	5,703	5,025	11,853
5.00	999.00	7,087	6,382	18,235
6.00	1000.00	8,527	7,795	26,030
7.00	1001.00	10,028	9,266	35,296
8.00	1002.00	11,582	10,795	46,091
8.50	1002.50	12,380	5,989	52,079

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 12.00	Inactive	6.00	2.00
Span (in)	= 12.00	4.00	12.00	2.00
No. Barrels	= 1	1	3	6
Invert El. (ft)	= 994.00	995.00	999.00	994.00
Length (ft)	= 50.00	0.00	0.00	8.50
Slope (%)	= 1.00	0.00	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	Yes	Yes	Yes

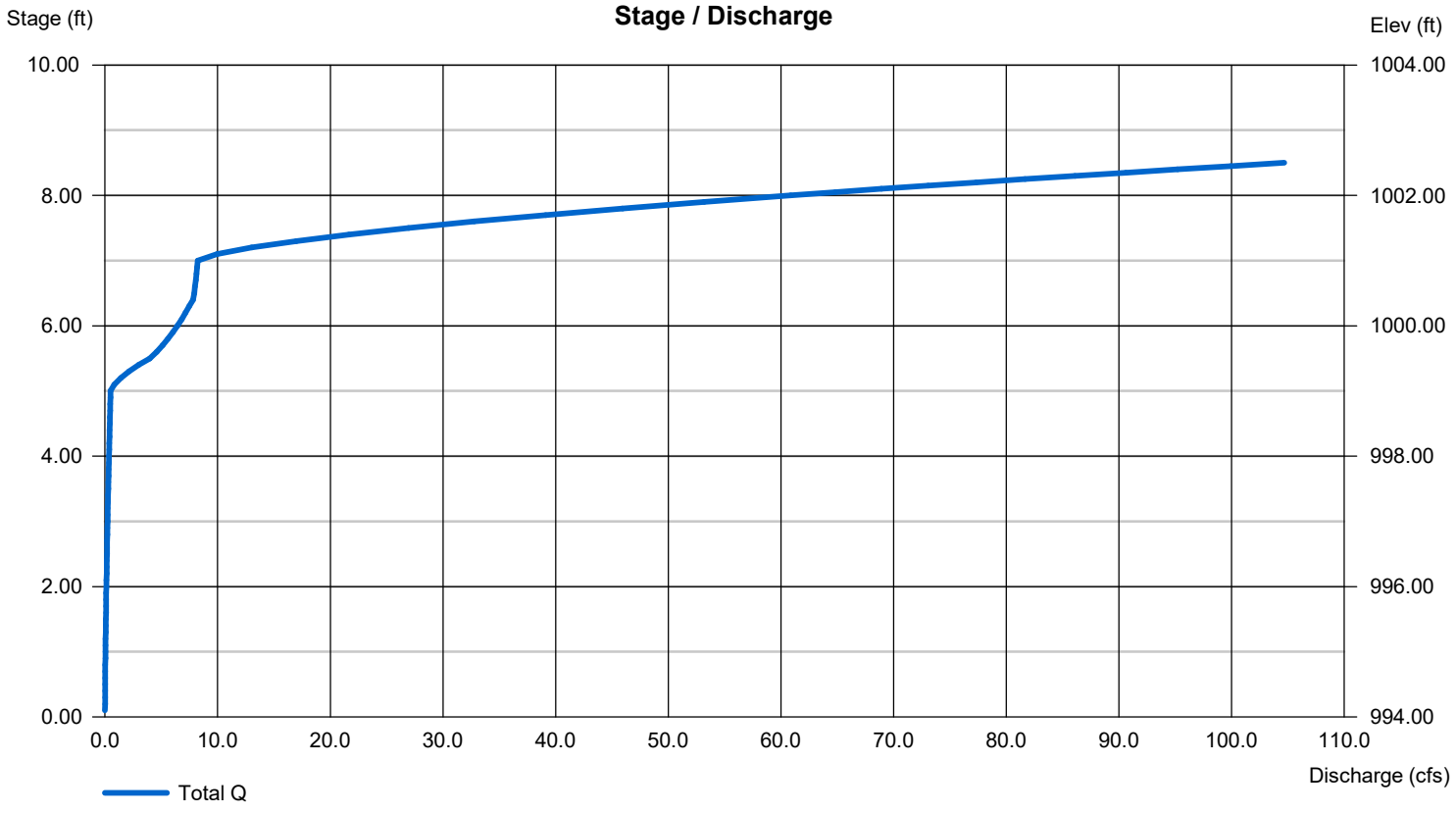
Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 20.00	20.00	0.00	0.00
Crest El. (ft)	= 1002.50	1001.00	0.00	0.00
Weir Coeff.	= 3.33	2.60	3.33	3.33
Weir Type	= 1	Broad	---	---
Multi-Stage	= Yes	No	No	No

Exfil.(in/hr) = 0.000 (by Wet area)

TW Elev. (ft) = 0.00

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).



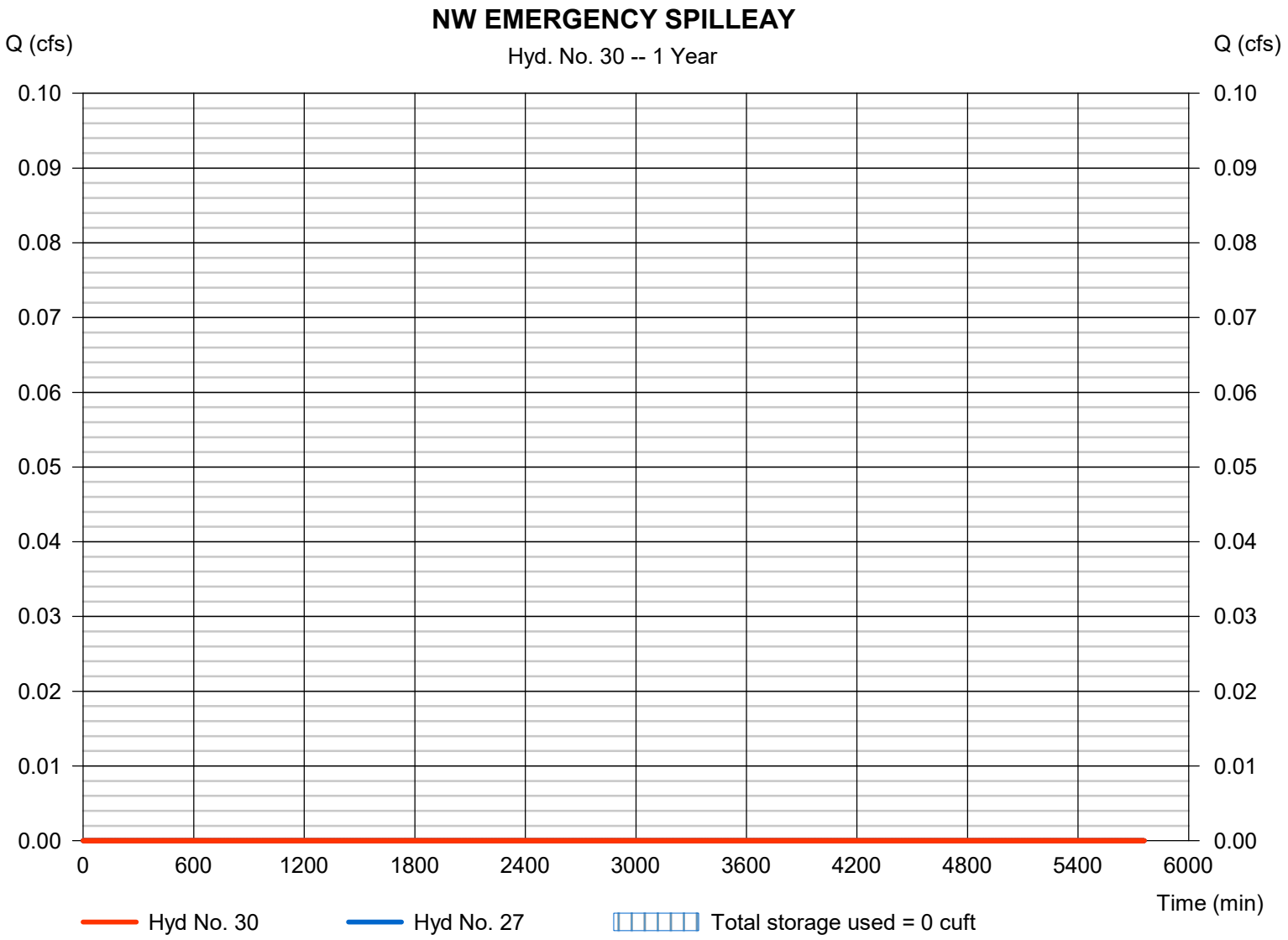
Hydrograph Report

Hyd. No. 30

NW EMERGENCY SPILLEAY

Hydrograph type	=	Reservoir	Peak discharge	=	0.000 cfs
Storm frequency	=	1 yrs	Time to peak	=	n/a
Time interval	=	2 min	Hyd. volume	=	0 cuft
Inflow hyd. No.	=	27 - NW OUT PARCEL 2.45 AC 6 HR	Max. Elevation	=	999.00 ft
Reservoir name	=	NW EMERGENCY SPILLWAY	Max. Storage	=	0 cuft

Storage Indication method used.



Pond Report

Pond No. 10 - NW EMERGENCY SPILLWAY

Pond Data

Contours -User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 999.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	999.00	00	0	0
1.00	1000.00	1,893	631	631
2.00	1001.00	3,106	2,474	3,105
3.00	1002.00	4,377	3,723	6,828
4.00	1003.00	5,703	5,025	11,853
5.00	1004.00	7,087	6,382	18,235
6.00	1005.00	8,527	7,795	26,030
7.00	1006.00	10,028	9,266	35,296
8.00	1007.00	11,582	10,795	46,091
8.50	1007.50	12,380	5,989	52,079

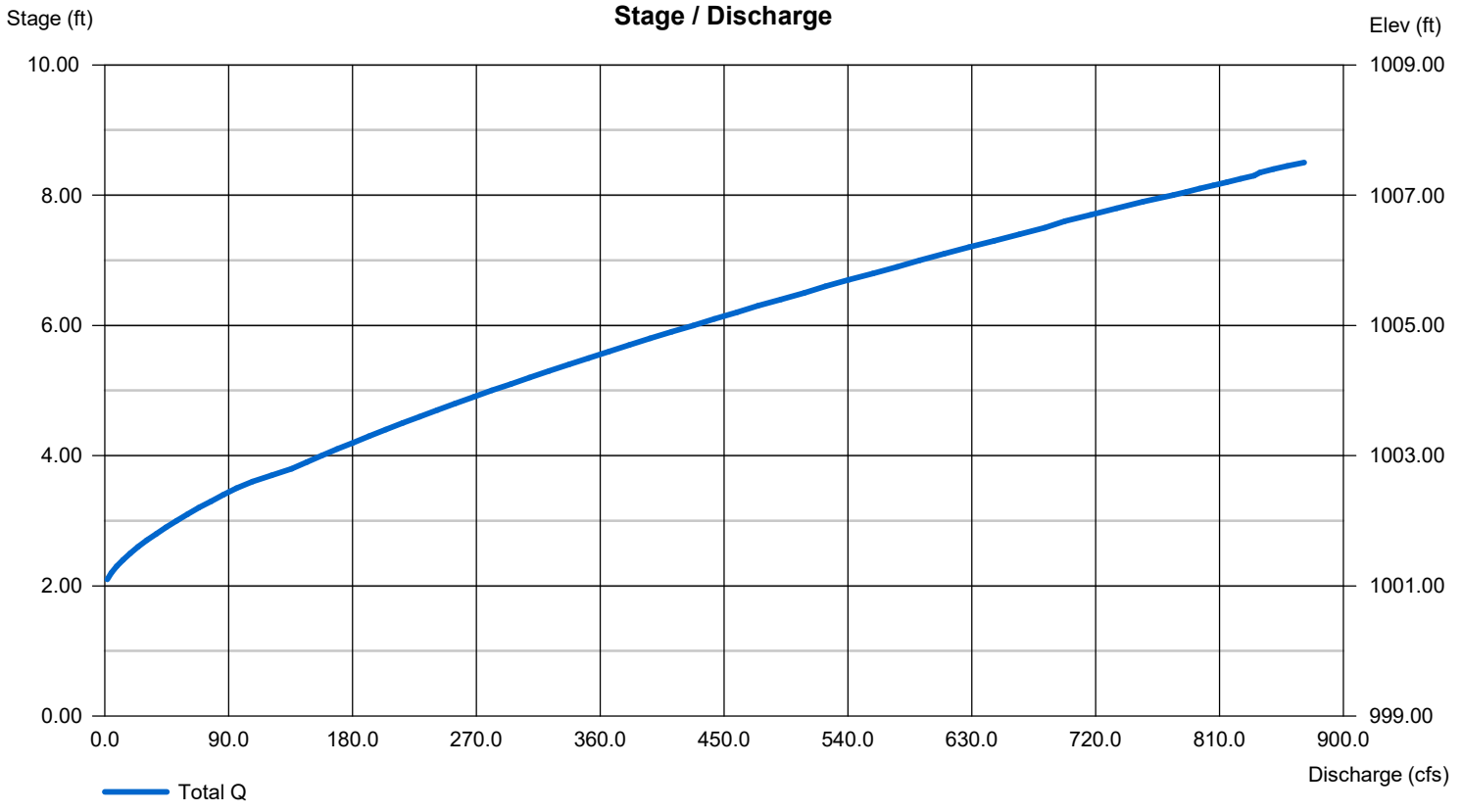
Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 12.00	Inactive	Inactive	0.00
Span (in)	= 12.00	4.00	12.00	0.00
No. Barrels	= 1	1	3	0
Invert El. (ft)	= 994.00	995.00	999.00	0.00
Length (ft)	= 50.00	0.00	0.00	0.00
Slope (%)	= 1.00	0.00	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	Yes	Yes	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 20.00	20.00	0.00	0.00
Crest El. (ft)	= 1002.50	1001.00	0.00	0.00
Weir Coeff.	= 3.33	2.60	3.33	3.33
Weir Type	= 1	Broad	---	---
Multi-Stage	= Yes	No	No	No
Exfil.(in/hr)	= 0.000 (by Wet area)			
TW Elev. (ft)	= 0.00			

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2026

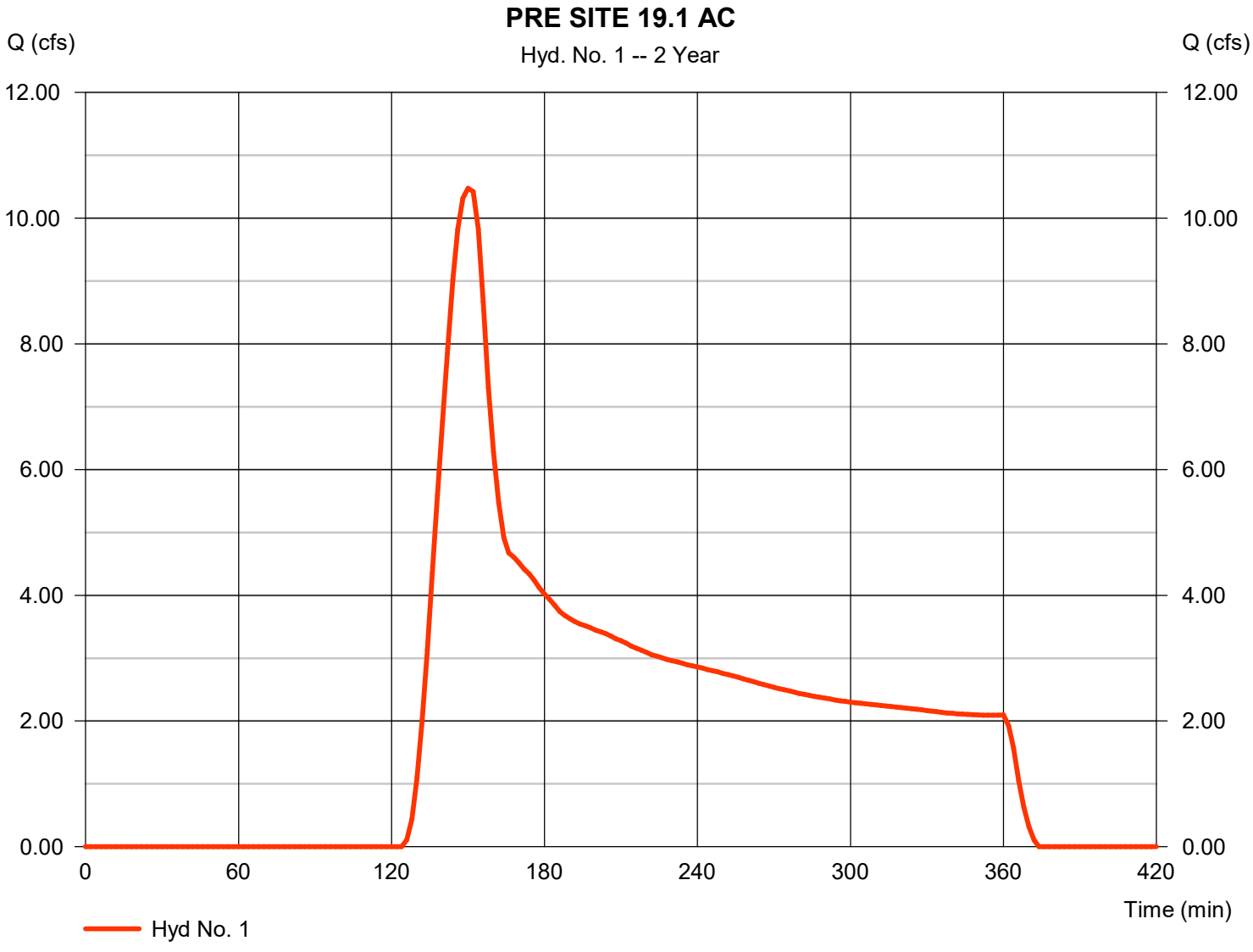
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	10.48	2	150	48,535	------	------	------	PRE SITE 19.1 AC
2	SCS Runoff	3.373	2	152	16,247	------	------	------	OFFSITE EAST 6.2 AC
3	SCS Runoff	4.581	2	144	19,846	------	------	------	OFFSITE ROAD 2.4 AC
4	SCS Runoff	1.065	2	146	4,765	------	------	------	OFFSITE NORTH 2 AC
5	Combine	8.294	2	146	40,858	2, 3, 4	------	------	OFFSITE
6	SCS Runoff	1.304	2	146	5,837	------	------	------	PRE NW OUTPARCEL 2.45 AC
8	SCS Runoff	1.729	2	146	7,155	------	------	------	direct west 2.1 AC 6hr
9	SCS Runoff	21.72	2	144	86,185	------	------	------	POST WEST 17.0 AC 6 hr
12	Reservoir	0.906	2	364	86,142	9	999.13	75,712	WEST POND
13	Combine	2.151	2	146	93,297	8, 12	------	------	POST WEST TOTAL
15	Combine	31.55	2	144	134,197	2, 3, 4, 8, 9,	------	------	TOTAL POST BEFORE DETENTION
17	Reservoir	14.71	2	154	86,182	9	1003.23	234,008	EMERGENCY SPILLWAY
20	SCS Runoff	6.387	2	716	12,896	------	------	------	direct west 2.1 AC 24 hr
21	SCS Runoff	68.00	2	716	140,303	------	------	------	POST WEST 17 AC 24 hr
23	Combine	68.00	2	716	140,303	21,	------	------	TO WEST POND 24HR WQ
24	Reservoir	1.114	2	1018	140,193	23	999.88	99,147	WQ DESIGN 24HR
25	Combine	7.130	2	716	106,193	8, 12, 20,	------	------	POST WEST TOTAL 24HR WQ
27	SCS Runoff	4.165	2	144	16,863	------	------	------	NW OUT PARCEL 2.45 AC 6-HR
28	Reservoir	0.361	2	362	16,811	27	998.06	12,234	NW OUT PARCEL POND 6HR
30	Reservoir	4.096	2	146	13,758	27	1001.18	3,781	NW EMERGENCY SPILLEAY

Hydrograph Report

Hyd. No. 1

PRE SITE 19.1 AC

Hydrograph type	=	SCS Runoff	Peak discharge	=	10.48 cfs
Storm frequency	=	2 yrs	Time to peak	=	150 min
Time interval	=	2 min	Hyd. volume	=	48,535 cuft
Drainage area	=	19.100 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	9.00 min
Total precip.	=	2.66 in	Distribution	=	SCS 6-Hr
Storm duration	=	6.00 hrs	Shape factor	=	484

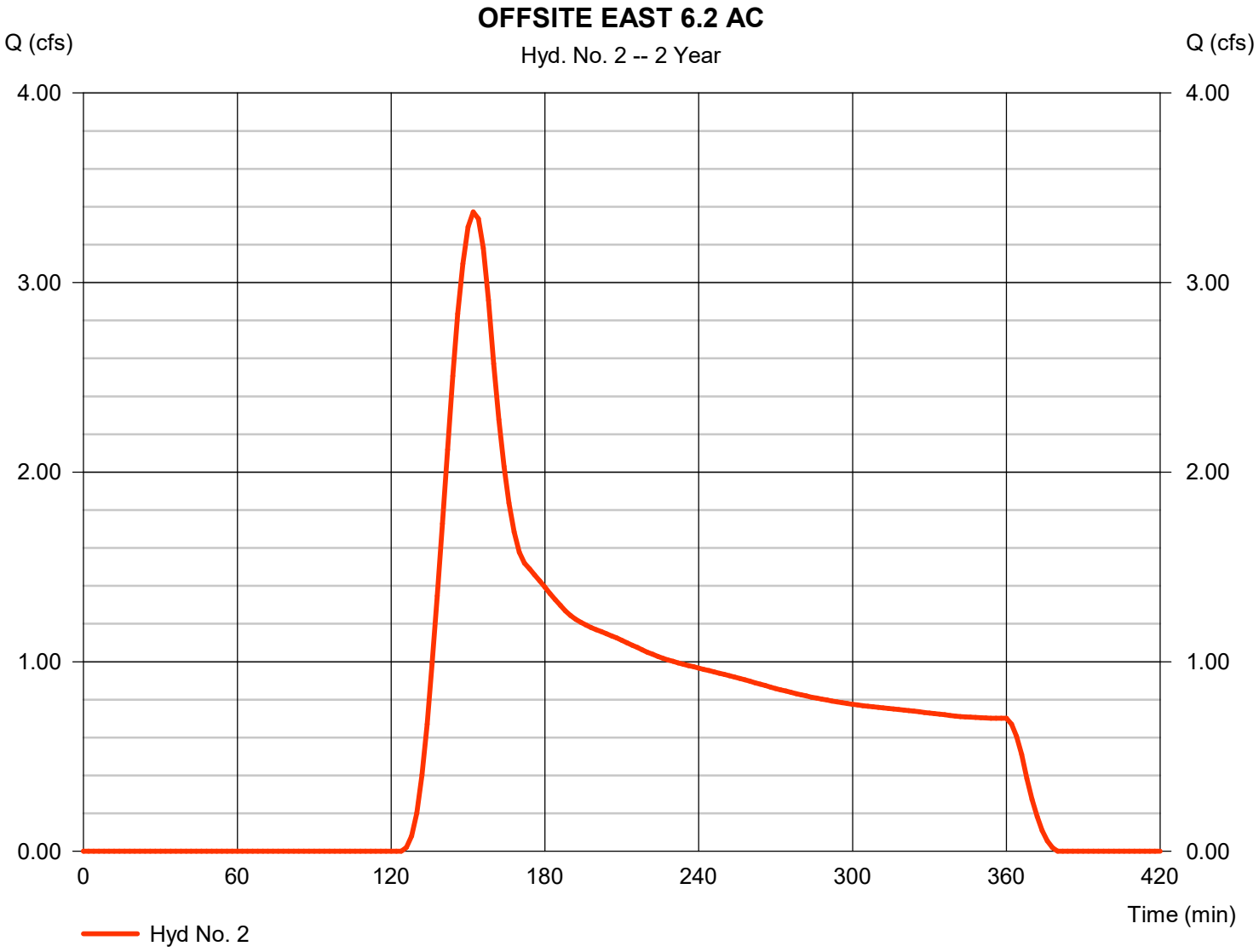


Hydrograph Report

Hyd. No. 2

OFFSITE EAST 6.2 AC

Hydrograph type	= SCS Runoff	Peak discharge	= 3.373 cfs
Storm frequency	= 2 yrs	Time to peak	= 152 min
Time interval	= 2 min	Hyd. volume	= 16,247 cuft
Drainage area	= 6.200 ac	Curve number	= 74
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 10.00 min
Total precip.	= 2.66 in	Distribution	= SCS 6-Hr
Storm duration	= 6.00 hrs	Shape factor	= 484

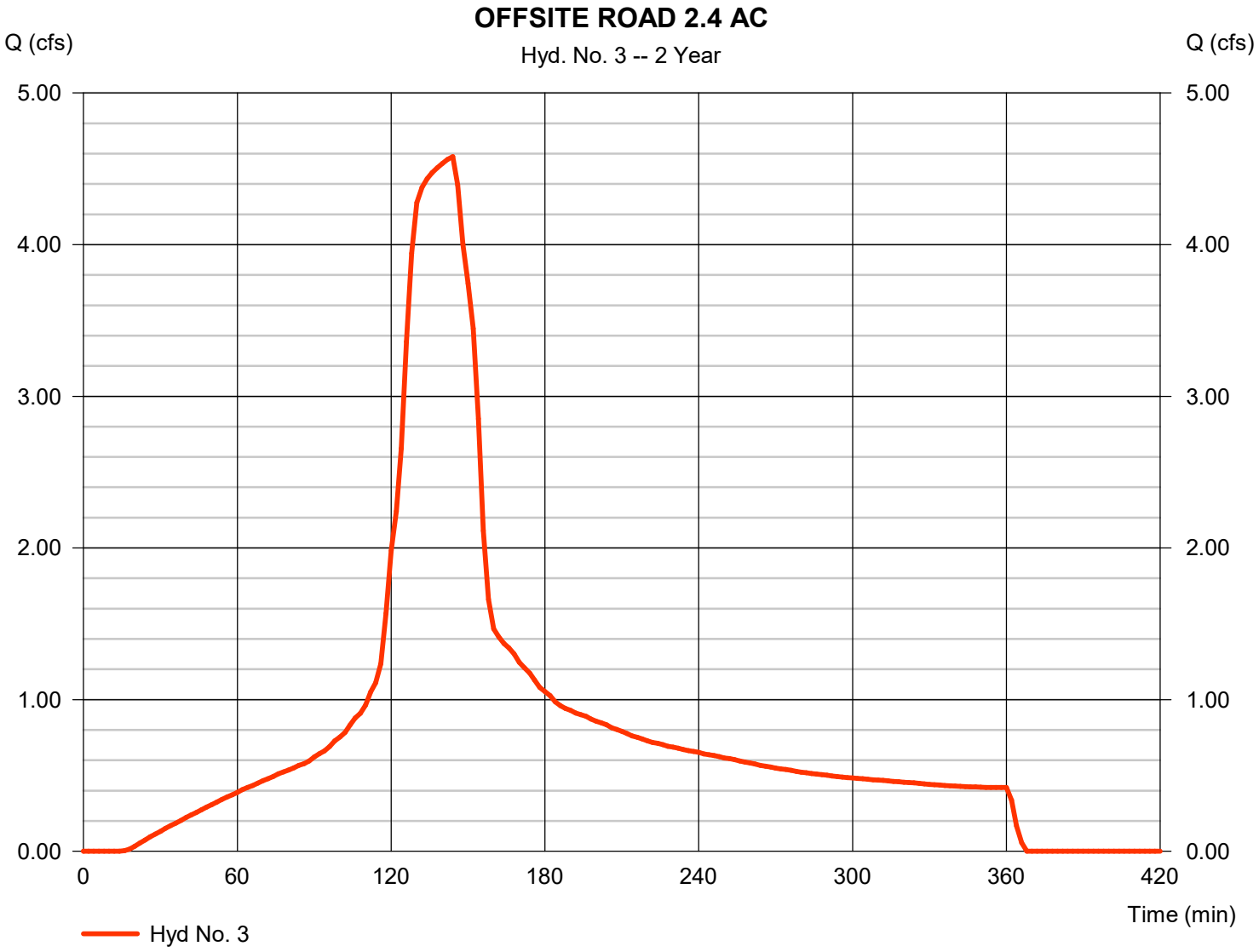


Hydrograph Report

Hyd. No. 3

OFFSITE ROAD 2.4 AC

Hydrograph type	= SCS Runoff	Peak discharge	= 4.581 cfs
Storm frequency	= 2 yrs	Time to peak	= 144 min
Time interval	= 2 min	Hyd. volume	= 19,846 cuft
Drainage area	= 2.400 ac	Curve number	= 98
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 2.66 in	Distribution	= SCS 6-Hr
Storm duration	= 6.00 hrs	Shape factor	= 484

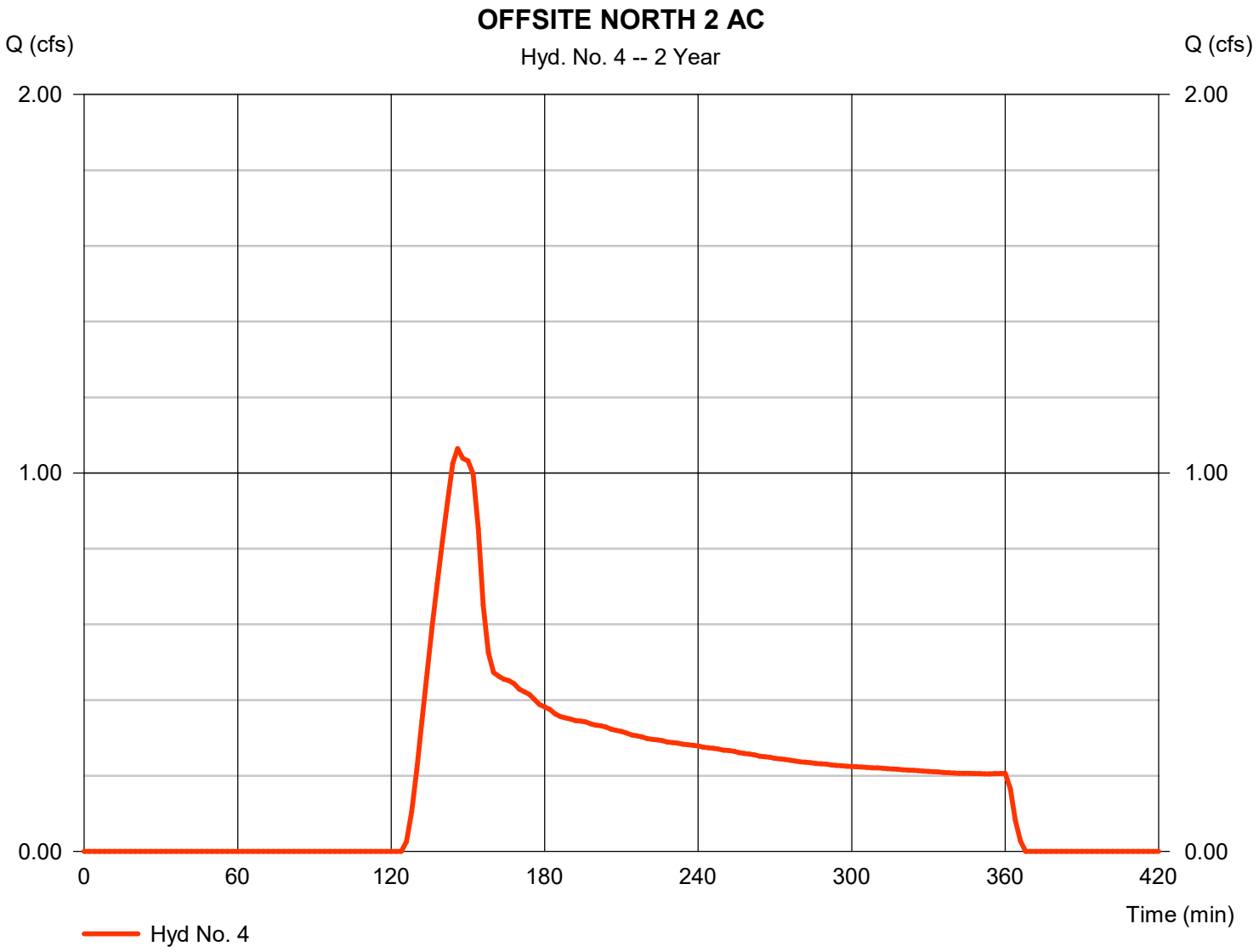


Hydrograph Report

Hyd. No. 4

OFFSITE NORTH 2 AC

Hydrograph type	=	SCS Runoff	Peak discharge	=	1.065 cfs
Storm frequency	=	2 yrs	Time to peak	=	146 min
Time interval	=	2 min	Hyd. volume	=	4,765 cuft
Drainage area	=	2.000 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	2.66 in	Distribution	=	SCS 6-Hr
Storm duration	=	6.00 hrs	Shape factor	=	484

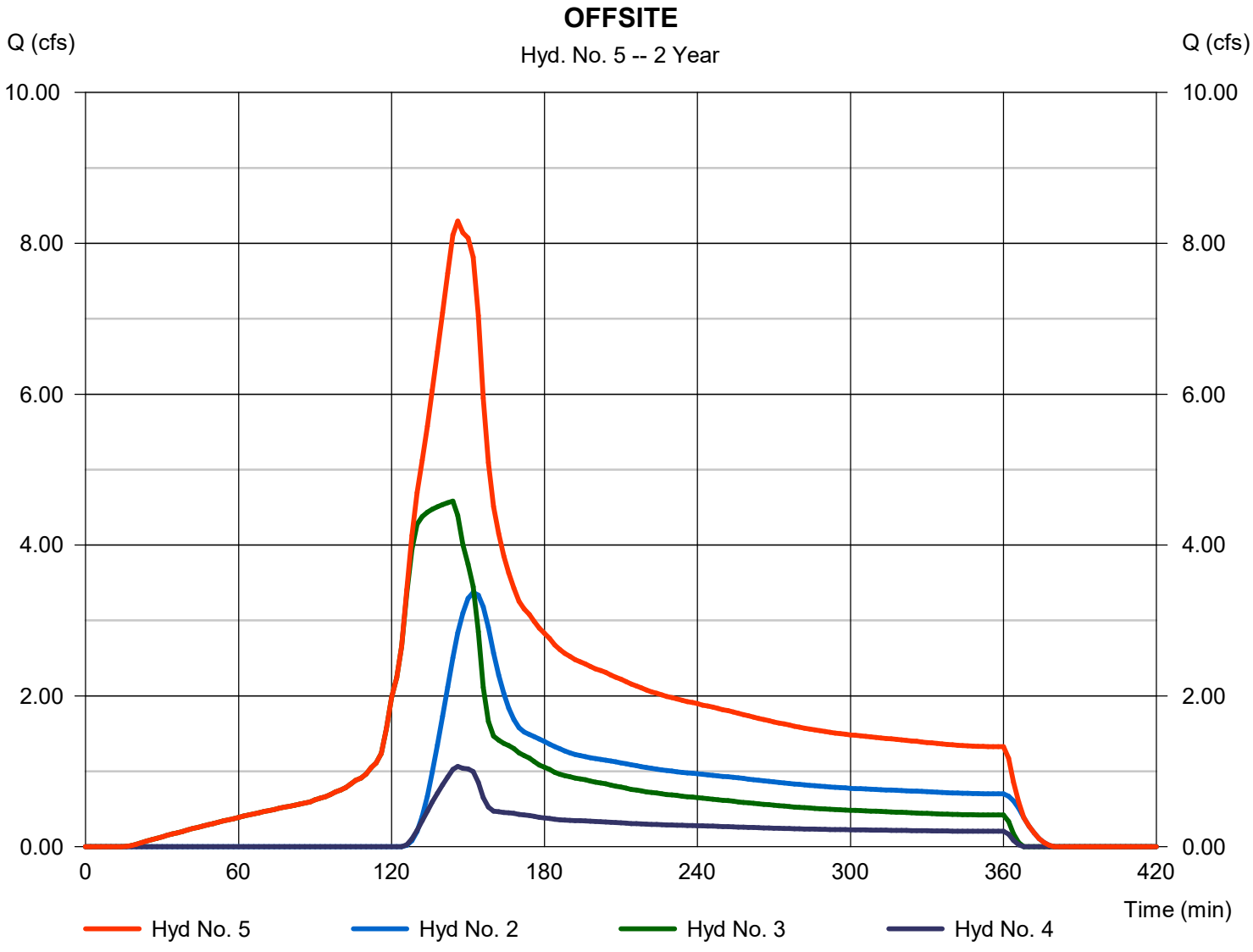


Hydrograph Report

Hyd. No. 5

OFFSITE

Hydrograph type	= Combine	Peak discharge	= 8.294 cfs
Storm frequency	= 2 yrs	Time to peak	= 146 min
Time interval	= 2 min	Hyd. volume	= 40,858 cuft
Inflow hyds.	= 2, 3, 4	Contrib. drain. area	= 10.600 ac

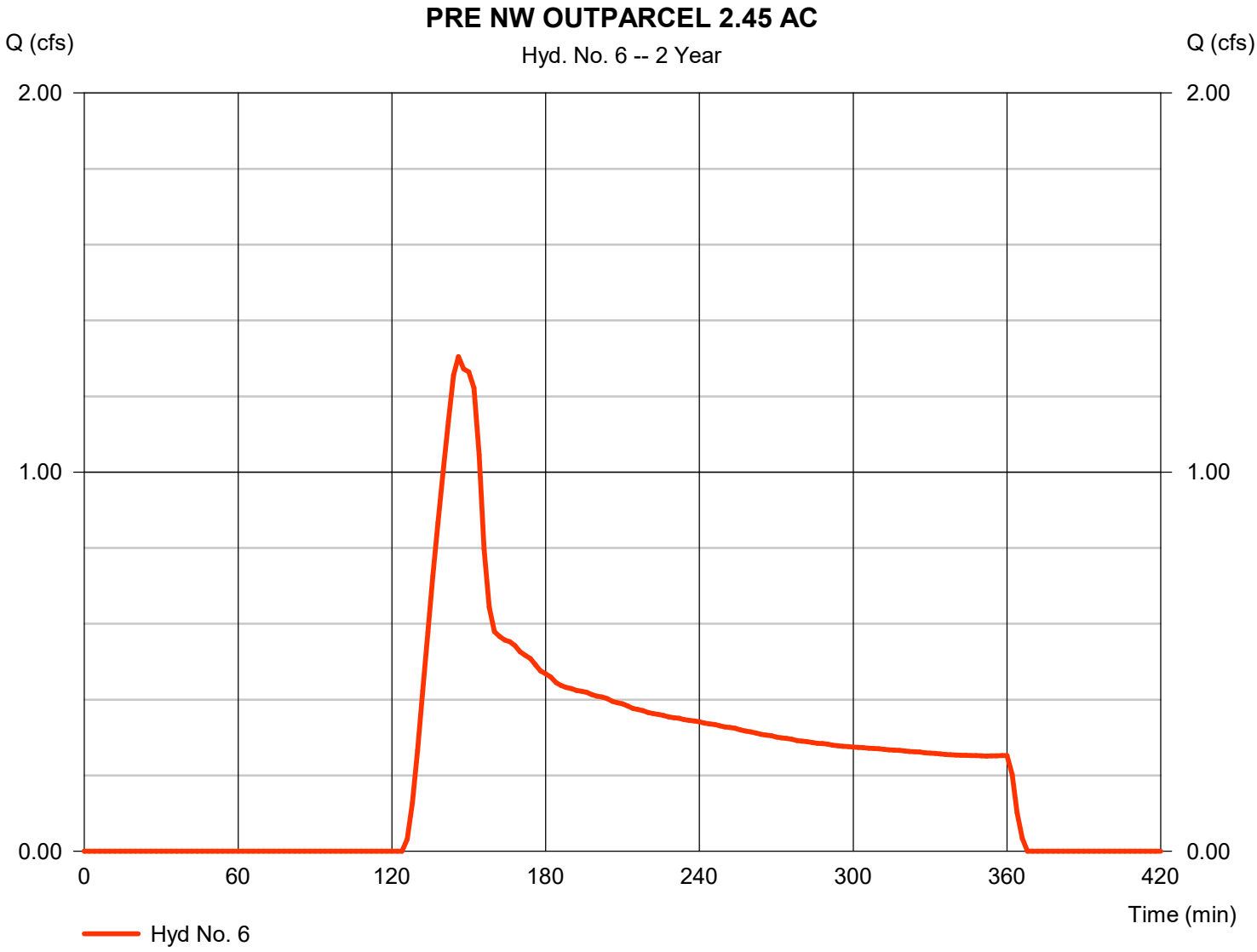


Hydrograph Report

Hyd. No. 6

PRE NW OUTPARCEL 2.45 AC

Hydrograph type	= SCS Runoff	Peak discharge	= 1.304 cfs
Storm frequency	= 2 yrs	Time to peak	= 146 min
Time interval	= 2 min	Hyd. volume	= 5,837 cuft
Drainage area	= 2.450 ac	Curve number	= 74
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 2.66 in	Distribution	= SCS 6-Hr
Storm duration	= 6.00 hrs	Shape factor	= 484

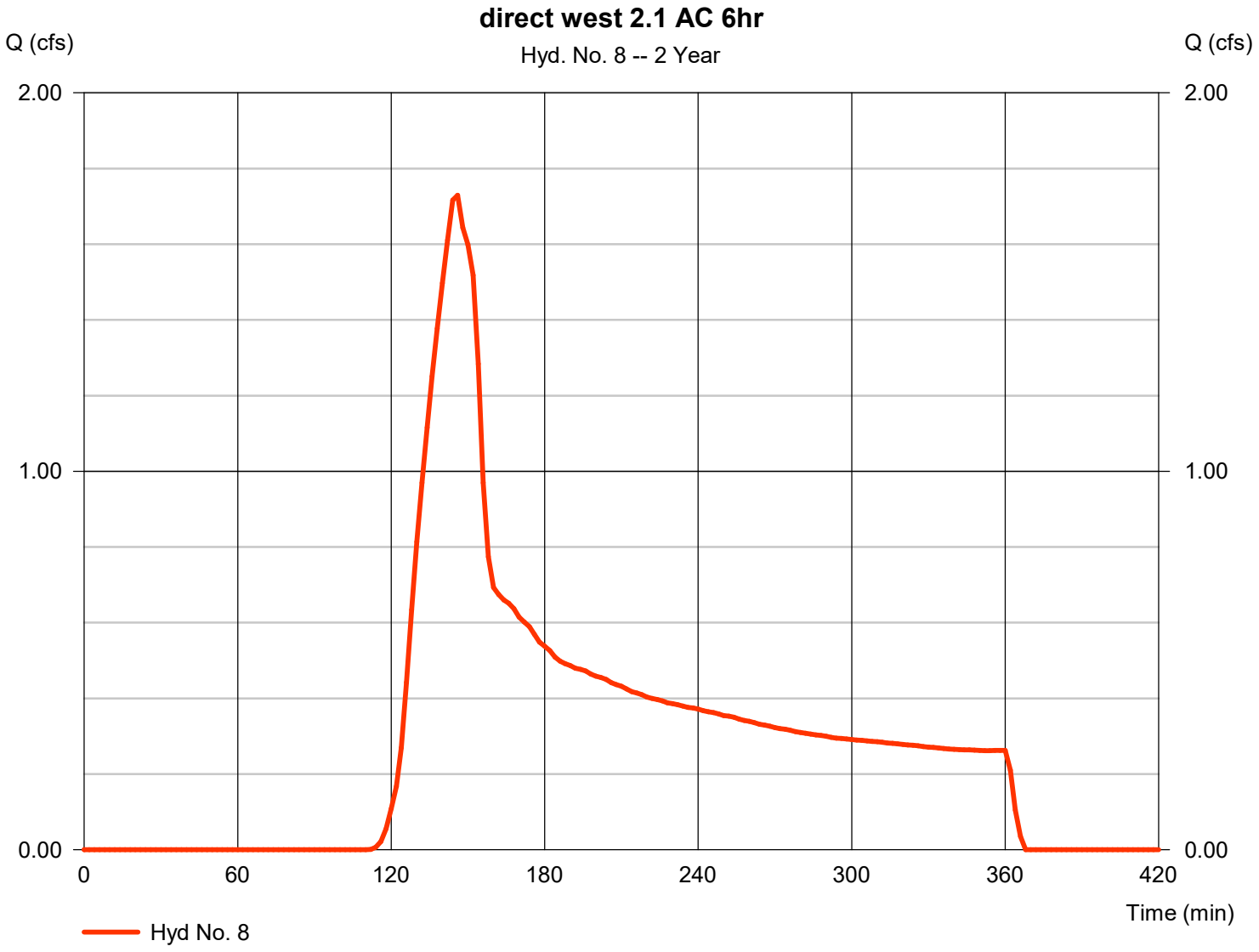


Hydrograph Report

Hyd. No. 8

direct west 2.1 AC 6hr

Hydrograph type	=	SCS Runoff	Peak discharge	=	1.729 cfs
Storm frequency	=	2 yrs	Time to peak	=	146 min
Time interval	=	2 min	Hyd. volume	=	7,155 cuft
Drainage area	=	2.100 ac	Curve number	=	80
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	2.66 in	Distribution	=	SCS 6-Hr
Storm duration	=	6.00 hrs	Shape factor	=	484

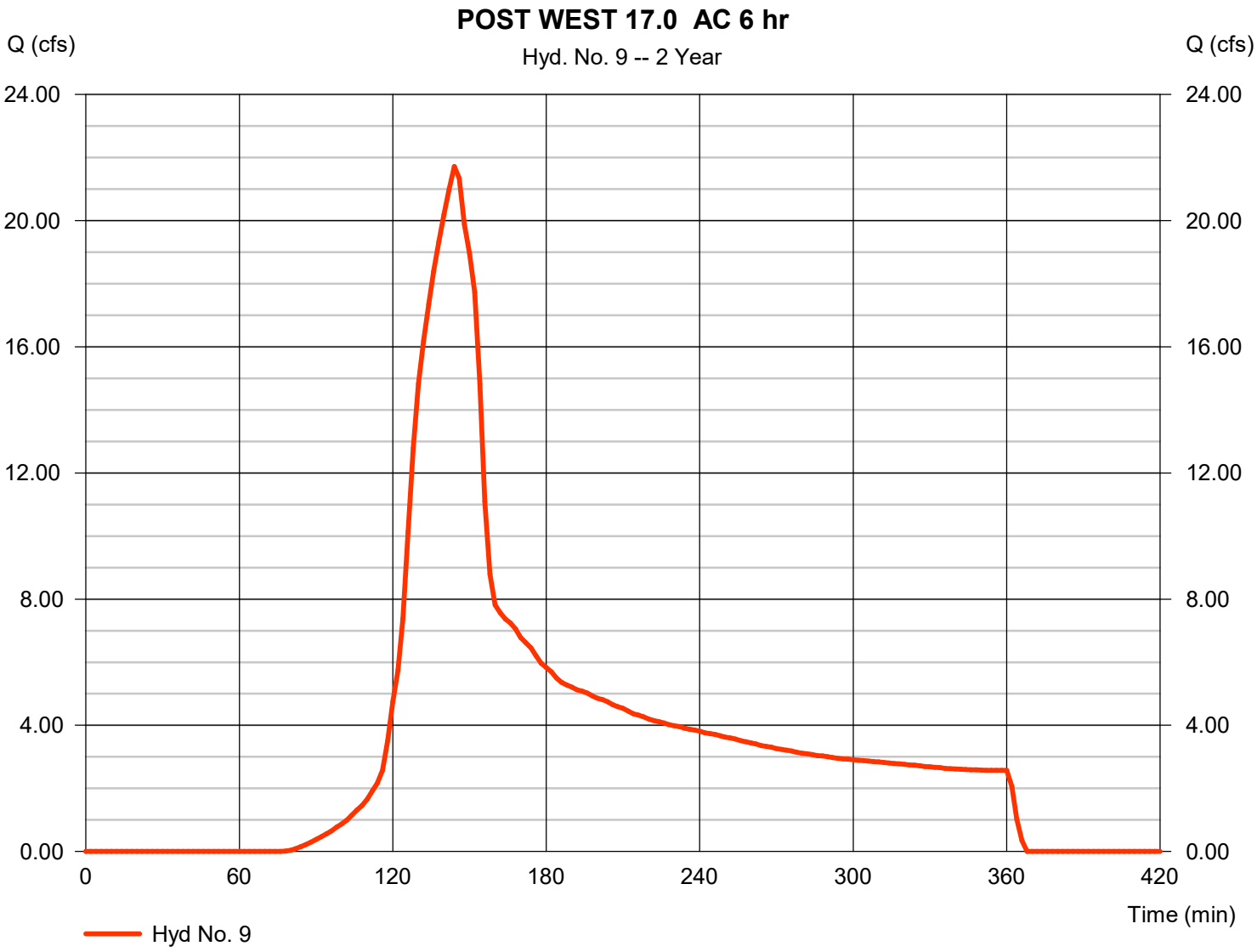


Hydrograph Report

Hyd. No. 9

POST WEST 17.0 AC 6 hr

Hydrograph type	=	SCS Runoff	Peak discharge	=	21.72 cfs
Storm frequency	=	2 yrs	Time to peak	=	144 min
Time interval	=	2 min	Hyd. volume	=	86,185 cuft
Drainage area	=	17.000 ac	Curve number	=	87.6
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	2.66 in	Distribution	=	SCS 6-Hr
Storm duration	=	6.00 hrs	Shape factor	=	484



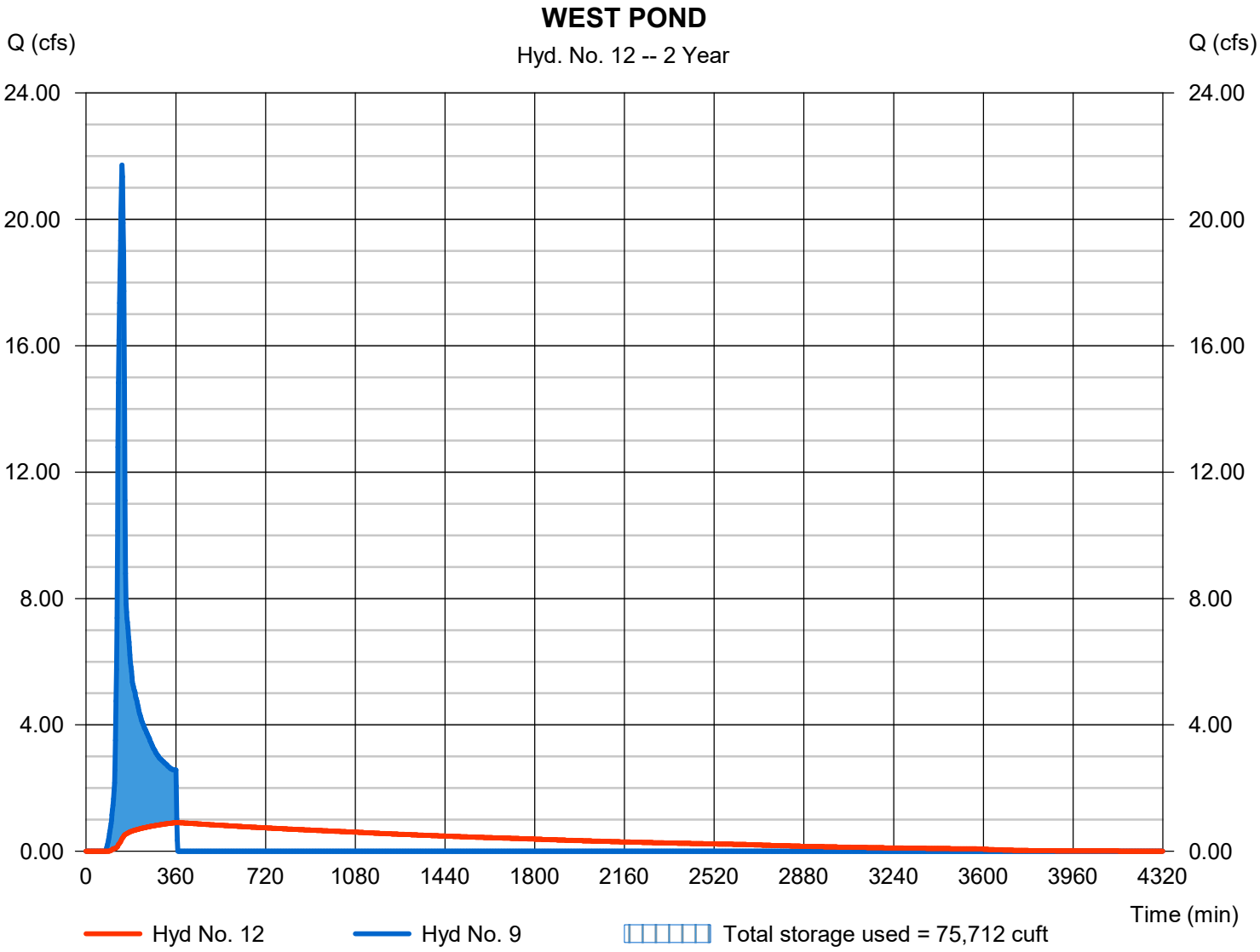
Hydrograph Report

Hyd. No. 12

WEST POND

Hydrograph type	=	Reservoir	Peak discharge	=	0.906 cfs
Storm frequency	=	2 yrs	Time to peak	=	364 min
Time interval	=	2 min	Hyd. volume	=	86,142 cuft
Inflow hyd. No.	=	9 - POST WEST 17.0 AC 6 hr	Max. Elevation	=	999.13 ft
Reservoir name	=	WEST POND retention	Max. Storage	=	75,712 cuft

Storage Indication method used.

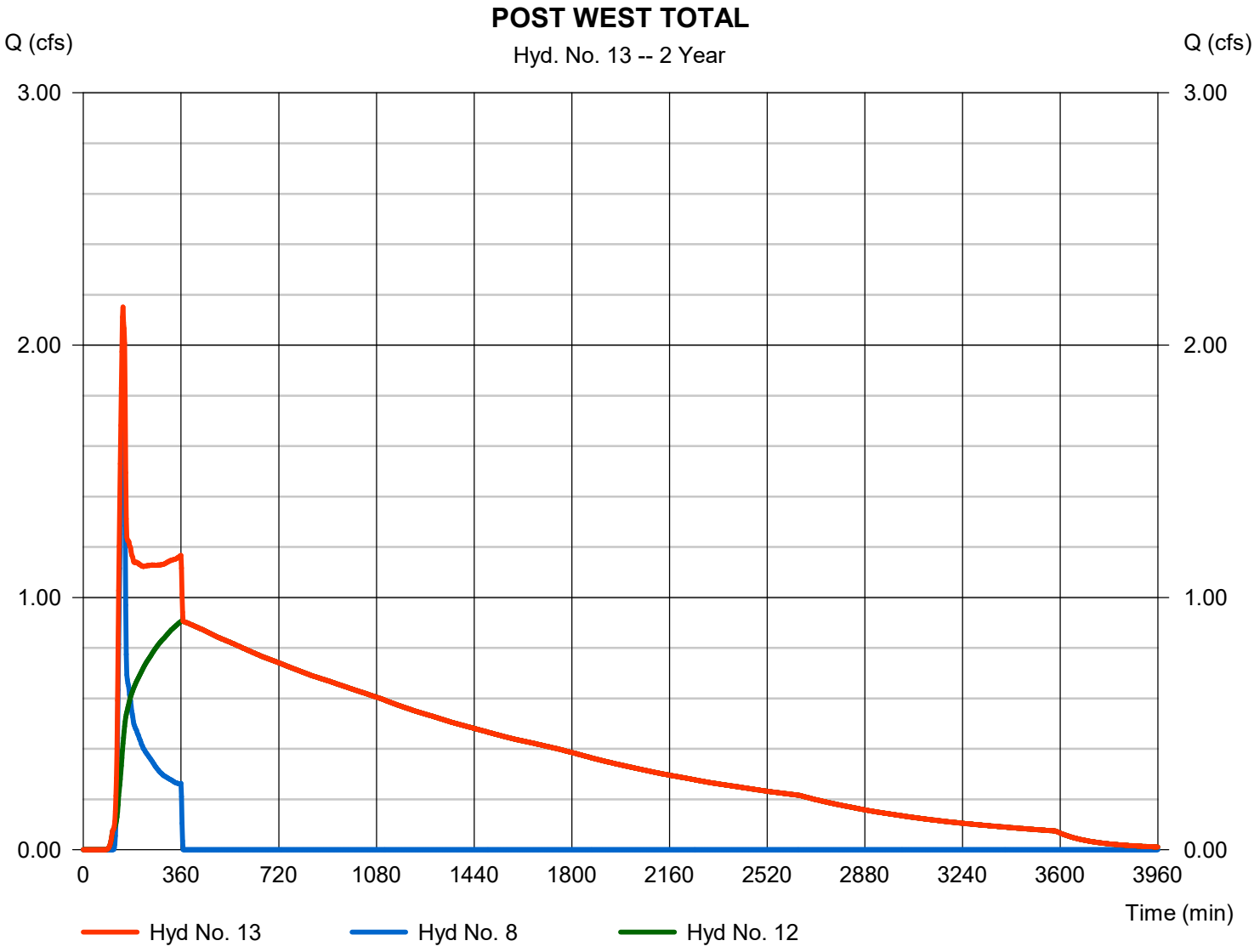


Hydrograph Report

Hyd. No. 13

POST WEST TOTAL

Hydrograph type	= Combine	Peak discharge	= 2.151 cfs
Storm frequency	= 2 yrs	Time to peak	= 146 min
Time interval	= 2 min	Hyd. volume	= 93,297 cuft
Inflow hyds.	= 8, 12	Contrib. drain. area	= 2.100 ac

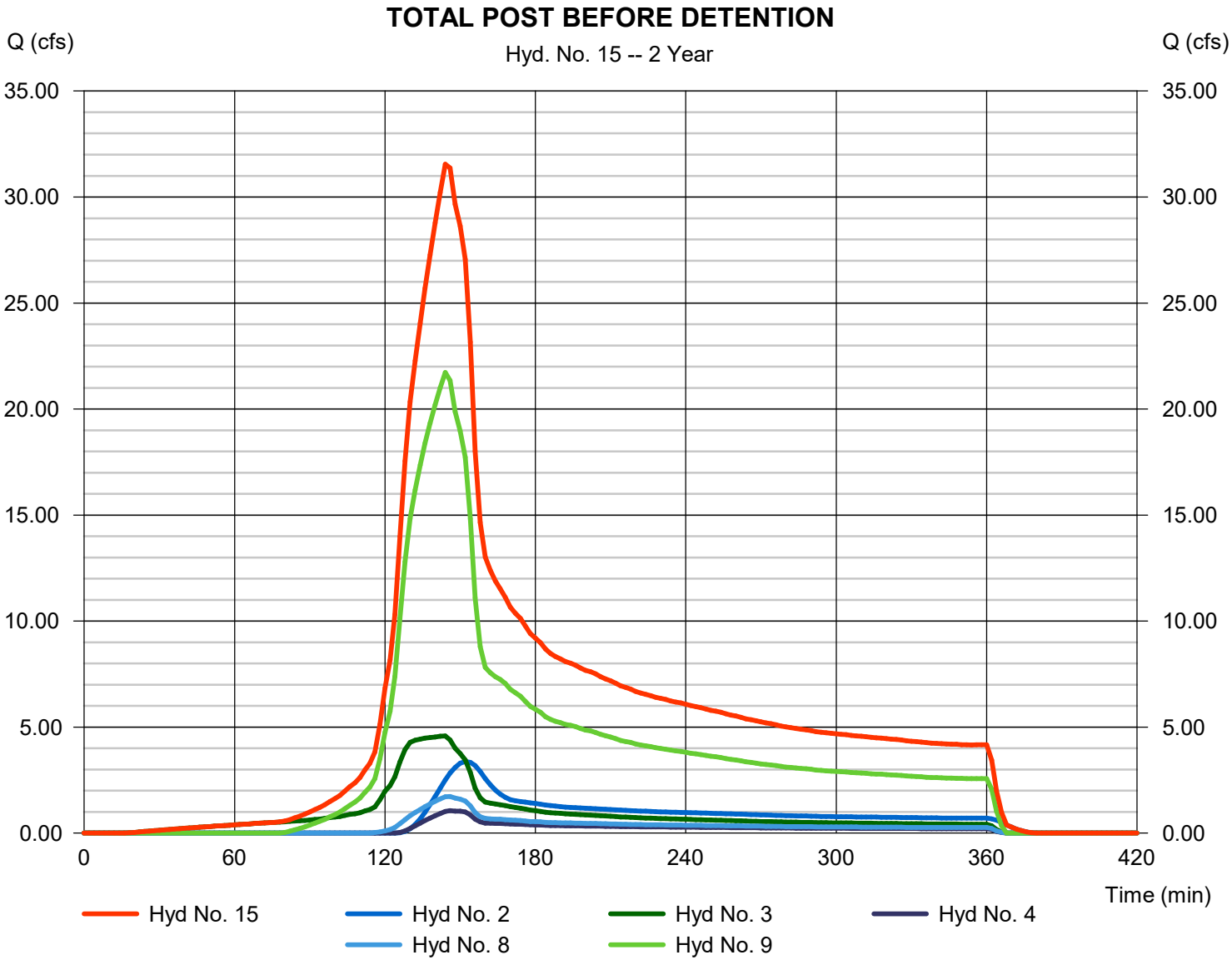


Hydrograph Report

Hyd. No. 15

TOTAL POST BEFORE DETENTION

Hydrograph type	= Combine	Peak discharge	= 31.55 cfs
Storm frequency	= 2 yrs	Time to peak	= 144 min
Time interval	= 2 min	Hyd. volume	= 134,197 cuft
Inflow hyds.	= 2, 3, 4, 8, 9	Contrib. drain. area	= 29.700 ac



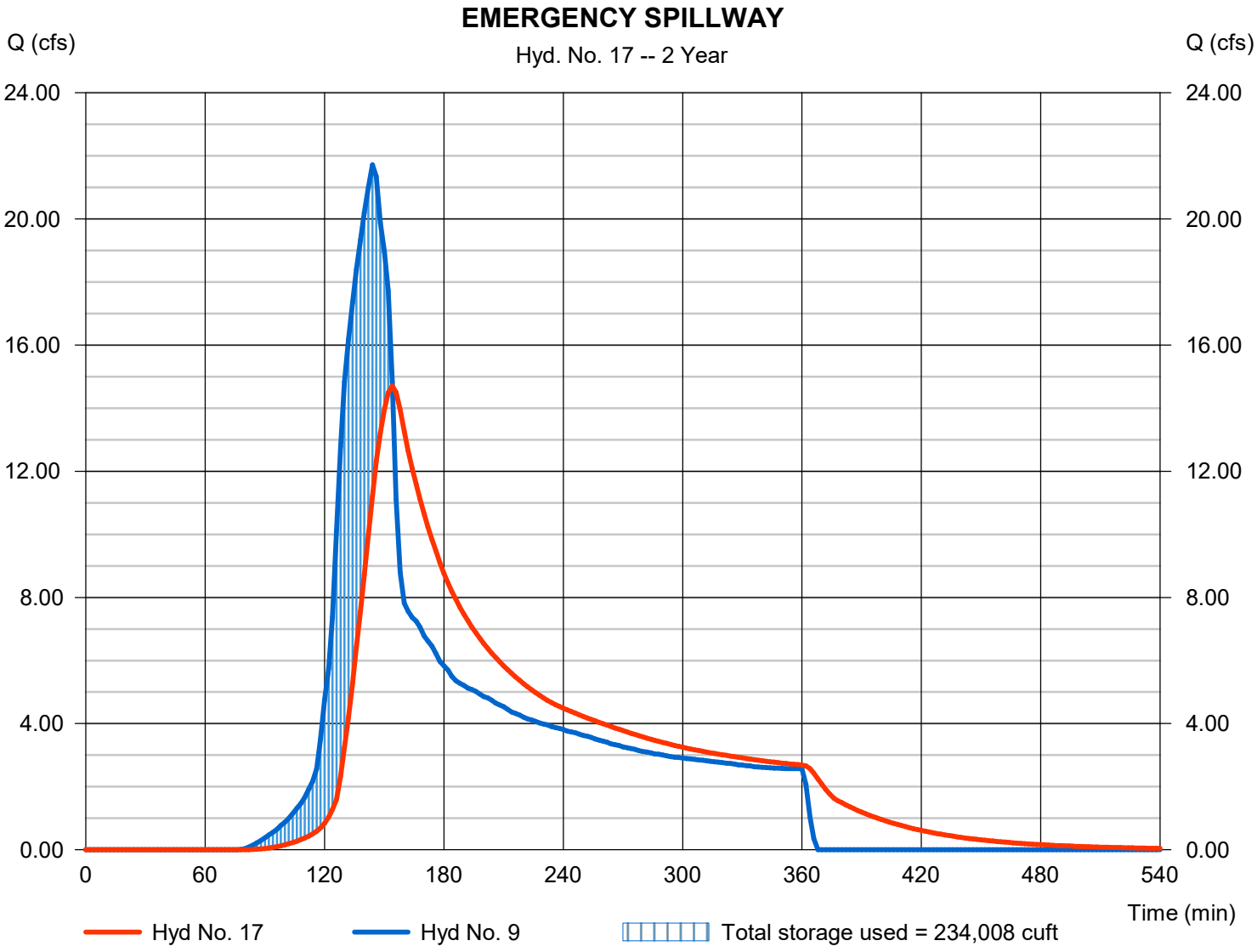
Hydrograph Report

Hyd. No. 17

EMERGENCY SPILLWAY

Hydrograph type	=	Reservoir	Peak discharge	=	14.71 cfs
Storm frequency	=	2 yrs	Time to peak	=	154 min
Time interval	=	2 min	Hyd. volume	=	86,182 cuft
Inflow hyd. No.	=	9 - POST WEST 17.0 AC 6 hr	Max. Elevation	=	1003.23 ft
Reservoir name	=	EMERGENCY SPILLWAY	Max. Storage	=	234,008 cuft

Storage Indication method used. Wet pond routing start elevation = 1002.80 ft.

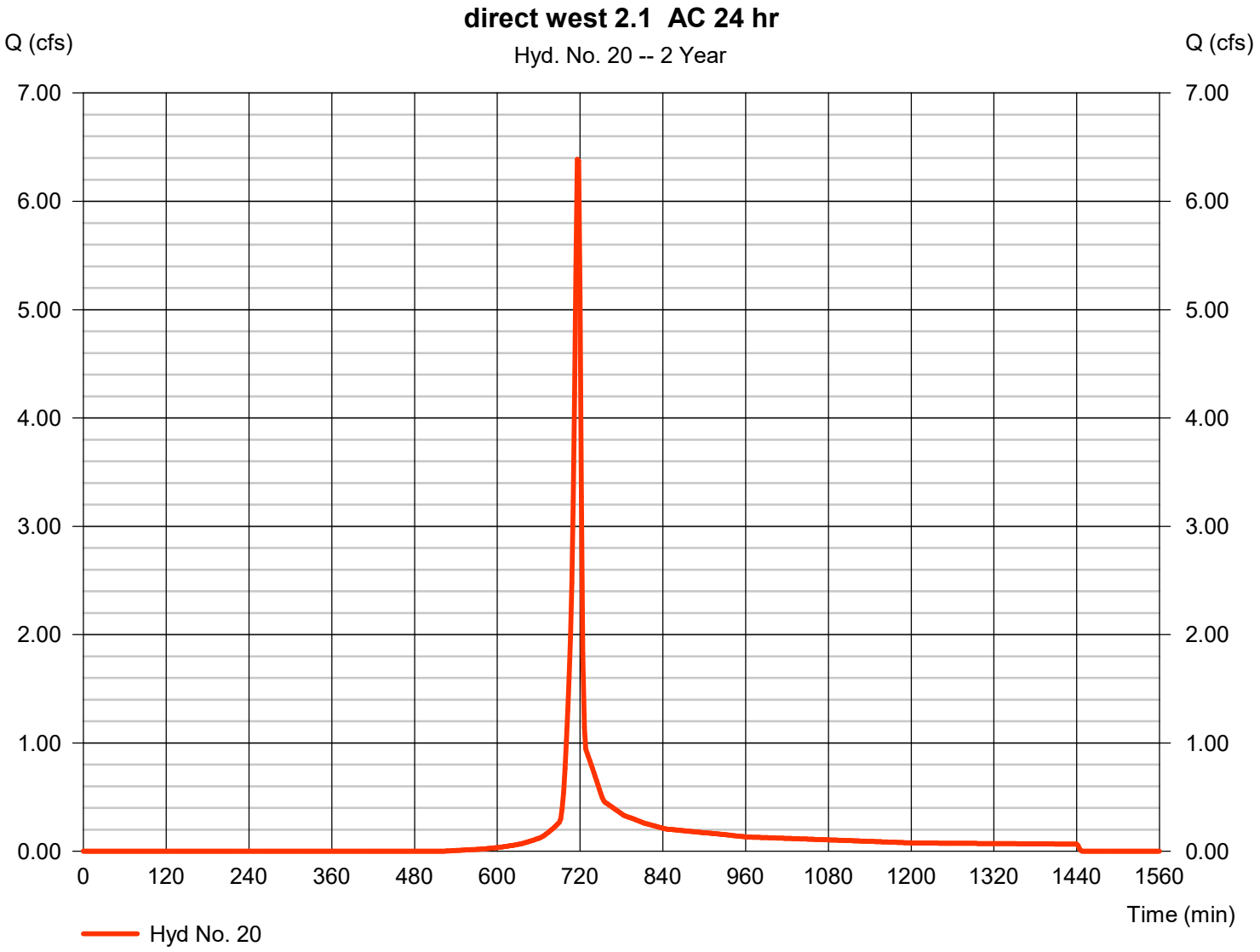


Hydrograph Report

Hyd. No. 20

direct west 2.1 AC 24 hr

Hydrograph type	= SCS Runoff	Peak discharge	= 6.387 cfs
Storm frequency	= 2 yrs	Time to peak	= 716 min
Time interval	= 2 min	Hyd. volume	= 12,896 cuft
Drainage area	= 2.100 ac	Curve number	= 80
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.71 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

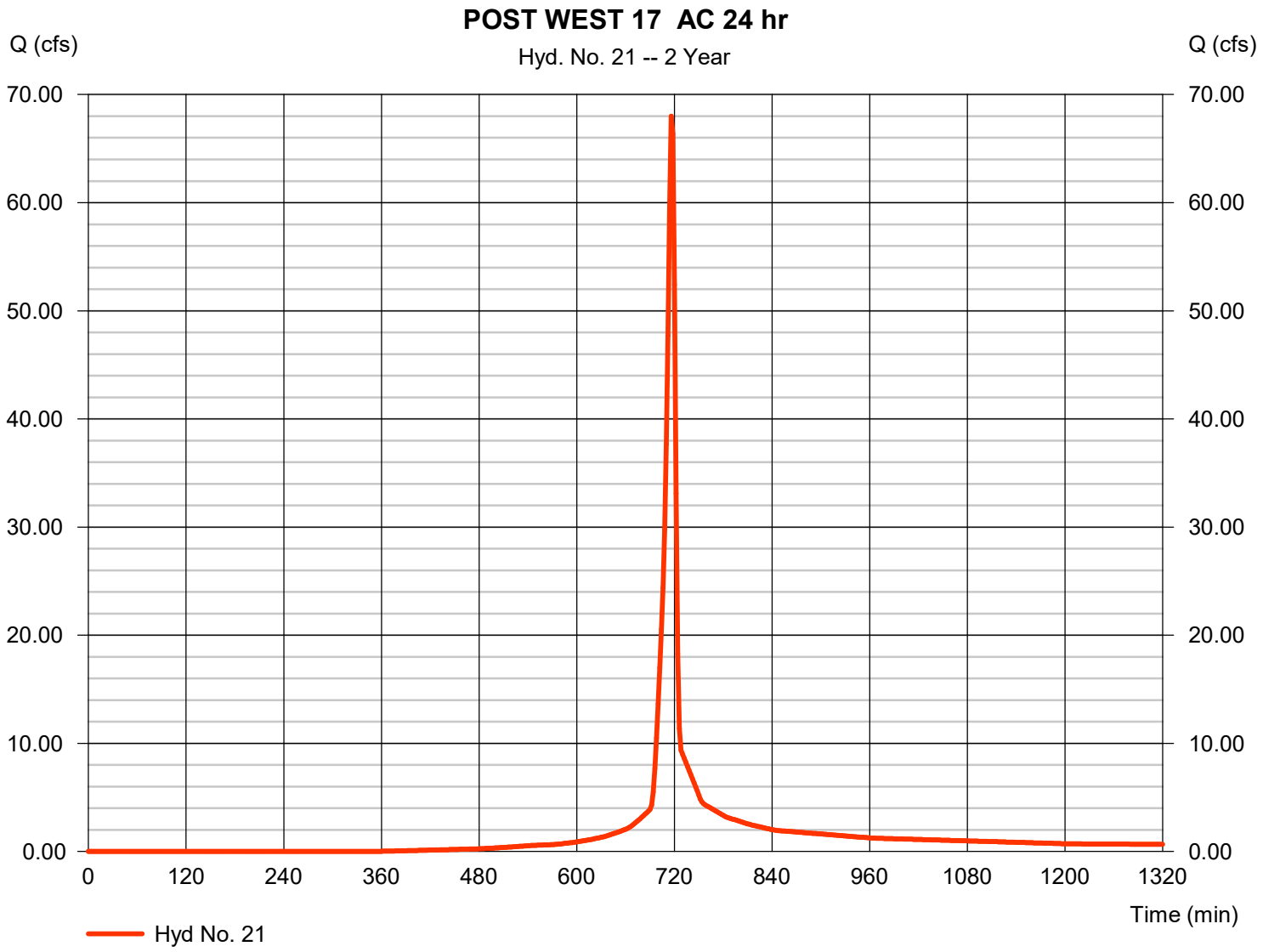


Hydrograph Report

Hyd. No. 21

POST WEST 17 AC 24 hr

Hydrograph type	= SCS Runoff	Peak discharge	= 68.00 cfs
Storm frequency	= 2 yrs	Time to peak	= 716 min
Time interval	= 2 min	Hyd. volume	= 140,303 cuft
Drainage area	= 17.000 ac	Curve number	= 87.6
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.71 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

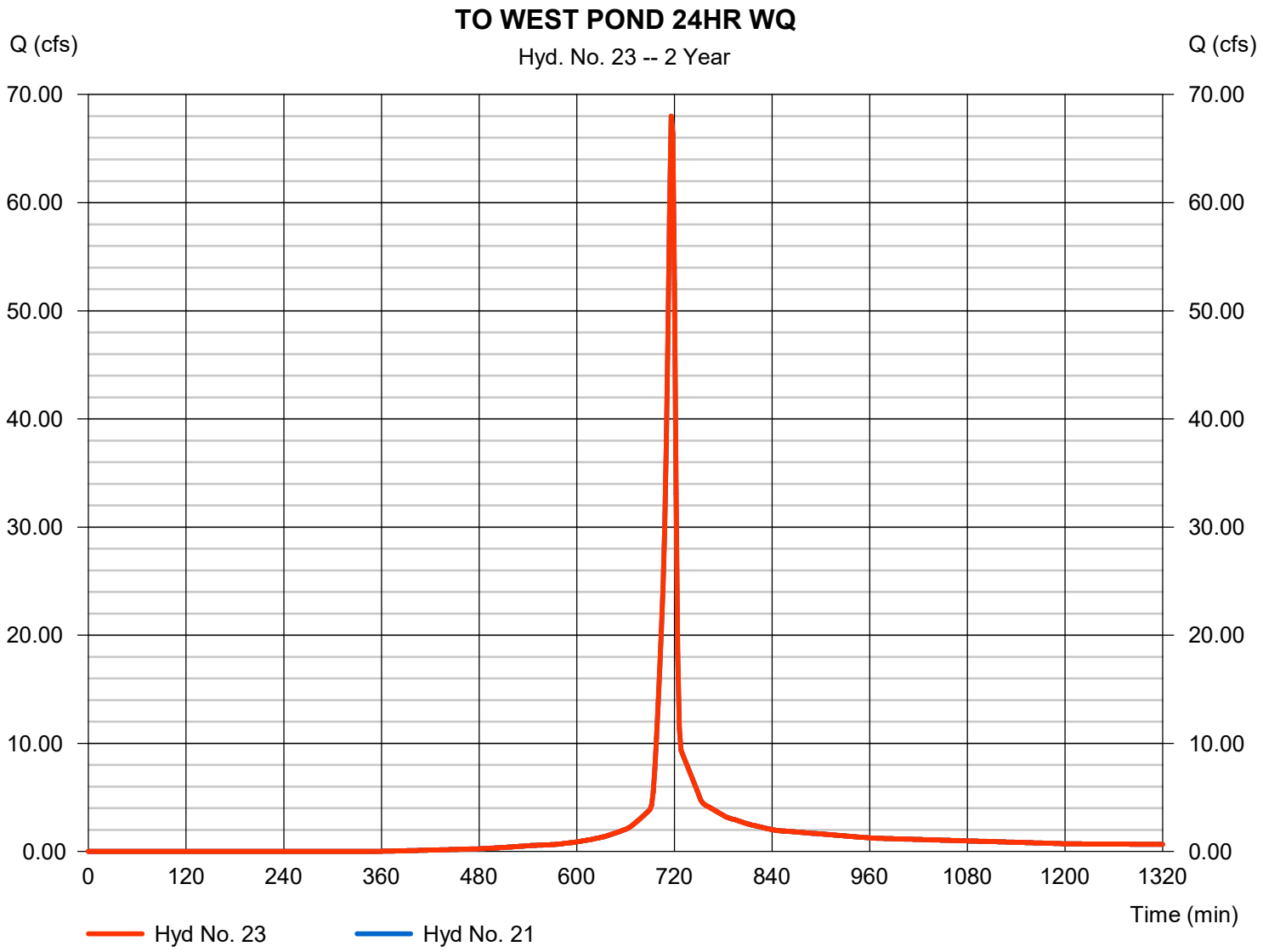


Hydrograph Report

Hyd. No. 23

TO WEST POND 24HR WQ

Hydrograph type	= Combine	Peak discharge	= 68.00 cfs
Storm frequency	= 2 yrs	Time to peak	= 716 min
Time interval	= 2 min	Hyd. volume	= 140,303 cuft
Inflow hyds.	= 21	Contrib. drain. area	= 17.000 ac



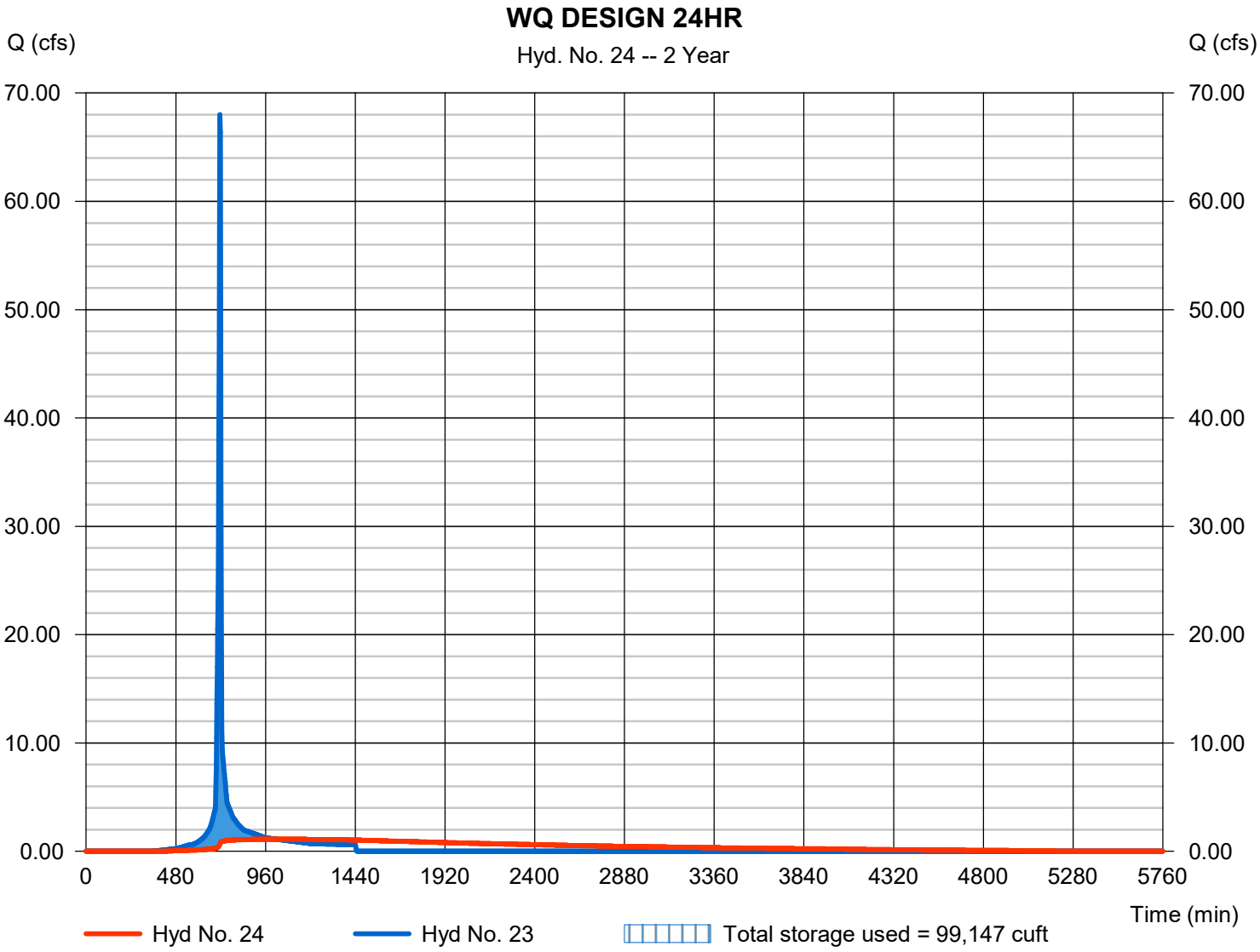
Hydrograph Report

Hyd. No. 24

WQ DESIGN 24HR

Hydrograph type	=	Reservoir	Peak discharge	=	1.114 cfs
Storm frequency	=	2 yrs	Time to peak	=	1018 min
Time interval	=	2 min	Hyd. volume	=	140,193 cuft
Inflow hyd. No.	=	23 - TO WEST POND 24HR WQ	Max. Elevation	=	999.88 ft
Reservoir name	=	WEST POND retention	Max. Storage	=	99,147 cuft

Storage Indication method used.

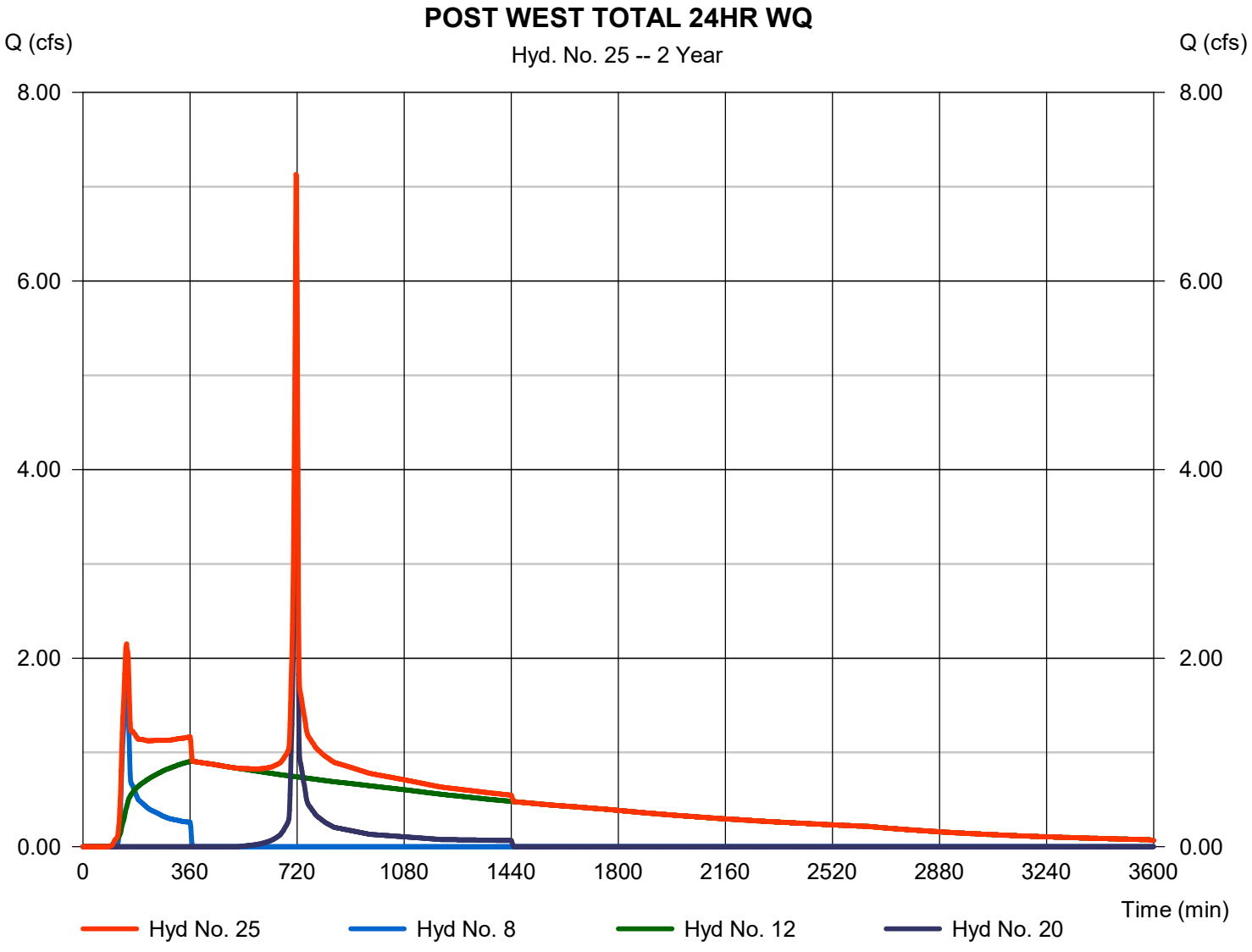


Hydrograph Report

Hyd. No. 25

POST WEST TOTAL 24HR WQ

Hydrograph type	= Combine	Peak discharge	= 7.130 cfs
Storm frequency	= 2 yrs	Time to peak	= 716 min
Time interval	= 2 min	Hyd. volume	= 106,193 cuft
Inflow hyds.	= 8, 12, 20	Contrib. drain. area	= 4.200 ac

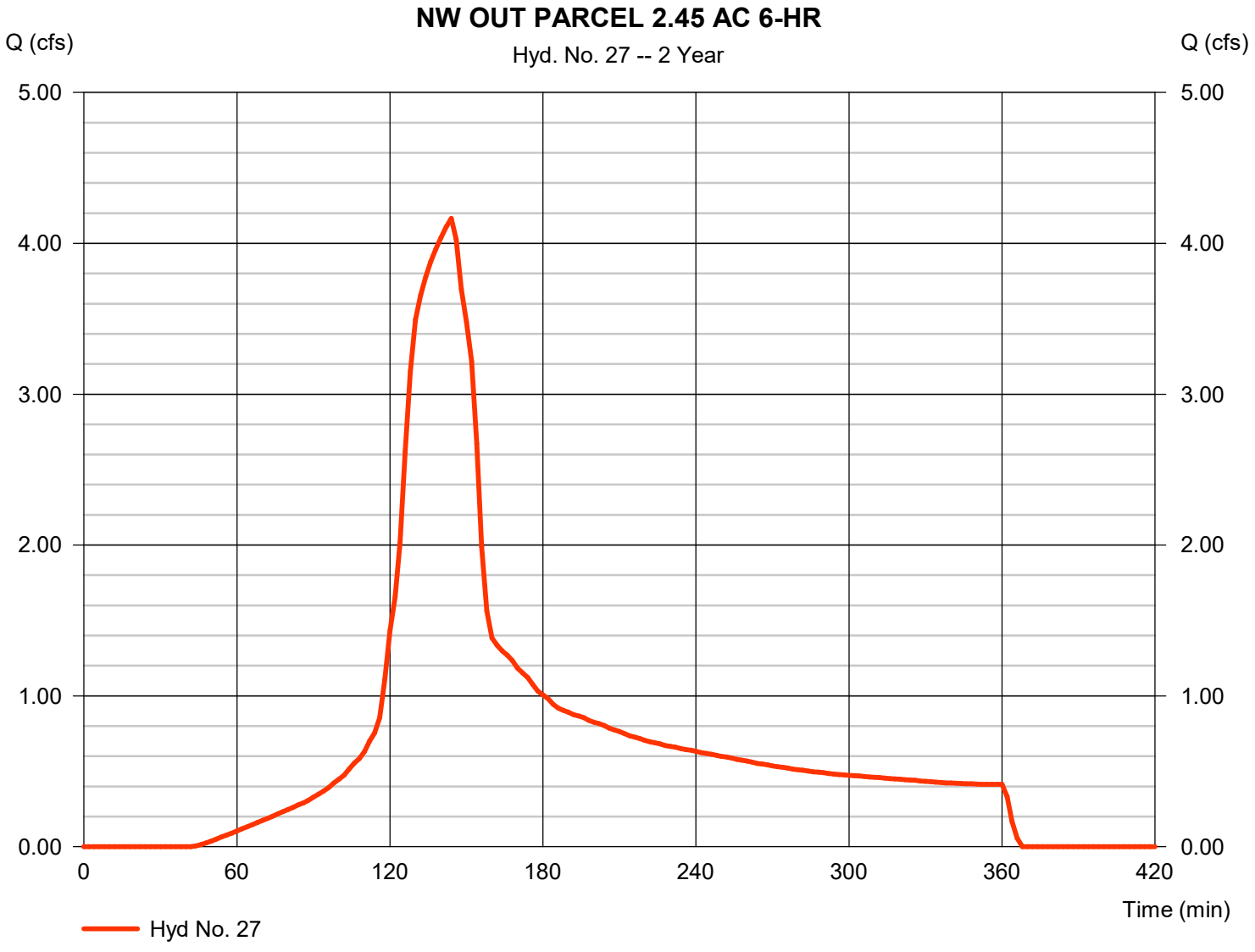


Hydrograph Report

Hyd. No. 27

NW OUT PARCEL 2.45 AC 6-HR

Hydrograph type	= SCS Runoff	Peak discharge	= 4.165 cfs
Storm frequency	= 2 yrs	Time to peak	= 144 min
Time interval	= 2 min	Hyd. volume	= 16,863 cuft
Drainage area	= 2.450 ac	Curve number	= 94
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 2.66 in	Distribution	= SCS 6-Hr
Storm duration	= 6.00 hrs	Shape factor	= 484



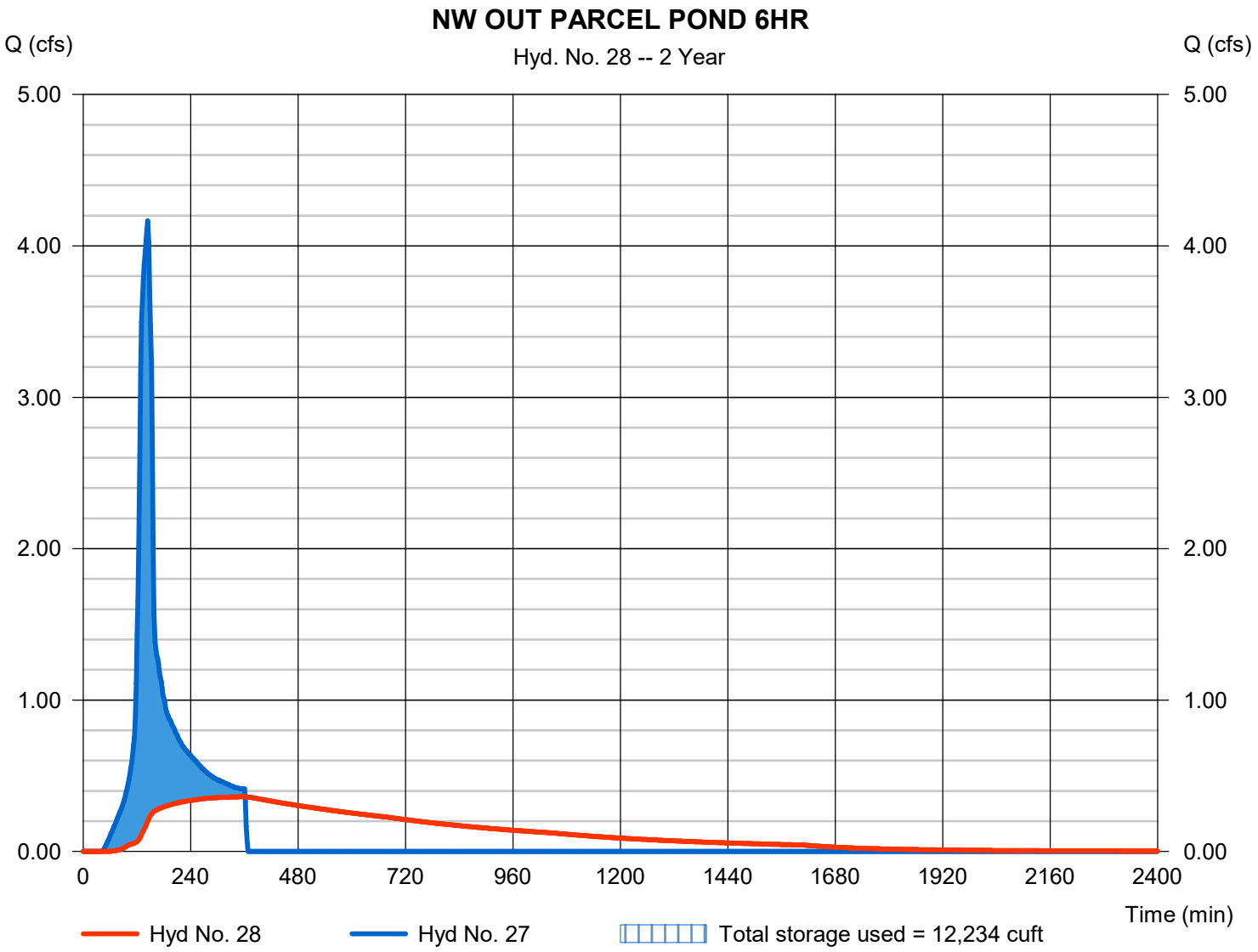
Hydrograph Report

Hyd. No. 28

NW OUT PARCEL POND 6HR

Hydrograph type	=	Reservoir	Peak discharge	=	0.361 cfs
Storm frequency	=	2 yrs	Time to peak	=	362 min
Time interval	=	2 min	Hyd. volume	=	16,811 cuft
Inflow hyd. No.	=	27 - NW OUT PARCEL 2.45 AC 6HR	Max. Elevation	=	998.06 ft
Reservoir name	=	NW OUT PARCEL POND	Max. Storage	=	12,234 cuft

Storage Indication method used.



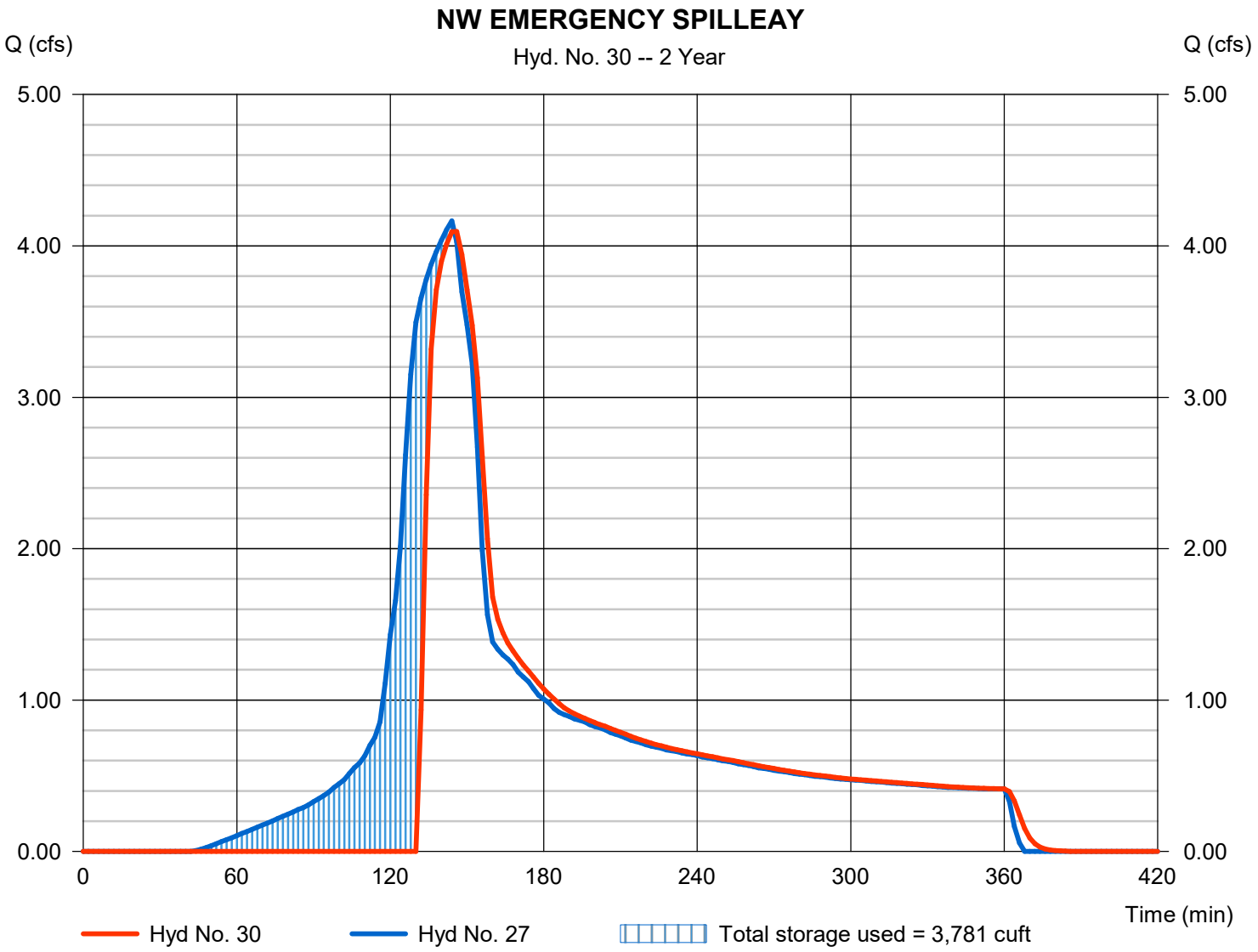
Hydrograph Report

Hyd. No. 30

NW EMERGENCY SPILLEAY

Hydrograph type	=	Reservoir	Peak discharge	=	4.096 cfs
Storm frequency	=	2 yrs	Time to peak	=	146 min
Time interval	=	2 min	Hyd. volume	=	13,758 cuft
Inflow hyd. No.	=	27 - NW OUT PARCEL 2.45 AC 6x HE	Max. Elevation	=	1001.18 ft
Reservoir name	=	NW EMERGENCY SPILLWAY	Max. Storage	=	3,781 cuft

Storage Indication method used.



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2026

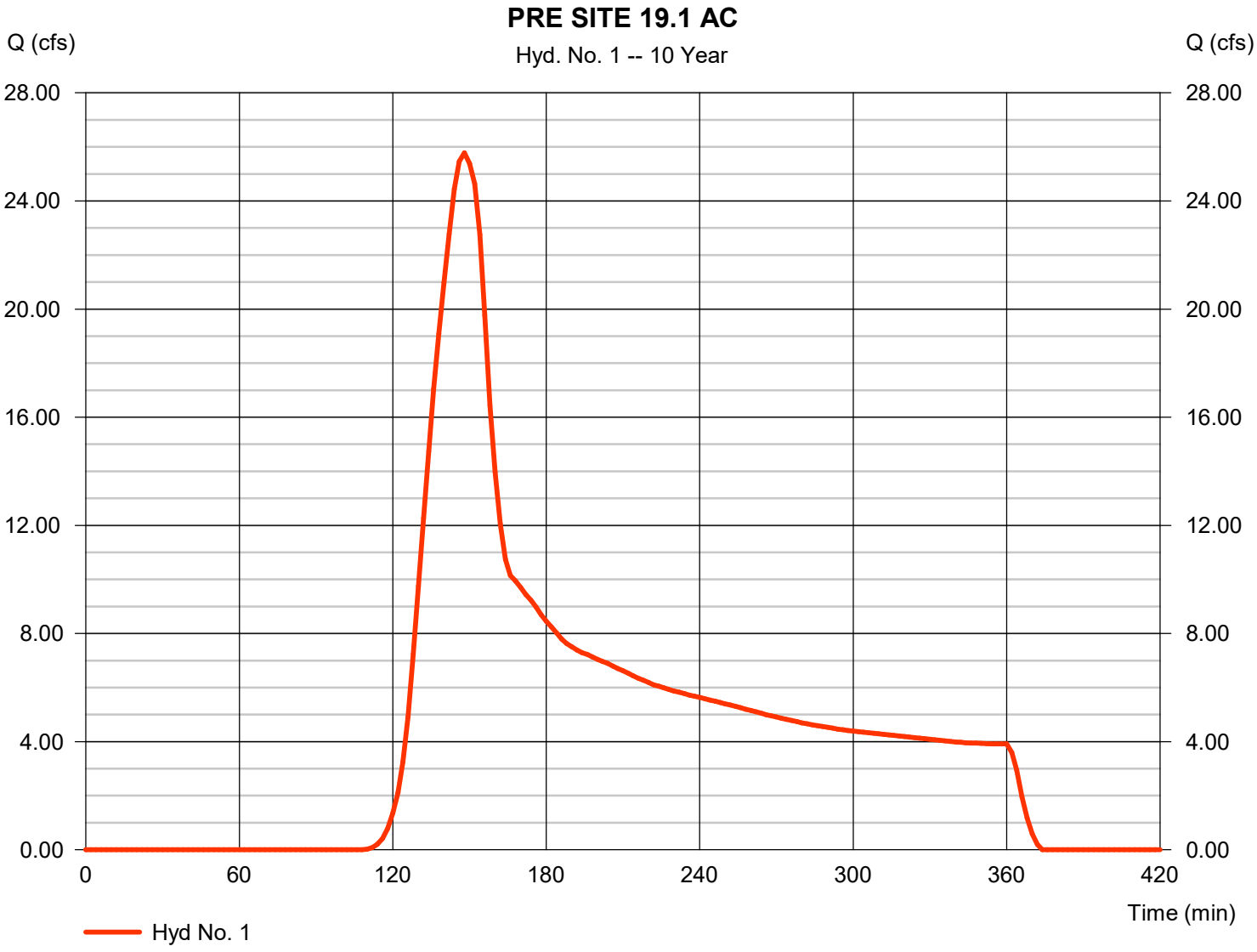
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	25.78	2	148	109,659	------	------	------	PRE SITE 19.1 AC
2	SCS Runoff	8.366	2	150	36,708	------	------	------	OFFSITE EAST 6.2 AC
3	SCS Runoff	6.926	2	144	30,588	------	------	------	OFFSITE ROAD 2.4 AC
4	SCS Runoff	2.620	2	146	10,765	------	------	------	OFFSITE NORTH 2 AC
5	Combine	17.11	2	146	78,061	2, 3, 4	------	------	OFFSITE
6	SCS Runoff	3.209	2	146	13,187	------	------	------	PRE NW OUTPARCEL 2.45 AC
8	SCS Runoff	3.627	2	144	14,473	------	------	------	direct west 2.1 AC 6hr
9	SCS Runoff	38.86	2	144	154,658	------	------	------	POST WEST 17.0 AC 6 hr
12	Reservoir	1.443	2	364	154,600	9	1000.97	137,567	WEST POND
13	Combine	4.291	2	144	169,073	8, 12	------	------	POST WEST TOTAL
15	Combine	59.40	2	144	247,193	2, 3, 4, 8, 9,	------	------	TOTAL POST BEFORE DETENTION
17	Reservoir	29.87	2	152	154,656	9	1003.49	246,730	EMERGENCY SPILLWAY
20	SCS Runoff	12.20	2	716	24,969	------	------	------	direct west 2.1 AC 24 hr
21	SCS Runoff	116.32	2	716	247,351	------	------	------	POST WEST 17 AC 24 hr
23	Combine	116.32	2	716	247,351	21,	------	------	TO WEST POND 24HR WQ
24	Reservoir	4.385	2	804	246,845	23	1001.59	162,171	WQ DESIGN 24HR
25	Combine	13.41	2	716	194,042	8, 12, 20,	------	------	POST WEST TOTAL 24HR WQ
27	SCS Runoff	6.645	2	144	27,554	------	------	------	NW OUT PARCEL 2.45 AC 6-HR
28	Reservoir	0.801	2	276	27,502	27	999.10	18,977	NW OUT PARCEL POND 6HR
30	Reservoir	6.596	2	144	24,449	27	1001.25	4,036	NW EMERGENCY SPILLEAY

Hydrograph Report

Hyd. No. 1

PRE SITE 19.1 AC

Hydrograph type	=	SCS Runoff	Peak discharge	=	25.78 cfs
Storm frequency	=	10 yrs	Time to peak	=	148 min
Time interval	=	2 min	Hyd. volume	=	109,659 cuft
Drainage area	=	19.100 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	9.00 min
Total precip.	=	3.98 in	Distribution	=	SCS 6-Hr
Storm duration	=	6.00 hrs	Shape factor	=	484

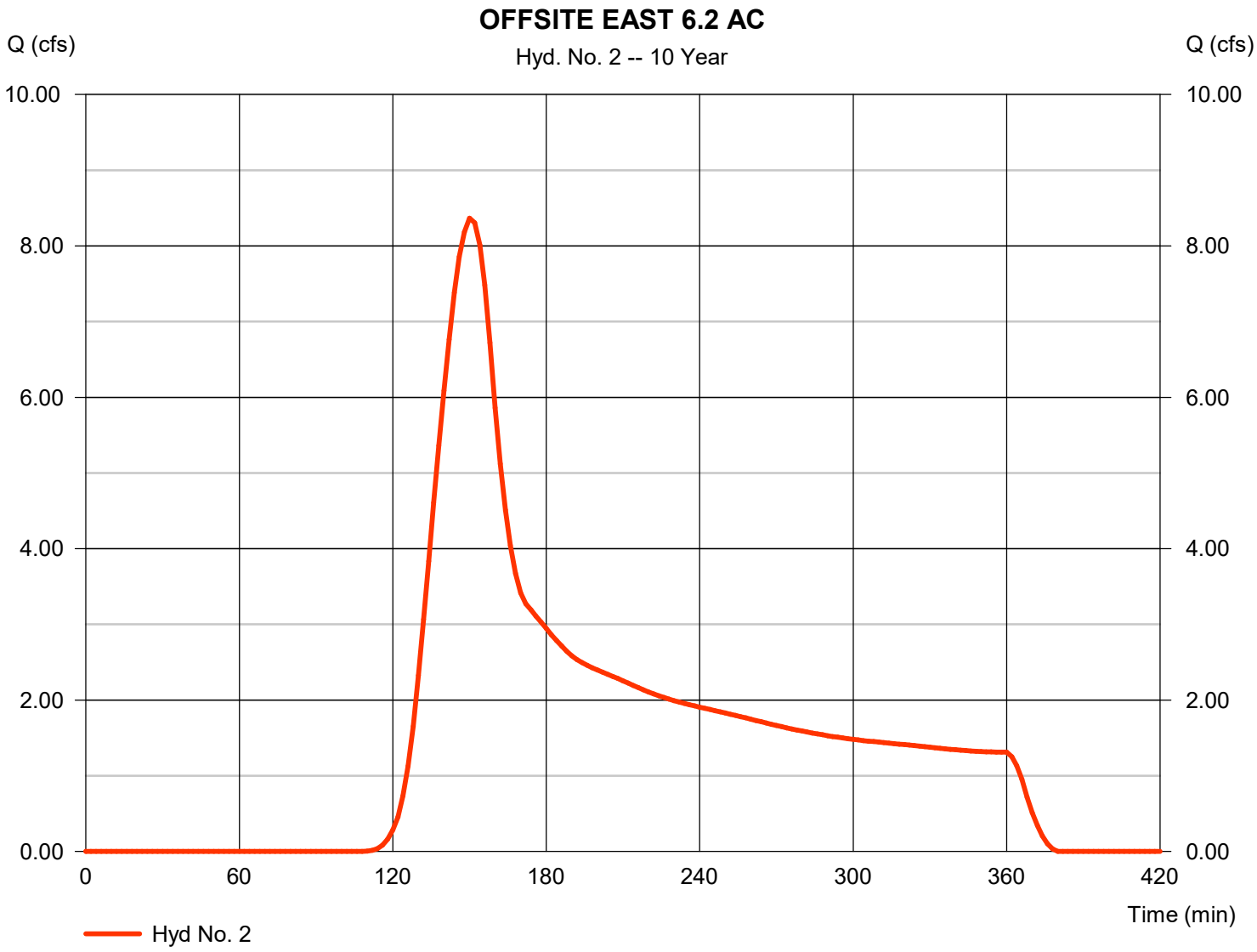


Hydrograph Report

Hyd. No. 2

OFFSITE EAST 6.2 AC

Hydrograph type	=	SCS Runoff	Peak discharge	=	8.366 cfs
Storm frequency	=	10 yrs	Time to peak	=	150 min
Time interval	=	2 min	Hyd. volume	=	36,708 cuft
Drainage area	=	6.200 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	10.00 min
Total precip.	=	3.98 in	Distribution	=	SCS 6-Hr
Storm duration	=	6.00 hrs	Shape factor	=	484

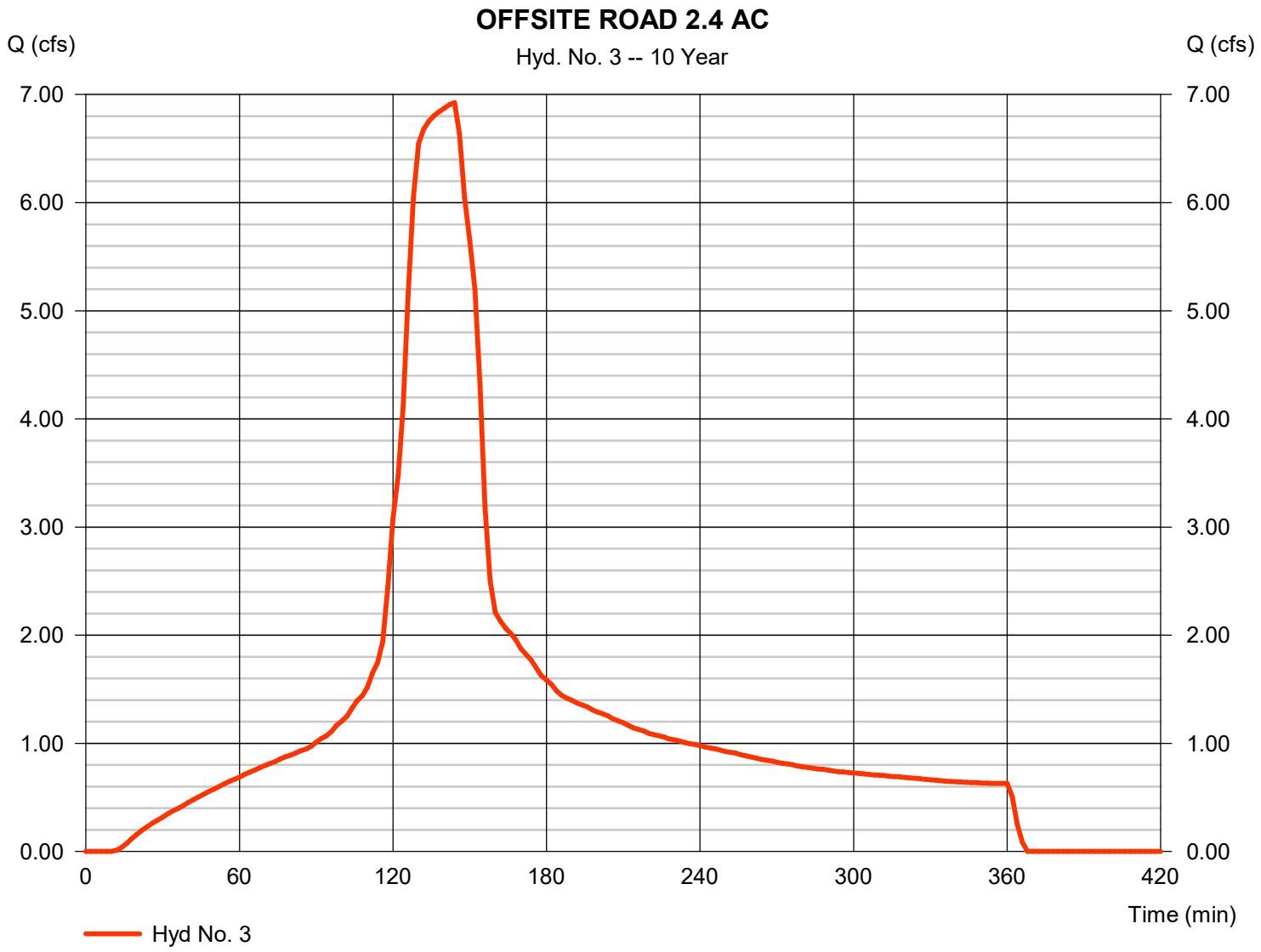


Hydrograph Report

Hyd. No. 3

OFFSITE ROAD 2.4 AC

Hydrograph type	= SCS Runoff	Peak discharge	= 6.926 cfs
Storm frequency	= 10 yrs	Time to peak	= 144 min
Time interval	= 2 min	Hyd. volume	= 30,588 cuft
Drainage area	= 2.400 ac	Curve number	= 98
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.98 in	Distribution	= SCS 6-Hr
Storm duration	= 6.00 hrs	Shape factor	= 484

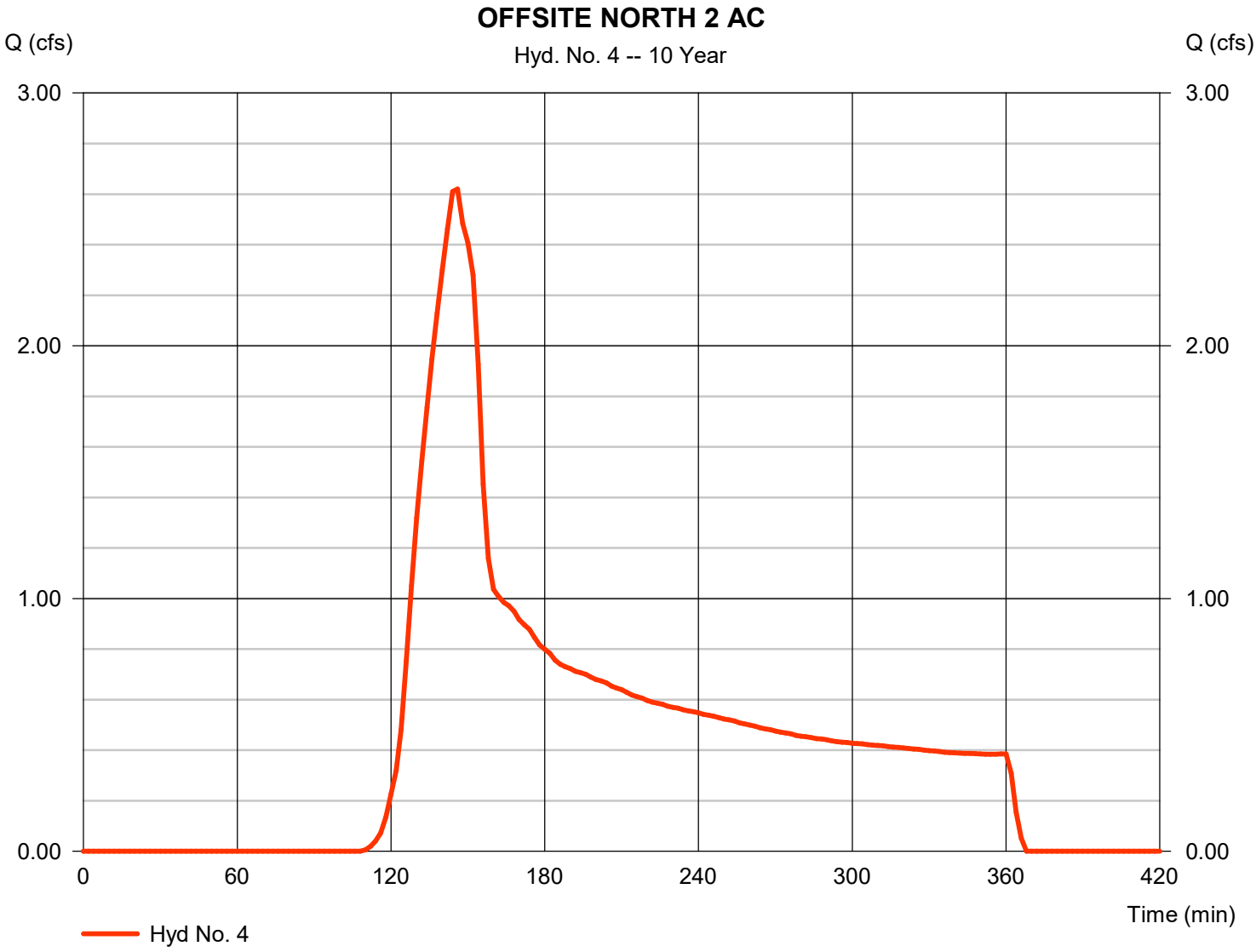


Hydrograph Report

Hyd. No. 4

OFFSITE NORTH 2 AC

Hydrograph type	= SCS Runoff	Peak discharge	= 2.620 cfs
Storm frequency	= 10 yrs	Time to peak	= 146 min
Time interval	= 2 min	Hyd. volume	= 10,765 cuft
Drainage area	= 2.000 ac	Curve number	= 74
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.98 in	Distribution	= SCS 6-Hr
Storm duration	= 6.00 hrs	Shape factor	= 484

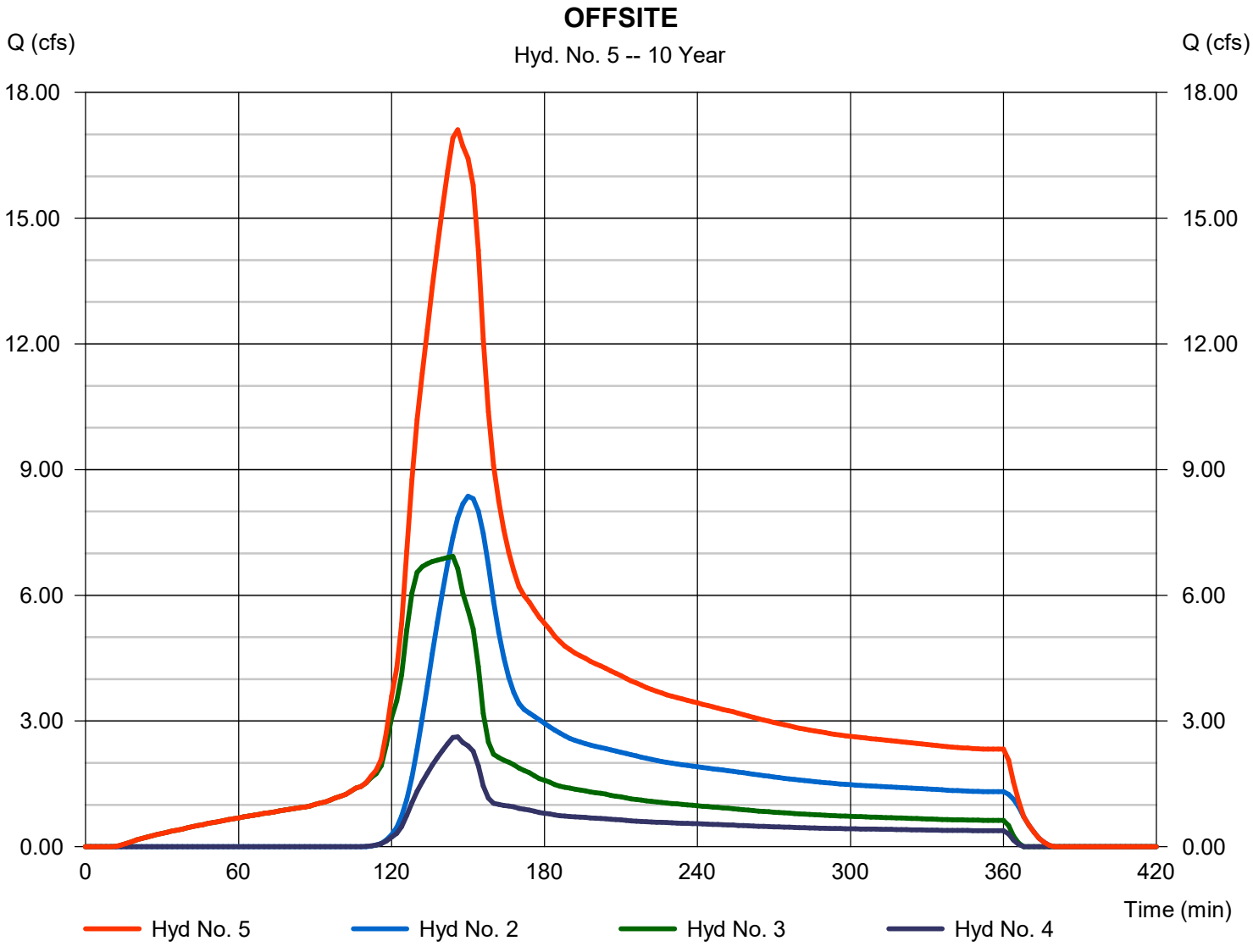


Hydrograph Report

Hyd. No. 5

OFFSITE

Hydrograph type	=	Combine	Peak discharge	=	17.11 cfs
Storm frequency	=	10 yrs	Time to peak	=	146 min
Time interval	=	2 min	Hyd. volume	=	78,061 cuft
Inflow hyds.	=	2, 3, 4	Contrib. drain. area	=	10.600 ac

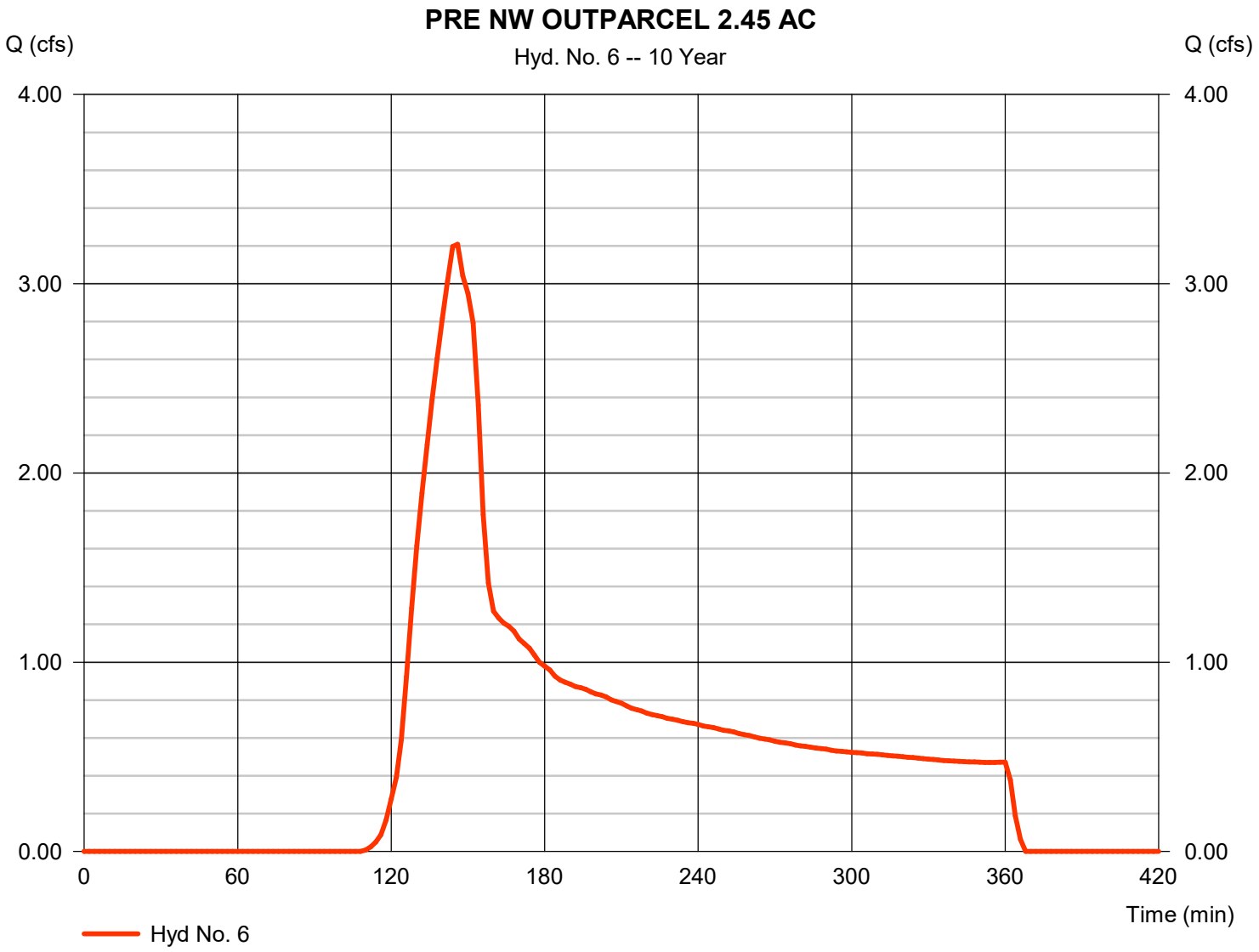


Hydrograph Report

Hyd. No. 6

PRE NW OUTPARCEL 2.45 AC

Hydrograph type	= SCS Runoff	Peak discharge	= 3.209 cfs
Storm frequency	= 10 yrs	Time to peak	= 146 min
Time interval	= 2 min	Hyd. volume	= 13,187 cuft
Drainage area	= 2.450 ac	Curve number	= 74
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.98 in	Distribution	= SCS 6-Hr
Storm duration	= 6.00 hrs	Shape factor	= 484

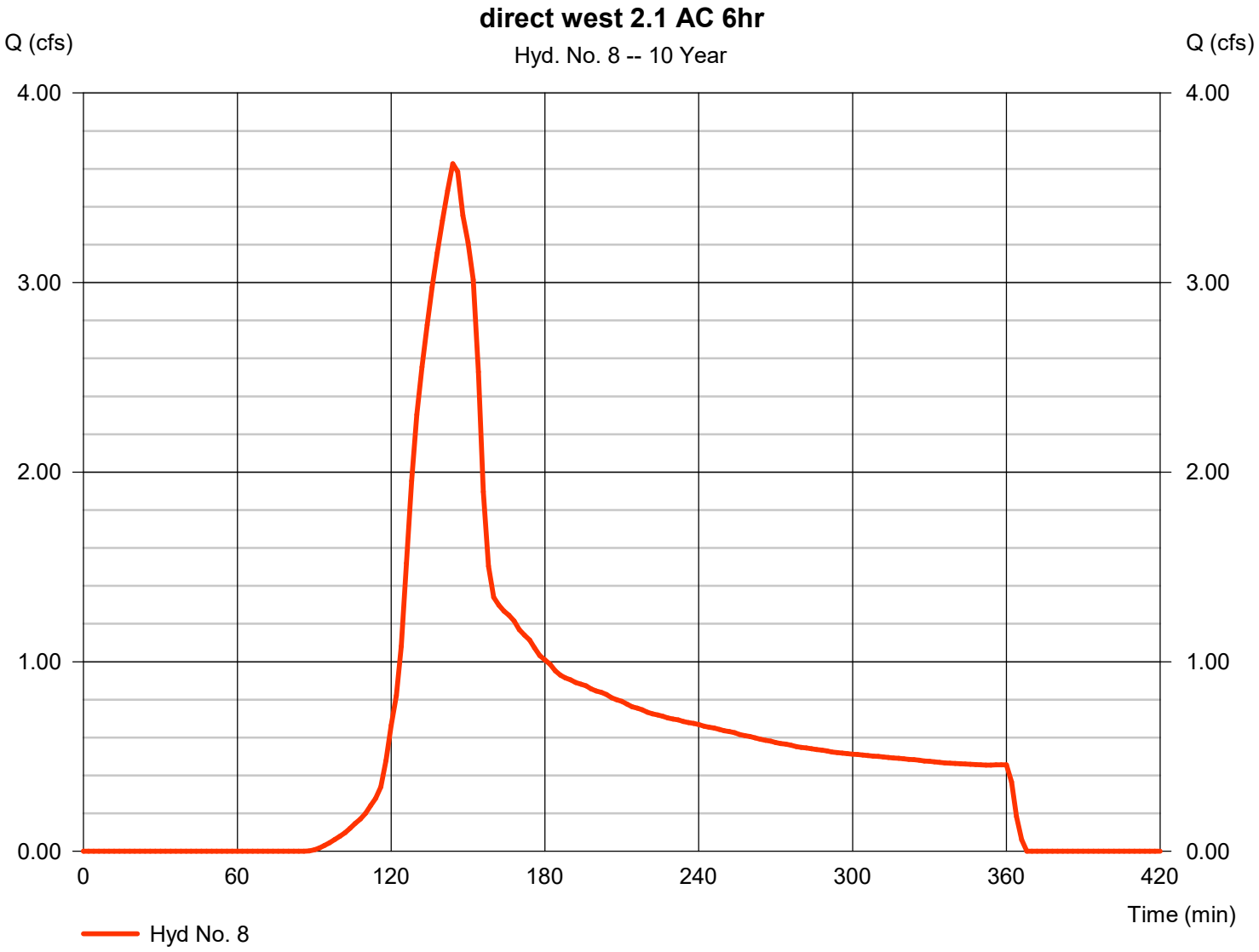


Hydrograph Report

Hyd. No. 8

direct west 2.1 AC 6hr

Hydrograph type	=	SCS Runoff	Peak discharge	=	3.627 cfs
Storm frequency	=	10 yrs	Time to peak	=	144 min
Time interval	=	2 min	Hyd. volume	=	14,473 cuft
Drainage area	=	2.100 ac	Curve number	=	80
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	3.98 in	Distribution	=	SCS 6-Hr
Storm duration	=	6.00 hrs	Shape factor	=	484

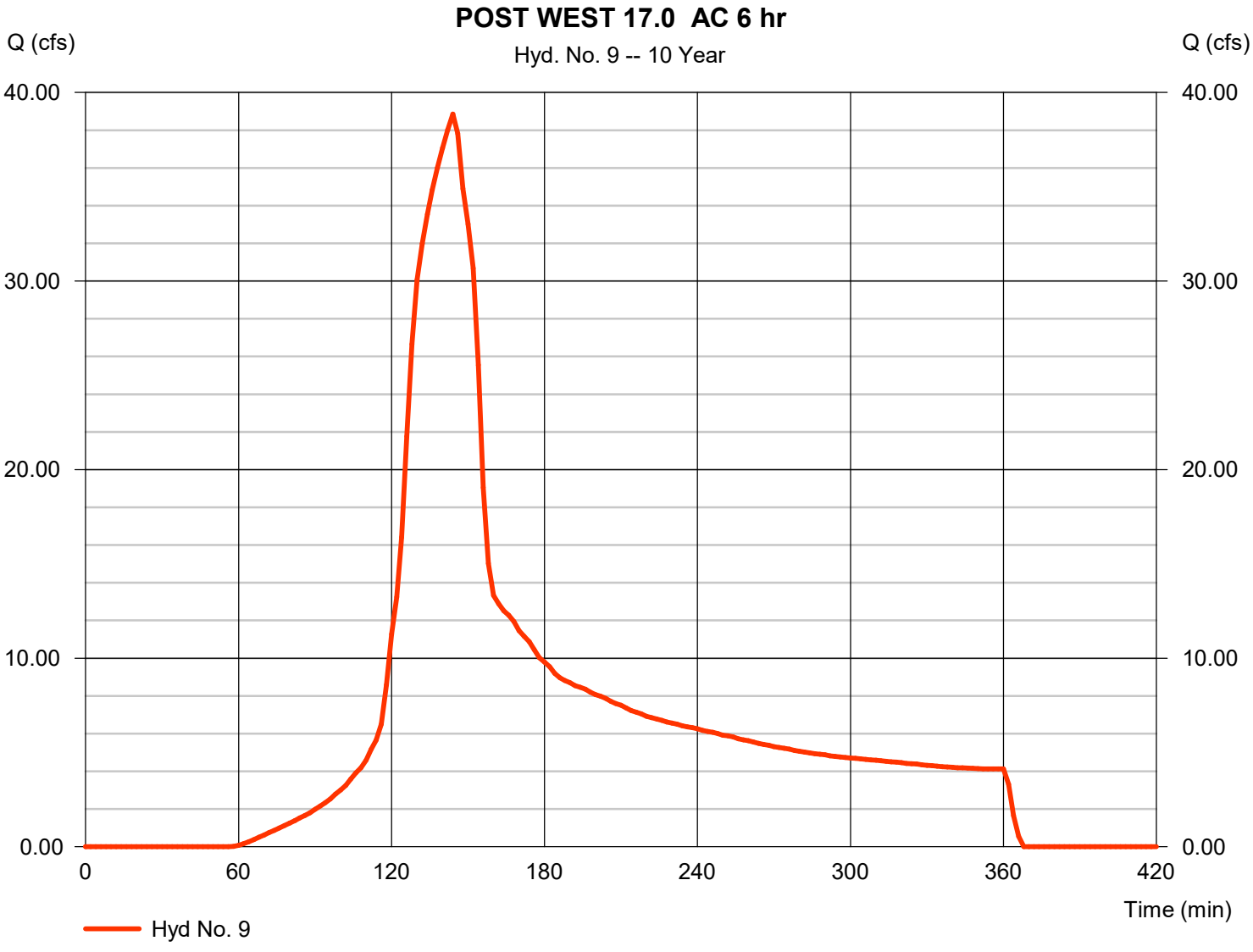


Hydrograph Report

Hyd. No. 9

POST WEST 17.0 AC 6 hr

Hydrograph type	=	SCS Runoff	Peak discharge	=	38.86 cfs
Storm frequency	=	10 yrs	Time to peak	=	144 min
Time interval	=	2 min	Hyd. volume	=	154,658 cuft
Drainage area	=	17.000 ac	Curve number	=	87.6
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	3.98 in	Distribution	=	SCS 6-Hr
Storm duration	=	6.00 hrs	Shape factor	=	484



Hydrograph Report

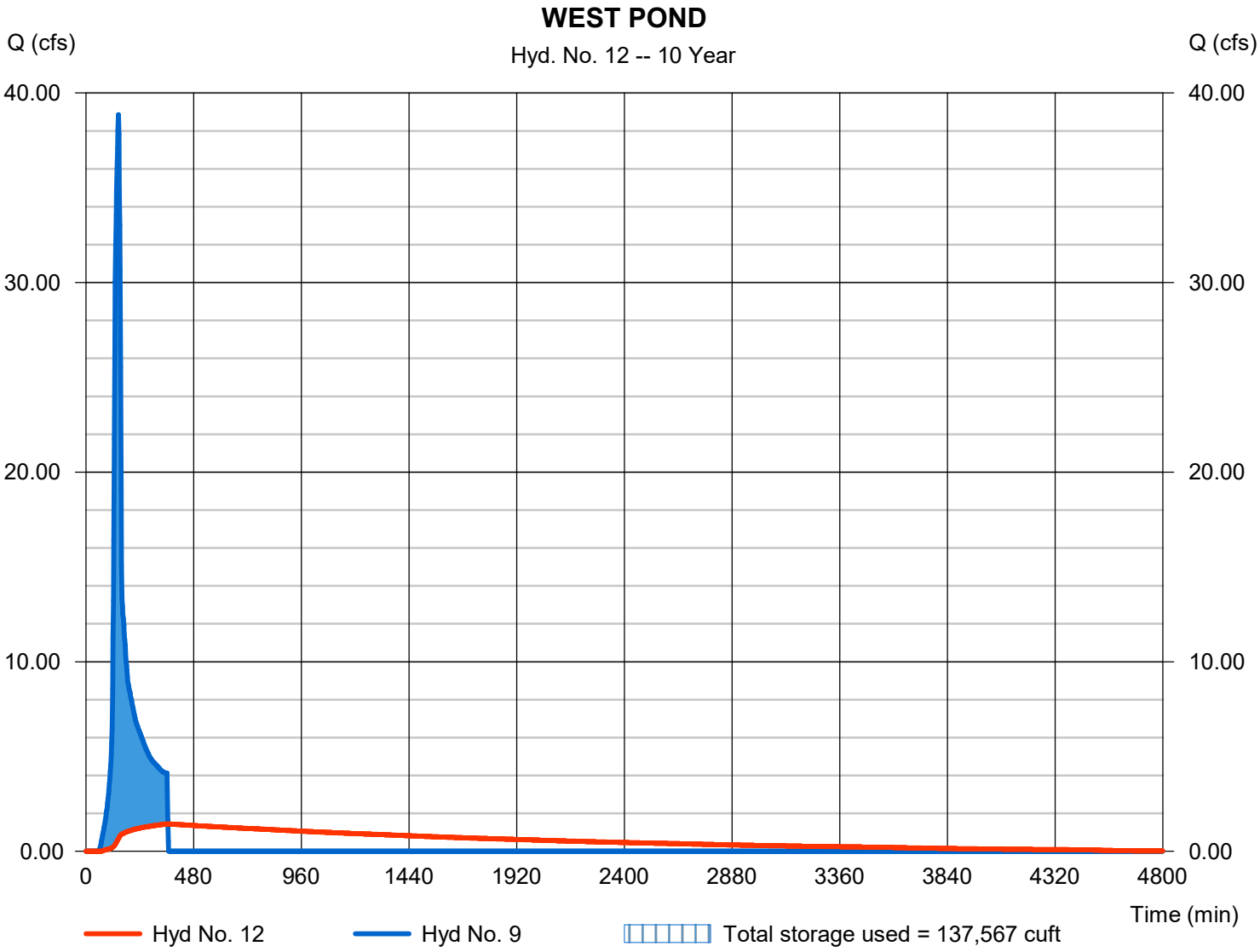
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2026 Tuesday, 03 / 31 / 2026

Hyd. No. 12

WEST POND

Hydrograph type	=	Reservoir	Peak discharge	=	1.443 cfs
Storm frequency	=	10 yrs	Time to peak	=	364 min
Time interval	=	2 min	Hyd. volume	=	154,600 cuft
Inflow hyd. No.	=	9 - POST WEST 17.0 AC 6 hr	Max. Elevation	=	1000.97 ft
Reservoir name	=	WEST POND retention	Max. Storage	=	137,567 cuft

Storage Indication method used.

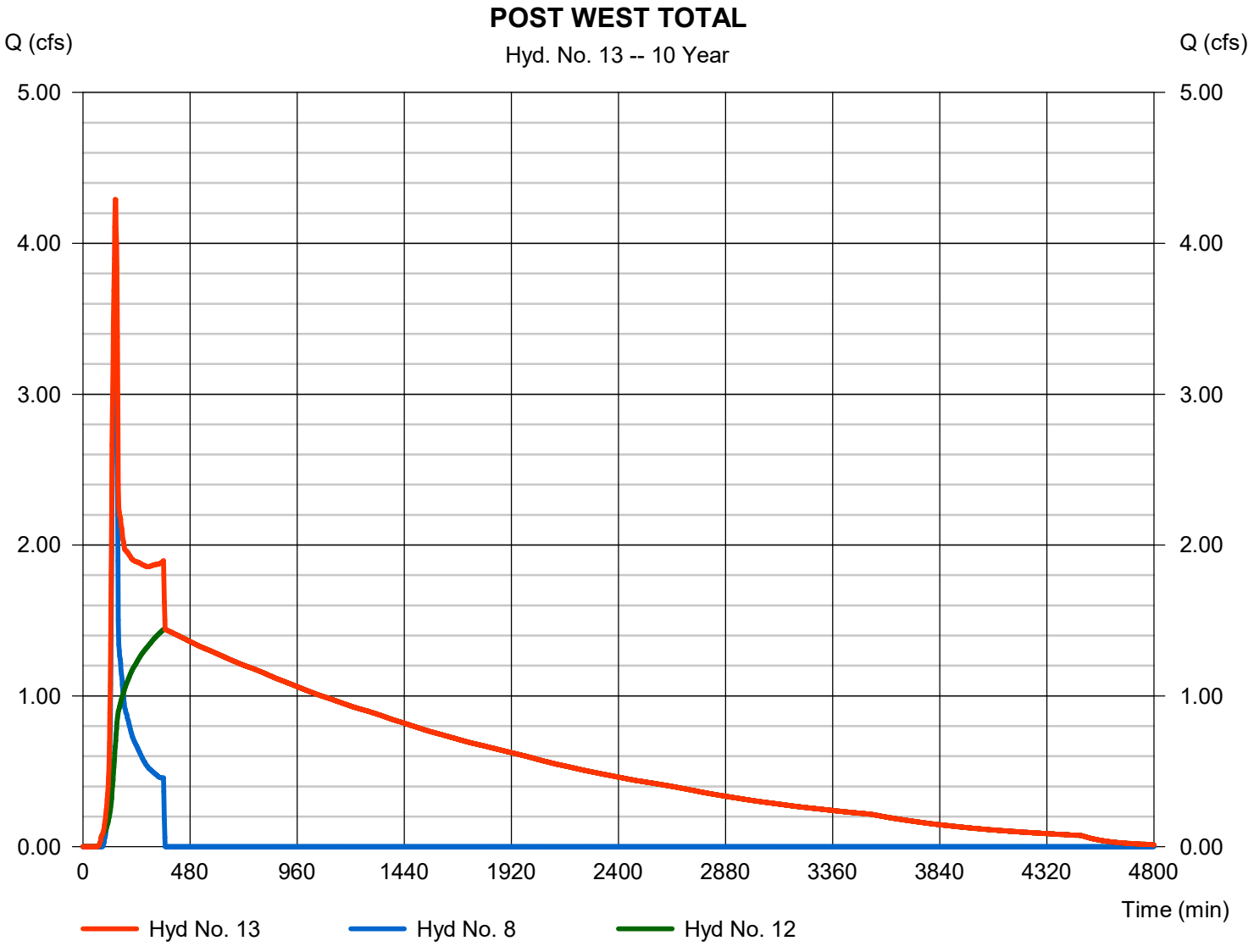


Hydrograph Report

Hyd. No. 13

POST WEST TOTAL

Hydrograph type	= Combine	Peak discharge	= 4.291 cfs
Storm frequency	= 10 yrs	Time to peak	= 144 min
Time interval	= 2 min	Hyd. volume	= 169,073 cuft
Inflow hyds.	= 8, 12	Contrib. drain. area	= 2.100 ac

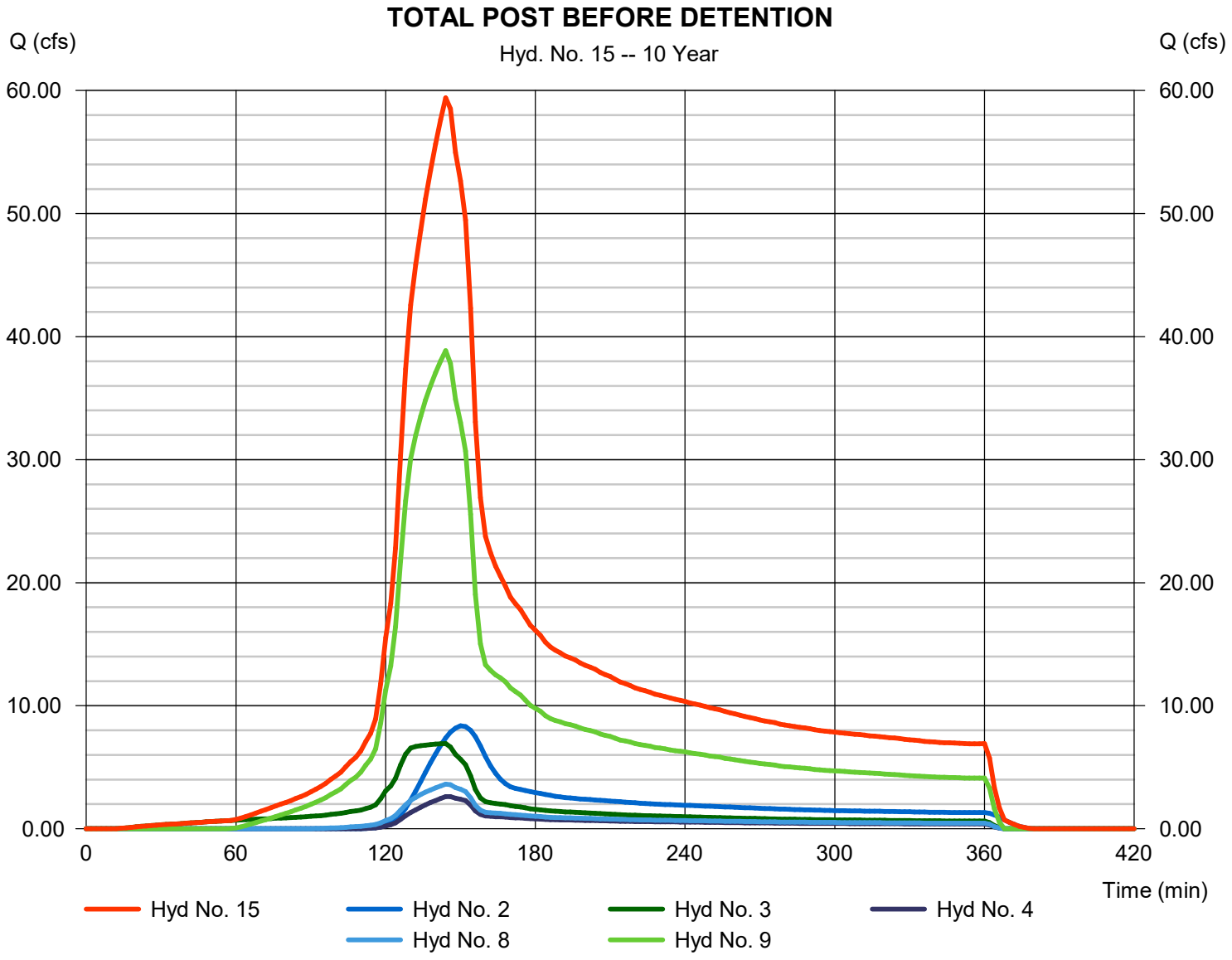


Hydrograph Report

Hyd. No. 15

TOTAL POST BEFORE DETENTION

Hydrograph type	= Combine	Peak discharge	= 59.40 cfs
Storm frequency	= 10 yrs	Time to peak	= 144 min
Time interval	= 2 min	Hyd. volume	= 247,193 cuft
Inflow hyds.	= 2, 3, 4, 8, 9	Contrib. drain. area	= 29.700 ac



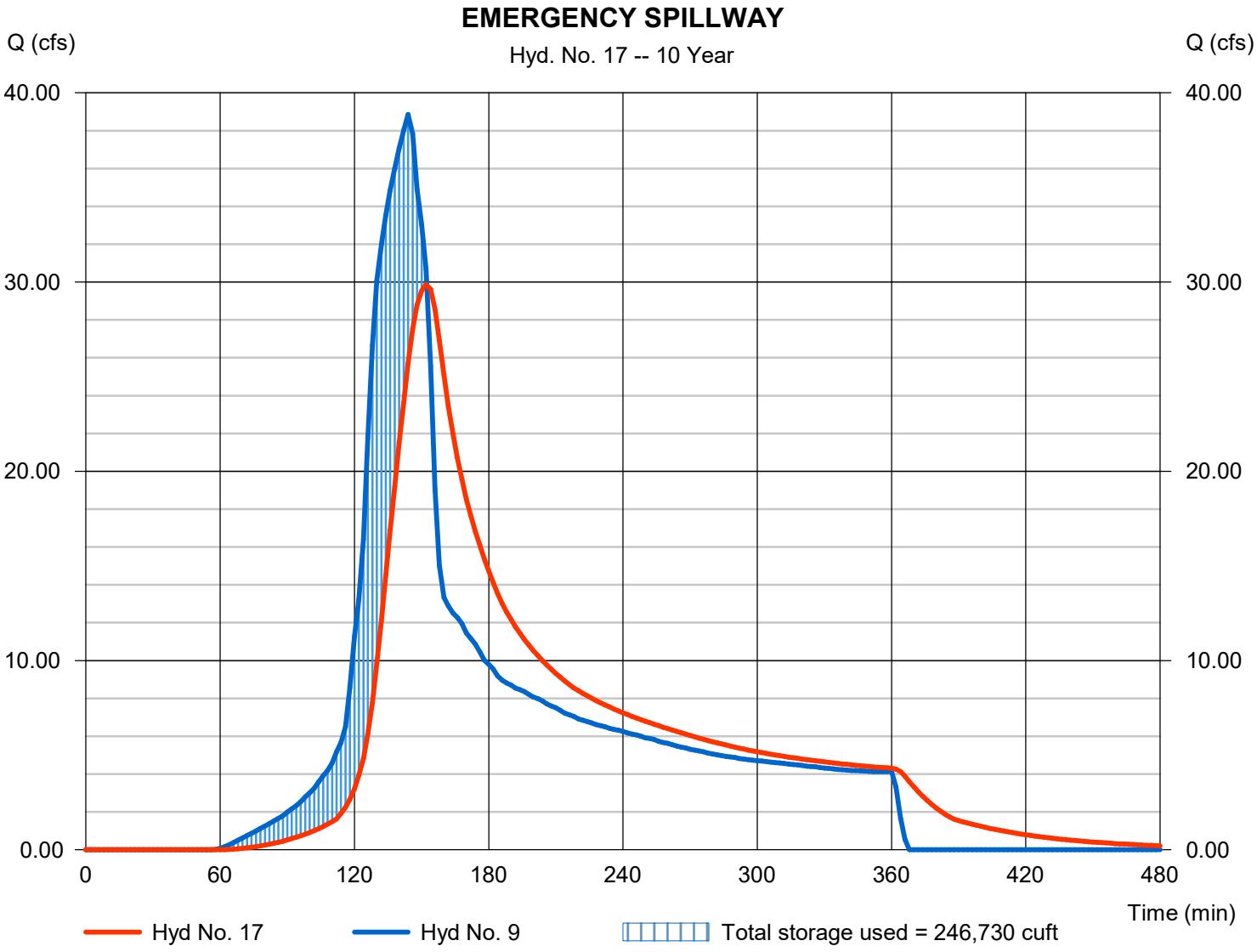
Hydrograph Report

Hyd. No. 17

EMERGENCY SPILLWAY

Hydrograph type	=	Reservoir	Peak discharge	=	29.87 cfs
Storm frequency	=	10 yrs	Time to peak	=	152 min
Time interval	=	2 min	Hyd. volume	=	154,656 cuft
Inflow hyd. No.	=	9 - POST WEST 17.0 AC 6 hr	Max. Elevation	=	1003.49 ft
Reservoir name	=	EMERGENCY SPILLWAY	Max. Storage	=	246,730 cuft

Storage Indication method used. Wet pond routing start elevation = 1002.80 ft.

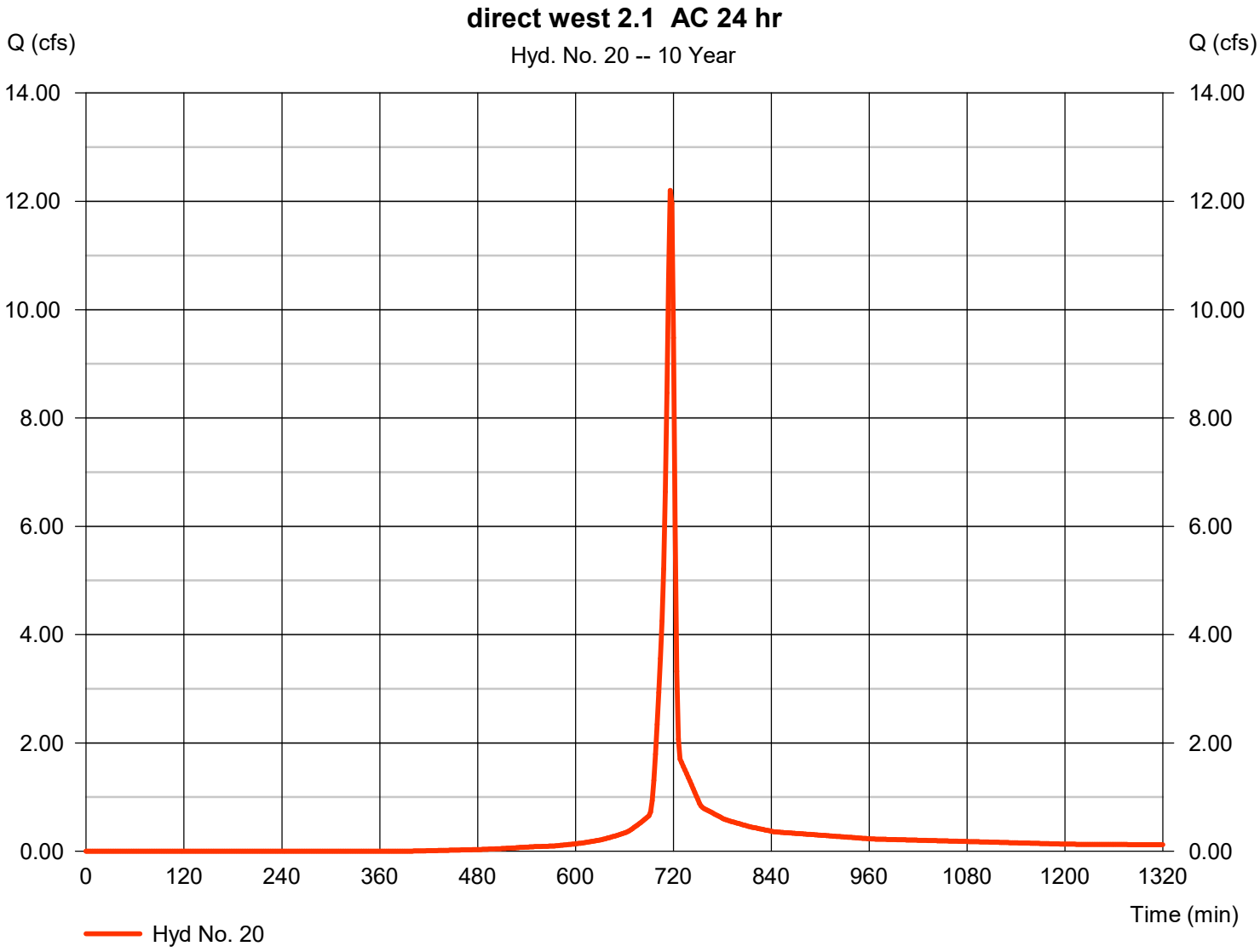


Hydrograph Report

Hyd. No. 20

direct west 2.1 AC 24 hr

Hydrograph type	=	SCS Runoff	Peak discharge	=	12.20 cfs
Storm frequency	=	10 yrs	Time to peak	=	716 min
Time interval	=	2 min	Hyd. volume	=	24,969 cuft
Drainage area	=	2.100 ac	Curve number	=	80
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	5.68 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

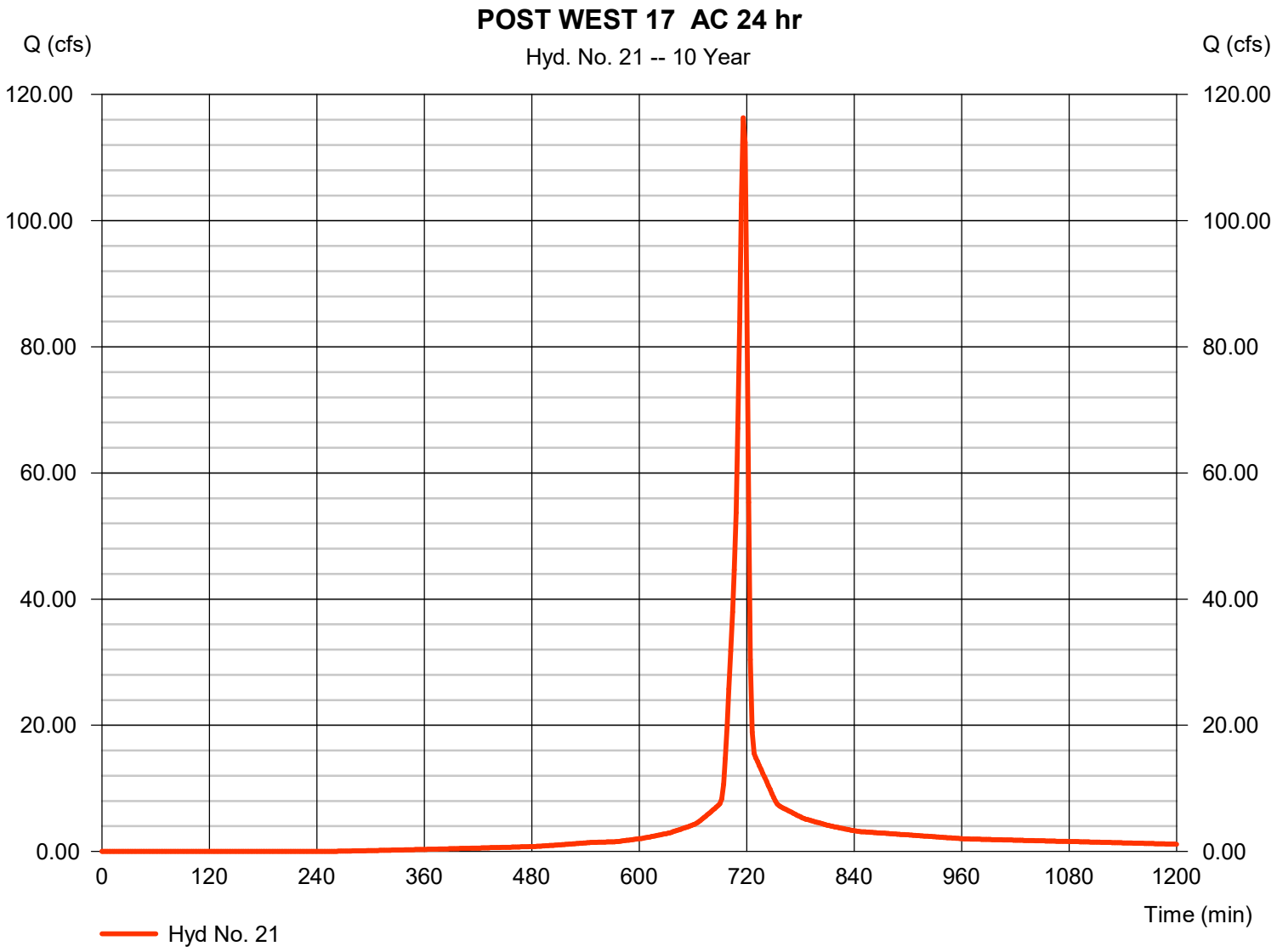


Hydrograph Report

Hyd. No. 21

POST WEST 17 AC 24 hr

Hydrograph type	= SCS Runoff	Peak discharge	= 116.32 cfs
Storm frequency	= 10 yrs	Time to peak	= 716 min
Time interval	= 2 min	Hyd. volume	= 247,351 cuft
Drainage area	= 17.000 ac	Curve number	= 87.6
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 5.68 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

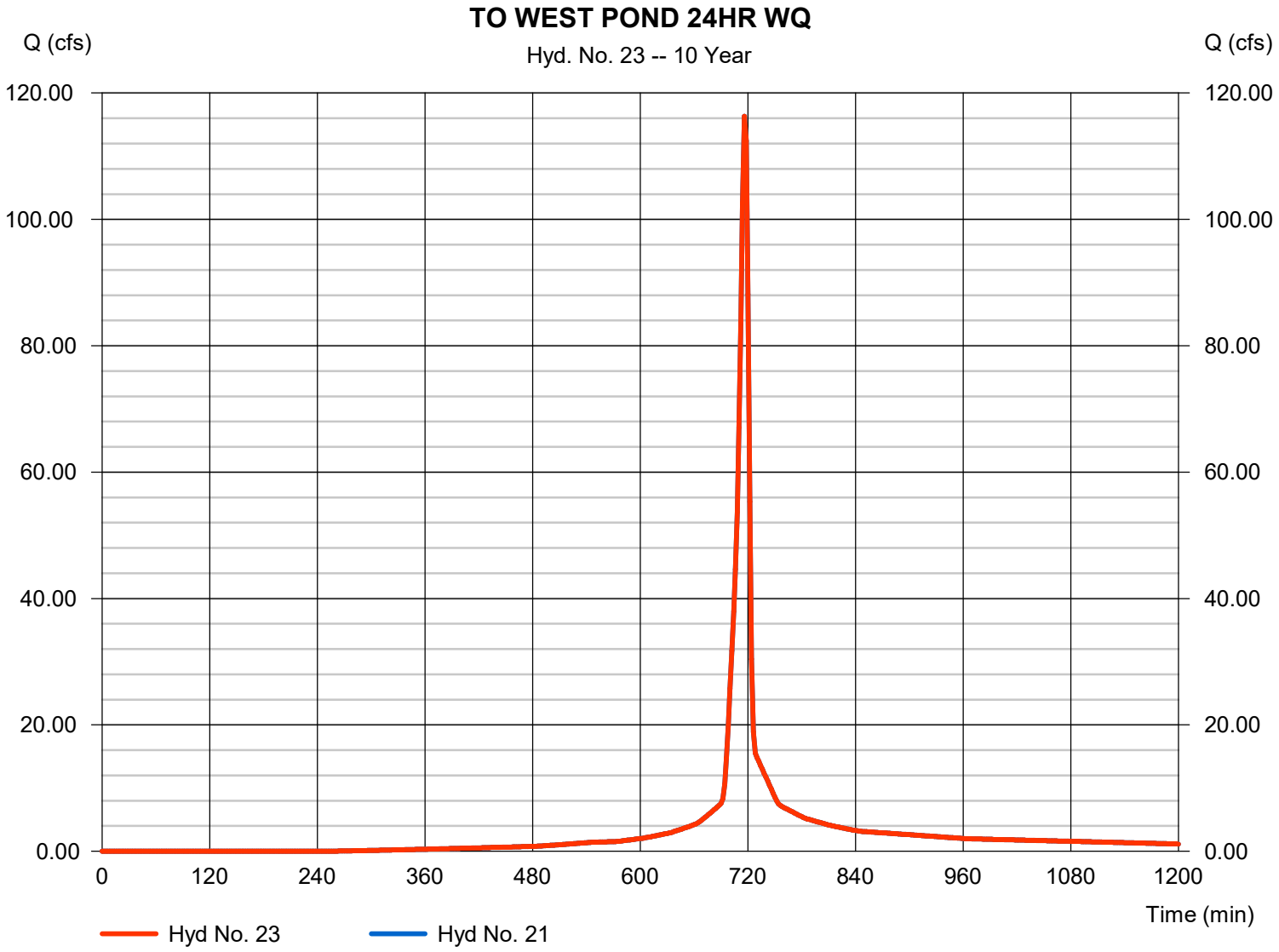


Hydrograph Report

Hyd. No. 23

TO WEST POND 24HR WQ

Hydrograph type	= Combine	Peak discharge	= 116.32 cfs
Storm frequency	= 10 yrs	Time to peak	= 716 min
Time interval	= 2 min	Hyd. volume	= 247,351 cuft
Inflow hyds.	= 21	Contrib. drain. area	= 17.000 ac



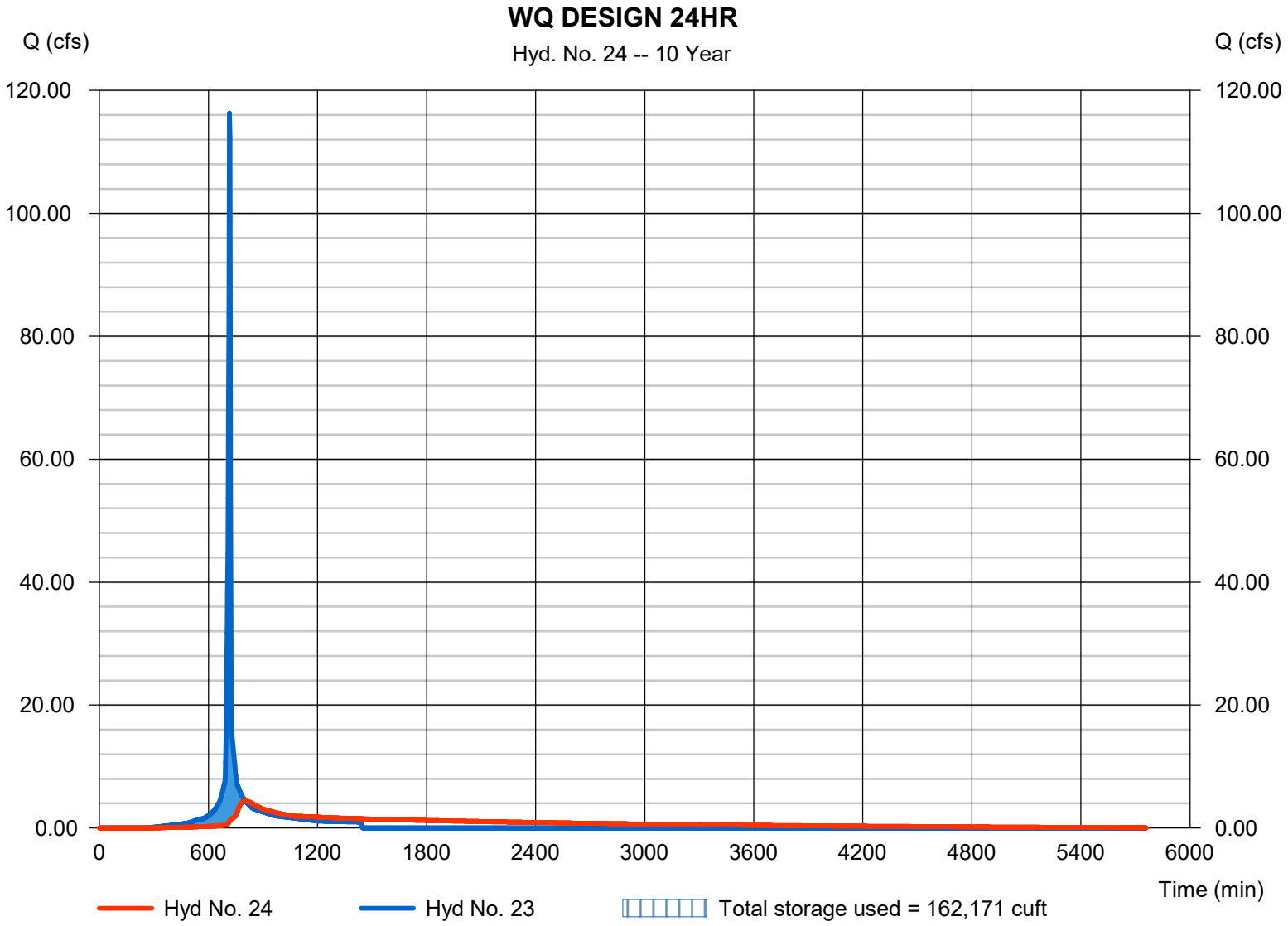
Hydrograph Report

Hyd. No. 24

WQ DESIGN 24HR

Hydrograph type	=	Reservoir	Peak discharge	=	4.385 cfs
Storm frequency	=	10 yrs	Time to peak	=	804 min
Time interval	=	2 min	Hyd. volume	=	246,845 cuft
Inflow hyd. No.	=	23 - TO WEST POND 24HR WQ	Max. Elevation	=	1001.59 ft
Reservoir name	=	WEST POND retention	Max. Storage	=	162,171 cuft

Storage Indication method used.

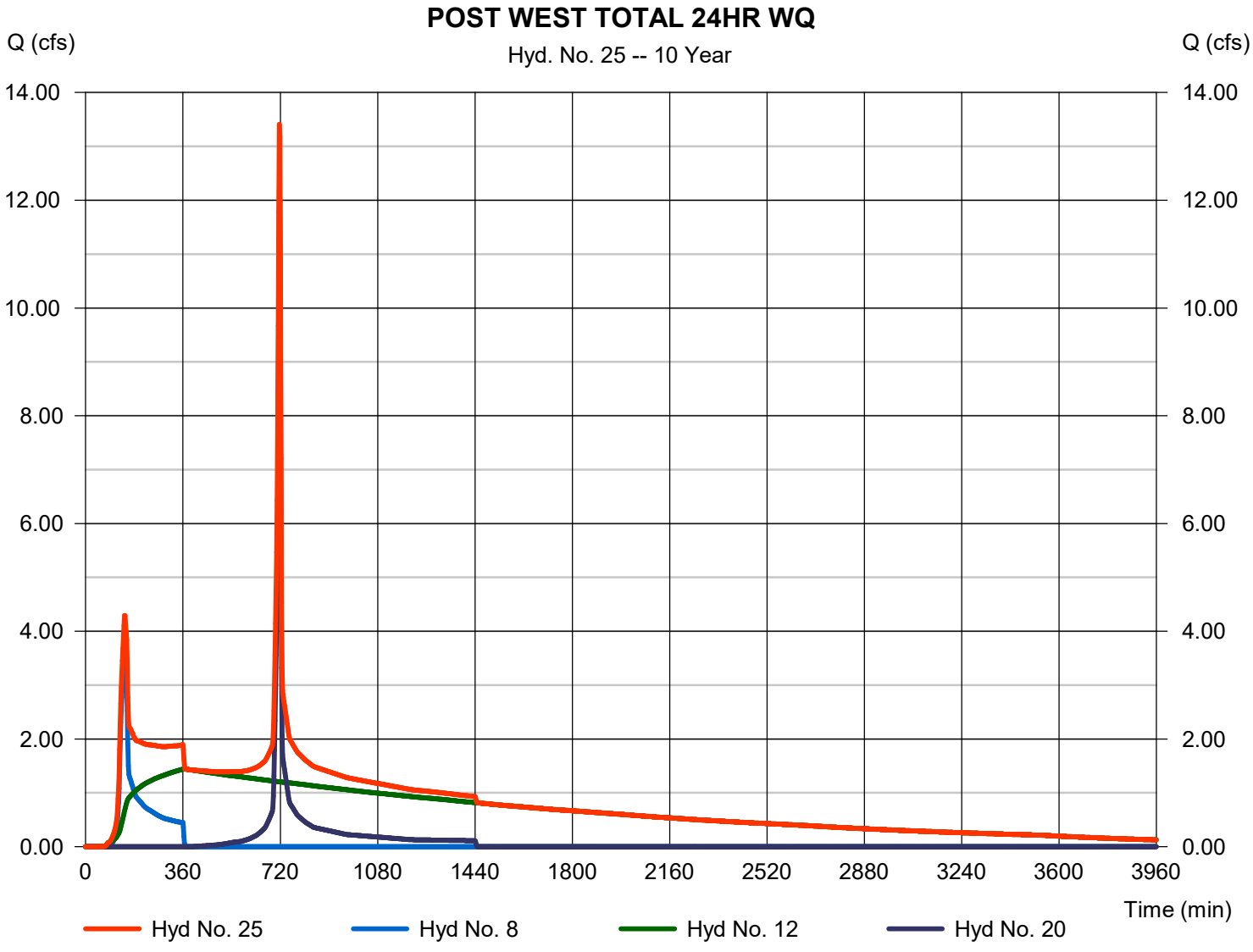


Hydrograph Report

Hyd. No. 25

POST WEST TOTAL 24HR WQ

Hydrograph type	=	Combine	Peak discharge	=	13.41 cfs
Storm frequency	=	10 yrs	Time to peak	=	716 min
Time interval	=	2 min	Hyd. volume	=	194,042 cuft
Inflow hyds.	=	8, 12, 20	Contrib. drain. area	=	4.200 ac

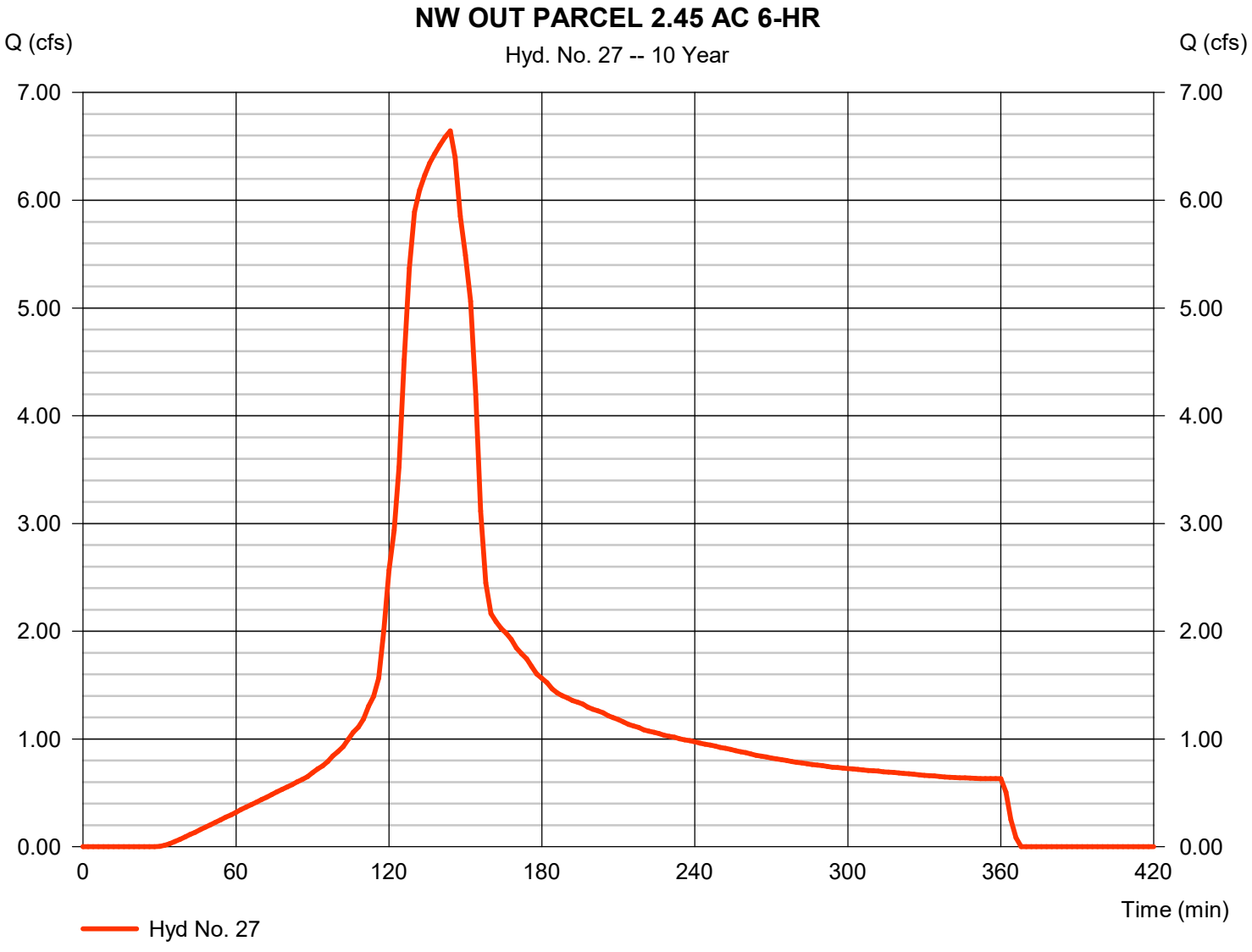


Hydrograph Report

Hyd. No. 27

NW OUT PARCEL 2.45 AC 6-HR

Hydrograph type	= SCS Runoff	Peak discharge	= 6.645 cfs
Storm frequency	= 10 yrs	Time to peak	= 144 min
Time interval	= 2 min	Hyd. volume	= 27,554 cuft
Drainage area	= 2.450 ac	Curve number	= 94
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.98 in	Distribution	= SCS 6-Hr
Storm duration	= 6.00 hrs	Shape factor	= 484



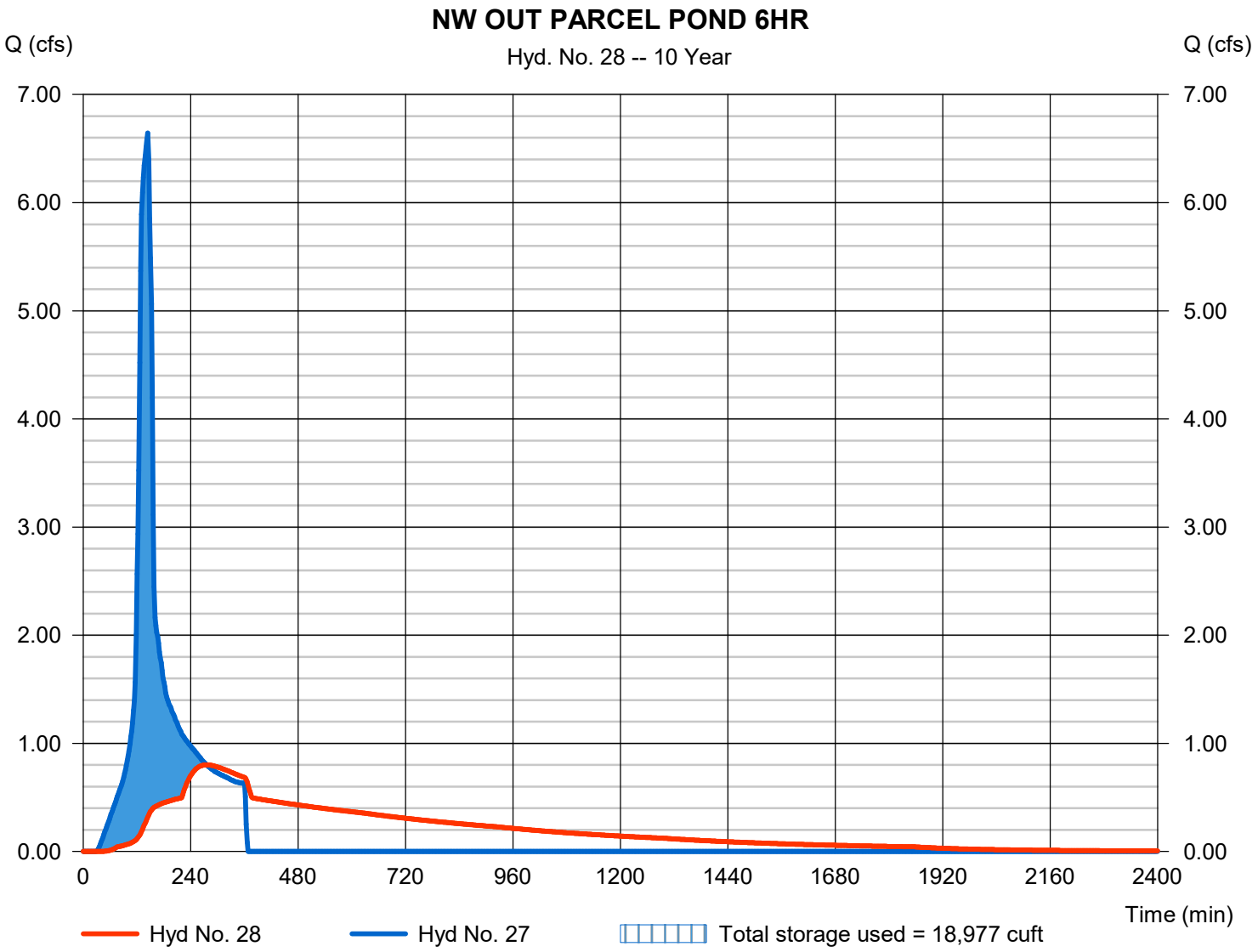
Hydrograph Report

Hyd. No. 28

NW OUT PARCEL POND 6HR

Hydrograph type	=	Reservoir	Peak discharge	=	0.801 cfs
Storm frequency	=	10 yrs	Time to peak	=	276 min
Time interval	=	2 min	Hyd. volume	=	27,502 cuft
Inflow hyd. No.	=	27 - NW OUT PARCEL 2.45 AC 6HR	Max. Elevation	=	999.10 ft
Reservoir name	=	NW OUT PARCEL POND	Max. Storage	=	18,977 cuft

Storage Indication method used.



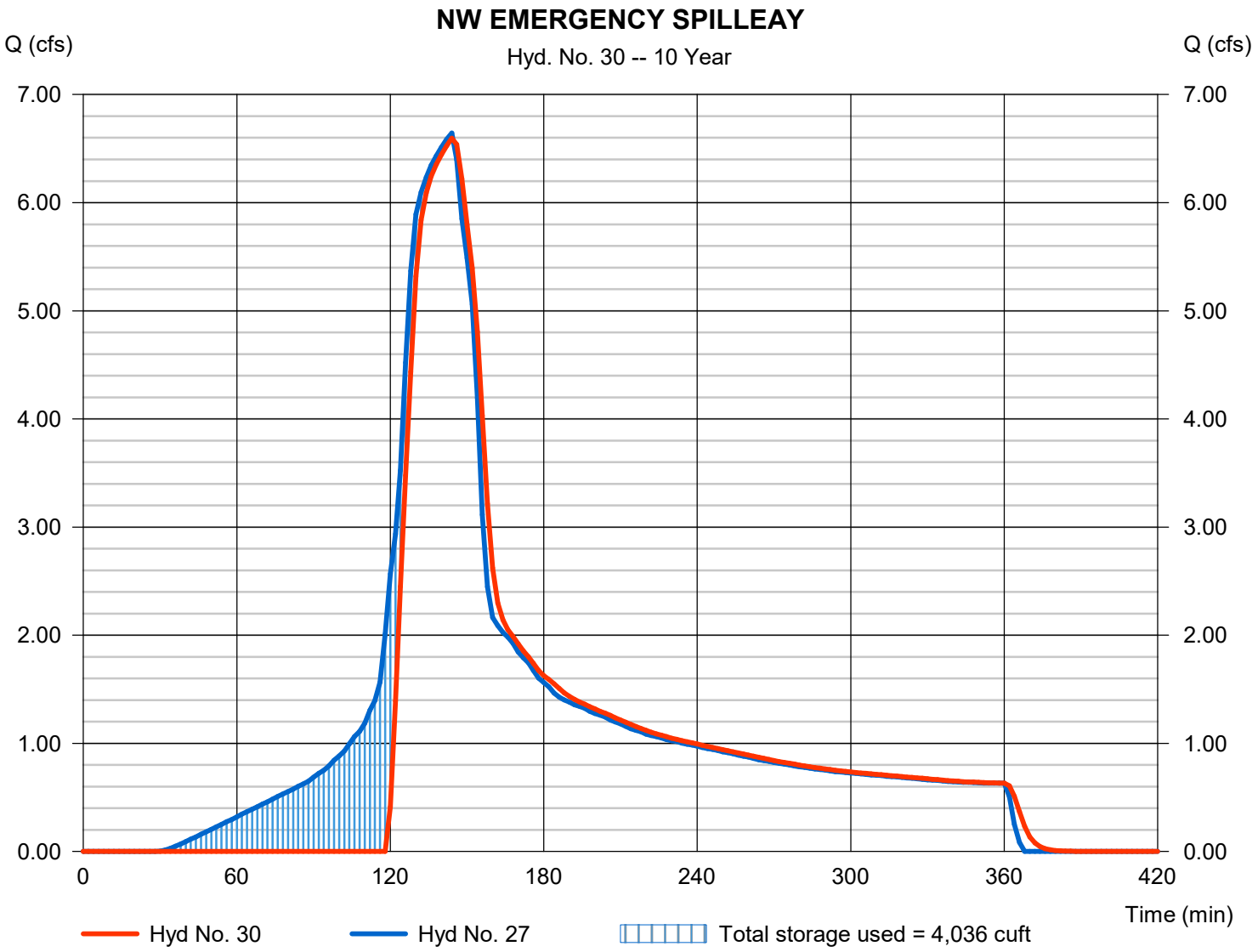
Hydrograph Report

Hyd. No. 30

NW EMERGENCY SPILLEAY

Hydrograph type	=	Reservoir	Peak discharge	=	6.596 cfs
Storm frequency	=	10 yrs	Time to peak	=	144 min
Time interval	=	2 min	Hyd. volume	=	24,449 cuft
Inflow hyd. No.	=	27 - NW OUT PARCEL 2.45 AC 6 HR	Max. Elevation	=	1001.25 ft
Reservoir name	=	NW EMERGENCY SPILLWAY	Max. Storage	=	4,036 cuft

Storage Indication method used.



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2026

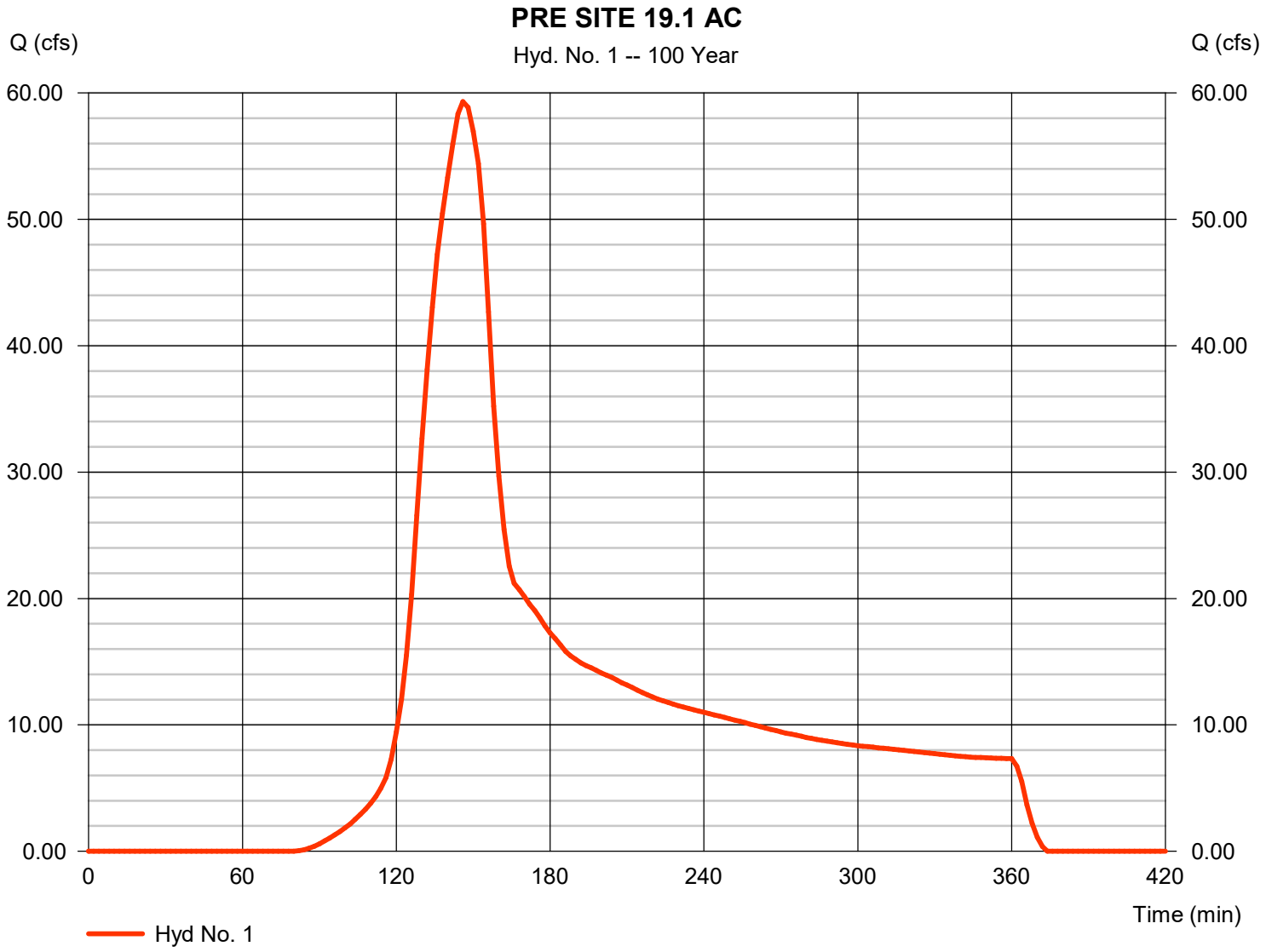
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	59.32	2	146	243,739	------	------	------	PRE SITE 19.1 AC
2	SCS Runoff	19.29	2	150	81,592	------	------	------	OFFSITE EAST 6.2 AC
3	SCS Runoff	11.18	2	144	50,242	------	------	------	OFFSITE ROAD 2.4 AC
4	SCS Runoff	6.026	2	144	23,927	------	------	------	OFFSITE NORTH 2 AC
5	Combine	35.60	2	146	155,761	2, 3, 4	------	------	OFFSITE
6	SCS Runoff	7.382	2	144	29,311	------	------	------	PRE NW OUTPARCEL 2.45 AC
8	SCS Runoff	7.442	2	144	29,551	------	------	------	direct west 2.1 AC 6hr
9	SCS Runoff	70.53	2	144	286,819	------	------	------	POST WEST 17.0 AC 6 hr
12	Reservoir	12.63	2	212	286,738	9	1001.93	175,648	WEST POND
13	Combine	14.09	2	210	316,289	8, 12	------	------	POST WEST TOTAL
15	Combine	113.53	2	144	472,131	2, 3, 4, 8, 9,	------	------	TOTAL POST BEFORE DETENTION
17	Reservoir	59.65	2	150	286,816	9	1003.90	266,470	EMERGENCY SPILLWAY
20	SCS Runoff	23.01	2	716	48,636	------	------	------	direct west 2.1 AC 24 hr
21	SCS Runoff	202.84	2	716	448,035	------	------	------	POST WEST 17 AC 24 hr
23	Combine	202.84	2	716	448,035	21,	------	------	TO WEST POND 24HR WQ
24	Reservoir	63.23	2	724	447,281	23	1003.25	235,208	WQ DESIGN 24HR
25	Combine	24.37	2	716	364,925	8, 12, 20,	------	------	POST WEST TOTAL 24HR WQ
27	SCS Runoff	11.10	2	144	47,384	------	------	------	NW OUT PARCEL 2.45 AC 6-HR
28	Reservoir	4.752	2	156	47,331	27	999.63	23,145	NW OUT PARCEL POND 6HR
30	Reservoir	11.06	2	144	44,278	27	1001.35	4,425	NW EMERGENCY SPILLEAY

Hydrograph Report

Hyd. No. 1

PRE SITE 19.1 AC

Hydrograph type	=	SCS Runoff	Peak discharge	=	59.32 cfs
Storm frequency	=	100 yrs	Time to peak	=	146 min
Time interval	=	2 min	Hyd. volume	=	243,739 cuft
Drainage area	=	19.100 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	9.00 min
Total precip.	=	6.39 in	Distribution	=	SCS 6-Hr
Storm duration	=	6.00 hrs	Shape factor	=	484

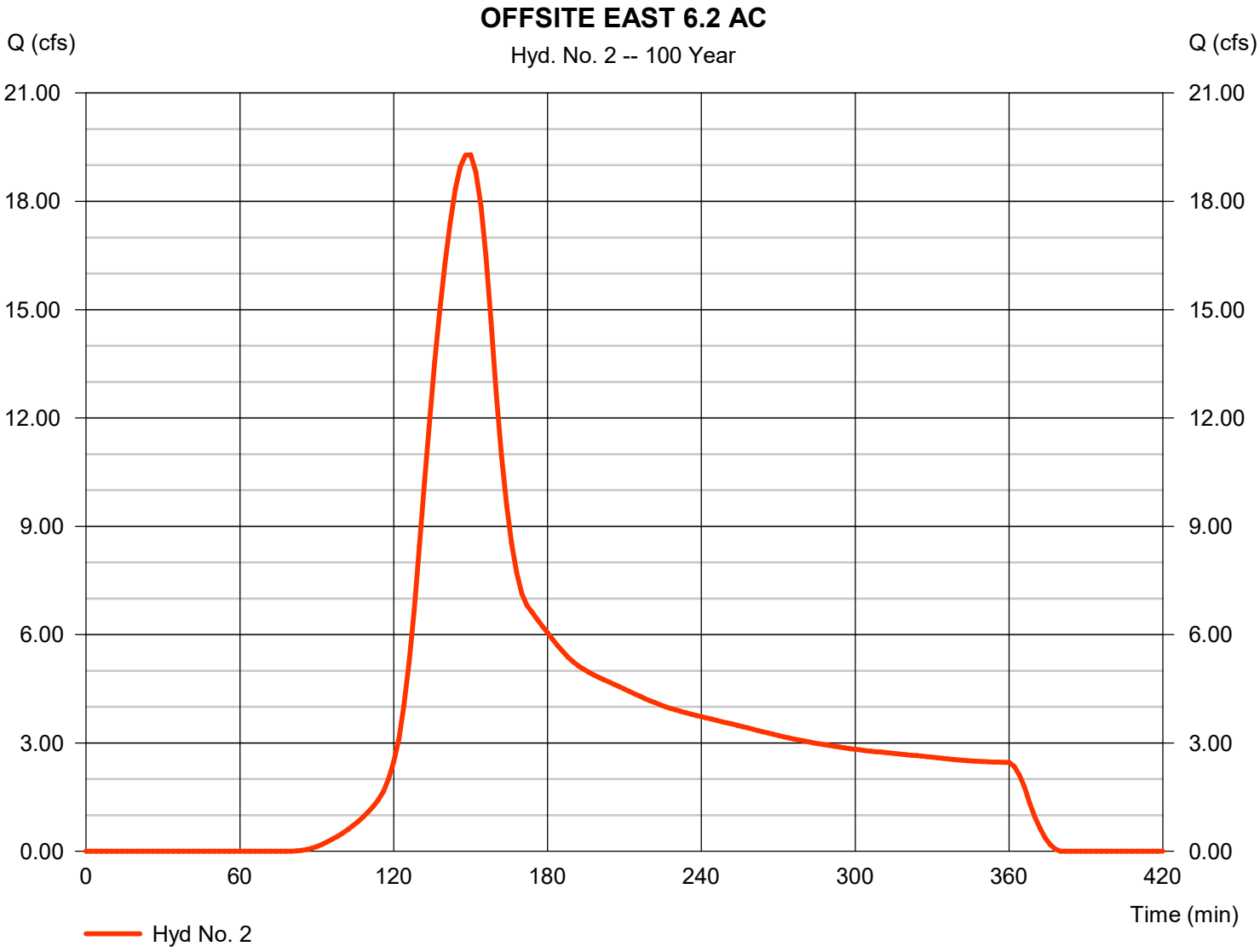


Hydrograph Report

Hyd. No. 2

OFFSITE EAST 6.2 AC

Hydrograph type	=	SCS Runoff	Peak discharge	=	19.29 cfs
Storm frequency	=	100 yrs	Time to peak	=	150 min
Time interval	=	2 min	Hyd. volume	=	81,592 cuft
Drainage area	=	6.200 ac	Curve number	=	74
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	10.00 min
Total precip.	=	6.39 in	Distribution	=	SCS 6-Hr
Storm duration	=	6.00 hrs	Shape factor	=	484

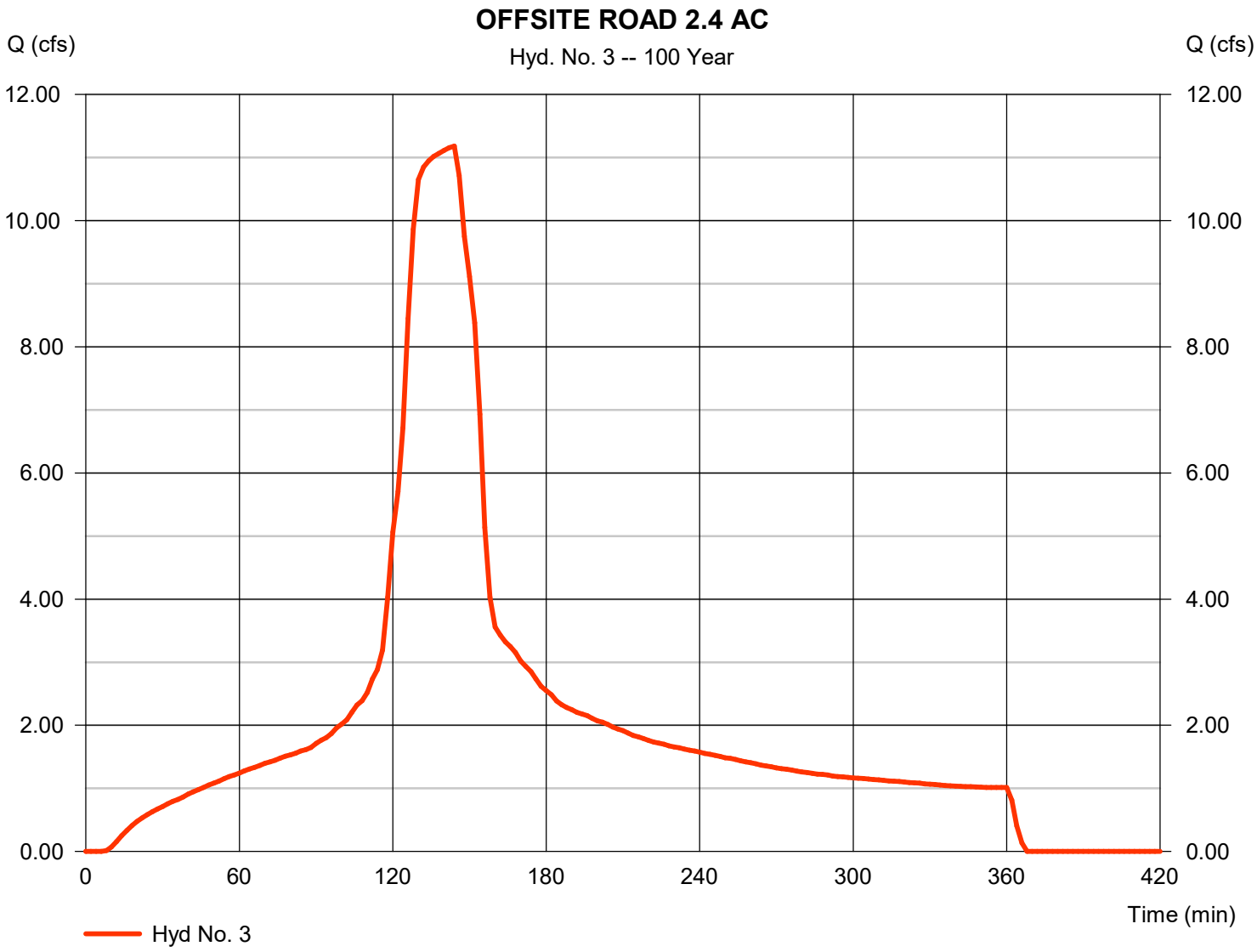


Hydrograph Report

Hyd. No. 3

OFFSITE ROAD 2.4 AC

Hydrograph type	=	SCS Runoff	Peak discharge	=	11.18 cfs
Storm frequency	=	100 yrs	Time to peak	=	144 min
Time interval	=	2 min	Hyd. volume	=	50,242 cuft
Drainage area	=	2.400 ac	Curve number	=	98
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	6.39 in	Distribution	=	SCS 6-Hr
Storm duration	=	6.00 hrs	Shape factor	=	484

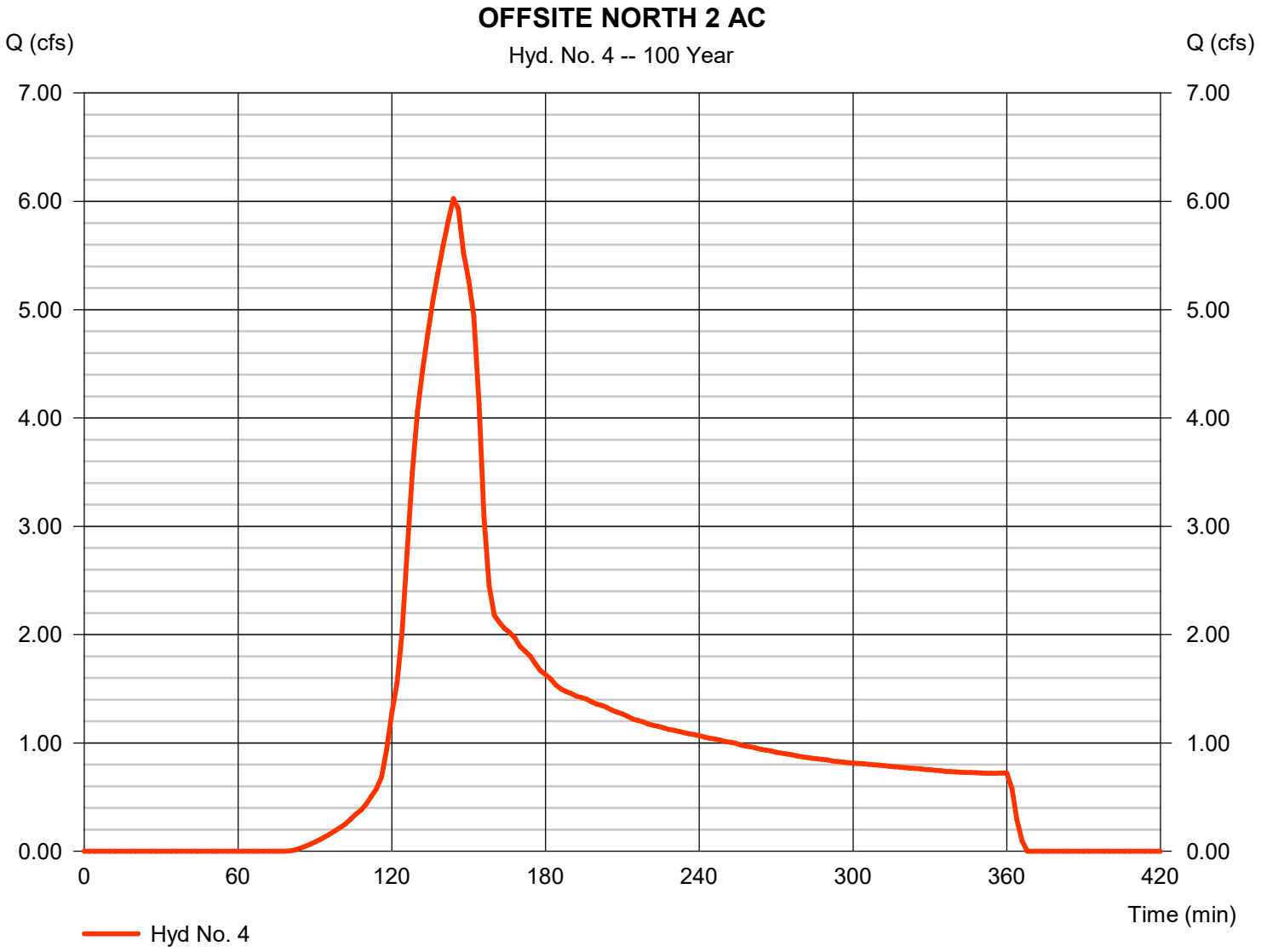


Hydrograph Report

Hyd. No. 4

OFFSITE NORTH 2 AC

Hydrograph type	= SCS Runoff	Peak discharge	= 6.026 cfs
Storm frequency	= 100 yrs	Time to peak	= 144 min
Time interval	= 2 min	Hyd. volume	= 23,927 cuft
Drainage area	= 2.000 ac	Curve number	= 74
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 6.39 in	Distribution	= SCS 6-Hr
Storm duration	= 6.00 hrs	Shape factor	= 484

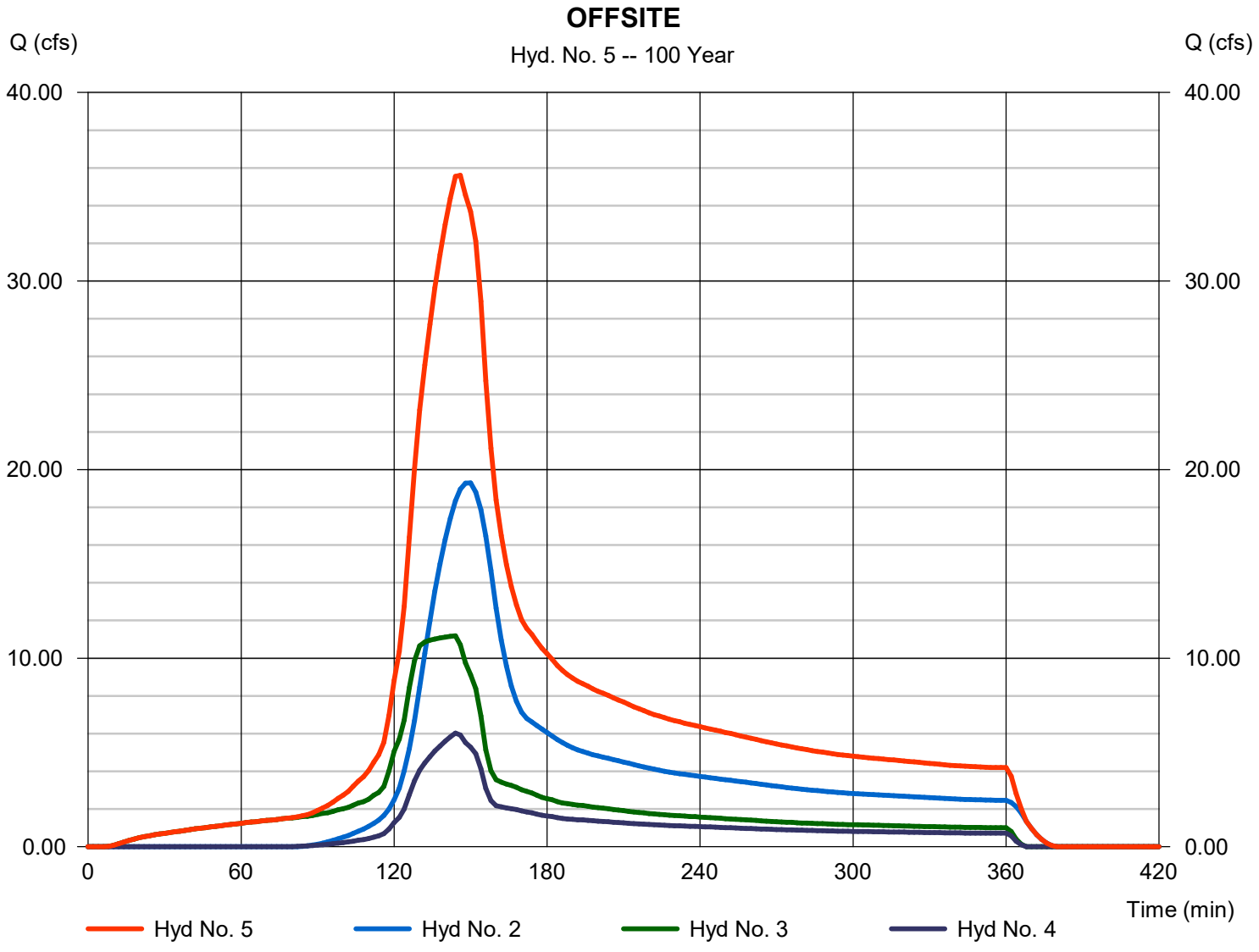


Hydrograph Report

Hyd. No. 5

OFFSITE

Hydrograph type	= Combine	Peak discharge	= 35.60 cfs
Storm frequency	= 100 yrs	Time to peak	= 146 min
Time interval	= 2 min	Hyd. volume	= 155,761 cuft
Inflow hyds.	= 2, 3, 4	Contrib. drain. area	= 10.600 ac

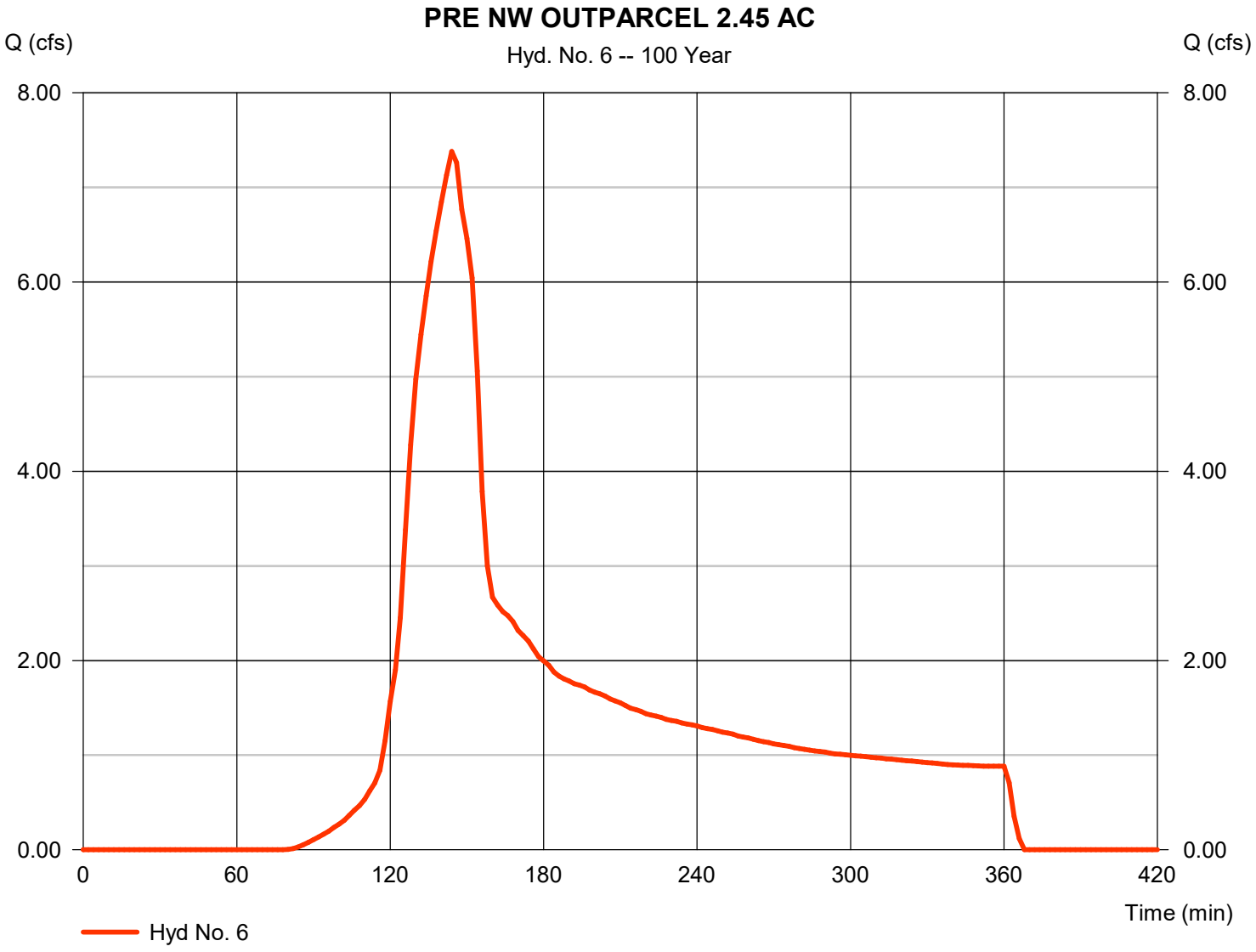


Hydrograph Report

Hyd. No. 6

PRE NW OUTPARCEL 2.45 AC

Hydrograph type	= SCS Runoff	Peak discharge	= 7.382 cfs
Storm frequency	= 100 yrs	Time to peak	= 144 min
Time interval	= 2 min	Hyd. volume	= 29,311 cuft
Drainage area	= 2.450 ac	Curve number	= 74
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 6.39 in	Distribution	= SCS 6-Hr
Storm duration	= 6.00 hrs	Shape factor	= 484

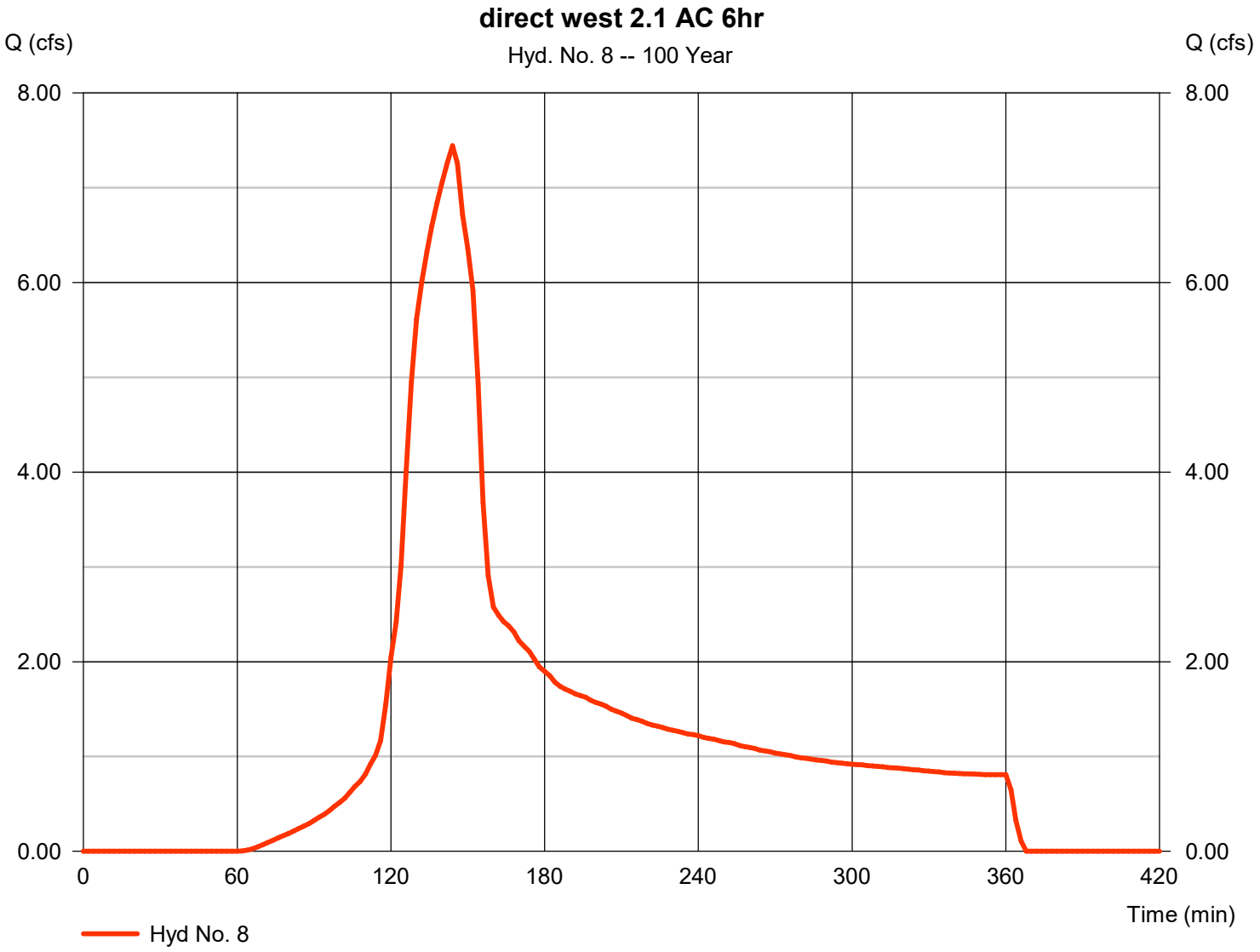


Hydrograph Report

Hyd. No. 8

direct west 2.1 AC 6hr

Hydrograph type	= SCS Runoff	Peak discharge	= 7.442 cfs
Storm frequency	= 100 yrs	Time to peak	= 144 min
Time interval	= 2 min	Hyd. volume	= 29,551 cuft
Drainage area	= 2.100 ac	Curve number	= 80
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 6.39 in	Distribution	= SCS 6-Hr
Storm duration	= 6.00 hrs	Shape factor	= 484

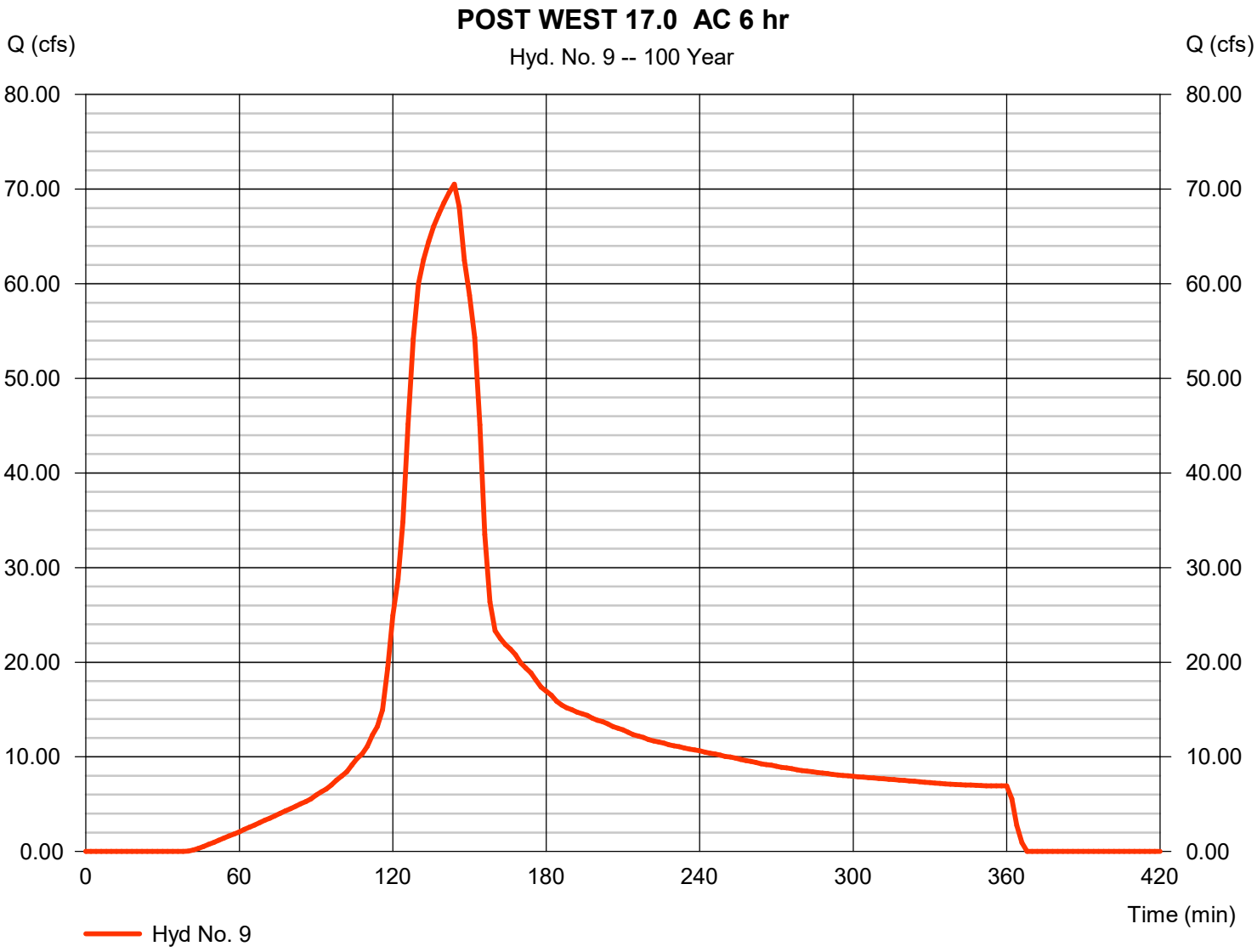


Hydrograph Report

Hyd. No. 9

POST WEST 17.0 AC 6 hr

Hydrograph type	=	SCS Runoff	Peak discharge	=	70.53 cfs
Storm frequency	=	100 yrs	Time to peak	=	144 min
Time interval	=	2 min	Hyd. volume	=	286,819 cuft
Drainage area	=	17.000 ac	Curve number	=	87.6
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	6.39 in	Distribution	=	SCS 6-Hr
Storm duration	=	6.00 hrs	Shape factor	=	484



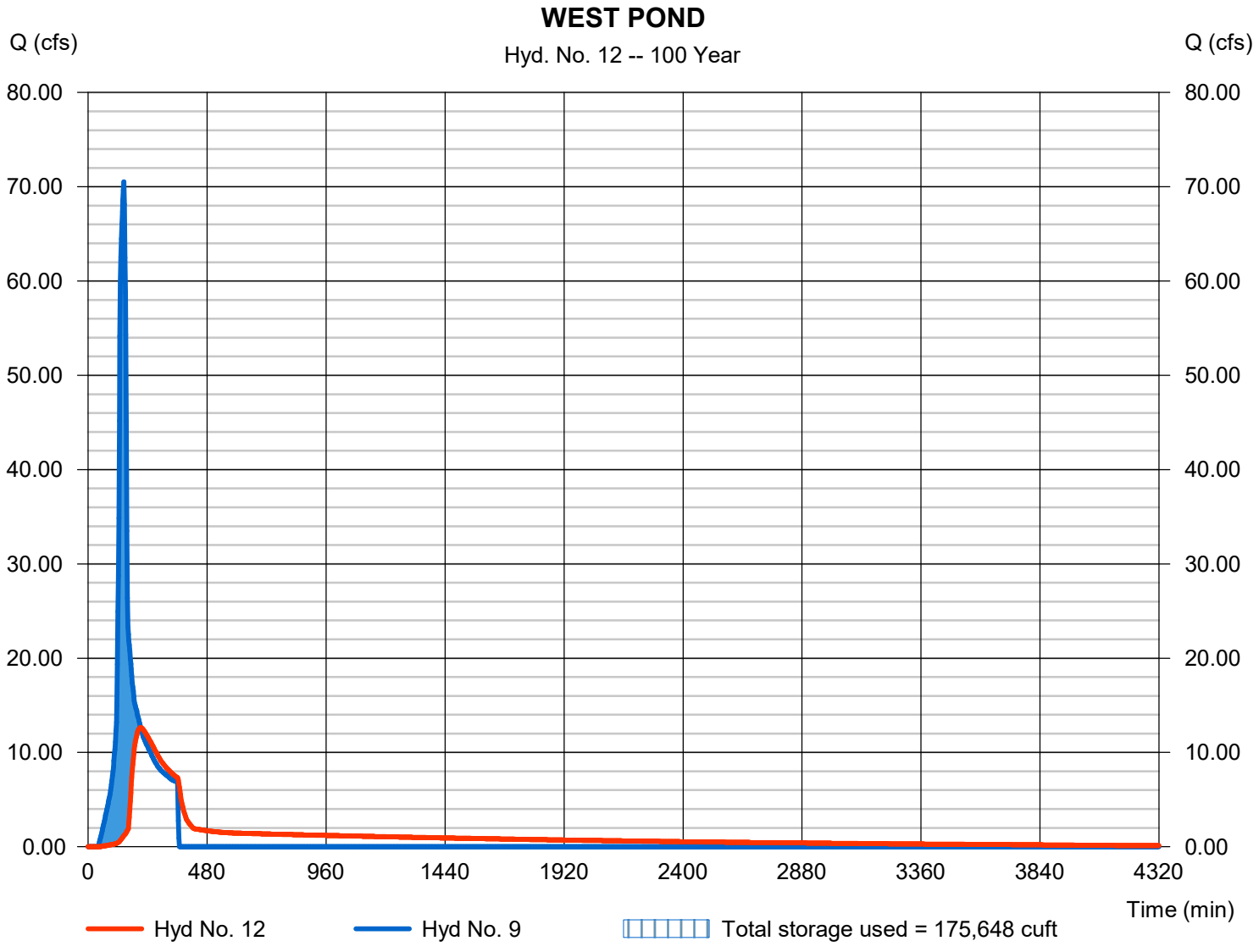
Hydrograph Report

Hyd. No. 12

WEST POND

Hydrograph type	=	Reservoir	Peak discharge	=	12.63 cfs
Storm frequency	=	100 yrs	Time to peak	=	212 min
Time interval	=	2 min	Hyd. volume	=	286,738 cuft
Inflow hyd. No.	=	9 - POST WEST 17.0 AC 6 hr	Max. Elevation	=	1001.93 ft
Reservoir name	=	WEST POND retention	Max. Storage	=	175,648 cuft

Storage Indication method used.

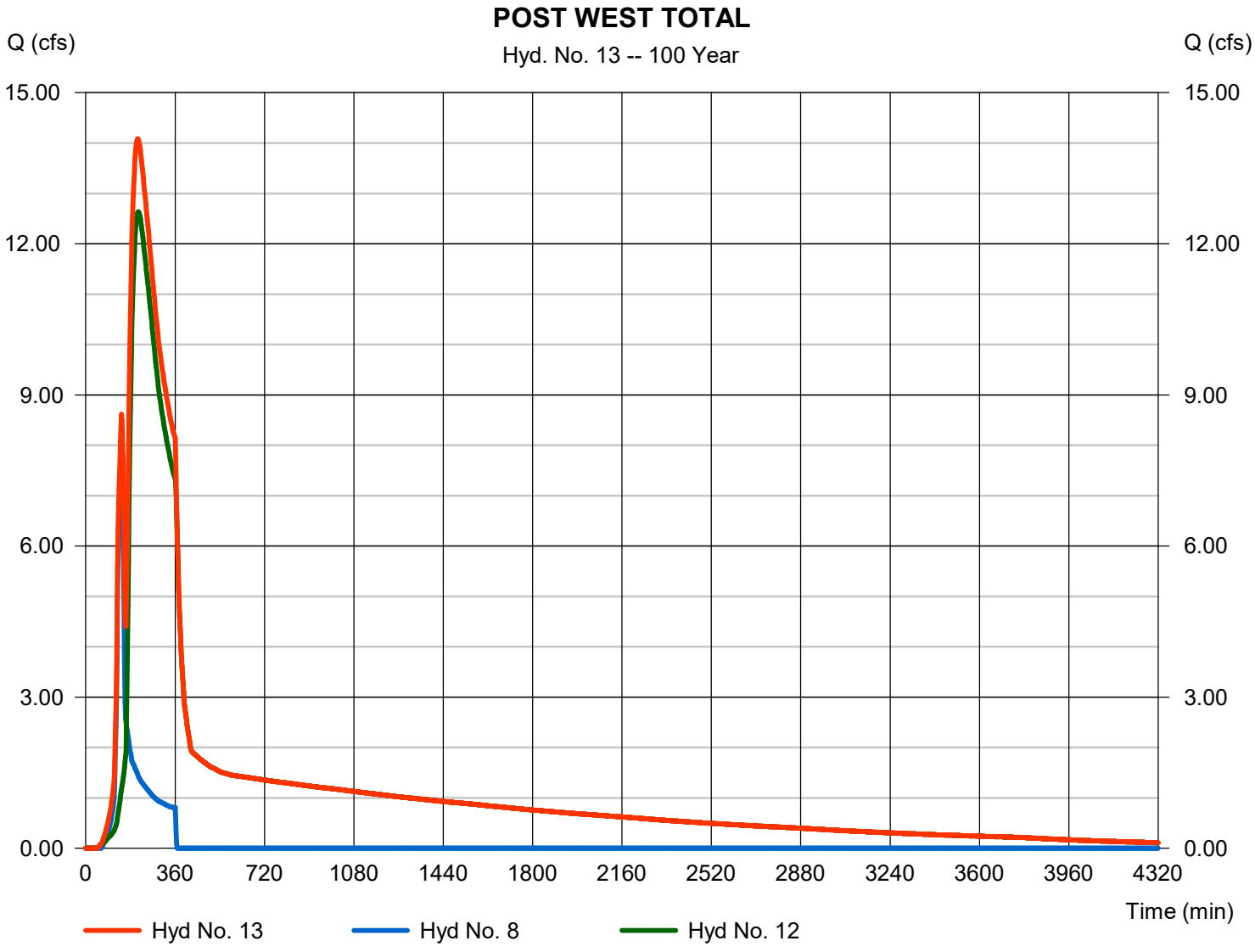


Hydrograph Report

Hyd. No. 13

POST WEST TOTAL

Hydrograph type	= Combine	Peak discharge	= 14.09 cfs
Storm frequency	= 100 yrs	Time to peak	= 210 min
Time interval	= 2 min	Hyd. volume	= 316,289 cuft
Inflow hyds.	= 8, 12	Contrib. drain. area	= 2.100 ac

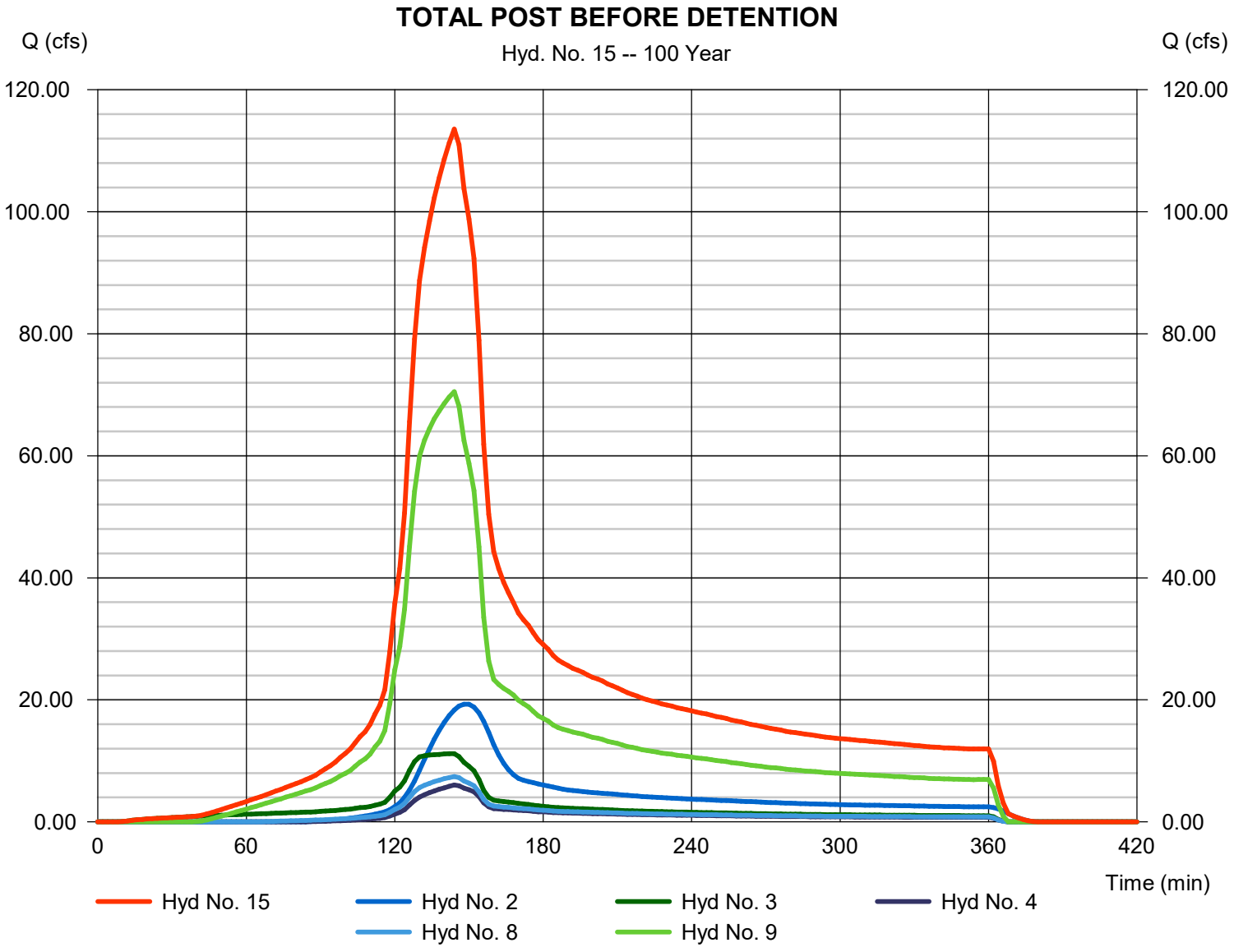


Hydrograph Report

Hyd. No. 15

TOTAL POST BEFORE DETENTION

Hydrograph type	= Combine	Peak discharge	= 113.53 cfs
Storm frequency	= 100 yrs	Time to peak	= 144 min
Time interval	= 2 min	Hyd. volume	= 472,131 cuft
Inflow hyds.	= 2, 3, 4, 8, 9	Contrib. drain. area	= 29.700 ac



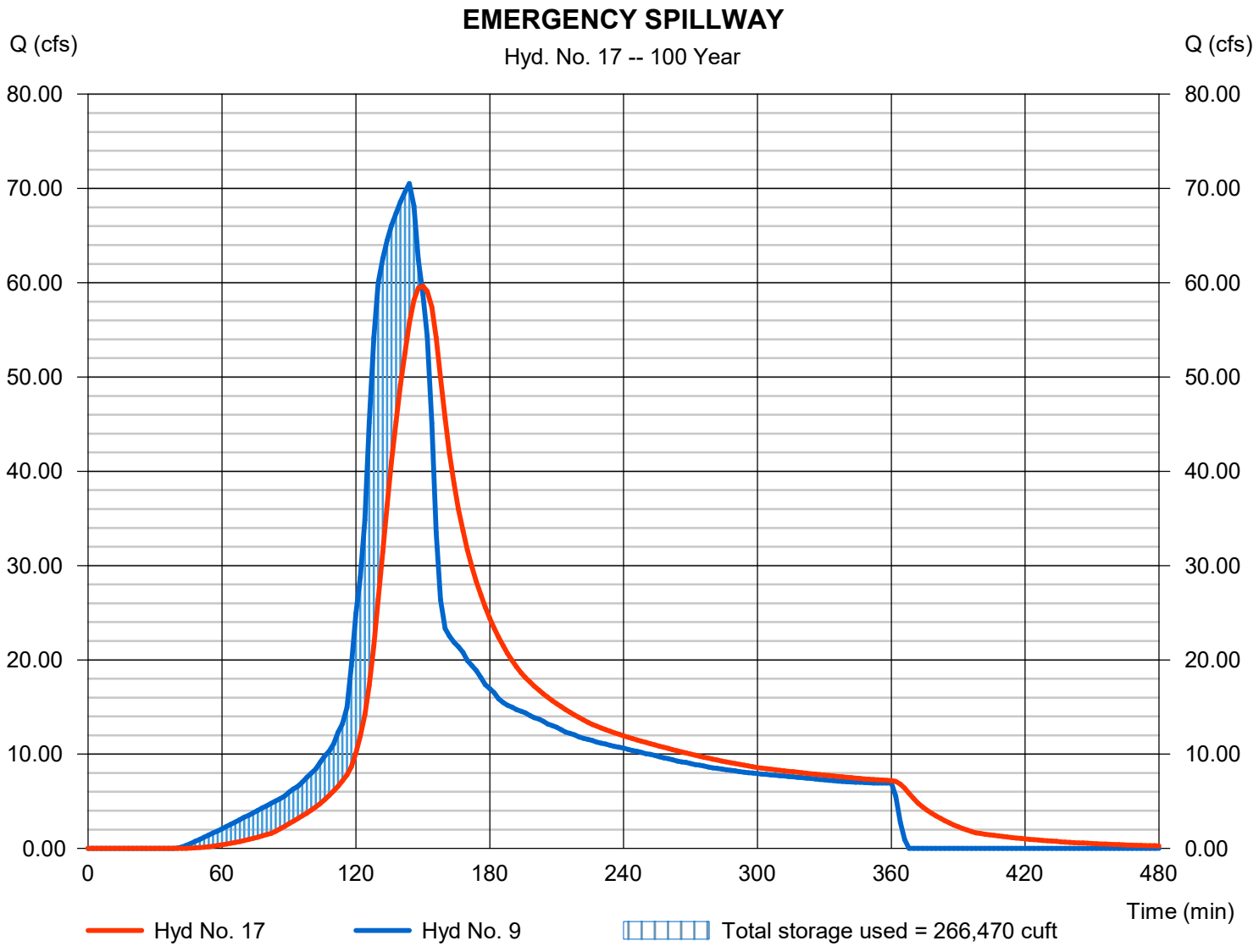
Hydrograph Report

Hyd. No. 17

EMERGENCY SPILLWAY

Hydrograph type	=	Reservoir	Peak discharge	=	59.65 cfs
Storm frequency	=	100 yrs	Time to peak	=	150 min
Time interval	=	2 min	Hyd. volume	=	286,816 cuft
Inflow hyd. No.	=	9 - POST WEST 17.0 AC 6 hr	Max. Elevation	=	1003.90 ft
Reservoir name	=	EMERGENCY SPILLWAY	Max. Storage	=	266,470 cuft

Storage Indication method used. Wet pond routing start elevation = 1002.80 ft.

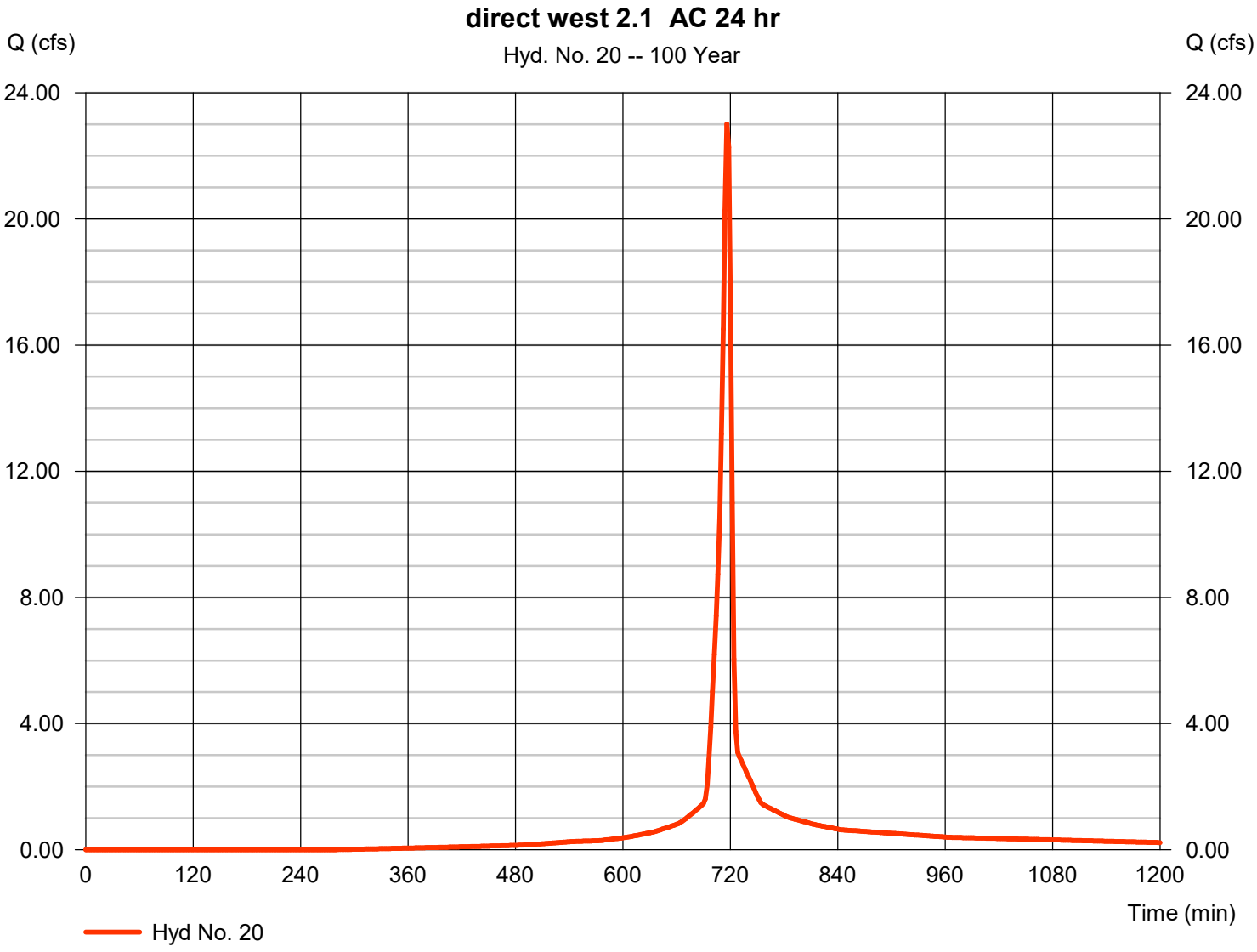


Hydrograph Report

Hyd. No. 20

direct west 2.1 AC 24 hr

Hydrograph type	= SCS Runoff	Peak discharge	= 23.01 cfs
Storm frequency	= 100 yrs	Time to peak	= 716 min
Time interval	= 2 min	Hyd. volume	= 48,636 cuft
Drainage area	= 2.100 ac	Curve number	= 80
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 9.25 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

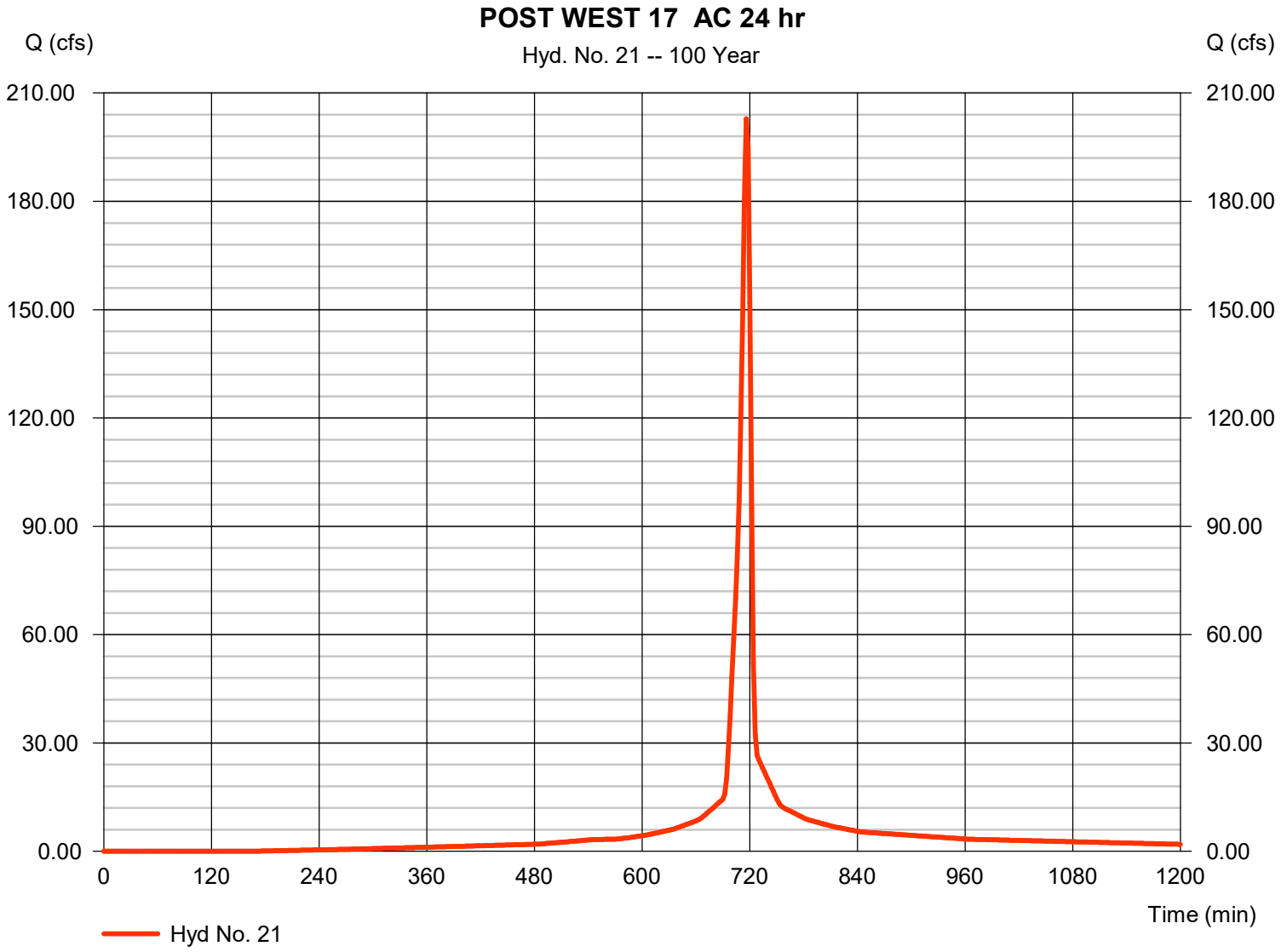


Hydrograph Report

Hyd. No. 21

POST WEST 17 AC 24 hr

Hydrograph type	=	SCS Runoff	Peak discharge	=	202.84 cfs
Storm frequency	=	100 yrs	Time to peak	=	716 min
Time interval	=	2 min	Hyd. volume	=	448,035 cuft
Drainage area	=	17.000 ac	Curve number	=	87.6
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	9.25 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

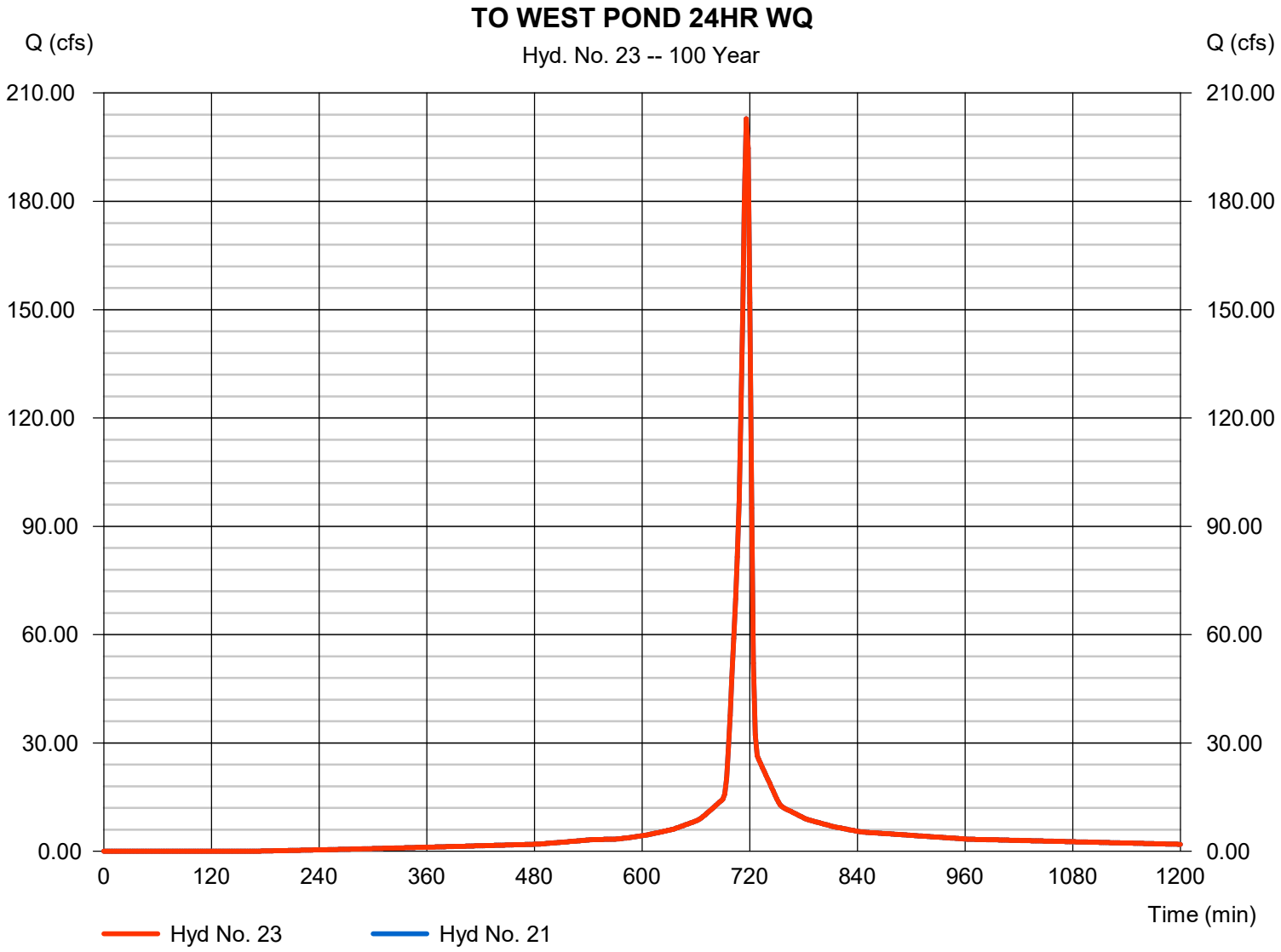


Hydrograph Report

Hyd. No. 23

TO WEST POND 24HR WQ

Hydrograph type	= Combine	Peak discharge	= 202.84 cfs
Storm frequency	= 100 yrs	Time to peak	= 716 min
Time interval	= 2 min	Hyd. volume	= 448,035 cuft
Inflow hyds.	= 21	Contrib. drain. area	= 17.000 ac



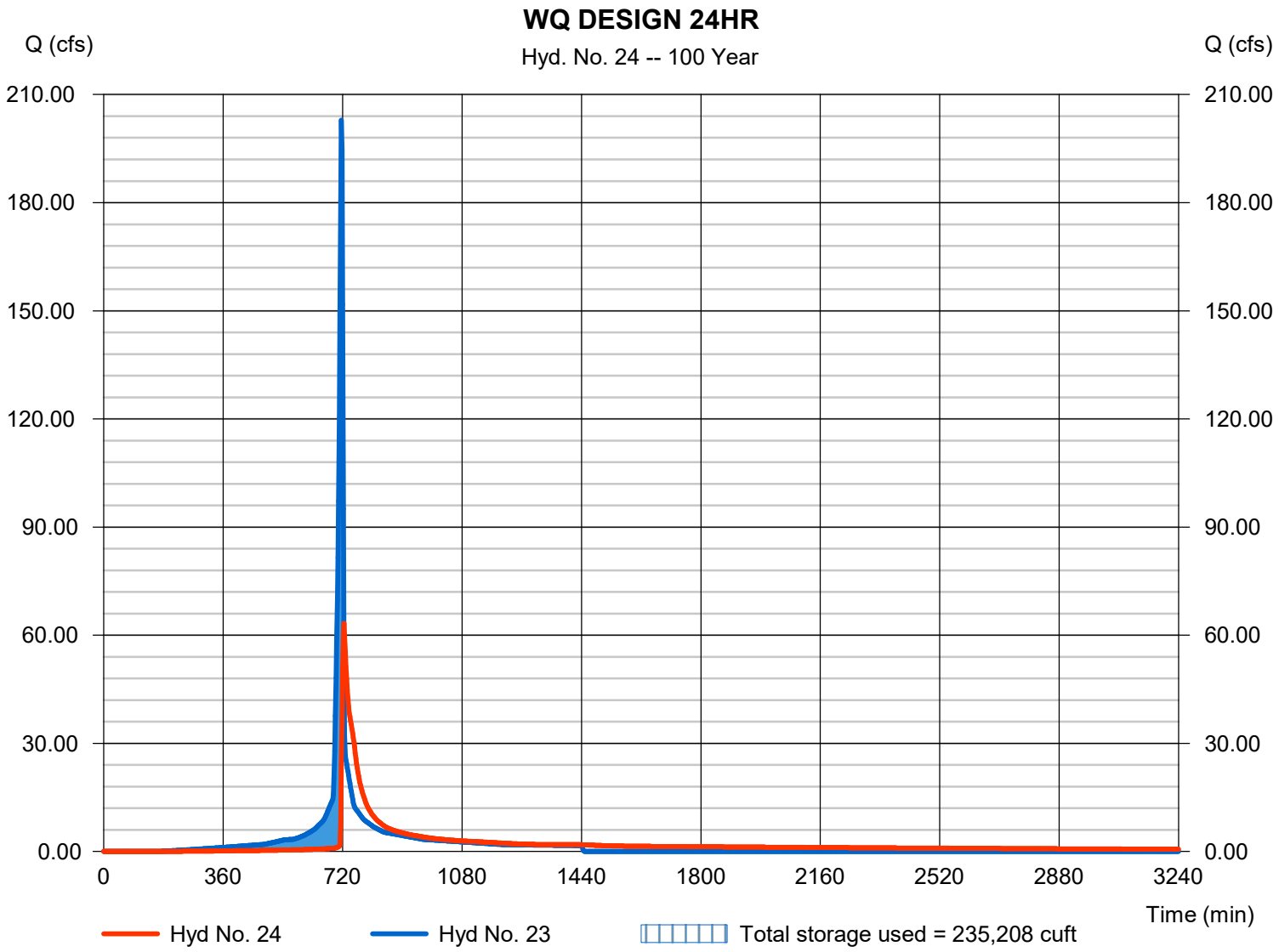
Hydrograph Report

Hyd. No. 24

WQ DESIGN 24HR

Hydrograph type	=	Reservoir	Peak discharge	=	63.23 cfs
Storm frequency	=	100 yrs	Time to peak	=	724 min
Time interval	=	2 min	Hyd. volume	=	447,281 cuft
Inflow hyd. No.	=	23 - TO WEST POND 24HR WQ	Max. Elevation	=	1003.25 ft
Reservoir name	=	WEST POND retention	Max. Storage	=	235,208 cuft

Storage Indication method used.

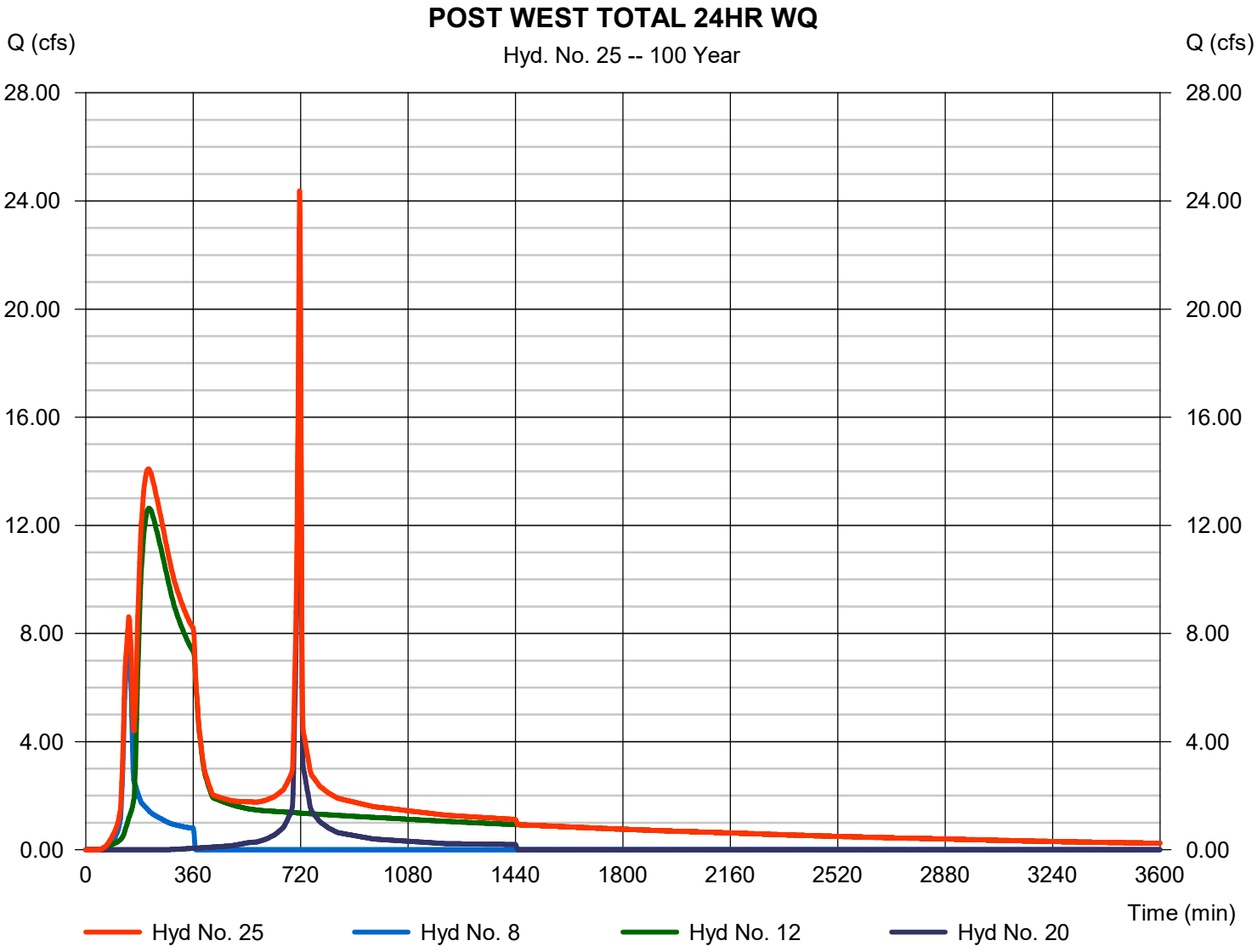


Hydrograph Report

Hyd. No. 25

POST WEST TOTAL 24HR WQ

Hydrograph type	= Combine	Peak discharge	= 24.37 cfs
Storm frequency	= 100 yrs	Time to peak	= 716 min
Time interval	= 2 min	Hyd. volume	= 364,925 cuft
Inflow hyds.	= 8, 12, 20	Contrib. drain. area	= 4.200 ac

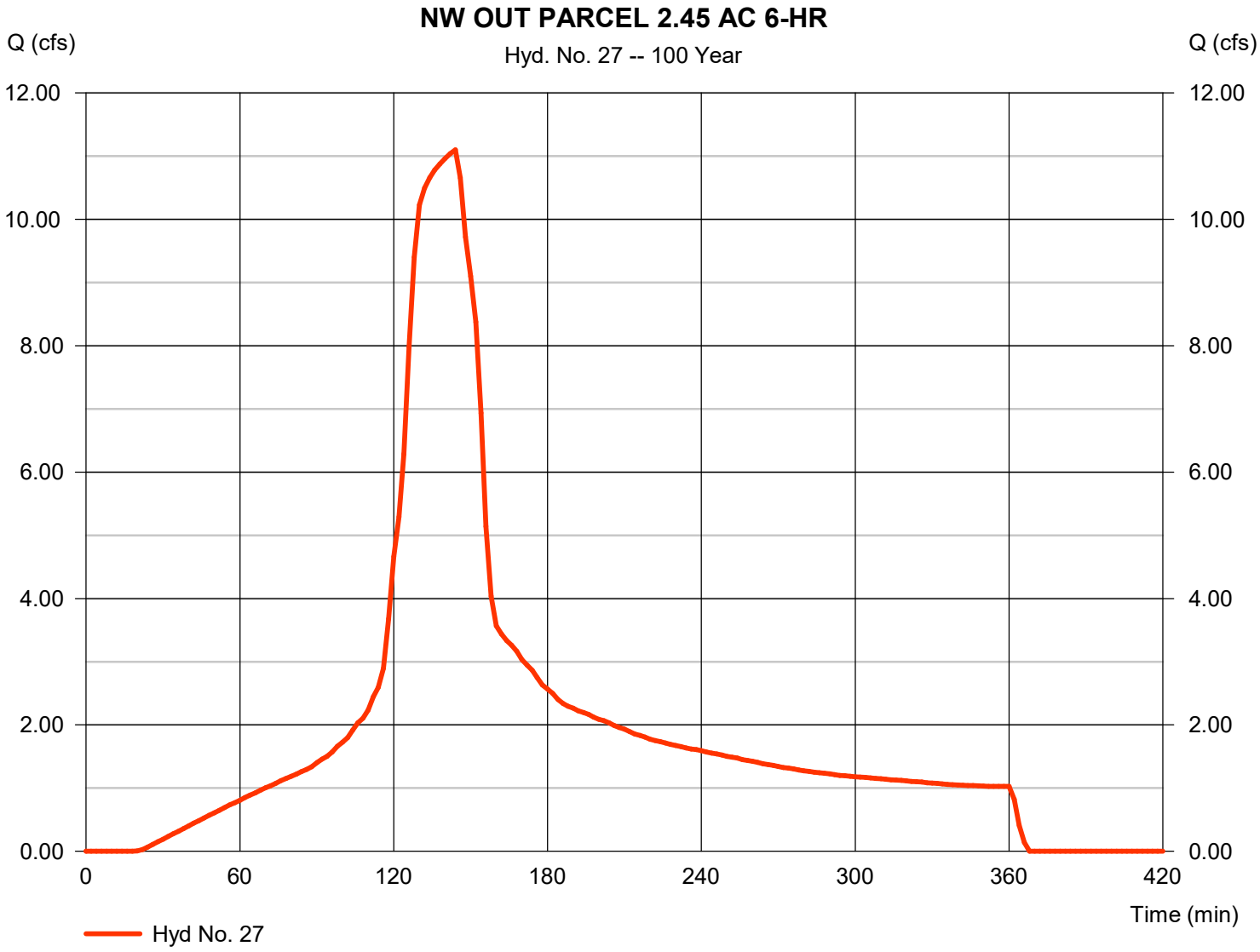


Hydrograph Report

Hyd. No. 27

NW OUT PARCEL 2.45 AC 6-HR

Hydrograph type	= SCS Runoff	Peak discharge	= 11.10 cfs
Storm frequency	= 100 yrs	Time to peak	= 144 min
Time interval	= 2 min	Hyd. volume	= 47,384 cuft
Drainage area	= 2.450 ac	Curve number	= 94
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 6.39 in	Distribution	= SCS 6-Hr
Storm duration	= 6.00 hrs	Shape factor	= 484



Hydrograph Report

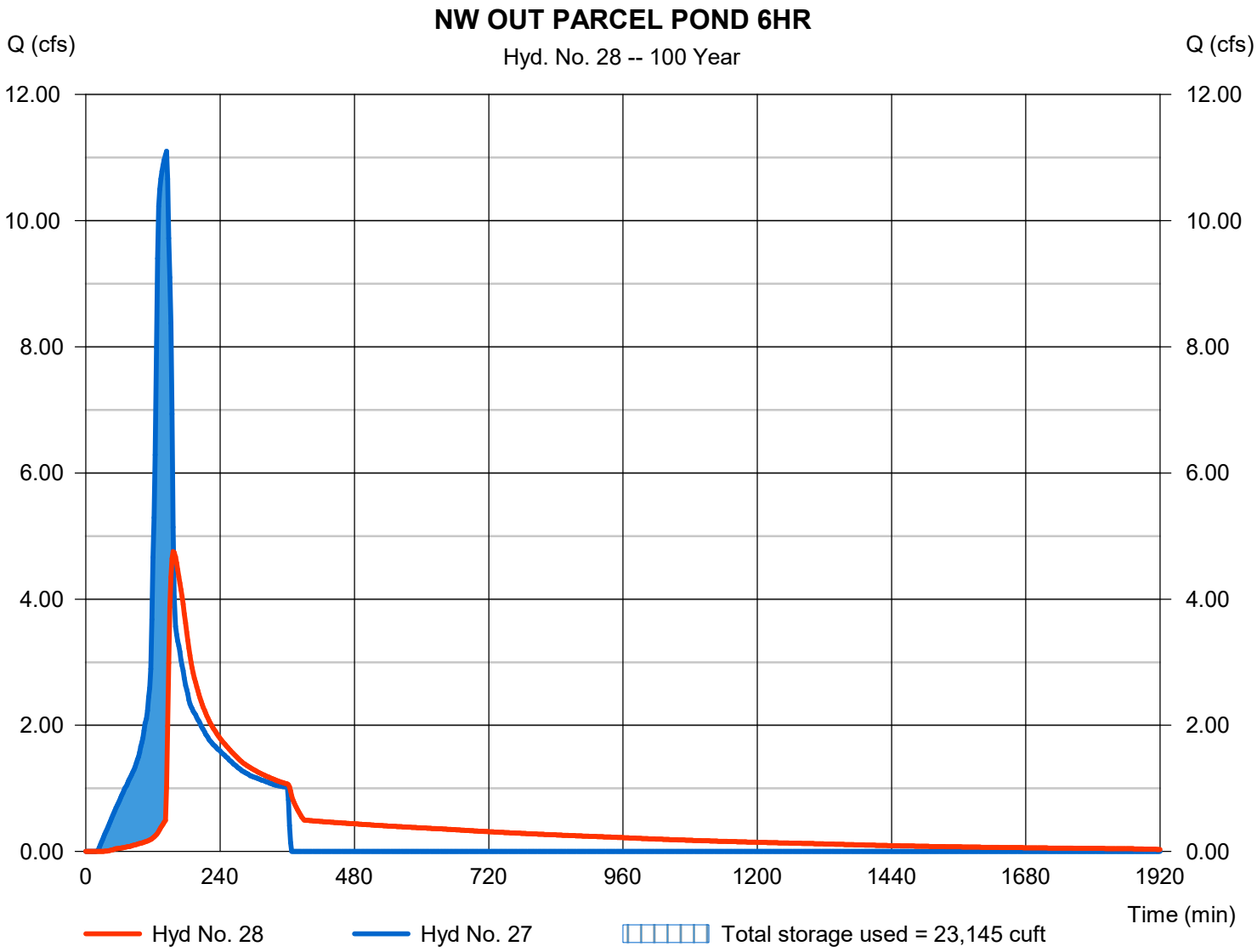
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2026 Tuesday, 03 / 31 / 2026

Hyd. No. 28

NW OUT PARCEL POND 6HR

Hydrograph type	=	Reservoir	Peak discharge	=	4.752 cfs
Storm frequency	=	100 yrs	Time to peak	=	156 min
Time interval	=	2 min	Hyd. volume	=	47,331 cuft
Inflow hyd. No.	=	27 - NW OUT PARCEL 2.45 AC 6HR	Max. Elevation	=	999.63 ft
Reservoir name	=	NW OUT PARCEL POND	Max. Storage	=	23,145 cuft

Storage Indication method used.



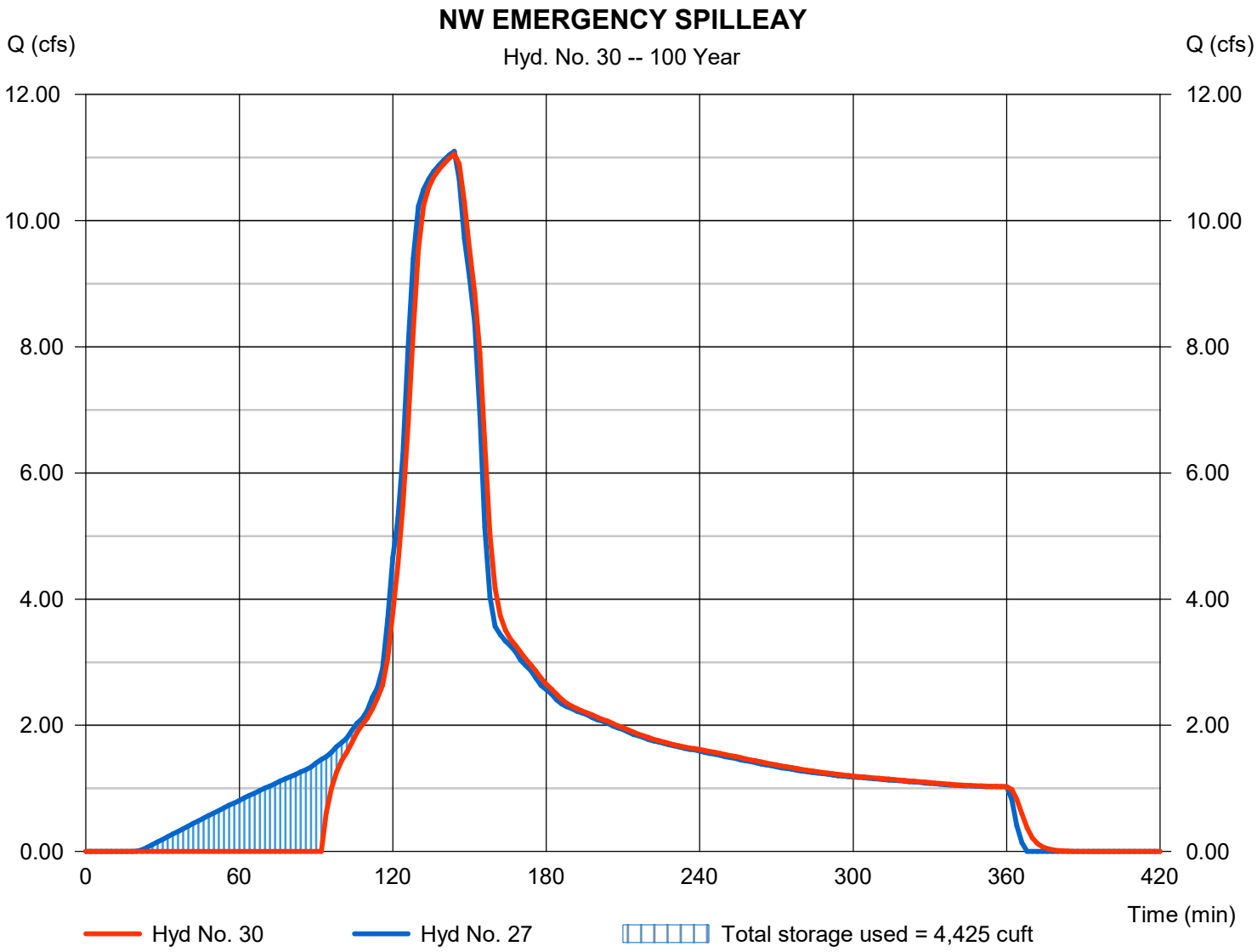
Hydrograph Report

Hyd. No. 30

NW EMERGENCY SPILLEAY

Hydrograph type	=	Reservoir	Peak discharge	=	11.06 cfs
Storm frequency	=	100 yrs	Time to peak	=	144 min
Time interval	=	2 min	Hyd. volume	=	44,278 cuft
Inflow hyd. No.	=	27 - NW OUT PARCEL 2.45 AC 26 HR	Max. Elevation	=	1001.35 ft
Reservoir name	=	NW EMERGENCY SPILLWAY	Max. Storage	=	4,425 cuft

Storage Indication method used.



Appendix G – Water Quality Worksheets

General Requirements

Project Information

Project Name:	Grocery store
Date:	8-Apr-26
Address:	NE DOUGLAS ST
Nearest Intersection:	NE DOUGLAS ST AND NW CHIPMAN RD
Project Type:	Site Development - New Development
System Type:	Separate Storm Sewer System
Proposed Land Use:	Commercial
Input Value Basis:	Actual measured values based on improvement plans

Site Parameters

Total Disturbed Area of Site	19.10	acres
Total Proposed Impervious Area	418,176	square feet
Effective FEMA floodplain?	Yes	*(Select Yes/No)*

Describe Known Stormwater Issues (if any):

Stormwater Management Requirements/Variance

Project required to meet stormwater management criteria?	Yes	
Request for Variance?	No	*(Select Yes/No)*

Why? Explain:

Landscape Professional Verification of Compliance with Design Criteria

Preservation/Restoration

Requirements Met?						Design Criteria
FALSE	Yes	FALSE	No	TRUE	N/A	Stream setbacks meet requirements of Section 5604 and placed within a separate dedicated tract of land restricted from future development?
TRUE	Yes	FALSE	No			Project incorporates preservation or restoration of Natural Areas?
TRUE	Yes	FALSE	No	FALSE	N/A	Natural Area meets requirements of Section 5604?
FALSE	Yes	FALSE	No	TRUE	N/A	Natural Area placed within a separate dedicated tract of land restricted from future development?
FALSE	Yes	FALSE	No	FALSE	N/A	Project incorporates the following Sustainable Stormwater Management Practices and RRV reductions meeting requirements of Section 5602 and 5604 (select all that apply):
FALSE	Yes	FALSE	No	TRUE	N/A	Sheetflow to Natural Areas
FALSE	Yes	FALSE	No	TRUE	N/A	Sheetflow to Natural Areas
FALSE	Yes	FALSE	No	TRUE	N/A	Downspout Disconnection (not applicable for residential developments)
TRUE	Yes	FALSE	No	FALSE	N/A	Preservation of Existing Trees or Planting New Trees?

Total RRV Reductions: 1,000 (cf)

I hereby certify, as a Landscape Professional, that the information in the Preservation/Restoration section of this form was assembled under my direct personal charge and is in compliance with the Stormwater Management Criteria.

Professional Name	License Number	State

Professional Engineer Verification of Compliance with Design Criteria

Retention

Requirements Met?						Design Criteria	Retention Volume (cf)	
TRUE	Yes	FALSE	No	FALSE	N/A	Required Retention Volume met per Section 5602?		
FALSE	Yes	FALSE	No	FALSE	N/A	Easement(s) provided?	***Required***	***Designed***
						RRV (prior to RRV Reductions)	48,591	194,700
						RRV (with RRV Reductions)	47,591	

Detention

Requirements Met?						Design Criteria	Release Rates (cfs)	
FALSE	Yes	FALSE	No	TRUE	N/A	Easement(s) provided?	***Maximum Allowable***	***Designed***
TRUE	Yes	FALSE	No	FALSE	N/A	2-year peak outflow control achieved?	3.82	2.15
TRUE	Yes	FALSE	No	FALSE	N/A	10-year peak outflow control achieved?	11.46	4.29
TRUE	Yes	FALSE	No	FALSE	N/A	100-year peak outflow control achieved?	57.3	14.09

Collection

Requirements Met?						Design Criteria
TRUE	Yes	FALSE	No	FALSE	N/A	Inlet placement and gutter spread per requirements of Section 5607?

Conveyance

Requirements Met?						Design Criteria
FALSE	Yes	FALSE	No	TRUE	N/A	Easement(s) provided?
TRUE	Yes	FALSE	No	FALSE	N/A	Enclosed pipe systems per requirements of 5608.2?
FALSE	Yes	FALSE	No	TRUE	N/A	Minor drainage systems per requirements of 5608.3 A?
TRUE	Yes	FALSE	No	FALSE	N/A	Designated overflow routes for 100-year design storm per requirements of Section 5608.3 B?
FALSE	Yes	FALSE	No	TRUE	N/A	Channel stabilization per requirements of 5608.4?
TRUE	Yes	FALSE	No	FALSE	N/A	Road crossings per requirements of 5608.5?

I hereby certify, as a Professional Engineer, that the information in the Retention, Detention, Collection, and Conveyance sections of this form were assembled under my direct personal charge and is in compliance with the Stormwater Management Criteria.

Professional Name	License Number	State

Required Maps	
TRUE	**Watershed Location Map.** Describes the project's location within the greater watershed depicting:
1.	Watershed boundary and area (acres)
2.	Delineated drainage area tributary to the project site (acres)
3.	Natural overland drainage paths to, through and downstream of the project site to the downstream destination of runoff (whether open channel or enclosed system)
4.	Water bodies & regulatory floodplain (lakes, rivers, streams, creeks, wetlands, etc.)
5.	Existing stormwater retention/detention facility location(s) in upstream or downstream watershed affecting stormwater management at project site (if applicable)
TRUE	**Existing Site Conditions Map.** Demonstrates existing conditions of the site depicting:
1.	Existing contours
2.	Aerial imagery
3.	Water bodies & regulatory floodplain (lakes, rivers, streams, creeks, wetlands, etc.)
4.	Natural overland drainage paths and discharge points from the site
5.	Existing utilities, including existing stormwater infrastructure
6.	Parcel boundaries
7.	Existing impervious surfaces and types (i.e. building, parking lot, gravel, etc.)
8.	Key statistics including total disturbed area, total impervious area, and lot size (if applicable)
TRUE	**Proposed Site Conditions Map.** Demonstrates proposed conditions of the site depicting:
1.	Proposed contours including finished floor elevation (FFE) and lowest opening elevation (LOE) information
2.	Existing and proposed utilities, including existing stormwater infrastructure overland drainage paths
3.	Designated overflow routes and discharge points from the site
4.	Proposed drainage areas labeled with IDs and acreages correlating to the stormwater management calculator inputs, including uncontrolled drainage area
5.	Parcel boundaries depicting required utility easements, stream setbacks identifying key features and statistics (top of bank or bank-full extents, centerline, Zone 1, and Zone 2, and dimensional offset), and Natural Areas with key statistics (total footprint, minimum length and width).
6.	Impervious surfaces and types (i.e. building, parking lot, gravel, etc.)
7.	Stormwater improvements including Natural Areas of preservation or restoration, preserved trees, new trees, retention practices, detention practices, collection and conveyance practices with labels correlating to the stormwater management calculator inputs

Site Summary

Project and Development Type:	Site Development - New Development
System Type:	Separate Storm Sewer System
Proposed Land Use:	Commercial
Input Value Basis:	Actual measured values based on improvement plans
Assumed Percent Impervious Coverage:	NA
Total Disturbed Area (sf):	831,996

Treatment Summary Table

Water Quality Storm Event (in) (P_{WQ})	1.37
Percent of Water Quality Storm to be Retained (PT%)	85%
Total Controlled Disturbed Area (sf)	831,996
Controlled Area Rv ($Rv_{controlled}$)	0.60
Total Uncontrolled Disturbed Area (sf)	0
Total Required Retention Volume (cf) (RRV)	48,591
Uncontrolled Retention Volume (cf)	0
Adjusted PT% within Controlled Drainage Areas	NA

☑ ***Uncontrolled area is within the limit to achieve the total site retention requirements.***

Drainage Areas Worksheet

View Instructions

How many total drainage areas are included on the site? 1

Drainage Area Summary Table		
Unique Drainage Area Identifier (ID)	Can this drainage area be feasibly controlled?	Disturbed Drainage Area (sf)
1	Yes	831,996

Select post-development cover types within the disturbed area:	
Natural Area	FALSE
Pervious Area	TRUE
Impervious Area	TRUE
Solar Farm - Native	FALSE
Solar Farm - Gravel	FALSE
Gravel - Overflow Parking Lots, Trails/Maintenance Paths, Substations	FALSE
Gravel - Primary Parking Lots, Access Driveways, Railroad Ballasts	FALSE
Gravel - Public Road with Compacted Subgrade Material	FALSE
Artificial Turf - No Underdrain System	FALSE
Artificial Turf - Underdrain System	FALSE
Water Surfaces	FALSE

Generate Detailed Drainage Area Tables

Filter Cover Types

Generate Design Sheets

Site Summary

Summary Table for Drainage Area ID:	1
Is this drainage area controlled?	Yes
Disturbed drainage area (sf)	831,996
RRV Prior to Reductions (cf)	**48,591**
Pervious Area Weighted Rv	0.25
Impervious Area Weighted Rv	0.95
Post-Development Condition Weighted CN	86.06

Cover Type Area Table for Drainage Area 1	Area (sf)										
Cover Type	Soil Type A	CN	Soil Type B	CN	Soil Type C	CN	Soil Type D	CN	**Total**	**% Cover**	Rv
Natural Area		30		55		70		77	**0**	0%	0.00
Pervious Area		39		61	413,820	74		80	**413,820**	50%	0.25
Impervious Area		98		98	418,176	98		98	**418,176**	50%	0.95
Solar Farm - Native		62		76		84		88	**0**	0%	0.40
Solar Farm - Gravel		75		84		89		92	**0**	0%	0.60
Gravel - Overflow Parking Lots, Trails/Maintenance Paths, Substations		75		84		89		92	**0**	0%	0.60
Gravel - Primary Parking Lots, Access Driveways, Railroad Ballasts		88		92		94		96	**0**	0%	0.80
Gravel - Public Road with Compacted Subgrade Material		98		99		98		98	**0**	0%	0.95
Artificial Turf - No Underdrain System		66		78		85		89	**0**	0%	0.45
Artificial Turf - Underdrain System		88		92		94		96	**0**	0%	0.80
Water Surfaces		100		100		100		99	**0**	0%	1.00
Total	**0**		**0**		**831,996**		**0**		**831,996**	**100%**	**0.60**

Design for Drainage Area 1

Drainage Area ID	1
Is this drainage area controlled?	Yes
Disturbed drainage area (sf)	831,996
RRV Prior to Reductions (cf)	**48,591**
Pervious Area Weighted Rv	0.25
Impervious Area Weighted Rv	0.95
Post-Development Condition Weighted CN	86.06

Required Retention Volume Reductions ($RRV_{Reductions}$)

View Instructions

Preservation/Restoration, & Disconnection $RRV_{reductions}$	Natural or Pervious Area Footprint (sf)	Pervious Tributary Area (sf) ($P_{Tributary\ Area}$)	Impervious Tributary Area (sf) ($I_{Tributary\ Area}$)	Runoff Reduction Credit	Retention Volume Credited (cf) $RRV_{reduction}$
Sheetflow to Natural Area				100%	0
Sheetflow to Pervious Area				50%	0
Downspout Disconnection				25%	0

Tree $RRV_{reductions}$	Number of Trees (Each)	Runoff Reduction Credit (cf/tree)	Retention Volume Credited (cf) $RRV_{reduction}$
Existing Trees (Preserved)		20	0
New Trees	100	10	1,000

Total $RRV_{reductions}$ (cf)	**1,000**
RRV After Reductions (cf)	**47,591**
% Reduction in RRV	**2.1%**

Retention Practices

Select material types and storage layers used for this design:	
Open Storage (Ponding Area)	TRUE
Bioretention Soil	FALSE
Structural Soil	FALSE
Sand	FALSE
Storage Aggregate Media	FALSE
Choker Course	FALSE
Green Roof Drainage Layer	FALSE
Green Roof Growing Media	FALSE
Storage Chamber(s)	FALSE

Hide Blank Rows Show Blank Rows

PT% 85.00%

Retention Facility ID	Practice	Downstream Retention Facility ID	Pervious Drainage Area	Impervious Drainage Area	Approx. Target Retention Volume (cf)	Retention Volume Provided (cf) (V_R)	Bypass RRV (cf)	Open Storage (Ponding)			Total Storage Volume (cf)	Runoff Reduction Factor (%)	Retention Volume Provided (cf)	Maximum Retention Credit
1	Dry Detention Basin, Controlled Release	1	413,820	418,176	**48,592**	**194,700**		29,500	11.0	324,500	324,500	60%	194,700	57,166

Required Retention Volume (cf)	47,591
Retention Volume Achieved (cf)	194,700

☑ *You met the Required Retention Volume.*

Design for Drainage Area 1

Detention Calculations

	2-year storm	10-year storm	25-year storm	50-year storm	100-year storm
Required Rainfall Event (in) - 6 hour Events	2.66	4.04	4.96	5.70	6.47

Post-Development Conditions

Weighted CN	86.06
S	1.62
Ia	0.08

	2-year storm	10-year storm	25-year storm	50-year storm	100-year storm
Pre-Development Runoff Volume (in)	0.14	0.75	1.31	1.81	2.38
Post Development Runoff Volume (in) with no Retention	1.58	2.81	3.66	4.36	5.10
Post-Development Runoff Volume (in) with Retention	0.00	0.00	0.00	0.00	0.42
Retention Adjusted CN	0.0	0.0	0.0	0.0	36.1
Additional Detention Required?	**No**	**No**	**No**	**No**	**No**

Design Storm	Required Release Rate (cfs/acre)	Allowable Site Release (cfs)	Peak Outflow (cfs)	Max Ponding Depth (ft)	Achieved Release Rate (cfs/acre)	
2-Year, NOAA Atlas14 Median, First Quartile	0.20	3.82	2.15	5.13	0.11	***Required release rate met.***
10-Year, NOAA Atlas14 Median, First Quartile	0.60	11.46	4.29	6.97	0.22	***Required release rate met.***
100-Year, NOAA Atlas14 Median, First Quartile	3.00	57.30	14.09	7.93	0.74	***Required release rate met.***

Verification of Required Retention Volume (RRV)

Total Site Summary	**Total Disturbed Area (sf):**	831,996	
	Total Site Rv:	0.60	
	Total RRV Prior to Reductions (cf)	48,591	
	Total RRV Reductions (cf)	1,000	
	Total RRV After Reductions (cf)	47,591	
	Total Retention Volume Achieved (cf)	194,700	☑ *Total Required Retention Volume achiev*
	Percent WQv Control Achieved	342.3%	☑ *Required percent site control achieved!*

General Requirements

Project Information

Project Name:	Commercial store
Date:	April 8,2026
Address:	NW Commerce Dr
Nearest Intersection:	NE Tudor Rd and NW Commerce Dr
Project Type:	Site Development - New Development
System Type:	Separate Storm Sewer System
Proposed Land Use:	Commercial
Input Value Basis:	Actual measured values based on improvement plans

Site Parameters

Total Disturbed Area of Site	2.45	acres
Total Proposed Impervious Area	80,042	square feet
Effective FEMA floodplain?	Yes	*(Select Yes/No)*

Describe Known Stormwater Issues (if any):

Stormwater Management Requirements/Variance

Project required to meet stormwater management criteria?	Yes	
Request for Variance?	No	*(Select Yes/No)*

Why? Explain:

Landscape Professional Verification of Compliance with Design Criteria

Preservation/Restoration

Requirements Met?						Design Criteria
FALSE	Yes	FALSE	No	TRUE	N/A	Stream setbacks meet requirements of Section 5604 and placed within a separate dedicated tract of land restricted from future development?
TRUE	Yes	FALSE	No			Project incorporates preservation or restoration of Natural Areas?
TRUE	Yes	FALSE	No	FALSE	N/A	Natural Area meets requirements of Section 5604?
FALSE	Yes	FALSE	No	TRUE	N/A	Natural Area placed within a separate dedicated tract of land restricted from future development?
FALSE	Yes	FALSE	No	FALSE	N/A	Project incorporates the following Sustainable Stormwater Management Practices and RRV reductions meeting requirements of Section 5602 and 5604 (select all that apply):
FALSE	Yes	FALSE	No	TRUE	N/A	Sheetflow to Natural Areas
FALSE	Yes	FALSE	No	TRUE	N/A	Sheetflow to Natural Areas
FALSE	Yes	FALSE	No	TRUE	N/A	Downspout Disconnection (not applicable for residential developments)
TRUE	Yes	FALSE	No	FALSE	N/A	Preservation of Existing Trees or Planting New Trees?

Total RRV Reductions: 150 (cf)

I hereby certify, as a Landscape Professional, that the information in the Preservation/Restoration section of this form was assembled under my direct personal charge and is in compliance with the Stormwater Management Criteria.

Professional Name	License Number	State

Professional Engineer Verification of Compliance with Design Criteria

Retention

Requirements Met?						Design Criteria	Retention Volume (cf)	
TRUE	Yes	FALSE	No	FALSE	N/A	Required Retention Volume met per Section 5602?		
FALSE	Yes	FALSE	No	FALSE	N/A	Easement(s) provided?	***Required***	***Designed***
						RRV (prior to RRV Reductions)	8,026	15,480
						RRV (with RRV Reductions)	7,876	

Detention

Requirements Met?						Design Criteria	Release Rates (cfs)	
FALSE	Yes	FALSE	No	TRUE	N/A	Easement(s) provided?	***Maximum Allowable***	***Designed***
TRUE	Yes	FALSE	No	FALSE	N/A	2-year peak outflow control achieved?	0.49	0.361
TRUE	Yes	FALSE	No	FALSE	N/A	10-year peak outflow control achieved?	1.47	0.801
TRUE	Yes	FALSE	No	FALSE	N/A	100-year peak outflow control achieved?	7.35	4.752

Collection

Requirements Met?						Design Criteria
TRUE	Yes	FALSE	No	FALSE	N/A	Inlet placement and gutter spread per requirements of Section 5607?

Conveyance

Requirements Met?						Design Criteria
FALSE	Yes	FALSE	No	TRUE	N/A	Easement(s) provided?
TRUE	Yes	FALSE	No	FALSE	N/A	Enclosed pipe systems per requirements of 5608.2?
FALSE	Yes	FALSE	No	TRUE	N/A	Minor drainage systems per requirements of 5608.3 A?
TRUE	Yes	FALSE	No	FALSE	N/A	Designated overflow routes for 100-year design storm per requirements of Section 5608.3 B?
FALSE	Yes	FALSE	No	TRUE	N/A	Channel stabilization per requirements of 5608.4?
TRUE	Yes	FALSE	No	FALSE	N/A	Road crossings per requirements of 5608.5?

I hereby certify, as a Professional Engineer, that the information in the Retention, Detention, Collection, and Conveyance sections of this form were assembled under my direct personal charge and is in compliance with the Stormwater Management Criteria.

Professional Name	License Number	State

Required Maps	
TRUE	**Watershed Location Map.** Describes the project's location within the greater watershed depicting:
1.	Watershed boundary and area (acres)
2.	Delineated drainage area tributary to the project site (acres)
3.	Natural overland drainage paths to, through and downstream of the project site to the downstream destination of runoff (whether open channel or enclosed system)
4.	Water bodies & regulatory floodplain (lakes, rivers, streams, creeks, wetlands, etc.)
5.	Existing stormwater retention/detention facility location(s) in upstream or downstream watershed affecting stormwater management at project site (if applicable)
TRUE	**Existing Site Conditions Map.** Demonstrates existing conditions of the site depicting:
1.	Existing contours
2.	Aerial imagery
3.	Water bodies & regulatory floodplain (lakes, rivers, streams, creeks, wetlands, etc.)
4.	Natural overland drainage paths and discharge points from the site
5.	Existing utilities, including existing stormwater infrastructure
6.	Parcel boundaries
7.	Existing impervious surfaces and types (i.e. building, parking lot, gravel, etc.)
8.	Key statistics including total disturbed area, total impervious area, and lot size (if applicable)
TRUE	**Proposed Site Conditions Map.** Demonstrates proposed conditions of the site depicting:
1.	Proposed contours including finished floor elevation (FFE) and lowest opening elevation (LOE) information
2.	Existing and proposed utilities, including existing stormwater infrastructure overland drainage paths
3.	Designated overflow routes and discharge points from the site
4.	Proposed drainage areas labeled with IDs and acreages correlating to the stormwater management calculator inputs, including uncontrolled drainage area
5.	Parcel boundaries depicting required utility easements, stream setbacks identifying key features and statistics (top of bank or bank-full extents, centerline, Zone 1, and Zone 2, and dimensional offset), and Natural Areas with key statistics (total footprint, minimum length and width).
6.	Impervious surfaces and types (i.e. building, parking lot, gravel, etc.)
7.	Stormwater improvements including Natural Areas of preservation or restoration, preserved trees, new trees, retention practices, detention practices, collection and conveyance practices with labels correlating to the stormwater management calculator inputs

Site Summary

Project and Development Type:	Site Development - New Development
System Type:	Separate Storm Sewer System
Proposed Land Use:	Commercial
Input Value Basis:	Actual measured values based on improvement plans
Assumed Percent Impervious Coverage:	NA
Total Disturbed Area (sf):	106,722

Treatment Summary Table

Water Quality Storm Event (in) (P_{WQ})	1.37
Percent of Water Quality Storm to be Retained (PT%)	85%
Total Controlled Disturbed Area (sf)	106,722
Controlled Area Rv ($Rv_{controlled}$)	0.78
Total Uncontrolled Disturbed Area (sf)	0
Total Required Retention Volume (cf) (RRV)	8,026
Uncontrolled Retention Volume (cf)	0
Adjusted PT% within Controlled Drainage Areas	NA

☑ ***Uncontrolled area is within the limit to achieve the total site retention requirements.***

Drainage Areas Worksheet

View Instructions

How many total drainage areas are included on the site? 1

Drainage Area Summary Table		
Unique Drainage Area Identifier (ID)	**Can this drainage area be feasibly controlled?**	**Disturbed Drainage Area (sf)**
1	Yes	106,722

Select post-development cover types within the disturbed area:	
Natural Area	FALSE
Pervious Area	TRUE
Impervious Area	TRUE
Solar Farm - Native	FALSE
Solar Farm - Gravel	FALSE
Gravel - Overflow Parking Lots, Trails/Maintenance Paths, Substations	FALSE
Gravel - Primary Parking Lots, Access Driveways, Railroad Ballasts	FALSE
Gravel - Public Road with Compacted Subgrade Material	FALSE
Artificial Turf - No Underdrain System	FALSE
Artificial Turf - Underdrain System	FALSE
Water Surfaces	FALSE

Generate Detailed Drainage Area Tables

Filter Cover Types

Generate Design Sheets

Site Summary

Summary Table for Drainage Area ID:	1
Is this drainage area controlled?	Yes
Disturbed drainage area (sf)	106,722
RRV Prior to Reductions (cf)	**8,026**
Pervious Area Weighted Rv	0.25
Impervious Area Weighted Rv	0.95
Post-Development Condition Weighted CN	93.50

Cover Type Area Table for Drainage Area 1	Area (sf)										
Cover Type	Soil Type A	CN	Soil Type B	CN	Soil Type C	CN	Soil Type D	CN	**Total**	**% Cover**	Rv
Natural Area		30		55		70		77	**0**	0%	0.00
Pervious Area		39		61		74	26,681	80	**26,681**	25%	0.25
Impervious Area		98		98	9,605	98	70,437	98	**80,042**	75%	0.95
Solar Farm - Native		62		76		84		88	**0**	0%	0.40
Solar Farm - Gravel		75		84		89		92	**0**	0%	0.60
Gravel - Overflow Parking Lots, Trails/Maintenance Paths, Substations		75		84		89		92	**0**	0%	0.60
Gravel - Primary Parking Lots, Access Driveways, Railroad Ballasts		88		92		94		96	**0**	0%	0.80
Gravel - Public Road with Compacted Subgrade Material		98		99		98		98	**0**	0%	0.95
Artificial Turf - No Underdrain System		66		78		85		89	**0**	0%	0.45
Artificial Turf - Underdrain System		88		92		94		96	**0**	0%	0.80
Water Surfaces		100		100		100		99	**0**	0%	1.00
Total	**0**		**0**		**9,605**		**97,117**		**106,722**	**100%**	**0.78**

Design for Drainage Area 1

Drainage Area ID	1
Is this drainage area controlled?	Yes
Disturbed drainage area (sf)	106,722
RRV Prior to Reductions (cf)	**8,026**
Pervious Area Weighted Rv	0.25
Impervious Area Weighted Rv	0.95
Post-Development Condition Weighted CN	93.50

Required Retention Volume Reductions ($RRV_{Reductions}$)

View Instructions

Preservation/Restoration, & Disconnection $RRV_{reductions}$	Natural or Pervious Area Footprint (sf)	Pervious Tributary Area (sf) ($P_{Tributary\ Area}$)	Impervious Tributary Area (sf) ($I_{Tributary\ Area}$)	Runoff Reduction Credit	Retention Volume Credited (cf) $RRV_{reduction}$
Sheetflow to Natural Area				100%	0
Sheetflow to Pervious Area				50%	0
Downspout Disconnection				25%	0

Tree $RRV_{reductions}$	Number of Trees (Each)	Runoff Reduction Credit (cf/tree)	Retention Volume Credited (cf) $RRV_{reduction}$
Existing Trees (Preserved)		20	0
New Trees	15	10	150

Total $RRV_{reductions}$ (cf)	**150**
RRV After Reductions (cf)	**7,876**
% Reduction in RRV	**1.9%**

Retention Practices

Select material types and storage layers used for this design:	
Open Storage (Ponding Area)	TRUE
Bioretention Soil	FALSE
Structural Soil	FALSE
Sand	FALSE
Storage Aggregate Media	FALSE
Choker Course	FALSE
Green Roof Drainage Layer	FALSE
Green Roof Growing Media	FALSE
Storage Chamber(s)	FALSE

Hide Blank Rows Show Blank Rows

PT% 85.00%

Retention Facility ID	Practice	Downstream Retention Facility ID	Pervious Drainage Area	Impervious Drainage Area	Approx. Target Retention Volume (cf)	Retention Volume Provided (cf) (V_R)	Bypass RRV (cf)	Open Storage (Ponding)			Total Storage Volume (cf)	Runoff Reduction Factor (%)	Retention Volume Provided (cf)	Maximum Retention Credit
1	Dry Detention Basin, Controlled Release	1	26,681	80,042	**8,027**	**15,480**		4,300	6.0	25,800	25,800	60%	15,480	9,443

Required Retention Volume (cf)	7,876
Retention Volume Achieved (cf)	15,480

☑ *You met the Required Retention Volume.*

Design for Drainage Area 1

Detention Calculations

	2-year storm	10-year storm	25-year storm	50-year storm	100-year storm
Required Rainfall Event (in) - 6 hour Events	2.66	4.04	4.96	5.70	6.47

Post-Development Conditions

Weighted CN	93.50
S	0.70
Ia	0.03

	2-year storm	10-year storm	25-year storm	50-year storm	100-year storm
Pre-Development Runoff Volume (in)	0.14	0.75	1.31	1.81	2.38
Post Development Runoff Volume (in) with no Retention	2.08	3.41	4.32	5.05	5.81
Post-Development Runoff Volume (in) with Retention	0.00	0.51	1.42	2.15	2.91
Retention Adjusted CN	0.0	54.2	62.0	65.1	67.1
Additional Detention Required?	**No**	**No**	**No**	**No**	**No**

Design Storm	Required Release Rate (cfs/acre)	Allowable Site Release (cfs)	Peak Outflow (cfs)	Max Ponding Depth (ft)	Achieved Release Rate (cfs/acre)	
2-Year, NOAA Atlas14 Median, First Quartile	0.20	0.49	0.361	4.06	0.15	***Required release rate met.***
10-Year, NOAA Atlas14 Median, First Quartile	0.60	1.47	0.801	5.1	0.33	***Required release rate met.***
100-Year, NOAA Atlas14 Median, First Quartile	3.00	7.35	4.752	5.63	1.94	***Required release rate met.***

Verification of Required Retention Volume (RRV)

Total Site Summary	**Total Disturbed Area (sf):**	106,722	
	Total Site Rv:	0.78	
	Total RRV Prior to Reductions (cf)	8,026	
	Total RRV Reductions (cf)	150	
	Total RRV After Reductions (cf)	7,876	
	Total Retention Volume Achieved (cf)	15,480	☑ *Total Required Retention Volume achiev*
	Percent WQv Control Achieved	165.5%	☑ *Required percent site control achieved!*

ROUSE FRETS WHITE GOSS
GENTILE RHODES, P.C.

Patricia R. Jensen
pjensen@rousepc.com
816.502.4723

May 21, 2026

Dan Fernandez, Project Manager
City of Lee's Summit, Missouri
Development Services
220 S.E. Green Street
Lee's Summit, MO 64063

Re: Application Number: PL2026035
Commercial Rezoning with Preliminary Development Plan/Dillon's and Additional Parcels

Dear Dan :

We represent The Phillips Edison Company concerning the above referenced application. In discussions with staff concerning the application, we are requesting the following modifications/clarifications from the Unified Development Code (this letter is in addition the requested modifications already filed):

Modification Request #1 – Landscape Buffer Requirement

UDO Reference: UDO **Sec. 8.890 and Sec. 8.900 – Buffering Requirements**

Standard:

High-impact buffering is required along property lines adjacent to RP-4 and AG zoning districts.

Request

Approval of a modification from the high-impact buffering requirements of UDO Sec. 8.890 and Sec. 8.900 along the southern property line adjacent to the AG-zoned property.

Justification

Compliance with Residential Buffering Requirements:

The proposed development complies with the required buffering standards along the north property line adjacent to the RP-4 residential zoning district, where buffering serves its primary purpose of providing separation between commercial and residential land uses.

Existing Land Use Context:

Although the property to the south is zoned AG (Agricultural), it does not function as an active agricultural or residential use. Rather, the parcel contains an existing underground utility facility and associated utility infrastructure. As such, the adjoining property functions more similarly to utility land than to a traditional agricultural use that would typically warrant high-impact buffering.

Limited Functional Benefit of Required Buffering:

Because the adjacent AG-zoned property is not actively used for agricultural or residential purposes, strict application of the high-impact buffering requirement along this property line would provide limited practical benefit in terms of screening or land use compatibility.

Visibility from the Arterial Roadway:

Installation of the required high-impact buffer along the southern property line would hinder visibility of the proposed development, including the fuel station, from the adjacent arterial roadway. Given the orientation of the site, this area is visible to motorists traveling along the corridor, and the required buffer would unnecessarily limit visibility of the development to passing traffic without providing a commensurate buffering benefit to the adjoining property.

Consistency with Ordinance Intent:

The intent of the buffering standards is to mitigate potential visual and operational impacts between incompatible land uses. Given the existing utility character of the adjacent southern parcel, the proposed development does not create the type of adjacency conflict that the high-impact buffer requirement is intended to address.

Landscaping and Site Design:

The proposed landscape plan continues to incorporate perimeter landscaping, street trees, and parking lot landscaping consistent with the overall landscape standards of the UDO. These elements will provide visual softening of the site while maintaining appropriate site design flexibility and roadway visibility. The site will also have up to a 12-foot depression from existing grades along the property boundary near NE Douglas Street, providing topographic screening in addition to the perimeter landscaping.

Minimum Relief Statement:

The requested modification represents the minimum relief necessary to accommodate reasonable site design while maintaining the overall intent of the UDO buffering standards.

Modification Request #2 – Light Pole Height

UDO Reference: UDO **Sec. 8.250.D.1 – Lighting Height Limitations**

Standard:

All light fixtures on properties within or adjoining residential uses and/or districts shall not exceed 15 feet in height within the perimeter area measured 100 feet from the property line. Outside the perimeter area, the height may increase to 20 feet.

Request

Approval of a modification from the lighting height requirements of UDO Sec. 8.250.D.1 to allow pole heights up to 28 feet, as shown on the photometric plan.

Justification

Operational Lighting Requirements:

Reducing pole heights to the ordinance limit would require a substantially greater number of light poles to achieve the illumination levels necessary for safe vehicle and pedestrian circulation throughout the site. The proposed pole heights allow the site to be lit more efficiently while avoiding unnecessary pole proliferation.

Site Topography:

The proposed site is situated at a lower elevation relative to many of the adjacent residential properties. Finished floor elevations for nearby residences range from 1012.33 to 1041.96, with an average finished floor elevation of 1023.38, while the average grade within the proposed parking area is 1016.5. As a result, the adjacent residential properties are approximately 6.9 feet higher than the proposed parking area, which reduces the apparent height of the proposed light fixtures as viewed from those properties.

Lighting Design and Spill Control:

The photometric plan is designed to direct light downward and provide adequate site illumination while minimizing spillover and glare onto adjacent properties. The use of taller fixtures also allows broader and more uniform light distribution, reducing the need for a larger number of poles near adjoining property lines.

Minimum Relief Statement: The requested modification represents the minimum relief necessary to achieve safe and functional site lighting while minimizing impacts to surrounding properties.

Modification Request #3 – Elevation Materials, Articulation, and Glazing Requirements

UDO Reference

- UDO Sec. 8.080.B and Sec. 15.315.H (Primary Facade Material Requirements)
- UDO Sec. 8.080.B and Sec. 8.050.B.3.a (Wall Articulation)
- UDO Sec. 8.050.B.4.i and Sec. 15.315.G (Commercial Building Fenestration)

Standard

The UDO requires three (3) different Class 1 or Class 2 materials on primary facades, wall articulation at least once every 60 linear feet, and a minimum of 50% clear glass within the designated pedestrian view zone. We believe that our plan meets these requirements. If not, we request the following modifications.

Request

Approval of a comprehensive modification to:

- Allow the two (2) chosen premium variations of Class 1 and Class 2 masonry materials on the rear facade in lieu of three distinct materials.
- Approve the wall articulation for both the front (east) and rear (west) elevations based on the overall architectural scale of the facility rather than strict 60-foot intervals.
- Reduce the required pedestrian view zone glazing on the rear (west) elevation to 0% based on the structural and back-of-house interior use of the building and accept the 31% on the front (east) elevation.

Justification

Class 1 and 2 Materials on the West (Rear) Elevation:

The submitted elevations for the west elevation, which is the rear of the grocery store, utilize two (2) different types of Class 1 and 2 materials, both of which are high-quality ground face CMU products. Per the provided elevations, these two premium masonry materials make up 92% of the rear elevation. Another 6% of the elevation materials are comprised of Class 3 materials consisting of the wainscot and wainscot cap that wrap all four (4) sides of the building, seamlessly connecting the rear to the rest of the building. The remaining 2% of the elevation consists of functional hollow metal doors and metal trim. In total, 92% of the rear of the building consists of Class 1 and Class 2 materials, matching the overall upscale design and color palette established by the front entry elevation of the building and preventing unnecessary visual disruptions.

Wall Articulation Frequency and Building Scale:

The articulation of the east (front) elevation is established working left to right with substantial architectural elements that effectively break down the massive scale of the grocery store:

- Left Side: Begins with a structural pilaster and popout that steps a full 12” out horizontally from the main facade and extends 32” vertically above the main roof line.

- Center-Left Transition: Continuing to the right, the roof line steps up 16” above the main roof line along with a material change located 55’-6” from the terminal pilaster. This roof line change runs for 103’-2” before hitting the primary entry element.

- Primary Entry Element: The main entry element horizontally bumps out a substantial 22’-9 ¾” from the main wall of the building. To emphasize this pedestrian gateway, it utilizes two different parapet heights that are 5’-8” and 10’-4” above the main roof line.

- Right Side: The right side of the entry follows the same roof line step as the left, and the remainder of the elevation tracks the main building roof line, transitioning smoothly into the adjacent retail building.

As for the west (rear) elevation, a structural pilaster and popout anchor the left corner at the entry to the truck dock area. The horizontal plane of the wall is intentionally maintained straight down the truck dock for safety and truck movement purposes. However, to break up the massing along this safety-critical wall, the design introduces alternating roof heights running the length of the rear elevation, shifting between the main 24’ building height and vertical popups that step up 8” along the rear at roughly 38’ intervals. At the truck delivery doors, the building introduces a substantial 40’ horizontal plane change, and the pattern continues to the left side of the rear elevation, ending in another popout to match the one on the left side.

Pedestrian View Zone Glazing Constraints:

The front (east) elevation concentrates the building's fenestration where it directly interacts with the public at the entry and exit area of the building along with the checkout area inside the building, with an overall glazing percentage of 11% on the front elevation and with the glazing percentage inside the primary pedestrian view zone at 31%. The remainder of the walls that do not have glazing are for restrooms, the customer service area, the pharmacy storage area, coolers, and freezers.

Conversely, the rear elevation does not contain any glazing because this area on the interior is entirely dedicated to back-of-house operations, including heavy inventory storage, the delivery staging area, employee restrooms, electrical equipment rooms, and the main fire riser. Therefore, glazing is not possible on the rear of the building.

Minimum Relief Statement

The requested modifications represents the minimum relief necessary to accommodate reasonable modifications to the prototypical Dillons elevation and accommodating the interior functions of the grocery store while maintaining the overall intent of the UDO standards.

Revised Plans:

In addition, the revised plans that will be submitted in accordance with our discussions with staff, address the remaining comments on the Applicant Letter dated May 15, 2026. With these submittals, it is our understanding that we will proceed with the Planning Commission meeting on June 11, 2026 and the City Council on July 7, 2026.

If you need anything else, please contact me.

Very truly yours,

Patricia R. Jensen

PRJ/kab

cc: Greg Clough (via e-mail gclough@PHILLIPSEDISON.com)
Tim Goyette (via e-mail tgoyette@phillipsedison.com)
Kassi Foote (via e-mail khamner@PHILLIPSEDISON.com)
Marvin Brown (via e-mail mbrown@pickeringfirm.com)
Michael Rokas (via e-mail michael.rokas@kroger.com)
Marc Breetz (via e-mail MarcB@naosdg.com)
Tom Widmeyer (via e-mail tom.widmeyer@kroger.com)
Jill Giles (via e-mail jill.giles@kroger.com)
Rachelle Biondo (via e-mail rbiondo@rousepc.com)

ROUSE FRETS WHITE GOSS
GENTILE RHODES, P.C.

Memorandum

TO: Dan Fernandez

FROM: Patricia Jensen

DATE: 3/6/2026

RE: Dillons - PL2026035

This Memo will summarize the neighborhood meeting relating to the above-referenced case held on March 5, 2026 at the Missouri Innovations Campus, 1101 NW Innovations Parkway beginning at 6:00 p.m.

Tim Goyette, Marvin Brown and Patricia Jensen attended the meeting on behalf of the Applicant. A list of attendees is attached hereto.

The applicant's team presented a PowerPoint presentation to the group. The presentation is attached hereto.

Questions/concerns were raised regarding street improvements and access. The applicant's team responded to those items.

DILLONS / LEE'S SUMMIT
NEIGHBORHOOD MEETING
March 5, 2026

SIGN-IN SHEET	
NAME	**CONTACT INFORMATION**
Albert & Jean Seese	816-524-3737 820 NW Main Street, Lee's Summit, MO 64086
Jim & Linda Tucker	918-527-1537 Owasso, OK
Scott Knoche	816-524-7040 800 NW Main Street, Lee's Summit, MO 64081
Terry & Laah Tucker	785-885-8075 104 Woodrock Lane, Rogers, AR 72756
Beatrice Finkemeier	
Dave Meyer	dave@davemeyerllc.com
Hope Wright	
Bill Baird	

Dillons

East of NW Main Street, South of NE Tudor Road and West of NE Douglas Street

Neighborhood Engagement Meeting

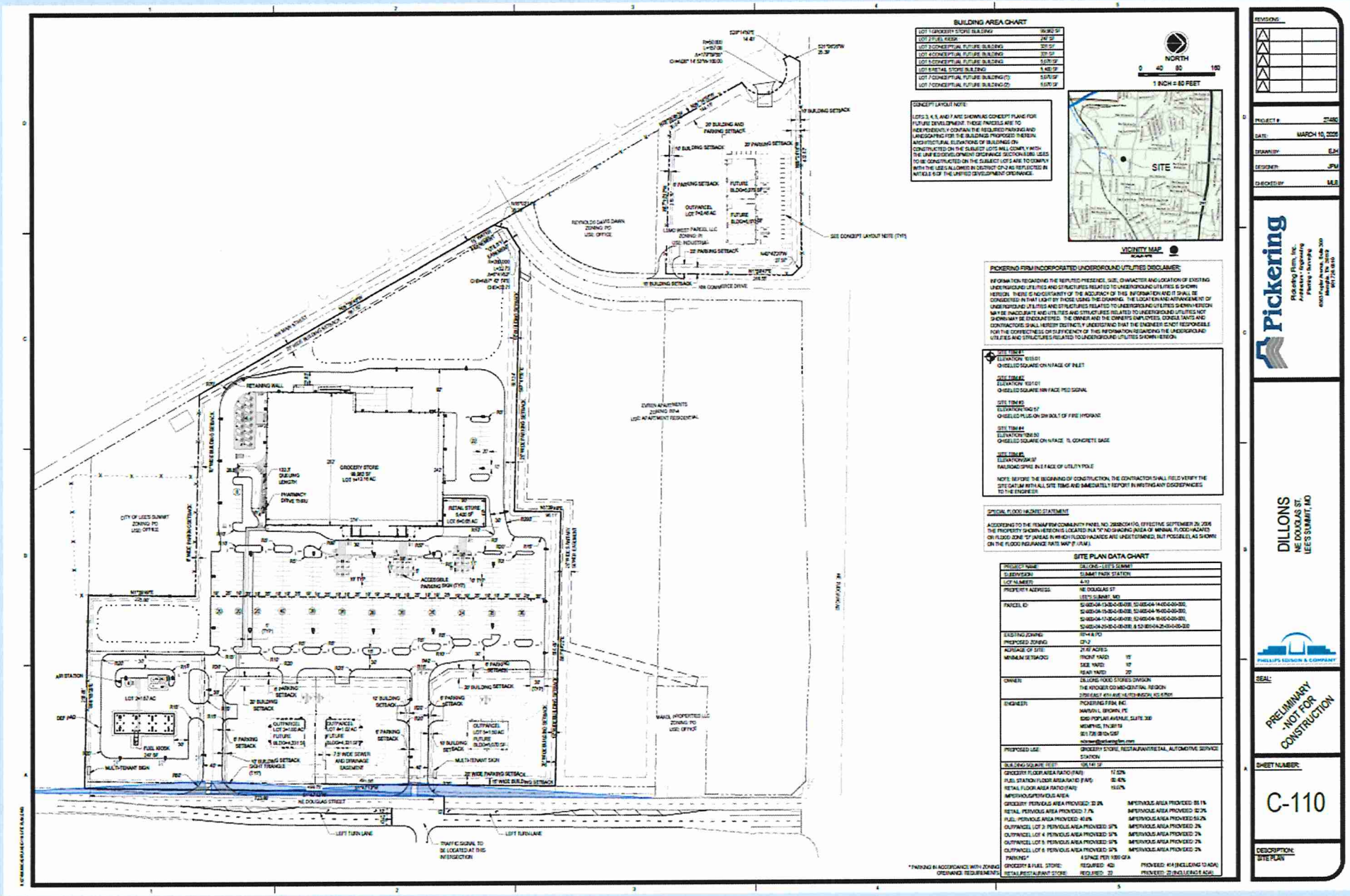
March 5, 2026

#4898-4252-2771

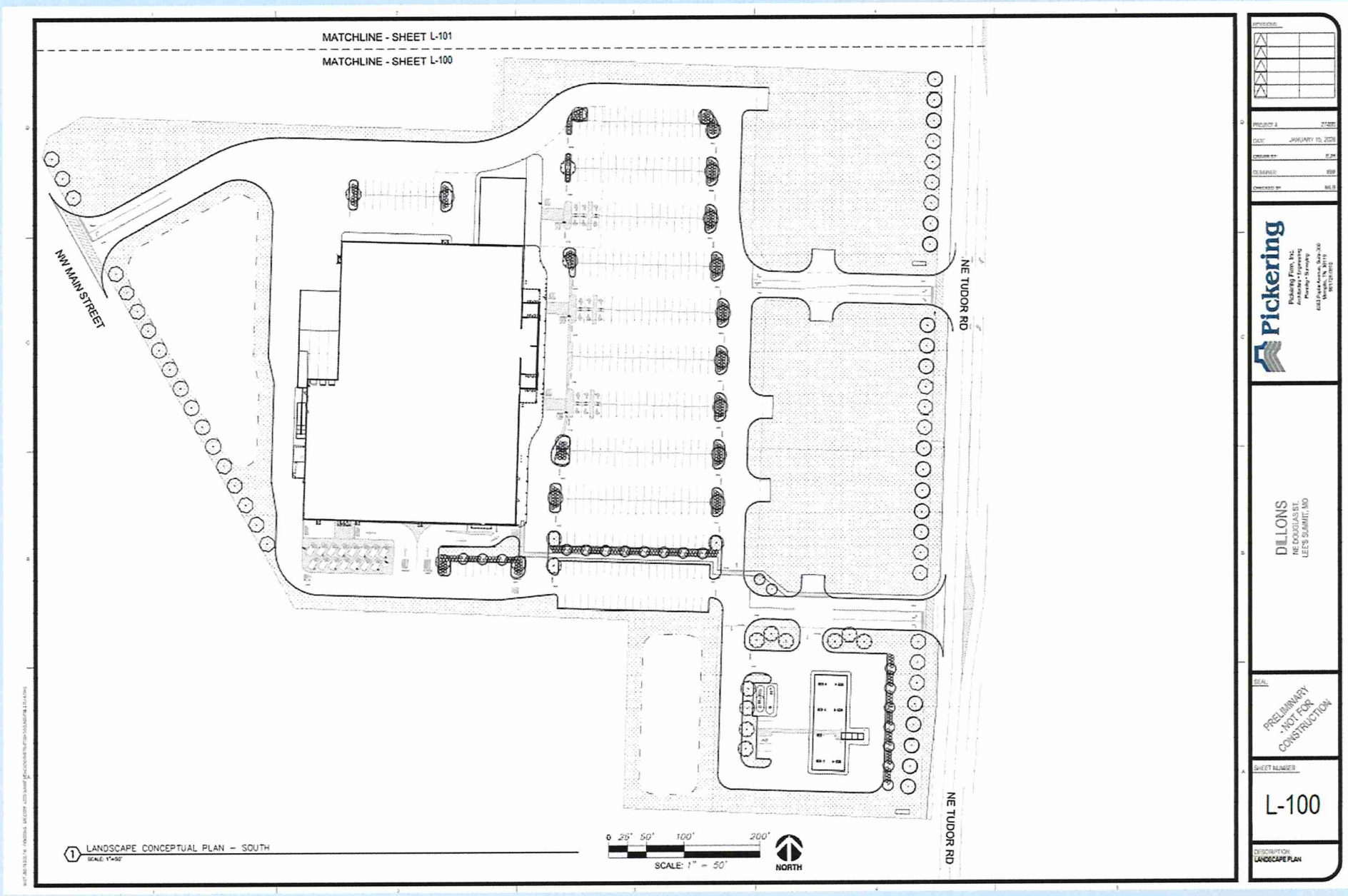
Request

Application for approval of a Rezoning and Preliminary Development Plan from Districts PI, PO and RP-4 to District CP-2 to allow for the development of the property as a Dillons Grocery Store (100,494 s.f.) with gas pumps; and additional Retail Store (5,400 s.f.) and four outlots for future development.

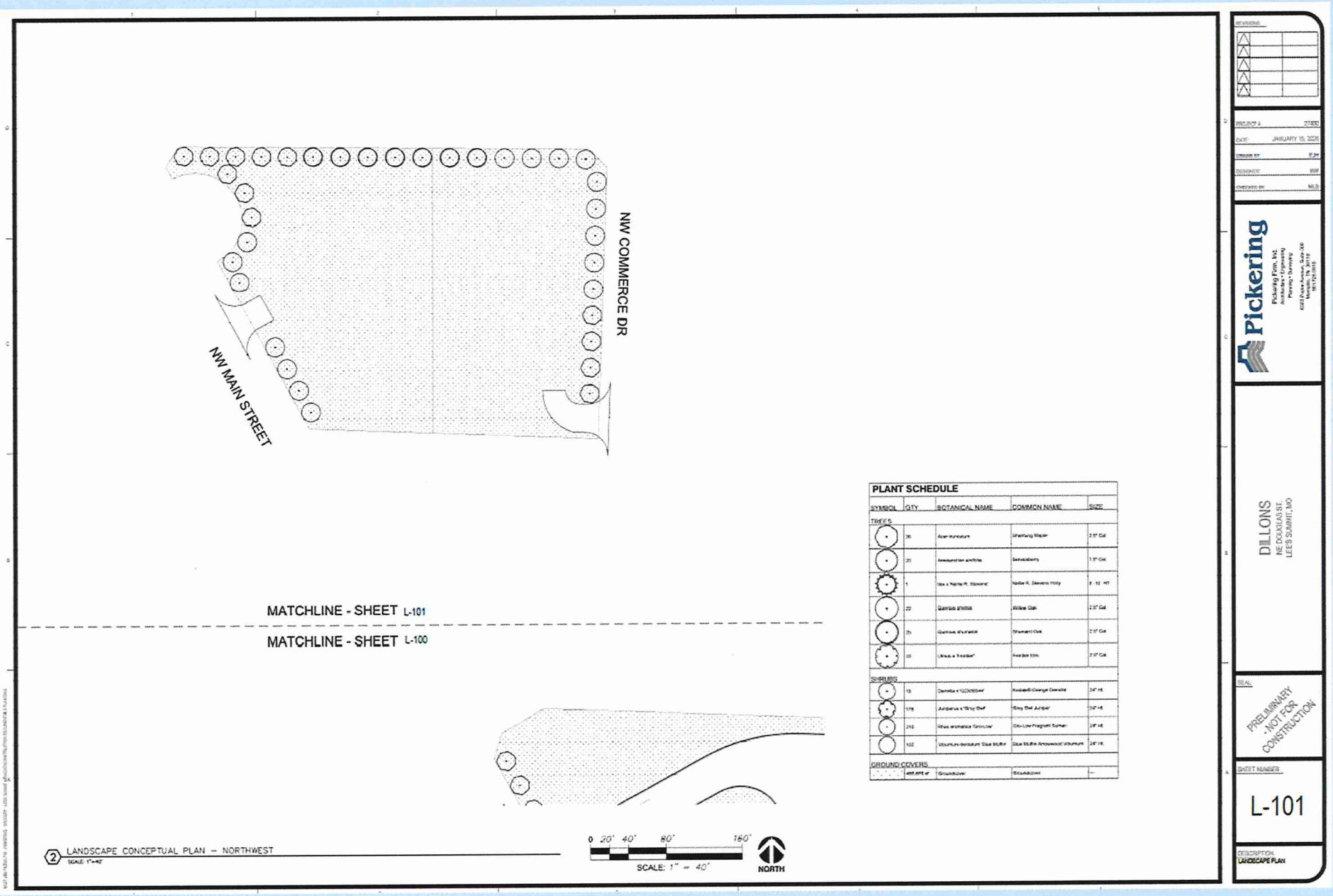
Site Plan


BUILDING AREA CHART
NORTH
1 INCH = 60 FEET
SITE
VICINITY MAP
PICKERING FIRM INCORPORATED UNDERGROUND UTILITIES DISCLAIMER:
SITE PLAN DATA CHART
GROCERY STORE
RETAIL STORE
PHARMACY DRIVE THRU
NE DOUGLAS STREET
LEFT TURN LANE
TRAFFIC SIGNAL TO BE LOCATED AT THIS INTERSECTION
Pickering
DILLONS
NE DOUGLAS ST.
LEE'S SUMMIT, MO
PRELIMINARY -NOT FOR CONSTRUCTION
C-110
SITE PLAN

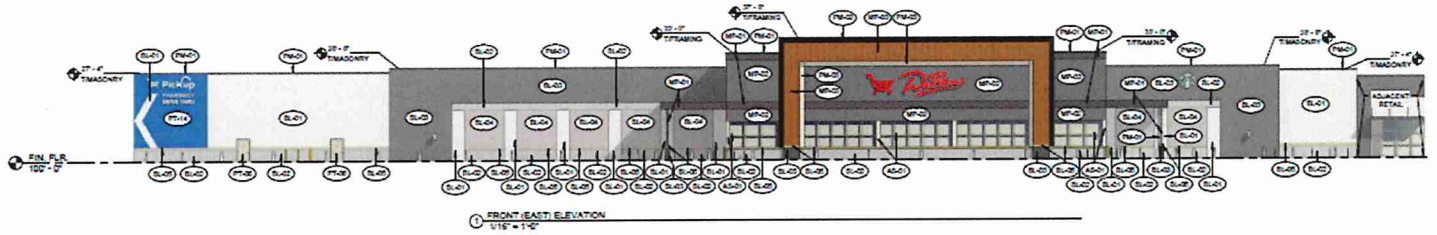
Landscape Plan filed 2/4/26



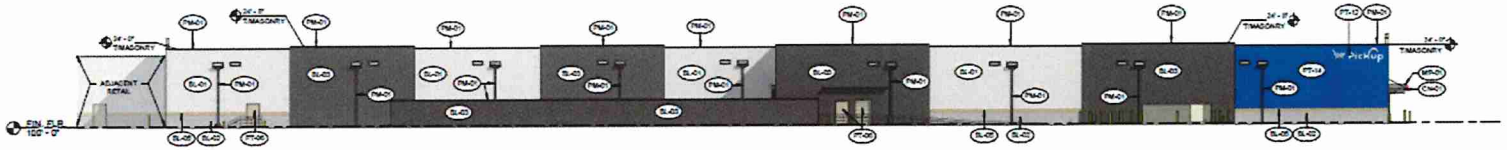
Landscape Plan filed 2/4/26



Elevations filed 2/4/26



1 FRONT (EAST) ELEVATION
1/16" = 1'-0"

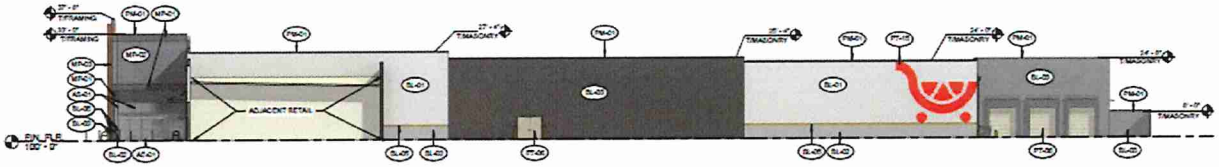


2 BACK (WEST) ELEVATION
1/16" = 1'-0"

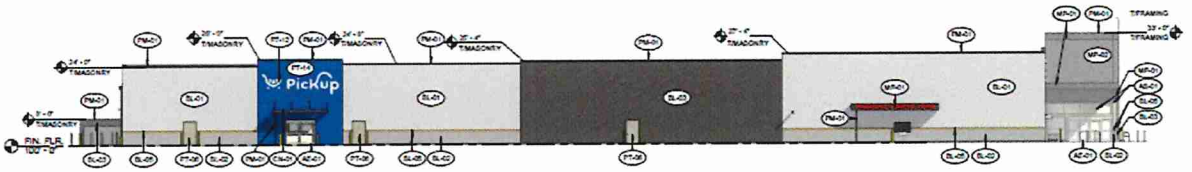
SIGNAGE SHOWN FOR REFERENCE ONLY. OWNER'S SIGN CONTRACTOR TO INSTALL NEW SIGNAGE. ALL SIGNS ARE UNDER SEPARATE PERMIT TO BE PULLED BY OWNER'S SIGNAGE CONTRACTOR.

EXTERIOR FINISHES

MATERIAL	DESCRIPTION	MANUFACTURER	FINISH
AE-01	PREFINISHED ALUMINUM STOREFRONT DOOR	STANLEY	CLEAR ANODIZED
AS-01	PREFINISHED ALUMINUM STOREFRONT		CLEAR ANODIZED
BL-01	DECORATIVE, INTEGRALLY COLORED CMU - SMOOTH FACE PRECISION	BASALITE	TONNY
BL-02	DECORATIVE, INTEGRALLY COLORED CMU - SPLIT FACE	BASALITE	NONVR
BL-03	DECORATIVE, INTEGRALLY COLORED CMU - SMOOTH FACE PRECISION	BASALITE	NOTHVR
BL-04	DECORATIVE, INTEGRALLY COLORED CMU - SMOOTH FACE PRECISION	BASALITE	NONVR
BL-05	DECORATIVE, INTEGRALLY COLORED CMU - DOMED FACE PRECISION	BASALITE	NONVR
CM-01	PREMANUFACTURED CANOPY	ARCHITECTURAL FABRICATIONS INC.	SLATE GRAY
MP-01	METAL PANEL - SMOOTH	ATAS INT	SLATE GRAY
MP-02	METAL PANEL - CORRUGATED	ATAS INT	SILVERSMITH
MP-03	METAL WALL PANEL, WOOD GRAIN FINISH	LONGBOARD	LIGHT CHERRY
PM-01	PREFINISHED METAL		SLATE GRAY
PM-02	PREFINISHED METAL		MATTE BLACK
PM-03	PREFINISHED METAL		WHITE
PT-06	PAINTED METAL	SHERWIN WILLIAMS	MINDFUL GRAY SW7016
PT-07	PAINTED METAL	SHERWIN WILLIAMS	GAUNTLET GRAY SW7019
PT-08	PAINT	SHERWIN WILLIAMS	DRAGON SAFETY YELLOW
PT-12	PAINT	SHERWIN WILLIAMS	WHITE
PT-14	PAINT	SHERWIN WILLIAMS	H-ROGER BLUE PMS 2738C
PT-15	PAINT	SHERWIN WILLIAMS	DILLONS RED
SD-01	VINYL SOFFIT PANEL	CERTAINTEED	GRANITE GRAY



3 RIGHT (NORTH) ELEVATION
1/16" = 1'-0"



4 LEFT (SOUTH) ELEVATION
1/16" = 1'-0"

naos
Naos Design Group, LLC
4949 S. SYRACUSE STREET
SUITE 460
DENVER, COLORADO 80237
(p) 303.759.5777 (f) 720.360.4281
www.naosdg.com

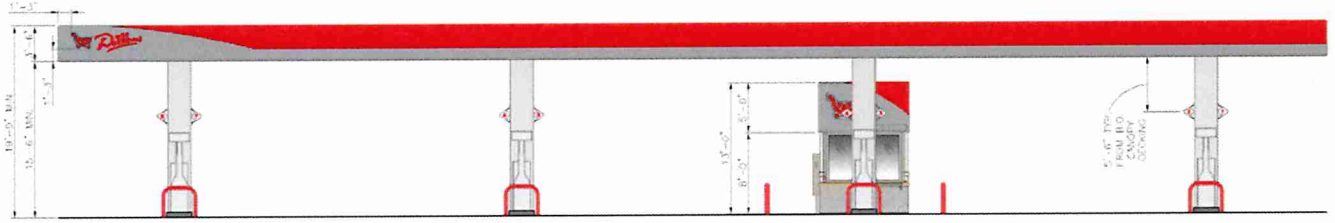
DILLON'S #152

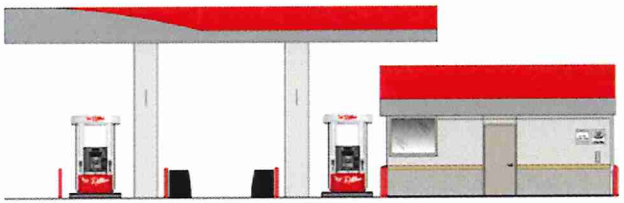
NE DOUGLAS ST
LEE'S SUMMIT, MO

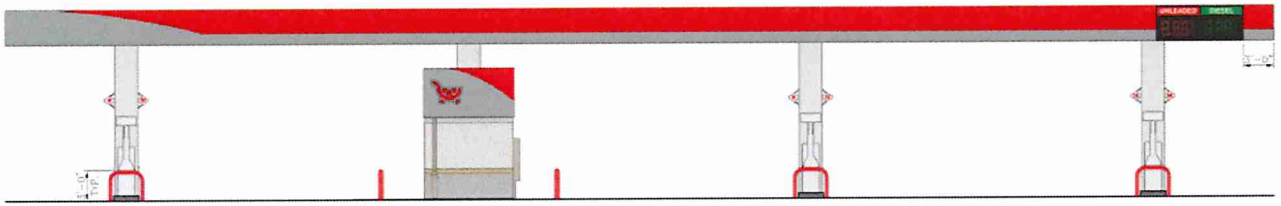
JOB #: 2026002 DATE: 01/15/2026
SCALE: 1/16" = 1'-0"

COPYRIGHT © 2026 NAOS DESIGN GROUP, LLC.
THESE DRAWINGS OR PARTS THEREOF ARE NOT TO BE REPRODUCED IN ANY FORM, BY ANY METHOD, FOR ANY PURPOSE, WITHOUT PRIOR WRITTEN CONSENT FROM NAOS.

Elevations filed 2/4/26







Naos Design Group, LLC
4949 S. SYRACUSE STREET
SUITE 460
DENVER, COLORADO 80237
(p) 303.759.5777 (f) 720.360.4281
www.naosdg.com

DILLON'S #152

NE DOUGLAS ST
LEE'S SUMMIT, MO

JOB #: 2026002 DATE: 01/15/2026
SCALE:

COPYRIGHT © 2026 NAOS DESIGN GROUP, LLC
THESE DRAWINGS, OR ANY PART THEREOF, MAY NOT BE REPRODUCED IN ANY FORM, BY ANY METHOD, FOR ANY PURPOSE, WITHOUT PRIOR WRITTEN CONSENT FROM NAOS

Request

Application for approval of a Rezoning and Preliminary Development Plan from Districts PI, PO and RP-4 to District CP-2 to allow for the development of the property as a Dillons Grocery Store (100,494 s.f.) with gas pumps; and additional Retail Store (5,400 s.f.) and four outlots for future development.

City Plan Commission Meeting: April 9, 2026

Sec. 2.260. Criteria for considering rezoning, Preliminary Development Plan, and Conceptual Plan Applications.

A. Such regulations shall be made in accordance with a comprehensive plan and designed to lessen congestion in the streets; to secure safety from fire, panic and other dangers; to promote health and the general welfare; to provide adequate light and air; to prevent the overcrowding of land; to avoid undue concentration of population; to preserve features of historical significance; to facilitate the adequate provision of transportation, water, sewerage, schools, parks, and other public requirements. Such regulations shall be made with reasonable consideration, among other things, to the character of the district and its peculiar suitability for particular uses, and with a view to conserving the values of buildings and encouraging the most appropriate use of land throughout such municipality.

B. Criteria for considering rezoning applications. In considering any application for rezoning, the Commission and the Governing Body may give consideration to the criteria stated below, to the extent they are pertinent to the particular application. The Commission and Governing Body may also consider other factors that may be relevant to a particular application.

1. The character of the neighborhood.
2. The existing and any proposed zoning and uses of adjacent properties, and the extent to which the proposed use is compatible with the adjacent zoning and uses.
3. The extent to which the proposed use facilitates the adequate provision of transportation, water, sewerage, schools, parks and other public requirements.
4. The suitability of the property for the uses to which it has been restricted under the applicable zoning district regulations.
5. The length of time, if any, the property has remained vacant as zoned.
6. The extent to which the proposed use will negatively affect the aesthetics of the property and neighboring property.
7. The extent to which the proposed use will seriously injure the appropriate use of, or detrimentally affect, neighboring property.
8. The extent to which the proposed use will adversely affect the capacity or safety of the portions of the street network impacted by the use, or present parking problems in the vicinity of the property.
9. The extent to which the proposed use will create excessive storm water runoff, air pollution, water pollution, noise pollution or other environmental harm.
10. The extent to which the proposed use will negatively affect the values of the property or neighboring properties.
11. The extent to which there is a need for the use in the community.
12. The economic impact of the proposed use on the community.
13. The ability of the applicant to satisfy any requirements applicable to the specific use imposed pursuant to this chapter.
14. The extent to which public facilities and services are available and adequate to meet the demand for facilities and services generated by the proposed use.
15. The gain, if any, to the public health, safety and welfare due to approval of the application as compared to the hardship imposed upon the landowner, if any, as a result of denial of the application.

16. The conformance of the proposed use to the Comprehensive Plan, the Major Street Plan, the Capital Improvements Plan, and other adopted planning policies.

17. The recommendation of professional staff.

18. The consistency of the proposed use with the permitted uses and the uses subject to conditions in the district in which the proposed rezoning or special use is located.

C. Criteria for considering preliminary development plan applications. The Commission and Governing Body shall use the applicable zoning district regulations as a guide for review of the preliminary development plan. If the Commission and/or Governing Body imposes conditions or restrictions on a preliminary development plan, it may designate specific requirements that must be met before an applicant may submit a final development plan application. The Governing Body, in establishing conditions of approval, may require the applicant to execute a "development agreement" that is acceptable to both the applicant and the City. Such "development agreement" shall become part and parcel to the ordinance approving the rezoning of the property for which the development plan represents. In considering any preliminary development plan application, the Commission and the Governing Body may give consideration to the criteria stated in Subsection A. above and may also consider the following criteria:

1. Development is designed, located and proposed to be operated so that the public health, safety and welfare will be protected;

2. Development will not impede the normal and orderly development and improvement of the surrounding property; and

3. Development incorporates adequate ingress and egress and an internal street network that minimizes traffic congestion.

D. Criteria for preliminary development plan applications for non-residential uses allowed by right in residential districts. In considering any preliminary development plan application that proposes non-residential uses in residential districts, the Commission and the Governing Body may give consideration to the criteria stated in Subsection A. above and may also consider the following:

1. The capability of the site to accommodate the building, parking and drives with appropriate open space and safe and easy ingress and egress.

2. The degree of harmony between the architectural quality of the proposed building and the surrounding neighborhood.

3. The appropriateness of the minimum dimensions and areas of lots and yards contained in the applicable zoning district regulations may be considered and increased.

E. Criteria for considering conceptual development plan applications. The Commission and Governing Body shall review the conceptual development plan pursuant to Subsection A. above. If a rezoning of the property is requested, the conceptual development plan shall be considered simultaneously with the rezoning of the property. Approval of a conceptual development plan shall become part of the ordinance that amends the zoning ordinance. Approval of the conceptual development plan does not constitute approval of a preliminary development plan for any phase shown on the conceptual development plan. By approving the conceptual development plan, the Governing Body is preserving to itself full legislative discretion to review a preliminary development plan for each phase shown on the conceptual development plan, or for the entire property, as may be applicable, including review and consideration of all criteria governing preliminary development plans as set forth in this chapter.

Appl. #PL2026-035 - REZONING & PRELIMINARY DEVELOPMENT PLAN - SW of the NE Tudor Rd. & NE Douglas St. intersection; Philips Edison & Company, applicant

N

0 95 190 380 570 760

Feet

Packet Information

File #: TMP-3707, **Version:** 1

An ordinance approving a Rezoning from Districts PI (Planned Industrial), RP-4 (Planned Apartment Residential), and PO (Planned Office) to CP-2 (Planned Community Commercial) and Preliminary Development Plan for Dillon's on approximately 15.71 acres of land located near the southwest corner of NE Tudor Road and NE Douglas Street, all in accordance with the provisions of Chapter 33, the Unified Development Ordinance, of the Code of Ordinances for the City of Lee's Summit, Missouri.

Proposed City Council Motion:
I move for a second reading of an ordinance approving a Rezoning from Districts PI (Planned Industrial), RP-4 (Planned Apartment Residential), and PO (Planned Office) to CP-2 (Planned Community Commercial) and Preliminary Development Plan for Dillon's on approximately 15.71 acres of land located near the southwest corner of NE Tudor Road and NE Douglas Street, all in accordance with the provisions of Chapter 33, the Unified Development Ordinance, of the Code of Ordinances for the City of Lee's Summit, Missouri.

Adair Bright, AICP, Senior Planner

BILL NO.

AN ORDINANCE APPROVING A REZONING FROM DISTRICTS PI (PLANNED INDUSTRIAL), RP-4 (PLANNED APARTMENT RESIDENTIAL), AND PO (PLANNED OFFICE) TO DISTRICT CP-2 (PLANNED COMMUNITY COMMERCIAL) AND PRELIMINARY DEVELOPMENT PLAN FOR DILLON'S ON APPROXIMATELY 15.71 ACRES OF LAND LOCATED NEAR THE SOUTHWEST CORNER OF NE TUDOR ROAD AND NE DOUGLAS STREET, ALL IN ACCORDANCE WITH THE PROVISIONS OF CHAPTER 33, THE UNIFIED DEVELOPMENT ORDINANCE, OF THE CODE OF ORDINANCES FOR THE CITY OF LEE'S SUMMIT, MISSOURI.

WHEREAS, Application #PL2026-035 submitted by Philips Edison & Company requesting approval of a rezoning from PI (Planned Industrial), RP-4 (Planned Apartment Residential), and PO (Planned Office) to CP-2 (Planned Community Commercial) and preliminary development plan on land located near the southwest corner of NE Tudor Road and NE Douglas Street was referred to the Planning Commission to hold a public hearing; and

WHEREAS, the Unified Development Ordinance provides for the approval of a rezoning and preliminary development plan by the City following public hearings by the Planning Commission and City Council; and

WHEREAS, after due public notice in the manner prescribed by law, the Planning Commission held a public hearing for the consideration of the rezoning and preliminary development plan on June 11, 2026, and rendered a report to the City Council recommending that the rezoning and preliminary development plan be approved; and

WHEREAS, after due public notice in the manner prescribed by law, the City Council held a public hearing on July 7, 2026, and rendered a decision to approve the rezoning and preliminary development plan for said property.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF LEE'S SUMMIT, MISSOURI, as follows:

SECTION 1. That a rezoning and preliminary development plan is hereby approved on the following described property:

REZONING FROM PI, RP-4, and PO TO CP-2

The north 2 acres of the south ½ of Lot 4, Summit Park, a subdivision of land in Lee's Summit, Jackson County, Missouri, according to the recorded plat thereof.
And;
The north ½ of Lot 4, except the north 3 acres thereof, in Summit Park, a subdivision in Lee's Summit, Jackson County, Missouri, according to the recorded plat thereof.

All of Lots 5, 6, and 8, and Lot 7 except the south 225 feet thereof in Summit Park, a subdivision in Lee's Summit, Jackson County, Missouri, and subject to easements, rights of way of record and except that part in road.

Lot 9, and the south 1.373 acres of Lot 10, Summit Park, a subdivision in Lee's Summit, Jackson County, Missouri, according to the recorded plat thereof.

The south 3 acres of the south ½ of Lot 4, Summit Park, a subdivision in Lee's Summit, Jackson County, Missouri, more specifically described as being all of the south 210.6 feet of Lot 4, Summit Park.

That part of the following lying south of NE Tudor Road:
The north 25.5 acres of the northeast ¼ of the southwest ¼ lying east of Missouri Pacific Railroad right-of-way in Section 31, Township 48, Range 31, in the City of Lee's Summit, Jackson County Missouri, except a tract described as follows:
All that portion of the north 25.5 acres of the northeast ¼ of the southwest ¼ lying east of the Missouri Pacific Railroad right-of-way in Section 31, Township 48, Range 31 described as follows:
Beginning at the northeast corner of the northeast ¼ of the southwest ¼ of Section 31, Township 48, Range 31, in Lee's Summit, Jackson County, Missouri; thence south along the east line of said ¼ ¼ section, a distance of 914.5 feet; thence west parallel to the north line of said ¼ ¼ section, 411.0 feet to the true point of beginning of the tract herein described, said true point of beginning being in the westerly line of public road; thence north 31 degrees 00 minutes west along and with the westerly line of public road, a distance of 267.0 feet to a point 688.79 feet south of the north line of said northeast ¼ of southwest ¼ section; thence west parallel to said north line of ¼ ¼ section, 73.4 feet to a point in the easterly line of Missouri Pacific Railroad right-of-way; thence southeasterly with said railroad right-of-way, along a curve to the right (having a radius of 3175.4 feet), a distance of 234.0 feet to a point 914.5 feet south of the north line of said northeast ¼ of southwest ¼ section; thence east along the south line of 25.5 acres tract, 812.7 feet to the true point of beginning, and except that part in streets and roads.

AND

PRELIMINARY DEVELOPMENT PLAN
A Tract of land being part of Lots 4, 5, 6, 7, 8, 9, and 10 Summit Park, a subdivision recorded June 23, 1914, as instrument number 1914I0096399 in Book 6, Page 38, lying and situated in the South half of Section 31, Township 38 North, Range 31 West of the Fifth Principal Meridian, in the City of Lee's Summit, Jackson County, Missouri, said Tract being more particularly described as follows:
Commencing at the southwest corner of Lot 6, Summit Park, monumented by a 5/8" reinforcing rod; thence north 01° 39' 49" east, 225.0 feet, on the west line of said Lot 6, to the point of beginning of the tract herein described; thence north 87° 44' 22" west, 427.4 feet, departing said west line, to a point on the easterly right-of-way line of Main Street as now established, described by Roadway Plan Set from Walter P Moore & Associated, In., for City Project Number 714, dated September 24, 2021; thence north 28° 56' 49" west, 716.68 feet, on said easterly right-of-way line, to its intersection with the southeasterly right-of-way line of Commerce Drive as established by right-of-way deed, recorded as Instrument number 2018E0020780, dated March 14, 2018; thence north 16° 03' 11" east, 28.28 feet, on said southeasterly right-of-way line; thence north 61° 03' 11" east, 18.63 feet, continuing on said southeasterly right-of-way line to the beginning of a non-tangent curve to the left; thence northeasterly continuing on said southeasterly right-of-way line and on said curve to the left, having a radius of 280.0 feet and an arc length of 32.73 feet, to its intersection with the south line of Lot 1, Evren Apartments, a subdivision recorded September 5, 2025, and filed as Instrument number 2025E0035852, in Book I225, Page

85; thence south 87° 41’ 50” east, 557.34 feet, on the south line of said Lot 1; thence north 01° 39’ 49” east, 98.11 feet, continuing on said south line; thence south 87° 44’ 22” east, 364.47 feet, continuing on said south line; thence south 01° 47’ 13” west, 225.65 feet; thence south 88° 12’ 47” east, 89.76 feet; thence south 01° 47’ 13” west, 34.94 feet; thence south 88° 12’ 47” east, 125.85 feet, to its intersection with the west right-of-way line of Douglas Street as established by Conveyance of Right-of-Way, recorded in Book 555, Page 20, dated October 26, 1929; thence south 01° 47’ 13” west, 232.85 feet on said west right-of-way line, to the north line of Lot 5; thence south 01° 47’ 13” west, 274.71 feet, parallel with and 15 feet west of said west right-of-way line; thence north 87° 44’ 22” west. 393.62 feet, to the point of beginning of the tract herein described, said Tract containing 684,383 square feet or 15. 7113 acres more or less.

SECTION 2. That the following conditions of approval apply:

1. The development shall occur in accordance with the Preliminary Development Plan with a revision date of May 26, 2026.
2. A modification shall be granted to UDO Sec. 8.050.B.4.i.i allow for the following relief to the fenestration within the pedestrian view zone requirement:
    a. The western façade shall be exempt from the requirement.
    b. The eastern façade shall contain no less than 31% of clear glass within the pedestrian view zone.
3. A modification shall be granted to UDO Sec. 8.080.B to allow for building articulations as submitted in the Preliminary Development Plan with a revision date of May 26, 2026.
4. A modification shall be granted to UDO Sec. 8.250.D.1 to allow for the light poles to be 28’ tall from grade inclusive of the concrete base.
5. A modification shall be granted to UDO Sec. 8.900.A to allow the proposed grade in lieu of installing a masonry wall, vinyl fence, or berm along the southwestern portion of the property adjacent to the AG zoning along with required landscaping.
6. The western façade shall comply with all applicable requirements of Section 8.080.B. Specifically, the façade shall incorporate no fewer than three (3) different Class 1 or Class 2 building materials, with those materials collectively comprising at least fifty percent (50%) of the primary façade area.
7. Road improvements shall be constructed as stated in the Transportation Impact Analysis conducted by staff dated May 26, 2026.

SECTION 3. That rezoning of the property from PI, RP-4, and PO to CP-2 shall be as depicted on the rezoning exhibit appended hereto as Attachment A. Development shall be in accordance with the preliminary development plan set revision dated May 26, 2026, appended hereto as Attachment B, subject to approval conditions as stated in Section 2.

SECTION 4. Nonseverability. All provisions of this ordinance are so essentially and inseparably connected with, and so dependent upon, each other that no such provision would be enacted without all others. If a court of competent jurisdiction enters a final judgment on the merits that is not subject to appeal and that declares any provision or part of this ordinance void, unconstitutional, or unenforceable, then this ordinance, in its collective entirety, is invalid and shall have no legal effect as of the date of such judgment.

SECTION 5. That failure to comply with all of the provisions contained in this ordinance shall constitute violations of both this ordinance and Chapter 33, the City's Unified Development Ordinance, of the Code of Ordinances for the City of Lee's Summit.

SECTION 6. That this ordinance shall be in full force and effect from and after the date of its passage and adoption, and approval by the Mayor.

PASSED by the City Council of the City of Lee's Summit, Missouri, this ___day of _____, 2026.

_____
Mayor J. Beto Lopez

ATTEST:

_____
City Clerk *Trisha Fowler Arcuri*

APPROVED by the Mayor of said city this _____ day of _____, 2026.

_____
Mayor J. Beto Lopez

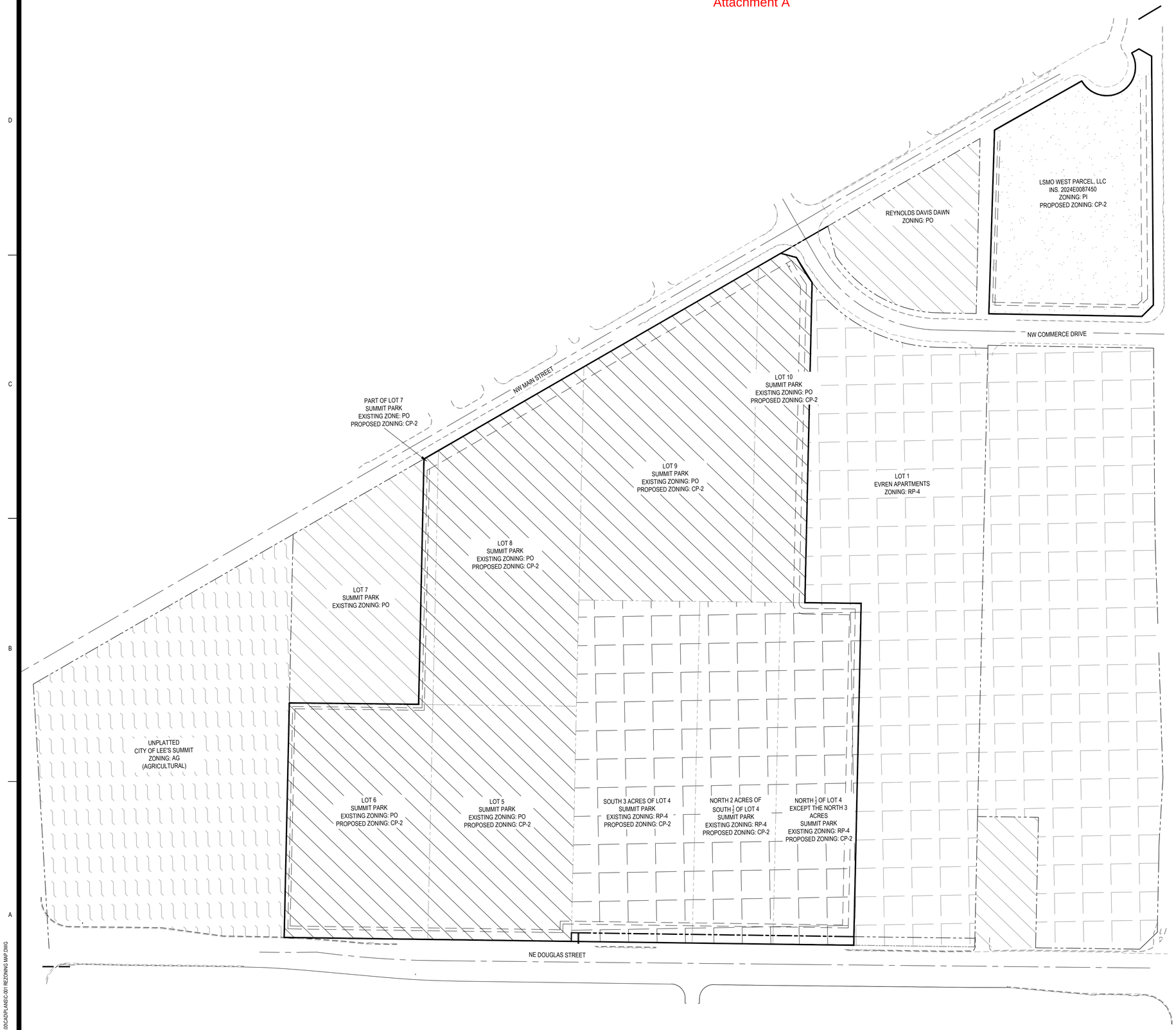
ATTEST:

_____
City Clerk *Trisha Fowler Arcuri*

APPROVED AS TO FORM:

_____
City Attorney *Brian Head*

Attachment A



NORTH

0 40 80 160

1 INCH = 80 FEET

VICINITY MAP

SCALE: NTS

EXISTING ZONE LEGEND	
	PI (PLANNED INDUSTRIAL)
	PO (PLANNED OFFICE)
	RP-4 (PLANNED APARTMENT RESIDENTIAL)
	AG (AGRICULTURAL)

TITLE COMMITMENT DESCRIPTIONS:

COMMITMENT NUMBER: KCC252116
THE NORTH TWO ACRES OF THE SOUTH ½ OF LOT 4, SUMMIT PARK, A SUBDIVISION OF LAND IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, ACCORDING TO THE RECORDED PLAT THEREOF.
AND;
THE NORTH ½ OF LOT 4, EXCEPT THE NORTH 3 ACRES THEREOF, IN SUMMIT PARK, A SUBDIVISION IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, ACCORDING TO THE RECORDED PLAT THEREOF.

COMMITMENT NUMBER: KCC252117
ALL OF LOTS 5, 6, 8, AND LOT 7 EXCEPT THE SOUTH 225 FEET THEREOF IN SUMMIT PARK, A SUBDIVISION IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, AND SUBJECT TO EASEMENTS, RIGHTS OF WAY OF RECORD, AND EXCEPT THAT PART IN ROADS.

COMMITMENT NUMBER: KCC252118
LOT 9, AND THE SOUTH 1.373 ACRES OF 10, SUMMIT PARK, A SUBDIVISION IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, ACCORDING TO THE RECORDED PLAT THEREOF.

COMMITMENT NUMBER: KCC252119
THE SOUTH 3 ACRES OF THE SOUTH HALF OF LOT 4, SUMMIT PARK, A SUBDIVISION IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, MORE SPECIFICALLY DESCRIBED AS BEING ALL OF THE SOUTH 210.6 FEET OF LOT 4, SUMMIT PARK.

COMMITMENT NUMBER: KCC252463
THAT PART OF THE FOLLOWING LYING SOUTH OF NE TUDOR ROAD:
THE NORTH 25.5 ACRES OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4 LYING EAST OF MISSOURI PACIFIC RAILROAD RIGHT-OF-WAY IN SECTION 31, TOWNSHIP 48, RANGE 31, IN THE CITY OF LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, EXCEPT A TRACT DESCRIBED AS FOLLOWS:
ALL THAT PORTION OF THE NORTH 25.5 ACRES OF THE NORTHEAST 1/4 OF SOUTHWEST 1/4, LYING EAST OF MISSOURI-PACIFIC RAILROAD RIGHT OF WAY IN SECTION 31, TOWNSHIP 48, RANGE 31 DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHEAST CORNER OF THE NORTHEAST 1/4 OF SOUTHWEST 1/4 OF SECTION 31, TOWNSHIP 48, RANGE 31, IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI; THENCE SOUTH ALONG THE EAST LINE OF SAID ¼ 1/4 SECTION, A DISTANCE OF 914.5 FEET; THENCE WEST PARALLEL TO THE NORTH LINE OF SAID 1/4 1/4 SECTION, 411.0 FEET TO THE TRUE POINT OF BEGINNING OF THE TRACT HEREIN DESCRIBED, SAID TRUE POINT OF BEGINNING BEING IN THE WESTERLY LINE OF PUBLIC ROAD; THENCE NORTH 31 DEGREES 00 MINUTES WEST ALONG AND WITH THE WESTERLY LINE OF PUBLIC ROAD, A DISTANCE OF 267.0 FEET TO A POINT 688.79 FEET SOUTH OF THE NORTH LINE OF SAID NORTHEAST 1/4 OF SOUTHWEST 1/4 SECTION; THENCE WEST PARALLEL TO SAID NORTH LINE OF 1/4 1/4 SECTION, 731.4 FEET TO A POINT IN THE EASTERLY LINE OF MISSOURI-PACIFIC RAILROAD RIGHT OF WAY; THENCE SOUTHEASTERLY WITH SAID RAILROAD RIGHT OF WAY, ALONG A CURVE TO THE RIGHT (HAVING A RADIUS OF 3175.4 FEET), A DISTANCE OF 234.0 FEET TO A POINT 914.5 FEET SOUTH OF THE NORTH LINE OF SAID NORTHEAST 1/4 OF SOUTHWEST 1/4 SECTION: THENCE EAST ALONG THE SOUTH LINE OF 25.5 ACRES TRACT, 812.7 FEET TO THE TRUE POINT OF BEGINNING, AND EXCEPT THAT PART IN STREETS AND ROADS.

REVISIONS:

1		
2		
3		
4		
5		

PROJECT #: 27480
DATE: MAY 26, 2026
DRAWN BY: EJH
DESIGNER: JPM
CHECKED BY: MLB

Pickering
Pickering Firm, Inc.
Architecture • Engineering
Planning • Surveying
6363 Poplar Avenue, Suite 300
Memphis, TN 38119
901.726.0810

DILLONS
NE DOUGLAS ST.
LEE'S SUMMIT, MO

PHILLIPS EDISON & COMPANY

SEAL:

PRELIMINARY - NOT FOR CONSTRUCTION

SHEET NUMBER:

C-001

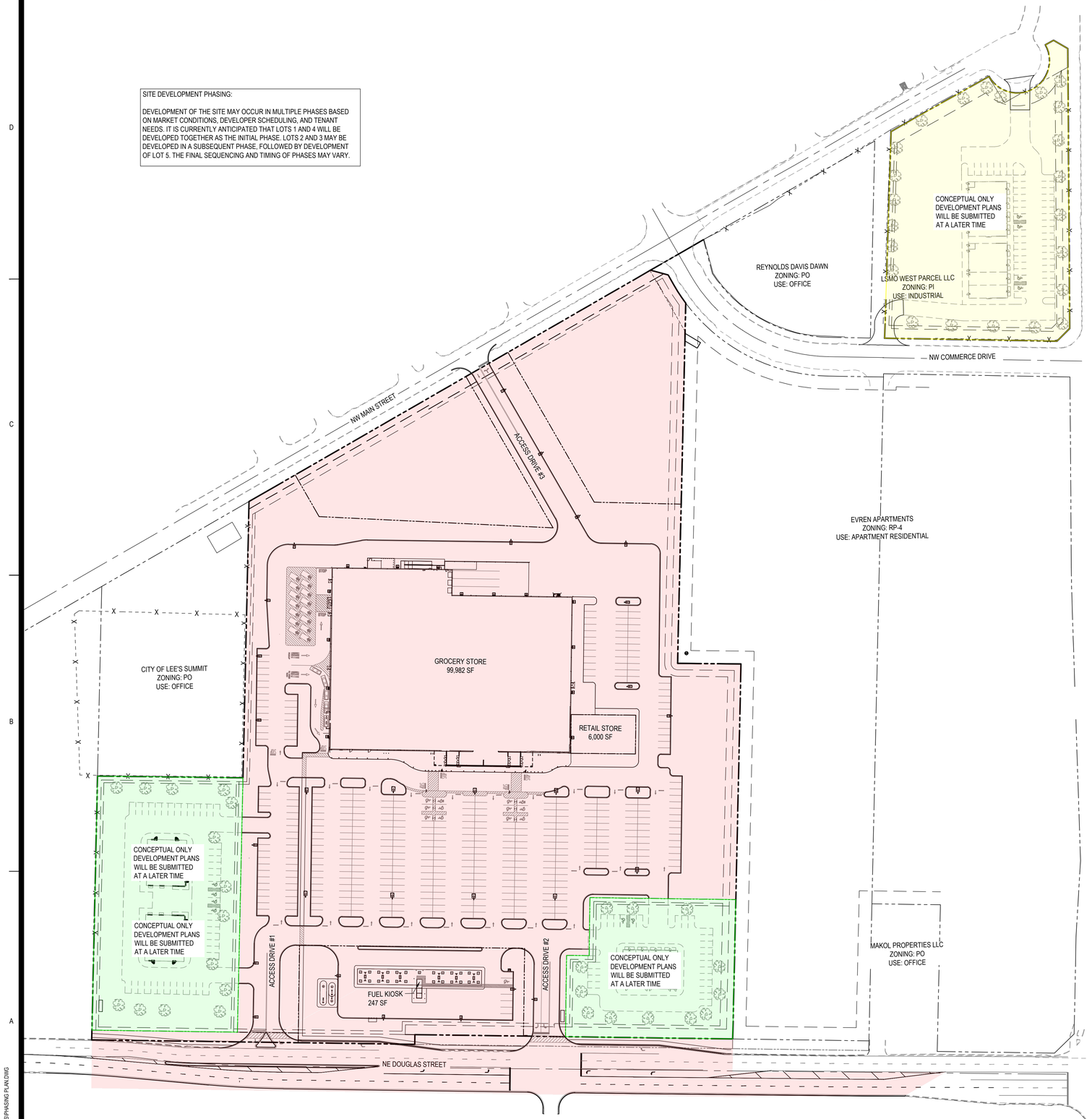
DESCRIPTION:
REZONING MAP

K:\27480.00\CAD\PLANS\C-001 REZONING MAP.DWG

Attachment B

SITE DEVELOPMENT PHASING:

DEVELOPMENT OF THE SITE MAY OCCUR IN MULTIPLE PHASES BASED ON MARKET CONDITIONS, DEVELOPER SCHEDULING, AND TENANT NEEDS. IT IS CURRENTLY ANTICIPATED THAT LOTS 1 AND 4 WILL BE DEVELOPED TOGETHER AS THE INITIAL PHASE. LOTS 2 AND 3 MAY BE DEVELOPED IN A SUBSEQUENT PHASE, FOLLOWED BY DEVELOPMENT OF LOT 5. THE FINAL SEQUENCING AND TIMING OF PHASES MAY VARY.



NORTH

0 40 80 160

1 INCH = 80 FEET

VICINITY MAP

SCALE: NTS

PHASING MAP LEGEND	
	PHASE 1
	PHASE 2
	PHASE 3

LEGAL DESCRIPTION: A TRACT OF LAND BEING PART OF LOTS 4, 5, 6, 7,8, 9 AND 10 SUMMIT PARK, A SUBDIVISION RECORDED JUNE 23RD, 1914 AS INSTRUMENT NUMBER 191410096399 IN BOOK 6, PAGE 38, LYING AND SITUATED IN THE SOUTH HALF OF SECTION 31, TOWNSHIP 38 NORTH, RANGE 31 WEST OF THE FIFTH PRINCIPAL MERIDIAN, IN THE CITY OF LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, SAID TRACT AS SURVEYED BY BRENT E. THOMPSON, PLS - 2006000161, WITH BHC, MO CLS 2006009875-F, BEING MORE PARTICULARLY DESCRIBED ON THIS 14TH DAY OF JANUARY, 2026 BY METES AND BOUNDS AS FOLLOWS:

(NOTE: FOR COURSE ORIENTATION THE BEARINGS IN THIS DESCRIPTION ARE BASED WEST LINE OF LOT 6, SUMMIT PARK HAVING A BEARING OF NORTH 01° 39' 49" EAST, REFERENCED TO THE MISSOURI STATE PLANE COORDINATE SYSTEM, WEST ZONE, NAD83.)

COMMENCING AT THE SOUTHWEST CORNER OF LOT 6, SUMMIT PARK, MONUMENTED BY A 5/8" REINFORCING ROD;

THENCE NORTH 01° 39' 49" EAST, 225.00 FEET, ON THE WEST LINE OF SAID LOT 6, TO THE POINT OF BEGINNING OF THE TRACT HEREIN DESCRIBED;

THENCE NORTH 87° 44' 22" WEST, 427.40 FEET, DEPARTING SAID WEST LINE, TO A POINT ON THE EASTERLY RIGHT-OF-WAY LINE OF MAIN STREET AS NOW ESTABLISHED, DESCRIBED BY ROADWAY PLAN SET FROM WALTER P MOORE & ASSOCIATES, INC. FOR CITY PROJECT NUMBER 714, DATED SEPTEMBER 24, 2021;

THENCE NORTH 28° 56' 49" WEST, 716.68 FEET, ON SAID EASTERLY RIGHT-OF-WAY LINE, TO ITS INTERSECTION WITH THE SOUTHEASTERLY RIGHT-OF-WAY LINE OF COMMERCE DRIVE AS ESTABLISHED BY RIGHT-OF-WAY DEED, RECORDED AS INSTRUMENT NUMBER 2018E0020780, DATED MARCH 14, 2018;

THENCE NORTH 16° 03' 11" EAST, 28.28 FEET, ON SAID SOUTHEASTERLY RIGHT-OF-WAY LINE;

THENCE NORTH 61° 03' 11" EAST, 18.63 FEET, CONTINUING ON SAID SOUTHEASTERLY RIGHT-OF-WAY LINE, TO THE BEGINNING OF A NON-TANGENT CURVE TO THE LEFT;

THENCE NORTHEASTERLY, CONTINUING ON SAID SOUTHEASTERLY RIGHT-OF-WAY LINE AND ON SAID CURVE TO THE LEFT, HAVING A RADIUS OF 280.00 FEET AND AN ARC LENGTH OF 32.73 FEET, WITH A CHORD BEARING OF NORTH 57° 42' 14" EAST AND A CHORD DISTANCE OF 32.71 FEET, TO ITS INTERSECTION WITH THE SOUTH LINE OF LOT 1, EVREN APARTMENTS, A SUBDIVISION RECORDED SEPTEMBER 5TH, 2025 AND FILED AS INSTRUMENT NUMBER 2025E0065852, IN BOOK I225, PAGE 85;

THENCE SOUTH 87° 41' 50" EAST, 557.34 FEET, ON THE SOUTH LINE OF SAID LOT 1;

THENCE NORTH 01° 39' 49" EAST, 98.11 FEET, CONTINUING ON SAID SOUTH LINE;

THENCE SOUTH 87° 44' 22" EAST, 364.47 FEET, CONTINUING ON SAID SOUTH LINE;

THENCE SOUTH 01° 47' 13" WEST, 225.65 FEET;

THENCE SOUTH 88° 12' 47" EAST, 89.76 FEET;

THENCE SOUTH 01° 47' 13" WEST, 34.94 FEET;

THENCE SOUTH 88° 12' 47" EAST, 125.85 FEET, TO ITS INTERSECTION WITH THE WEST RIGHT-OF-WAY LINE OF DOUGLAS STREET AS ESTABLISHED BY CONVEYANCE OF RIGHT-OF-WAY, RECORDED IN BOOK 555, PAGE 20, DATED OCTOBER 26, 1929;

THENCE SOUTH 01° 47' 13" WEST, 232.85 FEET, ON SAID WEST RIGHT-OF-WAY LINE, TO THE NORTH LINE OF LOT 5;

THENCE SOUTH 01° 47' 13" WEST, 274.71 FEET, PARALLEL WITH AND 15 FEET WEST OF SAID WEST RIGHT-OF-WAY LINE;

THENCE NORTH 87° 44' 22" WEST, 393.62 FEET, TO THE POINT OF BEGINNING OF THE TRACT HEREIN DESCRIBED, SAID TRACT CONTAINING 684,383 SQUARE FEET OR 15.7113 ACRES MORE OR LESS.

REVISIONS:

1		
2		
3		
4		
5		

PROJECT #: 27480

DATE: MAY 26, 2026

DRAWN BY: EJH

DESIGNER: JPM

CHECKED BY: MLB

Pickering

Pickering Firm, Inc.
Architecture • Engineering
Planning • Surveying

6363 Poplar Avenue, Suite 300
Memphis, TN 38119
901.726.0810

DILLONS
NE DOUGLAS ST.
LEE'S SUMMIT, MO

PHILLIPS EDISON & COMPANY

SEAL:

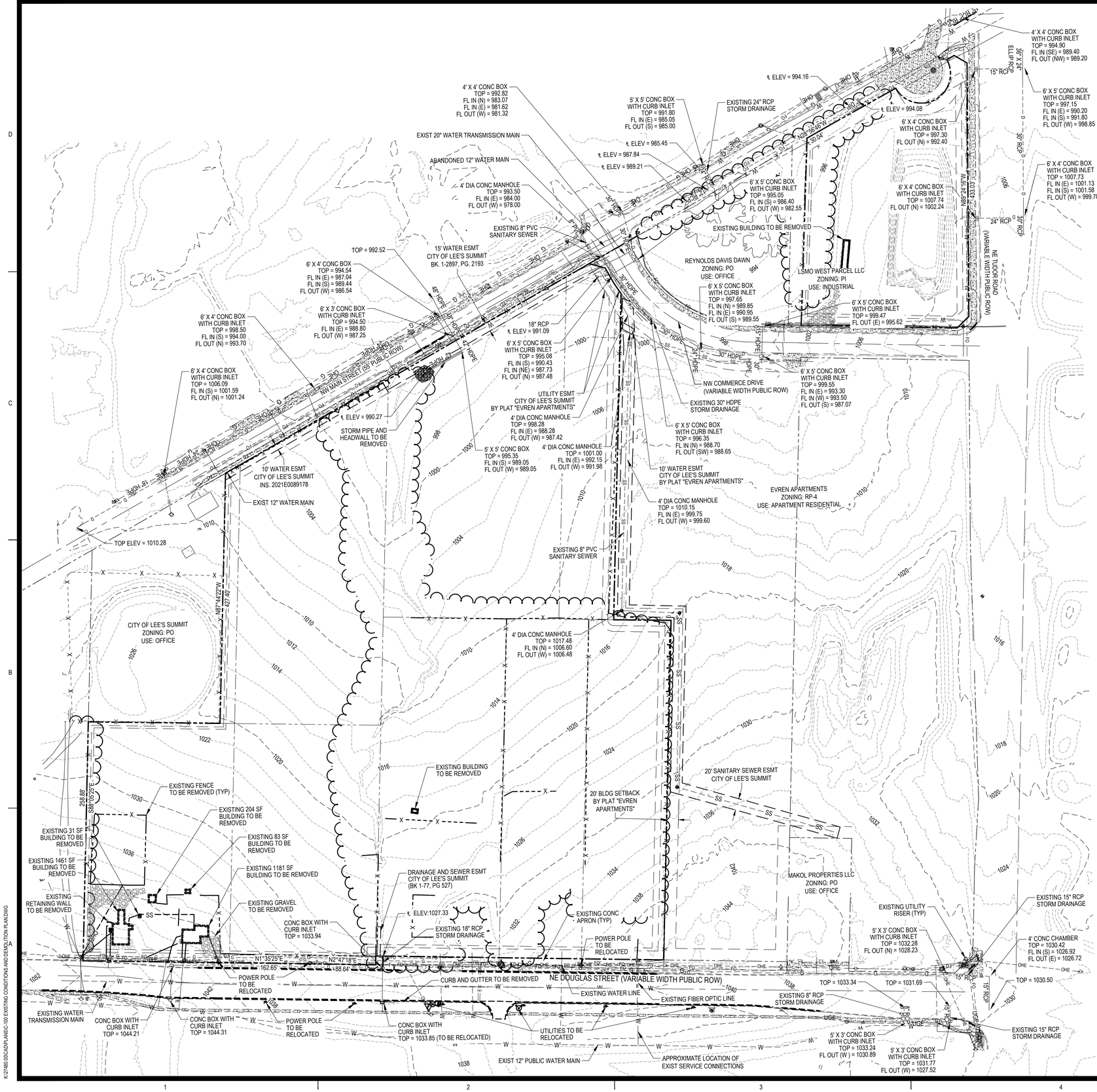
PRELIMINARY - NOT FOR CONSTRUCTION

SHEET NUMBER:

C-002

DESCRIPTION:
PHASING PLAN

K:\27480.00\CAD\PLANS\PHASING PLAN.DWG



VICINITY MAP
SCALE: NTS

PICKERING FIRM INCORPORATED UNDERGROUND UTILITIES DISCLAIMER:

INFORMATION REGARDING THE REPUTED PRESENCE, SIZE, CHARACTER AND LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES IS SHOWN HEREON. THERE IS NO CERTAINTY OF THE ACCURACY OF THIS INFORMATION AND IT SHALL BE CONSIDERED IN THAT LIGHT BY THOSE USING THIS DRAWING. THE LOCATION AND ARRANGEMENT OF UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES SHOWN HEREON MAY BE INACCURATE AND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES NOT SHOWN MAY BE ENCOUNTERED. THE OWNER AND THE OWNER'S EMPLOYEES, CONSULTANTS AND CONTRACTORS SHALL HEREBY DISTINCTLY UNDERSTAND THAT THE ENGINEER IS NOT RESPONSIBLE FOR THE CORRECTNESS OR SUFFICIENCY OF THIS INFORMATION REGARDING THE UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES SHOWN HEREON.

SITE TBM #1
ELEVATION: 1015.01
CHISELED SQUARE ON N FACE OF INLET

SITE TBM #2
ELEVATION: 1031.01
CHISELED SQUARE NW FACE PED SIGNAL

SITE TBM #3
ELEVATION:1042.57
CHISELED PLUS ON SW BOLT OF FIRE HYDRANT

SITE TBM #4
ELEVATION:1058.50
CHISELED SQUARE ON N FACE TL CONCRETE BASE

SITE TBM #5
ELEVATION:994.97
RAILROAD SPIKE IN E FACE OF UTILITY POLE

NOTE: BEFORE THE BEGINNING OF CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY THE SITE DATUM WITH ALL SITE TBMS AND IMMEDIATELY REPORT IN WRITING ANY DISCREPANCIES TO THE ENGINEER.

SPECIAL FLOOD HAZARD STATEMENT

ACCORDING TO THE FEMA/FIRM COMMUNITY PANEL NO. 29095C0417G, EFFECTIVE SEPTEMBER 29, 2006 THE PROPERTY SHOWN HEREON IS LOCATED IN A "X" NO SHADING (AREA OF MINIMAL FLOOD HAZARD) OR FLOOD ZONE "D" (AREAS IN WHICH FLOOD HAZARDS ARE UNDETERMINED, BUT POSSIBLE), AS SHOWN ON THE FLOOD INSURANCE RATE MAP (F.I.R.M.).

LINE LEGEND

D	EXISTING STORM DRAINAGE
T	EXISTING OVERHEAD TELEPHONE LINES
UGT	EXISTING UNDERGROUND TELEPHONE LINES
OHE	EXISTING OVERHEAD ELECTRIC LINES
UGE	EXISTING UNDERGROUND ELECTRIC LINES
G	EXISTING NATURAL GAS LINE
W	EXISTING WATER LINE
SS	EXISTING SANITARY SEWER LINE
X	EXISTING FENCE

SYMBOL LEGEND

POWER POLE
METAL TRAFFIC POLE
LIGHT POLE
ELECTRIC BOX
ANCHOR GUY
TELEPHONE PEDESTAL
SANITARY SEWER MANHOLE
GAS VALVE
WATER VALVE
WATER METER/WATER SHUTOFF
FIRE HYDRANT
CURB INLET
DRAIN INLET
STORM SEWER MANHOLE
MONITOR WELL
FOUND IRON PIN/NAIL/SPIKE
SET IRON PIN/NAIL/SPIKE
FOUND CONCRETE MONUMENT
SIGN
TREE, SHRUB, PLANTING
FIRE DEPARTMENT CONNECTION
MONITOR WELL

ABBREVIATIONS

EP	EDGE OF PAVEMENT
ROW	RIGHT OF WAY
℄	CENTERLINE
RCP	REINFORCED CONCRETE PIPE
CONC	CONCRETE
CMP	CORRUGATED METAL PIPE
ℙ	SUBJECT PROPERTY LINE
TC	TOP OF CURB
BC	BOTTOM OF CURB
POB	POINT OF BEGINNING
HCR	HANDICAP RAMP
	HANDICAP PARKING/ACCESS
SCO	SEWER CLEANOUT
INLET	INLET
HDWL	HEADWALL
PB	PLAT BOOK
PG	PAGE
C=	DEED CALL
C&M=	CALL & MEASURED DISTANCE
ESMT	EASEMENT

*NOTE: ALL SYMBOLS, ABBREVIATIONS, OR LINESTYLES DO NOT NECESSARILY APPEAR ON DRAWING(S). USE ONLY AS APPLICABLE.

REVISIONS:

1		
2		
3		
4		
5		

PROJECT #: 27480
DATE: MAY 26, 2026
DRAWN BY: EJH
DESIGNER: JPM
CHECKED BY: MLB

Pickering
Pickering Firm, Inc.
Architecture • Engineering
Planning • Surveying
6363 Poplar Avenue, Suite 300
Memphis, TN 38119
901.726.0810

DILLONS
NE DOUGLAS ST.
LEE'S SUMMIT, MO

PHILLIPS EDISON & COMPANY

SEAL:
PRELIMINARY - NOT FOR CONSTRUCTION

SHEET NUMBER:
C-100

DESCRIPTION:
EXISTING CONDITIONS AND DEMOLITION PLAN

K:\27480.00\CAD\PLANS\C-100 EXISTING CONDITIONS AND DEMOLITION PLAN.DWG

PLATTING NOTE:

LOT 4 IS INTENDED TO BE PLATTED AS THE BUILDING FOOTPRINT ONLY. SHARED ACCESS AND PARKING FOR THE SITE SHALL BE PROVIDED THROUGH A BLANKET ACCESS EASEMENT AND SHARED PARKING AGREEMENT TO BE ESTABLISHED WITH THE FINAL PLAT.

BUILDING AREA CHART

LOT 1 GROCERY STORE BUILDING:	99,982 SF
FUEL KIOSK:	247 SF
LOT 2 CONCEPTUAL BUILDINGS:	8,662 SF
LOT 3 CONCETUAL BUILDING:	5,070 SF
LOT 4 RETAIL STORE:	6,000 SF
LOT 5 CONCEPTUAL BUILDINGS:	10,140 SF

CONCEPT LAYOUT NOTE:

LOTS 2, 3, AND 5 ARE SHOWN AS CONCEPT PLANS FOR FUTURE DEVELOPMENT. THOSE PARCELS ARE TO INDEPENDENTLY CONTAIN THE REQUIRED PARKING AND LANDSCAPING FOR THE BUILDINGS PROPOSED THEREIN. ARCHITECTURAL ELEVATIONS OF BUILDINGS ON CONSTRUCTED ON THE SUBJECT LOTS WILL COMPLY WITH THE UNIFIED DEVELOPMENT ORDINANCE SECTION 8.080. USES TO BE CONSTRUCTED ON THE SUBJECT LOTS ARE TO COMPLY WITH THE USES ALLOWED IN DISTRICT CP-2 AS REFLECTED IN ARTICLE 6 OF THE UNIFIED DEVELOPMENT ORDINANCE.

NORTH

0 40 80 160

1 INCH = 80 FEET

VICINITY MAP

SCALE: NTS

PICKERING FIRM INCORPORATED UNDERGROUND UTILITIES DISCLAIMER:

INFORMATION REGARDING THE REPUTED PRESENCE, SIZE, CHARACTER AND LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES IS SHOWN HEREON. THERE IS NO CERTAINTY OF THE ACCURACY OF THIS INFORMATION AND IT SHALL BE CONSIDERED IN THAT LIGHT BY THOSE USING THIS DRAWING. THE LOCATION AND ARRANGEMENT OF UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES SHOWN HEREON MAY BE INACCURATE AND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES NOT SHOWN MAY BE ENCOUNTERED. THE OWNER AND THE OWNER'S EMPLOYEES, CONSULTANTS AND CONTRACTORS SHALL HEREBY DISTINCTLY UNDERSTAND THAT THE ENGINEER IS NOT RESPONSIBLE FOR THE CORRECTNESS OR SUFFICIENCY OF THIS INFORMATION REGARDING THE UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES SHOWN HEREON.

SITE TBM #1
ELEVATION: 1015.01
CHISELED SQUARE ON N FACE OF INLET

SITE TBM #2
ELEVATION: 1031.01
CHISELED SQUARE NW FACE PED SIGNAL

SITE TBM #3
ELEVATION:1042.57
CHISELED PLUS ON SW BOLT OF FIRE HYDRANT

SITE TBM #4
ELEVATION:1058.50
CHISELED SQUARE ON N FACE TL CONCRETE BASE

SITE TBM #5
ELEVATION:994.97
RAILROAD SPIKE IN E FACE OF UTILITY POLE

NOTE: BEFORE THE BEGINNING OF CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY THE SITE DATUM WITH ALL SITE TBMS AND IMMEDIATELY REPORT IN WRITING ANY DISCREPANCIES TO THE ENGINEER.

SPECIAL FLOOD HAZARD STATEMENT

ACCORDING TO THE FEMA/FIRM COMMUNITY PANEL NO. 29095C0417G, EFFECTIVE SEPTEMBER 29, 2006 THE PROPERTY SHOWN HEREON IS LOCATED IN A "X" NO SHADING (AREA OF MINIMAL FLOOD HAZARD) OR FLOOD ZONE "D" (AREAS IN WHICH FLOOD HAZARDS ARE UNDETERMINED, BUT POSSIBLE), AS SHOWN ON THE FLOOD INSURANCE RATE MAP (F.I.R.M.).

SITE PLAN DATA CHART

PROJECT NAME:	DILLONS - LEE'S SUMMIT
SUBDIVISION:	SUMMIT PARK STATION
LOT NUMBER:	1-5
PROPERTY ADDRESS:	NE DOUGLAS ST. LEE'S SUMMIT, MO
PARCEL ID:	52-900-04-13-00-0-00-000, 52-900-04-14-00-0-00-000, 52-900-04-15-00-0-00-000, 52-900-04-16-00-0-00-000, 52-900-04-17-00-0-00-000, 52-900-04-18-00-0-00-000, 52-900-04-20-00-0-00-000, & 52-900-04-25-00-0-00-000
EXISTING ZONING:	RP-4 & PO
PROPOSED ZONING:	CP-2
ACREAGE OF SITE:	21.41 ACRES *(EXCLUDING ROW DEDICATION)*
MINIMUM SETBACKS:	FRONT YARD: 15' SIDE YARD: 10' REAR YARD: 20'
OWNER:	DILLONS FOOD STORES DIVISON THE KROGER CO MID-CENTRAL REGION 2700 EAST 4TH AVE HUTCHINSON, KS 67501
ENGINEER:	PICKERING FIRM, INC. MARVIN L. BROWN, PE 6363 POPLAR AVENUE, SUITE 300 MEMPHIS, TN 38119 901.726.0810x1287 mbrown@pickeringfirm.com
PROPOSED USE:	GROCERY STORE, RESTAURANT/RETAIL, AUTOMOTIVE SERVICE STATION
BUILDING SQUARE FEET:	99,982 SF
GROCERY FLOOR AREA RATIO (FAR):	17.78%
FUEL STATION FLOOR AREA RATIO (FAR):	0.05%
RETAIL FLOOR AREA RATIO (FAR):	100%
PERVIOUS/IMPERVIOUS AREA:	
GROCERY/FUEL: PERVIOUS AREA PROVIDED: 25.9%	IMPERVIOUS AREA PROVIDED: 74.1%
RETAIL (LOT 4): PERVIOUS AREA PROVIDED: 0%	IMPERVIOUS AREA PROVIDED: 100%
OUTPARCEL LOT 2: PERVIOUS AREA (CONCEPTUAL): 45%	IMPERVIOUS AREA (CONCEPTUAL): 55%
OUTPARCEL LOT 3: PERVIOUS AREA (CONCEPTUAL): 45%	IMPERVIOUS AREA (CONCEPTUAL): 55%
OUTPARCEL LOT 5: PERVIOUS AREA (CONCEPTUAL): 56%	IMPERVIOUS AREA (CONCEPTUAL): 44%
TRACT "A": PERVIOUS AREA: 100%	IMPERVIOUS AREA: 0%
TRACT "B": PERVIOUS AREA: 100%	IMPERVIOUS AREA: 0%
PARKING:*	4 SPACES PER 1000 GFA
GROCERY, FUEL, & RETAIL SHOP:	REQUIRED: 423 PROVIDED: 434 (INCLUDING 13 ADA)

* PARKING IN ACCORDANCE WITH ZONING ORDINANCE REQUIREMENTS

REVISIONS:

1		
2		
3		
4		
5		

PROJECT #: 27480
DATE: MAY 26, 2026
DRAWN BY: EJH
DESIGNER: JPM
CHECKED BY: MLB

Pickering
Pickering Firm, Inc.
Architecture • Engineering
Planning • Surveying
6363 Poplar Avenue, Suite 300
Memphis, TN 38119
901.726.0810

DILLONS
NE DOUGLAS ST.
LEE'S SUMMIT, MO

PHILLIPS EDISON & COMPANY

SEAL:

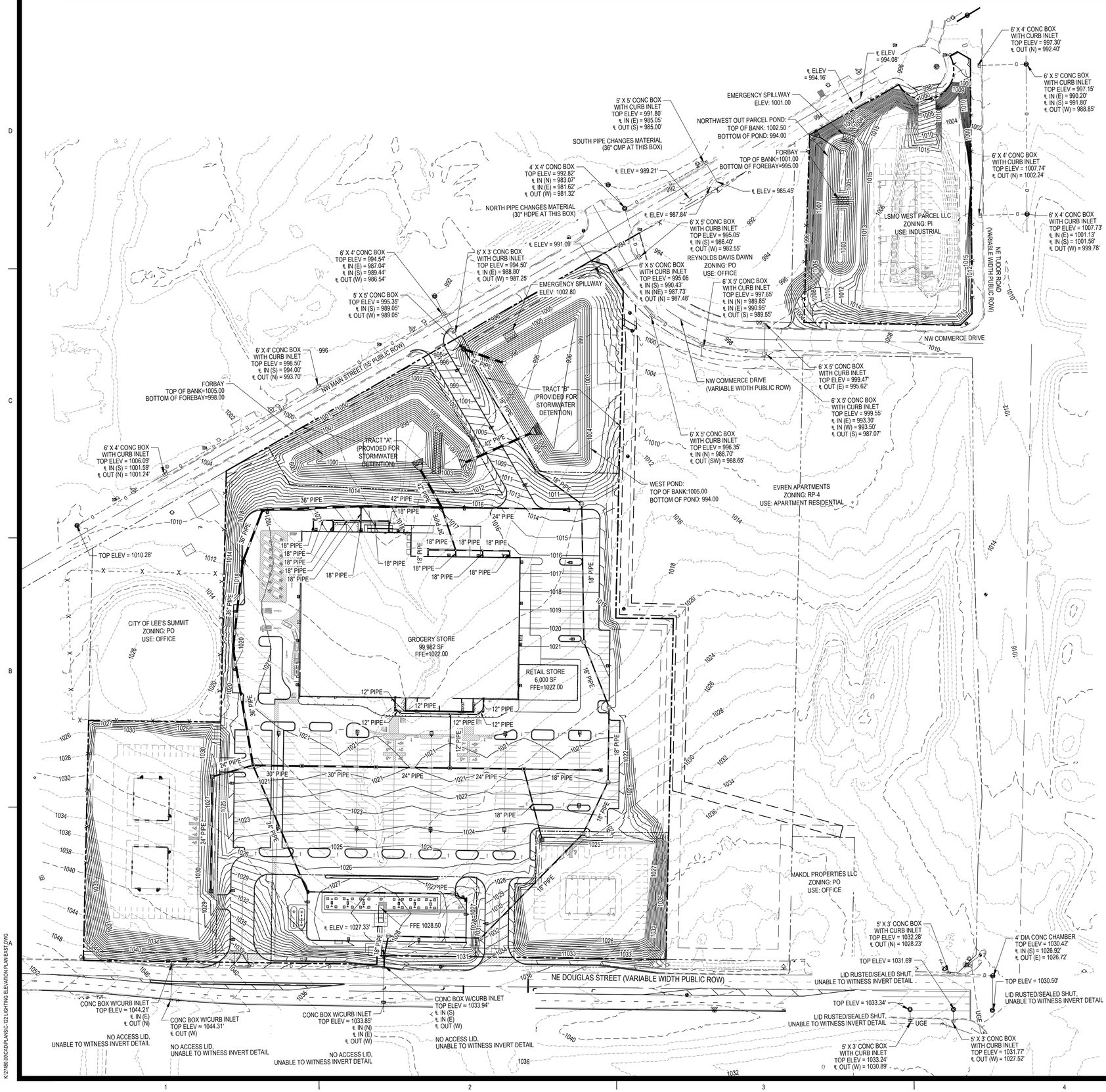
PRELIMINARY - NOT FOR CONSTRUCTION

SHEET NUMBER:

C-110

DESCRIPTION:
SITE PLAN

K:\27480.00\CAD\PLANS\C-110 SITE PLAN.DWG



NORTH

0 40 80 160

1 INCH = 80 FEET

VICINITY MAP
SCALE: NTS

PICKERING FIRM INCORPORATED UNDERGROUND UTILITIES DISCLAIMER:

INFORMATION REGARDING THE REPUTED PRESENCE, SIZE, CHARACTER AND LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES IS SHOWN HEREON. THERE IS NO CERTAINTY OF THE ACCURACY OF THIS INFORMATION AND IT SHALL BE CONSIDERED IN THAT LIGHT BY THOSE USING THIS DRAWING. THE LOCATION AND ARRANGEMENT OF UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES SHOWN HEREON MAY BE INACCURATE AND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES NOT SHOWN MAY BE ENCOUNTERED. THE OWNER AND THE OWNER'S EMPLOYEES, CONSULTANTS AND CONTRACTORS SHALL HEREBY DISTINCTLY UNDERSTAND THAT THE ENGINEER IS NOT RESPONSIBLE FOR THE CORRECTNESS OR SUFFICIENCY OF THIS INFORMATION REGARDING THE UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES SHOWN HEREON.

SITE TBM #1
ELEVATION: 1015.01
CHISELED SQUARE ON N FACE OF INLET

SITE TBM #2
ELEVATION: 1031.01
CHISELED SQUARE NW FACE PED SIGNAL

SITE TBM #3
ELEVATION:1042.57
CHISELED PLUS ON SW BOLT OF FIRE HYDRANT

SITE TBM #4
ELEVATION:1058.50
CHISELED SQUARE ON N FACE TL CONCRETE BASE

SITE TBM #5
ELEVATION:994.97
RAILROAD SPIKE IN E FACE OF UTILITY POLE

NOTE: BEFORE THE BEGINNING OF CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY THE SITE DATUM WITH ALL SITE TBMS AND IMMEDIATELY REPORT IN WRITING ANY DISCREPANCIES TO THE ENGINEER.

SPECIAL FLOOD HAZARD STATEMENT

ACCORDING TO THE FEMA/FIRM COMMUNITY PANEL NO. 29095C0417G, EFFECTIVE SEPTEMBER 29, 2006 THE PROPERTY SHOWN HEREON IS LOCATED IN A "X" NO SHADING (AREA OF MINIMAL FLOOD HAZARD) OR FLOOD ZONE "D" (AREAS IN WHICH FLOOD HAZARDS ARE UNDETERMINED, BUT POSSIBLE), AS SHOWN ON THE FLOOD INSURANCE RATE MAP (F.I.R.M.).

DETENTION TRACT MAINTENANCE:

DETENTION TRACTS "A" AND "B" SHALL BE MAINTAINED BY THE OWNERS OF LOTS 1 THROUGH 4, OR THEIR SUCCESSORS AND ASSIGNS. A MAINTENANCE AGREEMENT OR PROPERTY OWNERS ASSOCIATION SHALL BE ESTABLISHED WITH THE FINAL PLAT TO PROVIDE FOR THE PERPETUAL OPERATION AND MAINTENANCE OF THE DETENTION BASINS AND ASSOCIATED DRAINAGE IMPROVEMENTS.

REVISIONS:

1		
2		
3		
4		
5		

PROJECT #: 27480
DATE: MAY 26, 2026
DRAWN BY: EJH
DESIGNER: JPM
CHECKED BY: MLB

Pickering
Pickering Firm, Inc.
Architecture • Engineering
Planning • Surveying
6363 Poplar Avenue, Suite 300
Memphis, TN 38119
901.726.0810

DILLONS
NE DOUGLAS ST.
LEE'S SUMMIT, MO

PHILLIPS EDISON & COMPANY

SEAL:

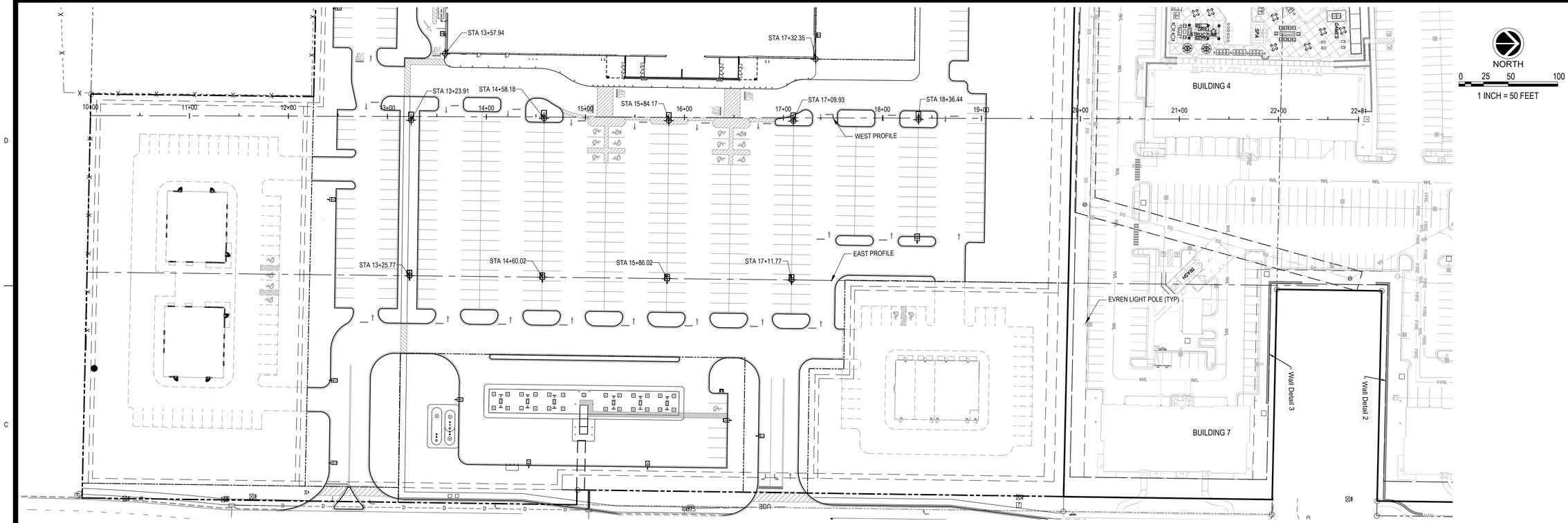
PRELIMINARY - NOT FOR CONSTRUCTION

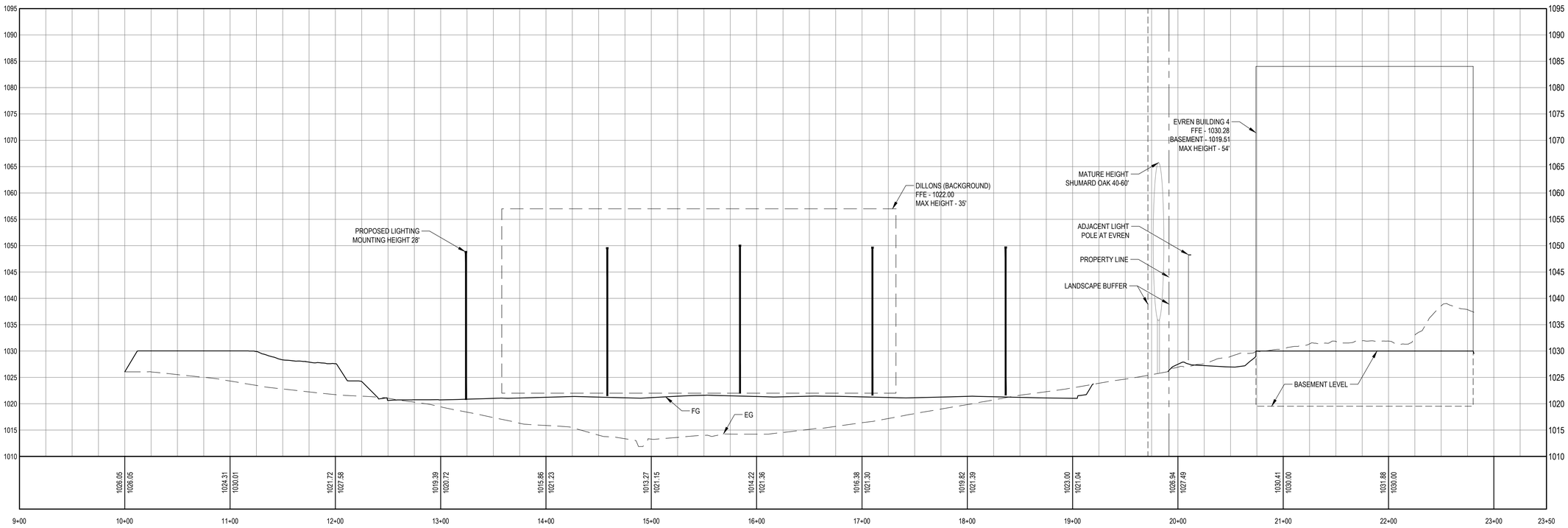
SHEET NUMBER:

C-120

DESCRIPTION:
GRADING AND DRAINAGE PLAN

K:\27480.00\CAD\PLANS\C-120 LIGHTING ELEVATION PLAN EAST.DWG





1 WEST PROFILE
H: 1"=50' V: 1"=10'

REVISIONS:

1		
2		
3		
4		
5		

PROJECT #: 27480
DATE: MAY 26, 2026
DRAWN BY: EJH
DESIGNER: JPM
CHECKED BY: MLB

Pickering
Pickering Firm, Inc.
Architecture • Engineering
Planning • Surveying
6363 Poplar Avenue, Suite 300
Memphis, TN 38119
901.726.0810

DILLONS
NE DOUGLAS ST.
LEE'S SUMMIT, MO

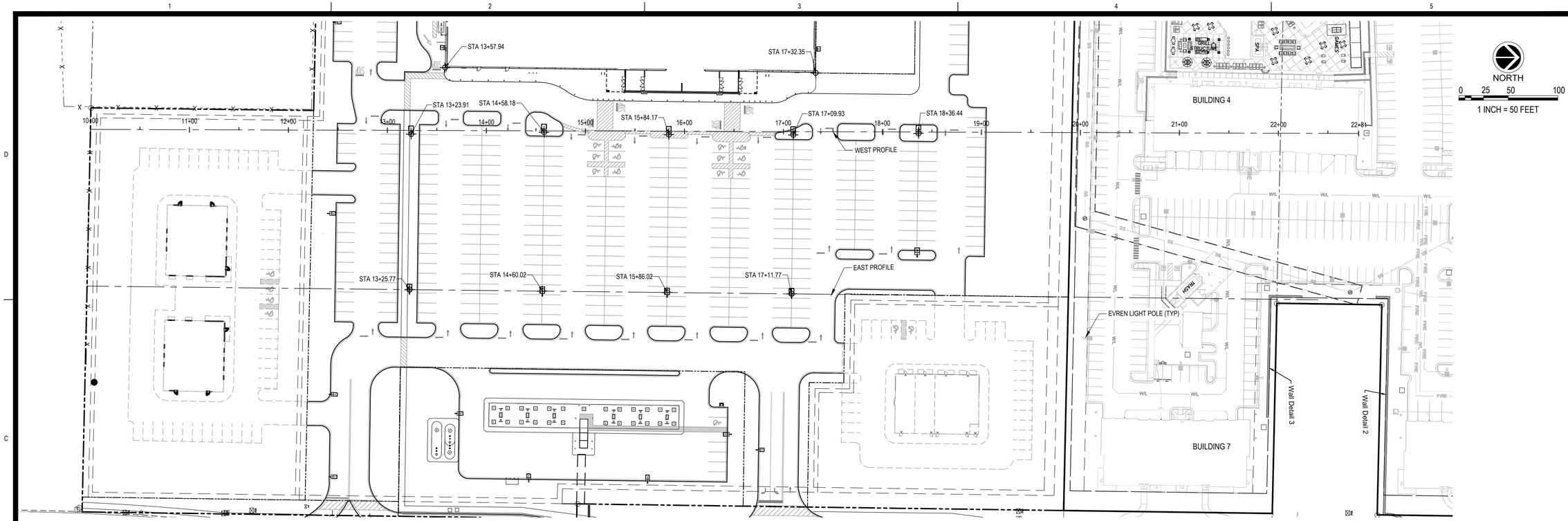
PHILLIPS EDISON & COMPANY

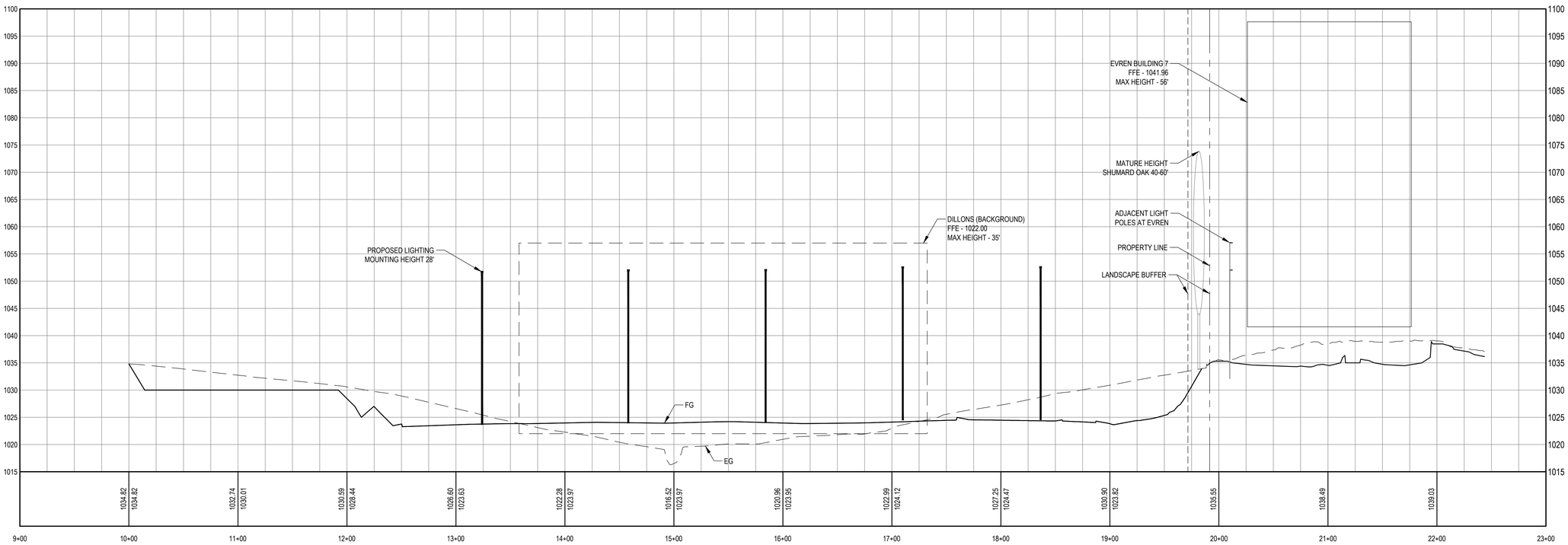
SEAL:
PRELIMINARY - NOT FOR CONSTRUCTION

SHEET NUMBER:
C-121

DESCRIPTION:
LIGHTING ELEVATION PLAN WEST

K:\27480.00\CAD\PLANS\C-121 LIGHTING ELEVATION PLAN EAST.DWG





2 EAST PROFILE
H: 1"=50' V: 1"=10'

REVISIONS:

1		
2		
3		
4		
5		

PROJECT #: 27480
DATE: MAY 26, 2026
DRAWN BY: EJH
DESIGNER: JPM
CHECKED BY: MLB

Pickering
Pickering Firm, Inc.
Architecture • Engineering
Planning • Surveying
6363 Poplar Avenue, Suite 300
Memphis, TN 38119
901.726.0810

DILLONS
NE DOUGLAS ST.
LEE'S SUMMIT, MO

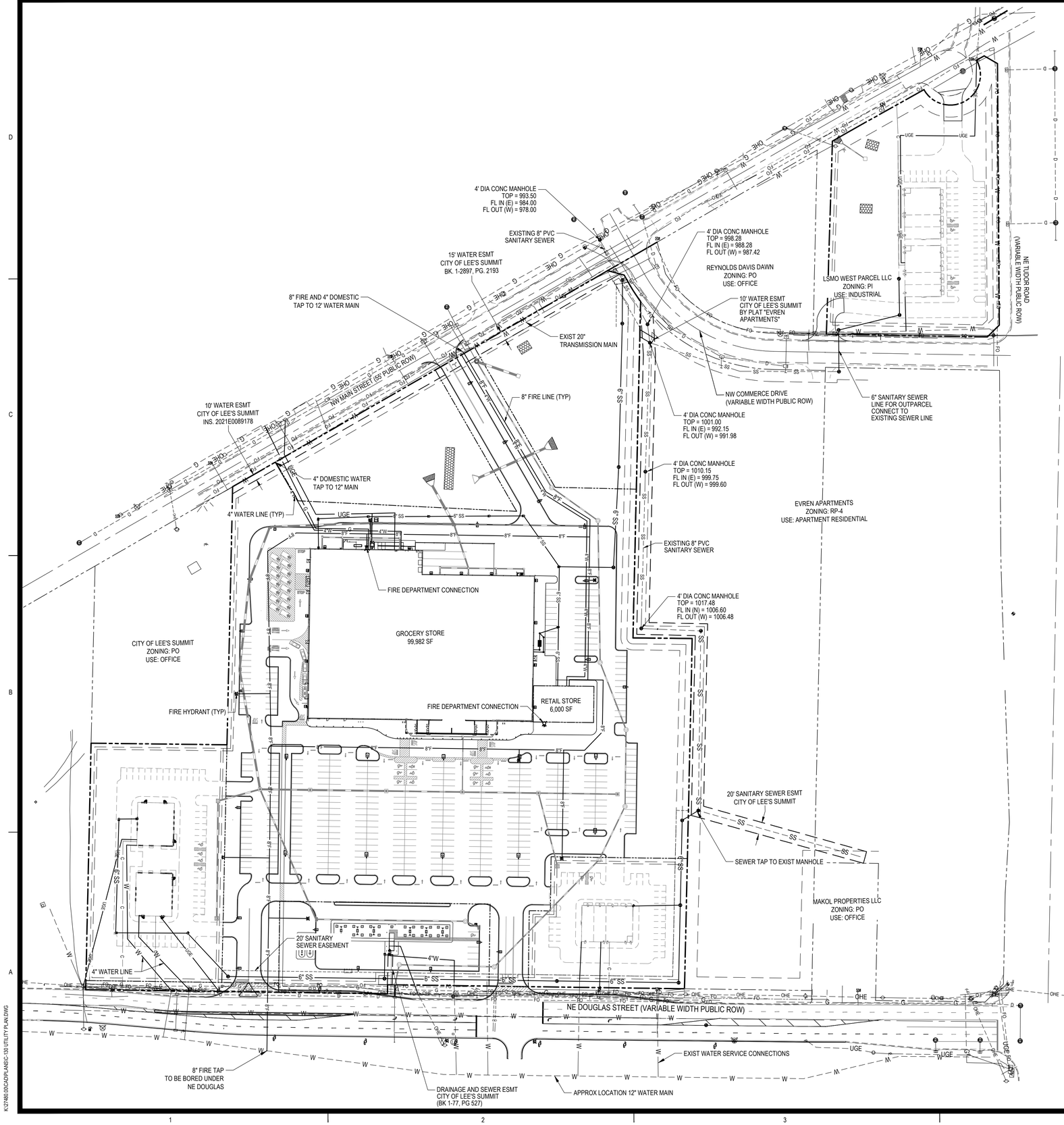
PHILLIPS EDISON & COMPANY

SEAL:
PRELIMINARY - NOT FOR CONSTRUCTION

SHEET NUMBER:
C-122

DESCRIPTION:
LIGHTING ELEVATION PLAN EAST

K:\27480.00\CAD\PLANS\C-122 LIGHTING ELEVATION PLAN EAST.DWG



NORTH

0 40 80 160

1 INCH = 80 FEET

VICINITY MAP

SCALE: NTS

PICKERING FIRM INCORPORATED UNDERGROUND UTILITIES DISCLAIMER:

INFORMATION REGARDING THE REPUTED PRESENCE, SIZE, CHARACTER AND LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES IS SHOWN HEREON. THERE IS NO CERTAINTY OF THE ACCURACY OF THIS INFORMATION AND IT SHALL BE CONSIDERED IN THAT LIGHT BY THOSE USING THIS DRAWING. THE LOCATION AND ARRANGEMENT OF UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES SHOWN HEREON MAY BE INACCURATE AND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES NOT SHOWN MAY BE ENCOUNTERED. THE OWNER AND THE OWNER'S EMPLOYEES, CONSULTANTS AND CONTRACTORS SHALL HEREBY DISTINCTLY UNDERSTAND THAT THE ENGINEER IS NOT RESPONSIBLE FOR THE CORRECTNESS OR SUFFICIENCY OF THIS INFORMATION REGARDING THE UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES SHOWN HEREON.

SITE TBM #1
ELEVATION: 1015.01
CHISELED SQUARE ON N FACE OF INLET

SITE TBM #2
ELEVATION: 1031.01
CHISELED SQUARE NW FACE PED SIGNAL

SITE TBM #3
ELEVATION:1042.57
CHISELED PLUS ON SW BOLT OF FIRE HYDRANT

SITE TBM #4
ELEVATION:1058.50
CHISELED SQUARE ON N FACE TL CONCRETE BASE

SITE TBM #5
ELEVATION:994.97
RAILROAD SPIKE IN E FACE OF UTILITY POLE

NOTE: BEFORE THE BEGINNING OF CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY THE SITE DATUM WITH ALL SITE TBMS AND IMMEDIATELY REPORT IN WRITING ANY DISCREPANCIES TO THE ENGINEER.

SPECIAL FLOOD HAZARD STATEMENT

ACCORDING TO THE FEMA/FIRM COMMUNITY PANEL NO. 29095C0417G, EFFECTIVE SEPTEMBER 29, 2006 THE PROPERTY SHOWN HEREON IS LOCATED IN A "X" NO SHADING (AREA OF MINIMAL FLOOD HAZARD) OR FLOOD ZONE "D" (AREAS IN WHICH FLOOD HAZARDS ARE UNDETERMINED, BUT POSSIBLE), AS SHOWN ON THE FLOOD INSURANCE RATE MAP (F.I.R.M.).

LINE LEGEND

- EXISTING STORM DRAINAGE
- EXISTING OVERHEAD TELEPHONE LINES
- EXISTING UNDERGROUND TELEPHONE LINES
- EXISTING OVERHEAD ELECTRIC LINES
- EXISTING UNDERGROUND ELECTRIC LINES
- EXISTING NATURAL GAS LINE
- EXISTING WATER LINE
- EXISTING SANITARY SEWER LINE
- EXISTING FENCE
- STORM DRAINAGE PIPE
- OVERHEAD TELEPHONE LINES
- UNDERGROUND TELEPHONE LINES
- OVERHEAD ELECTRIC LINES
- UNDERGROUND ELECTRIC LINES
- NATURAL GAS LINE
- WATER LINE
- FIRE LINE
- SANITARY SEWER LINE
- FENCE

REVISIONS:

1		
2		
3		
4		
5		

PROJECT #: 27480

DATE: MAY 26, 2026

DRAWN BY: EJH

DESIGNER: JPM

CHECKED BY: MLB

Pickering
Pickering Firm, Inc.
Architecture • Engineering
Planning • Surveying
6363 Poplar Avenue, Suite 300
Memphis, TN 38119
901.726.0810

DILLONS
NE DOUGLAS ST.
LEE'S SUMMIT, MO

PHILLIPS EDISON & COMPANY

SEAL:

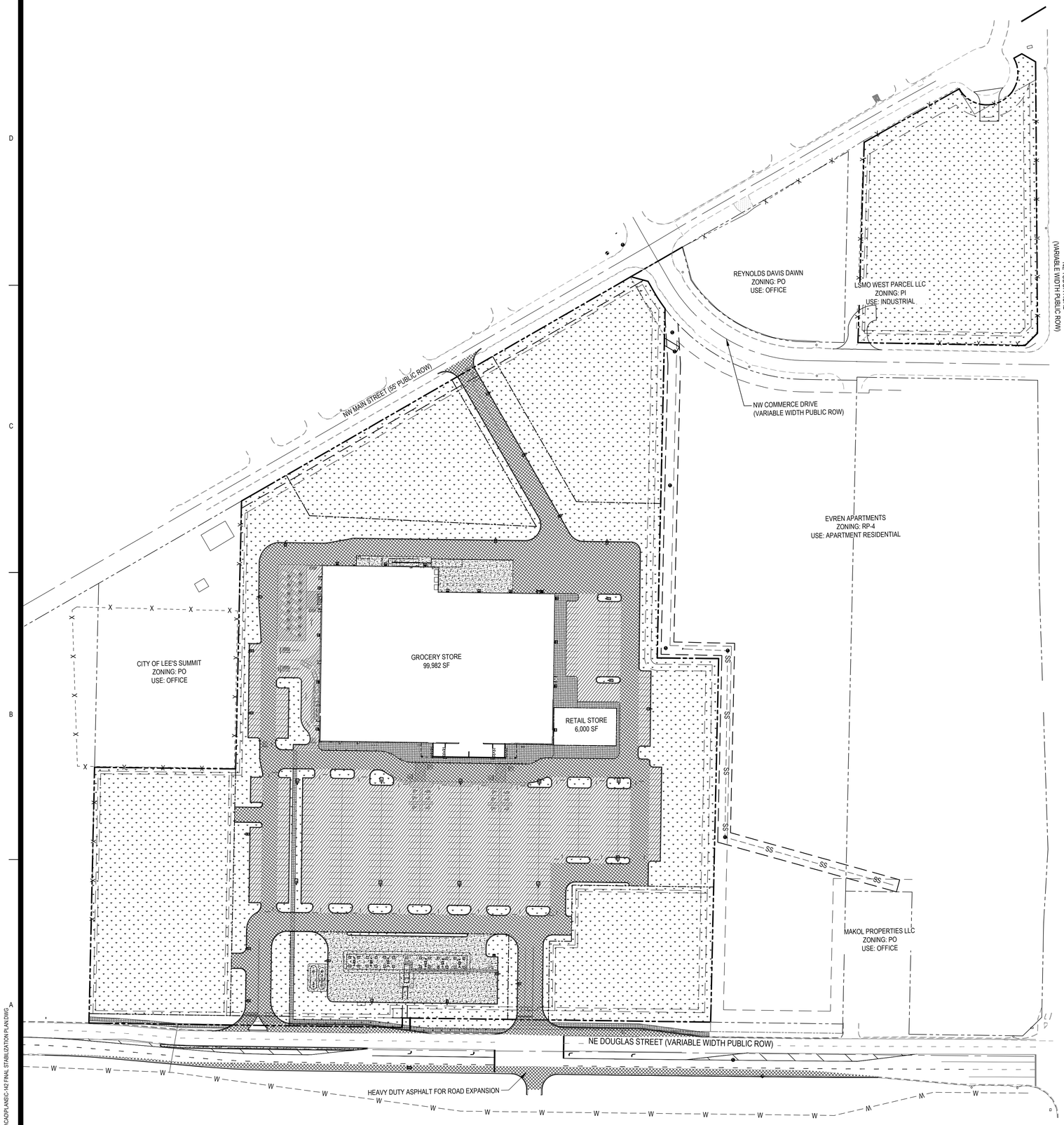
PRELIMINARY - NOT FOR CONSTRUCTION

SHEET NUMBER:

C-130

DESCRIPTION:
UTILITY PLAN

K:\27480.00\CAD\PLANS\C-130 UTILITY PLAN.DWG



NORTH

0 40 80 160

1 INCH = 80 FEET

VICINITY MAP
SCALE: NTS

PICKERING FIRM INCORPORATED UNDERGROUND UTILITIES DISCLAIMER:

INFORMATION REGARDING THE REPUTED PRESENCE, SIZE, CHARACTER AND LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES IS SHOWN HEREON. THERE IS NO CERTAINTY OF THE ACCURACY OF THIS INFORMATION AND IT SHALL BE CONSIDERED IN THAT LIGHT BY THOSE USING THIS DRAWING. THE LOCATION AND ARRANGEMENT OF UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES SHOWN HEREON MAY BE INACCURATE AND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES NOT SHOWN MAY BE ENCOUNTERED. THE OWNER AND THE OWNER'S EMPLOYEES, CONSULTANTS AND CONTRACTORS SHALL HEREBY DISTINCTLY UNDERSTAND THAT THE ENGINEER IS NOT RESPONSIBLE FOR THE CORRECTNESS OR SUFFICIENCY OF THIS INFORMATION REGARDING THE UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES SHOWN HEREON.

SITE TBM #1
ELEVATION: 1015.01
CHISELED SQUARE ON N FACE OF INLET

SITE TBM #2
ELEVATION: 1031.01
CHISELED SQUARE NW FACE PED SIGNAL

SITE TBM #3
ELEVATION:1042.57
CHISELED PLUS ON SW BOLT OF FIRE HYDRANT

SITE TBM #4
ELEVATION:1058.50
CHISELED SQUARE ON N FACE TL CONCRETE BASE

SITE TBM #5
ELEVATION:994.97
RAILROAD SPIKE IN E FACE OF UTILITY POLE

NOTE: BEFORE THE BEGINNING OF CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY THE SITE DATUM WITH ALL SITE TBMS AND IMMEDIATELY REPORT IN WRITING ANY DISCREPANCIES TO THE ENGINEER.

SPECIAL FLOOD HAZARD STATEMENT

ACCORDING TO THE FEMA/FIRM COMMUNITY PANEL NO. 29095C0417G, EFFECTIVE SEPTEMBER 29, 2006 THE PROPERTY SHOWN HEREON IS LOCATED IN A "X" NO SHADING (AREA OF MINIMAL FLOOD HAZARD) OR FLOOD ZONE "D" (AREAS IN WHICH FLOOD HAZARDS ARE UNDETERMINED, BUT POSSIBLE), AS SHOWN ON THE FLOOD INSURANCE RATE MAP (F.I.R.M.).

PAVEMENT HATCH LEGEND

	LIGHT-DUTY ASPHALT PAVEMENT
	HEAVY-DUTY ASPHALT PAVEMENT
	CONCRETE PAVEMENT
	SIDEWALK
	SEED

REVISIONS:

1		
2		
3		
4		
5		

PROJECT #: 27480
DATE: MAY 26, 2026
DRAWN BY: EJH
DESIGNER: JPM
CHECKED BY: MLB

Pickering
Pickering Firm, Inc.
Architecture • Engineering
Planning • Surveying
6363 Poplar Avenue, Suite 300
Memphis, TN 38119
901.726.0810

DILLONS
NE DOUGLAS ST.
LEE'S SUMMIT, MO

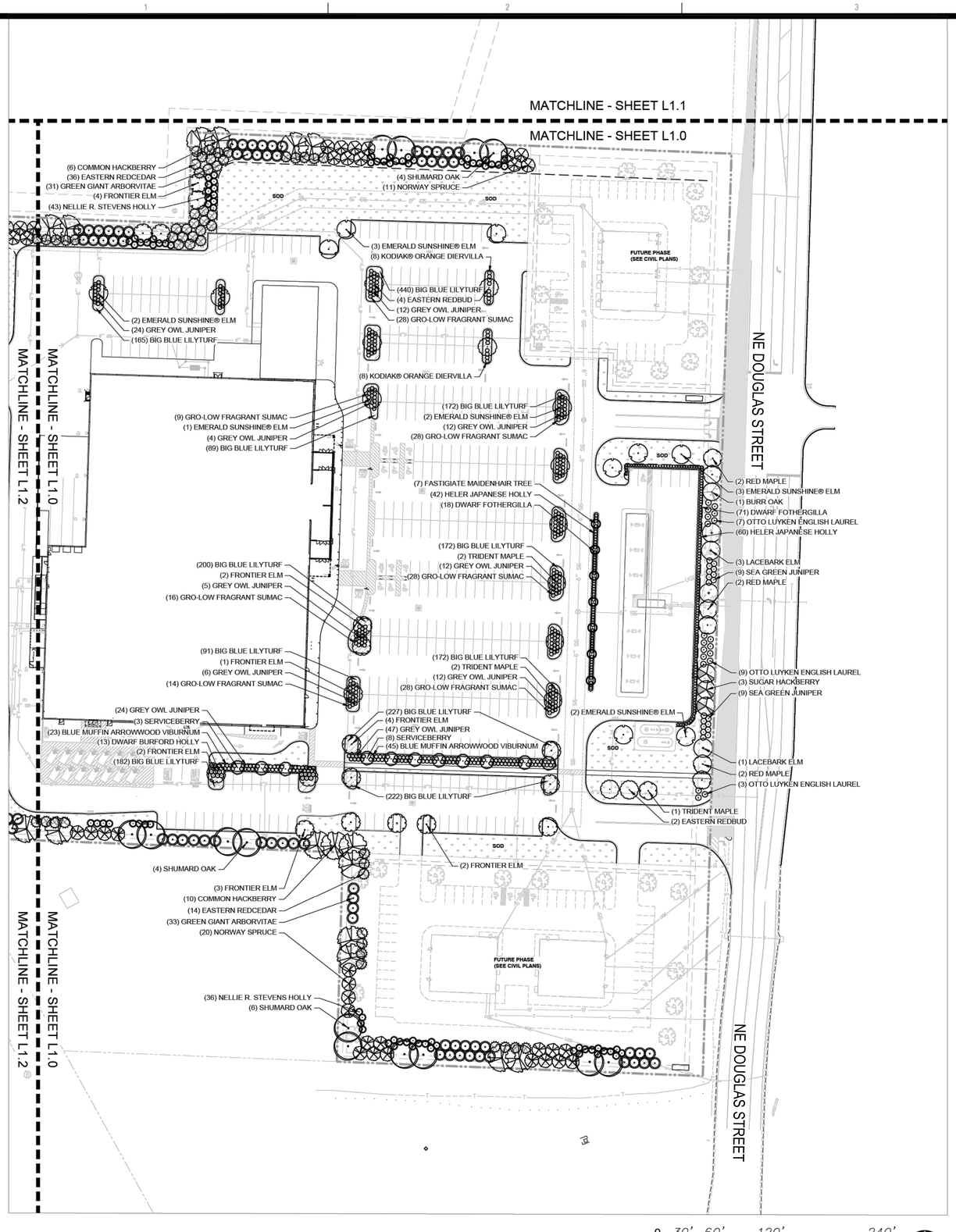
PHILLIPS EDISON & COMPANY

SEAL:
PRELIMINARY - NOT FOR CONSTRUCTION

SHEET NUMBER:
C-142

DESCRIPTION:
FINAL STABILIZATION PLAN

K:\27480.000\CAD\PLANS\C-142 FINAL STABILIZATION PLAN.DWG



1 LANDSCAPE CONCEPTUAL PLAN – SOUTH
SCALE: 1"=60'

0 30' 60' 120' 240'
SCALE: 1" = 60'
NORTH

PLANT SCHEDULE

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONT.	UNIT	COMMENTS	
HIGH IMPACT BUFFER								
	22	Celtis occidentalis	Common Hackberry	2.5" Cal.	B&B	EA	Well branched, full to ground	
	101	Ilex x 'Nellie R. Stevens'	Nellie R. Stevens Holly	8`-10` HT	Pot	EA	6` - 8` Ht. min.	
	67	Juniperus virginiana	Eastern Redcedar	8` Ht.	Pot	EA	Well branched, full to ground	
	52	Picea abies	Norway Spruce	8` Ht.	Pot	EA	Well branched, full to ground	
	18	Quercus shumardii	Shumard Oak	2.5" Cal.	B&B	EA	Well branched, full to ground	
	89	Thuja x 'Green Giant'	Green Giant Arborvitae	8` Ht.	Pot	EA	Well branched, full to ground	
	18	Ulmus x 'Frontier'	Frontier Elm	2.5" Cal.	B&B	EA	Well branched, full to ground	
INTERIOR TREES								
	5	Acer buergerianum	Trident Maple	1.5" Cal.	B&B	EA	Well branched, full to ground	
	11	Amelanchier alnifolia	Serviceberry	1.5" Cal.	B&B	EA	Well branched, full to ground	
	6	Cercis canadensis	Eastern Redbud	1.5" Cal.	B&B	EA	Well branched, full to ground	
	7	Ginkgo biloba 'Fastigiata'	Fastigiate Maidenhair Tree	1.5" Cal.	B&B	EA	Well branched, full to ground	
	13	Ulmus davidiana japonica `JFS-Bieberich`	Emerald Sunshine® Elm	1.5" Cal.	B&B	EA	Well branched, full to ground	
STREET FRONTAGE								
	14	Acer rubrum	Red Maple	3.5" Cal.	B&B	EA	Uniform branching, dominant leader	
	6	Carpinus caroliniana	American Hornbeam	3.5" Cal.	B&B	EA	Well branched, full to ground	
	6	Celtis laevigata	Sugar Hackberry	3.5" Cal.	B&B	EA	Well branched, full to ground	
	56	Juniperus chinensis 'Sea Green'	Sea Green Juniper	3` Ht.	Pot	EA		
	44	Prunus laurocerasus 'Otto Luyken'	Otto Luyken English Laurel	3` Ht.	Pot	EA		
	2	Quercus macrocarpa	Burr Oak	3.5" Cal.	B&B	EA	Well branched, full to ground	
	10	Ulmus parvifolia	Lacebark Elm	3.5" Cal.	B&B	EA	Well branched, full to ground	
SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	UNIT	COMMENTS	
INTERIOR SHRUBS								
	16	Diervilla x 'G2X88544'	Kodiak® Orange Diervilla	24" Ht.				
	89	Fothergilla gardenii	Dwarf Fothergilla	24" Ht.	Pot	EA	Full plant, free of weeds	
	13	Ilex cornuta 'Burfordii Nana'	Dwarf Burford Holly	24" Ht.	Pot	EA	Full plant, free of weeds	
	102	Ilex crenata 'Helleri'	Heler Japanese Holly	24" Ht.	Pot	EA	Full plant, free of weeds	
	158	Juniperus x 'Grey Owl'	Grey Owl Juniper	24" Ht.	Pot	EA	Full plant, free of weeds	
	151	Rhus aromatica 'Gro-Low'	Gro-Low Fragrant Sumac	24" Ht.	Pot	EA	Full plant, free of weeds	
	68	Viburnum dentatum 'Blue Muffin'	Blue Muffin Arrowwood Viburnum	24" Ht.				
SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	UNIT	COMMENTS		SPACING
GROUND COVERS								
	119,525 sf	Festuca arundinacea	Tall Fescue	sod	Fill Area	See Detail		
	2,132	Liriope muscari 'Big Blue'	Big Blue Lilyturf	1 gal.	Fill Area	Weed-free and actively growing		18" o.c.

REVISIONS:

1		
2		
3		
4		
5		

PROJECT #: 27480
DATE: APRIL 7, 2026
DRAWN BY: DT
DESIGNER: DT
CHECKED BY: DT

Pickering
Pickering Firm, Inc.
Architecture • Engineering
Planning • Surveying
6363 Poplar Avenue, Suite 300
Memphis, TN 38119
901.726.0810

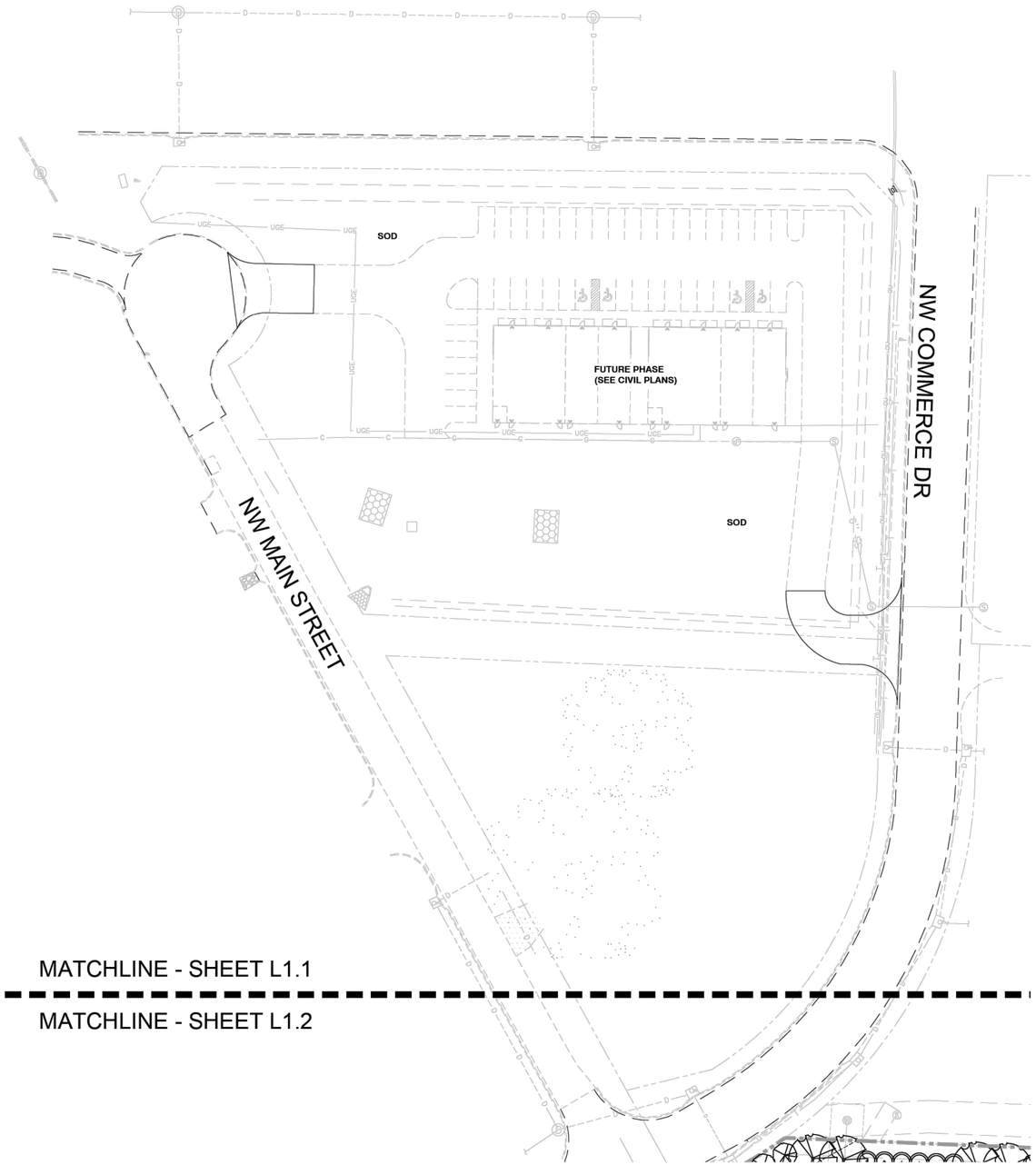
DILLONS
NE DOUGLAS ST.
LEE'S SUMMIT, MO

SEAL:
PRELIMINARY - NOT FOR CONSTRUCTION

SHEET NUMBER:
L1.0

DESCRIPTION:
LANDSCAPE PLAN

M:\07 JOB FILES\25.718 - PICKERING - GROCERY - LEES SUMMIT MO\ACAD\CONSTRUCTION DOCS\DRAWINGS\L1.0 PLAN (LEE SUMMIT).DWG



1 LANDSCAPE CONCEPTUAL PLAN – NORTHWEST
SCALE: 1"=40'

0 20' 40' 80' 160'
SCALE: 1" = 40'

NORTH

PLANT SCHEDULE

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONT.	UNIT	COMMENTS	
HIGH IMPACT BUFFER								
	22	Celtis occidentalis	Common Hackberry	2.5" Cal.	B&B	EA	Well branched, full to ground	
	101	Ilex x 'Nellie R. Stevens'	Nellie R. Stevens Holly	8'-10' HT	Pot	EA	6' - 8' Ht. min.	
	67	Juniperus virginiana	Eastern Redcedar	8' Ht.	Pot	EA	Well branched, full to ground	
	52	Picea abies	Norway Spruce	8' Ht.	Pot	EA	Well branched, full to ground	
	18	Quercus shumardii	Shumard Oak	2.5" Cal.	B&B	EA	Well branched, full to ground	
	89	Thuja x 'Green Giant'	Green Giant Arborvitae	8' Ht.	Pot	EA	Well branched, full to ground	
	18	Ulmus x 'Frontier'	Frontier Elm	2.5" Cal.	B&B	EA	Well branched, full to ground	
INTERIOR TREES								
	5	Acer buergerianum	Trident Maple	1.5" Cal.	B&B	EA	Well branched, full to ground	
	11	Amelanchier alnifolia	Serviceberry	1.5" Cal.	B&B	EA	Well branched, full to ground	
	6	Cercis canadensis	Eastern Redbud	1.5" Cal.	B&B	EA	Well branched, full to ground	
	7	Ginkgo biloba 'Fastigiata'	Fastigiate Maidenhair Tree	1.5" Cal.	B&B	EA	Well branched, full to ground	
	13	Ulmus davidiana japonica `JFS-Bieberich`	Emerald Sunshine® Elm	1.5" Cal.	B&B	EA	Well branched, full to ground	
STREET FRONTAGE								
	14	Acer rubrum	Red Maple	3.5" Cal.	B&B	EA	Uniform branching, dominant leader	
	6	Carpinus caroliniana	American Hornbeam	3.5" Cal.	B&B	EA	Well branched, full to ground	
	6	Celtis laevigata	Sugar Hackberry	3.5" Cal.	B&B	EA	Well branched, full to ground	
	56	Juniperus chinensis 'Sea Green'	Sea Green Juniper	3` Ht.	Pot	EA		
	44	Prunus laurocerasus 'Otto Luyken'	Otto Luyken English Laurel	3` Ht.	Pot	EA		
	2	Quercus macrocarpa	Burr Oak	3.5" Cal.	B&B	EA	Well branched, full to ground	
	10	Ulmus parvifolia	Lacebark Elm	3.5" Cal.	B&B	EA	Well branched, full to ground	

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	UNIT	COMMENTS	
INTERIOR SHRUBS								
	16	Diervilla x 'G2X88544'	Kodiak® Orange Diervilla	24" Ht.				
	89	Fothergilla gardenii	Dwarf Fothergilla	24" Ht	Pot	EA	Full plant, free of weeds	
	13	Ilex cornuta 'Burfordii Nana'	Dwarf Burford Holly	24" Ht.	Pot	EA	Full plant, free of weeds	
	102	Ilex crenata 'Helleri'	Heler Japanese Holly	24" Ht.	Pot	EA	Full plant, free of weeds	
	158	Juniperus x 'Grey Owl'	Grey Owl Juniper	24" Ht.	Pot	EA	Full plant, free of weeds	
	151	Rhus aromatica 'Gro-Low'	Gro-Low Fragrant Sumac	24" Ht.	Pot	EA	Full plant, free of weeds	
	68	Viburnum dentatum 'Blue Muffin'	Blue Muffin Arrowwood Viburnum	24" Ht.				

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	UNIT	COMMENTS		SPACING
GROUND COVERS								
	119,525 sf	Festuca arundinacea	Tall Fescue	sod	Fill Area	See Detail		
	2,132	Liriope muscari 'Big Blue'	Big Blue Lilyturf	1 gal.	Fill Area	Weed-free and actively growing		18" o.c.

REVISIONS:

1		
2		
3		
4		
5		

PROJECT #: 27480
DATE: APRIL 7, 2026
DRAWN BY: DT
DESIGNER: DT
CHECKED BY: DT

Pickering
Pickering Firm, Inc.
Architecture • Engineering
Planning • Surveying
6363 Poplar Avenue, Suite 300
Memphis, TN 38119
901.726.0810

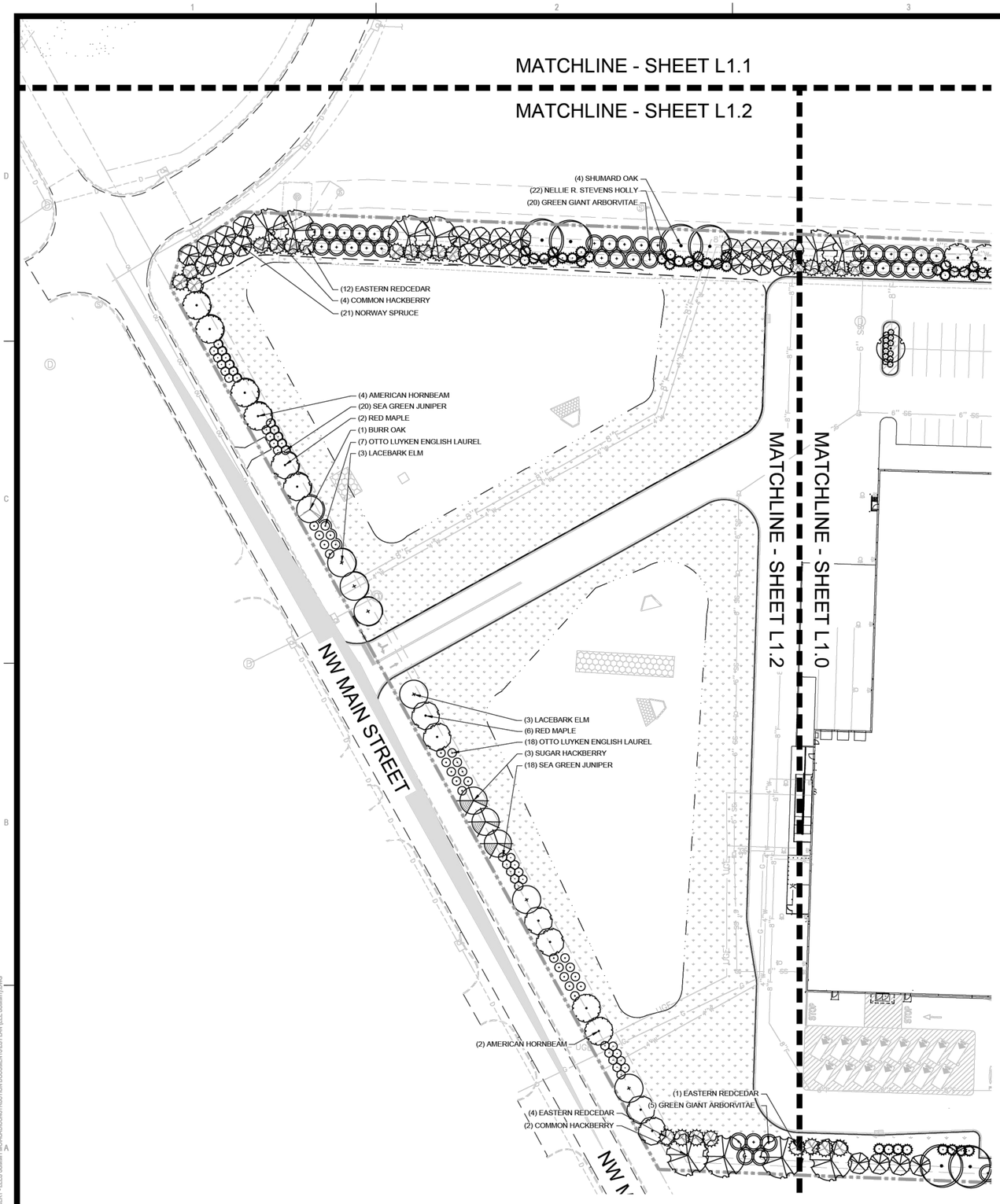
DILLONS
NE DOUGLAS ST.
LEE'S SUMMIT, MO

SEAL:
PRELIMINARY - NOT FOR CONSTRUCTION

SHEET NUMBER:
L1.1

DESCRIPTION:
LANDSCAPE PLAN

M:\07 JOB FILES\3718 - PICKERING - GROCERY - LEES SUMMIT MO\ACAD\CONSTRUCTION DOCUMENTS\L5 PLAN (LEE SUMMIT).DWG



1 LANDSCAPE CONCEPTUAL PLAN – SOUTHWEST
SCALE: 1"=40'

0 20' 40' 80' 160'
SCALE: 1" = 40'
NORTH

PLANT SCHEDULE

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONT.	UNIT	COMMENTS	
HIGH IMPACT BUFFER								
	22	Celtis occidentalis	Common Hackberry	2.5" Cal.	B&B	EA	Well branched, full to ground	
	101	Ilex x 'Nellie R. Stevens'	Nellie R. Stevens Holly	8`-10` HT	Pot	EA	6` - 8` Ht. min.	
	67	Juniperus virginiana	Eastern Redcedar	8` Ht.	Pot	EA	Well branched, full to ground	
	52	Picea abies	Norway Spruce	8` Ht.	Pot	EA	Well branched, full to ground	
	18	Quercus shumardii	Shumard Oak	2.5" Cal.	B&B	EA	Well branched, full to ground	
	89	Thuja x 'Green Giant'	Green Giant Arborvitae	8` Ht.	Pot	EA	Well branched, full to ground	
	18	Ulmus x 'Frontier'	Frontier Elm	2.5" Cal.	B&B	EA	Well branched, full to ground	
INTERIOR TREES								
	5	Acer buergerianum	Trident Maple	1.5" Cal.	B&B	EA	Well branched, full to ground	
	11	Amelanchier alnifolia	Serviceberry	1.5" Cal.	B&B	EA	Well branched, full to ground	
	6	Cercis canadensis	Eastern Redbud	1.5" Cal.	B&B	EA	Well branched, full to ground	
	7	Ginkgo biloba 'Fastigiata'	Fastigiate Maidenhair Tree	1.5" Cal.	B&B	EA	Well branched, full to ground	
	13	Ulmus davidiana japonica `JFS-Bieberich`	Emerald Sunshine® Elm	1.5" Cal.	B&B	EA	Well branched, full to ground	
STREET FRONTAGE								
	14	Acer rubrum	Red Maple	3.5" Cal.	B&B	EA	Uniform branching, dominant leader	
	6	Carpinus caroliniana	American Hornbeam	3.5" Cal.	B&B	EA	Well branched, full to ground	
	6	Celtis laevigata	Sugar Hackberry	3.5" Cal.	B&B	EA	Well branched, full to ground	
	56	Juniperus chinensis 'Sea Green'	Sea Green Juniper	3` Ht.	Pot	EA		
	44	Prunus laurocerasus 'Otto Luyken'	Otto Luyken English Laurel	3` Ht.	Pot	EA		
	2	Quercus macrocarpa	Burr Oak	3.5" Cal.	B&B	EA	Well branched, full to ground	
	10	Ulmus parvifolia	Lacebark Elm	3.5" Cal.	B&B	EA	Well branched, full to ground	
SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	UNIT	COMMENTS	
INTERIOR SHRUBS								
	16	Diervilla x 'G2X88544'	Kodiak® Orange Diervilla	24" Ht.				
	89	Fothergilla gardenii	Dwarf Fothergilla	24" Ht	Pot	EA	Full plant, free of weeds	
	13	Ilex cornuta 'Burfordii Nana'	Dwarf Burford Holly	24" Ht.	Pot	EA	Full plant, free of weeds	
	102	Ilex crenata 'Hellen'	Heler Japanese Holly	24" Ht.	Pot	EA	Full plant, free of weeds	
	158	Juniperus x 'Grey Owl'	Grey Owl Juniper	24" Ht.	Pot	EA	Full plant, free of weeds	
	151	Rhus aromatica 'Gro-Low'	Gro-Low Fragrant Sumac	24" Ht.	Pot	EA	Full plant, free of weeds	
	68	Viburnum dentatum 'Blue Muffin'	Blue Muffin Arrowwood Viburnum	24" Ht.				
SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	UNIT	COMMENTS		SPACING
GROUND COVERS								
	119,525 sf	Festuca arundinacea	Tall Fescue	sod	Fill Area	See Detail		
	2,132	Liriope muscari 'Big Blue'	Big Blue Lilyturf	1 gal.	Fill Area	Weed-free and actively growing		18" o.c.

REVISIONS:

1		
2		
3		
4		
5		

PROJECT #: 27480
DATE: APRIL 7, 2026
DRAWN BY: DT
DESIGNER: DT
CHECKED BY: DT

Pickering
Pickering Firm, Inc.
Architecture • Engineering
Planning • Surveying
6363 Poplar Avenue, Suite 300
Memphis, TN 38119
901.726.0810

DILLONS
NE DOUGLAS ST.
LEE'S SUMMIT, MO

SEAL:
PRELIMINARY - NOT FOR CONSTRUCTION

SHEET NUMBER:
L1.2

DESCRIPTION:
LANDSCAPE PLAN

M:\DOT JOB FILES\25718 - PICKERING - GROCERY - LEES SUMMIT MO\ACAD\CONSTRUCTION DOCUMENTS\L0 PLAN (LEE SUMMIT).DWG

Luminaire Schedule

Symbol	Qty	Label	Arrangement	Lum. Watts	Total Watts	Lum. Lumens	LLF	Description	Mounting Height (Overall Height)
-	25	FC1	SINGLE	104	2600	15383	1.000	SCV-LED-15L-SC-50	15
⊢	2	LPA21	Single	147.6	295.2	21545	0.941	GALN-SBSD-740-VOLT-T3-XX	28
⊢	1	LPA31	Single	218.1	218.1	32324	0.941	GALN-SBSD-740-VOLT-T3-XX	28
⊢	2	LPD11	Single	79.6	159.2	8446	0.941	GALN-SBSD-740-VOLT-T3-XX-HSS	28
⊢	9	LPD21	Single	100.9	908.1	13427	0.941	GALN-SBSC-740-VOLT-T3-XX-HSS	28
⊢	1	LPE21	Single	147.6	147.6	16301	0.941	GALN-SBSD-740-VOLT-T4FT-XX-HSS	28
⊢	3	LPE31	Single	218.1	654.3	24657	0.941	GALN-SBSD-740-VOLT-T4FT-XX-HSS	28
⊢	2	LPG41	Single	293.6	587.2	43644	0.941	GALN-SBAD-740-VOLT-SWQ-XX	28
⊢	10	LPG81	Single	584.9	5849	86057	0.941	GALN-SBBD-740-VOLT-SWQ-XX	28
⊢	15	LZ82	Single	124.5	1867.5	19670	0.941	GWS-SA2F-740-VOLT-T4FT-XX	15

Calculation Summary

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
CalcPts@GRADE	Illuminance	Fc	1.3	18.8	0.0	N.A.	N.A.
FUEL CANOPY	Illuminance	Fc	46.2	56.0	22.7	2.0	2.6
ACCESS ROAD 'A'	Illuminance	Fc	3.3	8.2	1.6	2.1	5.1
BUILDING REAR	Illuminance	Fc	3.4	6.5	1.2	2.9	5.4
CLICK-LIST & SIDE PARKING 'B'	Illuminance	Fc	3.1	4.5	2.0	1.6	2.3
ENTRANCE 'A'	Illuminance	Fc	2.5	2.9	1.9	1.3	1.5
ENTRANCE 'B'	Illuminance	Fc	3.3	6.3	1.5	2.2	4.2
FRONT DRIVE	Illuminance	Fc	5.0	8.2	3.1	1.6	2.7
FUEL CENTER DRIVES	Illuminance	Fc	3.5	5.9	1.6	2.2	3.7
FUEL CENTER PARKING	Illuminance	Fc	2.7	3.1	2.5	1.1	1.2
MAIN PARKING	Illuminance	Fc	4.2	9.4	2.0	2.1	4.7
REAR ENTRANCE	Illuminance	Fc	2.0	2.8	1.5	1.4	1.9
SIDE PARKING 'A'	Illuminance	Fc	3.2	5.1	2.1	1.5	2.4

Total Watts = 13286.2

Project manager to specify fixture voltage for each fixture type

0 20 40 60 80 120

Luminaire Location Summary

LumNo	Label	X	Y	Z	Orient	Tilt
1	FC1	639	93	15	0	0
2	FC1	639	79	15	0	0
3	FC1	625	93	15	0	0
4	FC1	625	79	15	0	0
5	FC1	639	121	15	0	0
6	FC1	639	107	15	0	0
7	FC1	625	121	15	0	0
8	FC1	625	107	15	0	0
9	FC1	639	65	15	0	0
10	FC1	625	51	15	0	0
11	FC1	625	65	15	0	0
12	FC1	625	142	15	0	0
13	FC1	639	164	15	0	0
14	FC1	625	164	15	0	0
15	FC1	639	178	15	0	0
16	FC1	625	178	15	0	0
17	FC1	639	219	15	0	0
18	FC1	625	219	15	0	0
19	FC1	639	233	15	0	0
20	FC1	625	233	15	0	0
21	FC1	639	192	15	0	0
22	FC1	625	192	15	0	0
23	FC1	639	206	15	0	0
24	FC1	625	206	15	0	0
25	FC1	639	51	15	0	0
26	LPA21	-45.75	-454.25	28	0	0
27	LPA21	-46.5	276.5	28	0	0
28	LPA31	664.5	316.5	28	90	0
29	LPD11	430.25	-119	28	90	0
30	LPD11	-37.394	-98.682	28	0	0
31	LPD21	696.25	-114.75	28	90	0
32	LPD21	613	-115.25	28	90	0
33	LPD21	631	12	28	90	0
34	LPD21	699	87	28	180	0
35	LPD21	699	207	28	180	0
36	LPD21	649	291	28	270	0
37	LPD21	-85	383	28	299.055	0
38	LPD21	-182	325	28	299.055	0
39	LPD21	-279	266	28	299.055	0
40	LPE21	223.75	828.75	28	270	0
41	LPE31	51.693	-103	28	90	0
42	LPE31	137.895	-115.25	28	90	0
43	LPE31	237	-115.25	28	90	0
44	LPG41	-45.75	453	28	90	0
45	LPG41	179	458.25	28	90	0
46	LPG81	346	350.5	28	180	0
47	LPG81	347	224.75	28	180	0
48	LPG81	346	98.75	28	180	0
49	LPG81	509	-35.5	28	180	0
50	LPG81	349.25	-35.5	28	180	0
51	LPG81	509.25	350.5	28	180	0
52	LPG81	510.25	224.75	28	180	0
53	LPG81	510.25	98.75	28	180	0
54	LPG81	467	477	28	180	0
55	LPG81	343.25	477	28	180	0
56	LZ82	49	373	15	90	0
57	LZ82	119	373	15	90	0
58	LZ82	189	373	15	90	0
59	LZ82	259	373	15	90	0
60	LZ82	40.5	351	15	180	0
61	LZ82	40.5	301	15	180	0
62	LZ82	40.5	251	15	180	0
63	LZ82	40.5	201	15	180	0
64	LZ82	36.5	-2	15	270	0
65	LZ82	-1	164.5	15	180	0
66	LZ82	-1	101.5	15	180	0
67	LZ82	-1	34.5	15	180	0
68	LZ82	111.5	-2.25	15	270	0
69	LZ82	186.5	-2.5	15	270	0
70	LZ82	261.5	-2.75	15	270	0

Total Quantity: 70

COOPER Lighting Solutions
Applications Engineering
1121 Highway 74 South
Peachtree City, GA 30269
tel no: 770-486-4599
fax no: 770-486-4599
e-mail: mkt-lightingapplications@cooperlighting.com

We make no representation as to its completeness, currency or accuracy because of reliance inherent to CAD and the additional digital data used to produce a lighting pprotocol. All digital CAD data appear to be extremely accurate, however, this apparent accuracy is an artifact of the techniques used to generate it, and is in no way intended to imply that the data represent the precise location of the features depicted. Any dimensions, areas or locations determined by measuring the graphics in this plan view, either manually or with the use of a computer. This light level analysis is an estimate only, and is based on estimated reflectance values for interior applications or estimated pole locations and aiming directions for exterior applications. This analysis is a mathematical model and can be only as accurate as is permitted by the third party software and the IES standards used. In addition, actual light levels obtained. This analysis is a mathematical model and can be only as accurate as is permitted by the third party software and the IES standards used. In addition, tolerances and light loss factors must be applied to the design values to account for variations in the actual installation, such as but not limited to, lamp output, input voltage between variances,manufacturing tolerances and maintenance. The presence of obstructions, light levels and uniformity may be affected by these variables. Lighting application drawings are being provided for the recipient of this disclaimer.

Project Name:	KROGER 615 DIL #152 Lees Summit, MO
Client:	The Kroger Co. Bill Selkirk
Drawn By:	AA
Date:	4/3/2026
Scale:	1" = 40'
Project No:	2600051 r2.AGI

REVISIONS:

1		
2		
3		
4		
5		

PROJECT #: 27480
DATE: MAY 26, 2026
DRAWN BY: EJH
DESIGNER: JPM
CHECKED BY: MLB

Pickering
Pickering Firm, Inc.
Architecture • Engineering
Planning • Surveying
6363 Poplar Avenue, Suite 300
Memphis, TN 38119
901.726.0810

DILLONS
NE DOUGLAS ST.
LEE'S SUMMIT, MO

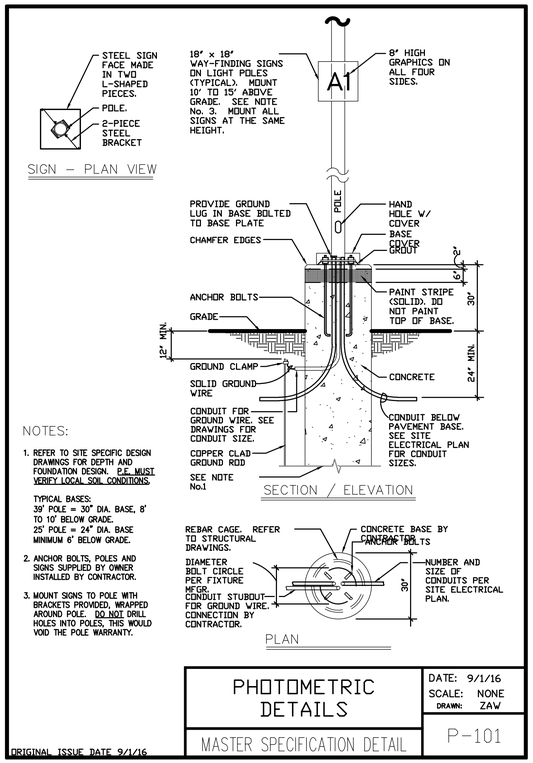
PHILLIPS EDISON & COMPANY

SEAL:
PRELIMINARY - NOT FOR CONSTRUCTION

SHEET NUMBER:
P-100

DESCRIPTION:
PHOTOMETRICS PLAN

K:\27480.00\CAD\PLANS\LIGHTING PLAN.DWG



NOTES:

1. REFER TO SITE SPECIFIC DESIGN DRAWINGS FOR DEPTH AND FOUNDATION DESIGN. P.E. MUST VERIFY LOCAL SOIL CONDITIONS.

   TYPICAL BASES:
   39' POLE = 30" DIA. BASE, 8' TO 10' BELOW GRADE.
   25' POLE = 24" DIA. BASE MINIMUM 6' BELOW GRADE.

2. ANCHOR BOLTS, POLES AND SIGNS SUPPLIED BY OWNER INSTALLED BY CONTRACTOR.

3. MOUNT SIGNS TO POLE WITH BRACKETS PROVIDED, WRAPPED AROUND POLE. DO NOT DRILL HOLES INTO POLES, THIS WOULD VOID THE POLE WARRANTY.

PHOTOMETRIC DETAILS	DATE: 9/1/16 SCALE: NONE DRAWN: ZAW
MASTER SPECIFICATION DETAIL	P-101

ORIGINAL ISSUE DATE 9/1/16

Scottsdale Vertex™ (SCV) Petroleum Canopy Light

Have questions? Call us at (800) 436-7800

Type : _____

PERFORMANCE

Back to Quick Links

Delivered Lumens*

Lumen Package	3000K CCT			4000K CCT			5000K CCT			Wattage
	Delivered Lumens	Efficiency	BUG Ratings	Delivered Lumens	Efficiency	BUG Ratings	Delivered Lumens	Efficiency	BUG Ratings	
10L	9,652	144	B3-U0-G1	9,928	148	B3-U0-G1	10,317	154	B3-U0-G1	67
13L	12,567	140	B3-U0-G1	12,927	144	B3-U0-G1	13,443	149	B3-U0-G1	90
15L	13,999	137	B3-U0-G1	14,399	141	B3-U0-G1	14,963	147	B3-U0-G1	102
20L	18,755	141	B4-U0-G1	19,598	147	B4-U0-G1	20,254	152	B4-U0-G1	133
23L	21,783	141	B4-U0-G2	22,406	145	B4-U0-G2	23,284	150	B4-U0-G2	155
23L (SCF7)	20,895	111	B3-U0-G3	23,187	123	B4-U0-G3	23,101	123	B3-U0-G3	188

*LEDs are frequently updated therefore values are nominal.

Recommended Lumen Maintenance - SCV 15L SC[1]

Ambient Temperature °C	Lumen Multiplier				
	Initial[2]	25k hr[3]	50k hr[3]	75k hr[3]	100k hr[3]
25	102%	97%	92%	88%	84%
30	102%	97%	92%	88%	84%
35	102%	97%	92%	88%	84%
40	102%	97%	92%	88%	84%
45	101%	95%	91%	86%	81%
50	101%	95%	90%	85%	80%

Recommended Lumen Maintenance - SCV 23 SCF1[1]

Ambient Temperature °C	Lumen Multiplier				
	Initial[2]	25k hr[3]	50k hr[3]	75k hr[3]	100k hr[3]
25	105%	88%	73%	61%	51%
30	105%	80%	61%	47%	36%
35	105%	70%	47%	32%	21%

Recommended Lumen Maintenance - SCV 23 SC[1]

Ambient emperature °C	Lumen Multiplier				
	Initial[2]	25k hr[3]	50k hr[3]	75k hr[3]	100k hr[3]
25	102%	97%	92%	88%	84%
30	102%	97%	92%	88%	84%
35	102%	97%	92%	88%	84%
40	101%	96%	91%	86%	82%

Electrical Data - Current draw in AMPS*

Lumen Package	Wattage	120V	208V	240V	277V	347V	480V
10L	67	0.56	0.32	0.28	0.24	0.19	0.14
13L	90	0.75	0.43	0.37	0.32	0.26	0.19
15L	102	0.85	0.49	0.42	0.37	0.29	0.21
20L	133	1.1	0.64	0.55	0.48	0.38	0.28
23L (SC)	155	1.29	0.75	0.65	0.56	0.45	0.32
23L (SCF7)	188	1.57	0.9	0.78	0.68	0.54	0.39

*Electrical data at 25° C (77F). Actual wattage may differ by +/-10%.

1 Lumen maintenance values at 25 ° C are calculated per TM-21 based on LM-80 data and in-situ luminaire testing.
2 In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within-six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip).
3 In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times 6X LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip).

Catalog # _____ Project : _____ Type : _____

Prepared By : _____ Date : _____

Scottsdale Vertex™ (SCV)

Petroleum Canopy Light

IP66

OVERVIEW	
Lumen Package (lm)	9,000 - 23,000
Wattage Range (W)	67 - 188
Efficacy Range (LPW)	109 - 154
Weight lbs (kg)	18.5 (8.4)
Controls	ALBMR, ALBCS, IMSBTxL

QUICK LINKS

Ordering Guide | Performance | Photometrics | Dimensions

FEATURES & SPECIFICATIONS

Construction
- Rugged low-profile die-cast aluminum housing, optical unit, and driver cover.
- Below canopy access to optical chamber and driver housing for serviceability.
- IP66 rated luminaire protects integral components from dust and water.
- Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling.
- Four fasteners secure the door frame to housing. Door frame also provides quick and easy access to the electrical compartment for servicing.
- Shipping weight: 18.5 lbs in carton.

Optical System
- Symmetrical distribution utilizes a clear tempered flat glass lens to uniformly illuminate the area under the gas canopy.
- Combination Forward Throw distribution uses clear tempered flat glass and optical grade PMMA acrylic lens to create an industry leading unique distribution pattern to illuminate the area under the gas canopy and the area between the gas canopy and convenience store eliminating the need for extra floodlights.
- Available in 5000K, 4000K and 3000K color temperatures.
- Minimum CRI of 80.

Electrical
- High-performance factory programmable driver; features include over-voltage, undervoltage, short circuit and over temperature protection.
- Integral 6kV surge protection that meets IEEE C62.41.2 and ANSI C82.77-5 Location Category C Low standards.
- Additional field replaceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).
- Custom lumen and wattage packages available.
- 0-10V dimming (10% - 100%) standard.
- Standard Universal Voltage (120-277 Vac) Input 50/60 Hz or optional High Voltage (347-480 Vac).
- L80 Calculated Life: >100k Hours (See Lumen Maintenance on Page 2).
- Total harmonic distortion: <20%.
- Operating temperature: -40°C to +50°C. (-40°F to +122°F) when mounted to Steel/ Aluminum surfaces for 10L, 13L, & 15L Lumen Packages, +45°C for 20L Lumen Package, and +35°C for 23L Lumen Package. If mounted to a non-metallic surface, reduce ambient by 5°C.
- Power factor: >0.90.
- High-efficacy LEDs are mounted to (4) circuit boards to maximize heat dissipation.
- Driver components are fully encased in potting material for moisture resistance. Driver complies with FCC standards.

Hazardous Location
- Designed for lighter than air fuel applications. Product is suitable for Class 1 Division 2 with all lumen packages and distributions only when properly installed per LSI installation instructions. Models with optional controls are not approved for Class 1, Division 2 applications.
  - Gas Groups A, B, C, and D – Group A: Acetylene / Group B: Hydrogen / Group C: Propane and Ethylene / Group D: Benzene, Butane, Methane & Propane.

Installation (Standard)
- Installs in a 12" or 16" deck pan.
- Four fasteners are provided for use in single deck steel canopies. Other suitable fasteners may be required and provided by others.
- Unit is designed to quickly retrofit into existing Scottsdale (4") hole.
- Aluminum locking collar and gasket are included and required for complete seal and support of canopy deck.
- Retrofit panels are available for existing Encores, Richmond, 2x2 Universal, and more.
- Direct mount to surface or recessed J box with hardware bracket kit ordered separately as an accessory.

Warranty
- LSI luminaires carry a 5-year limited warranty. Refer to https://www.lsicorp.com/resources/terms-conditions-warranty/ for more information.

Listings
- Listed to UL 1598 and UL 8750.
- Meets Buy American Act requirements.
- State of California Title 24 Compliant with IMSBT option.
- DesignLights Consortium® (DLC) Premium qualified product. Not all versions of this product may be DLC Premium qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.
- IDA compliant with 3000K or lower color temperature.

Scottsdale Vertex™ (SCV) Petroleum Canopy Light

Have questions? Call us at (800) 436-7800

Type : _____

ORDERING GUIDE

Back to Quick Links

TYPICAL ORDER EXAMPLE: SCV LED 13L SC UNV DIM 50 WHT IMSBT2 REDI

Prefix	Light Source	Lumen Package	Distribution	Voltage	Driver	Color Temperature	Finish	Options	Mounting
SCV - Petroleum Canopy Luminaire	LED Custom Lumen Packages[1] 23L - 23,000 Lumens	10L - 10,000 Lumens 13L - 13,000 Lumens 15L - 15,000 Lumens 20L - 20,000 Lumens 23L - 23,000 Lumens SCF7 - Combination Standard Symmetric and Forward Throw[2]	SC - Standard Symmetric	UNV - Universal Voltage (120-277VAC) HV - 347-480V[3]	DIM - 0-10V Dimming[4]	30 - 3000K 40 - 4000K 50 - 5000K	WHT - White BLK - Black BRZ - Bronze	Blank - None ALBMR1 - AirLink Blue Multi Range Motion and Photo Sensor (8-15' mounting height) ALBCS2 - AirLink Blue Wireless Motion & Photo Sensor (16-40' mounting height) IMSBT1L - Integral Bluetooth® Motion and Photocell Sensor (8-24' mounting height)[5] IMSBT2L - Integral Bluetooth® Motion and Photocell Sensor (25-40' mounting height)[6] HL - Hazardous Location Class 1 Div 2[7]	Blank - None REDI - REDIMount integrated junction box system[8]

Need more information? Click here for our glossary

Have additional questions? Call us at (800) 436-7800

ACCESSORY ORDERING INFORMATION

Part Number	Description
673425R2	Retrofit Panel Kit - EC / ECTA / SCF to SCV, for 16" Deck Panel with larger openings[2]
671601R2	Retrofit Panel Kit - EC / ECTA / SCF to SCV, for 12" Deck Panel[2]
673426R2	Retrofit Panel Kit - RECU Richmond to SCV
673427R2	Retrofit Panel Kit - UNV Universal 2x2 to SCV
357282	Retrofit 2x2 Cover Panel Blank (no holes)
354702	Retrofit RC Cover Panel Blank (no holes)
557193WHT	26" X 26" Beauty Plate Kit (with 4" Center hole)
564186WHT	26" X 32" Beauty Plate Kit (with 4" Center hole)

Part Number	Description
687461	Junction Box
1320540	Kit - Hole Plugs and Sealant (enough for 25 retrofits)
671939R2WHT	Rectangular Top Plate Kit (includes top plate and sealant)
675453R2	Surface Mount Box
687462R2	Retrofit Kit - CRU/CRUS to SCV
744355	Retrofit Kit for SCM/SCV to upgrade SC/SCF/EC/ECTA White
752127R2	Bracket SCM/SCV Direct Mount with Hardware

1 Custom lumen and wattage packages available consult factory. Values are within industry standard tolerances but not DLC listed.
2 Will not available with REDIMount.
3 0-10 low voltage wired dimming not available with REDIMount.
4 IMSBTxL is field configurable via the LSI app that can be downloaded from your smartphone's native app store.
5 HL not compatible with AirLink, IMSBTxL, 3000K, or REDIMount.
6 Light fixture engine does not ship with REDIMount attached.
7 Ideal for 0" to 12" openings.
8 Ideal for 0" openings.

Project		Catalog #		Type	
Prepared by		Notes		Date	

McGraw-Edison

GALN Galleon II

Area / Site Luminaire

Product Features

Light Atholicet™

Product Certifications

Interactive Menu

- Ordering Information page 2
- Mounting Details page 3
- Optical Distributions page 5
- Product Specifications page 5
- Energy and Performance Data page 6
- Control Options page 17

Quick Facts

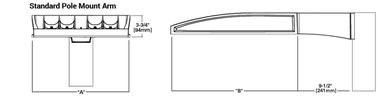
- Lumen packages range from 3,300 - 102,700 (33W - 658W)
- 22 optical distributions
- Efficacy up to 178 LPW

Connected Systems

- Wavelinx LITE Wireless
- Wavelinx PRO Wireless
- AirMesh Wireless

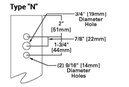
Dimensional Details

Standard Pole Mount Arm



Pole Drilling Pattern

Type "N"



Number of Light Squares	Width "A"	Housing Length "B"	Weight with Standard or QM Arm	EPA with Standard or QM Arm
1-4	16"	22"	29 lb	0.95
5-6	22"	22"	39 lb	0.95
7-9	22"	28-1/8"	48 lb	1.1

NOTE: For arm selection requirements and additional line art, see Mounting Details section.

NOTES:
1. IDA Certified (3000K CCT and warmer only, fixed mounting options)

COOPER Lighting Solutions
a @ignify business

PIS00005EN page 1
October 25, 2025 7:03 PM

McGraw-Edison

GALN Galleon II

Ordering Information

SAMPLE NUMBER: GALN-SA4C-740-U-T4FT-GM

Product Family [1, 2]	Light Engine Configuration			Color Temperature	Voltage	Distribution	Mounting	Finish
	Light Square	Square Count	Lumen Output					
GALN—Galleon II BAA-GALN—Galleon II Buy American Act Compliant [3] TAA-GALN—Galleon II Trade Agreements Act Compliant [3] BABA-GALN—Galleon II BABA/IIJA Compliant [3]	SA - 16 LED Light Square SB - 25 LED Light Square	1 - 1 Light Square 2 - 2 Light Squares 3 - 3 Light Squares 4 - 4 Light Squares 5 - 5 Light Squares 6 - 6 Light Squares 7 - 7 Light Squares 8 - 8 Light Squares 9 - 9 Light Squares	A - Output Level 1 B - Output Level 2 C - Output Level 3 D - Output Level 4 [4, 5] Z - Configured Output*	722 - 70CRI, 2700K 727 - 70CRI, 2700K 730 - 70CRI, 3000K 735 - 70CRI, 3500K 740 - 70CRI, 4000K 750 - 70CRI, 5000K 760 - 70CRI, 6000K 827 - 80CRI, 2700K 830 - 80CRI, 3000K 835 - 80CRI, 3500K 840 - 80CRI, 4000K 930 - 90CRI, 3000K 935 - 90CRI, 3500K 940 - 90CRI, 4000K 950 - 90CRI, 5000K AMB - Amber [4, 14]	U - 120-277V H - 347V-480V [1, 19] 1 - 120V 2 - 208V 3 - 240V 4 - 277V 8 - 480V [1, 19] 9 - 347V DV - 277V-480V DuroVolt Drivers [16, 19, 20]	T1 - Type I T2 - Type II T2R - Type II Roadway T3 - Type III T3R - Type III Roadway T4FT - Type IV Forward Throw T4W - Type IV Wide T4R - Type IV Narrow SM2 - Type V Square Medium SWQ - Type V Square Wide SL2 - Type II w/Spill Control SL3 - Type III w/Spill Control SL4 - Type IV w/Spill Control SLL - 90° Spill Light Eliminator Left SLR - 90° Spill Light Eliminator Right RW - Rectangular Wide Type I AFL - Automotive Frontline T2BC - Type II w/ Backlight Control [8] T3BC - Type III w/ Backlight Control [8] T4BC - Type IV w/ Backlight Control [8] LBC - 90° Left w/ Backlight Control [8] RBC - 90° Right w/ Backlight Control [8]	[blank] - Standard Pole Mount Arm QU - Quick Mount Universal Arm PA - Pole Mount Arm with Quick Mount Adaptor PA - Pole Mount, Adjustable SP - 3" Slipfitter, Adjustable [9] SP2 - 2-3/8" Slipfitter, Adjustable [9] OMA - Quick Mount Mast Arm, Fixed MA - Mast Arm, Fixed WM - Wall Mount, Fixed WA - Wall Mount, Adjustable UP - Upswept Arm	AP - Grey BZ - Bronze BK - Black DP - Dark Platinum GM - Graphite Metallic WH - White RAL/AK - Custom Color

Options (Add as Suffix)	Controls and Systems Options (Add as Suffix)	Accessories (Order Separately) [17]
DIM - External 0-10V Dimming Leads [18] F - Single Fuse (120, 277 or as 347V Specify Voltage) FF - Double Fuse (208, 240 or 480V Specify Voltage) 20K - 20kV/10kA 1.44J transient surge protective device [18] 2L - Two Circuits [18] HA - 50°C High Ambient [18] HSS - Installed House Side Shield [21] BCS - Backlight Control Shield [22, 23] GRSBK - Glare Reducing Shield, Black [24] GRSWH - Glare Reducing Shield, White [24] LED - Light Engine Color Tuned to Match Housing [18] TH - Tool-less Door Hardware CC - Coastal Construction finish [25] L90 - Optics Rotated 90° Left R90 - Optics Rotated 90° Right 3SDCM - 3 Standard Deviation Color Matching [26] AHD14S - After Hours Dim, 5 Hours [27] AHD24S - After Hours Dim, 6 Hours [27] AHD25S - After Hours Dim, 7 Hours [27] AHD35S - After Hours Dim, 8 Hours [27] DALI - DALI Drivers CDW - Non-programmable Drivers [18]	BPC - Button Type Photocontrol. Must specify voltage 120V, 208V, 240V or 277V. [4] PR - NEMA 3-PIN Photocontrol Receptacle PR7 - NEMA 7-PIN Photocontrol Receptacle [28] FADC - Field Adjustable Dimming Controller [29] PSC - Photocontrol Shorting Cap SPR2 - Dimming Motion Sensor, 9'-20' mounting [30] SPR4 - Dimming Motion Sensor, 21'-40' mounting [30] SPB2/X - Dimming Motion Sensor, limited square count, 9'-20' mounting [30] SPB4/X - Dimming Motion Sensor, limited square count, 21'-40' mounting [30] MS/DIM-L20 - Motion Sensor for Dimming Operation, 9'-20' Mounting [31, 32] MS/DIM-L40 - Motion Sensor for Dimming Operation, 21'-40' Mounting [31, 32] WLXIFOX - Wavelinx LITE, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 7' - 15' Mounting [31, 32, 33, 34] WLXIFOXPD - Wavelinx LITE, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 15' - 40' Mounting [31, 32, 33, 34] WPSZXX - WaveLinx PRO, SR Driver, Dimming Motion and Daylight, WAC Programmable, 7' - 15' Mounting [31, 32, 33, 34] WPS4XX - WaveLinx PRO, SR Driver, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting [31, 32, 33, 34] DMI10-L20 - AirMesh Occupancy Sensor (9'-20' Mounting) [35, 36] DMI10-L40 - AirMesh Occupancy Sensor (21'-40' Mounting) [35, 36]	OA/BA1016 - NEMA Photocontrol Multi Tap - 105-285V PR-NEMA 3-PIN Photocontrol Receptacle OA/BA1027 - NEMA Photocontrol - 480V OA/BA1201 - NEMA Photocontrol - 347V OA/BA1013 - Photocontrol Shorting Cap OA/BA1014 - 120V Photocontrol MA1252 - 10kV Surge Module Replacement MA1036-XX - Single Tenon Adapter for 2-3/8" O.D. Tenon MA1037-XX - (2@180°) Tenon Adapter for 2-3/8" O.D. Tenon MA1197-XX - (3@120°) Tenon Adapter for 2-3/8" O.D. Tenon MA1188-XX - (4@90°) Tenon Adapter for 2-3/8" O.D. Tenon MA1189-XX - (5@90°) Tenon Adapter for 2-3/8" O.D. Tenon MA1190-XX - (6@90°) Tenon Adapter for 2-3/8" O.D. Tenon MA1191-XX - (8@120°) Tenon Adapter for 2-3/8" O.D. Tenon MA1038-XX - Single Tenon Adapter for 3-1/2" O.D. Tenon MA1039-XX - (2@180°) Tenon Adapter for 3-1/2" O.D. Tenon MA1192-XX - (3@120°) Tenon Adapter for 3-1/2" O.D. Tenon MA1193-XX - (4@90°) Tenon Adapter for 3-1/2" O.D. Tenon MA1194-XX - (5@90°) Tenon Adapter for 3-1/2" O.D. Tenon MA1195-XX - (6@90°) Tenon Adapter for 3-1/2" O.D. Tenon SRA339 - Adaptor kit for mounting 3" SP arm to 2-3/8" O.D. vertical tenon FSIR-100 - Wireless Configuration Tool for MSCDM [37] LS/HSS - Field Installed House Side Shield for SA Light Squares [4, 21] LS/HSS-SB - Field Installed House Side Shield for SB Light Squares [4, 21] LS/BCS - Backlight Control Shield [4, 21, 22] LS/GRSBK-2PK - Glare Reducing Shield, Black [4, 24] LS/GRSWH-2PK - Glare Reducing Shield, White [4, 24] LS/PFS - Perimeter Shield, Black [38] WOLC-7P-15A - WaveLinx Outdoor Control Module [31, 34, 39] TLJ-EL-HV - AirMesh 7-PIN node, 110-480V [31, 34, 36] CBSSW-450-002 - AirMesh central base station with 5 button control [36]

NOTES:
1. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our white paper WP27300ENUS for additional support information.
2. Designlights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details.
3. Coastal construction finish salt spray tested to over 3,000 hours per ASTM B117, with a scribe rating of 9 per ASTM D1654. Not available with 7in option.
4. Not available with 5 Square, Output Level 4 not available with color temperatures 722, 727, 827, 830 or 930 when HSS is used.
5. 7in option not XC rated. Not available with Coastal Construction (CC) option.
6. Not available with SB light squares.
7. Not available with SCF1 or SCF4 configurations. Not available in combination with 1in high ambient and sensor options at Output Level 3. H voltage not available with sensor options, choose voltage 8 or 9.
8. 10" arm limited to 3" U, 6" arm limited to 5". SPS limited to 3-3/4" O.D. without tenon.
9. One required for each Light Square.
10. Not available with SB light squares. Not available with SPR at 347V or 480V. Not available with WaveLinx or 20kV surge option.
11. Requires PR7.
12. Replace XX with sensor color (WH, BZ or BK.).
13. WAC Gateway required to enable field configurability. Order WAC-PoE and WPOE-136 (10V to PoE injector) power supply if PoE switch is not available. Refer to WP27300ENUS.
14. Narrow band 3000K +/- 5mn for wildlife and observatory use. Choose Output Level 1, supplied at 500mA drive current only. Not available with SB light squares. Exact luminance wattage available in IES files. Available with 5WQ, 5WQ, SL2, SL3 and SL4 distributions. Can be used with HSS option.
15. Set of 4 pcs. One set required per Light Square.
16. Not available with 347V-480V, 20kV surge or Red Amber.
17. Not for use with T1, 5WQ, 5WQ, SWQ or RW options.
18. Cannot be used with other control options.
19. Not available in combination with any other outside fixture. Not available with DALI or integrated controls options.
20. Not available if any SPR2 or SPR4 sensor is selected. Motion sensor has an integral photocell.
21. Requires the use of a NEMA SP7 photocontrol or the PR7 or PR photocontrol receptacle with photocontrol accessory. Not available with SB light squares when using Output Level 4.
22. Not for use with T1, 14FT, T4FW or SL options. See IES files for details. Not available with SB light squares.
23. Sensor configuration mobile application required for configuration. See controls page for details.
24. Replace X with number of Light Squares controlled by the GRS, referencing the "GRSLX Availability Table" on the controls page.
25. Not available with HSS, GRSBK1 or GRSBK.
26. Only product configurations with fixture designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC PREFERENCES website for more information. Consult factory for other configurations that require domestic preference compliance.
27. For BAA or TAA requirements, Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.
28. Use PR7 for 347V applications to minimize from power quality issues such as loss of neutral, transients and voltage fluctuations. Visit www.nlpcda.com/pbwork for more information.
29. 480V not to be used with ungrounded or impedance grounded systems.
30. Not available with SA1A or SA1X. Not available with SB1, or any SB configuration using Output Level 1. Not available with any control option except SPR.
31. Not to be used with DALI, PR7, or other motion response control options. Not available with SB light squares when using Output Level 4.
32. Use GALN Product Configurator to specify lumen output, drive current and wattage. Not available with AMB. Not available with SB light squares.
33. Uses the FSIR-211 motion sensor. The FSIR-100 configuration tool is required to adjust parameters including high and low modes, daylight thresholds, and time delays. Refer to the FSIR-100 Configuration Tool Guide for WaveLinx LITE for more information.
34. Controls system is not available with photocontrol receptacles (PR, PR7) or other controls systems (FADC, SPR4).
35. Requires AirMesh central base station CBSSW-450-002 and Synapse commissioning for operation.
36. 3-step MacAdam ellipse binning. Available in 740 CRI/CCT only. Longer lead times apply, consult your lighting representative at Cooper Lighting Solutions for more information.
37. Requires use of a PC with Bluetooth.
38. Only product configurations with these prefixes are built to be compliant with Beday American Act of 1933 (BAA) or the Build America Buy America Act (BABA). BABA is the minimum Government compliance requirement for the Build America Buy America provisions which is part of the Infrastructure Investment and Jobs Act (IIJA). Additional requirements may apply to meet other standards which is part of the IIJA. Please refer to the DOMESTIC PREFERENCES website or consult the GLS Domestic Preferences team for more information. Components shipped separately will be separately analyzed under domestic preference requirements.
39. Select SA light square. Only available with Output Levels 1, 3 or 5. Not compatible with HSS, GRS, BCS or PFS shield options, or LCF.
40. Not compatible with DALI.
41. Uses non-NFC (Near Field Communication) drivers to eliminate field programmability.

COOPER Lighting Solutions
a @ignify business

PIS00005EN page 2
October 25, 2025 7:03 PM

REVISIONS:

PROJECT #: 27480
DATE: MAY 26, 2026
DRAWN BY: EJH
DESIGNER: JPM
CHECKED BY: MLB

Pickering
Pickering Firm, Inc.
Architecture • Engineering
Planning • Surveying
6363 Poplar Avenue, Suite 300
Memphis, TN 38119
901.726.0810

DILLONS
NE DOUGLAS ST.
LEE'S SUMMIT, MO

PHILLIPS EDISON & COMPANY

SEAL:

PRELIMINARY - NOT FOR CONSTRUCTION

SHEET NUMBER:

P-101

DESCRIPTION:
PHOTOMETRIC DETAILS

K:\27480.00\CAD\PLANS\-101 LIGHTING DETAILS.DWG

Project		Catalog #		Type	
Prepared by		Notes		Date	

McGraw-Edison

GWS Galleon II Wall Slim

Wall Mount Luminaire

Product Features

Light Athlitect™

Interactive Menu

- Ordering Information page 2
- Product Specifications page 2
- Energy and Performance Data page 3
- Control Options page 9

Product Certifications

Quick Facts

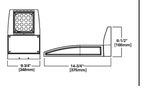
- Lumen packages range from 2,700 - 52,000 (20W - 373W)
- 14 optical distributions
- Efficacy up to 160 LPW

Connected Systems

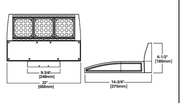
- WaveLinx PRO Wireless
- WaveLinx LITE Wireless

Dimensional Details

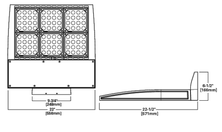
1 Square - Housing



2-3 Square - Housing



4-6 Square - Housing



NOTES:
1. Visit https://www.designlights.org/search/ to confirm qualification. Not all product variations are DLC qualified.
2. IDA Certified for 3000K CCT and warmer only.

McGraw-Edison

GWS Galleon II Wall Slim

Ordering Information

SAMPLE NUMBER: **GWS-SA1C-740-U-T2-GM**

Product Family [1,2]	Light Engine		Color Temperature	Voltage	Distribution and IES NEMA-Type (HxV)	Finish
	Configuration	Drive Current				
GWS-Galleon Wall Slim **BAA-GWS**-Galleon Wall Slim Buy American Act Compliant [18] **TAA-GWS**-Galleon Wall Slim Trade Agreements Act Compliant [18] **BABA-GWS**-Galleon Wall Slim build America Buy America [18]	**SA1**-1 Square **SA2**-2 Squares **SA3**-3 Squares **SA4**-4 Squares **SA5**-5 Squares **SA6**-6 Squares	**A**-350mA[3] **B**-450mA **C**-615mA **D**-800mA **E**-1050mA **F**-1200mA **Z**-Configured [19]	**722**-702CRI, 2200K **727**-70CRI, 2700K **730**-70CRI, 3000K **735**-70CRI, 3500K **740**-70CRI, 4000K **750**-70CRI, 5000K **760**-70CRI, 6000K **827**-80CRI, 2700K **830**-80CRI, 3000K	**U**-120-277V **1**-120V **2**-208V **3**-240V **4**-277V **5**-347V **9**-347V	**T1**-Type I **T2**-Type II **T3**-Type III **T4FT**-Type IV Forward Throw **T4W**-Type IV Wide **SL2**-Type II w/Spill Control **SL3**-Type III w/Spill Control **SL4**-Type IV w/Spill Control **SLL**-90° Spill Light Eliminator Left **SLR**-90° Spill Light Eliminator Right **SW**-Rectangular Wide Type I **SNO**-Type V Square Narrow **SMQ**-Type V Square Medium **SWQ**-Type V Square Wide	**AP**-Grey **BZ**-Bronze **BK**-Black **DP**-Dark Platinum **GM**-Graphite Metallic **WH**-White

Options (Add as Suffix)	Controls and Systems Options (Add as Suffix)	Accessories (Order Separately)
DIM-External 0-10V Dimming Leads* **F**-Single Fuse[7] **FF**-Double Fuse[7] **20K**-20kV surge protective device **2L**-Two Circuits [4,20] **CC**-Coastal Construction **L90**-Optics Rotated 90° Left **R90**-Optics Rotated 90° Right **HSS**-Factory Installed House Side Shield * **GRSBK**-Glare Reducing Shield, Black * **GRSWH**-Glare Reducing Shield, White * **AHD545**-After Hours Dim, 5 Hours[8] **AHD645**-After Hours Dim, 6 Hours[8] **AHD255**-After Hours Dim, 7 Hours[8] **AHD355**-After Hours Dim, 8 Hours[8] **HA**-50°C High Ambient **DALI**-DALI Drivers **WG**-Factory installed Wire Guard [9] **SLD**-Factory installed Vandal Shield **TB**-3-position Terminal Block	**BPC**-Button Type Photocontrol (120, 208, 240 or 277V. Must Specify Voltage) **PR**-NEMA 3-PIN Photocontrol Receptacle **PR7**-NEMA 7-PIN Photocontrol Receptacle[20] **WPSXXX**-WaveLinx PRO, SR Driver, Dimming Motion and Daylight, WAC Programmable, 7' - 15' Mounting [17] **WPSAXX**-WaveLinx PRO, SR Driver, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting [17] **WLLXXX**-WaveLinx LITE, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 7' - 15' Mounting [17] **WLSAXX**-WaveLinx LITE, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 15' - 40' Mounting [17] **SPB1**-Dimming Motion and Daylight Sensor, Bluetooth Programmable, < 8' Mounting** **SPB2**-Dimming Motion and Daylight Sensor, Bluetooth Programmable, 8' - 20' Mounting** **SPB4**-Dimming Motion and Daylight Sensor, Bluetooth Programmable, 21' - 40' Mounting** **DIM10-LOB**-AirMesh Occupancy Sensor (<40' Mounting)[10] **DIM10-L20**-AirMesh Occupancy Sensor (9'-20' Mounting)[10] **DIM10-L40**-AirMesh Occupancy Sensor (21'-40' Mounting)[10]	**OA/RA1016**-NEMA Photocontrol Multi-Tap - 105-285V **OA/RA1027**-NEMA Photocontrol - 480V **OA/RA1201**-NEMA Photocontrol - 347V **OA/RA1013**-Photocontrol Shorting Cap **OA/RA1014**-120V Photocontrol **MA1252**-10kV Surge Module Replacement **WDLC-7P-10A**-WaveLinx Outdoor Control Module [16] **TLT-HVD**-AirMesh 7-PIN node, 110-480V [16] **LS/HSS**-Field Installed House Side Shield *, [6] **LS/GRSBK-2PK**-Glare-Reducing Shield, Black *, [6,11] **LS/GRSWH-2PK**-Glare-Reducing Shield, White *, [6,11] **LS/PFS**-Perimeter Shield, Black [18, 21] **LS/WG/1**-Field installed Wire Guard, 1 Sq [9] **LS/WG/2**-Field installed Wire Guard, 2 Sq [9] **LS/WG/4**-Field installed Wire Guard, 4 Sq [9] **LS/SLD/1**-Field installed Vandal Shield, 1 Sq **LS/SLD/3**-Field installed Vandal Shield, 3 Sq **LS/SLD/6**-Field installed Vandal Shield, 6 Sq

NOTES:
1. Customer is responsible for engineering analysis to confirm fixture compatibility for all applications. Refer to our white paper WP513001EN for additional support information
2. Not available with Emergency Battery Backup. See Energy Insights.org Qualified Products List under Family Models for details
3. Available with SA1 only. Not available with SA1F or dimming
4. Not for use with T4FT, T4W or SL4 optics. See IES files for details.
5. 480V not to be used with ungrounded or impedance grounded systems.
6. Low voltage control lead brought out 10" outside fixture. Not available with DALI or integrated controls options
7. Single fuse (F) specify voltage 120V, 277V or 347V. Double fuse (FF) specify voltage 208V, 240V or 480V
8. 2L is not available with SPB at 347V or 480V. Not available with WaveLinx or Enlighted sensors, or 20kV surge option
9. Not for use with SWQ, SNQ, SWQ or HW optics. The light square trim plate is painted black when the HSS option is selected
10. Requires the use of BPC photocontrol or the PR7 or PR photocontrol receptacle with photocontrol accessory
11. Not available with WG option
12. Not available if any SPB or WaveLinx sensor is selected
13. Set of 4 pcs. One set required per Light Square
14. Sensor configuration mobile application required for configuration. See controls page for details
15. Requires PR7 receptacle
16. Order one shield per Light Square.
17. WAC Gateway required to enable field-configurability. Order WAC-PoE and WPOE-120 (10W to PoE injector) power supply if needed. WAC not required for Bluetooth Programmable sensors
18. Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.
19. Configured (Z) specify configurations delivers standard products with small adjustments to meet unique requirements such as packaging, labels, wattage adjustments, etc.
20. Available with SA1A for 120V only
21. Only product configurations with these prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or the Build America Buy America Act (BABA). BABA is the minimum Government compliance requirement for the Build America Buy America standards which is part of the Infrastructure and Investment Jobs Act (IIJA). Individual Government Agencies may have more stringent compliance standards. Please refer to the DOMESTIC PREFERENCES website or consult the CLS Domestic Preferences team for more information. Components shipped separately may be separately analyzed under domestic preference requirements.

Product Specifications

Construction

- Single-piece die-cast aluminum housing with integrated heat sink
- Available in three housing sizes: small (1 light square), medium (2 or 3 light squares), and large (4, 5, or 6 light squares)
- Housing and optics IK10 impact rated
- Housing and optics IP66 rated

Optics

- High-efficiency injection-molded AccuLED Optics technology
- 14 optical distributions for wall mount applications
- 3 shielding options include HSS, GRS and PFS
- SLD constructed of Makrolon GP, UV stabilized clear polycarbonate, with a thickness of 3/16" and impact rated IK10; Secured at 4 fastening points and spaced 3/16" from optical lens
- WG constructed of 11-guage wire in a 1"x1" cell pattern; Chrome color poly powder coat finish
- IDA Certified (3000K CCT and warmer only)

Electrical

- Standard with 0-10V dimming
- Standard with 10kV surge module, optional 20kV surge module
- Suitable for operation in -40°C to 40°C ambient environments
- Optional 50°C high ambient (HA) configuration

Mounting

- Gasketed and zinc plated rigid steel mounting attachment for wall mount only

Typical Applications

- Exterior Wall, Walkway

Finish

- 6 standard finishes use super durable TGIC polyester powder coat paint, providing 2.5 mil nominal thickness and salt-spray tested to 3,000 hours per ASTM B117
- RAL and custom color matches available
- Coastal Construction (CC) option available

Compliance

- This Cooper product is manufactured in the US and meets the BABA cost of components rule. To verify a configured product with specific accessories and options meets BABA Domestic Preference Requirements; submit this catalog number to Cooper Lighting Quotation team for validation by our Engineering and Manufacturing teams. Our BABA designation is based on the minimum compliance requirement for BABA. Individual Government Agencies may have more stringent compliance standards
- Please refer to the DOMESTIC PREFERENCES website or consult the CLS Domestic Preferences team for more information. Components shipped separately may be separately analyzed under domestic preference requirements

Warranty

- Five year limited warranty, consult website for details www.cooperlighting.com/legal

REVISIONS:

1		
2		
3		
4		
5		

PROJECT #: 27480
DATE: MAY 26, 2026
DRAWN BY: EJH
DESIGNER: JPM
CHECKED BY: MLB

Pickering Firm, Inc.
Architecture • Engineering
Planning • Surveying
6363 Poplar Avenue, Suite 300
Memphis, TN 38119
901.726.0810

DILLONS
NE DOUGLAS ST.
LEE'S SUMMIT, MO

PHILLIPS EDISON & COMPANY

SEAL:

PRELIMINARY - NOT FOR CONSTRUCTION

SHEET NUMBER:

P-102

DESCRIPTION:
PHOTOMETRIC DETAILS

K:\27480.00\CAD\PLANS\L-101 LIGHTING DETAILS.DWG

FRONT (EAST) ELEVATION AREA = *11,375 SF*

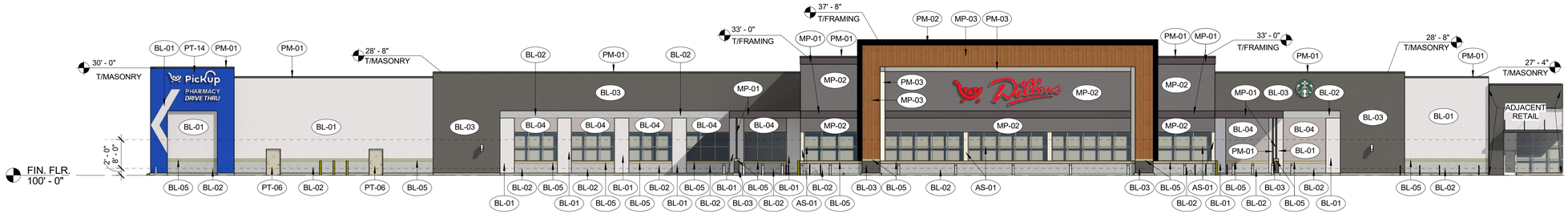
CLASS 1/2 MATERIALS:		
• GLAZING	1,245 SF	11%
• GROUND FACE CMU (BL-01)	2,933 SF	26%
• GROUND FACE CMU (BL-03)	2,328 SF	20%
• GROUND FACE CMU (BL-04)	528 SF	5%
• METAL PANEL (MP-01)	342 SF	3%
• METAL PANEL (MP-02)	1,546 SF	14%
• METAL PANEL (MP-03)	744 SF	6%
CLASS 1/2 TOTAL %		85%
CLASS 3 MATERIALS:		
• COMBED FACE CMU (BL-05)	189 SF	2%
• SPLIT FACE CMU (BL-02)	950 SF	8%
CLASS 4 MATERIALS:		
• METAL TRIM	513 SF	4%
• METAL TRIM (PM-01)	109 SF	1%
• METAL TRIM (PM-02)	219 SF	2%
• METAL TRIM (PM-03)	185 SF	1%
• HOLLOW METAL DOORS	57 SF	1%

LEFT (SOUTH) ELEVATION AREA = *8,204 SF*

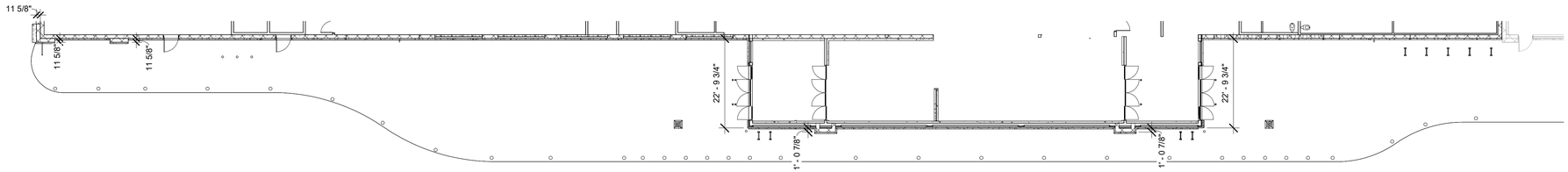
CLASS 1/2 MATERIALS:		
• GLAZING	251 SF	3%
• GROUND FACE CMU (BL-01)	3,720 SF	46%
• GROUND FACE CMU (BL-03)	2,654 SF	32%
• GROUND FACE CMU (BL-04)	0 SF	0%
• METAL PANEL (MP-01)	91 SF	1%
• METAL PANEL (MP-02)	384 SF	5%
• METAL PANEL (MP-03)	44 SF	1%
CLASS 1/2 TOTAL %		88%
CLASS 3 MATERIALS:		
• COMBED FACE CMU (BL-05)	99 SF	1%
• SPLIT FACE CMU (BL-02)	582 SF	7%
CLASS 4 MATERIALS:		
• METAL TRIM (PM-01)	108 SF	1%
• HOLLOW METAL DOORS	271 SF	3%

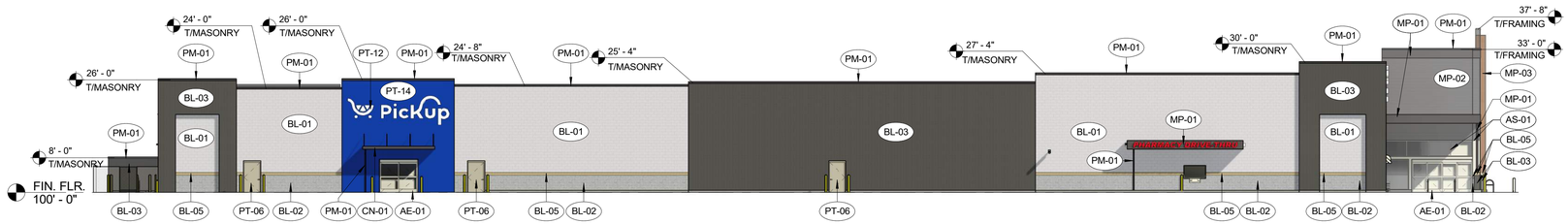
*ALL GLAZING NOTED IS TRANSPARENT.

ROOFING: TPO MEMBRANE, NOT VISIBLE - CLASS 3

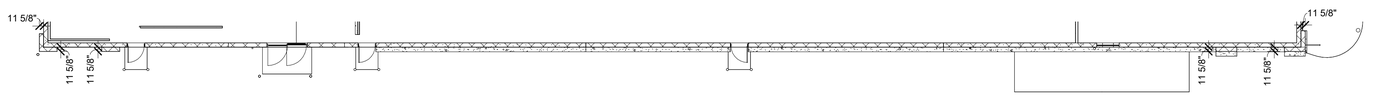


1 FRONT (EAST) ELEVATION
1/16" = 1'-0"





4 LEFT (SOUTH) ELEVATION
1/16" = 1'-0"



SIGNAGE SHOWN FOR REFERENCE ONLY. OWNER'S SIGN CONTRACTOR TO INSTALL NEW SIGNAGE. ALL SIGNS ARE UNDER SEPARATE PERMIT TO BE PULLED BY OWNER'S SIGNAGE CONTRACTOR.

EXTERIOR FINISHES

MATERIAL	DESCRIPTION	MANUFACTURER	FINISH
AE-01	PREFINISHED ALUMINUM STOREFRONT DOOR	STANLEY	CLEAR ANODIZED
AS-01	PREFINISHED ALUMINUM STOREFRONT		CLEAR ANODIZED
BL-01	DECORATIVE, INTEGRALLY COLORED CMU - GROUND FACE	BASALITE	720WR
BL-02	DECORATIVE, INTEGRALLY COLORED CMU - SPLIT FACE	BASALITE	800WR
BL-03	DECORATIVE, INTEGRALLY COLORED CMU - GROUND FACE	BASALITE	807WR
BL-04	DECORATIVE, INTEGRALLY COLORED CMU - GROUND FACE	BASALITE	900WR
BL-05	DECORATIVE, INTEGRALLY COLORED CMU - COMBED FACE PRECISION	BASALITE	923WR
CN-01	PREMANUFACTURED CANOPY	ARCHITECTURAL FABRICATIONS INC.	SLATE GRAY
MP-01	METAL PANEL - SMOOTH	ATAS INT.	SLATE GRAY
MP-02	METAL PANEL - CORRUGATED	ATAS INT.	SILVERSMITH
MP-03	METAL WALL PANEL, WOOD GRAIN FINISH	LONGBOARD	LIGHT CHERRY
PM-01	PREFINISHED METAL		SLATE GRAY
PM-02	PREFINISHED METAL		MATTE BLACK
PM-03	PREFINISHED METAL		WHITE
PT-06	PAINTED METAL	SHERWIN WILLIAMS	MINDFUL GRAY SW7016
PT-07	PAINTED METAL	SHERWIN WILLIAMS	GAUNTLET GRAY SW7019
PT-08	PAINT	SHERWIN WILLIAMS	SW4084 SAFETY YELLOW
PT-12	PAINT	SHERWIN WILLIAMS	WHITE
PT-14	PAINT	SHERWIN WILLIAMS	KROGER BLUE PMS 2728C
SO-01	VINYL SOFFIT PANEL	CERTAINTEED	GRANITE GRAY

Naos Design Group, LLC
4949 S. SYRACUSE STREET
SUITE 460
DENVER, COLORADO 80237
(p) 303.759.5777 (f) 720.360.4281
www.naosdg.com

DILLON'S #152

NE DOUGLAS ST
LEE'S SUMMIT, MO

JOB #: 2026002 **DATE:** 03/27/2026
SCALE: 1/16" = 1'-0"

COPYRIGHT © 2026 NAOS DESIGN GROUP, LLC.
THESE DRAWINGS, OR PARTS THEREOF, MAY NOT BE REPRODUCED IN ANY FORM, BY ANY METHOD, FOR ANY PURPOSE, WITHOUT PRIOR WRITTEN CONSENT FROM NAOS

THESE DOCUMENTS ARE FOR REVIEW ONLY. DOCUMENTS MUST BE APPROVED BY THE JURISDICTION AND THE DEVELOPER. DIMENSIONS AND AREAS ARE APPROXIMATE.

BACK (WEST) ELEVATION AREA = *9,272 SF*

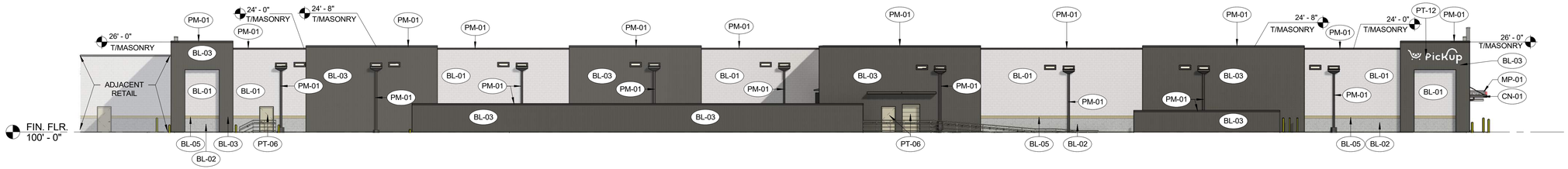
CLASS 1/2 MATERIALS:		
• GLAZING	0 SF	0%
• GROUND FACE CMU (BL-01)	3,255 SF	35%
• GROUND FACE CMU (BL-03)	5,296 SF	57%
• GROUND FACE CMU (BL-04)	0 SF	0%
• METAL PANEL (MP-01)	0 SF	0%
• METAL PANEL (MP-02)	0 SF	0%
• METAL PANEL (MP-03)	0 SF	0%
CLASS 1/2 TOTAL %		92%
CLASS 3 MATERIALS:		
• COMBED FACE CMU (BL-05)	74 SF	1%
• SPLIT FACE CMU (BL-02)	443 SF	5%
CLASS 4 MATERIALS:		
• METAL TRIM (PM-01)	105 SF	1%
• HOLLOW METAL DOORS	99 SF	1%

RIGHT (NORTH) ELEVATION AREA = *8,126 SF*

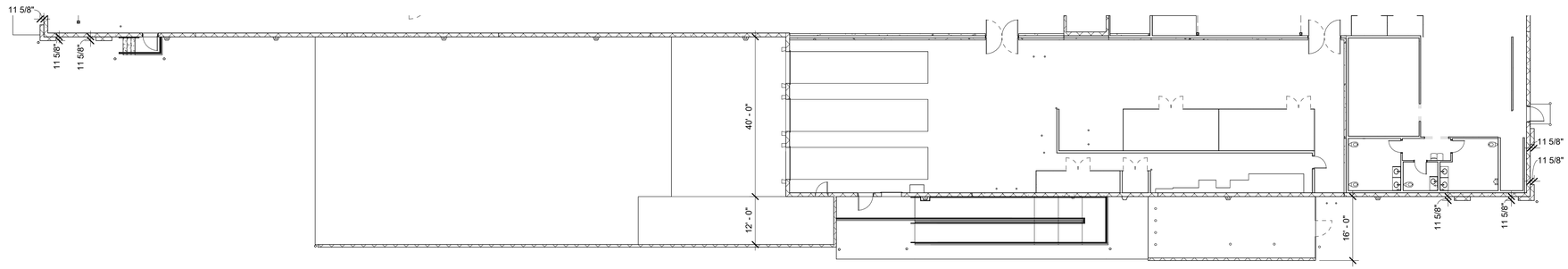
CLASS 1/2 MATERIALS:		
• GLAZING	326 SF	4%
• GROUND FACE CMU (BL-01)	2,985 SF	37%
• GROUND FACE CMU (BL-03)	3,362 SF	42%
• GROUND FACE CMU (BL-04)	0 SF	0%
• METAL PANEL (MP-01)	142 SF	2%
• METAL PANEL (MP-02)	368 SF	4%
• METAL PANEL (MP-03)	44 SF	1%
CLASS 1/2 TOTAL %		90%
CLASS 3 MATERIALS:		
• COMBED FACE CMU (BL-05)	101 SF	1%
• SPLIT FACE CMU (BL-02)	607 SF	7%
CLASS 4 MATERIALS:		
• METAL TRIM (PM-01)	103 SF	1%
• HOLLOW METAL DOORS	88 SF	1%

*ALL GLAZING NOTED IS TRANSPARENT.

ROOFING: TPO MEMBRANE, NOT VISIBLE - CLASS 3



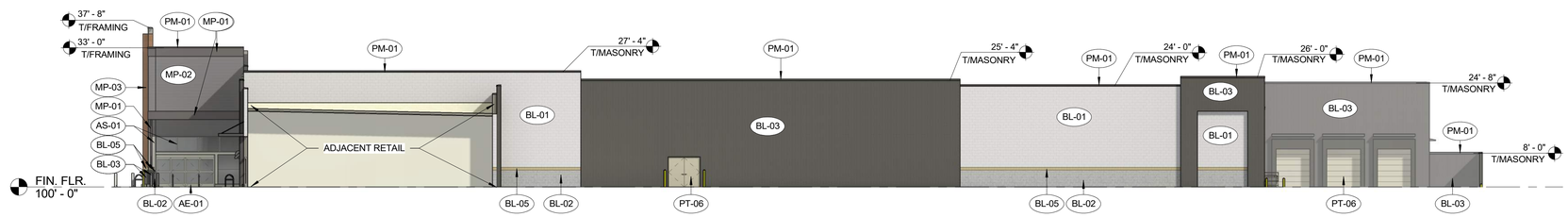
1 BACK (WEST) ELEVATION
1/16" = 1'-0"



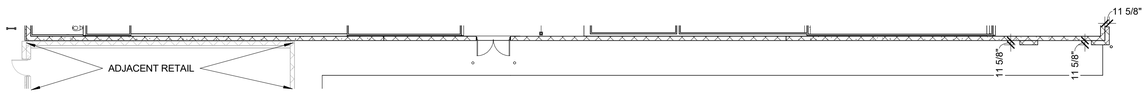
SIGNAGE SHOWN FOR REFERENCE ONLY. OWNER'S SIGN CONTRACTOR TO INSTALL NEW SIGNAGE. ALL SIGNS ARE UNDER SEPARATE PERMIT TO BE PULLED BY OWNER'S SIGNAGE CONTRACTOR.

EXTERIOR FINISHES

MATERIAL	DESCRIPTION	MANUFACTURER	FINISH
AE-01	PREFINISHED ALUMINUM STOREFRONT DOOR	STANLEY	CLEAR ANODIZED
AS-01	PREFINISHED ALUMINUM STOREFRONT		CLEAR ANODIZED
BL-01	DECORATIVE, INTEGRALLY COLORED CMU - GROUND FACE	BASALITE	720WR
BL-02	DECORATIVE, INTEGRALLY COLORED CMU - SPLIT FACE	BASALITE	800WR
BL-03	DECORATIVE, INTEGRALLY COLORED CMU - GROUND FACE	BASALITE	807WR
BL-04	DECORATIVE, INTEGRALLY COLORED CMU - GROUND FACE	BASALITE	900WR
BL-05	DECORATIVE, INTEGRALLY COLORED CMU - COMBED FACE PRECISION	BASALITE	923WR
CN-01	PREMANUFACTURED CANOPY	ARCHITECTURAL FABRICATIONS INC.	SLATE GRAY
MP-01	METAL PANEL - SMOOTH	ATAS INT.	SLATE GRAY
MP-02	METAL PANEL - CORRUGATED	ATAS INT.	SILVERSMITH
MP-03	METAL WALL PANEL, WOOD GRAIN FINISH	LONGBOARD	LIGHT CHERRY
PM-01	PREFINISHED METAL		SLATE GRAY
PM-02	PREFINISHED METAL		MATTE BLACK
PM-03	PREFINISHED METAL		WHITE
PT-06	PAINTED METAL	SHERWIN WILLIAMS	MINDFUL GRAY SW7016
PT-07	PAINTED METAL	SHERWIN WILLIAMS	GAUNTLET GRAY SW7019
PT-08	PAINT	SHERWIN WILLIAMS	SW4084 SAFETY YELLOW
PT-12	PAINT	SHERWIN WILLIAMS	WHITE
PT-14	PAINT	SHERWIN WILLIAMS	KROGER BLUE PMS 2728C
SO-01	VINYL SOFFIT PANEL	CERTAINTEED	GRANITE GRAY



2 RIGHT (NORTH) ELEVATION
1/16" = 1'-0"



BL-01 BL-02 BL-03 BL-04 BL-05 MP-01/PM-01/CN-01 MP-02 MP-03

Naos Design Group, LLC
4949 S. SYRACUSE STREET
SUITE 460
DENVER, COLORADO 80237
(p) 303.759.5777 (f) 720.360.4281
www.naosdg.com

DILLON'S #152

NE DOUGLAS ST
LEE'S SUMMIT, MO

JOB #: 2026002 **DATE:** 03/27/2026
SCALE: 1/16" = 1'-0"

COPYRIGHT © 2026 NAOS DESIGN GROUP, LLC.
THESE DRAWINGS, OR PARTS THEREOF, MAY NOT BE REPRODUCED IN ANY FORM, BY ANY METHOD, FOR ANY PURPOSE, WITHOUT PRIOR WRITTEN CONSENT FROM NAOS

THESE DOCUMENTS ARE FOR REVIEW ONLY. DOCUMENTS MUST BE APPROVED BY THE JURISDICTION AND THE DEVELOPER. DIMENSIONS AND AREAS ARE APPROXIMATE.

FRONT (EAST) ELEVATION AREA = *3,020 SF*

CLASS 1/2 MATERIALS:

• GLAZING	840 SF	27%
• GROUND FACE CMU (BL-01)	658 SF	22%
• GROUND FACE CMU (BL-03)	663 SF	22%
CLASS 1/2 TOTAL %		71%

CLASS 3 MATERIALS:

• COMBED FACE CMU (BL-05)	3 SF	1%
• SPLIT FACE CMU (BL-02)	16 SF	1%

CLASS 4 MATERIALS:

• METAL TRIM (PM-01)	840 SF	27%

BACK (WEST) ELEVATION AREA = *2,070 SF*

CLASS 1/2 MATERIALS:

• GROUND FACE CMU (BL-01)	1,257 SF	61%
• GROUND FACE CMU (BL-03)	366 SF	17%
CLASS 1/2 TOTAL %		78%

CLASS 3 MATERIALS:

• COMBED FACE CMU (BL-05)	44 SF	2%
• SPLIT FACE CMU (BL-02)	264 SF	13%

CLASS 4 MATERIALS:

• METAL TRIM (PM-01)	22 SF	1%
• HOLLOW METAL DOORS	117 SF	6%

RIGHT (NORTH) ELEVATION AREA = *1,445 SF*

CLASS 1/2 MATERIALS:

• GLAZING	216 SF	15%
• GROUND FACE CMU (BL-01)	714 SF	50%
• GROUND FACE CMU (BL-03)	323 SF	22%
CLASS 1/2 TOTAL %		97%

CLASS 3 MATERIALS:

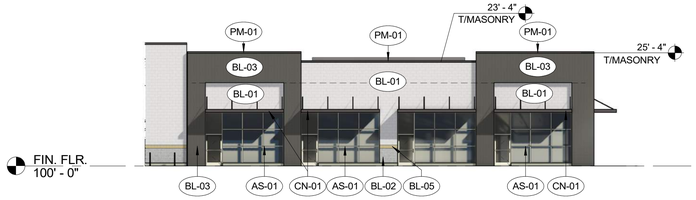
• COMBED FACE CMU (BL-05)	23 SF	1%
• SPLIT FACE CMU (BL-02)	142 SF	1%

CLASS 4 MATERIALS:

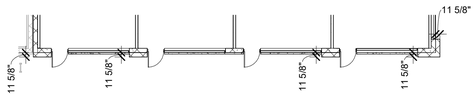
• METAL TRIM (PM-01)	27 SF	1%

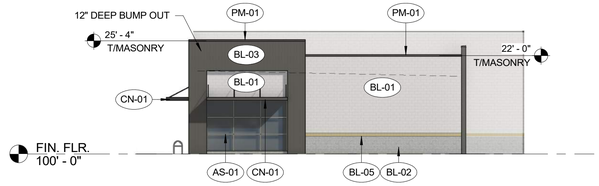
*ALL GLAZING NOTED IS TRANSPARENT.

ROOFING: TPO MEMBRANE, NOT VISIBLE - CLASS 3

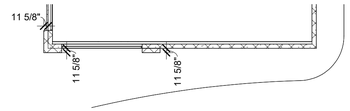


1 FRONT (EAST) RETAIL ELEVATION
1/16" = 1'-0"





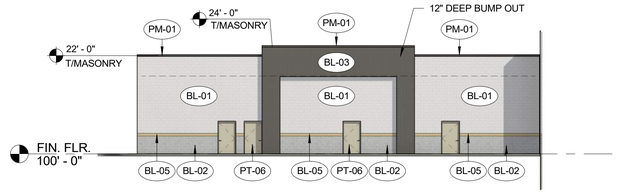
2 RIGHT (NORTH) RETAIL ELEVATION
1/16" = 1'-0"



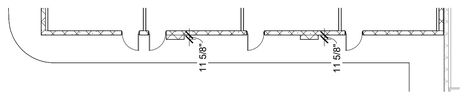
SIGNAGE SHOWN FOR REFERENCE ONLY. OWNER'S SIGN CONTRACTOR TO INSTALL NEW SIGNAGE. ALL SIGNS ARE UNDER SEPARATE PERMIT TO BE PULLED BY OWNER'S SIGNAGE CONTRACTOR.

EXTERIOR FINISHES

MATERIAL	DESCRIPTION	MANUFACTURER	FINISH
AE-01	PREFINISHED ALUMINUM STOREFRONT DOOR	STANLEY	CLEAR ANODIZED
AS-01	PREFINISHED ALUMINUM STOREFRONT		CLEAR ANODIZED
BL-01	DECORATIVE, INTEGRALLY COLORED CMU - GROUND FACE	BASALITE	720WR
BL-02	DECORATIVE, INTEGRALLY COLORED CMU - SPLIT FACE	BASALITE	800WR
BL-03	DECORATIVE, INTEGRALLY COLORED CMU - GROUND FACE	BASALITE	807WR
BL-05	DECORATIVE, INTEGRALLY COLORED CMU - COMBED FACE PRECISION	BASALITE	923WR
CN-01	PREMANUFACTURED CANOPY	ARCHITECTURAL FABRICATIONS INC.	SLATE GRAY
PM-01	PREFINISHED METAL		SLATE GRAY
PT-06	PAINTED METAL	SHERWIN WILLIAMS	MINDFUL GRAY SW7016



3 BACK (WEST) RETAIL ELEVATION
1/16" = 1'-0"



BL-01 BL-02 BL-03 BL-05 PM-01/CN-01

Naos Design Group, LLC
4949 S. SYRACUSE STREET
SUITE 460
DENVER, COLORADO 80237
(p) 303.759.5777 (f) 720.360.4281
www.naosdg.com

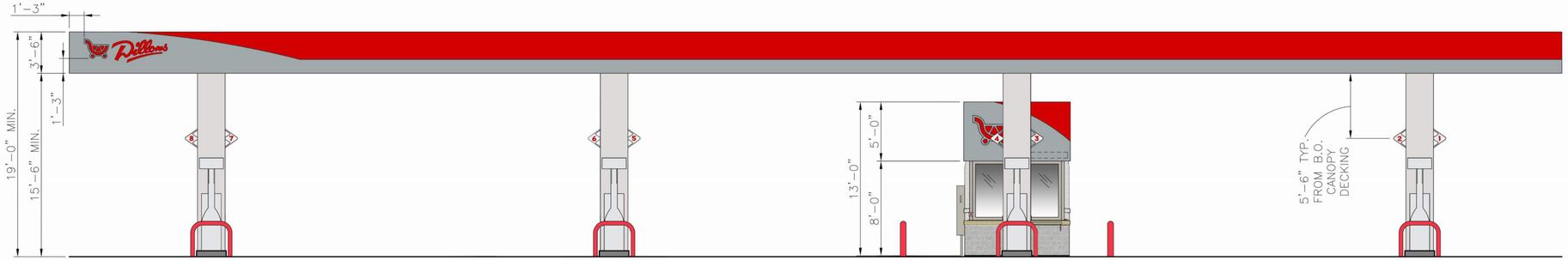
DILLON'S #152

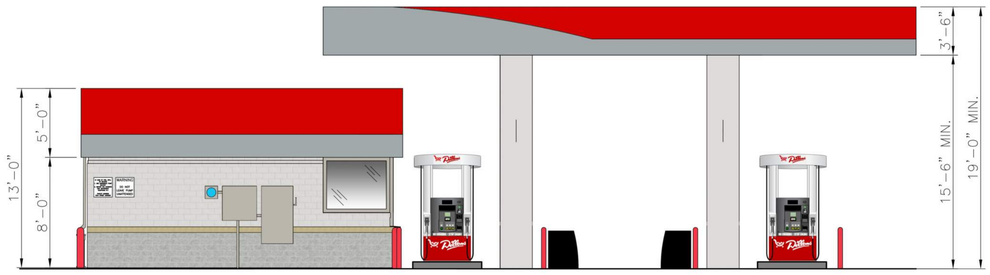
NE DOUGLAS ST
LEE'S SUMMIT, MO

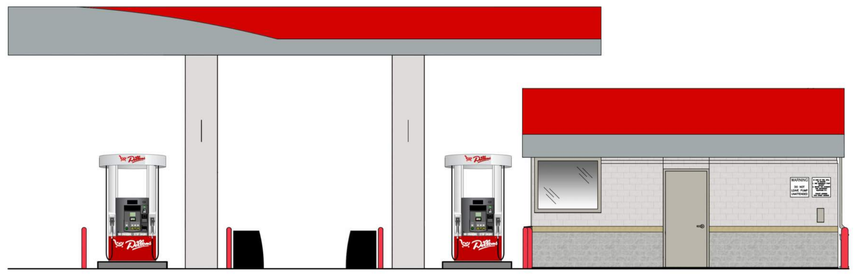
JOB #: 2026002 **DATE:** 03/27/2026
SCALE: 1/16" = 1'-0"

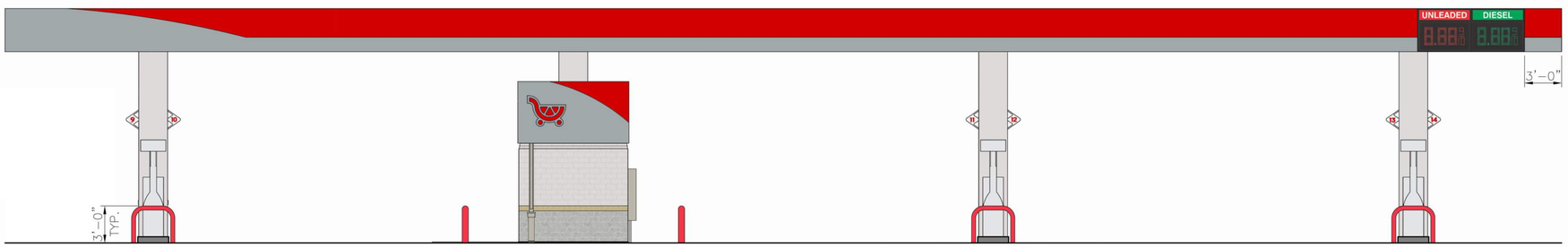
COPYRIGHT © 2026 NAOS DESIGN GROUP, LLC.
THESE DRAWINGS, OR PARTS THEREOF, MAY NOT BE REPRODUCED IN ANY FORM, BY ANY METHOD, FOR ANY PURPOSE, WITHOUT PRIOR WRITTEN CONSENT FROM NAOS

THESE DOCUMENTS ARE FOR REVIEW ONLY. DOCUMENTS MUST BE APPROVED BY THE JURISDICTION AND THE DEVELOPER. DIMENSIONS AND AREAS ARE APPROXIMATE.









Naos Design Group, LLC
4949 S. SYRACUSE STREET
SUITE 460
DENVER, COLORADO 80237
(p) 303.759.5777 (f) 720.360.4281
www.naosdg.com

DILLON'S #152

NE DOUGLAS ST
LEE'S SUMMIT, MO

JOB #: 2026002 **DATE:** 03/27/2026
SCALE:

COPYRIGHT © 2026 NAOS DESIGN GROUP, LLC.
THESE DRAWINGS, OR PARTS THEREOF, MAY NOT BE REPRODUCED IN ANY FORM, BY ANY METHOD, FOR ANY PURPOSE, WITHOUT PRIOR WRITTEN CONSENT FROM NAOS

THESE DOCUMENTS ARE FOR REVIEW ONLY. DOCUMENTS MUST BE APPROVED BY THE JURISDICTION AND THE DEVELOPER. DIMENSIONS AND AREAS ARE APPROXIMATE.