

ABBREVIATIONS:			
AFF	ABOVE FINISHED FLOOR	INV	INVERT
AP	ANGLE POINT	LF	LINEAL FEET
APR	APPROXIMATE	LP	LOW POINT
A	ASPHALT	MAX	MAXIMUM
BFF	BASEMENT FINISH FLOOR	MIN	MINIMUM
BVC	BEGIN VERTICAL CURVE	MOD	MODULE
BW	BOTTOM OF WALL	NG	NATURAL GROUND
C	CURB	NO	NUMBER
CL	CENTERLINE	NTS	NOT TO SCALE
CLNG	CEILING	O/S	OFFSET
CMP	CORRUGATED METAL PIPE	OHD	OVERHEAD DOOR
C/O	CLEAN OUT	PC	POINT OF CURVATURE
CONC	CONCRETE	PEO	PEDESTAL
CNR	CORNER	PI	POINT OF INTERSECTION
CR	CURB RETURN	PL	PROPERTY LINE
CS	CURB STOP	PR	PROPOSED
D	DEPTH	PT	POINT
DI	DRAIN INLET	PVC	POINT OF VERTICAL CURVE
DIP	DUCTILE IRON PIPE	PVC	POLYVINYL CHLORIDE PIPE
DMH	DRAINAGE MANHOLE	PVI	POINT OF VERTICAL INTERSECTION
DRN	DRAIN	RD	ROAD
DT	DITCH	R	RADIUS
DW	DRIVEWAY	RO	ROUGH OPENING
EA	EACH	ROW	RIGHT-OF-WAY
EG	EXISTING GRADE	RW	RETAINING WALL
ELEV	ELEVATION	SQFT	SQUARE FEET
ENGR	ENGINEER	SMH	SEWER MANHOLE
EOA	EDGE OF ASPHALT	SS	SANITARY SEWER
EOW	EDGE OF WALK	STA	STATION
EX	EXISTING	STRUCT	STRUCTURAL
FES	FLARED END SECTION	SW	SIDEWALK
FFE	FINISH FLOOR ELEVATION	TB	THRUST BLOCK
FG	FINISH GRADE	TBD	TO BE DETERMINED
FH	FIRE HYDRANT	TBR	TO BE REMOVED
FL	FLOW LINE	TBW	TOP BACK OF WALK
FT	FOOT OR FEET	TEL	TELEPHONE
GFE	GARAGE FFE	TOP	TOP OF PIPE
GB	GRADE BREAK	TW	TOP OF WALL
GYP	GYPSUM	TYP	TYPICAL
HC	HANDICAP RAMP	VOL	VOLUME
HP	HIGH POINT	VP	VALLEY PAN
IN	INLET	W	WIDTH
		WL	WATERLINE
		W/	WITH

**LOCATED IN THE NE $\frac{1}{4}$ OF SECTION 16, TOWNSHIP 6 NORTH, RANGE 88 WEST,
6TH P.M. OF ROUTT COUNTY, COLORADO**



C1

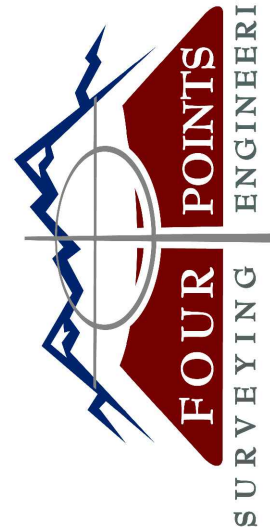
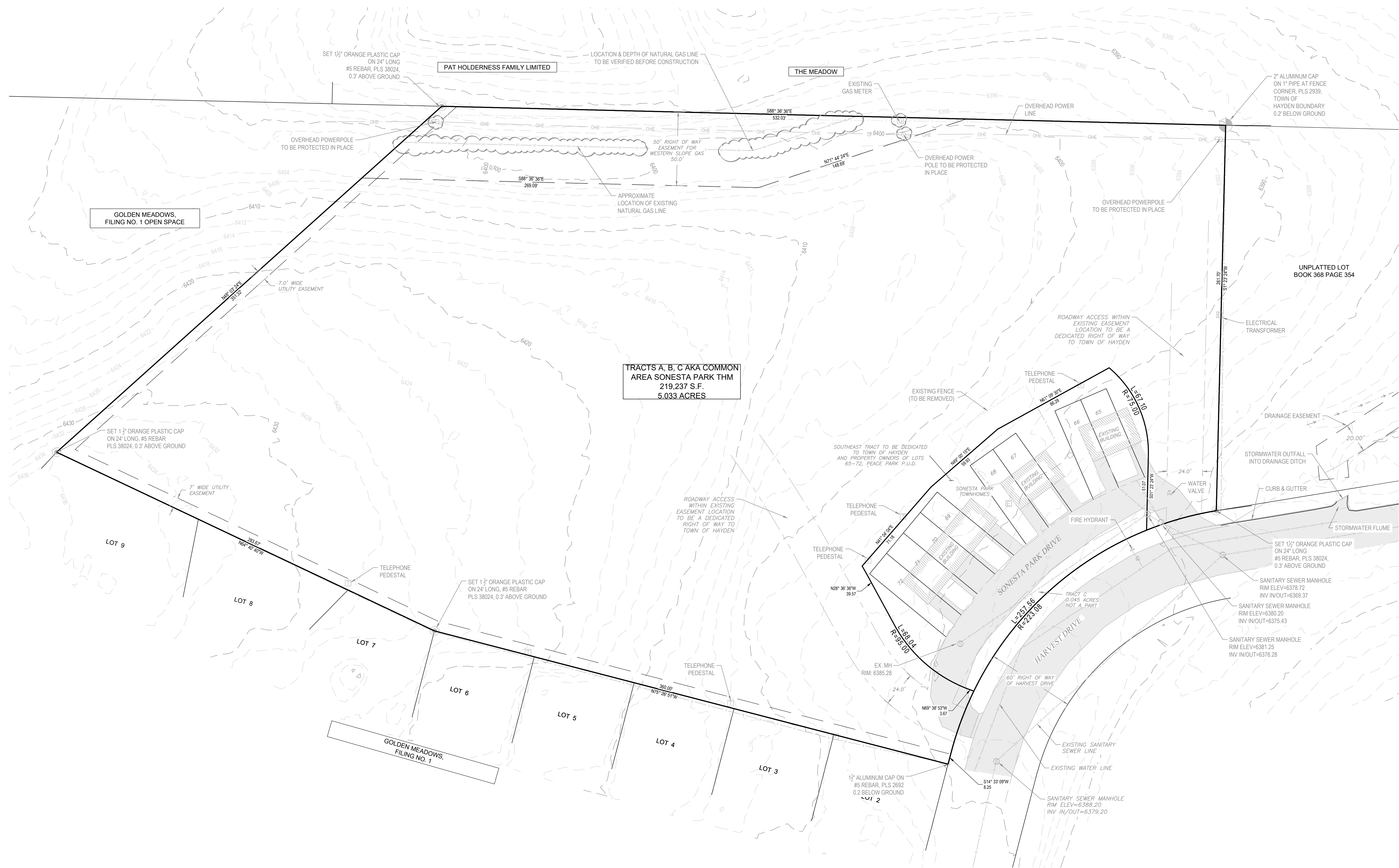
1. BENCHMARK = FOUND REBAR PLASTIC CAP ON #5 REBAR, ELEVATION=7369.12 IN THE SOUTHEAST PROPERTY CORNER. (SEE EXISTING CONDITIONS PLAN).
2. EXISTING CONDITIONS SURVEYED BY FOUR POINTS SURVEYING & ENGINEERING COMPLETED ON OCTOBER 20, 2020. TOPOGRAPHY GENERATED FROM 2018 ROUTE COUNTY GIS LIDAR DATA.
3. TOWN OF HAYDEN PLAN REVIEW AND APPROVAL IS ONLY FOR GENERAL CONFORMANCE WITH HAYDEN TOWN MUNICIPAL CODE. THE TOWN OF HAYDEN IS NOT RESPONSIBLE FOR THE COMPLETENESS, ACCURACY AND ADEQUACY OF THE DRAWINGS, DESIGN, DIMENSIONS, AND ELEVATIONS SHALL BE CONFIRMED AND CORRELATED AT THE JOB SITE.
4. ONE COPY OF THE APPROVED CONSTRUCTION PLANS AND SPECIFICATIONS SHALL BE KEPT ON THE JOB SITE AT ALL TIMES. PRIOR TO THE START OF CONSTRUCTION, CONTRACTOR TO VERIFY WITH PROJECT ENGINEER THE LATEST REVISION DATE OF THE APPROVED CONSTRUCTION PLANS.
5. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES. CALL THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AT 1-800-922-1987 AND ANY NECESSARY PRIVATE UTILITY TO PERFORM LOCATES PRIOR TO CONDUCTING ANY SITE WORK.
6. ALL INFRASTRUCTURE CONSTRUCTION AND RELATED WORK SHALL CONFORM TO THE TOWN OF HAYDEN STANDARD SPECIFICATIONS, LATEST REVISION.
7. ALL WATER AND SANITARY SEWER CONSTRUCTION AND RELATED WORK SHALL CONFORM TO THE TOWN OF HAYDEN UTILITIES STANDARD SPECIFICATIONS, LATEST EDITION.
8. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVALS REQUIRED TO PERFORM THE WORK SUCH AS RIGHT-OF-WAY PERMIT, GRADING AND EXCAVATION PERMIT, CONSTRUCTION Dewatering PERMIT, STORM WATER QUALITY PERMIT, ARMY CORP OF ENGINEER PERMIT, ETC. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN A COPY OF ALL APPLICABLE CODES, LICENSES, SPECIFICATIONS, AND STANDARDS NECESSARY TO PERFORM THE WORK AND BE FAMILIAR WITH THEIR CONTENTS PRIOR TO COMMENCING ANY WORK.
9. PRIOR TO ANY WORK IN THE RIGHT-OF-WAY INCLUDING STREET CUTS, CONTACT HAYDEN PLANNING DEPARTMENT FOR PERMIT REQUIREMENTS.
10. PRIOR TO START OF CONSTRUCTION CONTRACTOR SHALL COORDINATE WITH PROJECT ENGINEER TO IDENTIFY PROJECT INSPECTION AND TESTING REQUIREMENTS. CONTRACTOR SHALL PROVIDE FOR INSPECTIONS AND TESTING AT AN ADEQUATE FREQUENCY FOR THE PROJECT ENGINEER TO DOCUMENT THAT PROJECT IS CONSTRUCTED IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS.
11. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY TRAFFIC CONTROL. TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION.
12. CONTRACTOR SHALL PROVIDE ALL NECESSARY TRAFFIC CONTROL (SIGNS, BARRICADES, FLAGMEN, LIGHTS, ETC) IN ACCORDANCE WITH THE MUTCD, CURRENT EDITION.
13. CONTRACTOR MUST SUBMIT A CONSTRUCTION SITE MANAGEMENT PLAN (CSMP) AND EROSION CONTROL PLAN (ECP) FOR REVIEW AND APPROVAL BY HAYDEN PLANNING & ENGINEERING PRIOR TO START OF CONSTRUCTION. THE CSMP AND ECP MUST BE MAINTAINED ON-SITE AND UPDATED AS NEEDED TO REFLECT CURRENT CONDITIONS.
14. THE FOLLOWING PRIVATE IMPROVEMENTS REQUIRE CONSTRUCTION OBSERVATION PER THE TOWN OF HAYDEN ENGINEERING SERVICES SPECIFICATION OR AS REQUIRED BY THE TOWN OF HAYDEN PLANNING AND ENGINEERING: WATER, SEWER, AND STORM SEWER.
15. RECORD DRAWINGS ARE REQUIRED FOR: PUBLIC AND PRIVATE WATER AND SEWER.
16. ALL PIPE OUTFALLS REQUIRE FLARED END SECTIONS AND RIPPAP.
17. EXISTING ASPHALT PAVEMENT SHALL BE STRAIGHT SAW CUT WHEN ADJOINING WITH NEW ASPHALT PAVEMENT OR WHEN ACCESS TO UNDERGROUND UTILITIES IS REQUIRED. TACK COAT SHALL BE APPLIED TO ALL EXPOSED SURFACES INCLUDING SAW CUTS, POTHOLES, TRENCHES, AND ASPHALT OVERLAY. ASPHALT PATCHES IN THE RIGHT-OF-WAY SHALL BE PER TOWN OF HAYDEN SPECIFICATIONS.

1. GRADING SHALL OCCUR WITHIN THE PROPERTY LIMITS. WHERE OFF-SITE WORK IS APPROVED, WRITTEN PERMISSION OF THE ADJACENT PROPERTY OWNER MUST BE OBTAINED PRIOR TO ANY OFF-SITE GRADING OR CONSTRUCTION.
2. VEGETATED SLOPES 3:1 AND GREATER REQUIRE SOIL STABILIZATION WITH STRAW BLANKET AT MINIMUM UPON FINAL GRADING AND SEEDING/REVEGETATION.
3. ADJUST RIMS OF CLEANOUTS, MANHOLES, VALVE COVERS TO FINAL GRADE.

1. CONTRACTOR SHALL SUBMIT A CONSTRUCTION SITE MANAGEMENT PLAN (CSMP) TO HAYDEN PLANNING AND ENGINEERING FOR APPROVAL PRIOR TO BUILDING PERMIT ISSUANCE.
2. CONTRACTOR SHALL WORK IN A MANNER THAT MINIMIZES THE POTENTIAL FOR EROSION.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING, INSPECTING, AND MAINTAINING ALL NECESSARY EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION AND REMOVING EROSION CONTROL WHEN PROJECT IS COMPLETE AND VEGETATION IS ESTABLISHED.
4. ANY AREA DISTURBED BY CONSTRUCTION AND NOT PAVED OR NATURAL ROCK SURFACE SHALL BE REVEGETATED WITHIN ONE CONSTRUCTION SEASON.

1. EXISTING UTILITY LOCATIONS WERE OBTAINED FROM FIELD LOCATES AND FIELD SURVEYING AND HAVE NOT BEEN VERIFIED WITH ANY ADDITIONAL UNDERGROUND POTHOLING. POTHOLING AND VERIFICATION OF LINE LOCATIONS SHALL BE REQUIRED AT ALL EXISTING UTILITY CROSSINGS.
2. MINIMUM SEPARATION BETWEEN PARALLEL WATER AND SEWER MAINS AND SERVICES IS TEN (10') FEET. MINIMUM SEPARATION BETWEEN PARALLEL WATER AND SEWER SERVICE LINES IS TEN (10') FEET.
3. ALL WORK SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF HAYDEN WATER AND SEWER STANDARDS AND SPECIFICATIONS, LATEST EDITION.
4. MINIMUM COVER FROM FINISHED GRADE TO TOP OF WATER MAIN LINE IS SEVEN (7) FEET UNLESS OTHERWISE NOTED. ALL WATER SERVICE LINES SHALL BE TYPE "K" COPPER AND SEAMLESS BETWEEN FITTINGS.
5. MINIMUM SEPARATION BETWEEN UTILITY PEDESTALS AND FIRE HYDRANTS IS FIFTEEN (15) FEET. MINIMUM SEPARATION BETWEEN FIRE HYDRANTS, WATER OR SEWER MAINS, AND ENDS OF CULVERTS IS FIVE (5) FEET. MINIMUM SEPARATION BETWEEN WATER AND SEWER SERVICE LINES IS TEN (10') FEET. NO RIP-RAP IS PERMITTED WITHIN TEN (10) FEET OF A SEWER MAIN.
6. VALVES SHALL BE OPERATED BY UTILITY PERSONNEL ONLY.
7. SEWER SERVICES ARE ANTICIPATED TO BE FOUR (4") INCH DIAMETER, SDR 35 PVC, MINIMUM SLOPE OF 2%, UNLESS NOT OTHERWISE.
7. WATER SERVICES ARE ANTICIPATED TO BE ONE (1") INCH DIAMETER, POLYETHYLENE PRESSURE PIPE, UNLESS NOTED OTHERWISE.
8. DISINFECTION, BACTERIOLOGICAL, AND HYDROSTATIC TESTING IS REQUIRED FOR THE 8" DIP WATER/FIRE SERVICE PIPE.
9. ALL MECHANICAL JOINTS, RESTRAINT, THRUST BLOCKS AND CROSSING MUST BE OBSERVED BY THE ENGINEER PRIOR TO THE PLACEMENT OF BACKFILL.
10. MECHANICAL RESTRAINTS AND THRUST BLOCKS ARE REQUIRED AT ALL BENDS, TEES, REDUCERS AND DEAD ENDS.
11. ALL FITTINGS ASSOCIATED WITH UTILITY INSTALLATION WILL BE ON-SITE PRIOR TO WATER LINE SHUT DOWN.
12. SHARED WATER SERVICE CURB STOPS FOR DUPLEXES SHALL NOT BE PERMITTED. EACH INDIVIDUAL DUPLEX UNIT SHALL HAVE ITS OWN INDEPENDENT CURB STOP. METER PITS SHALL BE INSTALLED FOR ALL UNITS AND SHALL BE INSTALLED WITHIN THE UTILITY EASEMENT.



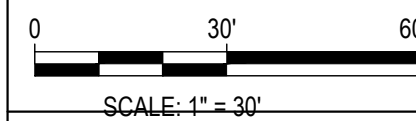


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**SONESTA TOWNHOMES
CIVIL PERMIT PLANS**

TOWN OF HAYDEN, COLORADO



DATE: 10/02/2025
JOB #: 1409-002
DRAWN BY: DSC
DESIGN BY: DSC
REVIEW BY: WNM
IF THIS DRAWING IS PRESENTED IN A FORMAT OTHER THAN 24" X 36", THE GRAPHIC SCALE SHOULD BE UTILIZED.

DRAWING:

**EXISTING
CONDITIONS PLAN**

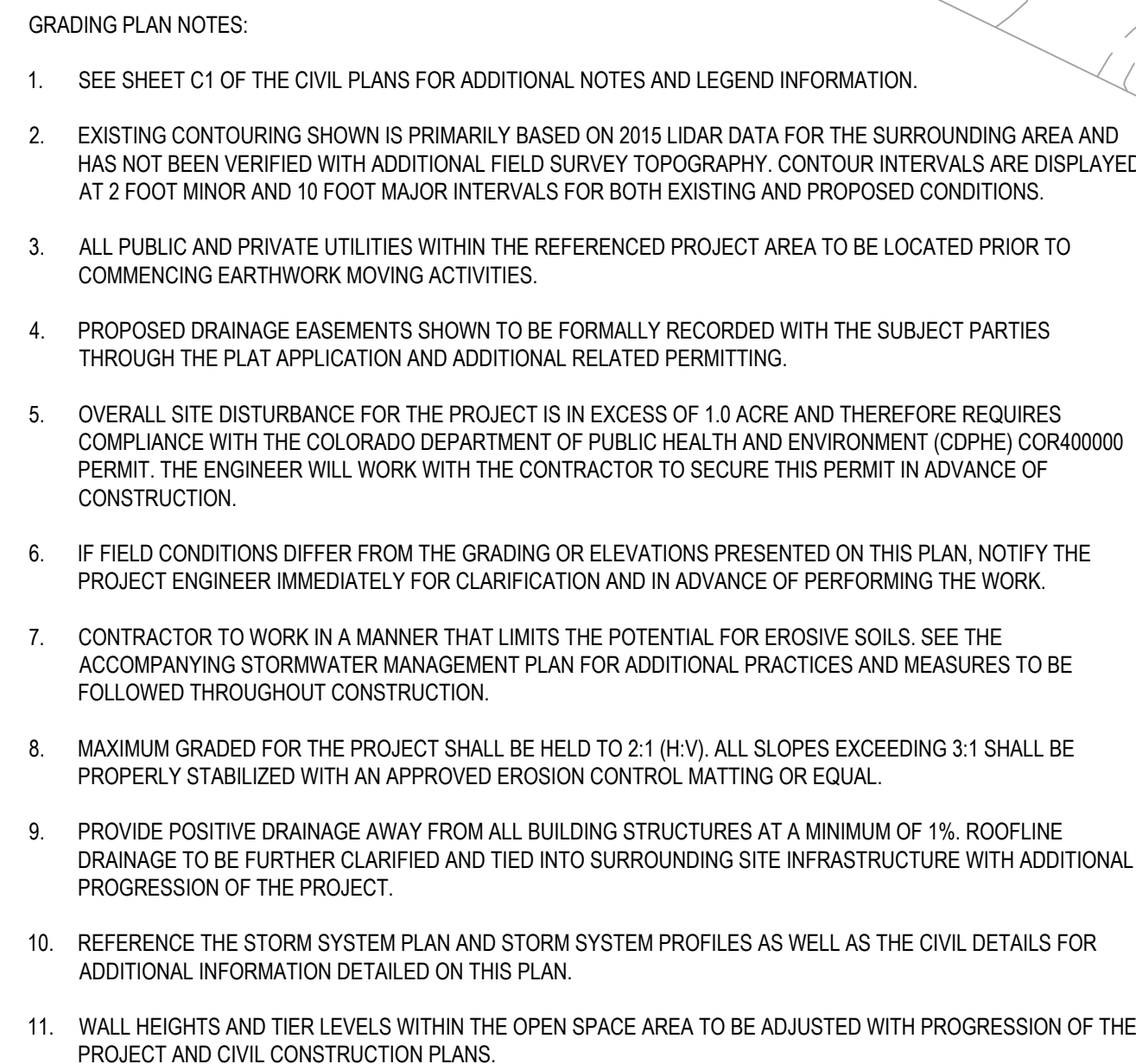
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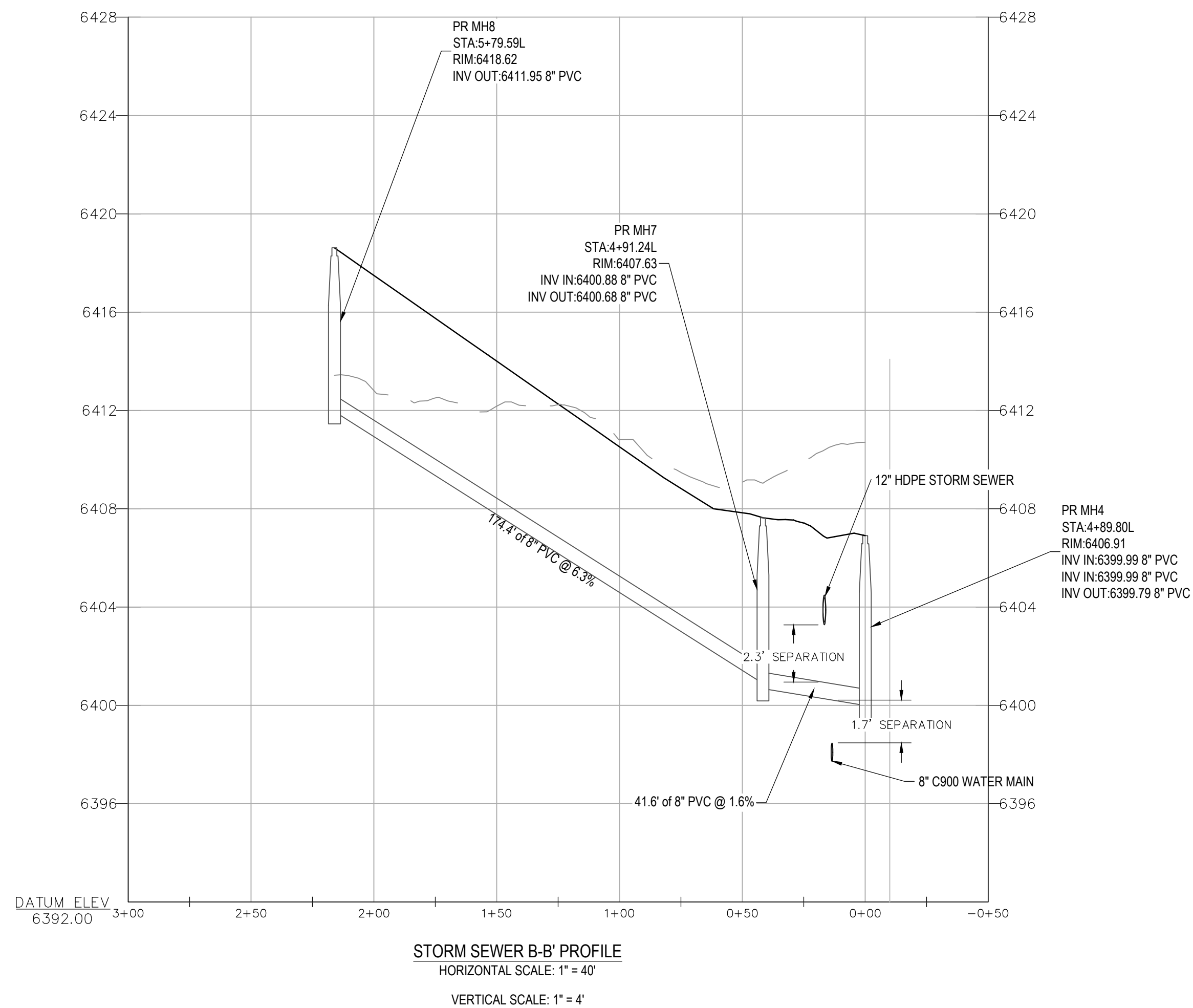
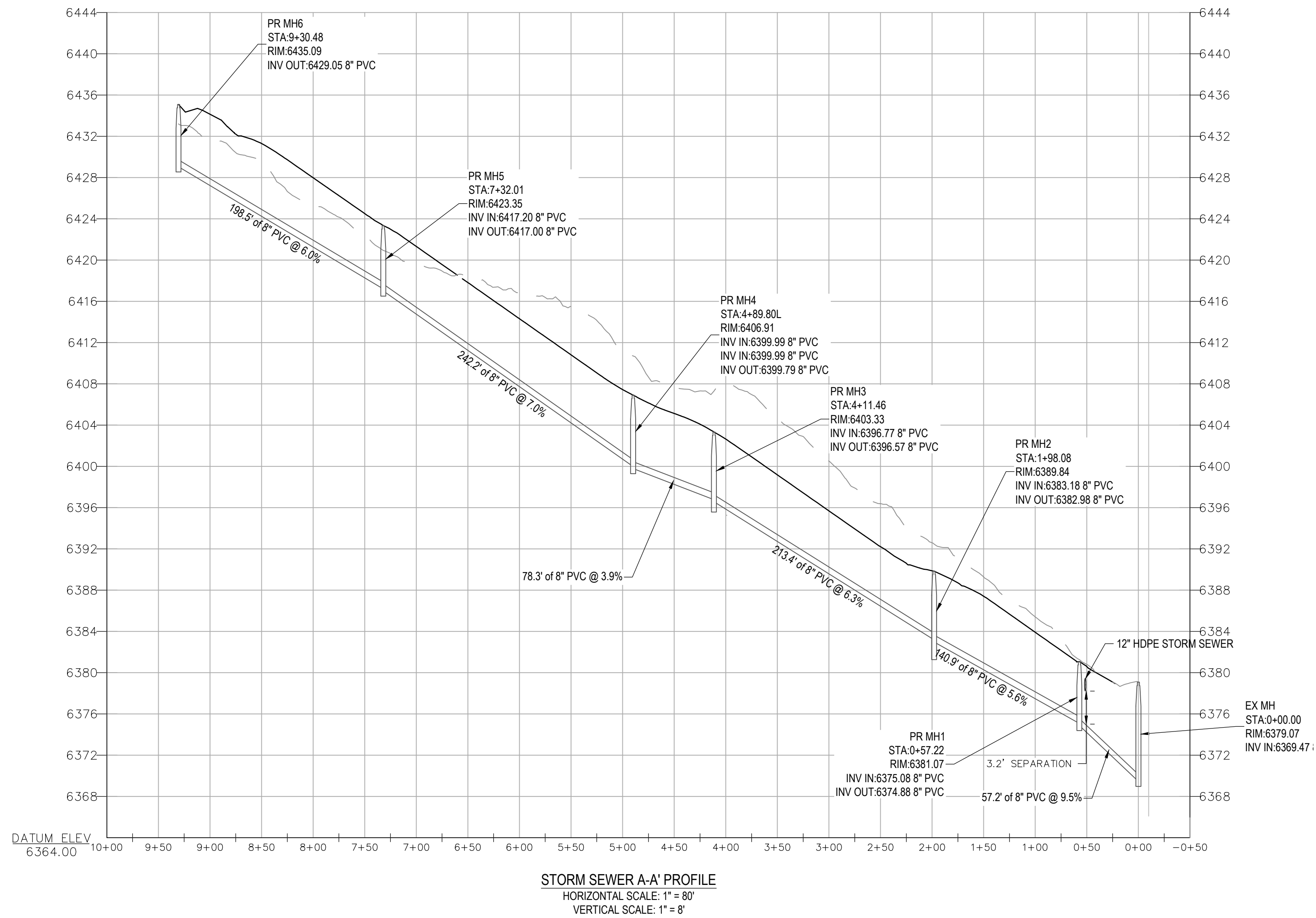
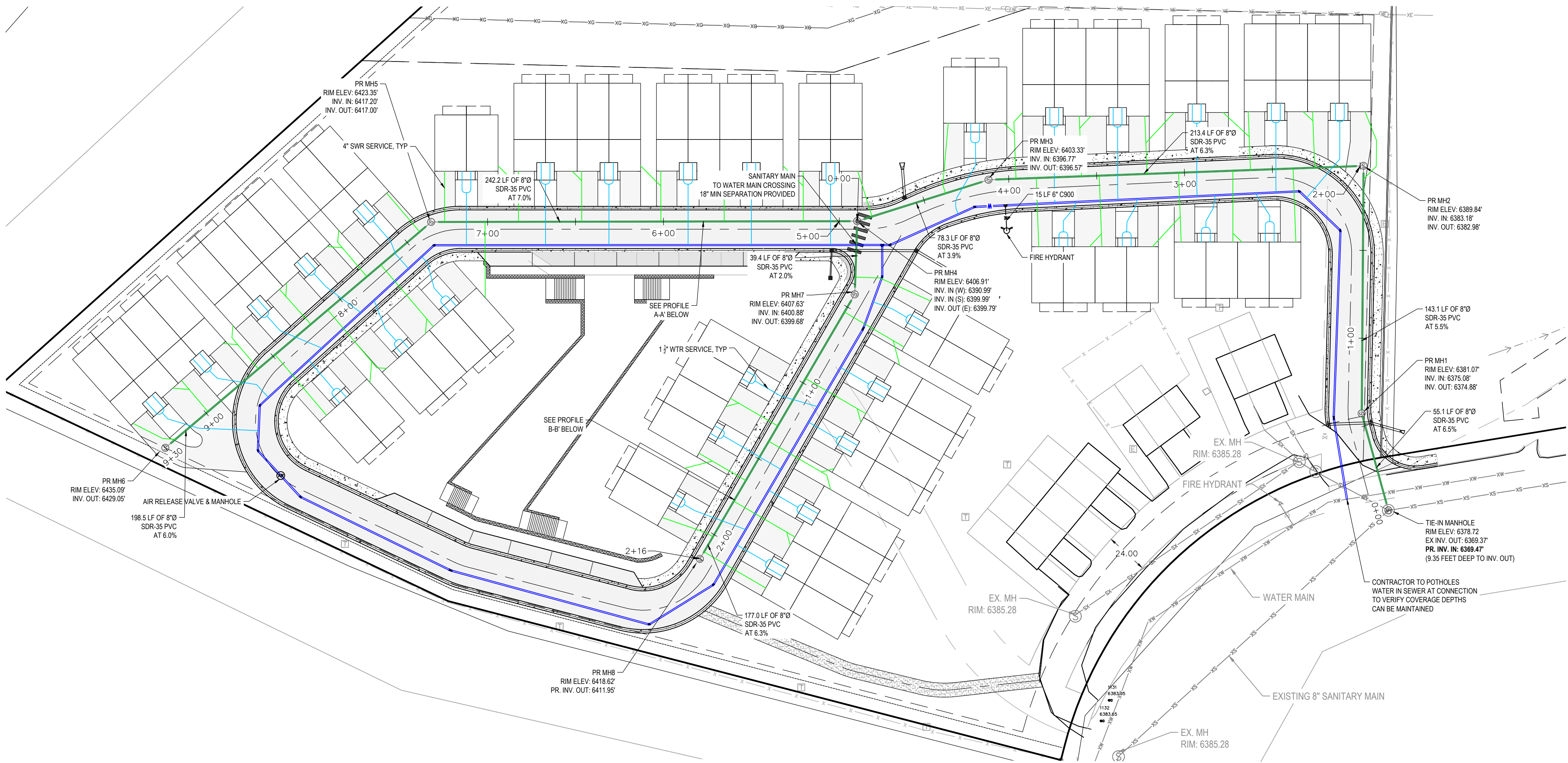
C2

[illegible]

Horizontal Scale SCALE: 1" = 30'	
Contour Interval = 2 ft	
DATE: 10/02/2025	
JOB #: 1409-002	
DRAWN BY: DSC	
DESIGN BY: DSC	
REVIEW BY: WNM	
IF THIS DRAWING IS PRESENTED IN A FORMAT OTHER THAN 24" X 36", THE GRAPHIC SCALE SHOULD BE UTILIZED	

SHEET NO. C





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SONESTA TOWNHOMES
CIVIL PERMIT PLANS
TOWN OF HAYDEN, COLORADO

Horizontal Scale
0 40' 80'
SCALE: 1" = 40'

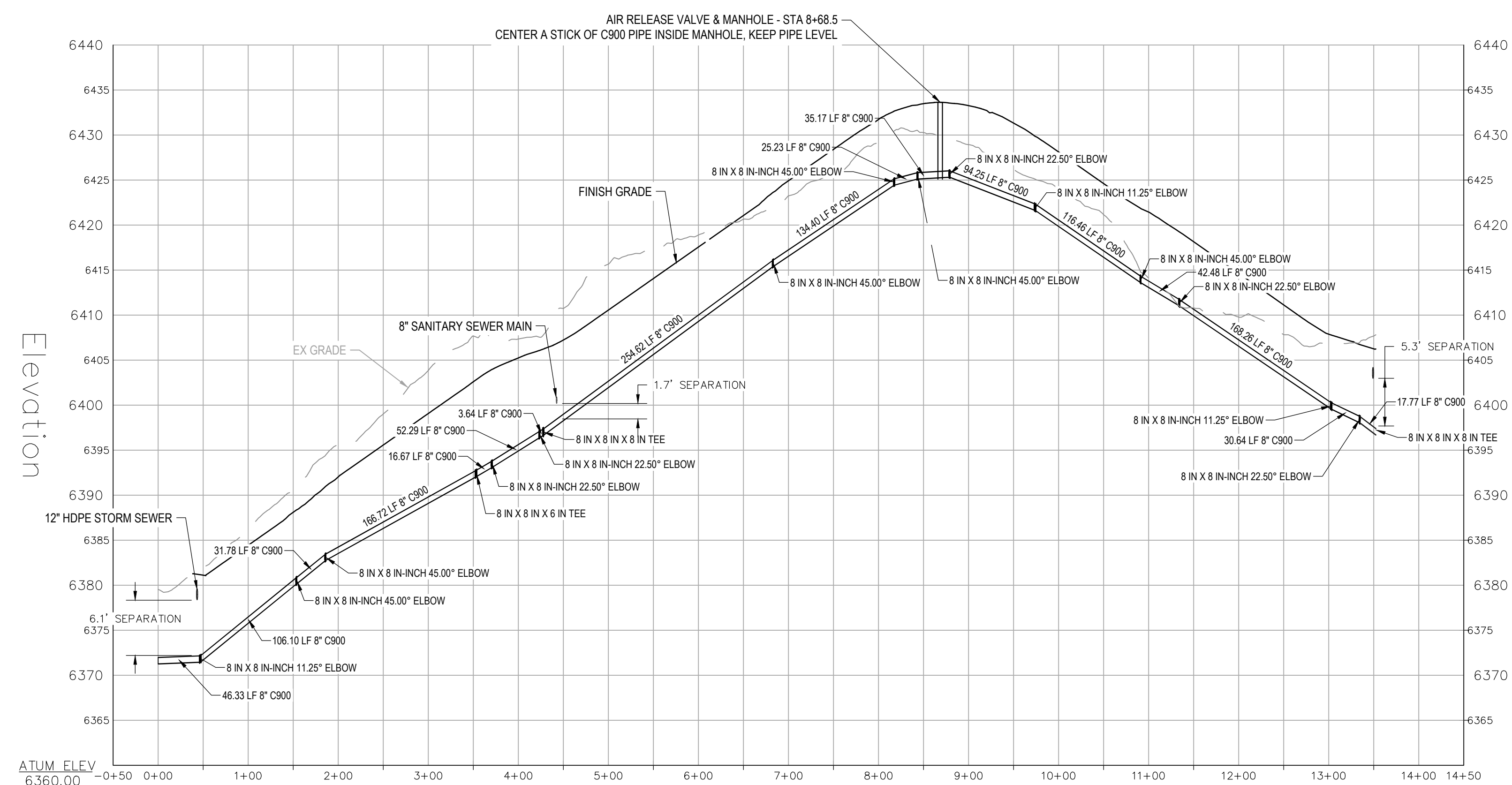
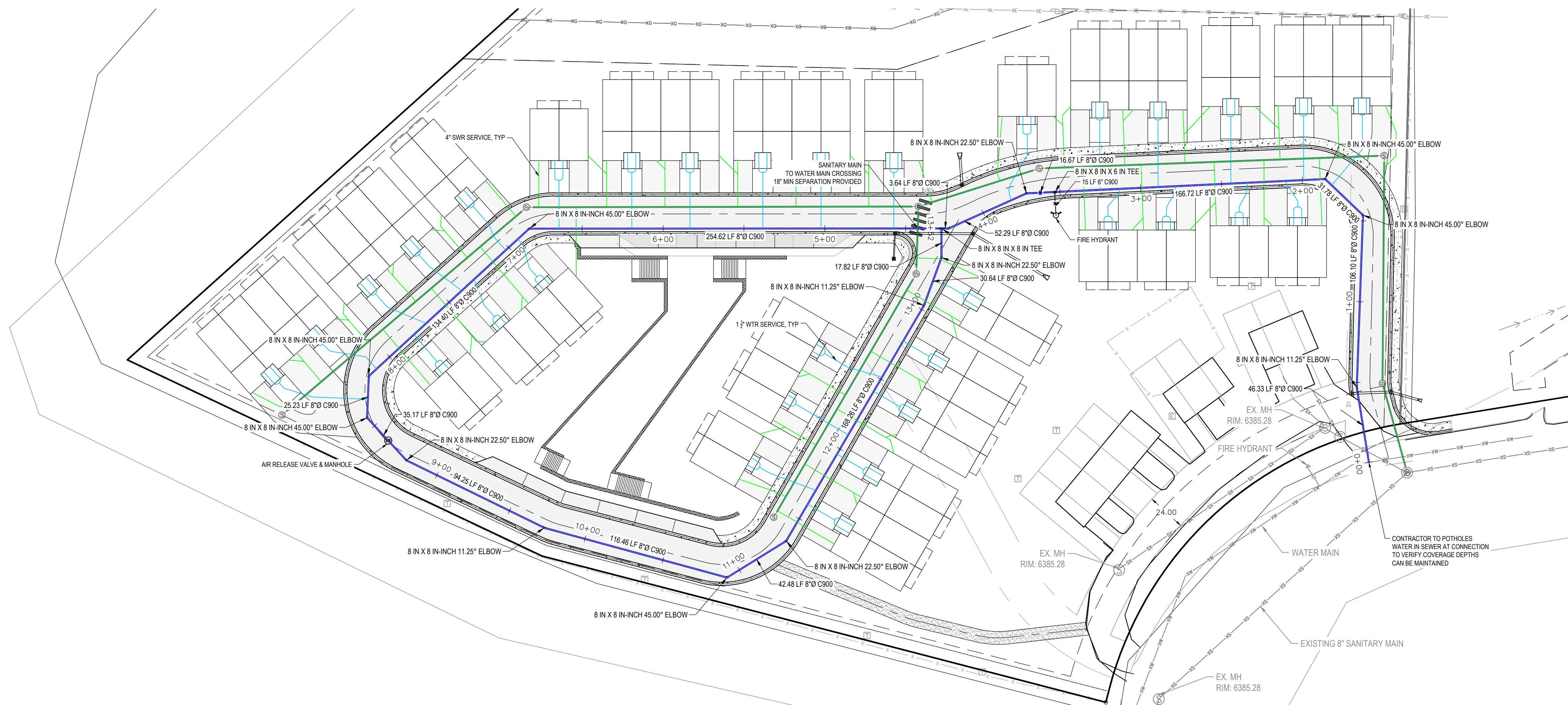
DATE: 10/02/2025
JOB #: 1409-002
DRAWN BY: DSC
DESIGN BY: DSC
REVIEW BY: WNM

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DRAWING:
SEWER MAIN
PLAN & PROFILE

SHEET NO.

C5



WATER MAIN PROFILE
HORIZONTAL SCALE: 1" = 100'
VERTICAL SCALE: 1" = 10'



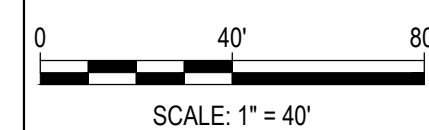
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SONESTA TOWNHOMES
CIVIL PERMIT PLANS

TOWN OF HAYDEN, COLORADO

Horizontal Scale



DATE: 10/02/2025
JOB #: 1409-002
DRAWN BY: DSC
DESIGN BY: DSC
REVIEW BY: WNM

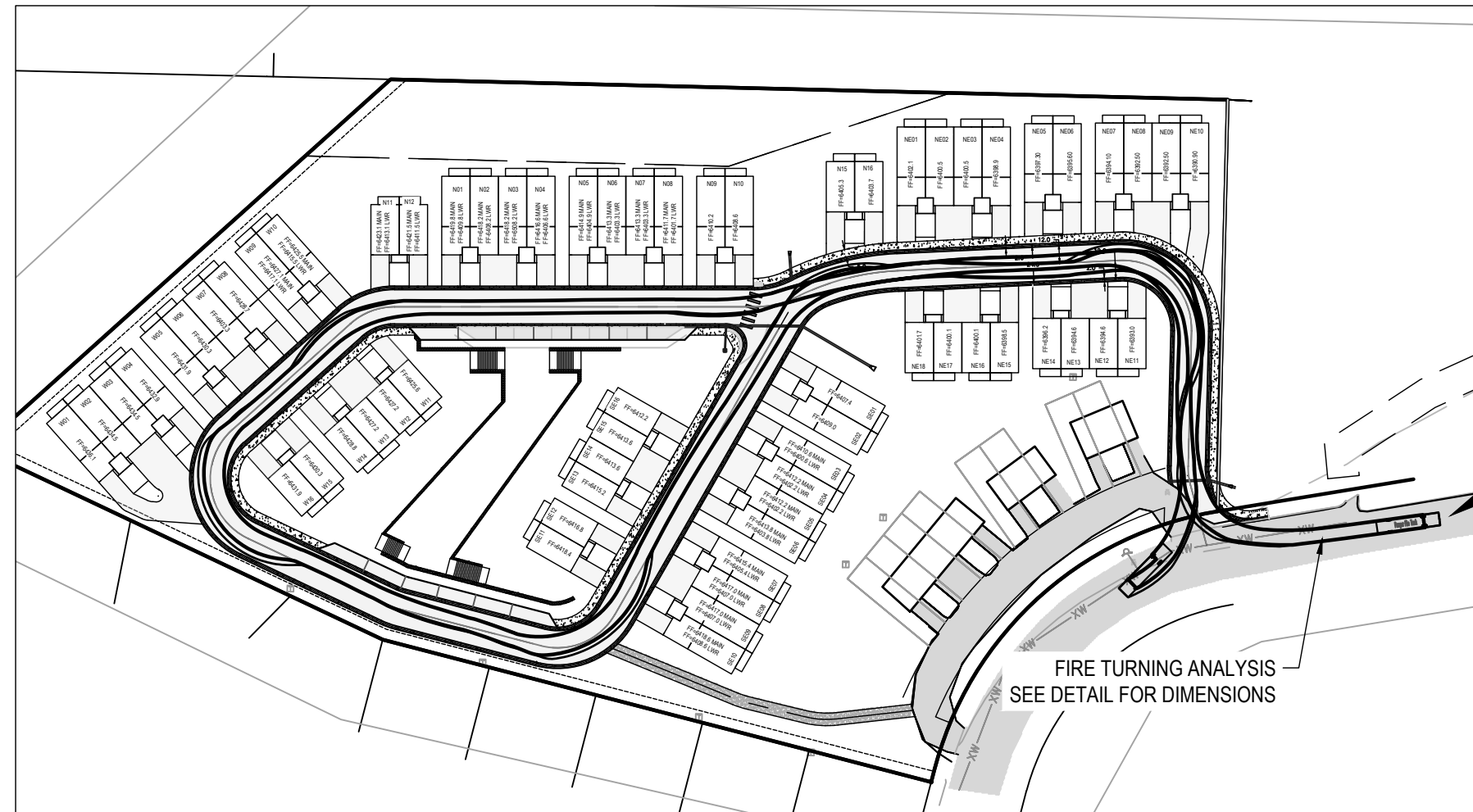
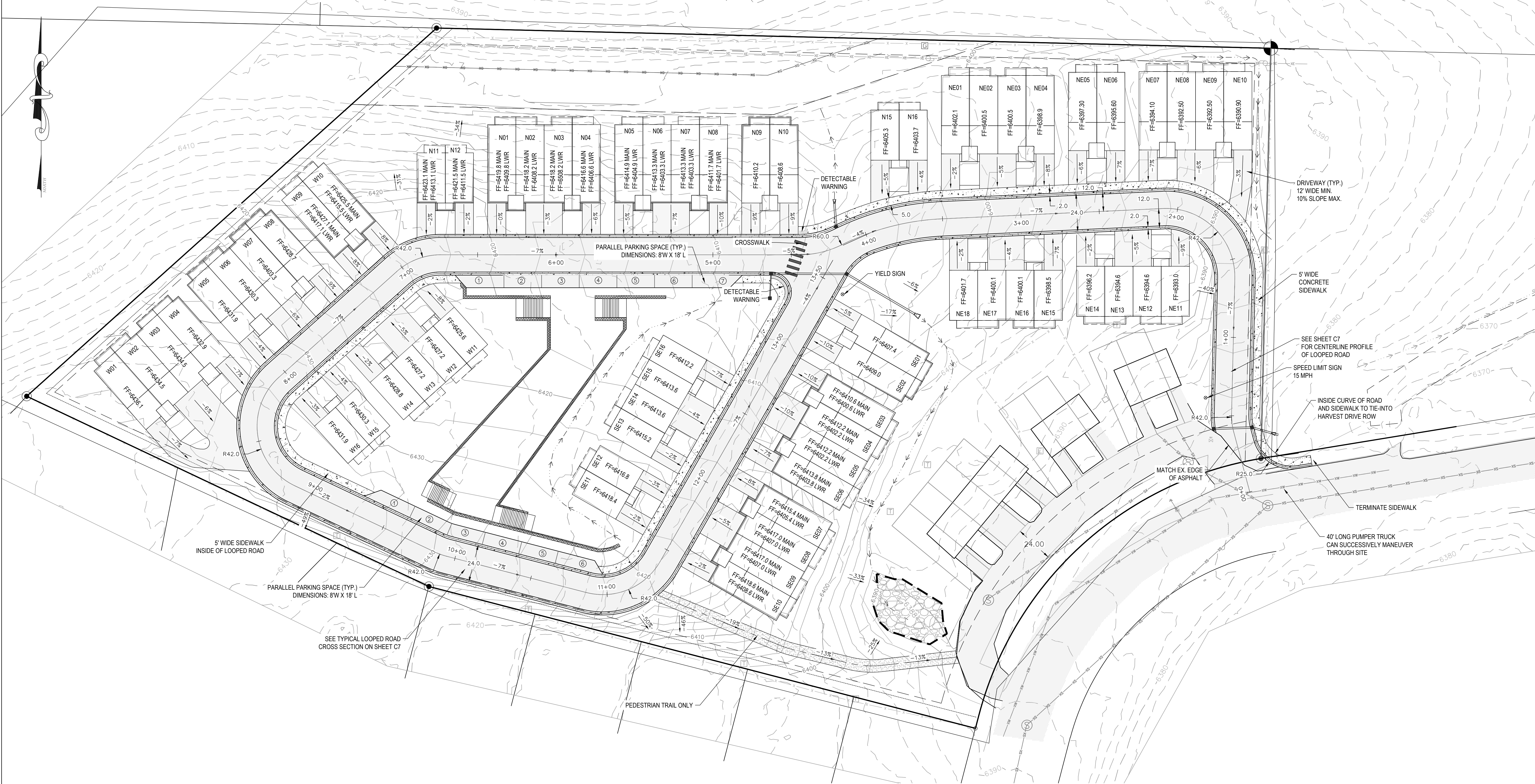
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DRAWING:

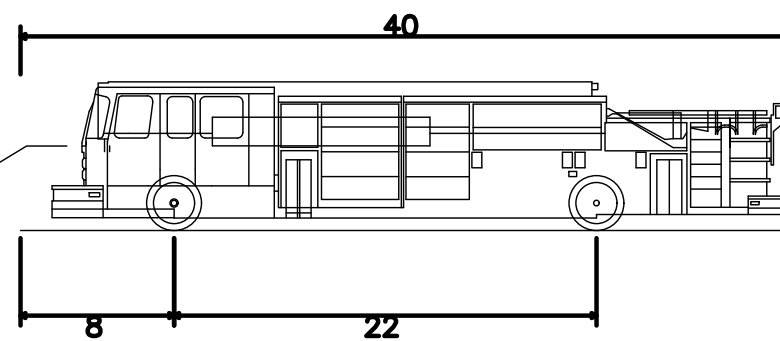
WATER MAIN PLAN & PROFILE

SHEET NO.

C6



FIRE TURNING EXHIBIT
SCALE: 1" = 100'



Pumper Fire Truck
Overall Length 40.000ft
Overall Width 8.167ft
Overall Body Height 7.745ft
Min Body Ground Clearance 0.656ft
Track Width 8.167ft
Lock-to-lock time 5.00s
Max Wheel Angle 45.00°

40' LONG PUMPER TRUCK INFORMATION



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SONESTA TOWNHOMES
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TOWN OF HAYDEN, COLORADO

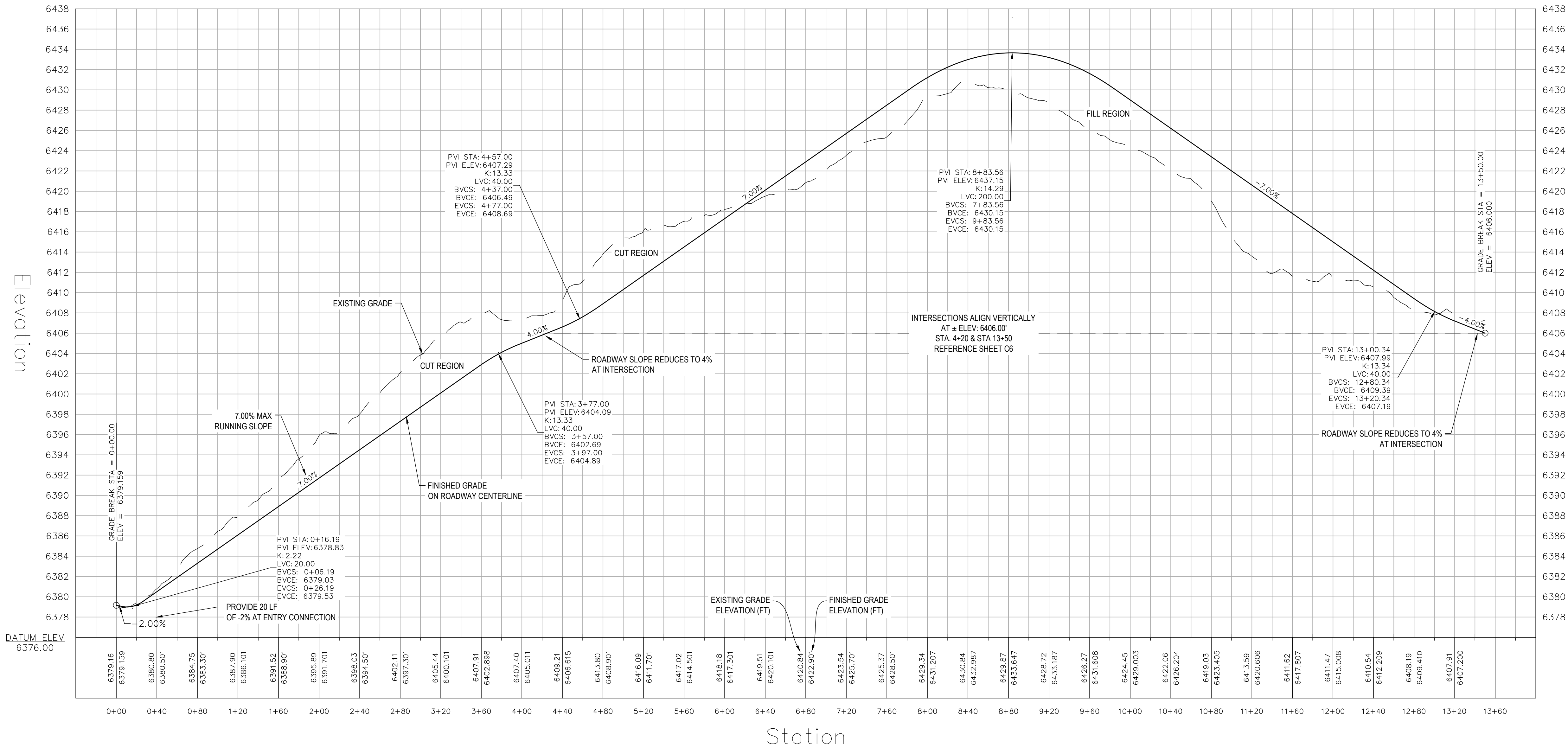
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0 30' 60'
SCALE: 1" = 30'
Contour Interval = 2 ft
DATE: 10/02/2025
JOB #: 1409-002
DRAWN BY: DSC
DESIGN BY: DSC
REVIEW BY: WNM

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DRAWING:
ROADWAY PLAN

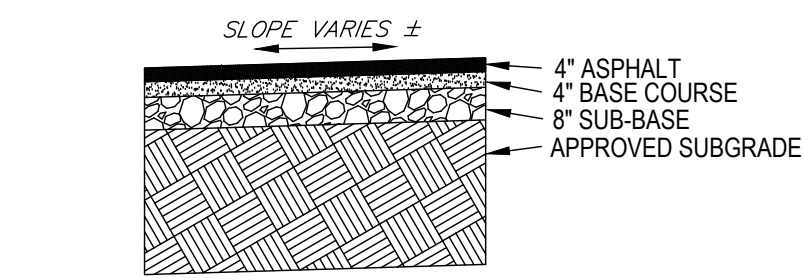
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C7

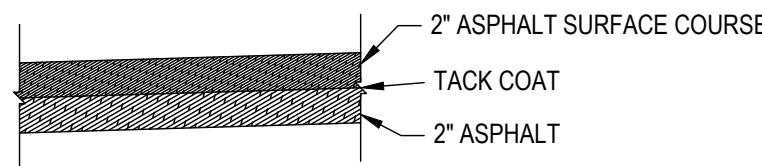


ROADWAY PROFILE

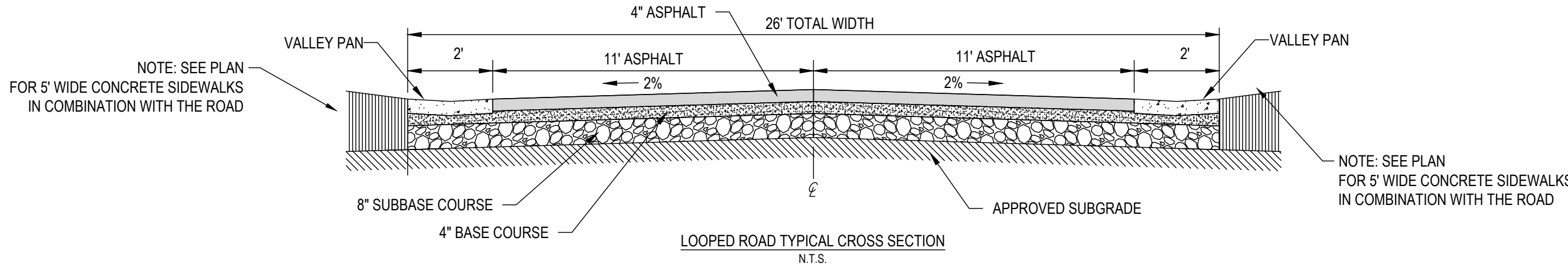
HORIZONTAL SCALE: 1" = 60'
VERTICAL SCALE: 1" = 6'



STANDARD ASPHALT PAVEMENT SECTION
NOT TO SCALE

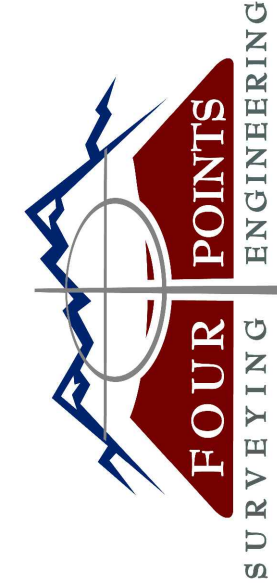


4\"/>



DRIVEWAY SURFACING NOTES:

- PRIOR TO THE PLACEMENT OF SUB-BASE AGGREGATES, THE EXPOSED SUB-GRADE SOILS SHALL BE UNIFORMLY SCARIFIED, MIXED, AND MOISTURE TREATED TO WITHIN 2% OF THE OPTIMUM MOISTURE CONTENT, AND THEN RE-COMPACTED TO AT LEAST 95% OF THE MAXIMUM STANDARD PROCTOR DENSITY.
- BASE COURSE AND SUB-BASE AGGREGATES SHALL MEET THE CDOT CLASS 6 ABC AND CLASS 2/1 ABC SPECIFICATIONS, RESPECTIVELY. BASE COURSE AND SUB-BASE AGGREGATES SHALL BE PLACED IN ONE LIFT AND COMPACTED TO AT LEAST 95% OF THE MAXIMUM MODIFIED PROCTOR DENSITY IN ACCORDANCE WITH ASTM 1557.
- DRIVEWAY SLOPES SHALL BE FINE GRADED AND TRACKED PERPENDICULAR TO THE DRIVEWAY CENTERLINE. ALL ADJACENT SLOPES SHALL BE SEEDED WITH NATIVE GRASS SEED AND STABILIZED STRAW BLANKET OR SIMILAR EROSION CONTROL MAT. SEED SHALL BE WATERED AS NECESSARY TO PROMOTE AND SUSTAIN GROWTH.



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SONESTA TOWNHOMES
CIVIL PERMIT PLANS
TOWN OF HAYDEN, COLORADO

DATE: 10/02/2025
JOB #: 1409-002
DRAWN BY: DSC
DESIGN BY: DSC
REVIEW BY: WNM

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DRAWING:
ROADWAY
PROFILE
SHEET NO.
C8



Leif Sunde <leifsunde7@gmail.com>

Tracts A,B,C Sonesta Park

32 messages

Leif Sunde <leifsunde7@gmail.com>
To: tegan.ebbert@haydencolorado.org

Wed, Jan 18, 2023 at 1:49 PM

Tegan -

Thank you again for your time in the phone this morning. I thought I'd drop you an email regarding the plat documents I requested on the phone in case I mumbled through spelling my name out for you.

Thank you again for your time.

—
Leif
303.898.8995

Tegan Ebbert <tegan.ebbert@haydencolorado.org>
To: Leif Sunde <leifsunde7@gmail.com>

Wed, Jan 18, 2023 at 2:50 PM

Thanks, Leif.

Following is the link to the packet from the most recent public hearing pertaining to the Peace Park subdivision project. Peace Park is the new design/layout for the Sonesta property. Meeting minutes are attached.

<https://haydencolorado.com/wp-content/uploads/2022/06/PC-Packet-6-23-22.pdf>

Attached to this email is the approval letter from the prior hearing for Sketch Plan and Conceptual PUD.

The remaining steps are to submit a final plat application and Final PUD application. There are submittal deadlines to continue the process, being 6/23/24 deadline to submit the final plat application and 6/23/23 deadline to submit the final PUD application. There are a few options when it comes to infrastructure and filing a final plat. There needs to be a Subdivision Improvement Agreement executed and either the infrastructure would need to be installed or the developer/owner would need to bond a certain percentage of the project costs (typically 10%) if.

If someone wanted to proceed with the existing Sonesta Park PUD/Plat (attached), the Peace Park Project can be left to expire and that layout could be pursued instead. There are still a few items that would need to be addressed through a Subdivision Improvement Agreement such as installation of utilities, roads, etc.

Please let me know if you have any questions.

Thanks,

Tegan

Tegan Ebbert | Community Development Director | Tegan.ebbert@haydencolorado.org

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Haydencolorado.com
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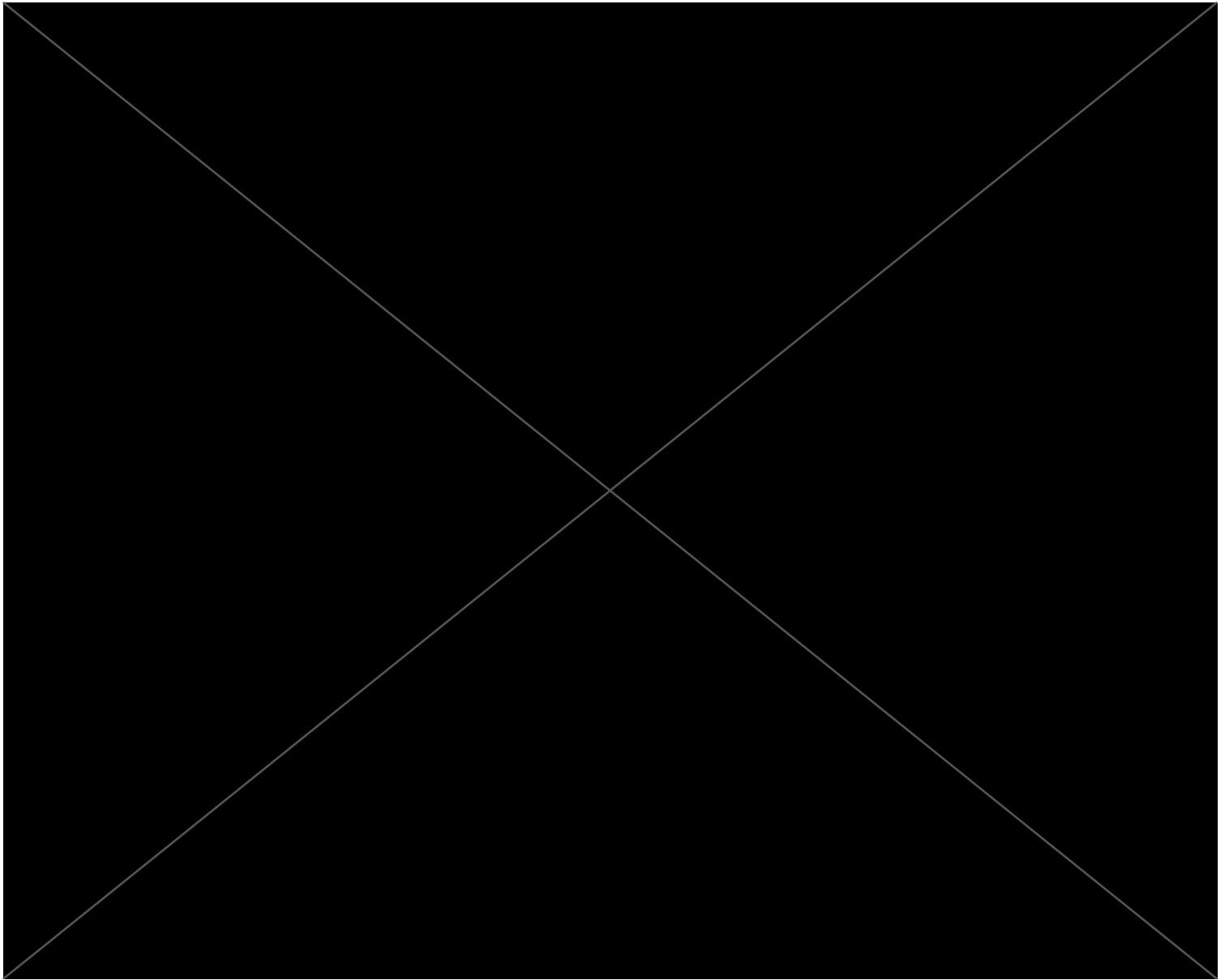
3 attachments

Letter of Approval Sketch & Conc PUD 12-6-21.pdf
95K

 **Letter of Approval Sketch & Conc PUD 12-6-21.pdf**
95K

 **6-23-22 Draft Minutes.pdf**
111K

 **008640.pdf**
4283K



Leif Sunde <leifsunde7@gmail.com>
To: Tegan Ebbert <tegan.ebbert@haydencolorado.org>

Wed, Jan 25, 2023 at 11:52 AM

Tegan -

Thank you so much for sending these along. Very helpful. We are officially under contract for the land.

You mentioned on the phone that there was a housing study/analysis that the town did. Would you be able to share that? I think it would help inform our phasing planning.

[Quoted text hidden]

[Quoted text hidden]

Tegan Ebbert <tegan.ebbert@haydencolorado.org>
To: Leif Sunde <leifsunde7@gmail.com>

Wed, Jan 25, 2023 at 11:55 AM

Hi,

The Housing Needs Assessment is attached.

Thanks,
Tegan

[Quoted text hidden]

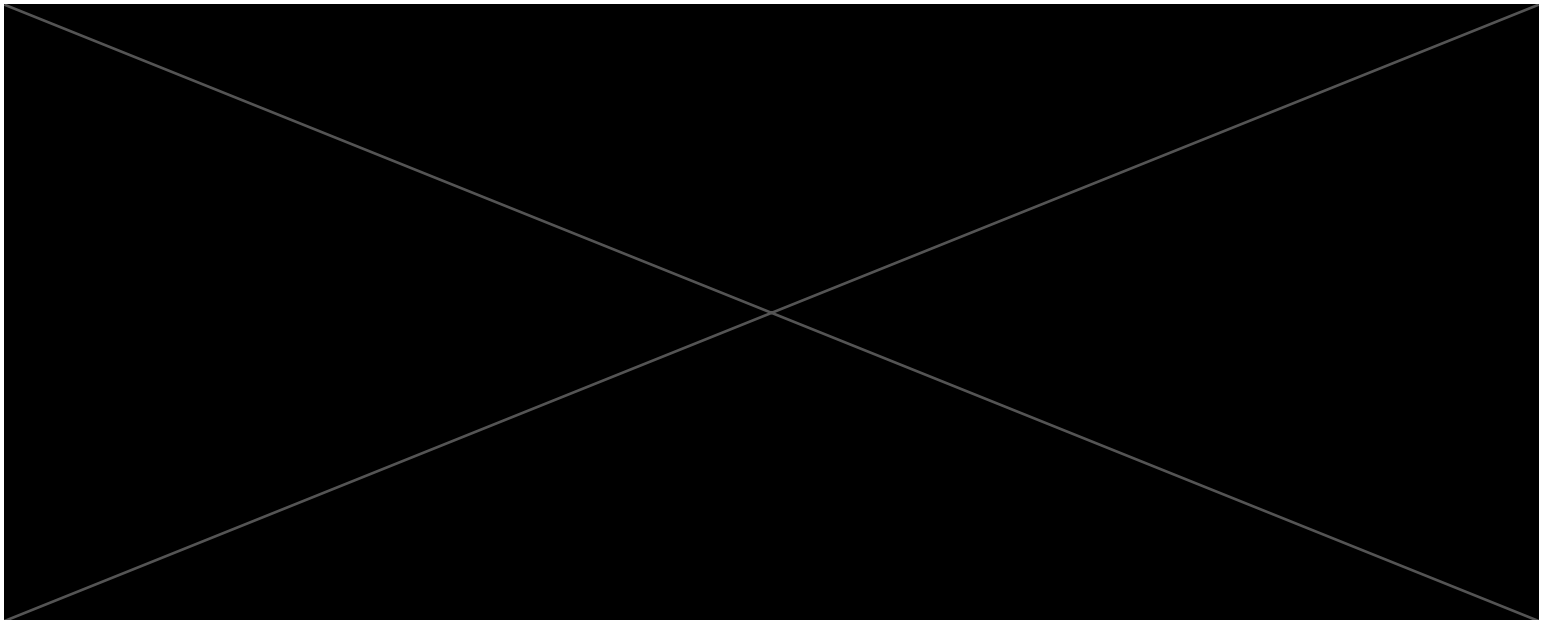
 **Hayden HNA - FINAL.pdf**
5858K

Leif Sunde <leifsunde7@gmail.com>
To: Tegan Ebbert <tegan.ebbert@haydencolorado.org>

Wed, Jan 25, 2023 at 11:57 AM

This is phenomenal. Thank you. I am hoping to make a day out at the property in the next 1-2 weeks. Do you have any availability for a meeting at your office or around town to discuss the outstanding next steps for final approval and getting into architectural planning/design?

[Quoted text hidden]



Leif Sunde <leifsunde7@gmail.com>
To: Tegan Ebbert <tegan.ebbert@haydencolorado.org>

Wed, Feb 8, 2023 at 11:43 AM

Tegan -

Thank you again for passing this along. It seems like this planned townhome development has the potential to significantly contribute to a solution to the distinct housing needs of Hayden and the surrounding area.

Through the course of our due diligence, I've become aware of the existing covenants appurtenant to the property (attached here). However, I have not been able to find any other evidence of existence of the HOA (meetings, officers, board of directors, schedule of dues, etc). Similarly, the seller and seller's agent have communicated that such HOA is not in existence.

Before going forward, I want to ensure that we have a clear understanding of the path forward for development. Can you share any further information? Will this development be subject to any restrictions beyond those enforced by the Town of Hayden and/or Routt County? Can you provide any assistance or guidance toward either quieting the title of these covenants or potentially free them from such through a subsequent subdivision?

I know this is a little messy, so please let me know if it might be best to sit down and discuss our plans for the property and how we can best help achieve the town's goals as we go forward.

Thank you, and I look forward to hearing from you.

[Quoted text hidden]

4 attachments**HOA Water Pump Facility Improvement Agr.pdf**

264K

**HOA Subdvn Improvement Agreement.pdf**

601K

**HOA Covenants.pdf**

262K

**HOA Covenants Supplemental.pdf**

269K

Tegan Ebbert <tegan.ebbert@haydencolorado.org>

Thu, Feb 9, 2023 at 6:43 PM

To: Leif Sunde <leifsunde7@gmail.com>

Hi Leif,

I'll need to do a little research on this and get back to you. The HOA covenants I am not so concerned about, if it was never formed then there is no enforcement mechanism behind it. We would likely want to see updated covenants established.

The SIA and Water Pump Facility document are of more interest. Public infrastructure improvements (roads, water, wastewater) will need to occur before dwelling units can be constructed. The Water Pump Facility Agreement is obviously wildly outdated and I need to find out if any of this was executed.

I am not entirely sure what you mean regarding additional restrictions beyond those enforced by the Town of Hayden/Routt County. Can you elaborate?

[Quoted text hidden]

Leif Sunde <leifsunde7@gmail.com>

Thu, Feb 9, 2023 at 9:01 PM

To: Tegan Ebbert <tegan.ebbert@haydencolorado.org>

Tegan -

Thank you so much for the communication. What I intended to ask with the comment about restrictions beyond what the town would enforce is specific to some of the covenants. Namely the mention of an architectural review committee, as this could potentially impose more stringent requirements/restrictions than is in place via planning and zoning ordinances.

Other than this obstacle, the project seems very promising.

—

Leif

303.898.8995

On Feb 9, 2023, at 18:43, Tegan Ebbert <tegan.ebbert@haydencolorado.org> wrote:

[Quoted text hidden]

Tegan Ebbert <tegan.ebbert@haydencolorado.org>
To: Leif Sunde <leifsunde7@gmail.com>

Fri, Feb 10, 2023 at 8:34 AM

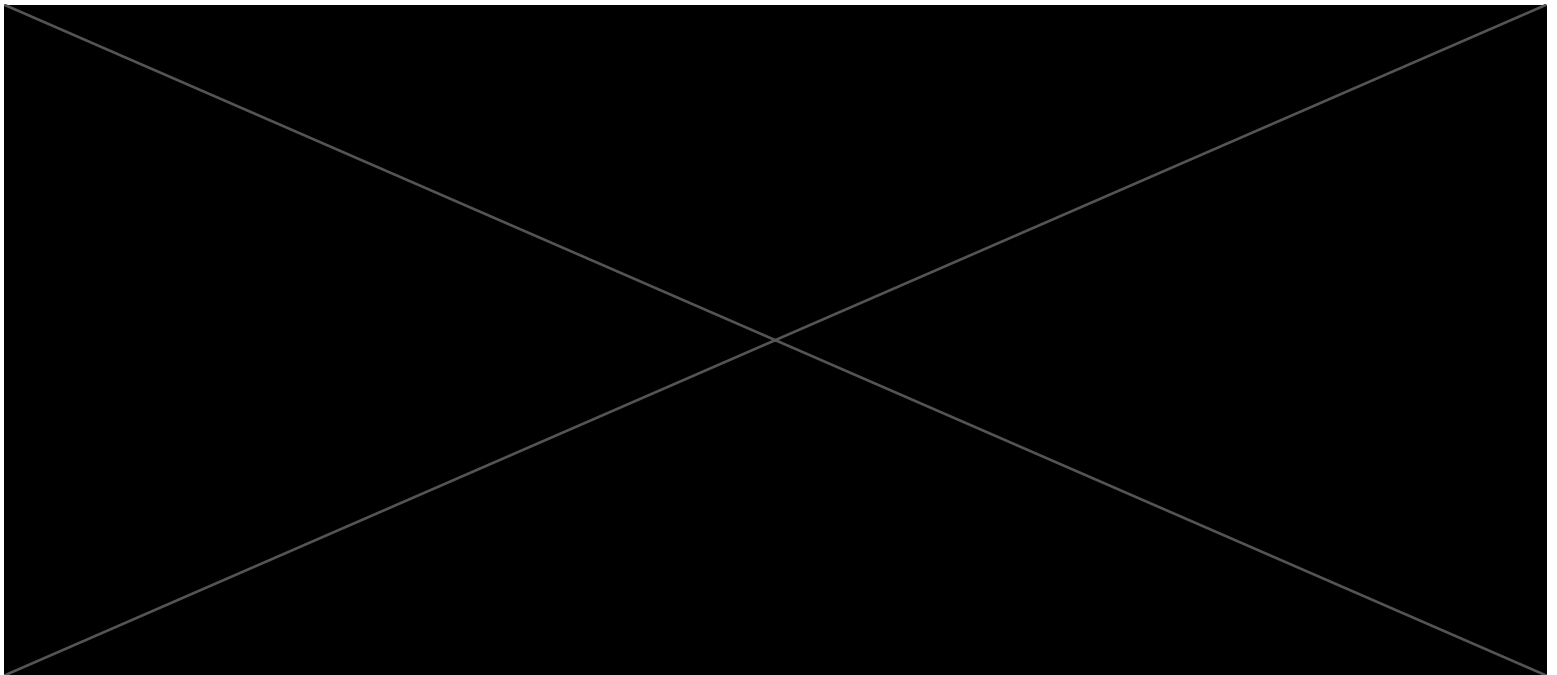
Oh! Ok, I wasn't sure if you were referring to state, federal restrictions, or other local agency restrictions (ie Army Corps of Engineers, FEMA Floodplain regs, fire code etc).

The Town does now enforce HOA covenants, if no HOA was formed and board appointed, there would be no enforcement mechanism to require compliance with the architectural process or anything else in the covenants that exceeds Town/County codes. We generally want to see that covenants exist for new developments because we want to know that there is a plan for maintenance of common spaces and required landscaping in open spaces and any common improvements that the Town doesn't own (ie street lighting, subdivision entryway signage, trails if applicable). What a neighborhood/HOA decides to impose as additional architectural requirements is in their court. Does that answer your question?

Thanks,

Tegn

[Quoted text hidden]



Leif Sunde <leifsunde7@gmail.com>
To: Tegan Ebbert <tegan.ebbert@haydencolorado.org>

Wed, Apr 5, 2023 at 10:27 AM

Tegan -

Thank you for your help and responsiveness through my due diligence phase of purchasing the above property. I have officially closed on the land as of 3/31 last week. I'd like to set up a time to speak with you regarding next steps for a pre-application conference and other requisite approvals needed to move forward with the development as provided on the Subdivision and PUD filed for Sonesta Park as attached.

[Quoted text hidden]

 **Sonesta Park PUD -Plat.pdf**
4281K

Tegan Ebbert <tegan.ebbert@haydencolorado.org>

Wed, Apr 5, 2023 at 3:40 PM

To: Leif Sunde <leifsunde7@gmail.com>

Hi Leif,

Congratulations! Let me come up with some dates/times that both myself and our Public Works Director are available to meet with you next week. Are you hoping to meet in person or virtually?

[Quoted text hidden]

Leif Sunde <leifsunde7@gmail.com>
To: Tegan Ebbert <tegan.ebbert@haydencolorado.org>

Wed, Apr 5, 2023 at 4:07 PM

I will be in AZ with family next week, so happy to meet virtually if possible.

—
Leif
303.898.8995
[Quoted text hidden]

Tegan Ebbert <tegan.ebbert@haydencolorado.org>
To: Leif Sunde <leifsunde7@gmail.com>
Cc: Bryan Richards <bryan.richards@haydencolorado.org>

Tue, Apr 11, 2023 at 9:58 AM

Leif,

Both myself and our Public Works Director are available on Thursday. How about 11 am?

[Quoted text hidden]

Bryan Richards <bryan.richards@haydencolorado.org>
To: Tegan Ebbert <tegan.ebbert@haydencolorado.org>, Leif Sunde <leifsunde7@gmail.com>

Tue, Apr 11, 2023 at 3:29 PM

I just had another meeting slide into the 11:00 time slot could we push this to 1:00 Thursday?

Bryan Richards | Public Works Director | bryan.richards@haydencolorado.org



Heart of the Yampa Valley™

Haydencolorado.com

P.O. Box 190, [178 West Jefferson, Hayden, CO 81639-0190](#)

Cell: 970-757-6002

From: Tegan Ebbert <tegan.ebbert@haydencolorado.org>
Sent: Tuesday, April 11, 2023 9:59 AM
To: Leif Sunde <leifsunde7@gmail.com>

Cc: Bryan Richards <bryan.richards@haydencolorado.org>
Subject: RE: Tracts A,B,C Sonesta Park

Leif,

[Quoted text hidden]

Tegan Ebbert <tegan.ebbert@haydencolorado.org>

Tue, Apr 11, 2023 at 3:31 PM

To: Bryan Richards <bryan.richards@haydencolorado.org>, Leif Sunde <leifsunde7@gmail.com>

1pm works for me, we will wait to hear from Leif.

Thanks,

Tegan

[Quoted text hidden]

Leif Sunde <leifsunde7@gmail.com>

Tue, Apr 11, 2023 at 3:50 PM

To: Tegan Ebbert <tegan.ebbert@haydencolorado.org>

Cc: Bryan Richards <bryan.richards@haydencolorado.org>

1pm on Thursday will work great. Thank you so much.

—
Leif
303.898.8995

On Apr 11, 2023, at 14:31, Tegan Ebbert <tegan.ebbert@haydencolorado.org> wrote:

1pm works for me, we will wait to hear from Leif.

Thanks,

Tegan

From: Bryan Richards <bryan.richards@haydencolorado.org>

Sent: Tuesday, April 11, 2023 3:30 PM

To: Tegan Ebbert <tegan.ebbert@haydencolorado.org>; Leif Sunde <leifsunde7@gmail.com>

Subject: RE: Tracts A,B,C Sonesta Park

I just had another meeting slide into the 11:00 time slot could we push this to 1:00 Thursday?

Bryan Richards | Public Works Director | bryan.richards@haydencolorado.org

<image001.jpg>

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[Quoted text hidden]

[Quoted text hidden]

Tegan Ebbert <tegan.ebbert@haydencolorado.org>
To: Leif Sunde <leifsunde7@gmail.com>
Cc: Bryan Richards <bryan.richards@haydencolorado.org>

Tue, Apr 11, 2023 at 3:52 PM

Great,

Here is a zoom link for Thursday at 1pm.

Join Zoom Meeting

<https://us02web.zoom.us/j/85924406278?pwd=N1JWYjd6bGp6dkVEZXVya2M0WFBIQT09>

Meeting ID: 859 2440 6278

Passcode: 134571

One tap mobile

+17193594580,,85924406278#,,, *134571# US

+13462487799,,85924406278#,,, *134571# US (Houston)

[Quoted text hidden]

Leif Sunde <leifsunde7@gmail.com>
To: Tegan Ebbert <tegan.ebbert@haydencolorado.org>
Cc: Bryan Richards <bryan.richards@haydencolorado.org>

Thu, Apr 13, 2023 at 8:47 AM

Tegan / Bryan -

I've had some unexpected changes to my travel schedule and will be in an airplane when we're intended to meet at 1:00.
Do you have any availability either tomorrow or next week?

My apologies for the inconvenience. I look forward to speaking with you both.

—
Leif
303.898.8995

On Apr 11, 2023, at 14:52, Tegan Ebbert <tegan.ebbert@haydencolorado.org> wrote:

[Quoted text hidden]

Tegan Ebbert <tegan.ebbert@haydencolorado.org>
To: Leif Sunde <leifsunde7@gmail.com>
Cc: Bryan Richards <bryan.richards@haydencolorado.org>

Thu, Apr 13, 2023 at 8:51 AM

Leif,

I was actually just about to email you to cancel! The Town is having a significant flood event that arose early this morning with all the rapid snow melt so things are a little hectic around here today. Lets plan for something next week. Is there a day/time that works well for you. Tuesday and Wednesday are pretty open on my schedule at the moment but I can't speak for Bryan's schedule.

Safe travels,

[Quoted text hidden]

Leif Sunde <leifsunde7@gmail.com>
To: Tegan Ebbert <tegan.ebbert@haydencolorado.org>
Cc: Bryan Richards <bryan.richards@haydencolorado.org>

Thu, Apr 13, 2023 at 11:58 AM

Next week anytime will work well for me. I have heard the runoff/melt is causing significant issues. Be safe! I'll wait to hear Bryan's availability.

Thank you.

—
Leif
303.898.8995

On Apr 13, 2023, at 07:51, Tegan Ebbert <tegan.ebbert@haydencolorado.org> wrote:

[Quoted text hidden]

Leif Sunde <leifsunde7@gmail.com>
To: Tegan Ebbert <tegan.ebbert@haydencolorado.org>
Cc: Bryan Richards <bryan.richards@haydencolorado.org>

Mon, Apr 17, 2023 at 3:05 PM

Good afternoon Tegan and Bryan -
I hope you're both doing well and managing the massive runoff ahead of the continued precipitation in the forecast. Quite the challenge!

Let me know some times that are available in the coming week(s) to meet either virtually or in-person r.egarding the development of Sonesta Park

I look forward to hearing from you.

Thank you.

[Quoted text hidden]

Tegan Ebbert <tegan.ebbert@haydencolorado.org>
To: Leif Sunde <leifsunde7@gmail.com>
Cc: Bryan Richards <bryan.richards@haydencolorado.org>

Fri, Apr 21, 2023 at 11:30 AM

Hi Leif,

Are you available on Tuesday (4/25) at 2:30pm? I will be out of the office at a conference Wednesday, Thursday, and Friday next week then I go on vacation the week after (5/2-5/9).

[Quoted text hidden]

Leif Sunde <leifsunde7@gmail.com>
To: Tegan Ebbert <tegan.ebbert@haydencolorado.org>
Cc: Bryan Richards <bryan.richards@haydencolorado.org>

Fri, Apr 21, 2023 at 12:00 PM

Tuesday at 2:30 works great. A zoom conference will be best for me.

Thank you!

—
Leif
303.898.8995
[Quoted text hidden]

Tegan Ebbert <tegan.ebbert@haydencolorado.org>
To: Leif Sunde <leifsunde7@gmail.com>

Tue, Apr 25, 2023 at 2:57 PM

Pre-app checklist and agreement for payment form are attached.

[Quoted text hidden]

2 attachments

 **Pre-Application Form & Checklist_042722.pdf**
224K

 **HAYDEN_Agreement for Payment_Dev Rev 3-7-22.pdf**
61K

Leif Sunde <leifsunde7@gmail.com>
To: Tegan Ebbert <tegan.ebbert@haydencolorado.org>

Tue, Apr 25, 2023 at 3:16 PM

Thank you for sending these over. We're excited to get working with the town on this development.

[Quoted text hidden]



Leif Sunde <leif@denversportslab.com>

Sonesta Park Townhomes

3 messages

Leif Sunde <leif@denversportslab.com>
To: Brad Parrott <bparrott@westrouttfire.com>

Mon, Apr 21, 2025 at 1:41 PM

Brad -

I hope you're doing well and enjoying the turn to spring. I wanted to follow up to the pre-application meeting we had regarding this project back in November. We have been working with Walter at Four Points Engineering to improve site accessibility, specifically regarding grades and turning radius.

I wanted to present this to you for your consideration and initial feedback before we finalize things for our formal submission. I have attached what was reviewed at the pre-application meeting (Scheme A), our current proposed layout (Scheme C), as well as the originally approved final (current) plat.

Both Schemes A and C are at 61-62 units, down from the 64 units in the existing plat.

Thank you, and we're looking forward to working with you to get this project started later this summer.

--

Leif Sunde
(c). 303.898.8995
(e). leif@denversportslab.com
[Book a Meeting](#)
Denver Sports Lab
www.DenverSportsLab.com

3 attachments **Sonesta Townhomes Site Plan_032525_C.pdf**
282K **Sonesta Townhomes Site Plan_032525_A.pdf**
337K **Sonesta Park PUD -Plat.pdf**
4282K

Brad Parrott <bparrott@westrouttfire.com>
To: Leif Sunde <leif@denversportslab.com>

Wed, Apr 23, 2025 at 10:23 AM

Leif,

Looking at the proposed layout we would just like to make sure that that first 90 degree turn has a radius in the North East corner of the plans would need to be able to accommodate a 40' bus. I know that Chief Guire talked about a mountable surface to help get that turning radius if needed.

We would also like to see a 24' flat driving surface to ensure that we can get our apparatus in while everyone else is trying to drive out.

Any elective monitored fire alarm or sprinkler systems would require additional inspection and testing as needed.

Other than that nothing else from us at the moment.

Thanks, have a great day.



Leif Sunde <leifsunde7@gmail.com>

Sonesta Park TH Pre-application

9 messages

Leif Sunde <leifsunde7@gmail.com>

Wed, Jul 31, 2024 at 2:40 PM

To: Tegan Ebbert <tegan.ebbert@haydencolorado.org>

Tegan -

I wanted to informally send this just to ensure it loads correctly for you. I will have this formally packaged and delivered with a check for the Pre-app fee tomorrow or Friday.

Thank you for your communication on the project thus far, and I am excited to be inching this forward.

--

Leif Sunde

303.898.8995

leifsunde7@gmail.com**Pre-Application Form & Checklist_310724.pdf**

8041K

Tegan Ebbert <tegan.ebbert@haydencolorado.org>

Wed, Aug 14, 2024 at 2:47 PM

To: Leif Sunde <leifsunde7@gmail.com>

Hi Leif,

I am just following up. I realized that I never saw a package/check dropped off. Did you drop one off?

Thanks,

Tegan**Tegan Ebbert** | Community Development Director | Tegan.ebbert@haydencolorado.org**Haydencolorado.com**P.O. Box 190, [178 West Jefferson](#), [Hayden, CO 81639-0190](#)

O: 970-276-3741 | C: 970-457-7216 | F: 970-276-3644

[Quoted text hidden]

Leif Sunde <leifsunde7@gmail.com>

Wed, Aug 14, 2024 at 3:41 PM

To: Tegan Ebbert <tegan.ebbert@haydencolorado.org>

Not yet. Unexpectedly got pulled out of town for some family matters. I got back yesterday and owe you a visit to deliver this.

Thank you for checking in.

—
Leif
303.898.8995

On Aug 14, 2024, at 14:47, Tegan Ebbert <tegan.ebbert@haydencolorado.org> wrote:

Hi Leif,

I am just following up. I realized that I never saw a package/check dropped off. Did you drop one off?

Thanks,

Tegan

Tegan Ebbert | Community Development Director | tegan.ebbert@haydencolorado.org

<image002.png>
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[Quoted text hidden]

Tegan Ebbert <tegan.ebbert@haydencolorado.org>
To: Leif Sunde <leifsunde7@gmail.com>

Wed, Aug 14, 2024 at 3:43 PM

All good! I was nervous it got lost in the office.

Thanks,
Tegan

[Quoted text hidden]

Leif Sunde <leifsunde7@gmail.com>
To: Tegan Ebbert <tegan.ebbert@haydencolorado.org>

Tue, Aug 20, 2024 at 3:49 PM

Tegan -
I hope you're doing well and your week is off to a good start. I have some partners in the project coming to town next Wednesday. We will be meeting at the site at 9:45 that morning. It would be great from them to have an opportunity to meet with you. Would it be possible for you to meet either at the site or at your office just afterward around 10/10:15? The intention is just an informal meet & greet rather than anything with an agenda.

Thank you in advance, and I look forward to speaking with you.

—
Leif

303.898.8995

On Aug 14, 2024, at 15:43, Tegan Ebbert <tegan.ebbert@haydencolorado.org> wrote:

[Quoted text hidden]

Tegan Ebbert <tegan.ebbert@haydencolorado.org>

Wed, Aug 21, 2024 at 3:32 PM

To: Leif Sunde <leifsunde7@gmail.com>

Hi Leif,

I am available next Wednesday morning. Do you mind if I invite the Hayden Public Works Director? I am not sure if he will be able to make it but it would be good to make an intro.

I can either meet onsite or at the office, which do you prefer?

Thanks,

Tegan

Tegan Ebbert | Community Development Director | tegan.ebbert@haydencolorado.org



[Quoted text hidden]

Leif Sunde <leifsunde7@gmail.com>

Wed, Aug 21, 2024 at 3:46 PM

To: Tegan Ebbert <tegan.ebbert@haydencolorado.org>

Tegan -

Thank you for the confirmation. I think it would be great to have the Public Works Director there as well. For ease, let's plan on meeting at the site next Wednesday. We will be there at 9:45, as the team is coming up from their offices in Buena Vista.

[Quoted text hidden]

Tegan Ebbert <tegan.ebbert@haydencolorado.org>

Thu, Aug 22, 2024 at 9:40 AM

To: Leif Sunde <leifsunde7@gmail.com>

Leif,

Bryan Richards, PW Director is able to join us on Wednesday at 9:45am onsite. He has a hard stop at 10:15am.

[Quoted text hidden]

Tegan Ebbert <tegan.ebbert@haydencolorado.org>

Wed, Aug 28, 2024 at 8:38 AM

To: Leif Sunde <leifsunde7@gmail.com>, Bryan Richards <bryan.richards@haydencolorado.org>

Good morning Leif,

Unfortunately I'm home sick today and won't be able to make it to your site visit. We have a cold going around the office and I am going try to keep my germs to myself.

Thanks,
Tegan

Get [Outlook for iOS](#)

From: Tegan Ebbert**Sent:** Thursday, August 22, 2024 9:40:53 AM**To:** Leif Sunde <leifsunde7@gmail.com>**Subject:** RE: Sonesta Park TH Pre-application

[Quoted text hidden]



Leif Sunde <leif@denversportslab.com>

Sonesta Townhome development meeting

13 messages

Tegan Ebbert <tegan.ebbert@haydencolorado.org>

Tue, Nov 12, 2024 at 10:05 AM

To: Leif Sunde <leif@denversportslab.com>, Ben Beall <bbeall@zenobiaconsultants.com>, Bryan Richards <bryan.richards@haydencolorado.org>, Trevor Guire <tguire72@gmail.com>, Brad Parrott <bparrott@westrouttfire.com>, Ty Johnson <ty@mesaplanning.com>

Hi all,

If you are available to be in person at Hayden Town Hall, that's great. If not, I have a teams link below.

Thanks,

Tegan

Microsoft Teams [Need help?](#)**Join the meeting now**

Meeting ID: 265 087 672 449

Passcode: CFSpgw

For organizers: [Meeting options](#)



Leif Sunde <leif@denversportslab.com>

Fri, Feb 28, 2025 at 11:10 AM

To: Tegan Ebbert <tegan.ebbert@haydencolorado.org>

Cc: Ben Beall <bbeall@zenobiaconsultants.com>, Bryan Richards <bryan.richards@haydencolorado.org>, Trevor Guire <tguire72@gmail.com>, Brad Parrott <bparrott@westrouttfire.com>, Ty Johnson <ty@mesaplanning.com>

Tegan -

I hope you are doing well and the winter has been good for you. I am at a point with my partners that we will be finalizing the site/civil plan shortly and hoping to move dirt for site improvements this summer. I want to check with you on the required steps, approvals, and paperwork between here and there. Specific questions include but are not limited to

- Process for administrative approval for lot-line adjustments
 - Can site work begin prior to this process?

- Permits required for site work
- Bond requirements (I believe it's 5%)
 - Can this be a letter of credit or a surety bond?
- When are utility and other development fees assessed
 - Can any of these be deferred to time of building permit?

If it is easier to talk through this in real-time I am happy to do so at your convenience.

Thank you again, and I look forward to speaking with you.

[Quoted text hidden]

--

Leif Sunde
(c). 303.898.8995
(e). leif@denversportslab.com
[Book a Meeting](#)
Denver Sports Lab
www.DenverSportsLab.com

Leif Sunde <leif@denversportslab.com>
To: Tegan Ebbert <tegan.ebbert@haydencolorado.org>

Tue, Mar 4, 2025 at 12:06 AM

Tegan -

I hope you're doing well. I just want to ping this to the top of your inbox in case it got buried coming in over the weekend.

[Quoted text hidden]

Tegan Ebbert <tegan.ebbert@haydencolorado.org>
To: Leif Sunde <leif@denversportslab.com>, Bryan Richards <bryan.richards@haydencolorado.org>
Cc: Ben Beall <bbeall@zenobiaconsultants.com>, Trevor Guire <tguire72@gmail.com>, Brad Parrott <bparrott@westrouttfire.com>, Ty Johnson <ty@mesapanning.com>

Tue, Mar 4, 2025 at 3:48 PM

Hi Leif,

We seem to have survived winter... but I suppose it's probably not over yet. My responses are below in blue.

- Process for administrative approval for lot-line adjustments **We will get a submittal checklist ready for you on this one. I've attached our general land use application form and agreement for payment form.**
 - **Can site work begin prior to this process?**
- Permits required for site work **@Bryan Richards Can you comment on any PW site work requirements (ie curb cut permit if applicable, State stormwater permit). Leif – there is nothing specific to Planning and Zoning to start moving dirt.**
- Bond requirements (I believe it's 5%) **Typically we required 10%, shot our attorney an email regarding allowable bonding types.**
 - **Can this be a letter of credit or a surety bond?**
- **When are utility and other development fees assessed**
 - **Can any of these be deferred to time of building permit? Use tax, building permitting fees, and tap (plant investment) fees are due at the time of building permitting. For any deferred tap fees, a request must be submitted to the Hayden Town Council and they consider approving it in a public meeting.**

Thanks,

Tegan

[Quoted text hidden]

2 attachments



Land Use Application.pdf
70K



HAYDEN_Agreement for Payment_Dev Rev.pdf
94K

Bryan Richards <bryan.richards@haydencolorado.org>

Tue, Mar 4, 2025 at 4:26 PM

To: Tegan Ebbert <tegan.ebbert@haydencolorado.org>, Leif Sunde <leif@denversportslab.com>

Cc: Ben Beall <bbeall@zenobiaconsultants.com>, Trevor Guire <tguire72@gmail.com>, Brad Parrott <bparrott@westrouttfire.com>, Ty Johnson <ty@mesaplanning.com>, Frank Case <frank.case@haydencolorado.org>

Leif,

1. Just thinking back to some comments with adding a waterline loop down the west entrance. I don't think I have seen any revised plan with that on there. We typically the plan set as the grading and excavation plan.
2. Roads will not be public as discussed but all water and sewer mains need to be in a dedicated easement. Please verify in updated plans.
3. State storm water permit - Obtained through the state.
4. Certificate of Insurance naming TOH as secondary insured for work in the Harvest ROW.
5. Traffic Control Plan by a certified Traffic Control Supervisor
6. Dust Control Procedures.
7. Work schedule – We request given the close proximity to existing residential neighborhood a Monday through Saturday 7:00 PM to 7:00 AM construction hour schedule. Please confirm on work schedule.
8. Materials testing plan. This needs to be in conformance with our Standard Specifications for the Water and Wastewater public utilities.
9. All public infrastructure submittal will need approved by TOH after your civil engineer reviews them in accordance with our Standard Specifications
10. Electronic copies of all the most current plans

Bryan Richards | Public Works Director | bryan.richards@haydencolorado.org**Haydencolorado.com**P.O. Box 190, [178 West Jefferson](#), Hayden, CO 81639-0190

C: 970-757-6002

[Quoted text hidden]

Leif Sunde <leif@denversportslab.com>

Tue, Mar 4, 2025 at 5:20 PM

To: Stephen Doyle <steve@adaptablerea.com>

Fresh in from Tegan at the Town Planning office. I have not reviewed the attachments yet. Forthcoming email from PW as well.

----- Forwarded message -----

From: **Tegan Ebbert** <tegan.ebbert@haydencolorado.org>

Date: Wed, Mar 5, 2025 at 6:48AM

Subject: RE: Sonesta Townhome development meeting

[Quoted text hidden]

[Quoted text hidden]

[Quoted text hidden]

2 attachments**Land Use Application.pdf**

70K

**HAYDEN_Agreement for Payment_Dev Rev.pdf**

94K

Leif Sunde <leif@denversportslab.com>
To: Stephen Doyle <steve@adaptablerea.com>

Tue, Mar 4, 2025 at 5:21 PM

See below from public works.

[Quoted text hidden]

Leif Sunde <leif@denversportslab.com>
To: Bryan Richards <bryan.richards@haydencolorado.org>

Tue, Mar 4, 2025 at 5:26 PM

Cc: Tegan Ebbert <tegan.ebbert@haydencolorado.org>, Ben Beall <bbeall@zenobiaconsultants.com>, Trevor Guire <tguire72@gmail.com>, Brad Parrott <bparrott@westrouttfire.com>, Ty Johnson <ty@mesaplanning.com>, Frank Case <frank.case@haydencolorado.org>

Tegan and Bryan -

Thank you for the communication and information here. I have relayed this to my team and will work to satisfy requirements as soon as possible.

Thank you.

[Quoted text hidden]

Tegan Ebbert <tegan.ebbert@haydencolorado.org>
To: Leif Sunde <leif@denversportslab.com>

Tue, Mar 18, 2025 at 4:51 PM

Hi,

Quick update –

I chatted with our attorney again regarding the bonding and a few procedural things.

We will only require bonding for public improvements. Because the infrastructure within the development is private, no bonding will be required.

As the Attorney and I looked more closely, he actually came to a slightly different process conclusion than he previously did. In the PUD amendment criteria, there is a requirement to use preliminary PUD review criteria (by today's standards) which gets a little hairy. PUD's are a really sensitive subject in Town at this moment in history. The conclusion he had is that this isn't actually an amendment of a PUD, its an amendment of "**A Plat** of Sonesta Park P.U.D." therefore it's actually a plat amendment/lot line adjustment and is processed as a "Minor Subdivision". A Minor Subdivision goes to Town Council but I suspect a PUD amendment would have been appeal and called up to Town Council just given the sensitivity to it at this moment. There isn't actually anything about the density, configuration, or housing typology that would have warranted a PUD under today's standards (ie there isn't any discernable deviation from the current development code) or really any clear reason that a PUD overly exists but our attorney indicated that, ultimately, the only modification is to the plat. Once we have a completed application, it's a 14 day public notice period before it goes on a Town Council agenda for their review and consideration.

There are two ways to approach this:

1. File a replat on the entire property.
2. File a replat on **ONLY** the lots that are changing in location/configuration. This can be done piecemeal or all at once.

Please let me know if you have any additional questions.

Thanks,

Tegan

Tegan Ebbert | Deputy Town Manager | Tegan.ebbert@haydencolorado.org



Haydencolorado.com

P.O. Box 190, [178 West Jefferson](#), Hayden, CO 81639-0190

O: 970-276-3741 | C: 970-457-7216 | F: 970-276-3644

From: Leif Sunde <leif@denversportslab.com>
Sent: Tuesday, March 4, 2025 12:06 AM
To: Tegan Ebbert <tegan.ebbert@haydencolorado.org>
Subject: Re: Sonesta Townhome development meeting

Tegan -

[Quoted text hidden]

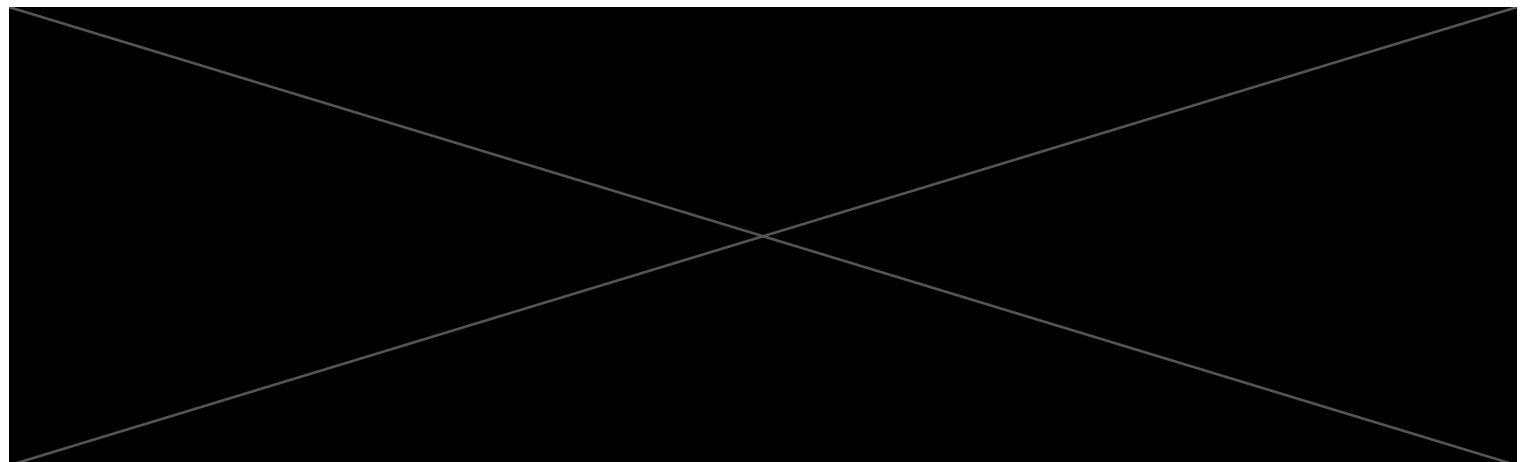
[Quoted text hidden]

3 attachments

Minor Subdivision Plat Checklist_2024.pdf
240K

Land Use Application.pdf
70K

HAYDEN_Agreement for Payment_Dev Rev.pdf
94K



From: Tegan Ebbert <tegan.ebbert@haydencolorado.org>
Date: March 18, 2025 at 16:52:04 MDT
To: Leif Sunde <leif@denversportslab.com>
Subject: RE: Sonesta Townhome development meeting

[Quoted text hidden]

Heart of the Yampa Valley TM

Haydencolorado.com

P.O. Box 190, 178 West Jefferson, Hayden, CO 81639-0190

O: 970-276-3741 | C: 970-457-7216 | F: 970-276-3644

From: Leif Sunde <leif@denversportslab.com>
Sent: Tuesday, March 4, 2025 12:06 AM
To: Tegan Ebbert <tegan.ebbert@haydencolorado.org>
Subject: Re: Sonesta Townhome development meeting

Tegan -

I hope you're doing well. I just want to ping this to the top of your inbox in case it got buried coming in over the weekend.

On Sat, Mar 1, 2025 at 2:10AM Leif Sunde <leif@denversportslab.com> wrote:

Tegan -

I hope you are doing well and the winter has been good for you. I am at a point with my partners that we will be finalizing the site/civil plan shortly and hoping to move dirt for site improvements this summer. I want to check with you on the required steps, approvals, and paperwork between here and there. Specific questions include but are not limited to

- Process for administrative approval for lot-line adjustments
 - Can site work begin prior to this process?
- Permits required for site work
- Bond requirements (I believe it's 5%?)
 - Can this be a letter of credit or a surety bond?
- When are utility and other development fees assessed
 - Can any of these be deferred to time of building permit?

If it is easier to talk through this in real-time I am happy to do so at your convenience.

Thank you again, and I look forward to speaking with you.

On Tue, Nov 12, 2024 at 10:05AM Tegan Ebbert <tegan.ebbert@haydencolorado.org> wrote:

Hi all,

If you are available to be in person at Hayden Town Hall, that's great. If not, I have a teams link below.

Thanks,

Tegan

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Meeting ID: 265 087 672 449

Passcode: CFSpwg

For organizers: [Meeting options](#)

--

Leif Sunde

(c). 303.898.8995

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www.DenverSportsLab.com

--

Leif Sunde

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Denver Sports Lab

4 attachments**image001.png**
5K**Minor Subdivision Plat Checklist_2024.pdf**
240K**Land Use Application.pdf**
70K**HAYDEN_Agreement for Payment_Dev Rev.pdf**
94K

Leif Sunde <leif@denversportslab.com>

Tue, Mar 18, 2025 at 5:18 PM

To: Tegan Ebbert <tegan.ebbert@haydencolorado.org>, Stephen Doyle <Steve@adaptablerea.com>

Tegan -

Thank you for the communication. I guess I am confused as to what the delineation is between an administrative subdivision, which is what we previously discussed, and the minor subdivision as you mention here. Maybe easier to talk through in real time with the attorney.

Leif
Denver Sports Lab
Shop: 720.383.8999
Cell: 303.898.8995

On Mar 18, 2025, at 16:52, Tegan Ebbert <tegan.ebbert@haydencolorado.org> wrote:

[Quoted text hidden]

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4 attachments**image001.png**
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240K**Land Use Application.pdf**
70K**HAYDEN_Agreement for Payment_Dev Rev.pdf**
94K

Tegan Ebbert <tegan.ebbert@haydencolorado.org>
To: Leif Sunde <leif@denversportslab.com>, Stephen Doyle <Steve@adaptablerea.com>

Wed, Mar 26, 2025 at 3:26 PM

Leif,

Myself, our Town Manager, and our attorney met yesterday. The Administrative Plat process has a “bump up” provision that allows that Town Manager to elevate the application to a Town Council review (ie the Minor Subdivision process, underlined below).

Administrative subdivisions are subdivisions that include

1. Subdividing a parcel of land for a duplex,
2. Replatting for the purpose of correcting survey, typographical, or similar errors ("plat corrections"),
3. Replatting which adjust lot lines between buildable lots, do not change the number of lots, and do not decrease the size of any non-conforming lot ("lot line adjustments"),
4. Replatting to merge contiguous, platted lots into one or more lots and that involves no rezoning or vacation of rights-of-way or easements ("consolidation plat").

The manager has the authority to determine that an administrative subdivision application shall be processed as a minor subdivision where the character of the subdivision application or multiple applications presents issues which, in the opinion of the manager, warrant review as a minor subdivision.

Minor subdivisions include all subdivisions which would create less than six separate parcels of land, which subdivide a parcel six acres or less size; and, which do not require or propose public right-of-way dedications or public improvements; but shall not include subdivisions which are administrative subdivisions.

Initially the discussion was that the Town Manager wanted to see this elevated but after our discussion this week, he directed me to have you submit it as an Administrative Subdivision with the understanding that, upon review, he (or at Town Council's request) may need to elevate it to the Minor Subdivision process. If it does get elevated, it will do some with the clear parameters of what it is being reviewed for (ie we aren't starting the subdivision process over from square one, simply moving a few lots around).

Does that make sense? I want to apologize for the confusion on this, we are trying to be sensitive to the fact that you (and staff) want to avoid opening up the project as much as possible and creating an overly onerous process while still making sure our elected officials aren't surprised/blindsided with something coming through without their review where ambiguity exists in our code language (ie the underlined section).

I am happy to jump on a call if need be.

Thanks,

Tegan

From: Leif Sunde <leif@denversportslab.com>
Sent: Tuesday, March 18, 2025 5:18 PM
To: Tegan Ebbert <tegan.ebbert@haydencolorado.org>; Stephen Doyle <Steve@adaptablereaa.com>
Subject: Re: Sonesta Townhome development meeting

Tegan -

[Quoted text hidden]



[Quoted text hidden]

3 attachments

HAYDEN_Agreement for Payment_Dev Rev.pdf
94K



Land Use Application.pdf
70K



Administrative Subdivision Plat Checklist_2024.pdf
312K

Leif Sunde <leif@denversportslab.com>
To: Tegan Ebbert <tegan.ebbert@haydencolorado.org>

Fri, Mar 28, 2025 at 12:07 PM

Tegan -

Thank you so much for the clarification on this, I know it is a rather muddy matter and in the context of a time where development is a hot topic in town.

I greatly appreciate your time and consideration for this project as we work to move it forward. Our targeted timeline is to be getting site overlot and compaction accomplished later this summer (Aug-Oct).

[Quoted text hidden]

ITEM 9. PRELIMINARY GRADING AND DRAINAGE PLAN AND REPORT



Ph: 970-871-6772 · Fax: 970-879-8023 · P.O. Box 775966 · Steamboat Springs, Colorado 80477

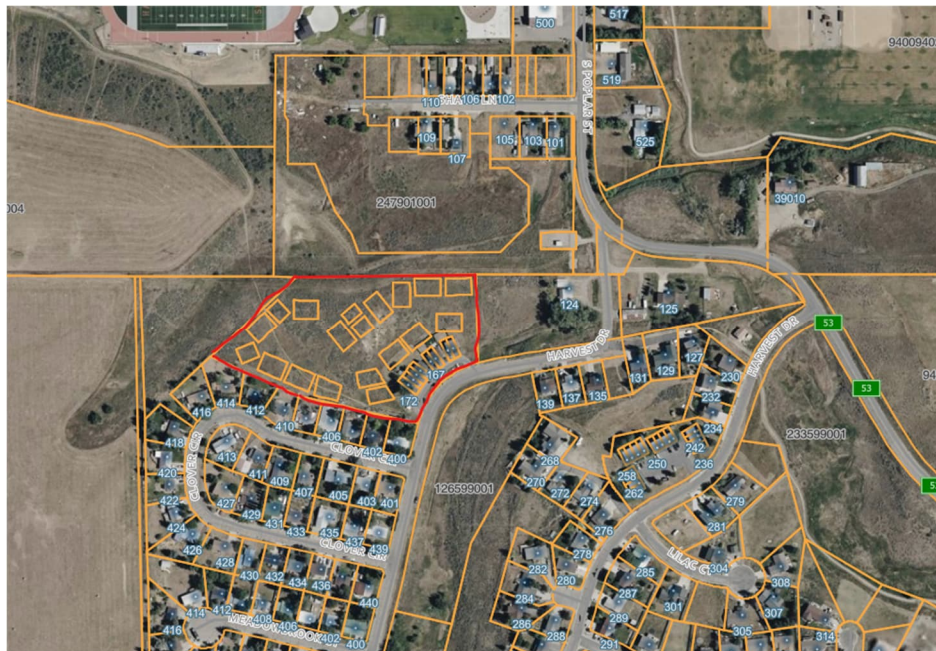
Date: 10/02/2025

Town of Hayden Planning Department
178 W. Jefferson Ave
P.O. Box 190
Hayden, CO 81639

RE: Preliminary Drainage Letter – Sonesta Townhomes
Four Points Surveying and Engineering - Job Number 1409-002

Dear Hayden Planning Department:

This drainage letter presents an analysis of stormwater runoff and stormwater management for eighteen proposed multifamily residential buildings within the Town limits of Hayden, Colorado. A vicinity map of the subject property is provided.



Vicinity Map: Tracts A, B, C AKA Common Area Sonesta Park Townhomes

Pre-development and post-development conditions for the subject property have been reviewed for purposes of this application. The proposed development is anticipated to generate an increase in peak flow rates due to the increased impervious area from paving and the building rooftops to replace existing undeveloped areas. On-site stormwater retention, in the form of a gravel infiltration basin storage areas, has been evaluated as a means to alleviate the increase of post development runoff associated with this project.

Four Points reviewed the Hayden Development Code for drainage report requirements to prepare this letter and the accompanying attachments. There are notably little to no drainage requirements provided in the Development Code for design storm parameters, post-development water quality and peak attenuation, and other calculation methods. Therefore, this letter serves as an initial overview of drainage conditions for the existing lot and subject development. Stormwater infrastructure proposed may be modified with additional evaluation of the project and prior to building permit submittal.

Pre Development Conditions:

The pre-developed site is primarily vacant and consists of native vegetation. Soil conditions were reviewed through the Natural Resources Conservation Service (NRCS) database, and the site generally consists of silt and loam subgrade stratification layers. These soils are described by NRCS as moderately poorly draining based on the Hydraulic Soil Group C rating. Soils conditions have not formally been reviewed by a geotechnical engineer via test pits, boring logs, and other sampling methods.

Three existing townhome buildings are located along the southern property boundary of the site and north of Sonesta Park Drive. The parcel has been conservatively estimated at approximately 2-5% imperviousness and makes up a total of roughly 5.5 acres in size, including the portion of the site that is made up by the three existing townhomes.

The site is gently to moderately sloping in three varying directions, as detailed on the attached Predevelopment Drainage Plan. The southern portion of the site generally slopes southerly towards Harvest Drive. There is minimal stormwater infrastructure present along Harvest Drive indicating that overland flow from the site currently sheet flows across the road. There is a small stretch of catch curb and gutter that conveys some of the Sonesta Park Drive and Harvest Drive drainage to the east. The curb and gutter transports runoff to an existing ditch that travels further east of the project site and eventually ties into municipal storm culverts near the intersection of Harvest Drive and South Poplar Street.

The remainder of the site overland flows either northerly across an existing gravel two-track roadway to a localized depression area, or directly to the east for collection into the small ditch referenced in the above paragraph. The three historical outfall points are designated and further described on the Pre-development Drainage Plan in the attachments.

Post-Development Conditions:

The site will be divided into four distinct drainage basins based on the post-development conveyance of stormwater for the project. Each of the four subbasins are described below.

Development Basin 1 (DB1): This is the largest subbasin (2.36 acres) and includes developed areas within the southern and central portions of the project site. Precipitation in this area will generally be conveyed by roadside valley pans, storm inlets and culverts, and vegetated swales to a gravel infiltration retention area in the southern corner of the development. The infiltration area shown is highly dependent on available soil conditions and may need to be modified to a detention pond facility with an outlet structure following additional review of site conditions. We are proposing this as on-site retention and infiltration to limit the need for a discharge pipe to span beneath Harvest Drive to daylight into the roadside ditch on the south side of the road. Additional modifications to the gravel retention area may be provided pending discussions generated with the Town of Hayden.

Development Basin 2 (DB2): This basin consists of 1.14 acres of developed area along the eastern portion of the project site. Stormwater runoff in this basin will be conveyed primarily via valley pans to a series of inlet structures located at the entry to the site. The inlets will deposit site flows to the east at historical outfall point 2, which consists of the ditch leading to the intersection of Harvest Drive and North Poplar Street. Further

evaluation will be provided to detail impacts between existing and proposed conditions to evaluate if downstream infrastructure has sufficient capacity for passing the anticipated increase of peak flows generated from the project.

Development Basin 3 (DB3): This basin includes approximately a 1.0 acre of developed area along the north and western portion of the site. Stormwater generated in this area will be routed from the road valley pan, to the inlet structure shown, and ultimately discharging at design point 3. There is potential to include additional stormwater detention or mitigate velocities with a riprap lined ditch in this area prior to release off-site. At this time, the outfall of the storm sewer pipe is shown as terminating into a grass-lined swale to convey site flows to the north following historical patterns for this area and as shown on the Pre-development Drainage Plan.

Development Basin 4 (DB4): This basin includes approximately 0.62 acres of entirely undeveloped/non-impermeable area that will discharge directly north and west offsite to mimic historical release conditions.

See the provided Proposed Drainage Plan for additional information on the four basins described above.

Recommendations:

Formal Rational and NRCS method hydraulic calculations for the project have not been evaluated at this time. Additional geotechnical evaluation is recommended to ensure that infiltrated areas may operate effectively with the intended design and will not result in conflicts with adjacent facilities. Additionally, Four Points intends to work directly with the Town of Hayden to minimize any stormwater impacts proposed with this design. The downstream sizing of collection ditches, storm culverts, and other town infrastructure may require additional survey to finalize the drainage conditions under evaluation.

We look forward to your review of this drainage letter and hope to answer any questions as this project progresses. Please refer to the attachments listed below for additional information pertaining to the exhibits that were used within this preliminary analysis.

Attachments:

1. NRCS Web Soil Survey
2. Pre Development Drainage Plan (DR1)
3. Post Development Drainage Plan (DR2)



United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for Routt Area, Colorado, Parts of Rio Blanco and Routt Counties



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

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Contents

Preface	2
How Soil Surveys Are Made	5
Soil Map	8
Soil Map.....	9
Legend.....	10
Map Unit Legend.....	12
Map Unit Descriptions.....	12
Routt Area, Colorado, Parts of Rio Blanco and Routt Counties.....	14
6B—Zoltay loam, 0 to 10 percent slopes.....	14
7C—Morapos loam, 3 to 12 percent slopes.....	15
10E—Bulkley silty clay, 12 to 25 percent slopes.....	17
102—Shermap loam, 3 to 25 percent slopes.....	18
Soil Information for All Uses	20
Soil Properties and Qualities.....	20
Soil Qualities and Features.....	20
Hydrologic Soil Group.....	20
References	26

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

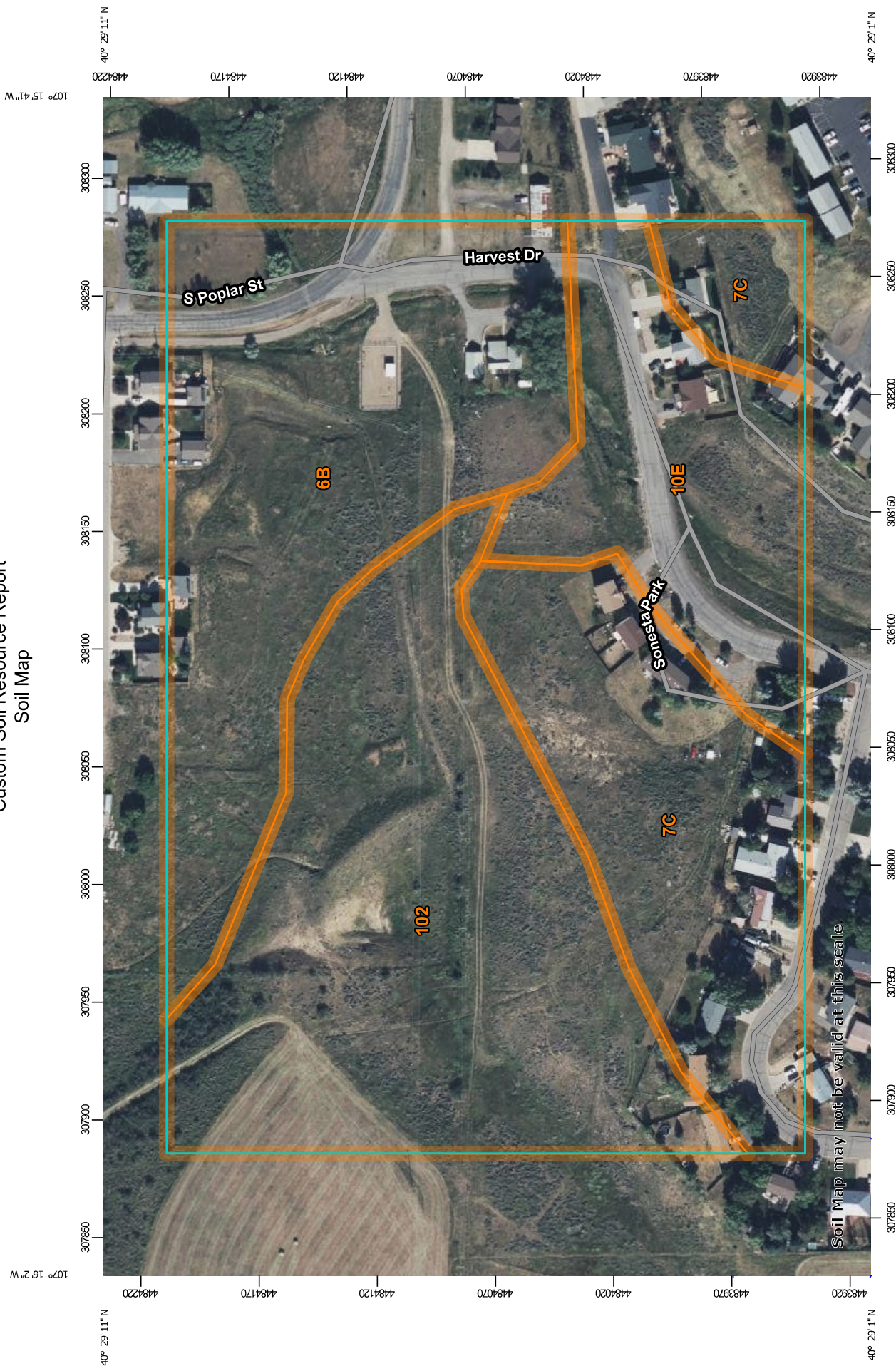
Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

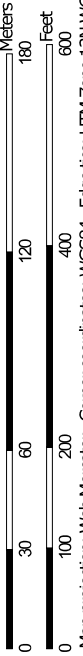
Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



Map Scale: 1:2,290 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

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: Routt Area, Colorado, Parts of Rio Blanco and Routt Counties
Survey Area Data: Version 15, Aug 29, 2025

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 9, 2020—Jul 11, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

MAP LEGEND

MAP INFORMATION

imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
6B	Zoltay loam, 0 to 10 percent slopes	7.9	29.6%
7C	Morapos loam, 3 to 12 percent slopes	5.8	21.8%
10E	Bulkley silty clay, 12 to 25 percent slopes	3.9	14.6%
102	Shermap loam, 3 to 25 percent slopes	9.0	34.0%
Totals for Area of Interest		26.5	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

Custom Soil Resource Report

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Routt Area, Colorado, Parts of Rio Blanco and Routt Counties

6B—Zoltay loam, 0 to 10 percent slopes

Map Unit Setting

National map unit symbol: k0f2
Elevation: 6,400 to 6,890 feet
Mean annual precipitation: 16 to 20 inches
Mean annual air temperature: 41 to 45 degrees F
Frost-free period: 70 to 110 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Zoltay and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Zoltay

Setting

Landform: Drainageways, alluvial fans
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Alluvium derived from sandstone and shale

Typical profile

Ap - 0 to 12 inches: loam
Bt1 - 12 to 20 inches: silty clay
Bt2 - 20 to 25 inches: silty clay
Bt3 - 25 to 33 inches: silty clay loam
Bk1 - 33 to 41 inches: clay loam
Bk2 - 41 to 60 inches: clay loam

Properties and qualities

Slope: 0 to 10 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.07 to 0.21 in/hr)
Depth to water table: About 36 to 60 inches
Frequency of flooding: Very rare
Frequency of ponding: None
Calcium carbonate, maximum content: 12 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 11.1 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Ecological site: R048AY292CO - Deep Loam
Hydric soil rating: No

Minor Components

Furia

Percent of map unit: 10 percent
Landform: Depressions on flood plains
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R048AY245CO - Mountain Swale
Hydric soil rating: No

7C—Morapos loam, 3 to 12 percent slopes

Map Unit Setting

National map unit symbol: k0f3
Elevation: 6,300 to 7,220 feet
Mean annual precipitation: 16 to 20 inches
Mean annual air temperature: 41 to 45 degrees F
Frost-free period: 70 to 110 days
Farmland classification: Not prime farmland

Map Unit Composition

Morapos and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Morapos

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Slope alluvium derived from shale

Typical profile

A - 0 to 6 inches: loam
AB - 6 to 12 inches: loam
Bt - 12 to 16 inches: clay
Btk - 16 to 22 inches: clay
Bk1 - 22 to 32 inches: clay
Bk2 - 32 to 40 inches: clay loam
Bk3 - 40 to 60 inches: clay loam

Properties and qualities

Slope: 3 to 12 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium

Custom Soil Resource Report

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.07 to 0.21 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: High (about 10.6 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Ecological site: R048AY292CO - Deep Loam
Hydric soil rating: No

Minor Components

Obadia

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Linear
Ecological site: R048AY247CO - Deep Clay Loam
Other vegetative classification: mountain swale (null_47)
Hydric soil rating: No

Morapos, very stony

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: R048AY292CO - Deep Loam
Hydric soil rating: No

Bulkley

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R048AY247CO - Deep Clay Loam
Hydric soil rating: No

10E—Bulkley silty clay, 12 to 25 percent slopes

Map Unit Setting

National map unit symbol: k0f9

Elevation: 6,300 to 7,220 feet

Mean annual precipitation: 16 to 20 inches

Mean annual air temperature: 41 to 45 degrees F

Frost-free period: 70 to 110 days

Farmland classification: Not prime farmland

Map Unit Composition

Bulkley and similar soils: 100 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Bulkley

Setting

Landform: Hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Colluvium and/or slope alluvium derived from sandstone and shale

Typical profile

A - 0 to 4 inches: silty clay

Bkss - 4 to 32 inches: silty clay

Bk - 32 to 46 inches: silty clay

Bky - 46 to 60 inches: silty clay

Properties and qualities

Slope: 12 to 25 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.07 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Gypsum, maximum content: 5 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water supply, 0 to 60 inches: High (about 10.2 inches)

Interpretive groups

Land capability classification (irrigated): 7s

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: D

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Ecological site: R048BY296CO - Claypan

Hydric soil rating: No

102—Shermap loam, 3 to 25 percent slopes

Map Unit Setting

National map unit symbol: k0j4

Elevation: 6,230 to 6,890 feet

Mean annual precipitation: 16 to 20 inches

Mean annual air temperature: 42 to 45 degrees F

Frost-free period: 70 to 110 days

Farmland classification: Not prime farmland

Map Unit Composition

Shermap and similar soils: 100 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Shermap

Setting

Landform: Hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Eolian deposits derived from sandstone and shale and/or slope alluvium derived from sandstone

Typical profile

A1 - 0 to 12 inches: loam

A2 - 12 to 22 inches: loam

Bt1 - 22 to 35 inches: clay loam

Bt2 - 35 to 65 inches: clay loam

Properties and qualities

Slope: 3 to 25 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.21 to 0.71 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water supply, 0 to 60 inches: High (about 11.0 inches)

Interpretive groups

Land capability classification (irrigated): 6e

Land capability classification (nonirrigated): 6e

Hydrologic Soil Group: C

Ecological site: R048AY238CO - Brushy Loam

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Hydric soil rating: No

Soil Information for All Uses

Soil Properties and Qualities

The Soil Properties and Qualities section includes various soil properties and qualities displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each property or quality.

Soil Qualities and Features

Soil qualities are behavior and performance attributes that are not directly measured, but are inferred from observations of dynamic conditions and from soil properties. Example soil qualities include natural drainage, and frost action. Soil features are attributes that are not directly part of the soil. Example soil features include slope and depth to restrictive layer. These features can greatly impact the use and management of the soil.

Hydrologic Soil Group

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.

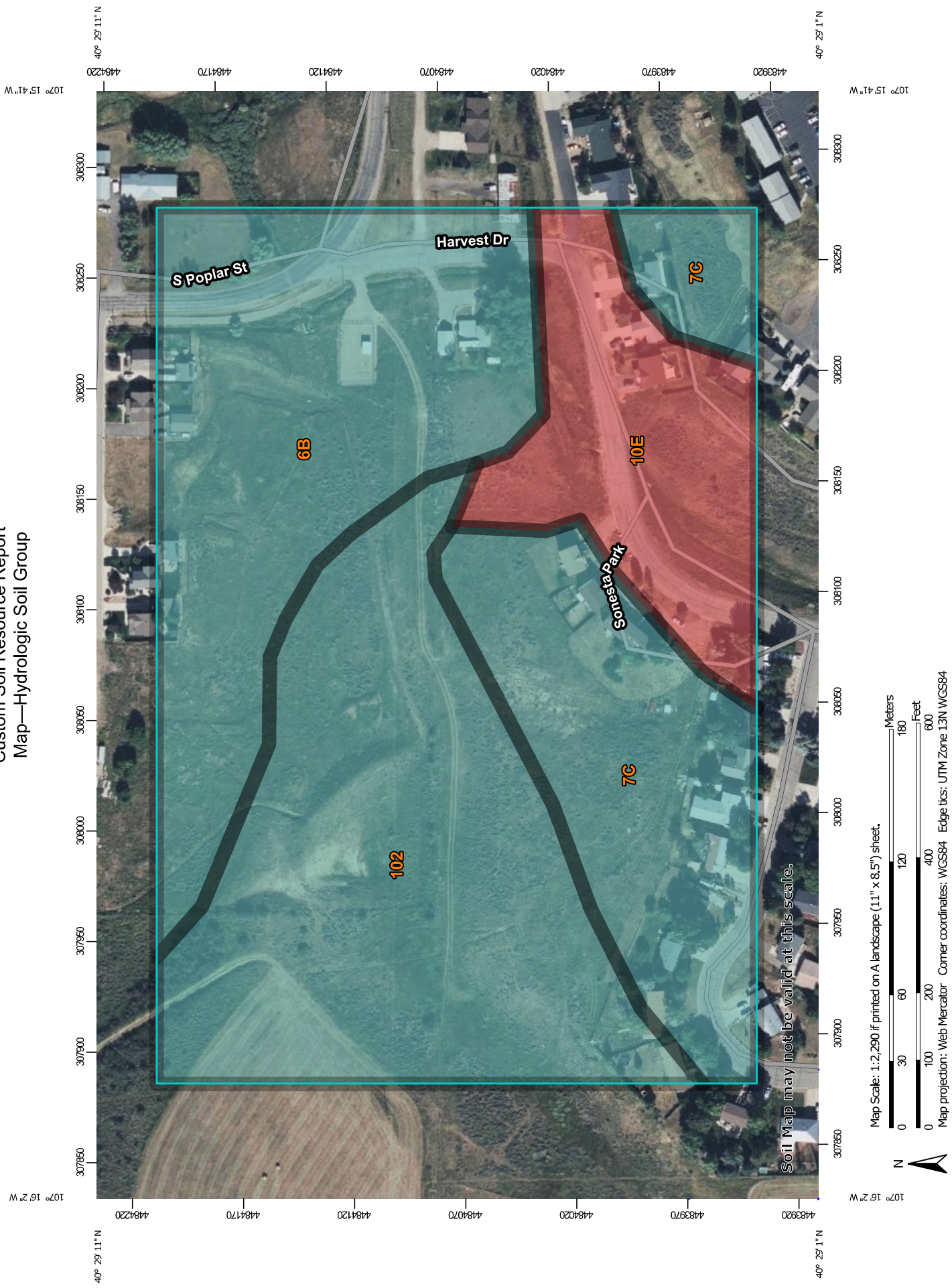
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Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

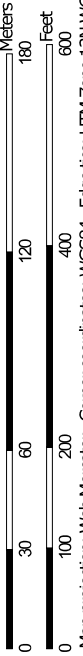
Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over 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.

Custom Soil Resource Report
Map—Hydrologic Soil Group



Map Scale: 1:2,290 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N 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

Water Features

Streams and Canals

Transportation

Rails
Interstate Highways
US Routes
Major Roads
Local Roads

Background

Aerial Photography

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

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: Routt Area, Colorado, Parts of Rio Blanco and Routt Counties
Survey Area Data: Version 15, Aug 29, 2025

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 9, 2020—Jul 11, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

MAP LEGEND

MAP INFORMATION

imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
6B	Zoltay loam, 0 to 10 percent slopes	C	7.9	29.6%
7C	Morapos loam, 3 to 12 percent slopes	C	5.8	21.8%
10E	Bulkley silty clay, 12 to 25 percent slopes	D	3.9	14.6%
102	Shermap loam, 3 to 25 percent slopes	C	9.0	34.0%
Totals for Area of Interest			26.5	100.0%

Rating Options—Hydrologic Soil Group*Aggregation Method: Dominant Condition**Component Percent Cutoff: None Specified**Tie-break Rule: Higher*

References

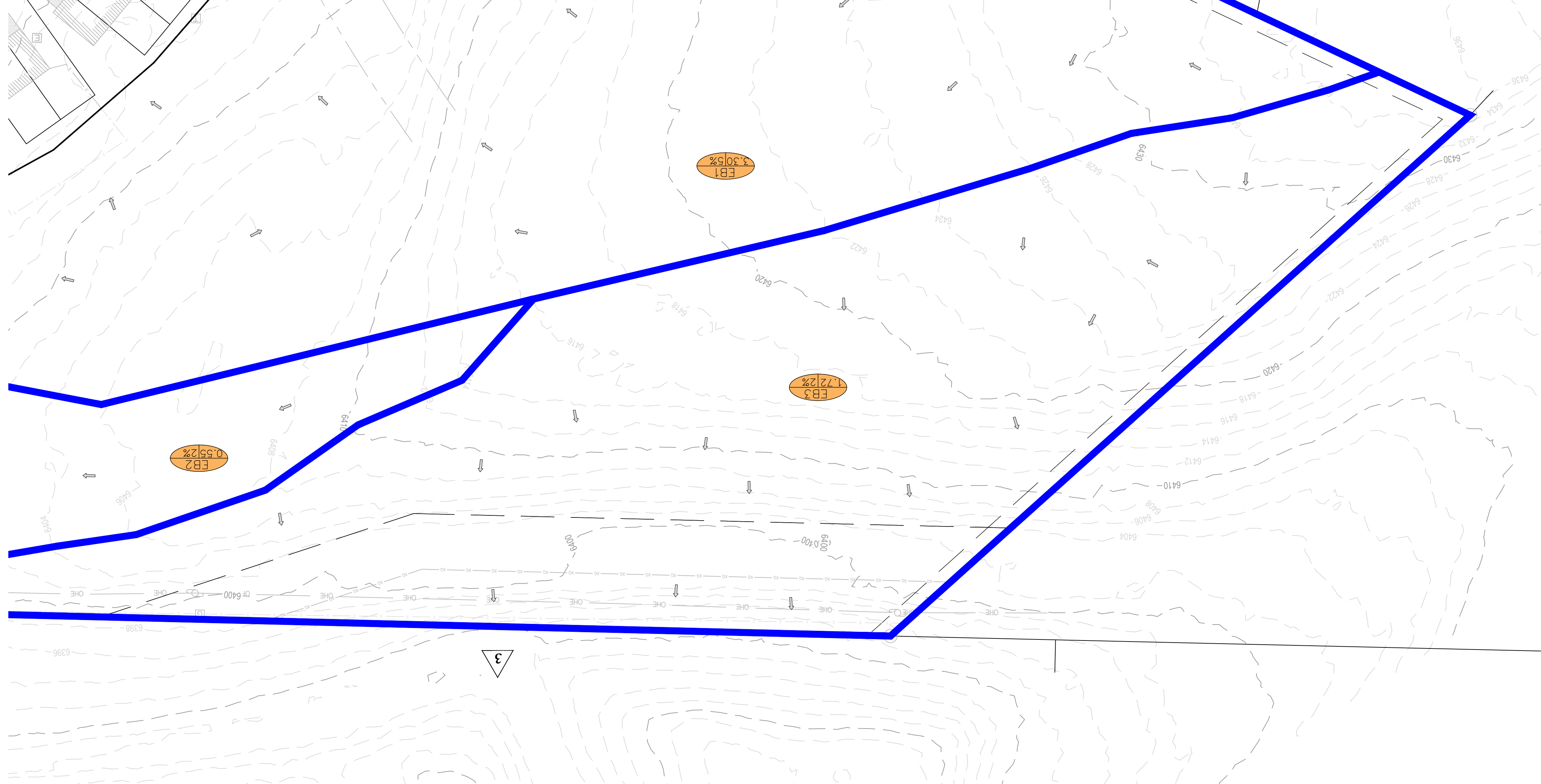
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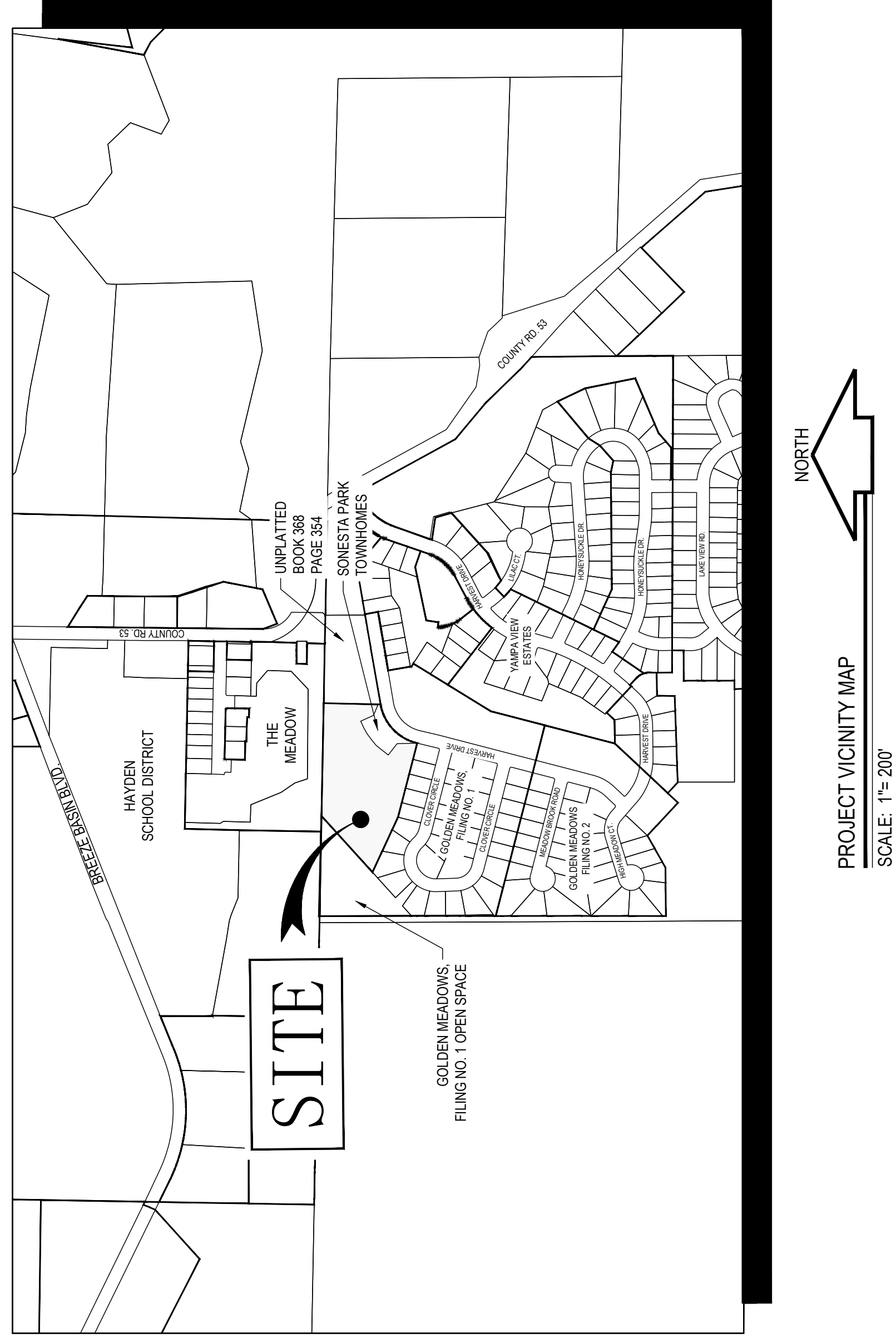
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ITEM 10. MASTER UTILITY PLAN

LOCATED IN THE NE $\frac{1}{4}$ OF SECTION 16, TOWNSHIP 6 NORTH, RANGE 88 WEST,
6TH P.M. OF ROUTT COUNTY, COLORADO



PROJECT CONTACT LIST

PROJECT OWNER

HEALTH CARE MANAGEMENT LLC.

PROJECT ARCHITECT

WEFING DESIGN STUDIO
ATTN: Erich Wefing
Fine Arts Building, Suite 512
Chicago, IL 60605

CIVIL ENGINEER

FOUR POINTS SURVEYING AND
ATTN: Walter Magill, PE
410 South Lincoln Ave, Suite 15
P.O. Box 775966
Steamboat Springs, CO 80487

UTILITY CONTACT LIST

WATER AND SANITARY SEWER

TOWN OF HAYDEN PUBLIC WORKS
178 WEST JEFFERSON AVE.
CONTACT: BRYAN RICHARDS
bryan.richards@haydencolorado.org
PHONE: 970-757-6002

ELECTRICAL

YAMPA VALLEY ELECTRICAL ASSOCIATION
32 10TH STREET
STEAMBOAT SPRINGS, CO
CONTACT: LARRY BALL

GAS

ATMOS ENERGY
30405 DOWNHILL DRIVE
STEAMBOAT SPRINGS, CO
CONTACT: DON CRANE
PHONE: 970-879-3223

TELEPHONE

CENTURY LINK
138 7TH STREET
STEAMBOAT SPRINGS, CO
CONTACT: JASON SHARPE
jason.sharpe@centurylink.com
PHONE: 970-328-2517

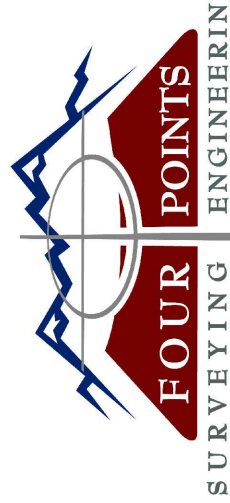
CABLE TELEVISION

COMCAST
625 SOUTH LINCOLN, SUITE #205
STEAMBOAT SPRINGS, CO 80487
PHONE: CONTACT: TONY HILDRETH
tony_hildreth@comcast.com
PHONE: 970-328-2517

UTILITY NOTIFICATION CENTER OF COLORADO

CALL TWO BUSINESS DAYS BEFORE YOU DIG, GRADE
OR EXCAVATE FOR THE MARKING OF UNDERGROUND UTILITIES
1-800-922-1987

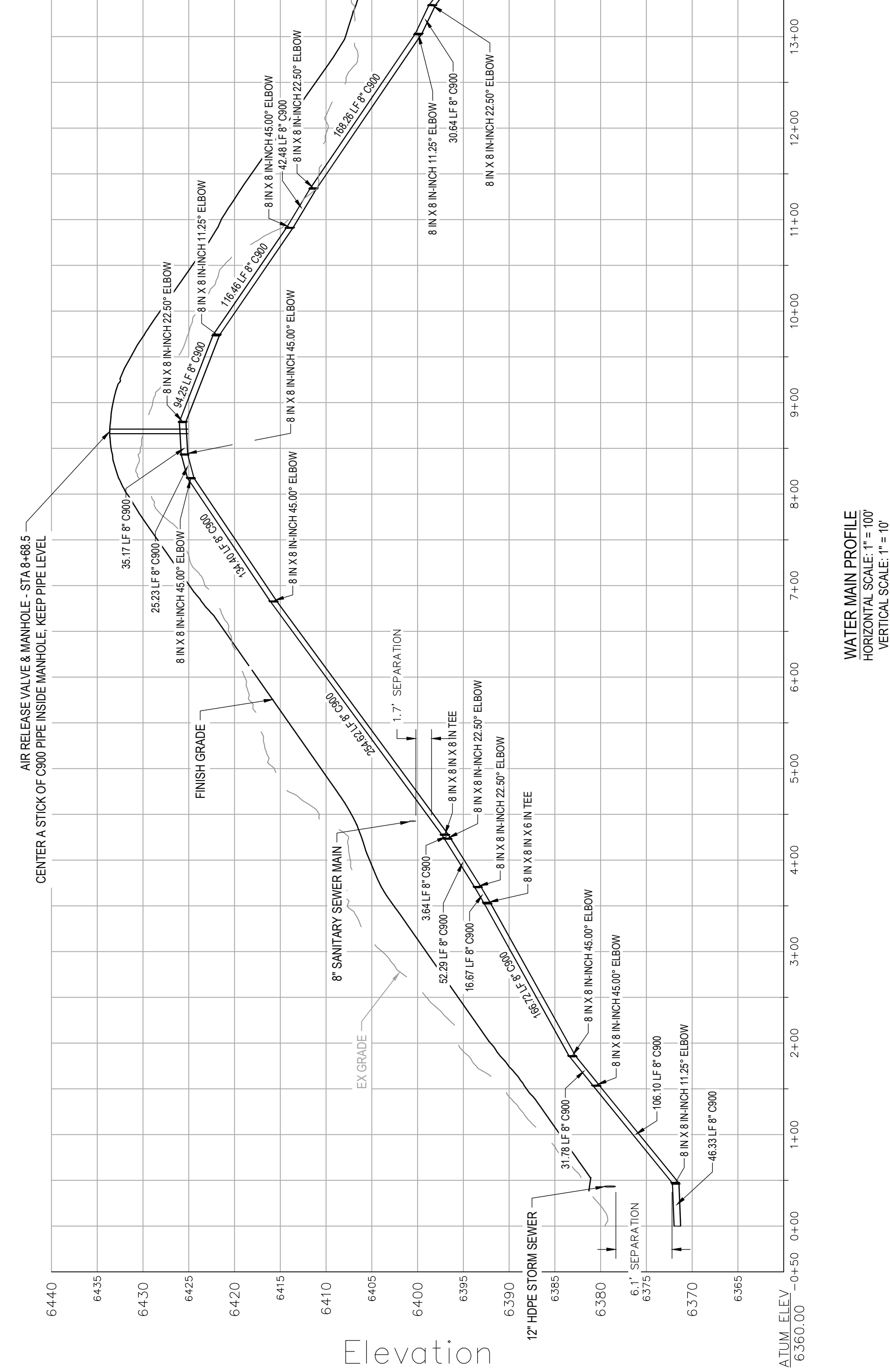
PERMIT PLANS PREPARED BY FOUR POINTS SURVEYING & ENGINEERING	No.	DATE	REVISIONS	INT
DATE: 10-02-2025				
JOB #: 1409-002				
DRAWN BY: DSC				
DESIGN BY: DSC				
CHECKED BY: DSC				
REVIEW BY: WMM				
IF THIS DRAWING IS PRESENTED IN A FORMAT OTHER THAN 24" x 36" INT, THE SCALE SHALL BE AS NOTED.				



Four Points Surveying & Engineering
410 S. Lincoln Ave., Unit 15

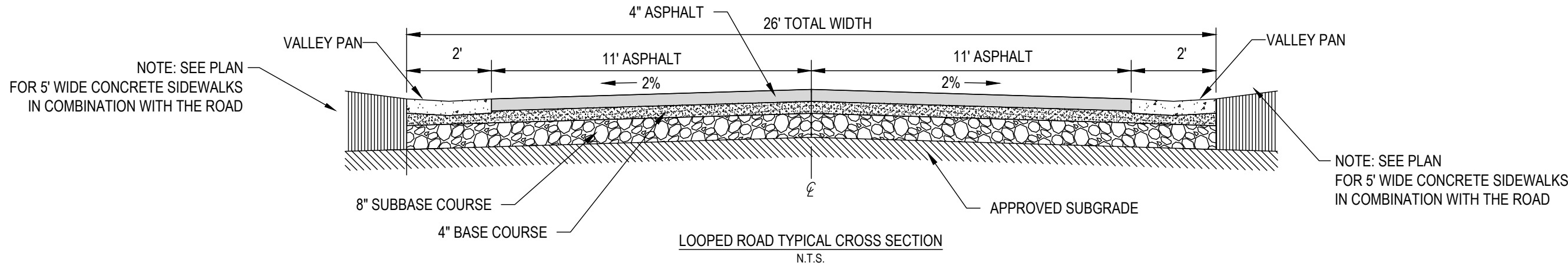
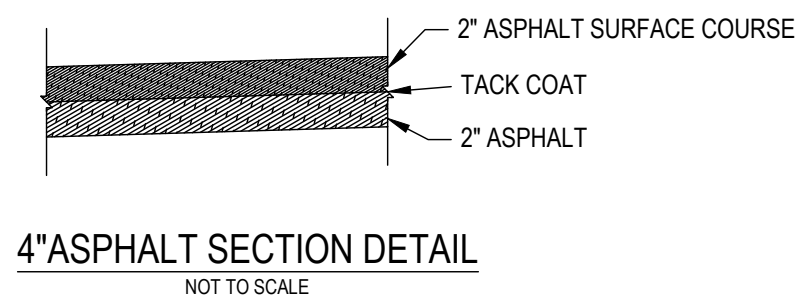
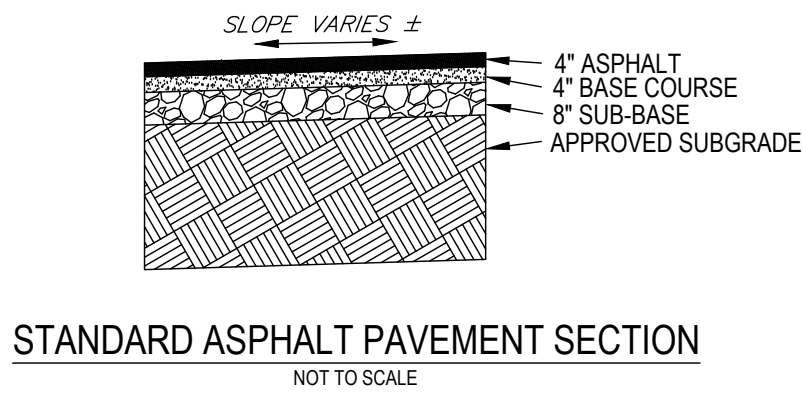
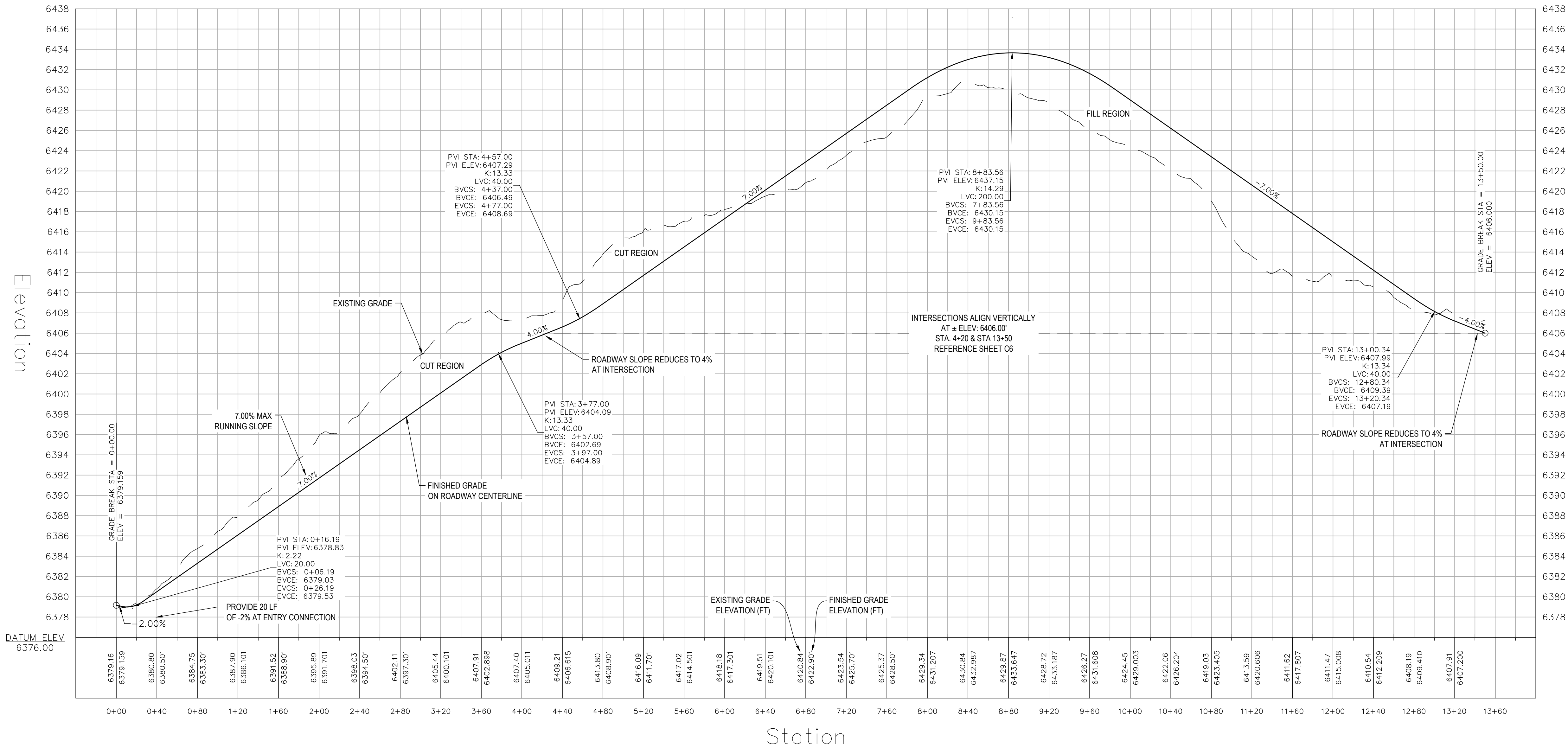
**P.O. Box 775966
Steamboat Springs, CO 80487
(970)-871-6772
walterm@fourpointss.com**





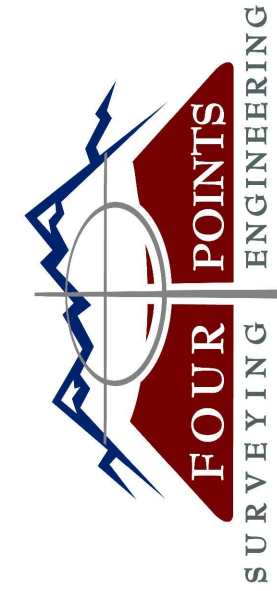
WATER MAIN PROFILE
HORIZONTAL SCALE: 1" = 100'
VERTICAL SCALE: 1" = 10'





DRIVEWAY SURFACING NOTES:

- PRIOR TO THE PLACEMENT OF SUB-BASE AGGREGATES, THE EXPOSED SUB-GRADE SOILS SHALL BE UNIFORMLY SCARIFIED, MIXED, AND MOISTURE TREATED TO WITHIN 2% OF THE OPTIMUM MOISTURE CONTENT, AND THEN RE-COMPACTED TO AT LEAST 95% OF THE MAXIMUM STANDARD PROCTOR DENSITY.
- BASE COURSE AND SUB-BASE AGGREGATES SHALL MEET THE CDOT CLASS 6 ABC AND CLASS 2/1 ABC SPECIFICATIONS, RESPECTIVELY. BASE COURSE AND SUB-BASE AGGREGATES SHALL BE PLACED IN ONE LIFT AND COMPACTED TO AT LEAST 95% OF THE MAXIMUM MODIFIED PROCTOR DENSITY IN ACCORDANCE WITH ASTM 1557.
- DRIVEWAY SLOPES SHALL BE FINE GRADED AND TRACKED PERPENDICULAR TO THE DRIVEWAY CENTERLINE. ALL ADJACENT SLOPES SHALL BE SEEDED WITH NATIVE GRASS SEED AND STABILIZED STRAW BLANKET OR SIMILAR EROSION CONTROL MAT. SEED SHALL BE WATERED AS NECESSARY TO PROMOTE AND SUSTAIN GROWTH.



440 S. Lincoln Ave, Suite 4A
P.O. Box 775966
Steamboat Springs, CO 80487
(970)-871-6772
www.fourpointsse.com

NO.	DATE	REVISIONS	INT

SONESTA TOWNHOMES
CIVIL PERMIT PLANS
TOWN OF HAYDEN, COLORADO

DATE: 10/02/2025
JOB #: 1409-002
DRAWN BY: DSC
DESIGN BY: DSC
REVIEW BY: WNM

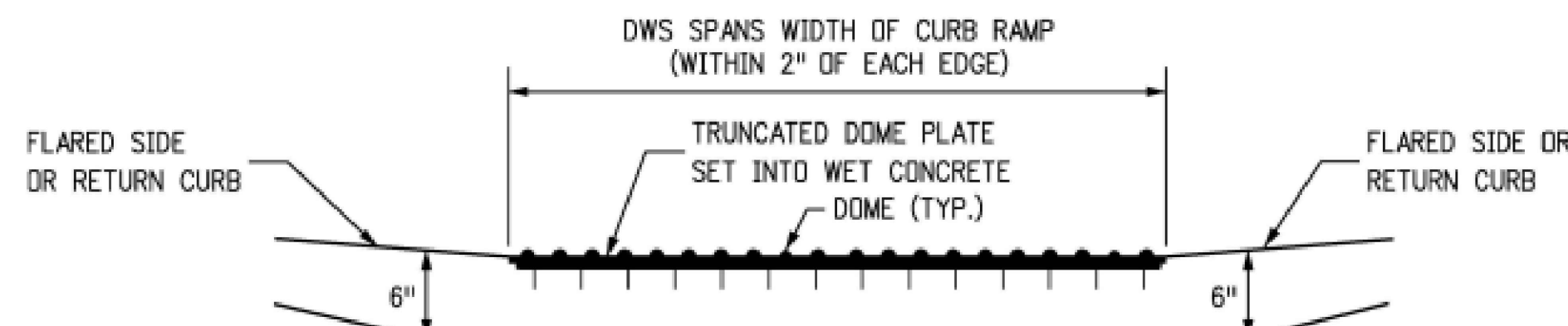
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ROADWAY
PROFILE

DRAWING:

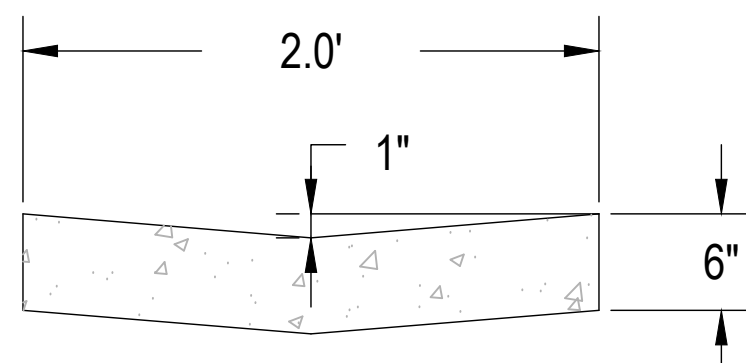
SHEET NO.

C8

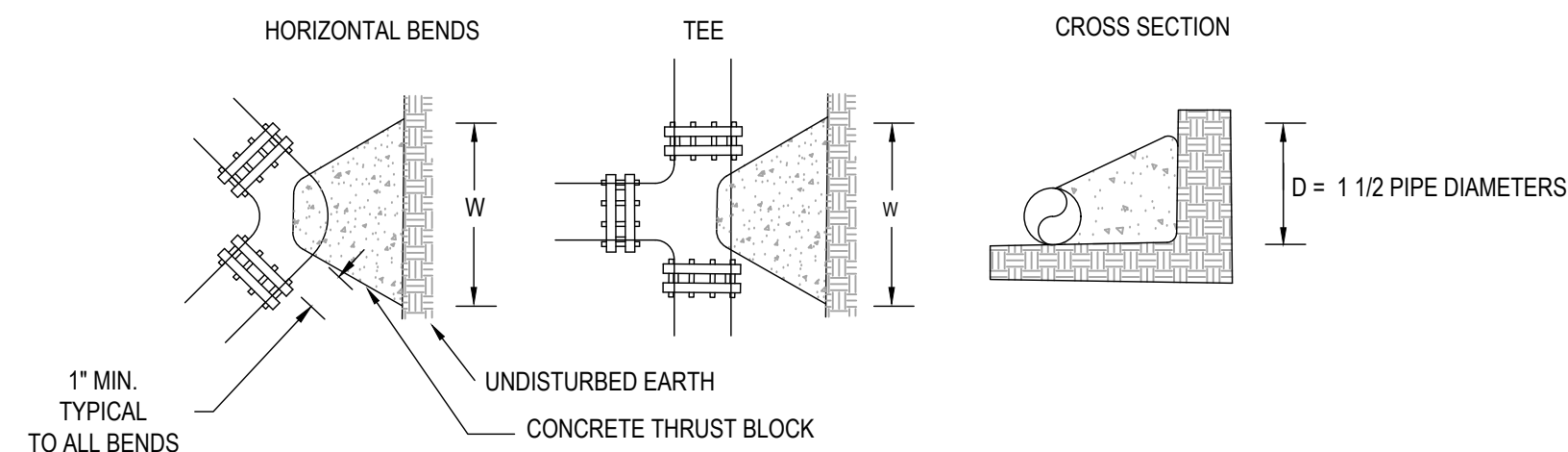


SECTION VIEW OF DETECTABLE
WARNING SURFACE PLATE

(LOOKING AT PERPENDICULAR RAMP
RUN FROM STREET)



CONCRETE VALLEY PAN DETAIL
NOT TO SCALE

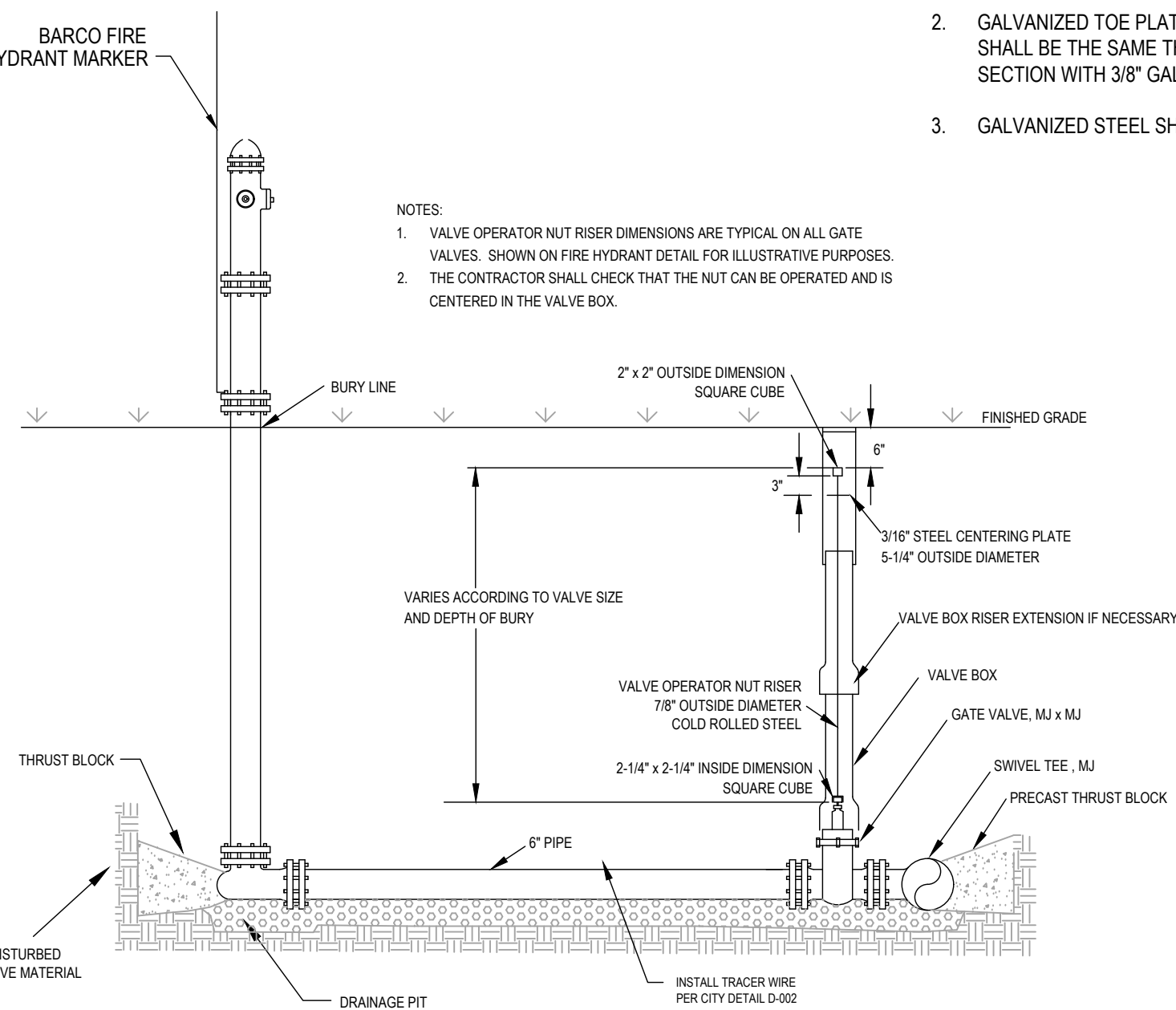


SIZE OF PIPE	BENDS				TEE OR DEAD END
	11 25"	22 5"	45"	90"	
4"	1.3	2.5	2.5	4	6.4
6"	1.3	2.5	5.0	9.0	6.4
8"	1.3	2.5	5.0	9.0	6.4
10"	1.9	3.8	7.4	13.7	9.7
12"	2.7	5.4	10.5	19.3	13.7

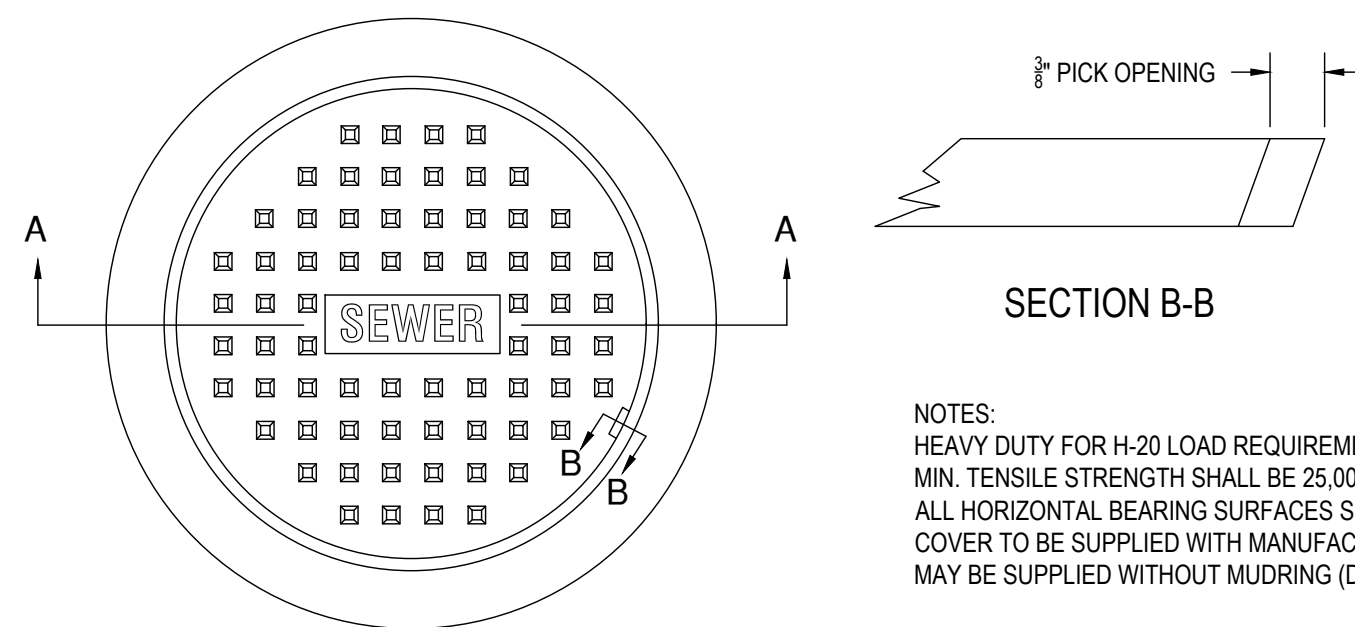
THRUST BLOCK BEARING AREA
IN SQUARE FEET. (AREA = W X D)

MINIMUM BEARING SURFACE (SF) FOR 201 TO 250 PSI					
SIZE OF PIPE	BENDS				TEE OR DEAD END
	11.25"	22.5"	45"	90"	
4"	1.6	3.1	4	4	8.0
6"	1.6	3.1	6.2	11.4	8.0
8"	1.6	3.1	6.2	11.4	8.0
10"	2.4	4.7	9.25	17.1	12.0
12"	3.4	6.7	13.1	24.2	17.1

TRUST BLOCK DETAILS
NOT TO SCALE

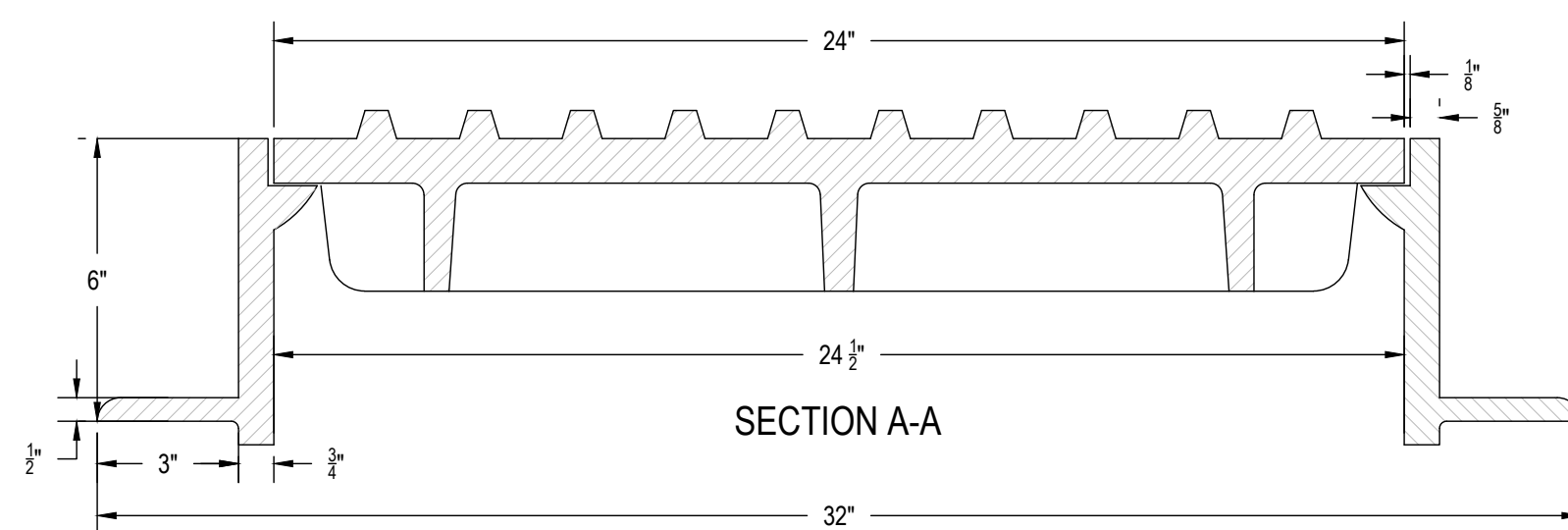


HYDRANT ASSMEBLY DETAIL
NOT TO SCALE



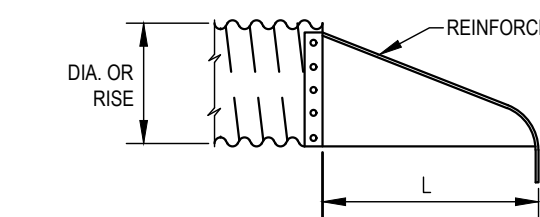
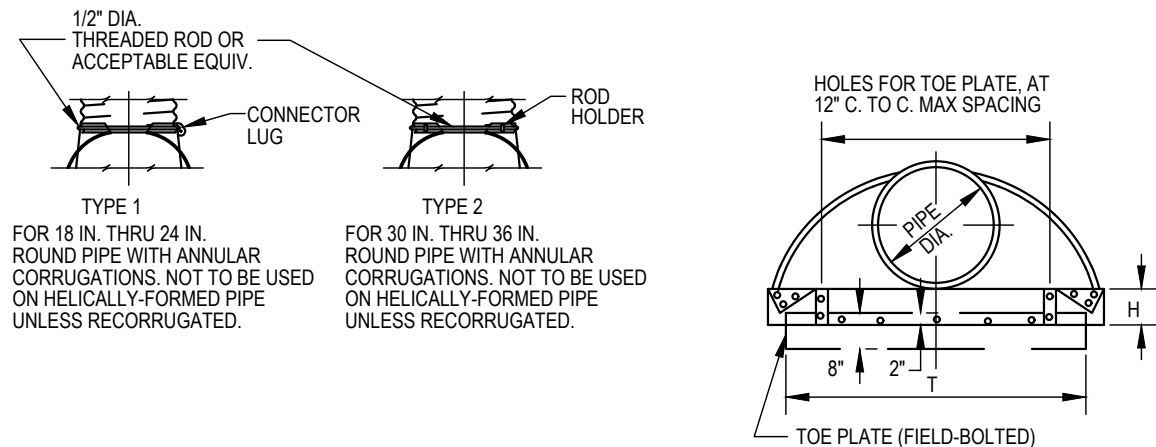
SECTION B-B

NOTES:
HEAVY DUTY FOR H-20 LOAD REQUIREMENTS
MIN. TENSILE STRENGTH SHALL BE 25,000 PSI
ALL HORIZONTAL BEARING SURFACES SHALL BE A MACHINED SURFACE
COVER TO BE SUPPLIED WITH MANUFACTURERS STANDARD TRACTION SURFACE
MAY BE SUPPLIED WITHOUT MUDRING (DIM FF)



STANDARD MANHOLE RING AND COVER
NOT TO SCALE

THIN-WALL ROUN PIPE		DIMENSIONS					
PIPE DIA.	THICK.	(inches)					
		A	B	H	L	W	T
12	0.064	6	6	6	21	24	34
18	0.064	8	8	6	31	36	46
24	0.064	9	12	6	36	42	52
24	0.064	6	10	6	41	48	58
30	0.079	12	16	8	51	60	70
36	0.109	14	19	9	60	72	94
42	0.109	16	22	12	69	84	106
48	0.109	18	27	12	78	96	122
54	0.109	18	30	12	84	102	124
60	0.109	18	33	12	87	114	136
66	0.109	18	36	12	87	120	142
72	0.109	18	39	12	87	126	148
78	0.109	18	42	12	87	132	154
84	0.109	18	45	12	87	138	160

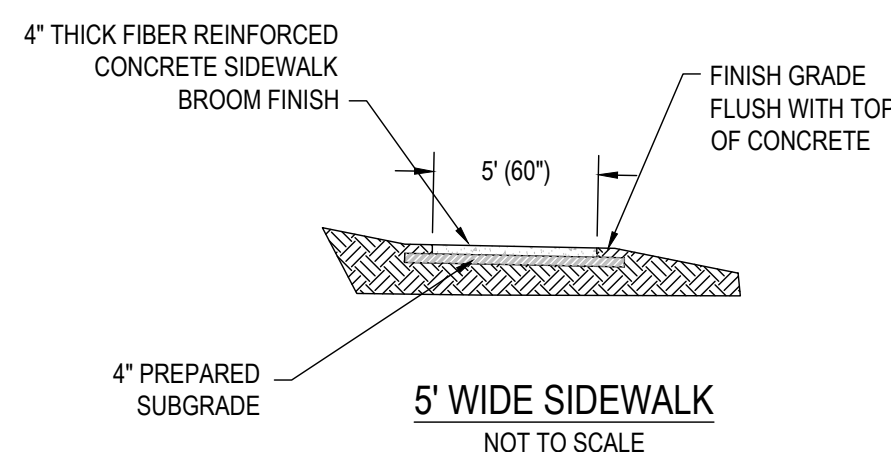


END SECTION AND CONNECTION DETAILS FOR THIN WALL PIPE CULVERTS

FLARED END SECTION DETAILS
NOT TO SCALE

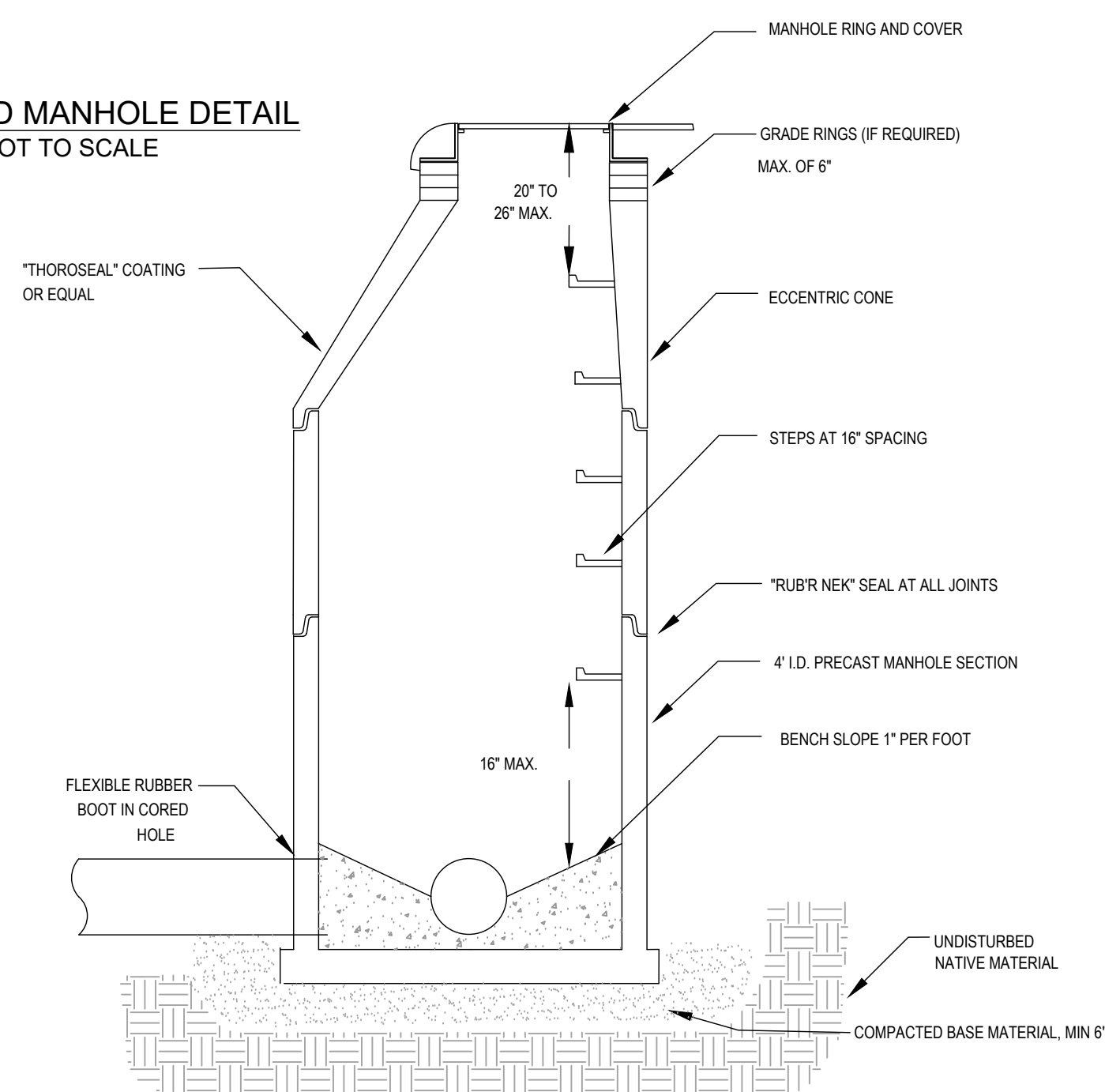
END SECTION NOTES

1. DIMENSIONS OF END SECTIONS MAY VARY SLIGHTLY FROM THOSE SHOWN ON THE TABLES DUE TO DIFFERENT MANUFACTURER'S VARIATIONS.
2. GALVANIZED TOE PLATE, AS SHOWN, REQUIRED ON END SECTIONS FOR ALL THIN WALL PIPE AND SHALL BE THE SAME THICKNESS AS END SECTIONS. TOE PLATE SHALL BE FIELD-BOLTED TO END SECTION WITH 3/8" GALVANIZED BOLTS, NUTS AND WASHERS.
3. GALVANIZED STEEL SHALL BE IN CONFORMANCE WITH AASHTO M 111, M 218 OR M 232.

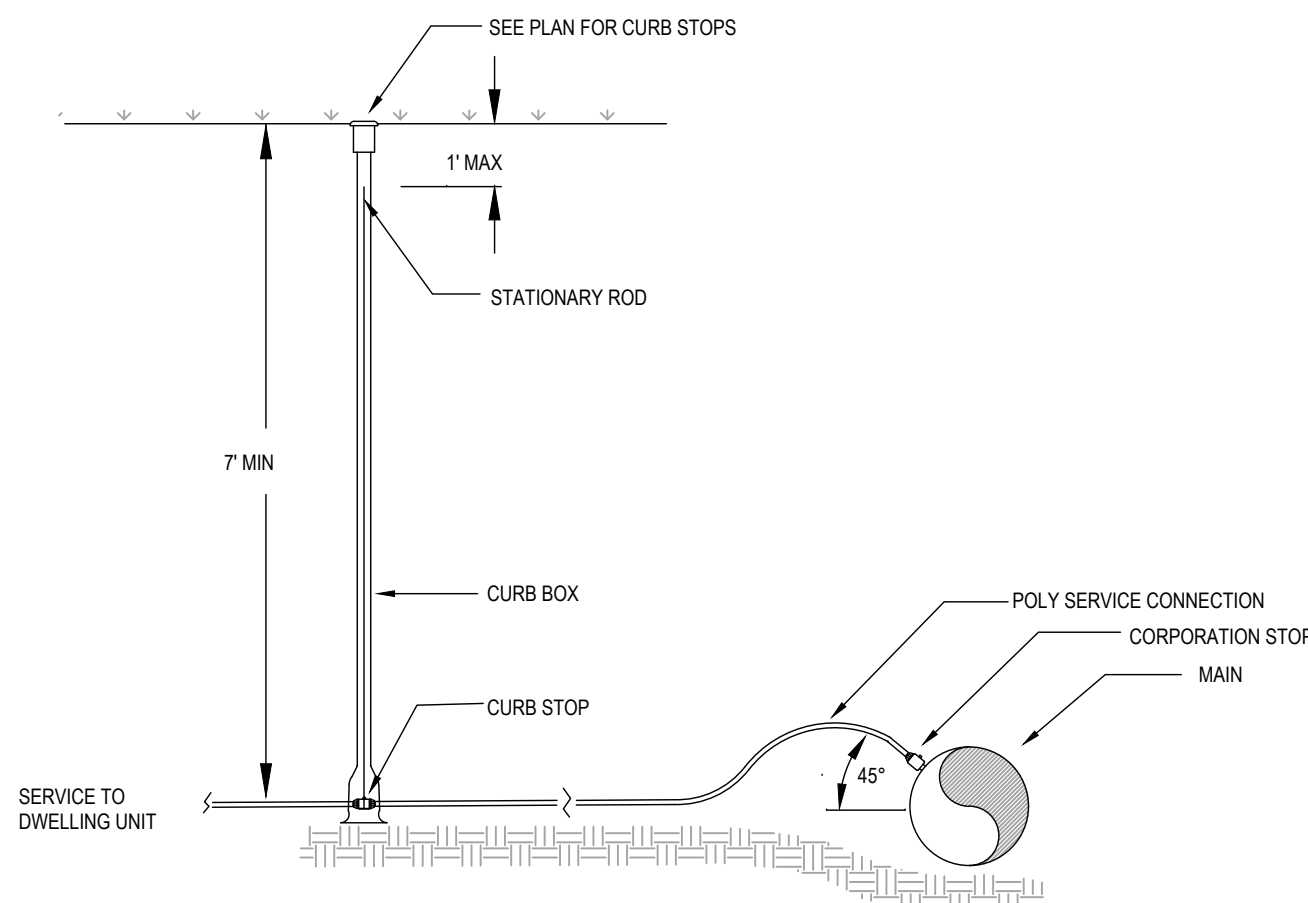


SIDEWALK NOTES:

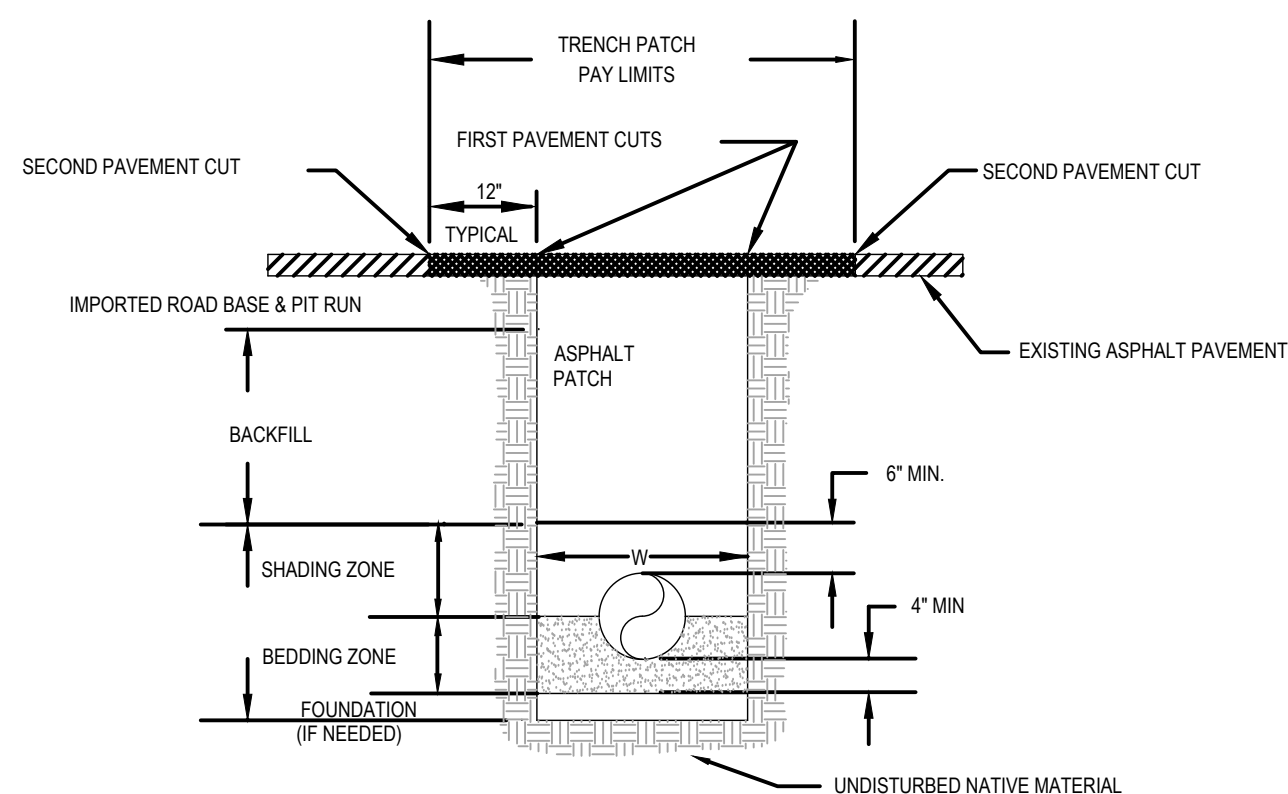
1. ALL SIDEWALKS SHALL HAVE MIN 1% SIDE SLOPE FOR PROPER DRAINAGE.
2. RAMP AND WING SLOPES SHALL NOT BE STEEPER THAN 12:1.
3. CONCRETE SHALL BE CLASS D WITH FIBER REINFORCEMENT.
4. NORMAL FLOW LINE AND PROFILE SHALL BE MAINTAINED THROUGH THE RAMP AREAS.
5. CONTROL JOINTS SHALL BE INSTALLED AT 4' INTERVALS.
6. CONTROL JOINTS SHALL BE TOOLED.



STANDARD MANHOLE DETAIL
NOT TO SCALE



WATER SERVICE LINE DETAIL
NOT TO SCALE



NOTES

A GUIDE FOR DESIRABLE TRENCH WIDTH (W) AT THE TOP OF THE PIPE SHALL BE THE NOMINAL DIAMETER OF THE PIPE PLUS 12-INCHES ON EACH SIDE OF THE PIPE.

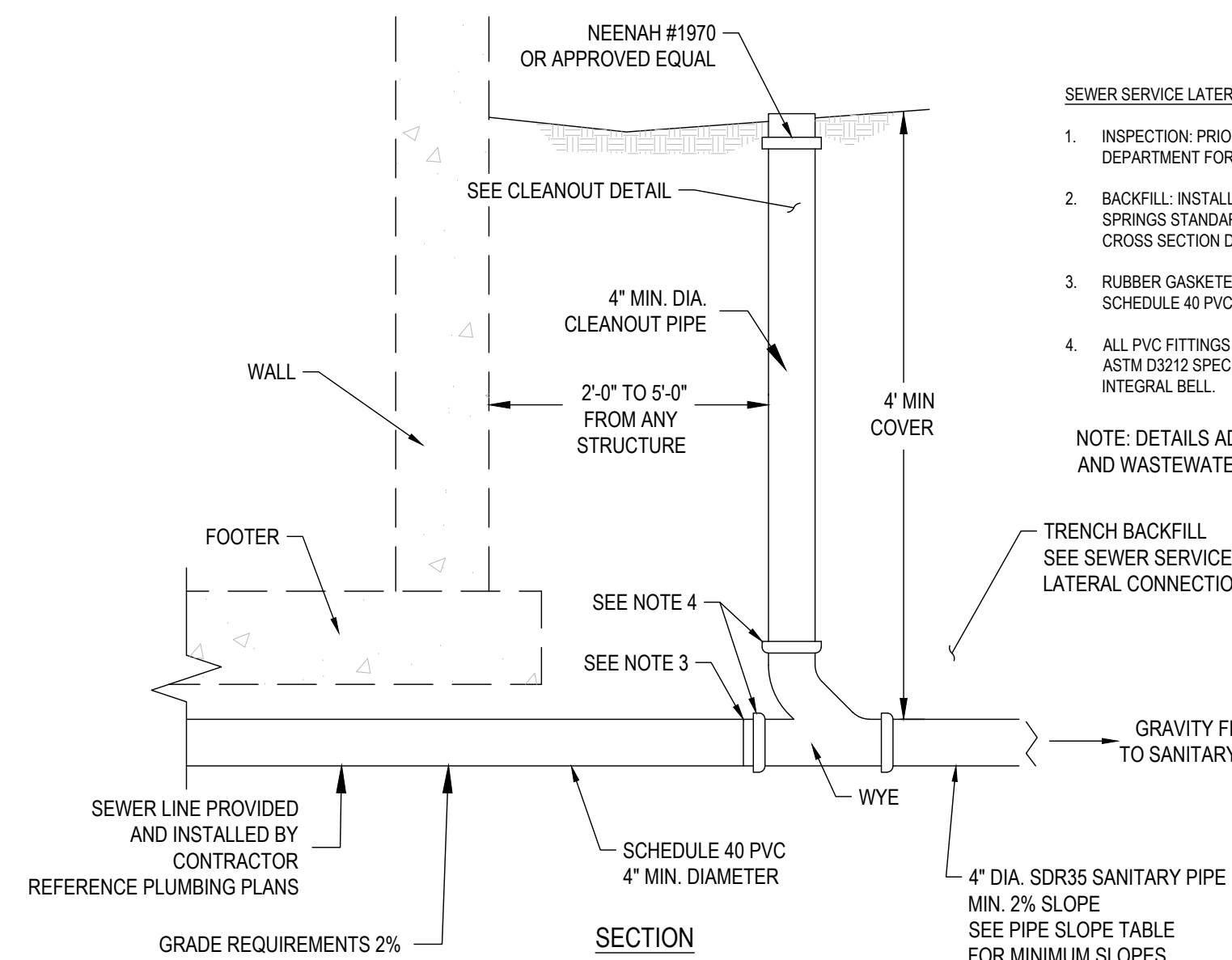
A SECOND PAVEMENT CUT SHALL BE REQUIRED PRIOR TO PLACING THE ASPHALT PATCH. REMOVE ALL IRREGULAR ASPHALT EDGES A MINIMUM OF 12-INCHES BEYOND ANY DAMAGED SURFACE TO A CLEAN VERTICAL EDGE. APPLY A BITUMINOUS TACK COAT PRIOR TO PLACING THE ASPHALT PATCH.

THE ASPHALT PATCH SHALL BE PLACED IN A 4-INCH LIFT AND ROLLER COMPACTED TO MATCH THE ADJACENT ASPHALT EDGES

SUB-BASE MATERIALS SHALL CONSIST OF 4-INCHES OF ROAD BASE ON 8-INCHES OF PIT-RUN. COMPACTION REQUIREMENTS SHALL EXCEED 95% MAXIMUM DRY DENSITY AS DETERMINED BY THE AASHTO T-180 TEST PROCEDURES.

THE CONTRACTOR MUST COMPLY WITH THE TRENCHING AND EXCAVATION REQUIREMENTS OF 29 CFR 1926.651 AND 1926.652 OR COMPARABLE OSH-APPROVE STATE PLAN REQUIREMENTS.

TRENCH CROSS SECTION
NOT TO SCALE



SANITARY SERVICE CONNECTION DETAIL
NOT TO SCALE

MINIMUM PIPE SLOPES FOR SEWER SERVICES		
4"	1/4" PER FOOT	2%
6"	1/8" PER FOOT	1%
8"	1/16" PER FOOT	0.5%

ITEM 11 & 12. PRELIMINARY LANDSCAPE AND OPENSOURCE PLAN

Sonesta Park P.U.D.
Located in the NE 1/4 of Section 16,
Township 6 North, Range 88
West, 6th P.M., Town of Hayden,
Routt County, Colorado



3 LANDSCAPE PLAN
Scale: 1" = 30 ft

2 COMMUNITY SPACE
Scale: 1/16" = 1'-0"

1 SITE SECTION - TERACED COMMUNITY SPACE
Scale: 1/8" = 1'-0"

WDS

410 SOUTH MICHIGAN AVENUE SUITE 512
CHICAGO ILLINOIS 60605
312.583.7087 ERICH@WDS-AD.COM

JOB # 2503

SONESTA PARK P.U.D.
TOWN OF HAYDEN, ROUTT COUNTY, COLORADO

SUBMISSION

DATE	DESCRIPTION
10.02.2025	SITE PLAN SUBMISSION

ITEM 13. SOILS REPORT AND MAP



United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for Routt Area, Colorado, Parts of Rio Blanco and Routt Counties



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

Preface	2
How Soil Surveys Are Made	5
Soil Map	8
Soil Map.....	9
Legend.....	10
Map Unit Legend.....	12
Map Unit Descriptions.....	12
Routt Area, Colorado, Parts of Rio Blanco and Routt Counties.....	14
6B—Zoltay loam, 0 to 10 percent slopes.....	14
7C—Morapos loam, 3 to 12 percent slopes.....	15
10E—Bulkley silty clay, 12 to 25 percent slopes.....	17
102—Shermap loam, 3 to 25 percent slopes.....	18
Soil Information for All Uses	20
Soil Properties and Qualities.....	20
Soil Qualities and Features.....	20
Hydrologic Soil Group (SONESTA).....	20
References	26

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

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: Routt Area, Colorado, Parts of Rio Blanco and Routt Counties

Survey Area Data: Version 10, Jun 5, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 8, 2012—Oct 5, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
6B	Zoltay loam, 0 to 10 percent slopes	0.2	1.1%
7C	Morapos loam, 3 to 12 percent slopes	5.5	37.2%
10E	Bulkley silty clay, 12 to 25 percent slopes	2.1	14.4%
102	Shermap loam, 3 to 25 percent slopes	7.0	47.4%
Totals for Area of Interest		14.7	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

Custom Soil Resource Report

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Routt Area, Colorado, Parts of Rio Blanco and Routt Counties

6B—Zoltay loam, 0 to 10 percent slopes

Map Unit Setting

National map unit symbol: k0f2
Elevation: 6,400 to 6,890 feet
Mean annual precipitation: 16 to 20 inches
Mean annual air temperature: 41 to 45 degrees F
Frost-free period: 70 to 110 days
Farmland classification: Not prime farmland

Map Unit Composition

Zoltay and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Zoltay

Setting

Landform: Alluvial fans, drainageways
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Alluvium derived from sandstone and shale

Typical profile

Ap - 0 to 12 inches: loam
Bt1 - 12 to 20 inches: silty clay
Bt2 - 20 to 25 inches: silty clay
Bt3 - 25 to 33 inches: silty clay loam
Bk1 - 33 to 41 inches: clay loam
Bk2 - 41 to 60 inches: clay loam

Properties and qualities

Slope: 0 to 10 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.07 to 0.21 in/hr)
Depth to water table: About 36 to 60 inches
Frequency of flooding: NoneVery rare
Frequency of ponding: None
Calcium carbonate, maximum content: 12 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 11.1 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Ecological site: R048AY292CO
Hydric soil rating: No

Minor Components

Furia

Percent of map unit: 10 percent
Landform: Depressions on flood plains
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R048AY245CO
Hydric soil rating: No

7C—Morapos loam, 3 to 12 percent slopes

Map Unit Setting

National map unit symbol: k0f3
Elevation: 6,300 to 7,220 feet
Mean annual precipitation: 16 to 20 inches
Mean annual air temperature: 41 to 45 degrees F
Frost-free period: 70 to 110 days
Farmland classification: Not prime farmland

Map Unit Composition

Morapos and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Morapos

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Slope alluvium derived from shale

Typical profile

A - 0 to 6 inches: loam
AB - 6 to 12 inches: loam
Bt - 12 to 16 inches: clay
Btk - 16 to 22 inches: clay
Bk1 - 22 to 32 inches: clay
Bk2 - 32 to 40 inches: clay loam
Bk3 - 40 to 60 inches: clay loam

Properties and qualities

Slope: 3 to 12 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium

Custom Soil Resource Report

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.07 to 0.21 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 2.0

Available water supply, 0 to 60 inches: High (about 10.6 inches)

Interpretive groups

Land capability classification (irrigated): 4e

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: C

Ecological site: R048AY292CO

Hydric soil rating: No

Minor Components

Obadia

Percent of map unit: 5 percent

Landform: Hills

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Side slope

Down-slope shape: Concave

Across-slope shape: Linear

Ecological site: R048AY247CO

Other vegetative classification: mountain swale (null_47)

Hydric soil rating: No

Bulkley

Percent of map unit: 5 percent

Landform: Hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: R048AY247CO

Hydric soil rating: No

Morapos, very stony

Percent of map unit: 5 percent

Landform: Hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Interfluve

Down-slope shape: Linear

Across-slope shape: Convex

Ecological site: R048AY292CO

Hydric soil rating: No

10E—Bulkley silty clay, 12 to 25 percent slopes

Map Unit Setting

National map unit symbol: k0f9

Elevation: 6,300 to 7,220 feet

Mean annual precipitation: 16 to 20 inches

Mean annual air temperature: 41 to 45 degrees F

Frost-free period: 70 to 110 days

Farmland classification: Not prime farmland

Map Unit Composition

Bulkley and similar soils: 100 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Bulkley

Setting

Landform: Hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Colluvium and/or slope alluvium derived from sandstone and shale

Typical profile

A - 0 to 4 inches: silty clay

Bkss - 4 to 32 inches: silty clay

Bk - 32 to 46 inches: silty clay

Bky - 46 to 60 inches: silty clay

Properties and qualities

Slope: 12 to 25 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.07 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Gypsum, maximum content: 5 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water supply, 0 to 60 inches: High (about 10.2 inches)

Interpretive groups

Land capability classification (irrigated): 7s

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: D

Custom Soil Resource Report

Ecological site: R048BY296CO

Hydric soil rating: No

102—Shermap loam, 3 to 25 percent slopes

Map Unit Setting

National map unit symbol: k0j4

Elevation: 6,230 to 6,890 feet

Mean annual precipitation: 16 to 20 inches

Mean annual air temperature: 42 to 45 degrees F

Frost-free period: 70 to 110 days

Farmland classification: Not prime farmland

Map Unit Composition

Shermap and similar soils: 100 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Shermap

Setting

Landform: Hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Eolian deposits derived from sandstone and shale and/or slope alluvium derived from sandstone

Typical profile

A1 - 0 to 12 inches: loam

A2 - 12 to 22 inches: loam

Bt1 - 22 to 35 inches: clay loam

Bt2 - 35 to 65 inches: clay loam

Properties and qualities

Slope: 3 to 25 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.21 to 0.71 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water supply, 0 to 60 inches: High (about 11.0 inches)

Interpretive groups

Land capability classification (irrigated): 6e

Land capability classification (nonirrigated): 6e

Hydrologic Soil Group: C

Ecological site: R048AY238CO

Custom Soil Resource Report

Map—Hydrologic Soil Group (SONESTA)



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: Routt Area, Colorado, Parts of Rio Blanco and Routt Counties
 Survey Area Data: Version 10, Jun 5, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 8, 2012—Oct 5, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

Table—Hydrologic Soil Group (SONESTA)

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
6B	Zoltay loam, 0 to 10 percent slopes	C	0.2	1.1%
7C	Morapos loam, 3 to 12 percent slopes	C	5.5	37.2%
10E	Bulkley silty clay, 12 to 25 percent slopes	D	2.1	14.4%
102	Shermap loam, 3 to 25 percent slopes	C	7.0	47.4%
Totals for Area of Interest			14.7	100.0%

Rating Options—Hydrologic Soil Group (SONESTA)

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

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- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelpdb1043084>

Custom Soil Resource Report

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ITEM 14. TRAFFIC STUDY

Based on the presently platted and entitled number of lots being preserved, a traffic study is not applicable. This is on the basis of the development presenting no increased traffic flow from what is presently identified and accounted for in roadway and traffic infrastructure planning.

ITEM 15. GEOLOGIC REPORT

A geologic report is forthcoming, and will be presented with or before the Final Plat Application for the development.

ITEM 16. PRELIMINARY STREET LIGHTING PLAN

Sonesta Park P.U.D.
Located in the NE 1/4 of Section 16,
Township 6 North, Range 88
West, 6th P.M., Town of Hayden,
Routt County, Colorado



- OH2 WALL MOUNTED OVER GARAGE FIXTURE
- OH1 WALL MOUNTED OVER DOOR FIXTURE
- INW IN-WALL LIGHT FIXTURE
- BLD BOLLARD WITH INTEGRATED LIGHT
- STRT 8'0" TALL LATERN-STYLE STREET LIGHT
- QTY (32) OVERALL STREET LIGHTS

1 Site Lighting Plan
Scale: 1" = 30 ft

WDS

410 SOUTH MICHIGAN AVENUE SUITE 512
CHICAGO ILLINOIS 60605
312.583.7087 ERICH@WDS-AD.COM

JOB # 2503
SONESTA PARK P.U.D.
TOWN OF HAYDEN, ROUTT COUNTY, COLORADO

SUBMISSION	
DATE	DESCRIPTION
10.02.2025	SITE PLAN SUBMISSION

SITE LIGHTING PLAN

SL-1.0

ITEM 17. MINERAL, OIL AND GAS RIGHTS DOCUMENTATION

There are no third-party claims to any mineral, oil, or gas rights subject to the property, whether surface or subsurface.

ITEM 18. COVENANTS

There are no proposed covenants at this time.



NOTICE OF PUBLIC HEARING

Planning Commission – Thursday, November 25, 2025

*We are interested in
your comments regarding the following proposal.*

Project: Sonesta Park Preliminary Plan

Area and Location: The property is described as Lots 1-64 INC SONESTA PARK THM. in Hayden, Colorado.

Applicant HCMH, LLC

Summary: The applicant has submitted a preliminary plan application to amend and change a previously approved subdivision for Lots 1-64 of Sonesta Park THM. The property was originally entitled as a part of a PUD subdivision process in 1980, and this application seeks to amend the current layout to adjust the lot layout, design for emergency access, public services, open space, and parking for the units.

The full application submittal can be found at <https://haydencolorado.com/planning-and-zoning/>

The Hayden Planning Commission will hold a Public Hearing and consider this item.

Meeting Schedule: **Planning Commission:** Public Hearing for this application is Thursday, November 25, 2025 at 6:00 pm.

The Public Hearing is held at Hayden Town Hall, 178 West Jefferson Avenue, Hayden, Colorado.

Please reply by: November 21, 2025 for comments to be entered into the record for Planning Commission consideration. Public comment can be made in person or virtually during the Public Hearing.

Contact/Reply to:

Tegan Ebbert,
Community Development Director
Box 190, Hayden, CO 81639

Phone: (970) 276-3741

Fax: (970) 276-3644

E-Mail: Tegan.ebbert@haydencolorado.org

Sonesta Townhomes

Traffic Impact Study



Submittal Date: October 28, 2025

Submitted To:

Denver Sports Lab.
15744 W 6th Avenue
Golden, CO 80401

Submitted By:

Fox Tuttle Transportation Group, LLC
1580 Logan Street, Suite 600-PMB 0604
Denver, CO 80203

TABLE OF CONTENTS

1.0	Introduction	1
2.0	Project Description	1
3.0	Study Considerations	2
3.1	Data Collection	2
3.2	Evaluation Methodology	2
3.3	Level of Service Capacity Analysis	2
4.0	Existing Conditions.....	3
4.1	Roadways.....	3
4.2	Intersections	4
4.3	Pedestrian and Bicycle.....	4
4.4	Transit	4
4.5	Existing Intersection Capacity Analysis.....	4
5.0	Future Conditions	5
5.1	Annual Growth Factor and Future Volume Methodology.....	5
5.2	Year 2028 Anticipated Transportation Network	5
5.3	Year 2028 Background Intersection Capacity Analysis (with or without Moonlit Meadows project)	5
5.4	Year 2045 Anticipated Transportation Network	6
5.5	Year 2045 Background Intersection Capacity Analysis.....	6
6.0	Future Traffic Conditions with Sonesta Townhomes.....	8
6.1	Trip Generation.....	8
6.2	Trip Distribution and Assignment	8
6.3	Year 2028 Background + Project Intersection Capacity Analysis.....	9
6.4	Year 2045 Background + Project Intersection Capacity Analysis.....	9
7.0	Queuing Analysis	10
8.0	CDOT Access Permit	11
9.0	Conclusions	12

LIST OF TABLES

Table 1 – Peak Hour Intersection Level of Service Summary	15
Table 2 – Peak Hour Estimated 95 th Percentile Queues	16
Table 3 – Trip Generation Summary	17
Table 4 – CDOT Access Permit Calculations.....	12

LIST OF FIGURES

Figure 1 – Vicinity Map	18
Figure 2 – Conceptual Site Plan	19
Figure 3 – Existing Traffic Volumes	20
Figure 4 – Year 2028 Background Traffic Volumes (without Moonlit)	21
Figure 5 – Year 2028 Background Traffic Volumes (with Moonlit).....	22
Figure 6 – Year 2045 Background Traffic Volumes (with Moonlit).....	23
Figure 7 – Site Trip Distribution	24
Figure 8 – Site-Generated Trips	25
Figure 9 – Year 2028 Background + Project Traffic Volumes (without Moonlit)	26
Figure 10 – Year 2028 Background + Project Traffic Volumes (with Moonlit).....	27
Figure 11 – Year 2045 Background + Project Traffic Volumes (with Moonlit).....	28

APPENDIX

Level of Service Definitions

Existing Traffic Data

Intersection Capacity Worksheets

Signal Warrant Analysis

SONESTA TOWNHOMES TRAFFIC IMPACT STUDY

1.0 Introduction

The Fox Tuttle Transportation Group has prepared this traffic impact study for the Sonesta Townhomes residential development project. The project site is located within the Town of Hayden, Colorado, on a vacant parcel with direct access to Harvest Drive, west of the Poplar Street and Harvest Drive intersection. The proposed development is planned to include 64 townhomes, with completion anticipated by Year 2028. Surrounding land uses include Hayden Valley Schools, single-family detached and attached residential homes, and Dry Creek Park. Additionally, the Moonlit Meadows project, a planned future development located south of the Town, has been considered in this analysis. **Figure 1** provides a vicinity map for the proposed project.

The purpose of this study is to assist in identifying potential traffic impacts within the study area as a result of this project. The traffic study addresses existing, short-term, and long-term peak hour intersection conditions in the study area with and without the project-generated traffic. The information contained in this study is anticipated to be used by the Town of Hayden staff in identifying any intersection or roadway deficiencies and potential improvements for the build-out condition and long-term future scenarios. This study focused on the weekday AM and PM peak hours which represent the periods of highest trip generation for the proposed use and adjacent street traffic. The traffic study was scoped with the Town of Hayden staff to ensure the appropriate intersections and scenarios were evaluated.

2.0 Project Description

The Sonesta Townhomes project proposes the development of currently vacant land into a residential community consisting of 64 single-family attached homes, with full build-out and occupancy anticipated by the end of Year 2028. Primary access to the site will be provided via the existing connection to Harvest Drive. **Figure 2** shows the site plan and proposed access location.

It should be noted that this site has already been platted in the Sonesta Park Planned Unit Development (PUD) with 64 townhomes. The latest site plan made adjustments for better circulation, access, and layout. The amount of traffic associated with the site will be the same regardless of site plan since there are the same type and number of homes.

3.0 Study Considerations

3.1 Data Collection

Intersection turning movement volumes were collected in late August 2025 at six (5) existing intersections during the weekday AM and PM peak hours with schools in session, including pedestrians and bicyclists. Daily traffic volumes were also collected on Poplar Street south of Breeze Basin Boulevard in late August 2025 with schools in session.

The existing traffic volumes are illustrated on **Figure 3**. The existing intersection geometry and traffic control are also shown on this figure. Count data sheets are provided in the **Appendix**.

3.2 Evaluation Methodology

The traffic operations analysis addressed the signalized and unsignalized intersection operations using the procedures and methodologies set forth by the *Highway Capacity Manual (HCM)*¹. Existing peak hour factors (PHF) by approach and peak hour were applied to the study intersections, with future-year adjustments made where significant increases in traffic are shown. Study intersections were evaluated using Synchro software (v12).

3.3 Level of Service Capacity Analysis

A Level of Service analysis was conducted to determine the existing and future performance of the study area intersections and accesses to determine the most appropriate intersection traffic controls and auxiliary lanes for future conditions.

To measure and describe the operational status of the study intersections, transportation engineers and planners commonly use a system referred to as “Level of Service” (LOS) that is defined by the *HCM*. LOS characterizes the operational conditions of an intersection’s traffic flow, ranging from LOS A (indicating free flow operations) and LOS F (indicating congested and sometimes oversaturated conditions). These grades represent the perspective of drivers and are an indication of the comfort and convenience associated with traveling through intersections. The intersection LOS is based on delay in seconds per vehicle for the intersection as a whole and for each movement.

Typically, LOS D overall during peak hours is acceptable. Individual movements may be allowed to fall to LOS E or F at signalized intersections. Minor movements at unsignalized intersections, such as left turns onto a major arterial, may be allowed to fall below LOS D, specifically where there are low volumes and/or

¹ *Highway Capacity Manual*, Highway Research Board Special Report 209, Transportation Research Board, National Research Council, 7th Edition (2022).

no viable alternative. Criteria contained in the *HCM* was applied for these analyses in order to determine peak hour LOS for each scenario. A more detailed discussion of LOS methodology is contained in the **Appendix** for reference.

4.0 Existing Conditions

4.1 Roadways

The study area boundaries are based on the amount of traffic to be generated by the project and potential impact to the existing roadway network. The primary public roadways that serve the project site are discussed in the following text and illustrated on **Figure 1**.

Jefferson Avenue (US Highway 40) is a two-lane, east-west, arterial roadway that provides access to residential and commercial neighborhoods near the project site. Regionally, the roadway provides access to neighboring towns such as Craig and Steamboat Springs. US Highway 40 extends into Utah (west) and to I-70 west of Denver (east). Jefferson Avenue is a Colorado Department of Transportation (CDOT) managed roadway classified as NR-B (Non-Rural Arterial). Within town, Jefferson Avenue has a posted speed of 30 to 35 miles per hour (mph) and serves approximately 8,400 vehicles per day (vpd) (CDOT, Year 2024).

Poplar Street (County Road 53) is a two-lane, north-south, roadway that provides access to local residential and commercial neighborhoods as well as Hayden High School and Routt County Fairgrounds. The roadway extends from Pearl Street (north), becomes County Road 53 at the south end of town, and extends to County Road 29 (south). South of Breeze Basin Boulevard, Poplar Street serves approximately 1,945 vpd (Year 2025).

Breeze Basin Boulevard is a two-lane, east-west roadway that provides access to local residential and commercial neighborhoods, Hayden High School, Dry Creek Park, and Routt County Fairgrounds. The roadway extends from just east of Poplar Street (east), becomes County Road 65 west of Hayden High School, and extends to County Road 113 (west).

Harvest Drive (north) is a two-lane, unstriped roadway that provides access to residential neighborhoods at the south end of town. The roadway extends from Poplar Street (north) to South Harvest Drive (south).

4.2 Intersections

The study area includes five (5) existing intersections that are listed below with the current traffic control and were analyzed for existing and future year's traffic operations:

1. Jefferson Avenue at Poplar Street [side-street stop controlled]
2. Poplar Street at Breeze Basin Boulevard [side-street stop controlled]
3. Poplar Street at School Access [side-street stop controlled]
4. Poplar Street at Harvest Drive (north) [side-street stop controlled]
5. Harvest Drive at Site Access [side-street stop controlled]

The existing lane configuration at each of the study locations is illustrated on **Figure 3**.

4.3 Pedestrian and Bicycle

Currently, there are sidewalks along both sides of Jefferson Avenue within the study area. At the intersection of Jefferson Avenue and 3rd Street, there is an uncontrolled pedestrian crossing of Jefferson Avenue. 3rd Street has sidewalks along the east side from Jefferson Avenue to south of Washington Avenue, at which point the sidewalk crosses 3rd Street to the west side and continues south to Hayden High School. Poplar Street has sidewalks on the west side of the roadway from Jefferson Avenue to Hayden High School. The remaining study roadways do not have sidewalks.

There are no on-street bike facilities within the project study area. Bikes are permitted to travel within the travel lanes of the study roadways.

4.4 Transit

The Town of Hayden is serviced by Steamboat Springs Transit with regional service. The bus travels from the Town of Craig to the City of Steamboat Springs in the morning and from Steamboat Springs to Craig in the evening, stopping in Hayden twice in the morning and twice in the evening. The stop in Hayden is located on Jefferson Avenue just east of Poplar Street.

4.5 Existing Intersection Capacity Analysis

The existing volumes, lane configuration, and traffic control are illustrated on **Figure 3**. The details of LOS for each movement are provided in **Table 1** and the 95th percentile queues are provided in **Table 2** (refer to **Appendix**). The intersection Level of Service worksheets are attached in the **Appendix**.

Currently, the study intersections operate overall at LOS A in both peak hours, with all individual movements operating at LOS C or better in both peak hours. All 95th percentile queues were estimated to be contained within existing storage.

5.0 Future Conditions

5.1 Annual Growth Factor and Future Volume Methodology

In order to forecast the future peak hour traffic volumes, background traffic growth assumptions were estimated based on CDOT growth rates and other traffic studies performed for the town.

Based on CDOT historic data and forecasts, the 20-year growth factor for US Highway 40 is estimated to be 1.2. This equates to an annual growth rate of **1.0%**, which was applied to the existing intersection and roadway volumes for future background scenarios. This annual growth rate is consistent with other studies performed in the area. In addition to background growth, projected traffic generated by the Main Street Apartments development—located along the south side of Jefferson Avenue between 3rd Street and Poplar Street—and the planned Moonlit Meadows development in the southern portion of the Town were incorporated into the future-year traffic forecasts for all analysis scenarios. However, given the current stage of the Moonlit Meadows project, this analysis includes short-term (Year 2028) scenarios both with and without the nearby development and its associated trip generation.

Based on these assumptions, the Year 2028 background traffic volumes (without and with the first phase of Moonlit Meadows project) are summarized on **Figures 4 and 5**, respectively, while the Year 2045 background traffic volumes (including the Moonlit Meadows trips) are presented on **Figure 6**.

5.2 Year 2028 Anticipated Transportation Network

For the short-term (Year 2028) background horizon, no changes to the existing roadway or intersection network were assumed in the scenario without the Moonlit Meadows development. However, for the scenario including Phase 1 of the Moonlit Meadows development, the proposed control and lane configuration modifications anticipated by Year 2028 were incorporated into the analysis, which includes a signal at the intersection of **Jefferson Avenue (US 40) and Poplar Street**, as well as one eastbound left-turn lane and one westbound left-turn lane at the same intersection. These assumptions and corresponding network changes are illustrated on **Figure 5**.

5.3 Year 2028 Background Intersection Capacity Analysis (with or without Moonlit Meadows project)

The study area intersections were evaluated to determine baseline operations for the Year 2028 background scenario and to identify any capacity constraints associated with background traffic (refer to **Section 5.1** for growth assumptions) both without and with Phase 1 of the Moonlit Meadows development. The background volumes, lane configuration, and traffic control are illustrated on **Figures 4 and 5**, respectively.

The Level of Service criteria discussed previously was applied to the study area intersections to determine the impacts with the short-term background volumes. The details of LOS for each movement are provided in **Table 1** and the 95th percentile queues are provided in **Table 2** (refer to **Appendix**). The intersection Level of Service worksheets are attached in the **Appendix**.

In summary for the Year 2028 background scenario without the Moonlit Meadows traffic, all study intersections are expected to operate similarly to Year 2025 existing conditions, with only minor increases in overall and movement delay, as well as queue lengths.

Without Moonlit Meadows: The northbound and southbound approaches at the **Jefferson Avenue and Poplar Street** intersection are shown to change from LOS C (existing) to LOS D (Year 2028 background without Moonlit Meadows) in the AM peak hour. These intersections are not projected to meet traffic signal warrants with Year 2028 background (without Moonlit) traffic volumes, and this level of delay is typical of a side-street approach to a major roadway. Minor increases in overall and movement delays, as well as queue lengths were found for the remaining study intersections.

With Moonlit Meadows: For the short-term scenario including the Moonlit Meadows Phase 1 traffic, the Jefferson Avenue at Poplar Street intersection was analyzed under signalized control since it was shown to be warranted in the *Moonlit Meadows Traffic Impact Study* (Fox Tuttle, September 2025) with buildout of Phase 1. Additionally, the previous study recommended one eastbound left-turn lane and one westbound left-turn lane. Under this configuration, the intersection of Jefferson Avenue at Poplar Street is expected to operate at an overall LOS B, with all movements performing at LOS C or better during the analyzed peak periods. Minor increases in overall and movement delays, as well as queue lengths were found for the remaining study intersections.

5.4 Year 2045 Anticipated Transportation Network

For the long-term background scenario assuming the competition of the Moonlit Meadows development, the proposed control and lane configuration modifications anticipated by Year 2045 were incorporated into the analysis. These assumptions and corresponding network changes are illustrated on **Figure 6**.

5.5 Year 2045 Background Intersection Capacity Analysis

The study area intersections were evaluated to determine baseline operations for the Year 2045 background scenario and to identify any capacity constraints associated with background traffic in the long-term scenario (refer to **Section 5.1** for growth assumptions) including the network changes and the total trips added by the Moonlit Meadows development. The long-term background volumes, lane configuration, and traffic control are illustrated on **Figure 6**.

The Level of Service criteria discussed previously was applied to the study area intersections to determine the impacts with the long-term background volumes. The details of LOS for each movement are provided in **Table 1** and the 95th percentile queues are provided in **Table 2** (refer to **Appendix**). The intersection Level of Service worksheets are attached in the **Appendix**.

In summary, all of the study intersections were estimated to operate similarly to the short-term background scenario, with minor increases to overall and movement delays and queue lengths. Overall, all the intersections were estimated to operate acceptably (LOS C or better) in both peak hours with most movements operating at LOS D or better. The following intersections were found to have one movement that operates below LOS D or queues that exceed the available storage:

- **#1. Jefferson Avenue and Poplar Street:** This intersection was analyzed under signalized control in accordance with the *Moonlit Meadows TIS* recommendations and was calculated to operate at LOS C during AM peak hour and at LOS B in the PM peak hour. During AM peak hour, the eastbound through/right-turn movement was expected to operate again at LOS D while the 95th percentile queue was calculated to be up to 591 feet. During PM peak hour, the 95th percentile queue of the westbound through/ right-turn movement was calculated to be up to 379 feet. These queues are anticipated to extend upstream and temporarily block adjacent intersections, potentially affecting overall network operations. Note that these queues occur with a signal since the through movements will have to stop on a red indication instead of the existing free flow condition.

Recommendations: Consider constructing a separate right-turn lane for eastbound and westbound approaches if redevelopment occurs at either corner and land is available.

- **#3. Poplar Street at School Access:** Under the long-term background scenario, this intersection was calculated to operate overall at LOS B in the AM peak hour and LOS A in the PM peak hour. During the AM peak hour, the eastbound left-turn is expected to start operating at LOS F, while the 95th percentile queues were calculated to extend up to 160 feet which exceeds the available storage.

No Mitigation Measures Recommended: The measured delay is typical of school driveways since there is a high volume of traffic turning into and out of the school in a short amount of time. If delays on the school access become a concern in the future, consider coordinating with Hayden Valley Schools to implement or strengthen an on-site drop-off loop and supervised loading/unloading. If traffic volumes grow substantially, conduct a feasibility study for a roundabout or a geometric reconfiguration that improves capacity and reduces delay while improving pedestrian safety.

6.0 Future Traffic Conditions with Sonesta Townhomes

6.1 Trip Generation

A trip generation estimate was performed to determine the traffic characteristics of the proposed development. The trip rates contained in the Institute of Transportation Engineers (ITE) *Trip Generation Handbook and Manual*² were applied to estimate the traffic for the dwelling units. This study applied the trip rates for “Single-Family Attached Housing” [ITE #215]. In general, the site is expected to experience the two (2) basic trip types as discussed below:

Primary Trips. These trips are made specifically to visit the site and are considered “new” trips. Primary trips would not have been made if the proposed project did not exist. Therefore, this is the only trip type that increases the total number of trips made on a regional basis. It is expected that the proposed project will experience mostly primary trips.

Non-Auto Trips. These trips are those that are completed by walking, bicycling, or using transit. The existing transit, pedestrian, and bicycle amenities encourage residents, and visitors to make non-auto trips to/from the residential lots. For this project, no non-auto reduction was applied to the vehicle trip generation, ensuring a conservative assessment of project-related traffic impacts.

In total, the Sonesta project was estimated to generate approximately 420 daily trips with 30 trips in the AM peak hour and 33 trips in the PM peak hour. Trip generation is described on **Table 3**.

6.2 Trip Distribution and Assignment

The estimated trip volumes were distributed onto the study area street network based on existing traffic characteristics, land uses, and traffic patterns in the area. The existing volumes were utilized to determine where vehicles are coming from and going to within the study area, plus the route to get to major highways and anticipated destinations. The following overall distributions were assumed for this project and are shown on **Figure 7**:

- West via Jefferson Avenue: 20%
- East via Jefferson Avenue: 60%
- West via Breeze Basin Boulevard: 5%
- Internal to/from the Town of Hayden: 10%
- South via County Road 53: 5%

² *Trip Generation Handbook and Manual, 12th Edition*, Institute of Transportation Engineers, 2025.

These trip distribution percentages are the same as applied in the *Moonlit Meadows TIS*. Using the distribution assumptions, the projected site traffic was assigned to the study area roadway network for the weekday AM and PM peak hour periods. Project-generated trips are shown on **Figure 8**.

6.3 Year 2028 Background + Project Intersection Capacity Analysis

This section discusses impacts associated with the addition of the project trips in the Year 2028 scenario both without and with Phase 1 of the Moonlit Meadows development. The site-generated volumes were added to the Year 2028 background volumes and are illustrated on **Figures 9 and 10**, respectively. **Figure 10** also illustrates the future traffic control and lane configurations at the intersection of Jefferson Avenue (US 40) at Poplar Street, consistent with the *Moonlit Meadows TIS*. The results of the LOS calculations for the intersections are summarized in **Table 1**. The 95th percentile queues are summarized in **Table 2**. The intersection level of service worksheets and queue reports are attached in the **Appendix**.

Without Moonlit Meadows: The Sonesta project trips have little to no impact on the operations of the study intersections as compared to the background scenarios (less than three seconds increase). All of the intersection and movement levels of service remain the same letter grade in the without Moonlit Meadows scenario. The 95th percentile queues were estimated to remain similar to those in the background scenario with no more than one additional vehicle added.

With Moonlit Meadows: The Sonesta project trips have little to no impact on the operations of the study intersections as compared to the background scenarios (less than two seconds increase). All of the intersection and movement levels of service remain the same letter grade in the without Moonlit Meadows scenario. The 95th percentile queues were estimated to remain similar to those in the background scenario with no more than one additional vehicle added.

6.4 Year 2045 Background + Project Intersection Capacity Analysis

This section discusses impacts associated with the addition of project trips in the Year 2045 scenario including the network changes and the total trips added by the proposed Sonesta development. The site-generated volumes were added to the Year 2045 background volumes and are illustrated on **Figure 11**. This figure also illustrates the future traffic control and lane configurations at the intersection of Jefferson Avenue (US 40) at Poplar Street, consistent with the *Moonlit Meadows TIS*.

The study intersections are anticipated to operate overall at LOS D or better, with most individual movements operating at LOS D or better. The following intersections were found to have one movement that operates below LOS D or queues that exceed the available storage:

- **#1. Jefferson Avenue and Poplar Street:** Similar with background scenario, this intersection was analyzed with signal control and was calculated to operate in acceptable LOS. However, the

eastbound and westbound through/right-turn movement continues to extend upstream and temporarily block adjacent intersections.

No additional mitigation measures are recommended. The previously identified recommendations remain applicable to address the long-term future conditions.

- **#2. Poplar Street and Breeze Basin Boulevard:** Under this scenario, the eastbound left-turn/through movement was calculated to start operating at LOS E in both peak hours. However, the 95th percentile queue lengths for these movements are expected to remain within the available storage capacity.

No mitigation measures are recommended. This reduced level of service is primarily attributed to the proximity of the intersection to the school, where higher traffic volumes along Poplar Street during peak periods result in fewer available gaps for turning vehicles. Delays are expected at intersections near a school.

- **#3. Poplar Street at School Access:** As in the long-term background scenario, during the AM peak hour, the eastbound left-turn was calculated to continue operating at LOS F and the 95th percentile queues were calculated to extend up to 173 feet which continues to exceed the available storage.

No additional mitigation measures are recommended. The previously identified considerations remain applicable to address on campus conditions that may mitigate side-street queuing.

The details of LOS for each movement are provided in **Table 1** and the 95th percentile queues are provided in **Table 2** (refer to **Appendix**). The intersection Level of Service worksheets are attached in the **Appendix**.

7.0 Queuing Analysis

A queuing analysis was performed to determine if the 95th percentile queues would be accommodated by the existing storage length, to determine the storage lengths for future auxiliary lanes, and if any of the queues would impact an upstream intersection/access. **Table 2** provides the existing storage lengths, as well as the 95th percentile queues for each existing and future scenario as calculated by Synchro (assuming each vehicle utilizes 25 feet of space). It should be noted that the 95th percentile queue length is a theoretical queue that is 1.65 standard deviations above the average queue length. In theory, the 95th percentile queue would be exceeded 5% of the time based on the average queue length, but it is also possible that a queue this long may not occur.

As shown in **Table 2**, the estimated queues are shorter than the available storage lengths in all scenarios where turn lanes are provided. However, as discussed, the eastbound and westbound approaches at the **Jefferson Avenue and Poplar Street** intersection were projected to experience increased queues under the long-term background and with-project scenarios, as traffic volumes increase and network modifications are implemented. Under these conditions, eastbound queues are projected to reach approximately 600 feet, extending west to 2nd Street, while westbound queues are expected to reach approximately 380 feet, extending east to Chestnut Street. These queues occur with a signal since the through movements will have to stop on a red indication instead of the existing free flow condition. To mitigate these long-term queuing impacts, it is recommended that eastbound and westbound right-turn lanes be provided by widening and restriping Jefferson Avenue when the corners are redeveloped and land becomes available. These improvements would allow right-turning vehicles to bypass queued through and left-turn traffic, thereby reducing overall queue lengths and improving intersection operations.

The northbound queues at the **school access on Poplar Street** were reviewed for all scenarios to determine the potential for queues to back up from this access towards the fire station just to the south (the fire station driveway begins approximately 85 feet south of the school access). Using the count data and peak hour factors, the Synchro/HCM modeling does not show that this would occur in any scenario with or without project build out. However, the eastbound queues found to exceed the available storage under the long-term scenarios, indicating that school access operations are expected to worsen over time, regardless of the proposed development. To address these potential operational issues, it is recommended that the school access be monitored periodically as traffic volumes increase. Should queueing or delay conditions deteriorate, improvements such as a northbound left-turn deceleration lane—to allow vehicles to wait outside the through-traffic stream—and/or enhancements to on-site circulation and loading operations should be considered to maintain safe and efficient access operations.

8.0 CDOT Access Permit

The short-term background volumes on Poplar Street south of Jefferson Avenue (US 40) were utilized as the baseline values for the permit calculations. The estimated trips for the proposed Sonesta townhomes were added to the volume and compared to determine the percentage increase. **Table 4** summarizes the hourly volumes and comparison.

Table 4. CDOT Access Permit Calculations

Scenario	Hourly Volume on US 40 at Poplar Street	
	AM	PM
Year 2028 Background Volumes (without Moonlit)	175	161
Year 2028 Background Volumes (with Moonlit Phase 1)	265	286
Proposed Sonesta Trips	27	28
Percentage of Increased Traffic (without Moonlit)	13.4%	14.8%
Percentage of Increased Traffic (with Moonlit Phase 1)	9.2%	8.9%

The new trips on Poplar Street turning onto or off Jefferson Avenue (US 40) was estimated to be approximately 27 vehicles in the AM peak hour and 28 vehicles in the PM peak hour. In the scenario without Moonlit Meadows Phase 1 traffic, the Sonesta project trips equate to less than 15% increase in traffic. With the completion of Moonlit Meadows Phase 1 traffic, the Sonesta project trips equate to less than 10% increase in traffic. CDOT requires an access permit when the side-street volume increases the permitted volume by 20% or more; therefore, an **access permit is not warranted**.

9.0 Conclusions

The Sonesta Townhomes project will consist of 64 single-family attached homes, with construction anticipated to be completed and occupied by the end of Year 2028. Primary access to the site will be provided via the existing connection to Harvest Drive. To project future background traffic volumes, consistent with other studies conducted in the area, an annual growth rate was applied and trips generated by the Main Street Apartments and Moonlit Meadows developments were incorporated into the future-year traffic forecasts (Year 2028 and Year 2045), in addition to background traffic growth. Two short-term (Year 2028) scenarios were analyzed:

- 1) Without the Moonlit Meadows project, representing baseline background growth.
- 2) With Phase 1 of the Moonlit Meadows project, incorporating its recommended improvements to Jefferson Avenue (US 40) and Poplar Street.

Long-term conditions were assessed for Year 2045, which includes full background growth and the completion of the Moonlit Meadows development.

The project is estimated to generate approximately 420 daily trips with 30 trips occurring in the AM peak hour and 33 trips occurring in the PM peak hour. **It was determined that the proposed roadway system can adequately accommodate the projected traffic volumes.** The results of this analysis indicate that the Sonesta Townhomes project will not cause significant degradation to intersection operations within the study area. Most intersections are expected to operate at acceptable LOS thresholds under both short-term (2028) and long-term (2045) conditions. However, localized operational issues—particularly near Hayden Valley Schools—are expected to persist and should be actively managed through operational coordination, geometric improvements, and continued monitoring. Additionally, the recommendations listed on the *Moonlit Meadows TIS* should be considered and periodically reviewed to ensure that they remain appropriate as traffic conditions evolve and long-term operations are reassessed. Based on the projected increase in volumes on Poplar Street south of Jefferson Avenue (US 40), CDOT Access Permit will not be required.

The following recommendations should be considered for implementation:

Background Conditions (Non-Project Related):

- **Jefferson Avenue and Poplar Street:** Signalize and add one eastbound left-turn lane and one westbound left-turn lane *[Year 2028 with Moonlit Meadow Phase 1]*. Consider eastbound and westbound right-turn lanes if land becomes available *[Year 2045]*.
- **Poplar Street at School Access:** If delays on the school access become a concern in the future, consider coordinating with Hayden Valley Schools to implement or strengthen an on-site drop-off loop and supervised loading/unloading. If traffic volumes grow substantially, conduct a feasibility study for a roundabout or a geometric reconfiguration that improves capacity and reduces delay while enhancing pedestrian safety *[Year 2045]*.

Project Related:

- **Access on Harvest Drive:** Construct one inbound lane and one outbound lane and side-street stop-control. Auxiliary lanes are not warranted.

Tables and Figures:

Table 1 – Peak Hour Intersection Level of Service Summary

Table 2 – Peak Hour Estimated 95th Percentile Queues

Table 3 – Trip Generation Summary

Table 4 – CDOT Access Permit Calculations [IN REPORT]

Figure 1 – Vicinity Map

Figure 2 – Conceptual Site Plan

Figure 3 – Year 2025 Existing Traffic Volumes

Figure 4 – Year 2028 Background Traffic Volumes

Figure 5 – Year 2028 Background Traffic Volumes (with Moonlit Meadows Project)

Figure 6 – Year 2045 Background Traffic Volumes (with Moonlit Meadows Project)

Figure 7 – Site Trip Distribution

Figure 8 – Site-Generated Traffic Volumes

Figure 9 – Year 2028 Background + Project Traffic Volumes

Figure 10 – Year 2028 Background + Project Traffic Volumes (with Moonlit Meadows Project)

Figure 11 – Year 2045 Background + Project Traffic Volumes (with Moonlit Meadows Project)

Table 1 - Peak Hour Intersection Level of Service Summary

Intersections and Lane Groups	Year 2025 Existing				Year 2028 Background (No Moonlit)				Year 2028 Background (No Moonlit) + Project				Year 2028 Background (w/ Moonlit)				Year 2028 Background (w/ Moonlit) + Project				Year 2045 Background (w/ Moonlit)				Year 2045 Background + Project			
	AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
STOP SIGN CONTROL																												
1. Jefferson Avenue (US 40) at Poplar Street	6	A	3	A	6	A	3	A	8	A	3	A																
Eastbound Left + Through + Right	8	A	9	A	8	A	9	A	8	A	9	A	Analyzed as Signal		Analyzed as Signal		Analyzed as Signal		Analyzed as Signal		Analyzed as Signal		Analyzed as Signal		Analyzed as Signal			
Westbound Left + Through + Right	9	A	8	A	9	A	8	A	9	A	8	A																
Northbound Left + Through + Right	24	C	15	B	28	D	16	C	35	D	17	C																
Southbound Left + Through + Right	23	C	18	C	26	D	20	C	29	D	20	C																
2. Poplar Street at Breeze Basin Boulevard	4	A	5	A	4	A	5	A	4	A	5	A	4	A	4	A	3	A	4	A	4	A	4	A	4	A	4	A
Eastbound Left + Through	15	B	12	B	15	C	13	B	16	C	13	B	19	C	16	C	21	C	16	C	34	D	34	D	37	E	37	E
Eastbound Right	10	A	9	A	10	A	9	A	10	A	10	A	10	B	10	B	10	B	10	B	11	B	14	B	11	B	15	B
Westbound Left + Through + Right	12	B	10	B	13	B	11	B	13	B	11	B	15	C	13	B	16	C	13	B	26	D	24	C	28	D	26	D
Northbound Left	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A	8	A	9	A	8	A	9	A
Northbound Through + Right	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A
Southbound Left + Through + Right	8	A	7	A	8	A	7	A	8	A	8	A	8	A	8	A	8	A	8	A	9	A	8	A	9	A	8	A
3. Poplar Street at School Access	5	A	2	A	5	A	2	A	5	A	1	A	5	A	1	A	5	A	1	A	11	B	1	A	13	B	1	A
Eastbound Left	14	B	11	B	14	B	11	B	15	B	11	B	19	C	13	B	20	C	13	B	69	F	24	C	80	F	26	D
Eastbound Right	9	A	9	A	9	A	9	A	9	A	10	A	10	A	10	B	10	A	10	B	10	B	13	B	10	B	13	B
Northbound Left + Through	8	A	0	A	8	A	0	A	8	A	0	A	8	A	0	A	8	A	0	A	8	A	9	A	8	A	9	A
Southbound Through + Right	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A
4. Poplar Street (CR 53) at Harvest Drive	2	A	1	A	2	A	1	A	3	A	2	A	3	A	2	A	4	A	3	A	4	A	3	A	6	A	3	A
Eastbound Left + Right	10	A	10	A	10	B	10	A	10	B	10	A	12	B	11	B	12	B	11	B	30	D	25	C	36	E	28	D
Northbound Left + Through	0	A	0	A	0	A	0	A	0	A	8	A	0	A	0	A	0	A	8	A	8	A	9	A	8	A	9	A
Southbound Through + Right	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A
5. Harvest Drive at Site Access	0	A	0	A	0	A	0	A	2	A	1	A	0	A	0	A	1	A	1	A	0	A	0	A	1	A	1	A
Eastbound Left + Through	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A
Westbound Through + Right	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A	0	A
Southbound Left + Right	9	A	9	A	9	A	9	A	9	A	9	A	9	A	10	A	9	A	10	A	10	A	10	A	10	A	10	B
SIGNAL CONTROL																												
1. Jefferson Avenue (US 40) at Poplar Street													16	B	12	B	17	B	12	B	34	C	18	B	36	D	19	B
Eastbound Left	Analyzed as Stop Controlled				Analyzed as Stop Controlled				9	A	14	B	9	A	14	B	11	B	13	B	11	B	13	B	11	B	13	B
Eastbound Through + Right									17	B	7	A	19	B	7	A	36	D	16	B	37	D	17	B				
Westbound Left									21	C	10	A	24	C	10	A	26	C	10	A	28	C	10	B				
Westbound Through + Right									8	A	13	B	8	A	13	B	13	B	16	B	13	B	16	B				
Northbound Left + Through + Right									17	B	15	B	17	B	15	B												
Northbound Left + Through																												
Northbound Right																												
Southbound Left + Through + Right									13	B	14	B	13	B	14	B	29	C	36	D	52	D	30	C	29	C	36	D

Table 2 - Peak Hour Estimated 95th Percentile Queues

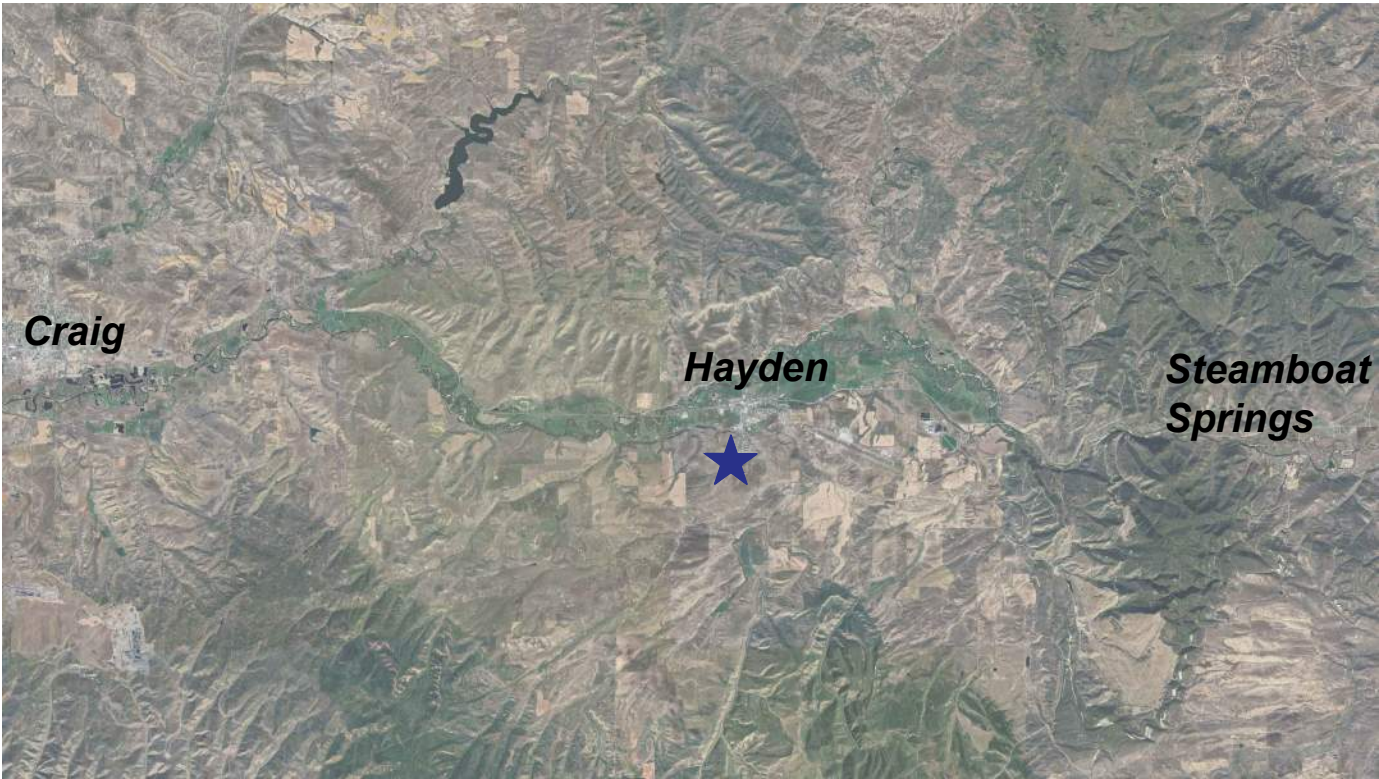
Intersections and Lane Groups	2025 Existing		2028 Background (No Moonlit)		2028 Background (No Moonlit) + Project		2028 Background (w/ Moonlit)		2028 Background (w/ Moonlit) + Project		2045 Background (w/ Moonlit)		2045 Background (w/ Moonlit) + Project		Max. Queue	Existing Storage
	95th% Queue		95th% Queue		95th% Queue		95th% Queue		95th% Queue		95th% Queue		95th% Queue			
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM		
1. Jefferson Avenue (US 40) at Poplar Street	Stop-Controlled		Stop-Controlled		Stop-Controlled		Signal		Signal		Signal		Signal			
Eastbound Left + Through + Right Eastbound Left Eastbound Through + Right Westbound Left + Through + Right Westbound Left Westbound Through + Right Northbound Left + Through + Right Northbound Left + Through Northbound Right Southbound Left + Through + Right	3'	3'	3'	3'	3'	3'									3'	-
							25'	10'	27'	10'	23'	11'	24'	11'	27'	-
							331'	56'	353'	57'	591'	191'	600'	201'	600'	-
	5'	5'	5'	5'	5'	8'									8'	-
							42'	46'	52'	51'	47'	111'	51'	118'	118'	-
							58'	182'	62'	183'	84'	379'	85'	382'	382'	-
	68'	15'	80'	18'	113'	23'	49'	27'	55'	29'					113'	-
											98'	80'	102'	82'	98'	-
											188'	21'	201'	20'	188'	-
	15'	15'	20'	15'	20'	18'	12'	21'	11'	21'	27'	49'	27'	49'	49'	-
2. Poplar Street at Breeze Basin Boulevard	Stop-Controlled		Stop-Controlled		Stop-Controlled		Stop-Controlled		Stop-Controlled		Stop-Controlled		Stop-Controlled			
Eastbound Left + Through	5'	3'	5'	5'	5'	5'	8'	5'	8'	5'	20'	20'	23'	23'	20'	-
Eastbound Right	10'	8'	10'	8'	10'	8'	10'	10'	10'	10'	10'	25'	10'	25'	25'	85'
Westbound Left + Through + Right	3'	3'	3'	3'	3'	3'	3'	3'	3'	3'	13'	13'	15'	15'	13'	-
Northbound Left	5'	5'	5'	5'	5'	5'	8'	5'	8'	5'	8'	8'	10'	10'	8'	50'
Northbound Through + Right	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	-
Southbound Left + Through + Right	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	-
3. Poplar Street at School Access	Stop-Controlled		Stop-Controlled		Stop-Controlled		Stop-Controlled		Stop-Controlled		Stop-Controlled		Stop-Controlled			
Eastbound Left	33'	5'	33'	5'	38'	5'	50'	8'	53'	8'	160'	20'	173'	23'	160'	60'
Eastbound Right	5'	0'	5'	0'	5'	0'	8'	0'	8'	0'	10'	3'	10'	3'	10'	60'
Northbound Left + Through	3'	0'	3'	0'	3'	0'	5'	0'	5'	0'	8'	0'	8'	0'	8'	-
Southbound Through + Right	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	-
4. Poplar Street (CR 53) at Harvest Drive (North)	Stop-Controlled		Stop-Controlled		Stop-Controlled		Stop-Controlled		Stop-Controlled		Stop-Controlled		Stop-Controlled			
Eastbound Left + Right	8'	3'	8'	3'	10'	5'	18'	13'	25'	15'	70'	43'	98'	58'	70'	-
Northbound Left + Through	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	-
Southbound Through + Right	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	-
5. Harvest Drive at Site Access	Stop-Controlled		Stop-Controlled		Stop-Controlled		Stop-Controlled		Stop-Controlled		Stop-Controlled		Stop-Controlled			
Eastbound Left + Through	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	-
Westbound Through + Right	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	0'	-
Southbound Left + Right	0'	0'	0'	0'	3'	3'	0'	0'	3'	3'	0'	0'	3'	3'	3'	-

Table 3 - Trip Generation Summary

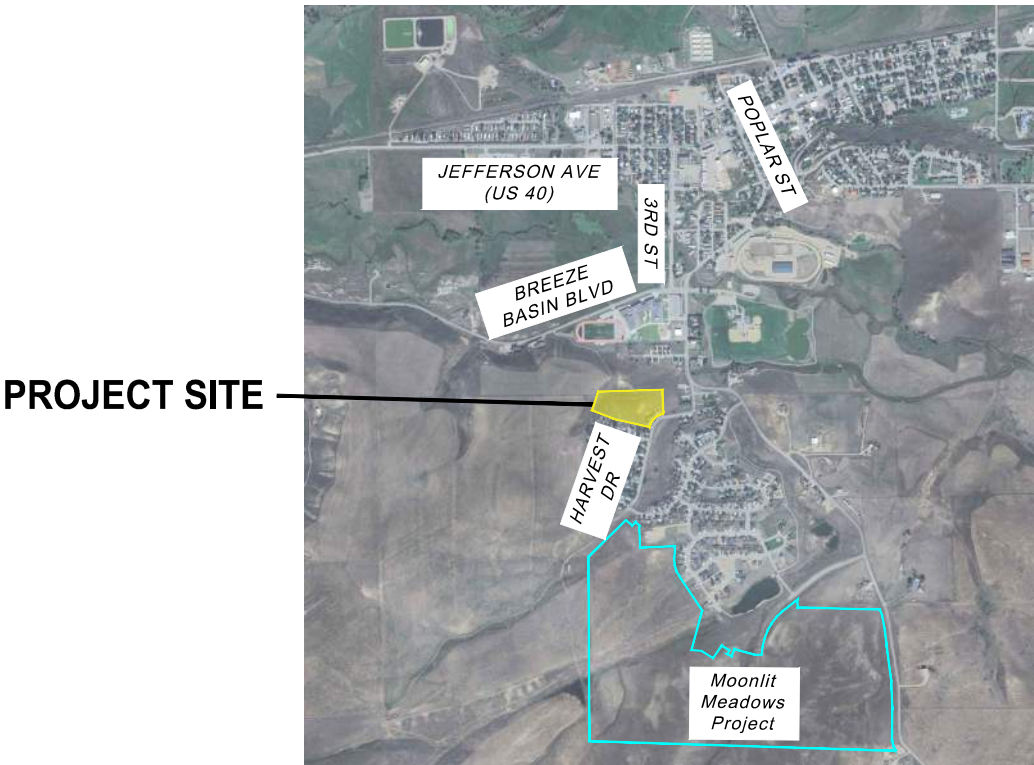
Land Use	Size	Unit	Average Daily Trips				AM Peak Hour Trips				PM Peak Hour Trips			
			Rate	Total	In	Out	Rate	Total	In	Out	Rate	Total	In	Out
ITE #215: Single-Family Attached Housing	64.0	DU	6.57	420	210	210	0.47	30	8	22	0.51	33	19	14

Source : ITE Trip Generation 12th Edition, 2025.

Area Map



Location within Hayden





Proposed Access
Existing Connection to Harvest Dr
Full Movement
Side-Street Stop Controlled

REFER TO LATEST SITE PLAN
 FOR EXACT DESIGN AND DETAILS

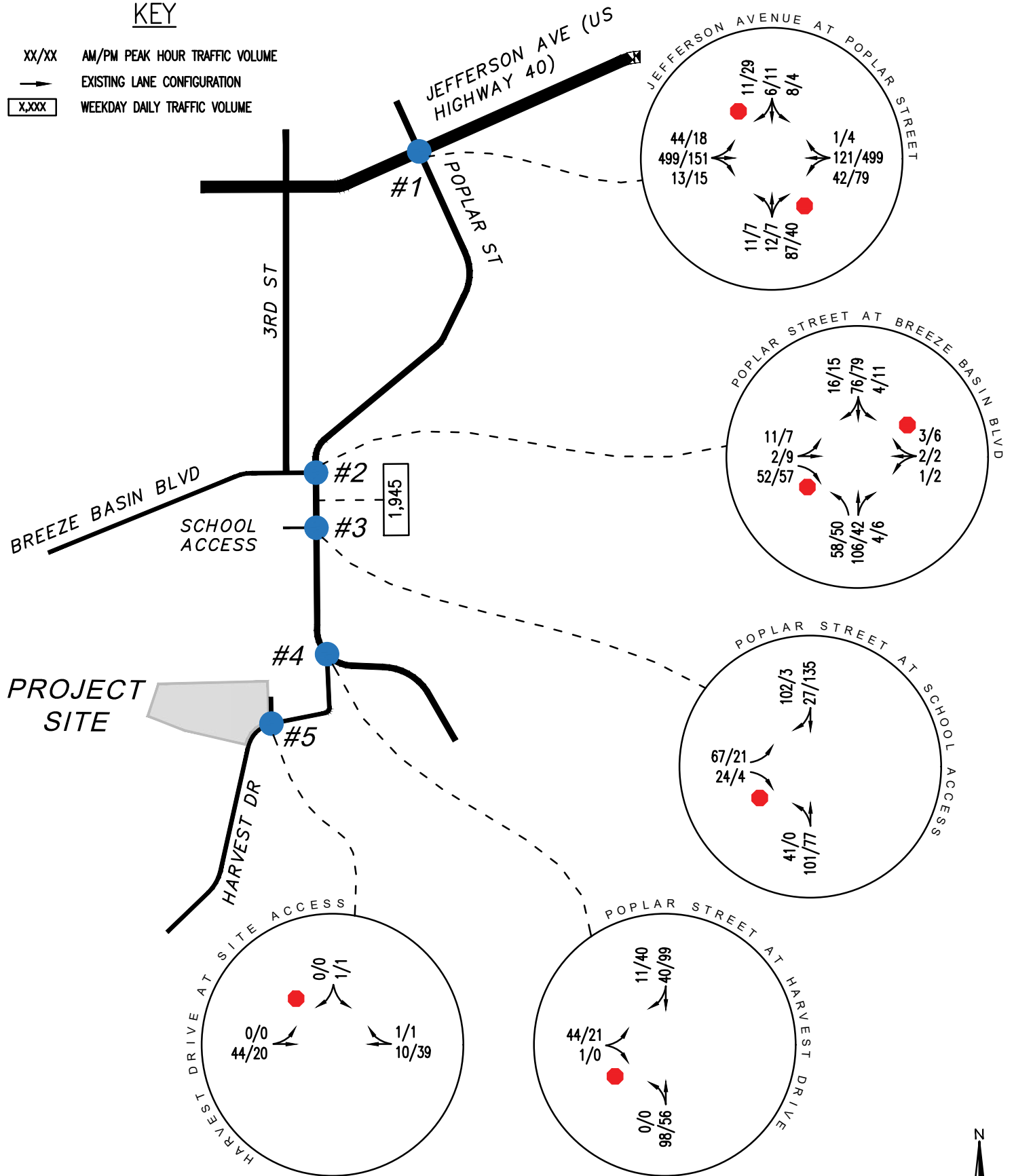


KEY

XX/XX AM/PM PEAK HOUR TRAFFIC VOLUME

EXISTING LANE CONFIGURATION

X,XXX WEEKDAY DAILY TRAFFIC VOLUME

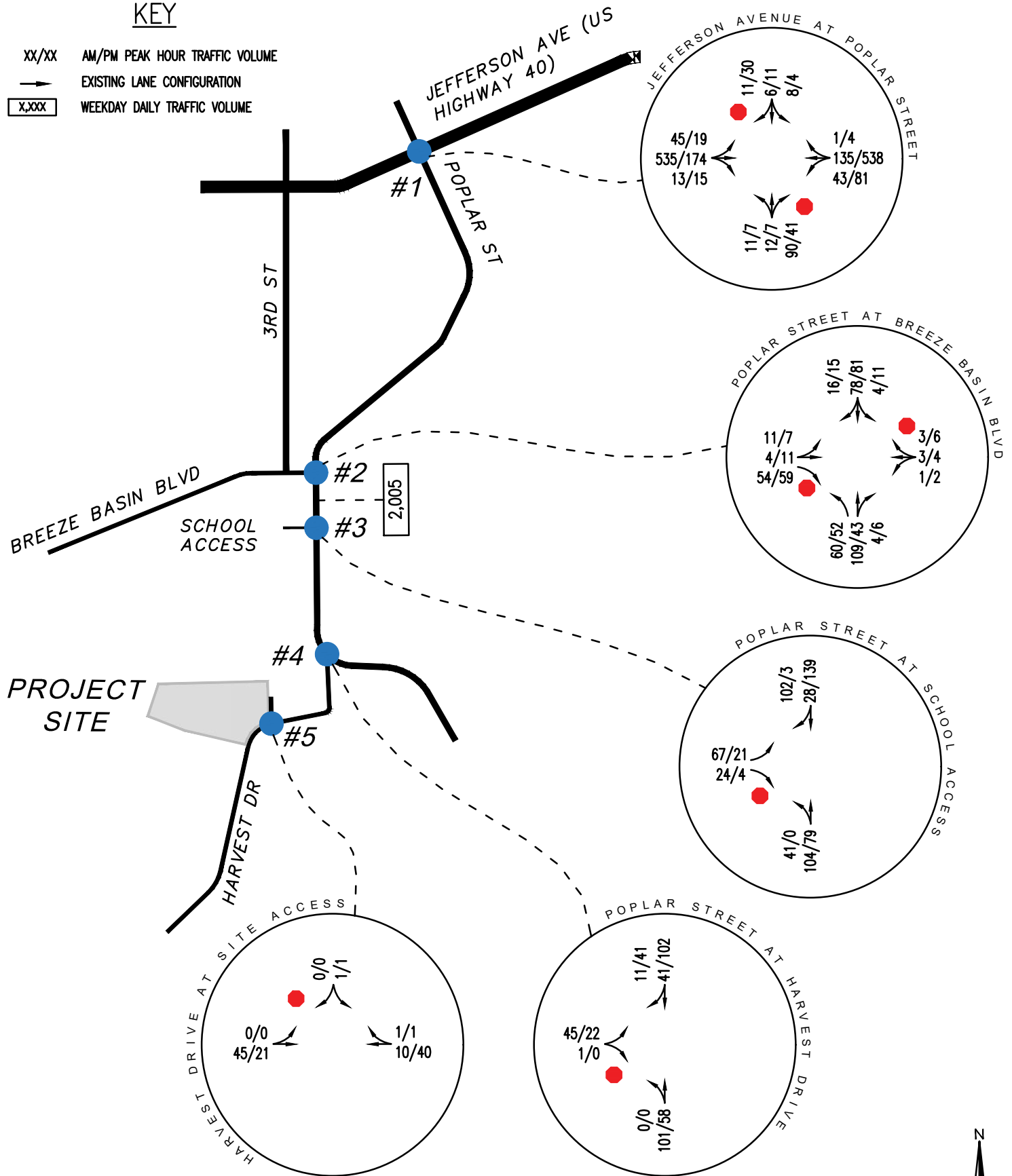


KEY

XX/XX AM/PM PEAK HOUR TRAFFIC VOLUME

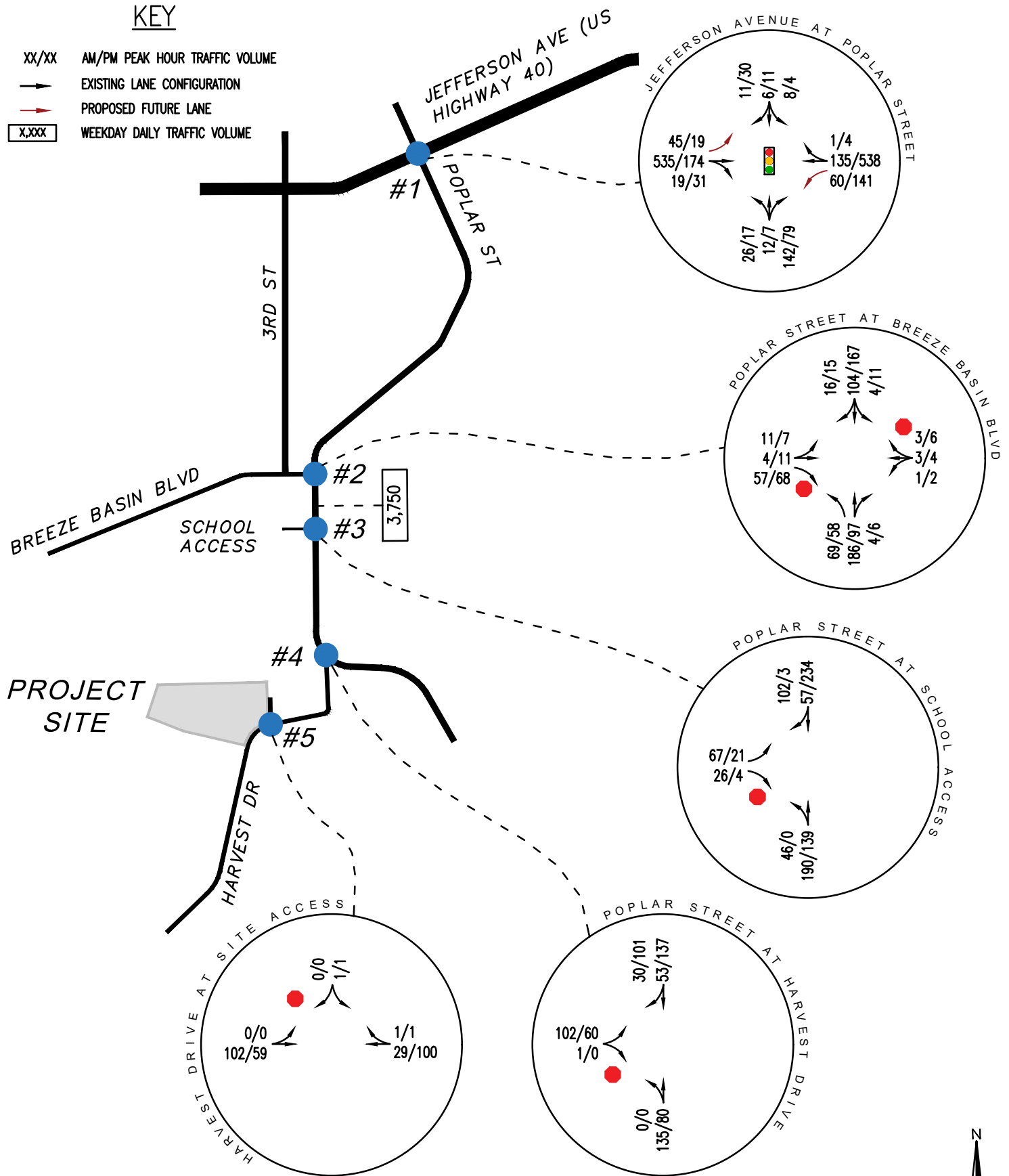
EXISTING LANE CONFIGURATION

X,XXX WEEKDAY DAILY TRAFFIC VOLUME



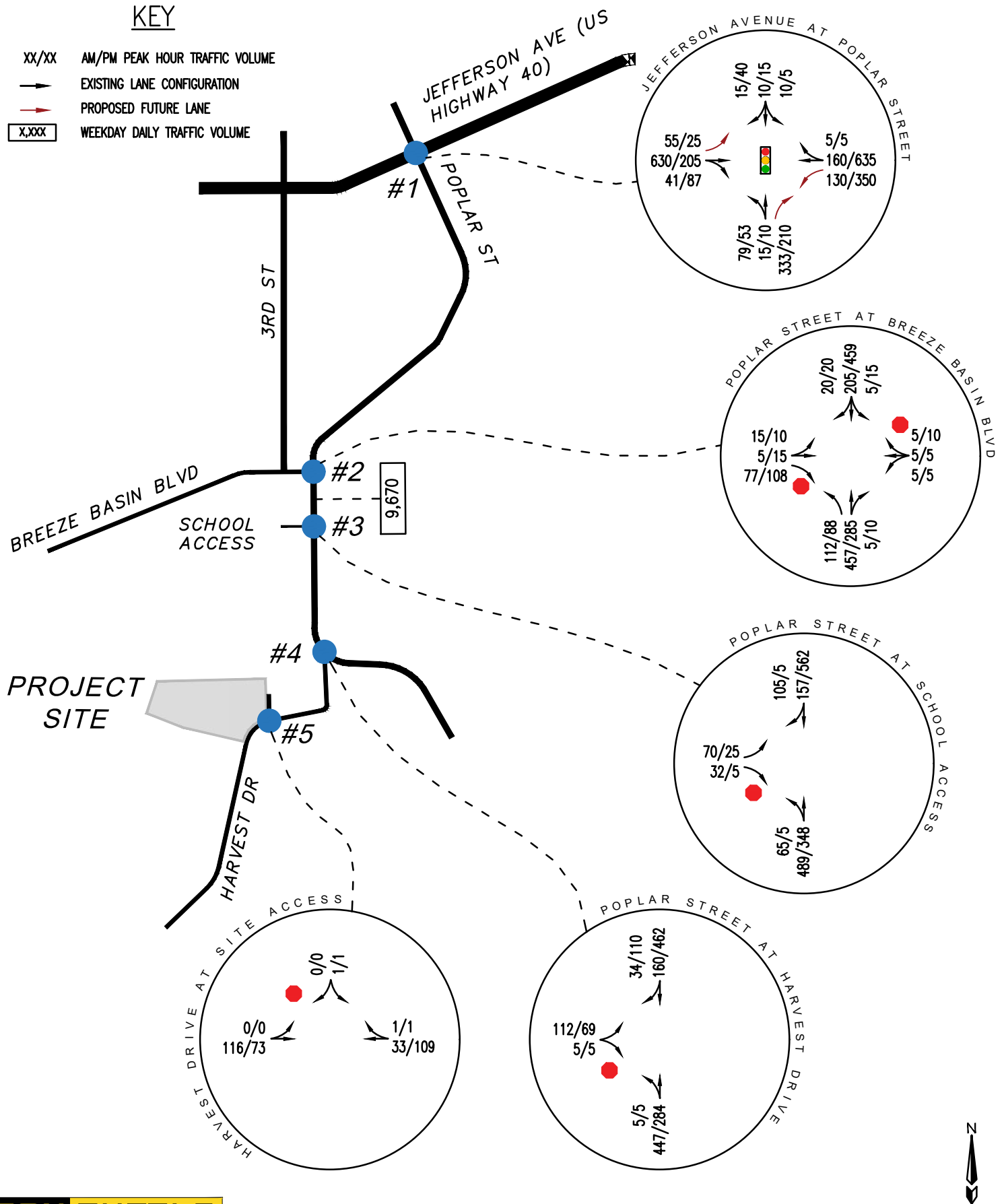
KEY

- XX/XX AM/PM PEAK HOUR TRAFFIC VOLUME
- EXISTING LANE CONFIGURATION
- PROPOSED FUTURE LANE
- X,XXX WEEKDAY DAILY TRAFFIC VOLUME



KEY

- XX/XX AM/PM PEAK HOUR TRAFFIC VOLUME
- EXISTING LANE CONFIGURATION
- PROPOSED FUTURE LANE
- X,XXX WEEKDAY DAILY TRAFFIC VOLUME



KEY

XX% [XX%] IN [OUT] SITE TRIP DISTRIBUTION

→ EXISTING LANE CONFIGURATION

→ PROPOSED FUTURE LANE

20%

To/From West
Via Jefferson Ave
(US Highway 40)

60%

To/From East
Via Jefferson Ave
(US Highway 40)

5%

To/From West
Via Breeze Basin
Blvd

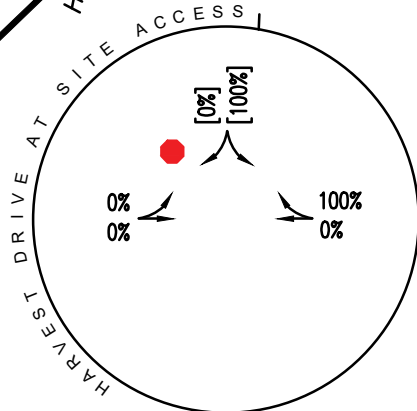
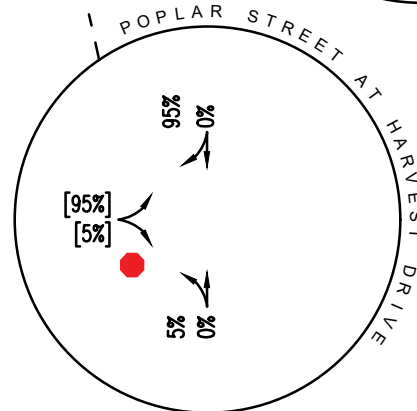
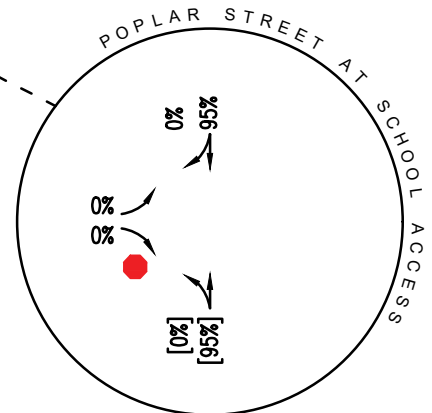
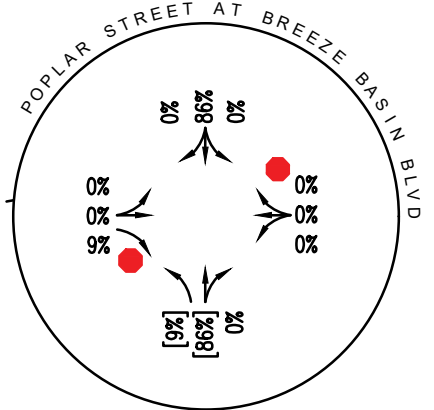
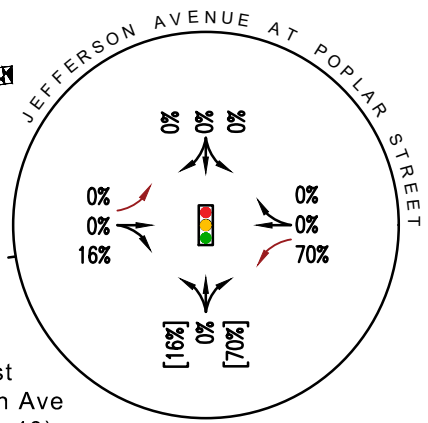
10%

To/From Town of
Hayden

**PROJECT
SITE**

5%

To/From South
Via CR 53

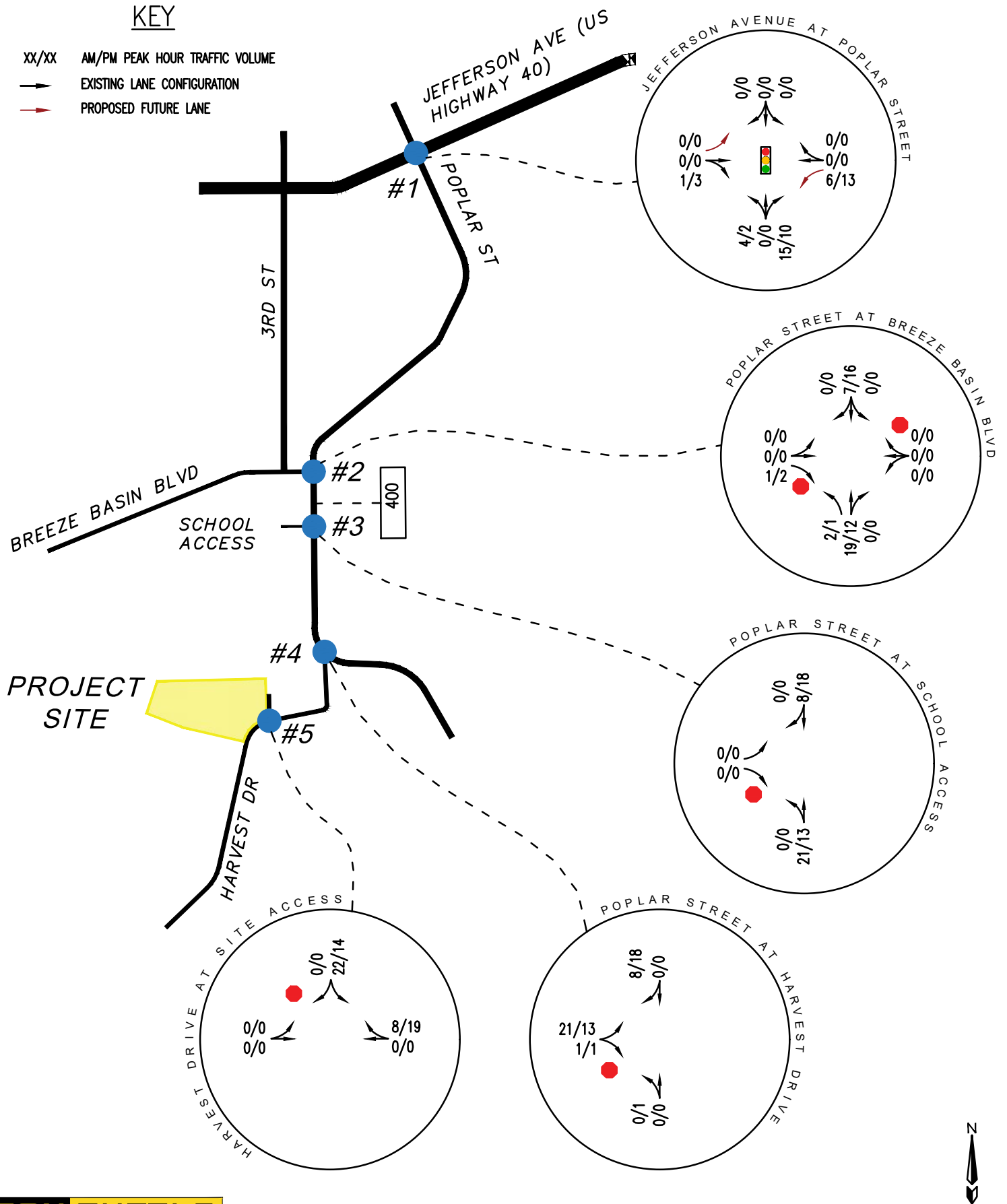


FOX TUTTLE
TRANSPORTATION GROUP

SONESTA TOWNHOMES TRAFFIC IMPACT STUDY - HAYDEN, CO
SITE TRIP DISTRIBUTION

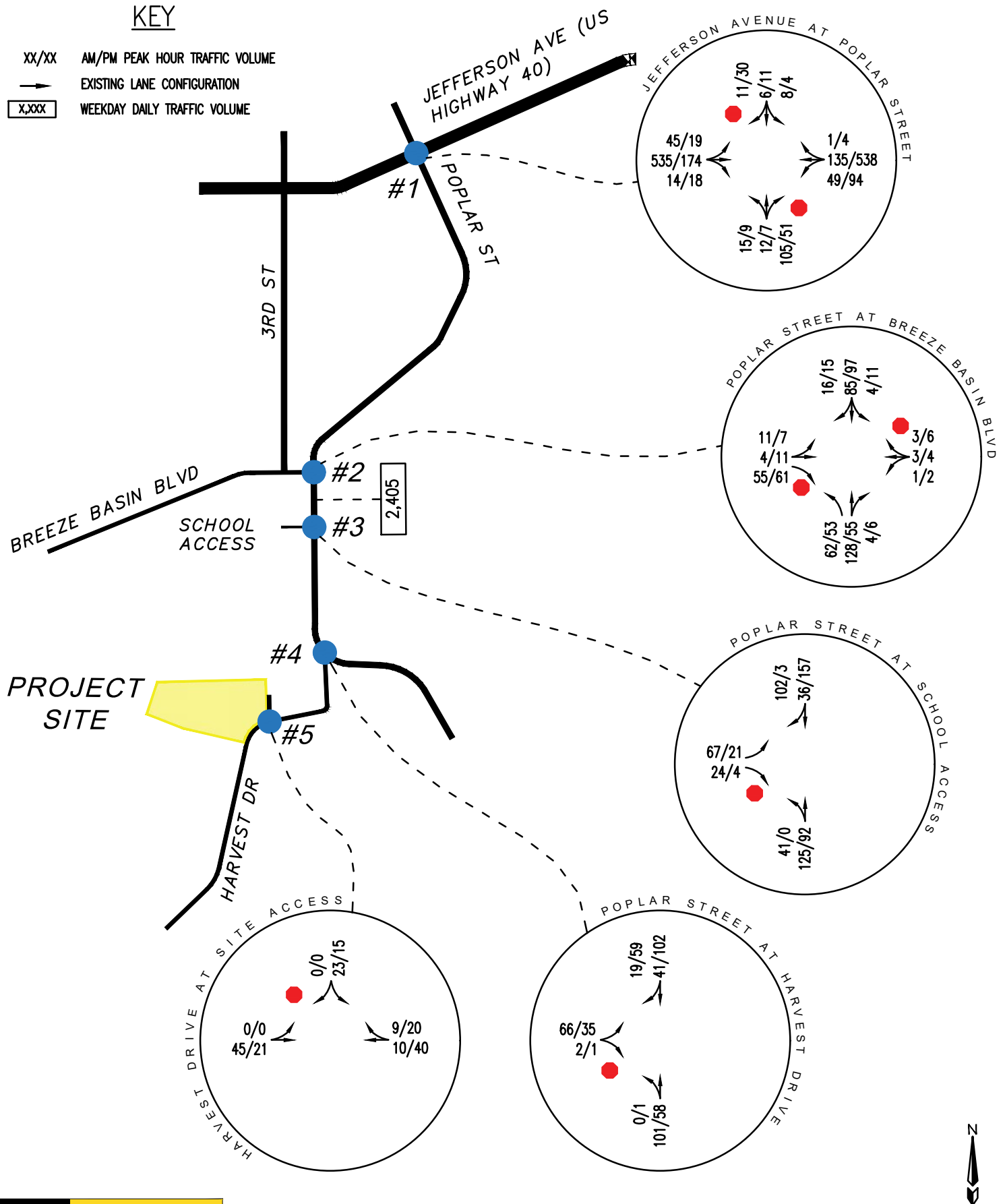
KEY

- XX/XX AM/PM PEAK HOUR TRAFFIC VOLUME
- EXISTING LANE CONFIGURATION
- PROPOSED FUTURE LANE



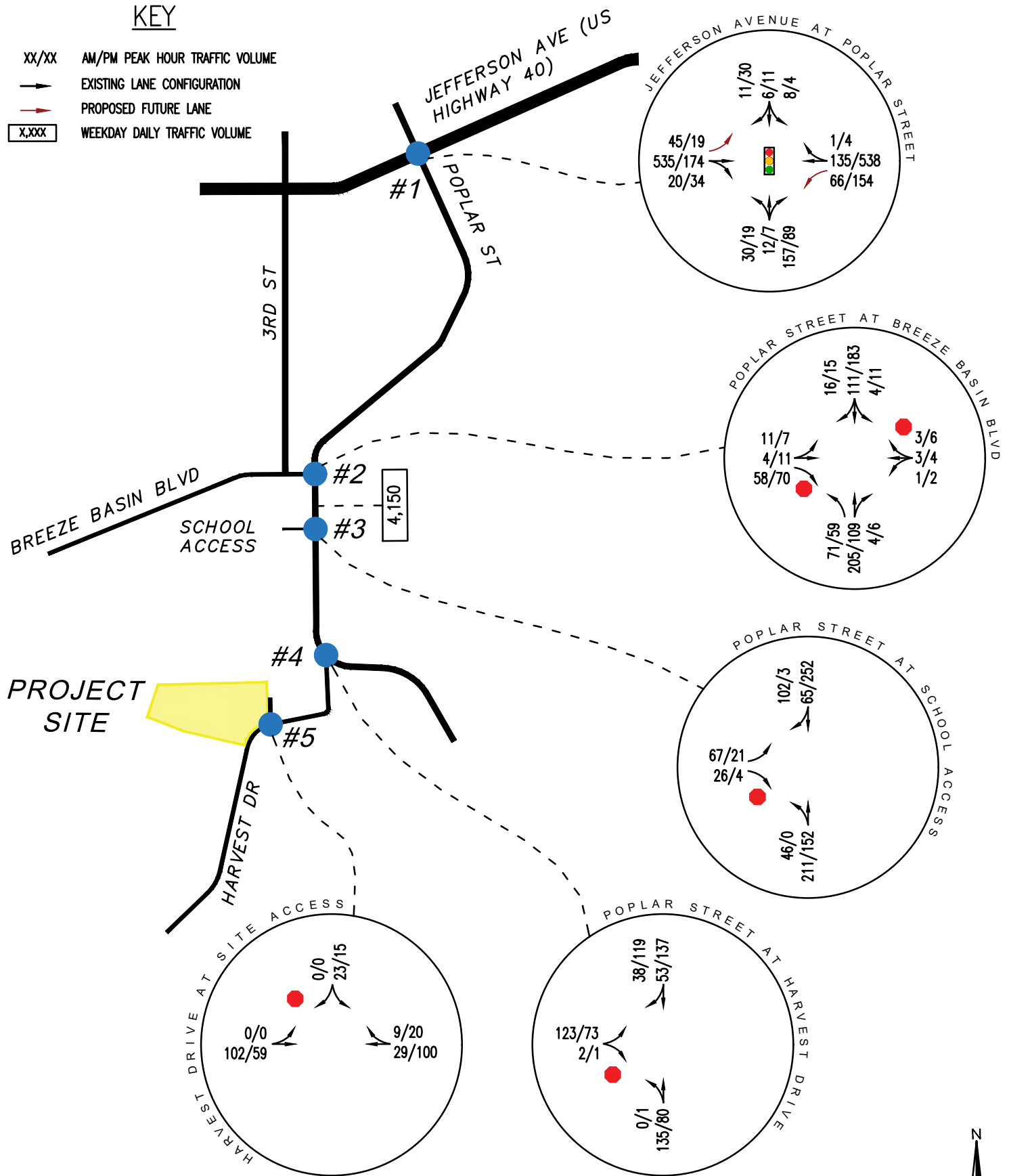
KEY

- XX/XX AM/PM PEAK HOUR TRAFFIC VOLUME
- EXISTING LANE CONFIGURATION
- X,XXX WEEKDAY DAILY TRAFFIC VOLUME



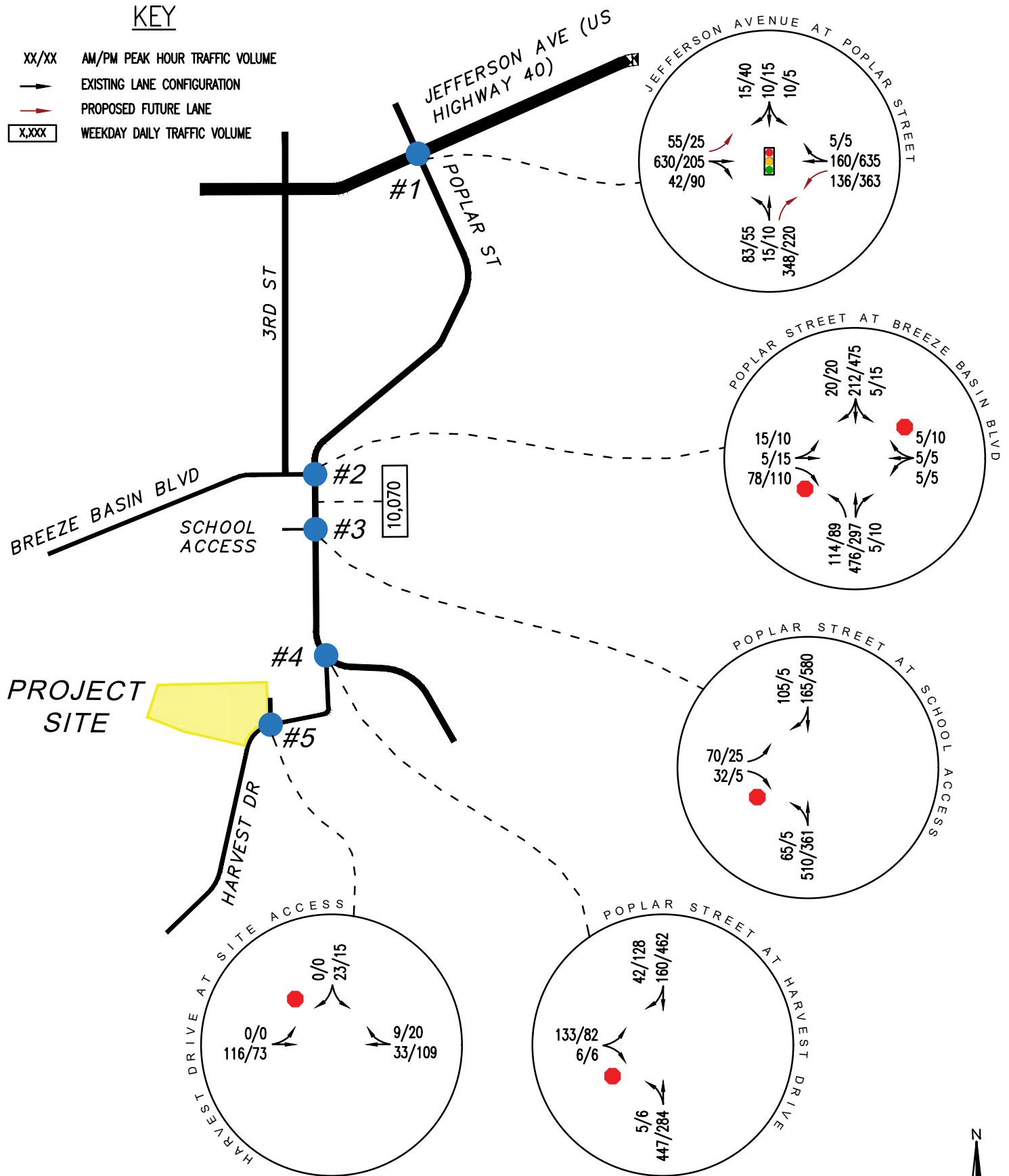
KEY

- XX/XX AM/PM PEAK HOUR TRAFFIC VOLUME
- EXISTING LANE CONFIGURATION
- PROPOSED FUTURE LANE
- X,XXX WEEKDAY DAILY TRAFFIC VOLUME



KEY

- XX/XX AM/PM PEAK HOUR TRAFFIC VOLUME
- EXISTING LANE CONFIGURATION
- PROPOSED FUTURE LANE
- X,XXX WEEKDAY DAILY TRAFFIC VOLUME



Appendix:

Level of Service Definitions

Existing Traffic Data

Intersection Capacity Worksheets

Signal Warrant Analysis

Level of Service Definitions

LEVEL OF SERVICE DEFINITIONS

In rating roadway and intersection operating conditions with existing or future traffic volumes, “Levels of Service” (LOS) A through F are used, with LOS A indicating very good operation and LOS F indicating poor operation. Levels of service at signalized and unsignalized intersections are closely associated with vehicle delays experienced in seconds per vehicle. More complete level of service definitions and delay data for signal and stop sign controlled intersections are contained in the following table for reference.

Level of Service Rating	Delay in seconds per vehicle (a)		Definition
	Signalized	Unsignalized	
A	0.0 to 10.0	0.0 to 10.0	Low vehicular traffic volumes; primarily free flow operations. Density is low and vehicles can freely maneuver within the traffic stream. Drivers are able to maintain their desired speeds with little or no delay.
B	10.1 to 20.0	10.1 to 15.0	Stable vehicular traffic volume flow with potential for some restriction of operating speeds due to traffic conditions. Vehicle maneuvering is only slightly restricted. The stopped delays are not bothersome and drivers are not subject to appreciable tension.
C	20.1 to 35.0	15.1 to 25.0	Stable traffic operations, however the ability for vehicles to maneuver is more restricted by the increase in traffic volumes. Relatively satisfactory operating speeds prevail, but adverse signal coordination or longer vehicle queues cause delays along the corridor.
D	35.1 to 55.0	25.1 to 35.0	Approaching unstable vehicular traffic flow where small increases in volume could cause substantial delays. Most drivers are restricted in ability to maneuver and selection of travel speeds due to congestion. Driver comfort and convenience are low, but tolerable.
E	55.1 to 80.0	35.1 to 50.0	Traffic operations characterized by significant approach delays and average travel speeds of one-half to one-third the free flow speed. Vehicular flow is unstable and there is potential for stoppages of brief duration. High signal density, extensive vehicle queuing, or corridor signal progression/timing are the typical causes of vehicle delays at signalized corridors.
F	> 80.0	> 50.0	Forced vehicular traffic flow and operations with high approach delays at critical intersections. Vehicle speeds are reduced substantially, and stoppages may occur for short or long periods of time because of downstream congestion.

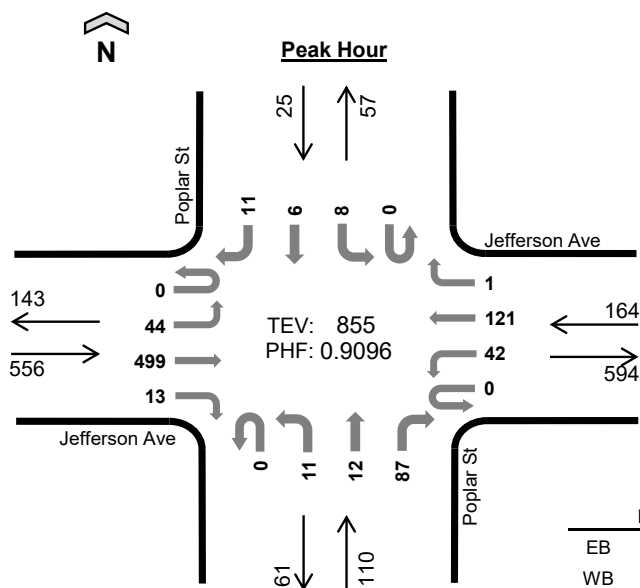
(a) Delay ranges based on Highway Capacity Manual (6th Edition, 2016) criteria.



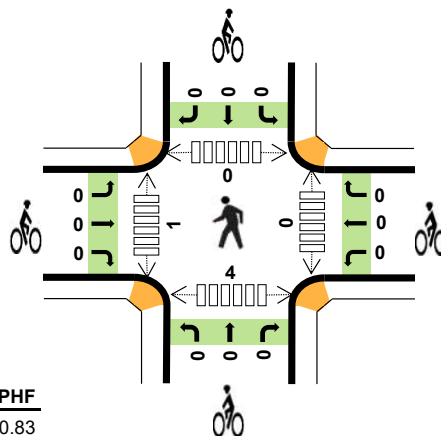
Existing Traffic Data



Poplar St Jefferson Ave



Date: 8/26/2025
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:00 AM to 8:00 AM



	HV%	PHF
EB	6%	0.83
WB	12%	0.77
NB	7%	0.59
SB	0%	0.57
TOTAL	7%	0.91

Peak Hour Count Summaries

Peak Hour Interval Start		Jefferson Ave				Jefferson Ave				Poplar St				Poplar St				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	10	155	2	0	8	25	0	0	1	2	15	0	1	0	2	221	0
7:15 AM		0	9	151	3	0	7	22	1	0	1	5	25	0	6	1	4	235	0
7:30 AM		0	14	117	3	0	8	40	0	0	1	2	11	0	0	2	2	200	0
7:45 AM		0	11	76	5	0	19	34	0	0	8	3	36	0	1	3	3	199	855
Pk Hr	All	0	44	499	13	0	42	121	1	0	11	12	87	0	8	6	11	855	
	HV	0	4	27	1	0	5	14	1	0	1	1	6	0	0	0	0	60	
	HV%	-	9%	5%	8%	-	12%	12%	100%	-	9%	8%	7%	-	0%	0%	0%	7%	

Note: For complete count summary (all intervals), see following pages.

** Heavy Vehicle Classifications include FHWA Classes 4-13.

** Count Summaries include heavy vehicles, but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	10	5	2	0	17	0	0	0	0	0	0	0	0	3	3
7:15 AM	9	2	2	0	13	0	0	0	0	0	0	0	0	1	1
7:30 AM	10	8	2	0	20	0	0	0	0	0	0	1	0	0	1
7:45 AM	3	5	2	0	10	0	0	0	0	0	0	0	0	0	0
Peak Hour	32	20	8	0	60	0	0	0	0	0	0	1	0	4	5

Count Summaries - All Vehicles

Interval Start		Jefferson Ave				Jefferson Ave				Poplar St				Poplar St				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	10	155	2	0	8	25	0	0	1	2	15	0	1	0	2	221	0
7:15 AM		0	9	151	3	0	7	22	1	0	1	5	25	0	6	1	4	235	0
7:30 AM		0	14	117	3	0	8	40	0	0	1	2	11	0	0	2	2	200	0
7:45 AM		0	11	76	5	0	19	34	0	0	8	3	36	0	1	3	3	199	855
8:00 AM		0	14	67	4	0	7	29	1	0	1	4	16	0	1	3	6	153	787
8:15 AM		0	14	92	2	0	5	37	1	0	4	3	13	0	5	4	1	181	733
8:30 AM		0	9	71	3	0	4	35	0	0	1	0	12	0	4	3	2	144	677
8:45 AM		0	4	58	5	0	11	33	1	0	5	1	11	0	0	1	6	136	614
Count Total		0	85	787	27	0	69	255	4	0	22	20	139	0	18	17	26	1,469	
Pk Hr	All	0	44	499	13	0	42	121	1	0	11	12	87	0	8	6	11	855	
	HV	0	4	27	1	0	5	14	1	0	1	1	6	0	0	0	0	60	
	HV%	-	9%	5%	8%	-	12%	12%	100%	-	9%	8%	7%	-	0%	0%	0%	7%	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	10	5	2	0	17	0	0	0	0	0	0	0	0	3	3
7:15 AM	9	2	2	0	13	0	0	0	0	0	0	0	0	1	1
7:30 AM	10	8	2	0	20	0	0	0	0	0	0	1	0	0	1
7:45 AM	3	5	2	0	10	0	0	0	0	0	0	0	0	0	0
8:00 AM	7	6	0	0	13	0	0	0	0	0	0	0	0	1	1
8:15 AM	5	4	1	0	10	0	0	0	0	0	0	0	0	2	2
8:30 AM	6	6	3	2	17	1	0	0	0	1	0	0	1	4	5
8:45 AM	7	8	2	0	17	0	0	0	0	0	0	0	0	0	0
Count Total	57	44	14	2	117	1	0	0	0	1	0	1	1	11	13
Peak Hour	32	20	8	0	60	0	0	0	0	0	0	1	0	4	5

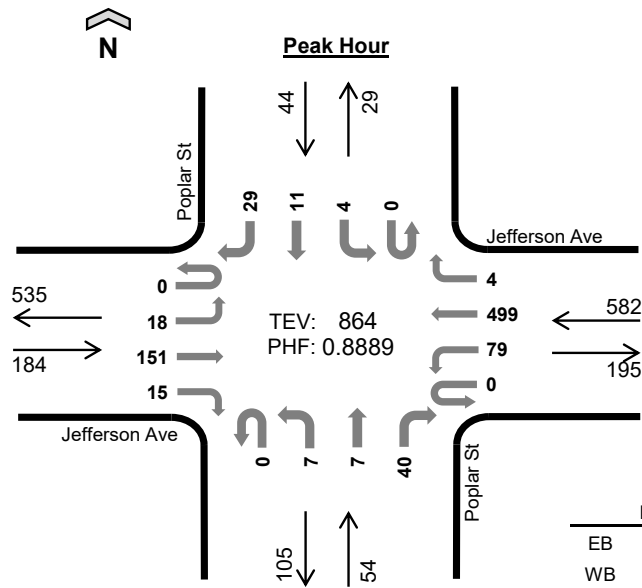
Count Summaries - Heavy Vehicles

Interval Start	Jefferson Ave				Jefferson Ave				Poplar St				Poplar St				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	1	9	0	0	1	4	0	0	0	0	2	0	0	0	0	17	0
7:15 AM	0	1	7	1	0	0	1	1	0	0	0	2	0	0	0	0	13	0
7:30 AM	0	1	9	0	0	2	6	0	0	1	1	0	0	0	0	0	20	0
7:45 AM	0	1	2	0	0	2	3	0	0	0	0	2	0	0	0	0	10	60
8:00 AM	0	0	7	0	0	0	6	0	0	0	0	0	0	0	0	0	13	56
8:15 AM	0	1	3	1	0	1	3	0	0	0	1	0	0	0	0	0	10	53
8:30 AM	0	1	5	0	0	1	5	0	0	0	0	3	0	0	2	0	17	50
8:45 AM	0	1	6	0	0	0	7	1	0	0	1	1	0	0	0	0	17	57
Count Total	0	7	48	2	0	7	35	2	0	1	3	10	0	0	2	0	117	
Pk Hr Heavy	0	4	27	1	0	5	14	1	0	1	1	6	0	0	0	0	60	

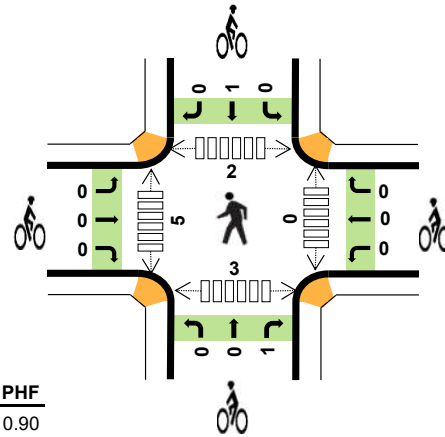
Count Summaries - Bikes

Interval Start	Jefferson Ave				Jefferson Ave				Poplar St				Poplar St				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Pk Hr Bike	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Poplar St Jefferson Ave



Date: 8/26/2025
Count Period: 2:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM



	HV%	PHF
EB	6%	0.90
WB	4%	0.85
NB	7%	0.75
SB	5%	0.85
TOTAL	5%	0.89

Peak Hour Count Summaries

Peak Hour Interval Start	Jefferson Ave				Jefferson Ave				Poplar St				Poplar St				15-min Total	Rolling Hour Total	
	Eastbound				Westbound				Northbound				Southbound						
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
5:00 PM	0	5	38	1	0	14	121	1	0	2	2	7	0	1	1	10	203	0	
5:15 PM	0	6	38	5	0	21	121	2	0	1	1	10	0	2	3	7	217	0	
5:30 PM	0	4	40	7	0	24	147	1	0	2	1	10	0	0	1	6	243	0	
5:45 PM	0	3	35	2	0	20	110	0	0	2	3	13	0	1	6	6	201	864	
Pk Hr	All	0	18	151	15	0	79	499	4	0	7	7	40	0	4	11	29	864	
	HV	0	1	9	1	0	4	21	1	0	0	1	3	0	1	1	0	43	
	HV%	-	6%	6%	7%	-	5%	4%	25%	-	0%	14%	8%	-	25%	9%	0%	5%	

Note: For complete count summary (all intervals), see following pages.

** Heavy Vehicle Classifications include FHWA Classes 4-13.

** Count Summaries include heavy vehicles, but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
5:00 PM	1	6	1	0	8	0	0	1	0	1	0	0	0	0	0
5:15 PM	4	10	0	0	14	0	0	0	0	0	0	2	1	0	3
5:30 PM	3	9	2	0	14	0	0	0	1	1	0	2	0	0	2
5:45 PM	3	1	1	2	7	0	0	0	0	0	0	1	1	3	5
Peak Hour	11	26	4	2	43	0	0	1	1	2	0	5	2	3	10

Count Summaries - All Vehicles

Interval Start	Jefferson Ave				Jefferson Ave				Poplar St				Poplar St				15-min Total	Rolling Hour Total	
	Eastbound				Westbound				Northbound				Southbound						
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
2:00 PM	0	2	44	5	0	6	47	0	0	3	7	6	0	1	3	2	126	0	
2:15 PM	0	1	40	1	0	8	58	2	0	3	6	11	0	2	0	9	141	0	
2:30 PM	0	3	46	3	0	10	53	0	0	4	1	8	0	0	0	5	133	0	
2:45 PM	0	2	42	2	0	8	67	0	0	3	1	7	0	1	4	5	142	542	
3:00 PM	0	3	42	3	0	11	68	0	0	3	2	5	0	0	2	4	143	559	
3:15 PM	0	3	37	7	0	14	70	0	0	6	1	9	0	2	2	5	156	574	
3:30 PM	0	1	38	12	0	13	88	1	0	4	3	6	0	0	2	3	171	612	
3:45 PM	0	4	39	2	0	18	83	1	0	5	3	18	0	0	3	9	185	655	
4:00 PM	0	2	39	9	0	17	91	2	0	6	3	12	0	0	0	7	188	700	
4:15 PM	0	3	45	4	0	15	114	0	0	3	3	11	0	1	2	6	207	751	
4:30 PM	0	5	37	3	0	18	108	0	0	5	2	8	0	3	4	4	197	777	
4:45 PM	0	4	32	7	0	13	120	3	0	4	1	1	0	1	2	9	197	789	
5:00 PM	0	5	38	1	0	14	121	1	0	2	2	7	0	1	1	10	203	804	
5:15 PM	0	6	38	5	0	21	121	2	0	1	1	10	0	2	3	7	217	814	
5:30 PM	0	4	40	7	0	24	147	1	0	2	1	10	0	0	1	6	243	860	
5:45 PM	0	3	35	2	0	20	110	0	0	2	3	13	0	1	6	6	201	864	
Count Total	0	51	632	73	0	230	1,466	13	0	56	40	142	0	15	35	97	2,850		
Pk Hr	All	0	18	151	15	0	79	499	4	0	7	7	40	0	4	11	29	864	
	HV	0	1	9	1	0	4	21	1	0	0	1	3	0	1	1	0	43	
	HV%	-	6%	6%	7%	-	5%	4%	25%	-	0%	14%	8%	-	25%	9%	0%	5%	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
2:00 PM	7	4	0	0	11	0	0	0	0	0	0	0	0	0	0
2:15 PM	1	7	3	1	12	0	0	0	0	0	0	0	0	0	0
2:30 PM	2	4	0	0	6	0	0	0	0	0	0	0	1	0	1
2:45 PM	4	9	0	0	13	0	0	0	0	0	0	0	0	0	0
3:00 PM	3	5	1	0	9	0	0	0	0	0	0	0	0	0	0
3:15 PM	4	10	1	0	15	1	1	0	0	2	0	0	1	0	1
3:30 PM	3	8	1	0	12	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	8	1	2	11	0	0	0	0	0	0	0	0	0	0
4:00 PM	4	11	1	1	17	0	0	0	0	0	0	0	0	0	0
4:15 PM	5	7	0	0	12	0	0	0	0	0	0	0	0	0	0
4:30 PM	3	8	0	0	11	0	0	0	0	0	0	0	0	2	2
4:45 PM	3	9	1	1	14	0	0	0	0	0	0	0	0	0	0
5:00 PM	1	6	1	0	8	0	0	1	0	1	0	0	0	0	0
5:15 PM	4	10	0	0	14	0	0	0	0	0	0	2	1	0	3
5:30 PM	3	9	2	0	14	0	0	0	1	1	0	2	0	0	2
5:45 PM	3	1	1	2	7	0	0	0	0	0	0	1	1	3	5
Count Total	50	116	13	7	186	1	1	1	1	4	0	5	4	5	14
Peak Hour	11	26	4	2	43	0	0	1	1	2	0	5	2	3	10

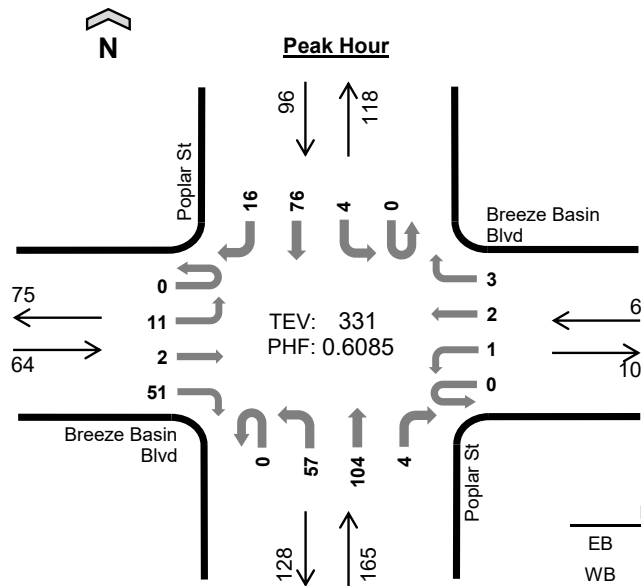
Count Summaries - Heavy Vehicles

Interval Start	Jefferson Ave				Jefferson Ave				Poplar St				Poplar St				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
2:00 PM	0	0	7	0	0	2	2	0	0	0	0	0	0	0	0	0	11	0
2:15 PM	0	0	1	0	0	0	7	0	0	1	1	1	0	1	0	0	12	0
2:30 PM	0	0	2	0	0	1	3	0	0	0	0	0	0	0	0	0	6	0
2:45 PM	0	0	4	0	0	1	8	0	0	0	0	0	0	0	0	0	13	42
3:00 PM	0	0	3	0	0	0	5	0	0	0	0	1	0	0	0	0	9	40
3:15 PM	0	0	3	1	0	2	8	0	0	1	0	0	0	0	0	0	15	43
3:30 PM	0	0	3	0	0	0	7	1	0	0	1	0	0	0	0	0	12	49
3:45 PM	0	0	0	0	0	1	7	0	0	0	0	1	0	0	0	2	11	47
4:00 PM	0	0	3	1	0	2	8	1	0	1	0	0	0	0	0	1	17	55
4:15 PM	0	0	5	0	0	0	7	0	0	0	0	0	0	0	0	0	12	52
4:30 PM	0	0	3	0	0	1	7	0	0	0	0	0	0	0	0	0	11	51
4:45 PM	0	0	2	1	0	0	9	0	0	1	0	0	0	0	0	1	14	54
5:00 PM	0	0	1	0	0	1	5	0	0	0	0	1	0	0	0	0	8	45
5:15 PM	0	1	3	0	0	3	7	0	0	0	0	0	0	0	0	0	14	47
5:30 PM	0	0	3	0	0	0	8	1	0	0	0	2	0	0	0	0	14	50
5:45 PM	0	0	2	1	0	0	1	0	0	0	1	0	0	1	1	0	7	43
Count Total	0	1	45	4	0	14	99	3	0	4	3	6	0	2	1	4	186	
Pk Hr Heavy	0	1	9	1	0	4	21	1	0	0	1	3	0	1	1	0	43	

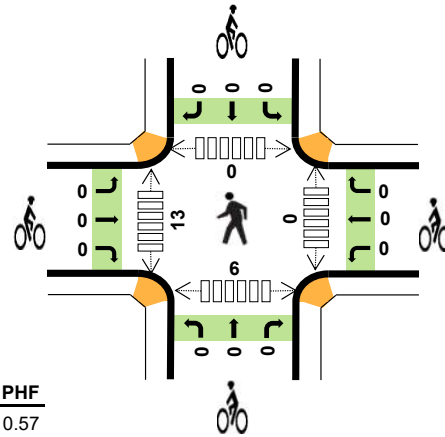
Count Summaries - Bikes

Interval Start	Jefferson Ave				Jefferson Ave				Poplar St				Poplar St				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	2
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Count Total	0	0	1	0	0	0	1	0	0	0	0	1	0	0	1	0	4	
Pk Hr Bike	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	

Poplar St Breeze Basin Blvd



Date: 8/26/2025
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:15 AM to 8:15 AM



	HV%	PHF
EB	9%	0.57
WB	17%	0.50
NB	2%	0.59
SB	4%	0.60
TOTAL	5%	0.61

Peak Hour Count Summaries

Peak Hour Interval Start		Breeze Basin Blvd				Breeze Basin Blvd				Poplar St				Poplar St				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:15 AM		0	2	1	5	0	0	1	0	0	8	25	0	0	0	13	6	61	0
7:30 AM		0	3	1	24	0	0	0	1	0	14	16	1	0	0	22	3	85	0
7:45 AM		0	6	0	19	0	0	0	1	0	22	47	1	0	3	35	2	136	0
8:00 AM		0	0	0	3	0	1	1	1	0	13	16	2	0	1	6	5	49	331
Pk Hr	All	0	11	2	51	0	1	2	3	0	57	104	4	0	4	76	16	331	
	HV	0	4	1	1	0	0	1	0	0	2	2	0	0	0	2	2	15	
	HV%	-	36%	50%	2%	-	0%	50%	0%	-	4%	2%	0%	-	0%	3%	13%	5%	

Note: For complete count summary (all intervals), see following pages.

** Heavy Vehicle Classifications include FHWA Classes 4-13.

** Count Summaries include heavy vehicles, but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:15 AM	0	0	1	1	2	0	0	0	0	0	0	0	0	1	1
7:30 AM	4	0	2	1	7	0	0	0	0	0	0	7	0	0	7
7:45 AM	2	0	1	2	5	0	0	0	0	0	0	4	0	2	6
8:00 AM	0	1	0	0	1	0	0	0	0	0	0	2	0	3	5
Peak Hour	6	1	4	4	15	0	0	0	0	0	0	13	0	6	19

Count Summaries - All Vehicles

Interval Start		Breeze Basin Blvd				Breeze Basin Blvd				Poplar St				Poplar St				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	1	1	6	0	0	0	0	0	6	18	0	0	0	11	0	43	0
7:15 AM		0	2	1	5	0	0	1	0	0	8	25	0	0	0	13	6	61	0
7:30 AM		0	3	1	24	0	0	0	1	0	14	16	1	0	0	22	3	85	0
7:45 AM		0	6	0	19	0	0	0	1	0	22	47	1	0	3	35	2	136	325
8:00 AM		0	0	0	3	0	1	1	1	0	13	16	2	0	1	6	5	49	331
8:15 AM		0	2	0	4	0	0	1	1	0	9	15	0	0	1	4	1	38	308
8:30 AM		0	4	0	6	0	1	0	0	0	5	6	0	0	3	9	1	35	258
8:45 AM		0	1	1	2	0	2	0	1	0	5	14	0	0	2	16	2	46	168
Count Total		0	19	4	69	0	4	3	5	0	82	157	4	0	10	116	20	493	
Pk Hr	All	0	11	2	51	0	1	2	3	0	57	104	4	0	4	76	16	331	
	HV	0	4	1	1	0	0	1	0	0	2	2	0	0	0	2	2	15	
	HV%	-	36%	50%	2%	-	0%	50%	0%	-	4%	2%	0%	-	0%	3%	13%	5%	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	1	2	0	0	0	0	0	0	0	0	1	1
7:30 AM	4	0	2	1	7	0	0	0	0	0	0	7	0	0	7
7:45 AM	2	0	1	2	5	0	0	0	0	0	0	4	0	2	6
8:00 AM	0	1	0	0	1	0	0	0	0	0	0	2	0	3	5
8:15 AM	1	0	1	0	2	0	0	0	0	0	0	0	0	2	2
8:30 AM	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	1	2	3	0	0	1	0	1	0	0	0	0	0
Count Total	10	1	6	7	24	0	0	1	0	1	0	13	0	8	21
Peak Hour	6	1	4	4	15	0	0	0	0	0	0	13	0	6	19

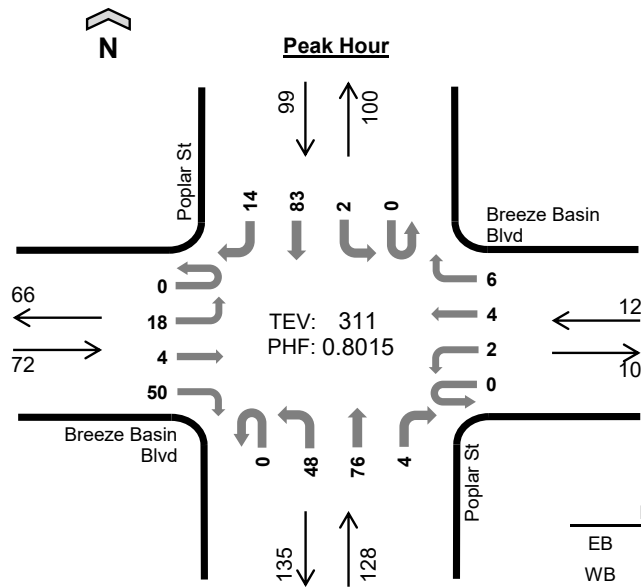
Count Summaries - Heavy Vehicles

Interval Start	Breeze Basin Blvd				Breeze Basin Blvd				Poplar St				Poplar St				15-min Total	Rolling Hour Total	
	Eastbound				Westbound				Northbound				Southbound						
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	2	0
7:30 AM	0	2	1	1	0	0	0	0	0	0	1	1	0	0	0	0	1	7	0
7:45 AM	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	5	15
8:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	15
8:15 AM	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	15
8:30 AM	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	11
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	3	9
Count Total	0	7	1	2	0	0	1	0	0	2	4	0	0	0	4	3	24		
Pk Hr Heavy	0	4	1	1	0	0	1	0	0	2	2	0	0	0	2	2	15		

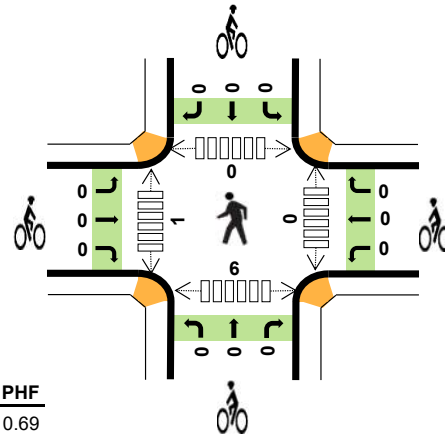
Count Summaries - Bikes

Interval Start	Breeze Basin Blvd				Breeze Basin Blvd				Poplar St				Poplar St				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
Count Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	
Pk Hr Bike	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Poplar St Breeze Basin Blvd



	HV%	PHF
EB	7%	0.69
WB	0%	0.60
NB	5%	0.59
SB	4%	0.83
TOTAL	5%	0.80



Peak Hour Count Summaries

Peak Hour Interval Start		Breeze Basin Blvd				Breeze Basin Blvd				Poplar St				Poplar St				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:30 PM		0	2	2	22	0	0	0	1	0	6	14	0	0	1	24	5	77	0
3:45 PM		0	5	0	8	0	2	1	2	0	22	30	2	0	0	23	2	97	0
4:00 PM		0	3	2	8	0	0	2	2	0	9	16	0	0	1	21	4	68	0
4:15 PM		0	8	0	12	0	0	1	1	0	11	16	2	0	0	15	3	69	311
Pk Hr	All	0	18	4	50	0	2	4	6	0	48	76	4	0	2	83	14	311	
	HV	0	2	0	3	0	0	0	0	0	3	3	0	0	0	0	4	15	
	HV%	-	11%	0%	6%	-	0%	0%	0%	-	6%	4%	0%	-	0%	0%	29%	5%	

Note: For complete count summary (all intervals), see following pages.

** Heavy Vehicle Classifications include FHWA Classes 4-13.

** Count Summaries include heavy vehicles, but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
3:30 PM	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
3:45 PM	3	0	1	0	4	0	0	0	0	0	0	0	0	6	6
4:00 PM	0	0	3	1	4	0	0	0	0	0	0	1	0	0	1
4:15 PM	2	0	2	0	4	0	0	0	0	0	0	0	0	0	0
Peak Hour	5	0	6	4	15	0	0	0	0	0	0	1	0	6	7

Count Summaries - All Vehicles

Interval Start		Breeze Basin Blvd				Breeze Basin Blvd				Poplar St				Poplar St				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
2:00 PM		0	1	1	5	0	0	0	0	0	6	19	0	0	0	8	1	41	0
2:15 PM		0	0	2	1	0	0	3	1	0	2	13	0	0	1	10	1	34	0
2:30 PM		0	3	0	2	0	1	0	1	0	2	7	1	0	3	11	2	33	0
2:45 PM		0	1	2	5	0	1	0	2	0	3	9	0	1	1	12	1	38	146
3:00 PM		0	0	2	6	0	1	0	0	0	3	8	0	0	2	16	0	38	143
3:15 PM		0	5	0	6	0	1	1	3	0	11	8	1	0	0	21	2	59	168
3:30 PM		0	2	2	22	0	0	0	1	0	6	14	0	0	1	24	5	77	212
3:45 PM		0	5	0	8	0	2	1	2	0	22	30	2	0	0	23	2	97	271
4:00 PM		0	3	2	8	0	0	2	2	0	9	16	0	0	1	21	4	68	301
4:15 PM		0	8	0	12	0	0	1	1	0	11	16	2	0	0	15	3	69	311
4:30 PM		0	1	1	8	0	0	3	0	0	8	9	0	0	1	20	6	57	291
4:45 PM		0	1	1	10	0	0	2	0	0	18	6	0	0	0	17	2	57	251
5:00 PM		0	3	2	14	0	0	0	1	0	7	5	0	0	1	16	2	51	234
5:15 PM		0	2	3	9	0	2	0	2	0	7	9	4	0	6	17	1	62	227
5:30 PM		0	1	2	11	0	0	0	1	0	8	13	2	0	4	26	3	71	241
5:45 PM		0	1	2	14	0	0	2	2	0	15	12	0	0	0	20	9	77	261
Count Total		0	37	22	141	0	8	15	19	0	138	194	12	1	21	277	44	929	
Pk Hr	All	0	18	4	50	0	2	4	6	0	48	76	4	0	2	83	14	311	
	HV	0	2	0	3	0	0	0	0	0	3	3	0	0	0	0	4	15	
	HV%	-	11%	0%	6%	-	0%	0%	0%	-	6%	4%	0%	-	0%	0%	29%	5%	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
2:00 PM	1	0	1	1	3	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	2	0	2	0	0	1	0	1	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	1	1	0	0	0	0	0	0	1	1	0	2
3:00 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	3	3	0	0	0	0	0	0	1	0	0	1
3:30 PM	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
3:45 PM	3	0	1	0	4	0	0	0	0	0	0	0	0	6	6
4:00 PM	0	0	3	1	4	0	0	0	0	0	0	1	0	0	1
4:15 PM	2	0	2	0	4	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
4:45 PM	1	0	1	0	2	0	0	0	0	0	0	1	0	0	1
5:00 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	1	0	1	2	0	0	0	2
Count Total	8	0	12	12	32	0	0	2	0	2	2	4	1	6	13
Peak Hour	5	0	6	4	15	0	0	0	0	0	0	1	0	6	7

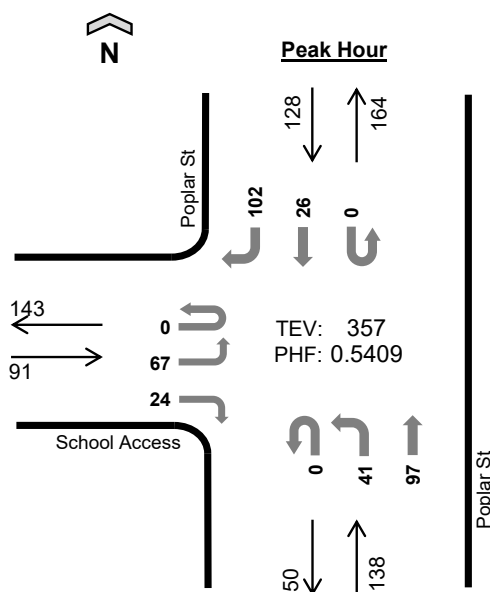
Count Summaries - Heavy Vehicles

Interval Start	Breeze Basin Blvd				Breeze Basin Blvd				Poplar St				Poplar St				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
2:00 PM	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	3	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	6
3:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	5
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	8
3:45 PM	0	2	0	1	0	0	0	0	0	1	0	0	0	0	0	0	4	11
4:00 PM	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	1	4	14
4:15 PM	0	0	0	2	0	0	0	0	0	1	1	0	0	0	0	0	4	15
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	13
4:45 PM	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	11
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	8
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	2	6
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	6
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Count Total	0	3	2	3	0	0	0	0	0	4	8	0	0	1	6	5	32	
Pk Hr Heavy	0	2	0	3	0	0	0	0	0	3	3	0	0	0	0	4	15	

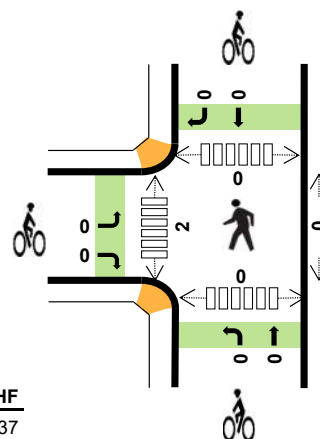
Count Summaries - Bikes

Interval Start	Breeze Basin Blvd				Breeze Basin Blvd				Poplar St				Poplar St				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1
Count Total	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	
Pk Hr Bike	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Poplar St School Access



Date: 8/26/2025
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:15 AM to 8:15 AM



	HV%	PHF
EB	0%	0.37
WB	--	--
NB	3%	0.70
SB	2%	0.59
TOTAL	2%	0.54

Peak Hour Count Summaries

Peak Hour Interval Start		School Access				n/a				Poplar St				Poplar St				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:15 AM		0	0	0	0	0	0	0	0	0	2	32	0	0	0	4	14	52	0
7:30 AM		0	7	0	3	0	0	0	0	0	14	22	0	0	0	9	37	92	0
7:45 AM		0	46	0	16	0	0	0	0	0	25	24	0	0	0	6	48	165	0
8:00 AM		0	14	0	5	0	0	0	0	0	0	19	0	0	0	7	3	48	357
Pk Hr	All	0	67	0	24	0	0	0	0	0	41	97	0	0	0	26	102	357	
	HV	0	0	0	0	0	0	0	0	0	0	4	0	0	0	3	0	7	
	HV%	-	0%	-	0%	-	-	-	-	-	-	0%	4%	-	-	-	12%	0%	

Note: For complete count summary (all intervals), see following pages.

** Heavy Vehicle Classifications include FHWA Classes 4-13.

** Count Summaries include heavy vehicles, but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:15 AM	0	0	2	1	3	0	0	0	0	0	0	1	0	0	1
7:30 AM	0	0	1	1	2	0	0	0	0	0	0	1	0	0	1
7:45 AM	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	0	0	4	3	7	0	0	0	0	0	0	2	0	0	2

Count Summaries - All Vehicles

Interval Start		School Access				n/a				Poplar St				Poplar St				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	0	0	0	0	0	0	0	0	1	25	0	0	0	7	9	42	0
7:15 AM		0	0	0	0	0	0	0	0	0	2	32	0	0	0	4	14	52	0
7:30 AM		0	7	0	3	0	0	0	0	0	14	22	0	0	0	9	37	92	0
7:45 AM		0	46	0	16	0	0	0	0	0	25	24	0	0	0	6	48	165	351
8:00 AM		0	14	0	5	0	0	0	0	0	0	19	0	0	0	7	3	48	357
8:15 AM		0	1	0	1	0	0	0	0	0	1	23	0	0	0	7	1	34	339
8:30 AM		0	0	0	0	0	0	0	0	0	1	11	0	0	0	15	1	28	275
8:45 AM		0	0	0	0	0	0	0	0	0	1	20	0	0	0	16	3	40	150
Count Total		0	68	0	25	0	0	0	0	0	45	176	0	0	0	71	116	501	
Pk Hr	All	0	67	0	24	0	0	0	0	0	41	97	0	0	0	26	102	357	
	HV	0	0	0	0	0	0	0	0	0	0	4	0	0	0	3	0	7	
	HV%	-	0%	-	0%	-	-	-	-	-	0%	4%	-	-	-	12%	0%	2%	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	2	1	3	0	0	0	0	0	0	1	0	0	1
7:30 AM	0	0	1	1	2	0	0	0	0	0	0	1	0	0	1
7:45 AM	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	1	1	2	0	0	2	0	2	0	0	0	0	0
Count Total	0	0	6	6	12	0	0	2	0	2	0	2	0	0	2
Peak Hour	0	0	4	3	7	0	0	0	0	0	0	2	0	0	2

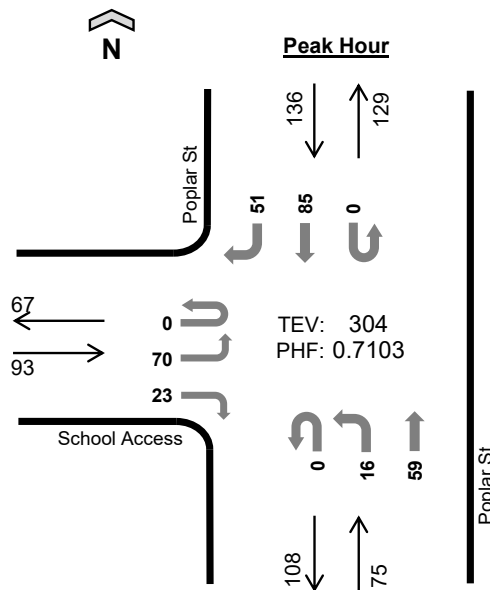
Count Summaries - Heavy Vehicles

Interval Start	School Access				n/a				Poplar St				Poplar St				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	8
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	5
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	4
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	4
Count Total	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	5	1	
Pk Hr Heavy	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	3	0	

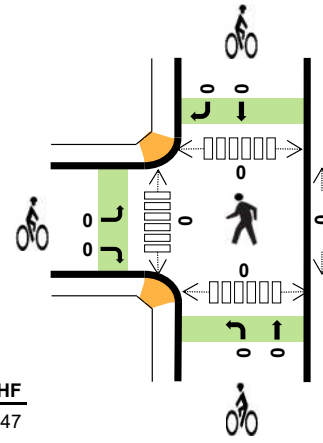
Count Summaries - Bikes

Interval Start	School Access				n/a				Poplar St				Poplar St				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
Count Total	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	
Pk Hr Bike	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Poplar St School Access



Date: 8/26/2025
Count Period: 2:00 PM to 6:00 PM
Peak Hour: 3:30 PM to 4:30 PM



	HV%	PHF
EB	0%	0.47
WB	--	--
NB	7%	0.82
SB	3%	0.69
TOTAL	3%	0.71

Peak Hour Count Summaries

Peak Hour Interval Start		School Access				n/a				Poplar St				Poplar St				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:30 PM		0	4	0	1	0	0	0	0	0	6	16	0	0	0	26	23	76	0
3:45 PM		0	38	0	12	0	0	0	0	0	8	15	0	0	0	17	17	107	0
4:00 PM		0	13	0	6	0	0	0	0	0	1	14	0	0	0	20	7	61	0
4:15 PM		0	15	0	4	0	0	0	0	0	1	14	0	0	0	22	4	60	304
Pk Hr	All	0	70	0	23	0	0	0	0	0	16	59	0	0	0	85	51	304	
	HV	0	0	0	0	0	0	0	0	0	0	5	0	0	0	4	0	9	
	HV%	-	0%	-	0%	-	-	-	-	-	-	0%	8%	-	-	-	5%	0%	

Note: For complete count summary (all intervals), see following pages.

** Heavy Vehicle Classifications include FHWA Classes 4-13.

** Count Summaries include heavy vehicles, but exclude bicycles in overall count.

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

Count Summaries - All Vehicles

Interval Start	School Access				n/a				Poplar St				Poplar St				15-min Total	Rolling Hour Total	
	Eastbound				Westbound				Northbound				Southbound						
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
2:00 PM	0	8	0	1	0	0	0	0	0	0	17	0	0	0	13	1	40	0	
2:15 PM	0	2	0	0	0	0	0	0	0	0	14	0	0	0	11	1	28	0	
2:30 PM	0	2	0	0	0	0	0	0	0	0	10	0	0	0	14	0	26	0	
2:45 PM	0	0	0	0	0	0	0	0	0	2	11	0	0	0	16	1	30	124	
3:00 PM	0	4	0	1	0	0	0	0	0	0	6	0	0	0	17	5	33	117	
3:15 PM	0	5	0	0	0	0	0	0	0	2	15	0	0	0	22	6	50	139	
3:30 PM	0	4	0	1	0	0	0	0	0	6	16	0	0	0	26	23	76	189	
3:45 PM	0	38	0	12	0	0	0	0	0	8	15	0	0	0	17	17	107	266	
4:00 PM	0	13	0	6	0	0	0	0	0	1	14	0	0	0	20	7	61	294	
4:15 PM	0	15	0	4	0	0	0	0	0	1	14	0	0	0	22	4	60	304	
4:30 PM	0	6	0	3	0	0	0	0	0	3	11	0	0	0	27	2	52	280	
4:45 PM	0	4	0	1	0	0	0	0	0	0	20	0	0	0	24	1	50	223	
5:00 PM	0	6	0	1	0	0	0	0	0	0	6	0	0	0	30	0	43	205	
5:15 PM	0	7	0	2	0	0	0	0	0	0	12	0	0	0	28	1	50	195	
5:30 PM	0	4	0	0	0	0	0	0	0	0	21	0	0	0	35	1	61	204	
5:45 PM	0	2	0	0	0	0	0	0	0	0	22	0	0	0	34	1	59	213	
Count Total	0	120	0	32	0	0	0	0	0	23	224	0	0	0	356	71	826		
Pk Hr	All	0	70	0	23	0	0	0	0	0	16	59	0	0	0	85	51	304	
	HV	0	0	0	0	0	0	0	0	0	0	5	0	0	0	4	0	9	
	HV%	-	0%	-	0%	-	-	-	-	-	0%	8%	-	-	-	5%	0%	3%	

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

Count Summaries - Heavy Vehicles																		
Interval Start	School Access				n/a				Poplar St				Poplar St				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
2:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
3:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	3
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	3
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	4
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	5
4:00 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	7
4:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	4	9
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	8
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	6
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	3
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	4
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Count Total	0	0	0	0	0	0	0	0	0	0	12	0	0	0	9	0	21	
Pk Hr Heavy	0	0	0	0	0	0	0	0	0	0	5	0	0	0	4	0	9	

Count Summaries - Bikes																		
Interval Start	School Access				n/a				Poplar St				Poplar St				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
Count Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	
Pk Hr Bike	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Harvest Dr Poplar St

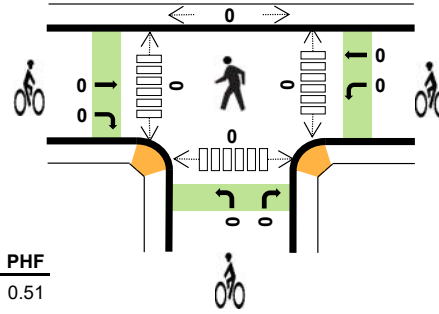
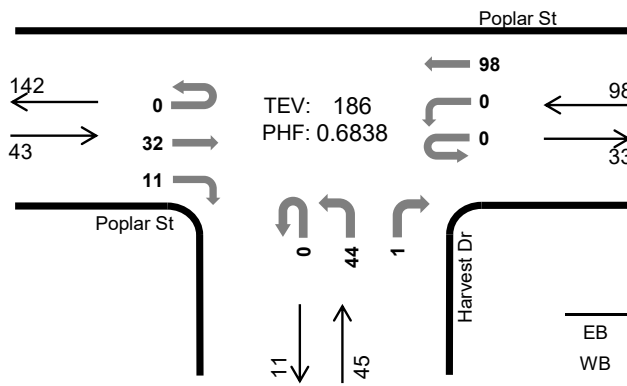


Peak Hour

Date: 8/26/2025

Count Period: 7:00 AM to 9:00 AM

Peak Hour: 7:00 AM to 8:00 AM



	HV%	PHF
EB	9%	0.51
WB	6%	0.77
NB	0%	0.75
SB	--	--
TOTAL	5%	0.68

Peak Hour Count Summaries

Peak Hour Interval Start		Poplar St				Poplar St				Harvest Dr				n/a				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	0	5	2	0	0	16	0	0	7	0	1	0	0	0	0	31	0
7:15 AM		0	0	3	1	0	0	22	0	0	13	0	0	0	0	0	0	39	0
7:30 AM		0	0	7	4	0	0	28	0	0	9	0	0	0	0	0	0	48	0
7:45 AM		0	0	17	4	0	0	32	0	0	15	0	0	0	0	0	0	68	186
Pk Hr	All	0	0	32	11	0	0	98	0	0	44	0	1	0	0	0	0	186	
	HV	0	0	2	2	0	0	6	0	0	0	0	0	0	0	0	0	10	
	HV%	-	-	6%	18%	-	-	6%	-	-	0%	-	0%	-	-	-	-	5%	

Note: For complete count summary (all intervals), see following pages.

** Heavy Vehicle Classifications include FHWA Classes 4-13.

** Count Summaries include heavy vehicles, but exclude bicycles in overall count.

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

Count Summaries - All Vehicles

Interval Start		Poplar St				Poplar St				Harvest Dr				n/a				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	0	5	2	0	0	16	0	0	7	0	1	0	0	0	0	31	0
7:15 AM		0	0	3	1	0	0	22	0	0	13	0	0	0	0	0	0	39	0
7:30 AM		0	0	7	4	0	0	28	0	0	9	0	0	0	0	0	0	48	0
7:45 AM		0	0	17	4	0	0	32	0	0	15	0	0	0	0	0	0	68	186
8:00 AM		0	0	6	5	0	0	14	0	0	3	0	0	0	0	0	0	28	183
8:15 AM		0	0	8	1	0	0	17	0	0	8	0	0	0	0	0	0	34	178
8:30 AM		0	0	12	2	0	0	3	0	0	6	0	0	0	0	0	0	23	153
8:45 AM		0	0	12	4	0	0	17	0	0	3	0	1	0	0	0	0	37	122
Count Total		0	0	70	23	0	0	149	0	0	64	0	2	0	0	0	0	308	
Pk Hr	All	0	0	32	11	0	0	98	0	0	44	0	1	0	0	0	0	186	
	HV	0	0	2	2	0	0	6	0	0	0	0	0	0	0	0	0	10	
	HV%	-	-	6%	18%	-	-	6%	-	-	0%	-	0%	-	-	-	-	5%	

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

Count Summaries - Heavy Vehicles

Interval Start	Poplar St				Poplar St				Harvest Dr				n/a				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:15 AM	0	0	0	1	0	0	3	0	0	0	0	0	0	0	0	0	4	0
7:30 AM	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	3	0
7:45 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	10
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
8:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	6
8:30 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	6
8:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	5
Count Total	0	0	5	2	0	0	8	0	0	0	0	0	0	0	0	0	15	
Pk Hr Heavy	0	0	2	2	0	0	6	0	0	0	0	0	0	0	0	0	10	

Count Summaries - Bikes

Interval Start	Poplar St				Poplar St				Harvest Dr				n/a				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	2
Count Total	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	
Pk Hr Bike	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Harvest Dr Poplar St

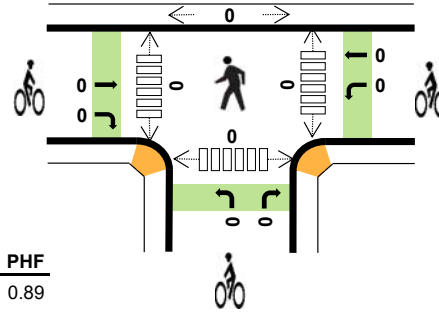
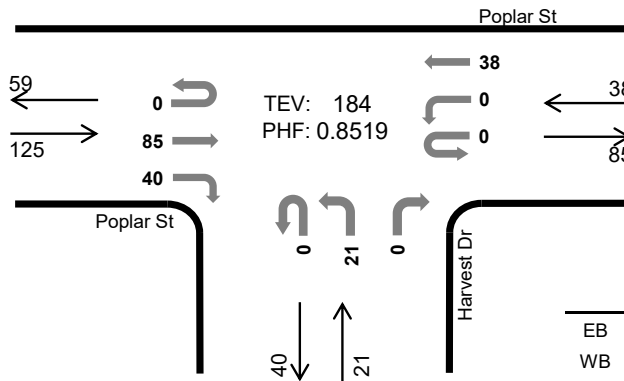


Peak Hour

Date: 8/26/2025

Count Period: 2:00 PM to 6:00 PM

Peak Hour: 5:00 PM to 6:00 PM



	HV%	PHF
EB	1%	0.89
WB	3%	0.79
NB	0%	0.66
SB	--	--
TOTAL	1%	0.85

Peak Hour Count Summaries

Peak Hour Interval Start	Poplar St				Poplar St				Harvest Dr				n/a				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
5:00 PM	0	0	24	7	0	0	4	0	0	2	0	0	0	0	0	0	37	0
5:15 PM	0	0	15	15	0	0	10	0	0	4	0	0	0	0	0	0	44	0
5:30 PM	0	0	27	8	0	0	12	0	0	7	0	0	0	0	0	0	54	0
5:45 PM	0	0	19	10	0	0	12	0	0	8	0	0	0	0	0	0	49	184
Pk Hr	All	0	0	85	40	0	0	38	0	0	21	0	0	0	0	0	184	
	HV	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2	
	HV%	-	-	1%	0%	-	-	3%	-	-	0%	-	-	-	-	-	1%	

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
5:00 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0

Count Summaries - All Vehicles

Interval Start	Poplar St				Poplar St				Harvest Dr				n/a				15-min Total	Rolling Hour Total	
	Eastbound				Westbound				Northbound				Southbound						
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
2:00 PM	0	0	6	6	0	0	13	0	0	2	0	0	0	0	0	0	0	27	0
2:15 PM	0	0	7	3	0	0	14	0	0	2	0	0	0	0	0	0	0	26	0
2:30 PM	0	0	10	2	0	0	6	0	0	2	0	0	0	0	0	0	0	20	0
2:45 PM	0	0	12	5	0	0	12	0	0	1	0	0	0	0	0	0	0	30	103
3:00 PM	0	0	10	6	0	0	7	0	0	0	0	0	0	0	0	0	0	23	99
3:15 PM	0	0	15	6	0	1	10	0	0	7	0	0	0	0	0	0	0	39	112
3:30 PM	0	0	15	5	0	0	15	0	0	5	0	0	0	0	0	0	0	40	132
3:45 PM	0	0	15	13	0	0	12	0	0	4	0	0	0	0	0	0	0	44	146
4:00 PM	0	0	16	8	0	1	13	0	0	3	0	0	0	0	0	0	0	41	164
4:15 PM	0	0	16	11	0	0	7	0	0	5	0	0	0	0	0	0	0	39	164
4:30 PM	0	0	19	9	0	0	11	0	0	5	0	0	0	0	0	0	0	44	168
4:45 PM	0	0	16	6	0	0	12	0	0	5	0	0	0	0	0	0	0	39	163
5:00 PM	0	0	24	7	0	0	4	0	0	2	0	0	0	0	0	0	0	37	159
5:15 PM	0	0	15	15	0	0	10	0	0	4	0	0	0	0	0	0	0	44	164
5:30 PM	0	0	27	8	0	0	12	0	0	7	0	0	0	0	0	0	0	54	174
5:45 PM	0	0	19	10	0	0	12	0	0	8	0	0	0	0	0	0	0	49	184
Count Total		0	0	242	120	0	2	170	0	0	62	0	0	0	0	0	0	596	
Pk Hr	All	0	0	85	40	0	0	38	0	0	21	0	0	0	0	0	0	184	
	HV	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	
	HV%	-	-	1%	0%	-	-	3%	-	-	0%	-	-	-	-	-	-	1%	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
2:00 PM	2	1	0	0	3	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0
2:45 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
3:15 PM	3	1	0	0	4	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0
4:15 PM	2	1	0	0	3	2	0	0	0	2	0	0	0	0	0
4:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	10	11	0	0	21	3	0	0	0	3	0	0	0	0	0
Peak Hour	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0

Count Summaries - Heavy Vehicles

Interval Start	Poplar St				Poplar St				Harvest Dr				n/a				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
2:00 PM	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0
2:15 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	0
2:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
2:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7
3:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	5
3:15 PM	0	0	3	0	0	1	0	0	0	0	0	0	0	0	0	0	4	7
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
3:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	6
4:00 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	7
4:15 PM	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	3	6
4:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	7
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
5:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5
5:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	3
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Count Total	0	0	8	2	0	1	10	0	0	0	0	0	0	0	0	0	21	
Pk Hr Heavy	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	

Count Summaries - Bikes

Interval Start	Poplar St				Poplar St				Harvest Dr				n/a				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3	
Pk Hr Bike	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Vehicle Classification Report Summary

Location: Poplar St S/O Breeze Basin Blvd

Count Direction: Northbound / Southbound

Date Range: 8/26/2025 to 8/26/2025

Site Code: 01

Direction	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
Northbound	3	584	234	5	35	5	0	0	1	1	0	0	0	868
	0.3%	67.3%	27.0%	0.6%	4.0%	0.6%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	
Southbound	1	664	279	6	107	14	0	0	6	1	0	0	0	1,078
	0.1%	61.6%	25.9%	0.6%	9.9%	1.3%	0.0%	0.0%	0.6%	0.1%	0.0%	0.0%	0.0%	
Total	4	1,248	513	11	142	19	0	0	7	2	0	0	0	1,946
	0.2%	64.1%	26.4%	0.6%	7.3%	1.0%	0.0%	0.0%	0.4%	0.1%	0.0%	0.0%	0.0%	

FHWA Vehicle Classification	
Class 1 - Motorcycles	Class 8 - Four or Fewer Axle Single-Trailer Trucks
Class 2 - Passenger Cars	Class 9 - Five-Axle Single-Trailer Trucks
Class 3 - Other Two-Axle, Four-Tire Single Unit Vehicles	Class 10 - Six or More Axle Single-Trailer Trucks
Class 4 - Buses	Class 11 - Five or fewer Axle Multi-Trailer Trucks
Class 5 - Two-Axle, Six-Tire, Single-Unit Trucks	Class 12 - Six-Axle Multi-Trailer Trucks
Class 6 - Three-Axle Single-Unit Trucks	Class 13 - Seven or More Axle Multi-Trailer Trucks
Class 7 - Four or More Axle Single-Unit Trucks	

Vehicle Speed Report Summary



Location: Poplar St S/O Breeze Basin Blvd

Direction: Northbound / Southbound

Date Range: 8/26/2025 to 8/26/2025

Site Code: 01

Direction	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
Northbound	8	129	184	364	154	25	4	0	0	0	0	0	0	0	0	0	0	868
	0.9%	14.9%	21.2%	41.9%	17.7%	2.9%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Southbound	5	105	214	399	285	58	10	1	1	0	0	0	0	0	0	0	0	1,078
	0.5%	9.7%	19.9%	37.0%	26.4%	5.4%	0.9%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Total	13	234	398	763	439	83	14	1	1	0	0	0	0	0	0	0	0	1,946
	0.7%	12.0%	20.5%	39.2%	22.6%	4.3%	0.7%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Total Study Percentile Speed Summary				Total Study Speed Statistics			
Northbound				Northbound			
50th Percentile (Median)		21.8	mph	Mean (Average) Speed		21.1	mph
85th Percentile		26.2	mph	10 mph Pace		17.7 - 27.7	mph
95th Percentile		29.2	mph	Percent in Pace		65.0	%
Southbound				Southbound			
50th Percentile (Median)		22.9	mph	Mean (Average) Speed		22.6	mph
85th Percentile		27.9	mph	10 mph Pace		18.0 - 28.0	mph
95th Percentile		30.6	mph	Percent in Pace		64.8	%

Location: Poplar St S/O Breeze Basin Blvd
Date Range: 8/26/2025 - 9/1/2025
Site Code: 01

Time	Tuesday 8/26/2025			Wednesday 8/27/2025			Thursday 8/28/2025			Friday 8/29/2025			Saturday 8/30/2025			Sunday 8/31/2025			Monday 9/1/2025			Mid-Week Average		
	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total
12:00 AM	0	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	2	2
1:00 AM	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
2:00 AM	1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2
3:00 AM	2	0	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	0	2
4:00 AM	3	4	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	7
5:00 AM	15	11	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15	11	26
6:00 AM	32	12	44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32	12	44
7:00 AM	146	131	277	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	146	131	277
8:00 AM	70	52	122	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	70	52	122
9:00 AM	47	40	87	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	47	40	87
10:00 AM	39	31	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39	31	70
11:00 AM	47	62	109	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	47	62	109
12:00 PM	55	62	117	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	55	62	117
1:00 PM	34	56	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	34	56	90
2:00 PM	50	48	98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50	48	98
3:00 PM	86	135	221	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	86	135	221
4:00 PM	75	107	182	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	75	107	182
5:00 PM	68	121	189	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68	121	189
6:00 PM	53	80	133	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	53	80	133
7:00 PM	26	65	91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26	65	91
8:00 PM	11	38	49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	38	49
9:00 PM	4	11	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	11	15
10:00 PM	4	7	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	7	11
11:00 PM	0	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	2	2
Total	868	1,078	1,946	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	868	1,078	1,946
Percent	45%	55%		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	45%	55%	
AM Peak	07:00	07:00	07:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	07:00	07:00	07:00
Vol.	146	131	277	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	146	131	277
PM Peak	15:00	15:00	15:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15:00	15:00	15:00
Vol.	86	135	221	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	86	135	221

1. Mid-week average includes data between Tuesday and Thursday.

***Intersection Capacity Worksheets:
Year 2025 Existing***

Intersection												
Int Delay, s/veh	5.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	44	499	13	42	121	1	11	12	87	8	6	11
Future Vol, veh/h	44	499	13	42	121	1	11	12	87	8	6	11
Conflicting Peds, #/hr	0	0	4	4	0	0	1	0	0	0	0	1
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	83	83	83	77	77	77	59	59	59	57	57	57
Heavy Vehicles, %	6	6	6	12	12	12	7	7	7	1	1	1
Mvmt Flow	53	601	16	55	157	1	19	20	147	14	11	19

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	158	0	0	621	0	0	992	987	613	984	994	159
Stage 1	-	-	-	-	-	-	719	719	-	267	267	-
Stage 2	-	-	-	-	-	-	272	268	-	717	727	-
Critical Hdwy	4.16	-	-	4.22	-	-	7.17	6.57	6.27	7.11	6.51	6.21
Critical Hdwy Stg 1	-	-	-	-	-	-	6.17	5.57	-	6.11	5.51	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.17	5.57	-	6.11	5.51	-
Follow-up Hdwy	2.254	-	-	2.308	-	-	3.563	4.063	3.363	3.509	4.009	3.309
Pot Cap-1 Maneuver	1397	-	-	913	-	-	220	243	483	228	246	889
Stage 1	-	-	-	-	-	-	412	425	-	741	690	-
Stage 2	-	-	-	-	-	-	723	679	-	422	431	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1397	-	-	910	-	-	180	213	482	128	216	888
Mov Cap-2 Maneuver	-	-	-	-	-	-	180	213	-	128	216	-
Stage 1	-	-	-	-	-	-	386	399	-	692	645	-
Stage 2	-	-	-	-	-	-	649	634	-	262	404	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.61	2.36	24.3	23.05
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	369	142	-	-	460	-	-	243
HCM Lane V/C Ratio	0.505	0.038	-	-	0.06	-	-	0.18
HCM Ctrl Dly (s/v)	24.3	7.7	0	-	9.2	0	-	23
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	2.7	0.1	-	-	0.2	-	-	0.6

Intersection												
Int Delay, s/veh	3.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔		↔	↔			↔	
Traffic Vol, veh/h	11	2	52	1	2	3	58	106	4	4	76	16
Future Vol, veh/h	11	2	52	1	2	3	58	106	4	4	76	16
Conflicting Peds, #/hr	0	0	6	6	0	0	13	0	0	0	0	13
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	100	-	-	-	60	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	57	57	57	50	50	50	59	59	59	60	60	60
Heavy Vehicles, %	9	9	9	17	17	17	2	2	2	4	4	4
Mvmt Flow	19	4	91	2	4	6	98	180	7	7	127	27

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	545	549	159	527	559	183	166	0	0	186	0	0
Stage 1	166	166	-	380	380	-	-	-	-	-	-	-
Stage 2	378	383	-	148	180	-	-	-	-	-	-	-
Critical Hdwy	7.19	6.59	6.29	7.27	6.67	6.37	4.12	-	-	4.14	-	-
Critical Hdwy Stg 1	6.19	5.59	-	6.27	5.67	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.19	5.59	-	6.27	5.67	-	-	-	-	-	-	-
Follow-up Hdwy	3.581	4.081	3.381	3.653	4.153	3.453	2.218	-	-	2.236	-	-
Pot Cap-1 Maneuver	439	434	868	439	417	822	1412	-	-	1376	-	-
Stage 1	819	748	-	613	589	-	-	-	-	-	-	-
Stage 2	629	600	-	820	723	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	394	396	853	357	381	822	1394	-	-	1376	-	-
Mov Cap-2 Maneuver	394	396	-	357	381	-	-	-	-	-	-	-
Stage 1	805	734	-	570	547	-	-	-	-	-	-	-
Stage 2	577	558	-	721	710	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	10.72		12.19		2.69		0.32	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1394	-	-	394	853	513	72	-	-
HCM Lane V/C Ratio	0.071	-	-	0.058	0.107	0.023	0.005	-	-
HCM Ctrl Dly (s/v)	7.8	-	-	14.7	9.7	12.2	7.6	0	-
HCM Lane LOS	A	-	-	B	A	B	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.2	0.4	0.1	0	-	-

Intersection						
Int Delay, s/veh	5.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	67	24	41	101	27	102
Future Vol, veh/h	67	24	41	101	27	102
Conflicting Peds, #/hr	0	0	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	37	37	70	70	59	59
Heavy Vehicles, %	1	1	3	3	2	2
Mvmt Flow	181	65	59	144	46	173

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	396	134	221	0	-	0
Stage 1	134	-	-	-	-	-
Stage 2	261	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.13	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.227	-	-	-
Pot Cap-1 Maneuver	611	917	1343	-	-	-
Stage 1	895	-	-	-	-	-
Stage 2	785	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	580	916	1340	-	-	-
Mov Cap-2 Maneuver	580	-	-	-	-	-
Stage 1	850	-	-	-	-	-
Stage 2	783	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	12.74	2.25	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	520	-	580	916	-	-
HCM Lane V/C Ratio	0.044	-	0.312	0.071	-	-
HCM Ctrl Dly (s/v)	7.8	0	14	9.2	-	-
HCM Lane LOS	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	1.3	0.2	-	-

Intersection						
Int Delay, s/veh	2.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	44	1	0	98	40	11
Future Vol, veh/h	44	1	0	98	40	11
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	75	75	77	77	51	51
Heavy Vehicles, %	1	1	6	6	9	9
Mvmt Flow	59	1	0	127	78	22
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	216	89	100	0	-	0
Stage 1	89	-	-	-	-	-
Stage 2	127	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.16	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.254	-	-	-
Pot Cap-1 Maneuver	774	972	1468	-	-	-
Stage 1	937	-	-	-	-	-
Stage 2	901	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	774	972	1468	-	-	-
Mov Cap-2 Maneuver	774	-	-	-	-	-
Stage 1	937	-	-	-	-	-
Stage 2	901	-	-	-	-	-
Approach	EB	NB		SB		
HCM Ctrl Dly, s/v	10.02	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1468	-	777	-	-	
HCM Lane V/C Ratio	-	-	0.077	-	-	
HCM Ctrl Dly (s/v)	0	-	10	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0	-	0.3	-	-	

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	44	10	1	1	0
Future Vol, veh/h	0	44	10	1	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	1	1	1	1	0	0
Mvmt Flow	0	59	13	1	1	0
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	15	0	-	0	73	14
Stage 1	-	-	-	-	14	-
Stage 2	-	-	-	-	59	-
Critical Hdwy	4.11	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.209	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1610	-	-	-	936	1072
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	969	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1610	-	-	-	936	1072
Mov Cap-2 Maneuver	-	-	-	-	936	-
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	969	-
Approach	EB	WB		SB		
HCM Ctrl Dly, s/v	0	0		8.85		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1610	-	-	-	936	
HCM Lane V/C Ratio	-	-	-	-	0.001	
HCM Ctrl Dly (s/v)	0	-	-	-	8.9	
HCM Lane LOS	A	-	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0	

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	18	151	15	79	499	4	7	7	40	4	11	29
Future Vol, veh/h	18	151	15	79	499	4	7	7	40	4	11	29
Conflicting Peds, #/hr	2	0	3	3	0	2	5	0	0	0	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	85	85	85	75	75	75	85	85	85
Heavy Vehicles, %	6	6	6	4	4	4	7	7	7	5	5	5
Mvmt Flow	20	168	17	93	587	5	9	9	53	5	13	34

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	594	0	0	187	0	0	1004	999	179	990	1005	596
Stage 1	-	-	-	-	-	-	219	219	-	777	777	-
Stage 2	-	-	-	-	-	-	784	780	-	212	227	-
Critical Hdwy	4.16	-	-	4.14	-	-	7.17	6.57	6.27	7.15	6.55	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.17	5.57	-	6.15	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.17	5.57	-	6.15	5.55	-
Follow-up Hdwy	2.254	-	-	2.236	-	-	3.563	4.063	3.363	3.545	4.045	3.345
Pot Cap-1 Maneuver	963	-	-	1375	-	-	216	239	851	223	239	498
Stage 1	-	-	-	-	-	-	772	713	-	385	403	-
Stage 2	-	-	-	-	-	-	379	399	-	783	710	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	961	-	-	1371	-	-	166	209	849	176	209	494
Mov Cap-2 Maneuver	-	-	-	-	-	-	166	209	-	176	209	-
Stage 1	-	-	-	-	-	-	752	694	-	346	361	-
Stage 2	-	-	-	-	-	-	304	358	-	707	692	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.86	1.06	14.8	18.02
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	439	173	-	-	244	-	-	328
HCM Lane V/C Ratio	0.164	0.021	-	-	0.068	-	-	0.158
HCM Ctrl Dly (s/v)	14.8	8.8	0	-	7.8	0	-	18
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.6	0.1	-	-	0.2	-	-	0.6

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	7	9	57	2	2	6	50	42	6	11	79	15
Future Vol, veh/h	7	9	57	2	2	6	50	42	6	11	79	15
Conflicting Peds, #/hr	0	0	6	6	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	100	-	-	-	60	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	69	69	69	60	60	60	59	59	59	83	83	83
Heavy Vehicles, %	7	7	7	1	1	1	5	5	5	4	4	4
Mvmt Flow	10	13	83	3	3	10	85	71	10	13	95	18

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	374	383	111	380	387	76	114	0	0	81	0	0
Stage 1	132	132	-	246	246	-	-	-	-	-	-	-
Stage 2	242	251	-	134	141	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.57	6.27	7.11	6.51	6.21	4.15	-	-	4.14	-	-
Critical Hdwy Stg 1	6.17	5.57	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.57	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	3.509	4.009	3.309	2.245	-	-	2.236	-	-
Pot Cap-1 Maneuver	574	543	929	580	549	988	1456	-	-	1504	-	-
Stage 1	860	778	-	760	705	-	-	-	-	-	-	-
Stage 2	750	690	-	872	782	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	526	506	922	478	512	988	1455	-	-	1504	-	-
Mov Cap-2 Maneuver	526	506	-	478	512	-	-	-	-	-	-	-
Stage 1	851	770	-	716	664	-	-	-	-	-	-	-
Stage 2	696	650	-	768	774	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	9.95		10.22		3.89		0.78	
HCM LOS	A		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1455	-	-	515	922	706	183	-	-
HCM Lane V/C Ratio	0.058	-	-	0.045	0.09	0.024	0.009	-	-
HCM Ctrl Dly (s/v)	7.6	-	-	12.3	9.3	10.2	7.4	0	-
HCM Lane LOS	A	-	-	B	A	B	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.1	0.3	0.1	0	-	-

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	21	4	0	77	135	3
Future Vol, veh/h	21	4	0	77	135	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	47	47	82	82	69	69
Heavy Vehicles, %	1	1	7	7	3	3
Mvmt Flow	45	9	0	94	196	4
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	292	198	200	0	-	0
Stage 1	198	-	-	-	-	-
Stage 2	94	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.17	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.263	-	-	-
Pot Cap-1 Maneuver	701	846	1343	-	-	-
Stage 1	838	-	-	-	-	-
Stage 2	932	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	701	846	1343	-	-	-
Mov Cap-2 Maneuver	701	-	-	-	-	-
Stage 1	838	-	-	-	-	-
Stage 2	932	-	-	-	-	-
Approach	EB	NB		SB		
HCM Ctrl Dly, s/v	10.29	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1343	-	701	846	-	-
HCM Lane V/C Ratio	-	-	0.064	0.01	-	-
HCM Ctrl Dly (s/v)	0	-	10.5	9.3	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	0	-	-

Intersection						
Int Delay, s/veh	1.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	21	0	0	56	99	40
Future Vol, veh/h	21	0	0	56	99	40
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	66	66	79	79	89	89
Heavy Vehicles, %	1	1	3	3	1	1
Mvmt Flow	32	0	0	71	111	45

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	205	134	156	0	-	0
Stage 1	134	-	-	-	-	-
Stage 2	71	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.13	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.227	-	-	-
Pot Cap-1 Maneuver	786	918	1418	-	-	-
Stage 1	895	-	-	-	-	-
Stage 2	954	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	786	918	1418	-	-	-
Mov Cap-2 Maneuver	786	-	-	-	-	-
Stage 1	895	-	-	-	-	-
Stage 2	954	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	9.77	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1418	-	786	-	-
HCM Lane V/C Ratio	-	-	0.04	-	-
HCM Ctrl Dly (s/v)	0	-	9.8	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	20	39	1	1	0
Future Vol, veh/h	0	20	39	1	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	70	70	70	70	70	70
Heavy Vehicles, %	1	1	1	1	0	0
Mvmt Flow	0	29	56	1	1	0

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	57	0	85
Stage 1	-	-	56
Stage 2	-	-	29
Critical Hdwy	4.11	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.209	-	3.5
Pot Cap-1 Maneuver	1554	-	921
Stage 1	-	-	971
Stage 2	-	-	999
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1554	-	921
Mov Cap-2 Maneuver	-	-	921
Stage 1	-	-	971
Stage 2	-	-	999

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	8.91
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1554	-	-	-	921
HCM Lane V/C Ratio	-	-	-	-	0.002
HCM Ctrl Dly (s/v)	0	-	-	-	8.9
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

***Intersection Capacity Worksheets:
Year 2028 Background
(without Moonlit Meadows)***

Intersection												
Int Delay, s/veh	6.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	45	535	13	43	135	1	11	12	90	8	6	11
Future Vol, veh/h	45	535	13	43	135	1	11	12	90	8	6	11
Conflicting Peds, #/hr	0	0	4	4	0	0	1	0	0	0	0	1
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	83	83	83	77	77	77	59	59	59	57	57	57
Heavy Vehicles, %	6	6	6	12	12	12	7	7	7	1	1	1
Mvmt Flow	54	645	16	56	175	1	19	20	153	14	11	19

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	177	0	0	664	0	0	1058	1053	656	1051	1060	177
Stage 1	-	-	-	-	-	-	765	765	-	288	288	-
Stage 2	-	-	-	-	-	-	293	288	-	763	773	-
Critical Hdwy	4.16	-	-	4.22	-	-	7.17	6.57	6.27	7.11	6.51	6.21
Critical Hdwy Stg 1	-	-	-	-	-	-	6.17	5.57	-	6.11	5.51	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.17	5.57	-	6.11	5.51	-
Follow-up Hdwy	2.254	-	-	2.308	-	-	3.563	4.063	3.363	3.509	4.009	3.309
Pot Cap-1 Maneuver	1376	-	-	879	-	-	198	222	456	206	225	869
Stage 1	-	-	-	-	-	-	388	405	-	722	676	-
Stage 2	-	-	-	-	-	-	704	664	-	398	410	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1376	-	-	876	-	-	160	192	455	108	195	868
Mov Cap-2 Maneuver	-	-	-	-	-	-	160	192	-	108	195	-
Stage 1	-	-	-	-	-	-	363	378	-	671	628	-
Stage 2	-	-	-	-	-	-	629	617	-	235	383	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.59	2.26	27.92	26.25
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	343	136	-	-	432	-	-	213
HCM Lane V/C Ratio	0.558	0.039	-	-	0.064	-	-	0.206
HCM Ctrl Dly (s/v)	27.9	7.7	0	-	9.4	0	-	26.3
HCM Lane LOS	D	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	3.2	0.1	-	-	0.2	-	-	0.8

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	11	4	54	1	3	3	60	109	4	4	78	16
Future Vol, veh/h	11	4	54	1	3	3	60	109	4	4	78	16
Conflicting Peds, #/hr	0	0	6	6	0	0	13	0	0	0	0	13
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	100	-	-	-	60	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	57	57	57	50	50	50	59	59	59	60	60	60
Heavy Vehicles, %	9	9	9	17	17	17	2	2	2	4	4	4
Mvmt Flow	19	7	95	2	6	6	102	185	7	7	130	27

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	561	565	162	544	575	188	170	0	0	192	0	0
Stage 1	170	170	-	392	392	-	-	-	-	-	-	-
Stage 2	391	395	-	153	183	-	-	-	-	-	-	-
Critical Hdwy	7.19	6.59	6.29	7.27	6.67	6.37	4.12	-	-	4.14	-	-
Critical Hdwy Stg 1	6.19	5.59	-	6.27	5.67	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.19	5.59	-	6.27	5.67	-	-	-	-	-	-	-
Follow-up Hdwy	3.581	4.081	3.381	3.653	4.153	3.453	2.218	-	-	2.236	-	-
Pot Cap-1 Maneuver	428	425	864	427	409	817	1408	-	-	1370	-	-
Stage 1	816	745	-	604	581	-	-	-	-	-	-	-
Stage 2	619	593	-	815	721	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	381	387	849	342	372	817	1390	-	-	1370	-	-
Mov Cap-2 Maneuver	381	387	-	342	372	-	-	-	-	-	-	-
Stage 1	802	732	-	560	539	-	-	-	-	-	-	-
Stage 2	564	549	-	709	708	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	10.93		12.76		2.7		0.31	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1390	-	-	383	849	478	71	-	-
HCM Lane V/C Ratio	0.073	-	-	0.069	0.112	0.029	0.005	-	-
HCM Ctrl Dly (s/v)	7.8	-	-	15.1	9.8	12.8	7.6	0	-
HCM Lane LOS	A	-	-	C	A	B	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.2	0.4	0.1	0	-	-

Intersection						
Int Delay, s/veh	5.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	67	24	41	104	28	102
Future Vol, veh/h	67	24	41	104	28	102
Conflicting Peds, #/hr	0	0	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	37	37	70	70	59	59
Heavy Vehicles, %	1	1	3	3	2	2
Mvmt Flow	181	65	59	149	47	173

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	402	136	222	0	-	0
Stage 1	136	-	-	-	-	-
Stage 2	266	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.13	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.227	-	-	-
Pot Cap-1 Maneuver	606	915	1341	-	-	-
Stage 1	893	-	-	-	-	-
Stage 2	781	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	575	914	1338	-	-	-
Mov Cap-2 Maneuver	575	-	-	-	-	-
Stage 1	849	-	-	-	-	-
Stage 2	780	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	12.82	2.21	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	509	-	575	914	-	-
HCM Lane V/C Ratio	0.044	-	0.315	0.071	-	-
HCM Ctrl Dly (s/v)	7.8	0	14.1	9.2	-	-
HCM Lane LOS	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	1.3	0.2	-	-

Intersection						
Int Delay, s/veh	2.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	45	1	0	101	41	11
Future Vol, veh/h	45	1	0	101	41	11
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	75	75	77	77	51	51
Heavy Vehicles, %	1	1	6	6	9	9
Mvmt Flow	60	1	0	131	80	22

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	222	91	102	0	-	0
Stage 1	91	-	-	-	-	-
Stage 2	131	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.16	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.254	-	-	-
Pot Cap-1 Maneuver	768	969	1465	-	-	-
Stage 1	935	-	-	-	-	-
Stage 2	897	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	768	969	1465	-	-	-
Mov Cap-2 Maneuver	768	-	-	-	-	-
Stage 1	935	-	-	-	-	-
Stage 2	897	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	10.07	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1465	-	772	-	-
HCM Lane V/C Ratio	-	-	0.079	-	-
HCM Ctrl Dly (s/v)	0	-	10.1	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	45	10	1	1	0
Future Vol, veh/h	0	45	10	1	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	1	1	1	1	0	0
Mvmt Flow	0	60	13	1	1	0

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	15	0	74
Stage 1	-	-	14
Stage 2	-	-	60
Critical Hdwy	4.11	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.209	-	3.5
Pot Cap-1 Maneuver	1610	-	935
Stage 1	-	-	1014
Stage 2	-	-	968
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1610	-	935
Mov Cap-2 Maneuver	-	-	935
Stage 1	-	-	1014
Stage 2	-	-	968

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	8.86
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1610	-	-	-	935
HCM Lane V/C Ratio	-	-	-	-	0.001
HCM Ctrl Dly (s/v)	0	-	-	-	8.9
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

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	19	174	15	81	538	4	7	7	41	4	11	30
Future Vol, veh/h	19	174	15	81	538	4	7	7	41	4	11	30
Conflicting Peds, #/hr	2	0	3	3	0	2	5	0	0	0	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	85	85	85	75	75	75	85	85	85
Heavy Vehicles, %	6	6	6	4	4	4	7	7	7	5	5	5
Mvmt Flow	21	193	17	95	633	5	9	9	55	5	13	35

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	640	0	0	213	0	0	1082	1077	205	1068	1083	642
Stage 1	-	-	-	-	-	-	247	247	-	828	828	-
Stage 2	-	-	-	-	-	-	835	830	-	240	255	-
Critical Hdwy	4.16	-	-	4.14	-	-	7.17	6.57	6.27	7.15	6.55	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.17	5.57	-	6.15	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.17	5.57	-	6.15	5.55	-
Follow-up Hdwy	2.254	-	-	2.236	-	-	3.563	4.063	3.363	3.545	4.045	3.345
Pot Cap-1 Maneuver	926	-	-	1345	-	-	191	214	823	197	214	469
Stage 1	-	-	-	-	-	-	746	693	-	361	382	-
Stage 2	-	-	-	-	-	-	355	378	-	757	691	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	924	-	-	1342	-	-	142	185	821	152	185	465
Mov Cap-2 Maneuver	-	-	-	-	-	-	142	185	-	152	185	-
Stage 1	-	-	-	-	-	-	725	673	-	321	339	-
Stage 2	-	-	-	-	-	-	279	336	-	678	671	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.82	1.03	15.95	19.58
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	402	162	-	-	234	-	-	300
HCM Lane V/C Ratio	0.183	0.023	-	-	0.071	-	-	0.177
HCM Ctrl Dly (s/v)	16	9	0	-	7.9	0	-	19.6
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.7	0.1	-	-	0.2	-	-	0.6

Intersection												
Int Delay, s/veh	4.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔		↔	↔			↔	
Traffic Vol, veh/h	7	11	59	2	4	6	52	43	6	11	81	15
Future Vol, veh/h	7	11	59	2	4	6	52	43	6	11	81	15
Conflicting Peds, #/hr	0	0	6	6	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	100	-	-	-	60	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	69	69	69	60	60	60	59	59	59	83	83	83
Heavy Vehicles, %	7	7	7	1	1	1	5	5	5	4	4	4
Mvmt Flow	10	16	86	3	7	10	88	73	10	13	98	18

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	387	393	114	392	397	78	117	0	0	83	0	0
Stage 1	134	134	-	254	254	-	-	-	-	-	-	-
Stage 2	252	259	-	138	143	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.57	6.27	7.11	6.51	6.21	4.15	-	-	4.14	-	-
Critical Hdwy Stg 1	6.17	5.57	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.57	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	3.509	4.009	3.309	2.245	-	-	2.236	-	-
Pot Cap-1 Maneuver	563	535	926	569	542	986	1453	-	-	1501	-	-
Stage 1	857	776	-	752	699	-	-	-	-	-	-	-
Stage 2	741	684	-	867	780	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	512	497	920	463	503	986	1452	-	-	1501	-	-
Mov Cap-2 Maneuver	512	497	-	463	503	-	-	-	-	-	-	-
Stage 1	848	768	-	707	656	-	-	-	-	-	-	-
Stage 2	682	643	-	759	772	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	10.07		10.68		3.93		0.76	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1452	-	-	503	920	654	179	-	-
HCM Lane V/C Ratio	0.061	-	-	0.052	0.093	0.031	0.009	-	-
HCM Ctrl Dly (s/v)	7.6	-	-	12.6	9.3	10.7	7.4	0	-
HCM Lane LOS	A	-	-	B	A	B	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.2	0.3	0.1	0	-	-

Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	21	4	0	79	139	3
Future Vol, veh/h	21	4	0	79	139	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	47	47	82	82	69	69
Heavy Vehicles, %	1	1	7	7	3	3
Mvmt Flow	45	9	0	96	201	4

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	300	204	206	0	-	0
Stage 1	204	-	-	-	-	-
Stage 2	96	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.17	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.263	-	-	-
Pot Cap-1 Maneuver	694	840	1336	-	-	-
Stage 1	833	-	-	-	-	-
Stage 2	930	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	694	840	1336	-	-	-
Mov Cap-2 Maneuver	694	-	-	-	-	-
Stage 1	833	-	-	-	-	-
Stage 2	930	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	10.35	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1336	-	694	840	-	-
HCM Lane V/C Ratio	-	-	0.064	0.01	-	-
HCM Ctrl Dly (s/v)	0	-	10.5	9.3	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	0	-	-

Intersection						
Int Delay, s/veh	1.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	22	0	0	58	102	41
Future Vol, veh/h	22	0	0	58	102	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	66	66	79	79	89	89
Heavy Vehicles, %	1	1	3	3	1	1
Mvmt Flow	33	0	0	73	115	46

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	211	138	161
Stage 1	138	-	-
Stage 2	73	-	-
Critical Hdwy	6.41	6.21	4.13
Critical Hdwy Stg 1	5.41	-	-
Critical Hdwy Stg 2	5.41	-	-
Follow-up Hdwy	3.509	3.309	2.227
Pot Cap-1 Maneuver	780	913	1412
Stage 1	891	-	-
Stage 2	952	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	780	913	1412
Mov Cap-2 Maneuver	780	-	-
Stage 1	891	-	-
Stage 2	952	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	9.82	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1412	-	780	-	-
HCM Lane V/C Ratio	-	-	0.043	-	-
HCM Ctrl Dly (s/v)	0	-	9.8	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	21	40	1	1	0
Future Vol, veh/h	0	21	40	1	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	70	70	70	70	70	70
Heavy Vehicles, %	1	1	1	1	0	0
Mvmt Flow	0	30	57	1	1	0
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	59	0	-	0	88	58
Stage 1	-	-	-	-	58	-
Stage 2	-	-	-	-	30	-
Critical Hdwy	4.11	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.209	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1552	-	-	-	918	1014
Stage 1	-	-	-	-	970	-
Stage 2	-	-	-	-	998	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1552	-	-	-	918	1014
Mov Cap-2 Maneuver	-	-	-	-	918	-
Stage 1	-	-	-	-	970	-
Stage 2	-	-	-	-	998	-
Approach	EB	WB		SB		
HCM Ctrl Dly, s/v	0	0		8.93		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1552	-	-	-	918	
HCM Lane V/C Ratio	-	-	-	-	0.002	
HCM Ctrl Dly (s/v)	0	-	-	-	8.9	
HCM Lane LOS	A	-	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0	

***Intersection Capacity Worksheets:
Year 2028 Background
(with Moonlit Meadows)***

Timings
10/27/2025

1: Poplar St & Jefferson Ave (US 40)
2028 Background (with Moonlit) - AM Peak Hour

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	45	535	60	135	26	12	8	6
Future Volume (vph)	45	535	60	135	26	12	8	6
Lane Group Flow (vph)	54	668	78	176	0	305	0	44
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		8		4
Permitted Phases	2		6		8		4	
Detector Phase	2	2	6	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	25.0	25.0	25.0	25.0	32.0	32.0	32.0	32.0
Total Split (s)	28.0	28.0	28.0	28.0	32.0	32.0	32.0	32.0
Total Split (%)	46.7%	46.7%	46.7%	46.7%	53.3%	53.3%	53.3%	53.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0		6.0		6.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	Max	Max	Max	Max	None	None	None	None
v/c Ratio	0.10	0.78	0.38	0.22		0.64		0.10
Control Delay (s/veh)	8.9	21.4	16.7	9.3		16.1		9.0
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	8.9	21.4	16.7	9.3		16.1		9.0
Queue Length 50th (ft)	7	129	12	24		45		5
Queue Length 95th (ft)	25	#331	42	58		49		12
Internal Link Dist (ft)		477		408		755		327
Turn Bay Length (ft)	50		100					
Base Capacity (vph)	552	851	205	808		867		840
Starvation Cap Reductn	0	0	0	0		0		0
Spillback Cap Reductn	0	0	0	0		0		0
Storage Cap Reductn	0	0	0	0		0		0
Reduced v/c Ratio	0.10	0.78	0.38	0.22		0.35		0.05

Intersection Summary

Cycle Length: 60

Actuated Cycle Length: 47.7

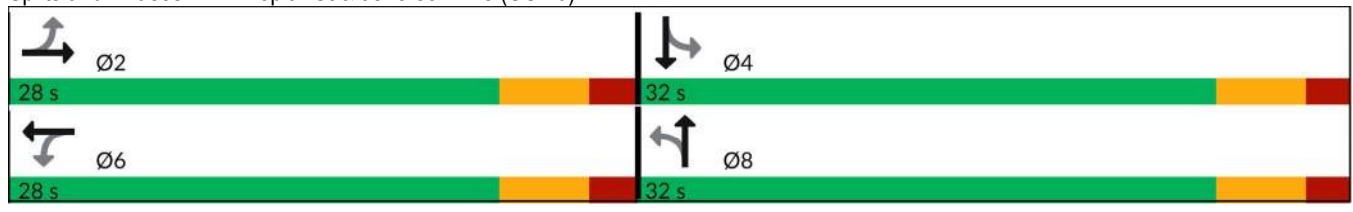
Natural Cycle: 65

Control Type: Semi Act-Uncoord

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Poplar St & Jefferson Ave (US 40)



HCM 7th Signalized Intersection Summary

10/27/2025

1: Poplar St & Jefferson Ave (US 40)

2028 Background (with Moonlit) - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	535	19	60	135	1	26	12	142	8	6	11
Future Volume (veh/h)	45	535	19	60	135	1	26	12	142	8	6	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1811	1811	1811	1722	1722	1722	1796	1796	1796	1885	1885	1885
Adj Flow Rate, veh/h	54	645	23	78	175	1	44	20	241	14	11	19
Peak Hour Factor	0.83	0.83	0.83	0.77	0.77	0.77	0.59	0.59	0.59	0.57	0.57	0.57
Percent Heavy Veh, %	6	6	6	12	12	12	7	7	7	1	1	1
Cap, veh/h	641	827	29	273	814	5	124	50	320	196	156	190
Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	1167	1738	62	707	1711	10	133	187	1208	352	591	717
Grp Volume(v), veh/h	54	0	668	78	0	176	305	0	0	44	0	0
Grp Sat Flow(s),veh/h/ln	1167	0	1800	707	0	1720	1528	0	0	1659	0	0
Q Serve(g_s), s	1.3	0.0	14.3	4.8	0.0	2.8	3.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.1	0.0	14.3	19.1	0.0	2.8	8.4	0.0	0.0	0.9	0.0	0.0
Prop In Lane	1.00		0.03	1.00		0.01	0.14		0.79	0.32		0.43
Lane Grp Cap(c), veh/h	641	0	856	273	0	818	494	0	0	542	0	0
V/C Ratio(X)	0.08	0.00	0.78	0.29	0.00	0.22	0.62	0.00	0.00	0.08	0.00	0.00
Avail Cap(c_a), veh/h	641	0	856	273	0	818	941	0	0	976	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.3	0.0	10.1	18.1	0.0	7.1	15.5	0.0	0.0	12.8	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	7.0	2.6	0.0	0.6	1.3	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	5.8	0.9	0.0	0.9	2.7	0.0	0.0	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	8.5	0.0	17.1	20.7	0.0	7.7	16.8	0.0	0.0	12.9	0.0	0.0
LnGrp LOS	A		B	C	A		B	B				
Approach Vol, veh/h	722		254			305			44			
Approach Delay, s/veh	16.4		11.7			16.8			12.9			
Approach LOS	B		B			B			B			
Timer - Assigned Phs	2		4		6		8					
Phs Duration (G+Y+Rc), s	28.0		18.3		28.0		18.3					
Change Period (Y+Rc), s	6.0		6.0		6.0		6.0					
Max Green Setting (Gmax), s	22.0		26.0		22.0		26.0					
Max Q Clear Time (g_c+I1), s	16.3		2.9		21.1		10.4					
Green Ext Time (p_c), s	2.3		0.2		0.1		1.8					
Intersection Summary												
HCM 7th Control Delay, s/veh	15.5											
HCM 7th LOS	B											

Intersection												
Int Delay, s/veh	3.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔		↔	↔			↔	
Traffic Vol, veh/h	11	4	57	1	3	3	69	186	4	4	104	16
Future Vol, veh/h	11	4	57	1	3	3	69	186	4	4	104	16
Conflicting Peds, #/hr	0	0	6	6	0	0	13	0	0	0	0	13
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	100	-	-	-	60	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	57	57	57	50	50	50	59	59	59	60	60	60
Heavy Vehicles, %	9	9	9	17	17	17	2	2	2	4	4	4
Mvmt Flow	19	7	100	2	6	6	117	315	7	7	173	27

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	765	769	206	749	779	319	213	0	0	322	0	0
Stage 1	213	213	-	553	553	-	-	-	-	-	-	-
Stage 2	552	556	-	196	226	-	-	-	-	-	-	-
Critical Hdwy	7.19	6.59	6.29	7.27	6.67	6.37	4.12	-	-	4.14	-	-
Critical Hdwy Stg 1	6.19	5.59	-	6.27	5.67	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.19	5.59	-	6.27	5.67	-	-	-	-	-	-	-
Follow-up Hdwy	3.581	4.081	3.381	3.653	4.153	3.453	2.218	-	-	2.236	-	-
Pot Cap-1 Maneuver	312	323	817	310	310	689	1357	-	-	1227	-	-
Stage 1	773	713	-	492	491	-	-	-	-	-	-	-
Stage 2	506	502	-	772	690	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	271	290	803	240	278	689	1340	-	-	1227	-	-
Mov Cap-2 Maneuver	271	290	-	240	278	-	-	-	-	-	-	-
Stage 1	759	700	-	449	448	-	-	-	-	-	-	-
Stage 2	451	458	-	661	677	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	12.06		15.34		2.12		0.26	
HCM LOS	B		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1340	-	-	276	803	362	57	-	-
HCM Lane V/C Ratio	0.087	-	-	0.095	0.125	0.039	0.005	-	-
HCM Ctrl Dly (s/v)	7.9	-	-	19.4	10.1	15.3	8	0	-
HCM Lane LOS	A	-	-	C	B	C	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0.3	0.4	0.1	0	-	-

Intersection						
Int Delay, s/veh	5.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	67	26	46	190	57	102
Future Vol, veh/h	67	26	46	190	57	102
Conflicting Peds, #/hr	0	0	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	37	37	70	70	59	59
Heavy Vehicles, %	1	1	3	3	2	2
Mvmt Flow	181	70	66	271	97	173

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	588	185	271	0	-	0
Stage 1	185	-	-	-	-	-
Stage 2	403	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.13	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.227	-	-	-
Pot Cap-1 Maneuver	473	860	1286	-	-	-
Stage 1	849	-	-	-	-	-
Stage 2	677	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	443	858	1284	-	-	-
Mov Cap-2 Maneuver	443	-	-	-	-	-
Stage 1	796	-	-	-	-	-
Stage 2	676	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	16.1	1.55	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	351	-	443	858	-	-
HCM Lane V/C Ratio	0.051	-	0.409	0.082	-	-
HCM Ctrl Dly (s/v)	8	0	18.6	9.6	-	-
HCM Lane LOS	A	A	C	A	-	-
HCM 95th %tile Q(veh)	0.2	-	2	0.3	-	-

Intersection						
Int Delay, s/veh	3.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	102	1	0	135	53	30
Future Vol, veh/h	102	1	0	135	53	30
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	75	75	77	77	51	51
Heavy Vehicles, %	1	1	6	6	9	9
Mvmt Flow	136	1	0	175	104	59

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	309	133	163	0	-	0
Stage 1	133	-	-	-	-	-
Stage 2	175	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.16	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.254	-	-	-
Pot Cap-1 Maneuver	686	918	1392	-	-	-
Stage 1	895	-	-	-	-	-
Stage 2	858	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	686	918	1392	-	-	-
Mov Cap-2 Maneuver	686	-	-	-	-	-
Stage 1	895	-	-	-	-	-
Stage 2	858	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	11.54	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1392	-	687	-	-
HCM Lane V/C Ratio	-	-	0.2	-	-
HCM Ctrl Dly (s/v)	0	-	11.5	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.7	-	-

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	102	29	1	1	0
Future Vol, veh/h	0	102	29	1	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	1	1	1	1	0	0
Mvmt Flow	0	136	39	1	1	0
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	40	0	-	0	175	39
Stage 1	-	-	-	-	39	-
Stage 2	-	-	-	-	136	-
Critical Hdwy	4.11	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.209	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1576	-	-	-	819	1038
Stage 1	-	-	-	-	988	-
Stage 2	-	-	-	-	895	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1576	-	-	-	819	1038
Mov Cap-2 Maneuver	-	-	-	-	819	-
Stage 1	-	-	-	-	988	-
Stage 2	-	-	-	-	895	-
Approach	EB	WB		SB		
HCM Ctrl Dly, s/v	0	0		9.4		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1576	-	-	-	819	
HCM Lane V/C Ratio	-	-	-	-	0.002	
HCM Ctrl Dly (s/v)	0	-	-	-	9.4	
HCM Lane LOS	A	-	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0	

Timings
10/27/2025

1: Poplar St & Jefferson Ave (US 40)
2028 Background (with Moonlit) - PM Peak Hour

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	19	174	141	538	17	7	4	11
Future Volume (vph)	19	174	141	538	17	7	4	11
Lane Group Flow (vph)	21	227	166	638	0	137	0	53
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		8		4
Permitted Phases	2		6		8		4	
Detector Phase	2	2	6	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	25.0	25.0	25.0	25.0	32.0	32.0	32.0	32.0
Total Split (s)	28.0	28.0	28.0	28.0	32.0	32.0	32.0	32.0
Total Split (%)	46.7%	46.7%	46.7%	46.7%	53.3%	53.3%	53.3%	53.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0		6.0		6.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	Max	Max	Max	Max	None	None	None	None
v/c Ratio	0.06	0.21	0.24	0.57		0.33		0.14
Control Delay (s/veh)	6.3	6.3	7.6	10.6		8.3		8.8
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	6.3	6.3	7.6	10.6		8.3		8.8
Queue Length 50th (ft)	2	27	22	109		6		4
Queue Length 95th (ft)	10	56	46	182		27		21
Internal Link Dist (ft)		477		408		755		327
Turn Bay Length (ft)	50		100					
Base Capacity (vph)	377	1077	688	1118		899		907
Starvation Cap Reductn	0	0	0	0		0		0
Spillback Cap Reductn	0	0	0	0		0		0
Storage Cap Reductn	0	0	0	0		0		0
Reduced v/c Ratio	0.06	0.21	0.24	0.57		0.15		0.06

Intersection Summary

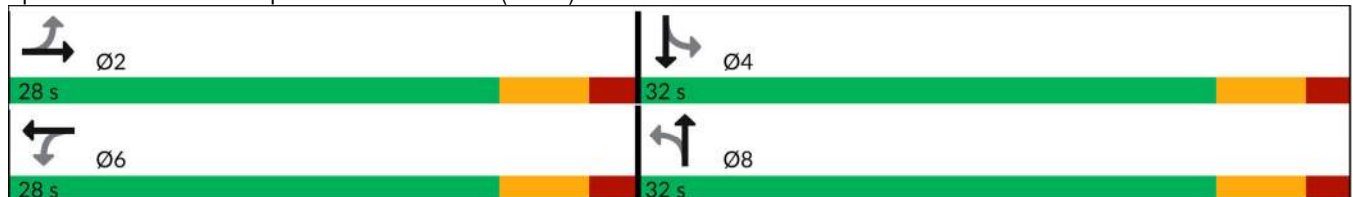
Cycle Length: 60

Actuated Cycle Length: 45.1

Natural Cycle: 60

Control Type: Semi Act-Uncoord

Splits and Phases: 1: Poplar St & Jefferson Ave (US 40)



HCM 7th Signalized Intersection Summary

10/27/2025

1: Poplar St & Jefferson Ave (US 40)

2028 Background (with Moonlit) - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	174	31	141	538	4	17	7	79	4	11	30
Future Volume (veh/h)	19	174	31	141	538	4	17	7	79	4	11	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1811	1811	1811	1841	1841	1841	1796	1796	1796	1826	1826	1826
Adj Flow Rate, veh/h	21	193	34	166	633	5	23	9	105	5	13	35
Peak Hour Factor	0.90	0.90	0.90	0.85	0.85	0.85	0.75	0.75	0.75	0.85	0.85	0.85
Percent Heavy Veh, %	6	6	6	4	4	4	7	7	7	5	5	5
Cap, veh/h	342	748	132	646	911	7	125	52	266	101	113	241
Arrive On Green	0.50	0.50	0.50	0.50	0.50	0.50	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	765	1499	264	1133	1824	14	129	226	1165	50	493	1056
Grp Volume(v), veh/h	21	0	227	166	0	638	137	0	0	53	0	0
Grp Sat Flow(s),veh/h/ln	765	0	1763	1133	0	1838	1521	0	0	1599	0	0
Q Serve(g_s), s	1.0	0.0	3.3	4.3	0.0	11.7	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	12.7	0.0	3.3	7.6	0.0	11.7	3.3	0.0	0.0	1.2	0.0	0.0
Prop In Lane	1.00		0.15	1.00		0.01	0.17		0.77	0.09		0.66
Lane Grp Cap(c), veh/h	342	0	880	646	0	918	442	0	0	454	0	0
V/C Ratio(X)	0.06	0.00	0.26	0.26	0.00	0.69	0.31	0.00	0.00	0.12	0.00	0.00
Avail Cap(c_a), veh/h	342	0	880	646	0	918	978	0	0	1018	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	13.3	0.0	6.3	8.5	0.0	8.5	14.4	0.0	0.0	13.6	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.7	1.0	0.0	4.3	0.4	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	1.0	1.0	0.0	4.3	1.1	0.0	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	13.7	0.0	7.0	9.5	0.0	12.8	14.8	0.0	0.0	13.7	0.0	0.0
LnGrp LOS	B		A		A	B		B	B			
Approach Vol, veh/h	248			804			137			53		
Approach Delay, s/veh	7.6			12.1			14.8			13.7		
Approach LOS	A			B			B			B		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	28.0			16.0			28.0			16.0		
Change Period (Y+Rc), s	6.0			6.0			6.0			6.0		
Max Green Setting (Gmax), s	22.0			26.0			22.0			26.0		
Max Q Clear Time (g_c+l1), s	14.7			3.2			13.7			5.3		
Green Ext Time (p_c), s	0.8			0.2			3.2			0.8		
Intersection Summary												
HCM 7th Control Delay, s/veh	11.6											
HCM 7th LOS	B											

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	7	11	68	2	4	6	58	97	6	11	167	15
Future Vol, veh/h	7	11	68	2	4	6	58	97	6	11	167	15
Conflicting Peds, #/hr	0	0	6	6	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	100	-	-	-	60	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	69	69	69	60	60	60	59	59	59	83	83	83
Heavy Vehicles, %	7	7	7	1	1	1	5	5	5	4	4	4
Mvmt Flow	10	16	99	3	7	10	98	164	10	13	201	18

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	602	609	217	608	613	169	220	0	0	175	0	0
Stage 1	238	238	-	366	366	-	-	-	-	-	-	-
Stage 2	364	371	-	242	247	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.57	6.27	7.11	6.51	6.21	4.15	-	-	4.14	-	-
Critical Hdwy Stg 1	6.17	5.57	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.57	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	3.509	4.009	3.309	2.245	-	-	2.236	-	-
Pot Cap-1 Maneuver	404	403	810	409	409	877	1331	-	-	1390	-	-
Stage 1	754	699	-	655	624	-	-	-	-	-	-	-
Stage 2	645	611	-	764	704	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	360	369	805	314	374	877	1330	-	-	1390	-	-
Mov Cap-2 Maneuver	360	369	-	314	374	-	-	-	-	-	-	-
Stage 1	746	691	-	607	578	-	-	-	-	-	-	-
Stage 2	583	566	-	644	696	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	11.25		12.46		2.85		0.43	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1330	-	-	365	805	502	101	-	-
HCM Lane V/C Ratio	0.074	-	-	0.071	0.122	0.04	0.01	-	-
HCM Ctrl Dly (s/v)	7.9	-	-	15.6	10.1	12.5	7.6	0	-
HCM Lane LOS	A	-	-	C	B	B	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.2	0.4	0.1	0	-	-

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	21	4	0	139	234	3
Future Vol, veh/h	21	4	0	139	234	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	47	47	82	82	69	69
Heavy Vehicles, %	1	1	7	7	3	3
Mvmt Flow	45	9	0	170	339	4

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	511	341	343	0	-	0
Stage 1	341	-	-	-	-	-
Stage 2	170	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.17	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.263	-	-	-
Pot Cap-1 Maneuver	525	703	1188	-	-	-
Stage 1	722	-	-	-	-	-
Stage 2	863	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	525	703	1188	-	-	-
Mov Cap-2 Maneuver	525	-	-	-	-	-
Stage 1	722	-	-	-	-	-
Stage 2	863	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	12.13	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1188	-	525	703	-	-
HCM Lane V/C Ratio	-	-	0.085	0.012	-	-
HCM Ctrl Dly (s/v)	0	-	12.5	10.2	-	-
HCM Lane LOS	A	-	B	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	0	-	-

Intersection						
Int Delay, s/veh	2.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	60	0	0	80	137	101
Future Vol, veh/h	60	0	0	80	137	101
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	66	66	79	79	89	89
Heavy Vehicles, %	1	1	3	3	1	1
Mvmt Flow	91	0	0	101	154	113

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	312	211	267	0	-	0
Stage 1	211	-	-	-	-	-
Stage 2	101	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.13	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.227	-	-	-
Pot Cap-1 Maneuver	683	832	1291	-	-	-
Stage 1	827	-	-	-	-	-
Stage 2	925	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	683	832	1291	-	-	-
Mov Cap-2 Maneuver	683	-	-	-	-	-
Stage 1	827	-	-	-	-	-
Stage 2	925	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	11.08	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1291	-	683	-	-
HCM Lane V/C Ratio	-	-	0.133	-	-
HCM Ctrl Dly (s/v)	0	-	11.1	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.5	-	-

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	59	100	1	1	0
Future Vol, veh/h	0	59	100	1	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	70	70	70	70	70	70
Heavy Vehicles, %	1	1	1	1	0	0
Mvmt Flow	0	84	143	1	1	0
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	144	0	-	0	228	144
Stage 1	-	-	-	-	144	-
Stage 2	-	-	-	-	84	-
Critical Hdwy	4.11	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.209	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1444	-	-	-	765	909
Stage 1	-	-	-	-	889	-
Stage 2	-	-	-	-	944	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1444	-	-	-	765	909
Mov Cap-2 Maneuver	-	-	-	-	765	-
Stage 1	-	-	-	-	889	-
Stage 2	-	-	-	-	944	-
Approach	EB	WB		SB		
HCM Ctrl Dly, s/v	0	0		9.72		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1444	-	-	-	765	
HCM Lane V/C Ratio	-	-	-	-	0.002	
HCM Ctrl Dly (s/v)	0	-	-	-	9.7	
HCM Lane LOS	A	-	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0	

***Intersection Capacity Worksheets:
Year 2045 Background
(with Moonlit Meadows)***

Timings
10/27/2025

1: Poplar St & Jefferson Ave (US 40)
2045 Background (with Moonlit) - AM Peak Hour

									
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	55	630	130	160	79	15	333	10	10
Future Volume (vph)	55	630	130	160	79	15	333	10	10
Lane Group Flow (vph)	66	808	169	214	0	125	444	0	62
Turn Type	pm+pt	NA	pm+pt	NA	Perm	NA	pm+ov	Perm	NA
Protected Phases	5	2	1	6		8	1		4
Permitted Phases	2		6		8		8	4	
Detector Phase	5	2	1	6	8	8	1	4	4
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.5	25.0	9.5	25.0	32.0	32.0	9.5	32.0	32.0
Total Split (s)	9.6	53.0	15.0	58.4	32.0	32.0	15.0	32.0	32.0
Total Split (%)	9.6%	53.0%	15.0%	58.4%	32.0%	32.0%	15.0%	32.0%	32.0%
Yellow Time (s)	3.5	4.0	3.5	4.0	4.0	4.0	3.5	4.0	4.0
All-Red Time (s)	1.0	2.0	1.0	2.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)	4.5	6.0	4.5	6.0		6.0	4.5		6.0
Lead/Lag	Lead	Lag	Lead	Lag			Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes		
Recall Mode	None	Max	None	Max	None	None	None	None	None
v/c Ratio	0.09	0.84	0.52	0.21		0.60	0.75		0.23
Control Delay (s/veh)	5.3	27.9	11.3	9.4		46.9	26.8		22.7
Queue Delay	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)	5.3	27.9	11.3	9.4		46.9	26.8		22.7
Queue Length 50th (ft)	9	356	24	50		66	154		17
Queue Length 95th (ft)	23	#591	47	84		98	188		27
Internal Link Dist (ft)		477		408		755			327
Turn Bay Length (ft)	50		100				100		
Base Capacity (vph)	726	965	345	1038		377	612		479
Starvation Cap Reductn	0	0	0	0		0	0		0
Spillback Cap Reductn	0	0	0	0		0	0		0
Storage Cap Reductn	0	0	0	0		0	0		0
Reduced v/c Ratio	0.09	0.84	0.49	0.21		0.33	0.73		0.13

Intersection Summary

Cycle Length: 100

Actuated Cycle Length: 87.7

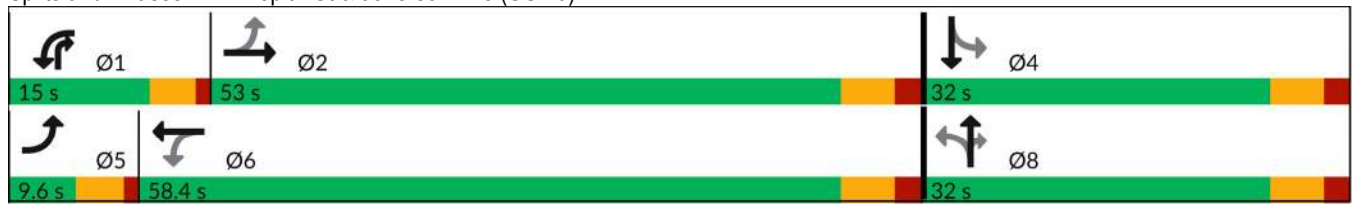
Natural Cycle: 90

Control Type: Semi Act-Uncoord

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Poplar St & Jefferson Ave (US 40)



HCM 7th Signalized Intersection Summary
10/27/2025

1: Poplar St & Jefferson Ave (US 40)
2045 Background (with Moonlit) - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	630	41	130	160	5	79	15	333	10	10	15
Future Volume (veh/h)	55	630	41	130	160	5	79	15	333	10	10	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1811	1811	1811	1722	1722	1722	1796	1796	1796	1885	1885	1885
Adj Flow Rate, veh/h	66	759	49	169	208	6	105	20	444	18	18	26
Peak Hour Factor	0.83	0.83	0.83	0.77	0.77	0.77	0.75	0.75	0.75	0.57	0.57	0.57
Percent Heavy Veh, %	6	6	6	12	12	12	7	7	7	1	1	1
Cap, veh/h	666	843	54	244	881	25	310	53	505	103	105	116
Arrive On Green	0.04	0.50	0.50	0.07	0.53	0.53	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	1725	1682	109	1640	1665	48	928	203	1519	213	402	444
Grp Volume(v), veh/h	66	0	808	169	0	214	125	0	444	62	0	0
Grp Sat Flow(s),veh/h/ln	1725	0	1791	1640	0	1713	1131	0	1519	1058	0	0
Q Serve(g_s), s	1.8	0.0	40.6	4.9	0.0	6.7	0.0	0.0	26.0	0.3	0.0	0.0
Cycle Q Clear(g_c), s	1.8	0.0	40.6	4.9	0.0	6.7	12.2	0.0	26.0	12.5	0.0	0.0
Prop In Lane	1.00		0.06	1.00		0.03	0.84		1.00	0.29		0.42
Lane Grp Cap(c), veh/h	666	0	898	244	0	906	364	0	505	325	0	0
V/C Ratio(X)	0.10	0.00	0.90	0.69	0.00	0.24	0.34	0.00	0.88	0.19	0.00	0.00
Avail Cap(c_a), veh/h	682	0	898	303	0	906	364	0	505	325	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	10.8	0.0	22.5	21.1	0.0	12.6	31.3	0.0	31.2	28.2	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	13.8	4.9	0.0	0.6	0.6	0.0	16.2	0.3	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	19.4	2.2	0.0	2.6	2.6	0.0	12.1	1.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	10.9	0.0	36.3	26.0	0.0	13.2	31.9	0.0	47.4	28.5	0.0	0.0
LnGrp LOS	B		D	C		B	C		D	C		
Approach Vol, veh/h	874		383			569			62			
Approach Delay, s/veh	34.4		18.8			44.0			28.5			
Approach LOS	C		B			D			C			
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.4	55.7		32.0	8.7	58.4		32.0				
Change Period (Y+Rc), s	4.5	6.0		6.0	4.5	6.0		6.0				
Max Green Setting (Gmax), s	10.5	47.0		26.0	5.1	52.4		26.0				
Max Q Clear Time (g_c+I1), s	6.9	42.6		14.5	3.8	8.7		28.0				
Green Ext Time (p_c), s	0.1	2.2		0.2	0.0	1.4		0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	33.9											
HCM 7th LOS	C											
Notes												
User approved pedestrian interval to be less than phase max green.												

Intersection												
Int Delay, s/veh	3.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔		↔	↔			↔	
Traffic Vol, veh/h	15	5	77	5	5	5	112	457	5	5	205	20
Future Vol, veh/h	15	5	77	5	5	5	112	457	5	5	205	20
Conflicting Peds, #/hr	0	0	6	6	0	0	13	0	0	0	0	13
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	100	-	-	-	60	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	57	57	85	50	50	50	85	85	59	60	85	60
Heavy Vehicles, %	9	9	9	17	17	17	2	2	2	4	4	4
Mvmt Flow	26	9	91	10	10	10	132	538	8	8	241	33

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1094	1097	277	1074	1110	542	288	0	0	546	0	0
Stage 1	288	288	-	805	805	-	-	-	-	-	-	-
Stage 2	806	810	-	268	304	-	-	-	-	-	-	-
Critical Hdwy	7.19	6.59	6.29	7.27	6.67	6.37	4.12	-	-	4.14	-	-
Critical Hdwy Stg 1	6.19	5.59	-	6.27	5.67	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.19	5.59	-	6.27	5.67	-	-	-	-	-	-	-
Follow-up Hdwy	3.581	4.081	3.381	3.653	4.153	3.453	2.218	-	-	2.236	-	-
Pot Cap-1 Maneuver	186	207	745	185	197	512	1274	-	-	1013	-	-
Stage 1	705	661	-	355	374	-	-	-	-	-	-	-
Stage 2	365	383	-	706	637	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	151	181	732	137	172	512	1259	-	-	1013	-	-
Mov Cap-2 Maneuver	151	181	-	137	172	-	-	-	-	-	-	-
Stage 1	690	647	-	318	335	-	-	-	-	-	-	-
Stage 2	311	343	-	600	623	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	17.21		26.26		1.59		0.25	
HCM LOS	C		D					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1259	-	-	158	732	199	52	-	-
HCM Lane V/C Ratio	0.105	-	-	0.223	0.124	0.151	0.008	-	-
HCM Ctrl Dly (s/v)	8.2	-	-	34.3	10.6	26.3	8.6	0	-
HCM Lane LOS	A	-	-	D	B	D	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0.8	0.4	0.5	0	-	-

Intersection						
Int Delay, s/veh	11.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	70	32	65	489	157	105
Future Vol, veh/h	70	32	65	489	157	105
Conflicting Peds, #/hr	0	0	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	37	37	70	85	85	59
Heavy Vehicles, %	1	1	3	3	2	2
Mvmt Flow	189	86	93	575	185	178

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1037	276	365	0	-	0
Stage 1	276	-	-	-	-	-
Stage 2	761	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.13	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.227	-	-	-
Pot Cap-1 Maneuver	257	765	1188	-	-	-
Stage 1	773	-	-	-	-	-
Stage 2	463	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	227	764	1186	-	-	-
Mov Cap-2 Maneuver	227	-	-	-	-	-
Stage 1	683	-	-	-	-	-
Stage 2	462	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	50.74	1.15	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	250	-	227	764	-	-
HCM Lane V/C Ratio	0.078	-	0.834	0.113	-	-
HCM Ctrl Dly (s/v)	8.3	0	69.2	10.3	-	-
HCM Lane LOS	A	A	F	B	-	-
HCM 95th %tile Q(veh)	0.3	-	6.4	0.4	-	-

Intersection						
Int Delay, s/veh	4.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			W	W	
Traffic Vol, veh/h	112	5	5	447	160	34
Future Vol, veh/h	112	5	5	447	160	34
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	75	75	77	77	51	51
Heavy Vehicles, %	1	1	6	6	9	9
Mvmt Flow	149	7	6	581	314	67
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	941	347	380	0	-	0
Stage 1	347	-	-	-	-	-
Stage 2	594	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.16	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.254	-	-	-
Pot Cap-1 Maneuver	294	698	1156	-	-	-
Stage 1	718	-	-	-	-	-
Stage 2	554	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	291	698	1156	-	-	-
Mov Cap-2 Maneuver	291	-	-	-	-	-
Stage 1	712	-	-	-	-	-
Stage 2	554	-	-	-	-	-
Approach	EB	NB		SB		
HCM Ctrl Dly, s/v	29.52	0.09		0		
HCM LOS	D					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	20	-	299	-	-	
HCM Lane V/C Ratio	0.006	-	0.522	-	-	
HCM Ctrl Dly (s/v)	8.1	0	29.5	-	-	
HCM Lane LOS	A	A	D	-	-	
HCM 95th %tile Q(veh)	0	-	2.8	-	-	

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	116	33	1	1	0
Future Vol, veh/h	0	116	33	1	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	1	1	1	1	0	0
Mvmt Flow	0	155	44	1	1	0
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	45	0	-	0	199	45
Stage 1	-	-	-	-	45	-
Stage 2	-	-	-	-	155	-
Critical Hdwy	4.11	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.209	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1569	-	-	-	794	1031
Stage 1	-	-	-	-	983	-
Stage 2	-	-	-	-	878	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1569	-	-	-	794	1031
Mov Cap-2 Maneuver	-	-	-	-	794	-
Stage 1	-	-	-	-	983	-
Stage 2	-	-	-	-	878	-
Approach	EB	WB		SB		
HCM Ctrl Dly, s/v	0	0		9.54		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1569	-	-	-	794	
HCM Lane V/C Ratio	-	-	-	-	0.002	
HCM Ctrl Dly (s/v)	0	-	-	-	9.5	
HCM Lane LOS	A	-	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0	

Timings
10/27/2025

1: Poplar St & Jefferson Ave (US 40)
2045 Background (with Moonlit) - PM Peak Hour

									
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	25	205	350	635	53	10	210	5	15
Future Volume (vph)	25	205	350	635	53	10	210	5	15
Lane Group Flow (vph)	28	325	412	753	0	84	280	0	71
Turn Type	pm+pt	NA	pm+pt	NA	Perm	NA	pm+ov	Perm	NA
Protected Phases	5	2	1	6		8	1		4
Permitted Phases	2		6		8		8	4	
Detector Phase	5	2	1	6	8	8	1	4	4
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.5	25.0	9.5	25.0	32.0	32.0	9.5	32.0	32.0
Total Split (s)	10.0	45.0	36.0	71.0	39.0	39.0	36.0	39.0	39.0
Total Split (%)	8.3%	37.5%	30.0%	59.2%	32.5%	32.5%	30.0%	32.5%	32.5%
Yellow Time (s)	3.5	4.0	3.5	4.0	4.0	4.0	3.5	4.0	4.0
All-Red Time (s)	1.0	2.0	1.0	2.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)	4.5	6.0	4.5	6.0		6.0	4.5		6.0
Lead/Lag	Lead	Lag	Lead	Lag			Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes		
Recall Mode	None	Max	None	Max	None	None	None	None	None
v/c Ratio	0.06	0.32	0.50	0.56		0.44	0.44		0.28
Control Delay (s/veh)	4.8	12.6	5.8	11.1		47.1	4.9		20.8
Queue Delay	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)	4.8	12.6	5.8	11.1		47.1	4.9		20.8
Queue Length 50th (ft)	3	90	61	247		50	0		14
Queue Length 95th (ft)	11	191	111	379		80	21		49
Internal Link Dist (ft)		477		408		755			327
Turn Bay Length (ft)	50		100				100		
Base Capacity (vph)	475	1015	1009	1341		517	900		597
Starvation Cap Reductn	0	0	0	0		0	0		0
Spillback Cap Reductn	0	0	0	0		0	0		0
Storage Cap Reductn	0	0	0	0		0	0		0
Reduced v/c Ratio	0.06	0.32	0.41	0.56		0.16	0.31		0.12

Intersection Summary

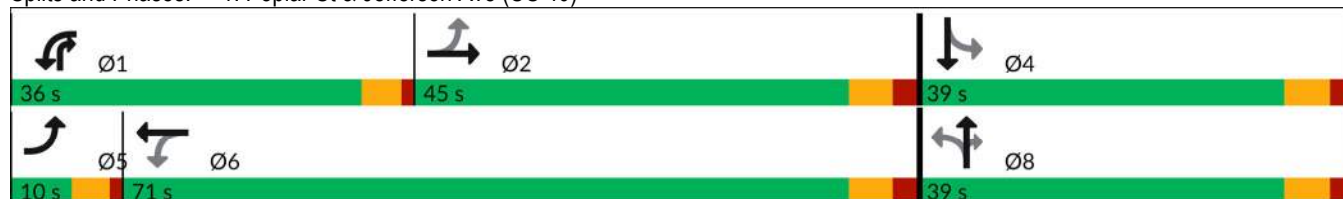
Cycle Length: 120

Actuated Cycle Length: 92.4

Natural Cycle: 80

Control Type: Semi Act-Uncoord

Splits and Phases: 1: Poplar St & Jefferson Ave (US 40)



HCM 7th Signalized Intersection Summary

10/27/2025

1: Poplar St & Jefferson Ave (US 40)

2045 Background (with Moonlit) - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	205	87	350	635	5	53	10	210	5	15	40
Future Volume (veh/h)	25	205	87	350	635	5	53	10	210	5	15	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1811	1811	1811	1841	1841	1841	1796	1796	1796	1826	1826	1826
Adj Flow Rate, veh/h	28	228	97	412	747	6	71	13	280	6	18	47
Peak Hour Factor	0.90	0.90	0.90	0.85	0.85	0.85	0.75	0.75	0.75	0.85	0.85	0.85
Percent Heavy Veh, %	6	6	6	4	4	4	7	7	7	5	5	5
Cap, veh/h	361	620	264	719	1133	9	289	48	495	47	95	204
Arrive On Green	0.03	0.51	0.51	0.13	0.62	0.62	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	1725	1205	512	1753	1823	15	1159	245	1503	48	488	1050
Grp Volume(v), veh/h	28	0	325	412	0	753	84	0	280	71	0	0
Grp Sat Flow(s),veh/h/ln	1725	0	1717	1753	0	1838	1404	0	1503	1586	0	0
Q Serve(g_s), s	0.8	0.0	11.9	10.7	0.0	27.5	0.6	0.0	16.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.8	0.0	11.9	10.7	0.0	27.5	4.5	0.0	16.1	3.9	0.0	0.0
Prop In Lane	1.00		0.30	1.00		0.01	0.85		1.00	0.08		0.66
Lane Grp Cap(c), veh/h	361	0	884	719	0	1142	336	0	495	346	0	0
V/C Ratio(X)	0.08	0.00	0.37	0.57	0.00	0.66	0.25	0.00	0.57	0.21	0.00	0.00
Avail Cap(c_a), veh/h	406	0	884	1013	0	1142	497	0	677	531	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	12.5	0.0	15.2	9.1	0.0	12.7	35.7	0.0	29.1	35.5	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	1.2	0.7	0.0	3.0	0.4	0.0	1.0	0.3	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	4.8	3.8	0.0	11.3	1.9	0.0	5.9	1.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.6	0.0	16.4	9.8	0.0	15.7	36.1	0.0	30.1	35.8	0.0	0.0
LnGrp LOS	B		B	A		B	D		C	D		
Approach Vol, veh/h	353			1165			364			71		
Approach Delay, s/veh	16.1			13.6			31.5			35.8		
Approach LOS	B			B			C			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.4	59.8		26.3	7.3	71.0		26.3				
Change Period (Y+Rc), s	4.5	6.0		6.0	4.5	6.0		6.0				
Max Green Setting (Gmax), s	31.5	39.0		33.0	5.5	65.0		33.0				
Max Q Clear Time (g_c+I1), s	12.7	13.9		5.9	2.8	29.5		18.1				
Green Ext Time (p_c), s	1.2	2.1		0.4	0.0	6.5		1.3				
Intersection Summary												
HCM 7th Control Delay, s/veh	18.2											
HCM 7th LOS	B											

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	10	15	108	5	5	10	88	285	10	15	459	20
Future Vol, veh/h	10	15	108	5	5	10	88	285	10	15	459	20
Conflicting Peds, #/hr	0	0	6	6	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	100	-	-	-	60	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	69	69	85	60	60	60	85	85	59	83	85	83
Heavy Vehicles, %	7	7	7	1	1	1	5	5	5	4	4	4
Mvmt Flow	14	22	127	8	8	17	104	335	17	18	540	24

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1136	1148	559	1144	1152	344	565	0	0	352	0	0
Stage 1	589	589	-	551	551	-	-	-	-	-	-	-
Stage 2	547	559	-	593	601	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.57	6.27	7.11	6.51	6.21	4.15	-	-	4.14	-	-
Critical Hdwy Stg 1	6.17	5.57	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.57	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	3.509	4.009	3.309	2.245	-	-	2.236	-	-
Pot Cap-1 Maneuver	175	194	519	178	198	701	992	-	-	1195	-	-
Stage 1	486	487	-	521	517	-	-	-	-	-	-	-
Stage 2	513	503	-	494	491	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	143	170	516	103	174	701	991	-	-	1195	-	-
Mov Cap-2 Maneuver	143	170	-	103	174	-	-	-	-	-	-	-
Stage 1	475	476	-	466	463	-	-	-	-	-	-	-
Stage 2	440	450	-	345	480	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	18.72		24.39		2.06		0.25	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	991	-	-	158	516	219	55	-	-
HCM Lane V/C Ratio	0.104	-	-	0.229	0.246	0.152	0.015	-	-
HCM Ctrl Dly (s/v)	9.1	-	-	34.4	14.3	24.4	8.1	0	-
HCM Lane LOS	A	-	-	D	B	C	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0.8	1	0.5	0	-	-

Intersection						
Int Delay, s/veh	1.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	25	5	5	348	562	5
Future Vol, veh/h	25	5	5	348	562	5
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	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	47	47	82	85	85	69
Heavy Vehicles, %	1	1	7	7	3	3
Mvmt Flow	53	11	6	409	661	7
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1086	665	668	0	-	0
Stage 1	665	-	-	-	-	-
Stage 2	422	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.17	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.263	-	-	-
Pot Cap-1 Maneuver	240	462	898	-	-	-
Stage 1	513	-	-	-	-	-
Stage 2	664	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	238	462	898	-	-	-
Mov Cap-2 Maneuver	238	-	-	-	-	-
Stage 1	509	-	-	-	-	-
Stage 2	664	-	-	-	-	-
Approach	EB	NB		SB		
HCM Ctrl Dly, s/v	22.5	0.13		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	26	-	238	462	-	-
HCM Lane V/C Ratio	0.007	-	0.223	0.023	-	-
HCM Ctrl Dly (s/v)	9	0	24.4	13	-	-
HCM Lane LOS	A	A	C	B	-	-
HCM 95th %tile Q(veh)	0	-	0.8	0.1	-	-

Intersection						
Int Delay, s/veh	2.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	69	5	5	284	462	110
Future Vol, veh/h	69	5	5	284	462	110
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	66	66	79	79	89	89
Heavy Vehicles, %	1	1	3	3	1	1
Mvmt Flow	105	8	6	359	519	124

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	953	581	643	0	-	0
Stage 1	581	-	-	-	-	-
Stage 2	372	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.13	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.227	-	-	-
Pot Cap-1 Maneuver	289	515	937	-	-	-
Stage 1	561	-	-	-	-	-
Stage 2	699	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	286	515	937	-	-	-
Mov Cap-2 Maneuver	286	-	-	-	-	-
Stage 1	557	-	-	-	-	-
Stage 2	699	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	24.49	0.15	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	31	-	295	-	-
HCM Lane V/C Ratio	0.007	-	0.38	-	-
HCM Ctrl Dly (s/v)	8.9	0	24.5	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	1.7	-	-

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	73	109	1	1	0
Future Vol, veh/h	0	73	109	1	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	70	70	70	70	70	70
Heavy Vehicles, %	1	1	1	1	0	0
Mvmt Flow	0	104	156	1	1	0
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	157	0	-	0	261	156
Stage 1	-	-	-	-	156	-
Stage 2	-	-	-	-	104	-
Critical Hdwy	4.11	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.209	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1429	-	-	-	733	894
Stage 1	-	-	-	-	877	-
Stage 2	-	-	-	-	925	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1429	-	-	-	733	894
Mov Cap-2 Maneuver	-	-	-	-	733	-
Stage 1	-	-	-	-	877	-
Stage 2	-	-	-	-	925	-
Approach	EB	WB		SB		
HCM Ctrl Dly, s/v	0	0		9.92		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1429	-	-	-	733	
HCM Lane V/C Ratio	-	-	-	-	0.002	
HCM Ctrl Dly (s/v)	0	-	-	-	9.9	
HCM Lane LOS	A	-	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0	

***Intersection Capacity Worksheets:
Year 2028 Background + Project
(without Moonlit Meadows)***

Intersection												
Int Delay, s/veh	8.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	45	535	14	49	135	1	15	12	105	8	6	11
Future Vol, veh/h	45	535	14	49	135	1	15	12	105	8	6	11
Conflicting Peds, #/hr	0	0	4	4	0	0	1	0	0	0	0	1
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	83	83	83	77	77	77	59	59	59	57	57	57
Heavy Vehicles, %	6	6	6	12	12	12	7	7	7	1	1	1
Mvmt Flow	54	645	17	64	175	1	25	20	178	14	11	19

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	177	0	0	665	0	0	1074	1069	657	1066	1077	177
Stage 1	-	-	-	-	-	-	765	765	-	303	303	-
Stage 2	-	-	-	-	-	-	309	304	-	763	774	-
Critical Hdwy	4.16	-	-	4.22	-	-	7.17	6.57	6.27	7.11	6.51	6.21
Critical Hdwy Stg 1	-	-	-	-	-	-	6.17	5.57	-	6.11	5.51	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.17	5.57	-	6.11	5.51	-
Follow-up Hdwy	2.254	-	-	2.308	-	-	3.563	4.063	3.363	3.509	4.009	3.309
Pot Cap-1 Maneuver	1376	-	-	878	-	-	193	217	456	201	220	869
Stage 1	-	-	-	-	-	-	388	405	-	708	665	-
Stage 2	-	-	-	-	-	-	691	654	-	398	410	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1376	-	-	875	-	-	154	186	454	95	189	868
Mov Cap-2 Maneuver	-	-	-	-	-	-	154	186	-	95	189	-
Stage 1	-	-	-	-	-	-	362	378	-	651	612	-
Stage 2	-	-	-	-	-	-	610	601	-	215	383	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.59	2.5	34.68	28.81
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	336	136	-	-	476	-	-	195
HCM Lane V/C Ratio	0.666	0.039	-	-	0.073	-	-	0.225
HCM Ctrl Dly (s/v)	34.7	7.7	0	-	9.4	0	-	28.8
HCM Lane LOS	D	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	4.5	0.1	-	-	0.2	-	-	0.8

Intersection												
Int Delay, s/veh	3.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔		↔	↔			↔	
Traffic Vol, veh/h	11	4	55	1	3	3	62	128	4	4	85	16
Future Vol, veh/h	11	4	55	1	3	3	62	128	4	4	85	16
Conflicting Peds, #/hr	0	0	6	6	0	0	13	0	0	0	0	13
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	100	-	-	-	60	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	57	57	57	50	50	50	59	59	59	60	60	60
Heavy Vehicles, %	9	9	9	17	17	17	2	2	2	4	4	4
Mvmt Flow	19	7	96	2	6	6	105	217	7	7	142	27

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	611	615	174	595	625	220	181	0	0	224	0	0
Stage 1	181	181	-	431	431	-	-	-	-	-	-	-
Stage 2	430	434	-	165	195	-	-	-	-	-	-	-
Critical Hdwy	7.19	6.59	6.29	7.27	6.67	6.37	4.12	-	-	4.14	-	-
Critical Hdwy Stg 1	6.19	5.59	-	6.27	5.67	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.19	5.59	-	6.27	5.67	-	-	-	-	-	-	-
Follow-up Hdwy	3.581	4.081	3.381	3.653	4.153	3.453	2.218	-	-	2.236	-	-
Pot Cap-1 Maneuver	396	397	852	395	382	783	1394	-	-	1333	-	-
Stage 1	804	736	-	575	558	-	-	-	-	-	-	-
Stage 2	590	569	-	803	712	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	351	360	836	313	347	783	1377	-	-	1333	-	-
Mov Cap-2 Maneuver	351	360	-	313	347	-	-	-	-	-	-	-
Stage 1	790	723	-	531	516	-	-	-	-	-	-	-
Stage 2	534	526	-	696	700	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	11.18		13.32		2.5		0.29	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1377	-	-	353	836	446	66	-	-
HCM Lane V/C Ratio	0.076	-	-	0.075	0.115	0.031	0.005	-	-
HCM Ctrl Dly (s/v)	7.8	-	-	16	9.9	13.3	7.7	0	-
HCM Lane LOS	A	-	-	C	A	B	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.2	0.4	0.1	0	-	-

Intersection						
Int Delay, s/veh	5.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	67	24	41	125	36	102
Future Vol, veh/h	67	24	41	125	36	102
Conflicting Peds, #/hr	0	0	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	37	37	70	70	59	59
Heavy Vehicles, %	1	1	3	3	2	2
Mvmt Flow	181	65	59	179	61	173

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	445	149	236	0	-	0
Stage 1	149	-	-	-	-	-
Stage 2	296	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.13	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.227	-	-	-
Pot Cap-1 Maneuver	572	900	1325	-	-	-
Stage 1	881	-	-	-	-	-
Stage 2	757	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	542	898	1323	-	-	-
Mov Cap-2 Maneuver	542	-	-	-	-	-
Stage 1	836	-	-	-	-	-
Stage 2	756	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	13.45	1.94	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	445	-	542	898	-	-
HCM Lane V/C Ratio	0.044	-	0.334	0.072	-	-
HCM Ctrl Dly (s/v)	7.8	0	14.9	9.3	-	-
HCM Lane LOS	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	1.5	0.2	-	-

Intersection

Int Delay, s/veh 2.8

Movement EBL EBR NBL NBT SBT SBRLane Configurations 

Traffic Vol, veh/h 66 2 0 101 41 19

Future Vol, veh/h 66 2 0 101 41 19

Conflicting Peds, #/hr 0 0 0 0 0 0

Sign Control Stop Stop Free Free Free Free

RT Channelized - None - None - None

Storage Length 0 - - - - -

Veh in Median Storage, # 0 - - 0 0 -

Grade, % 0 - - 0 0 -

Peak Hour Factor 75 75 77 77 51 51

Heavy Vehicles, % 1 1 6 6 9 9

Mvmt Flow 88 3 0 131 80 37

Major/Minor Minor2 Major1 Major2

Conflicting Flow All 230 99 118 0 - 0

Stage 1 99 - - - - -

Stage 2 131 - - - - -

Critical Hdwy 6.41 6.21 4.16 - - -

Critical Hdwy Stg 1 5.41 - - - - -

Critical Hdwy Stg 2 5.41 - - - - -

Follow-up Hdwy 3.509 3.309 2.254 - - -

Pot Cap-1 Maneuver 760 959 1446 - - -

Stage 1 927 - - - - -

Stage 2 897 - - - - -

Platoon blocked, % - - -

Mov Cap-1 Maneuver 760 959 1446 - - -

Mov Cap-2 Maneuver 760 - - - - -

Stage 1 927 - - - - -

Stage 2 897 - - - - -

Approach EB NB SB

HCM Ctrl Dly, s/v 10.34 0 0

HCM LOS B

Minor Lane/Major Mvmt NBL NBT EBLn1 SBT SBR

Capacity (veh/h) 1446 - 765 - -

HCM Lane V/C Ratio - - 0.119 - -

HCM Ctrl Dly (s/v) 0 - 10.3 - -

HCM Lane LOS A - B - -

HCM 95th %tile Q(veh) 0 - 0.4 - -

Intersection						
Int Delay, s/veh	2.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	45	10	9	23	0
Future Vol, veh/h	0	45	10	9	23	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	1	1	1	1	0	0
Mvmt Flow	0	60	13	12	31	0
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	25	0	-	0	79	19
Stage 1	-	-	-	-	19	-
Stage 2	-	-	-	-	60	-
Critical Hdwy	4.11	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.209	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1596	-	-	-	928	1065
Stage 1	-	-	-	-	1009	-
Stage 2	-	-	-	-	968	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1596	-	-	-	928	1065
Mov Cap-2 Maneuver	-	-	-	-	928	-
Stage 1	-	-	-	-	1009	-
Stage 2	-	-	-	-	968	-
Approach	EB	WB		SB		
HCM Ctrl Dly, s/v	0	0		9.01		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1596	-	-	-	928	
HCM Lane V/C Ratio	-	-	-	-	0.033	
HCM Ctrl Dly (s/v)	0	-	-	-	9	
HCM Lane LOS	A	-	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

Intersection												
Int Delay, s/veh	3.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	19	174	18	94	538	4	9	7	51	4	11	30
Future Vol, veh/h	19	174	18	94	538	4	9	7	51	4	11	30
Conflicting Peds, #/hr	2	0	3	3	0	2	5	0	0	0	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	85	85	85	75	75	75	85	85	85
Heavy Vehicles, %	6	6	6	4	4	4	7	7	7	5	5	5
Mvmt Flow	21	193	20	111	633	5	12	9	68	5	13	35

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	640	0	0	216	0	0	1114	1109	206	1099	1117	642
Stage 1	-	-	-	-	-	-	249	249	-	858	858	-
Stage 2	-	-	-	-	-	-	866	861	-	240	259	-
Critical Hdwy	4.16	-	-	4.14	-	-	7.17	6.57	6.27	7.15	6.55	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.17	5.57	-	6.15	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.17	5.57	-	6.15	5.55	-
Follow-up Hdwy	2.254	-	-	2.236	-	-	3.563	4.063	3.363	3.545	4.045	3.345
Pot Cap-1 Maneuver	926	-	-	1342	-	-	181	205	822	187	205	469
Stage 1	-	-	-	-	-	-	744	692	-	347	369	-
Stage 2	-	-	-	-	-	-	341	366	-	757	688	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	924	-	-	1338	-	-	132	173	819	139	173	465
Mov Cap-2 Maneuver	-	-	-	-	-	-	132	173	-	139	173	-
Stage 1	-	-	-	-	-	-	723	672	-	302	321	-
Stage 2	-	-	-	-	-	-	263	318	-	666	669	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.81	1.17	16.86	20.36
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	392	159	-	-	266	-	-	287
HCM Lane V/C Ratio	0.228	0.023	-	-	0.083	-	-	0.184
HCM Ctrl Dly (s/v)	16.9	9	0	-	7.9	0	-	20.4
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.9	0.1	-	-	0.3	-	-	0.7

Intersection												
Int Delay, s/veh	4.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔		↔	↔			↔	
Traffic Vol, veh/h	7	11	61	2	4	6	53	55	6	11	97	15
Future Vol, veh/h	7	11	61	2	4	6	53	55	6	11	97	15
Conflicting Peds, #/hr	0	0	6	6	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	100	-	-	-	60	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	69	69	69	60	60	60	59	59	59	83	83	83
Heavy Vehicles, %	7	7	7	1	1	1	5	5	5	4	4	4
Mvmt Flow	10	16	88	3	7	10	90	93	10	13	117	18

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	430	436	133	435	440	98	136	0	0	103	0	0
Stage 1	153	153	-	278	278	-	-	-	-	-	-	-
Stage 2	276	283	-	157	162	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.57	6.27	7.11	6.51	6.21	4.15	-	-	4.14	-	-
Critical Hdwy Stg 1	6.17	5.57	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.57	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	3.509	4.009	3.309	2.245	-	-	2.236	-	-
Pot Cap-1 Maneuver	527	506	903	533	512	960	1430	-	-	1476	-	-
Stage 1	837	761	-	731	682	-	-	-	-	-	-	-
Stage 2	719	668	-	847	766	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	477	469	897	429	475	960	1429	-	-	1476	-	-
Mov Cap-2 Maneuver	477	469	-	429	475	-	-	-	-	-	-	-
Stage 1	828	753	-	685	639	-	-	-	-	-	-	-
Stage 2	660	626	-	736	757	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	10.28		10.99		3.57		0.67	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1429	-	-	472	897	621	157	-	-
HCM Lane V/C Ratio	0.063	-	-	0.055	0.099	0.032	0.009	-	-
HCM Ctrl Dly (s/v)	7.7	-	-	13.1	9.5	11	7.5	0	-
HCM Lane LOS	A	-	-	B	A	B	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.2	0.3	0.1	0	-	-

Intersection						
Int Delay, s/veh	1.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	21	4	0	92	157	3
Future Vol, veh/h	21	4	0	92	157	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	47	47	82	82	69	69
Heavy Vehicles, %	1	1	7	7	3	3
Mvmt Flow	45	9	0	112	228	4
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	342	230	232	0	-	0
Stage 1	230	-	-	-	-	-
Stage 2	112	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.17	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.263	-	-	-
Pot Cap-1 Maneuver	656	812	1307	-	-	-
Stage 1	811	-	-	-	-	-
Stage 2	915	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	656	812	1307	-	-	-
Mov Cap-2 Maneuver	656	-	-	-	-	-
Stage 1	811	-	-	-	-	-
Stage 2	915	-	-	-	-	-
Approach	EB	NB		SB		
HCM Ctrl Dly, s/v	10.66	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1307	-	656	812	-	-
HCM Lane V/C Ratio	-	-	0.068	0.01	-	-
HCM Ctrl Dly (s/v)	0	-	10.9	9.5	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	0	-	-

Intersection						
Int Delay, s/veh	1.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	35	1	1	58	102	59
Future Vol, veh/h	35	1	1	58	102	59
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	66	66	79	79	89	89
Heavy Vehicles, %	1	1	3	3	1	1
Mvmt Flow	53	2	1	73	115	66

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	224	148	181
Stage 1	148	-	-
Stage 2	76	-	-
Critical Hdwy	6.41	6.21	4.13
Critical Hdwy Stg 1	5.41	-	-
Critical Hdwy Stg 2	5.41	-	-
Follow-up Hdwy	3.509	3.309	2.227
Pot Cap-1 Maneuver	767	902	1388
Stage 1	882	-	-
Stage 2	950	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	766	902	1388
Mov Cap-2 Maneuver	766	-	-
Stage 1	881	-	-
Stage 2	950	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	10.04	0.13	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	31	-	769	-	-
HCM Lane V/C Ratio	0.001	-	0.071	-	-
HCM Ctrl Dly (s/v)	7.6	0	10	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection						
Int Delay, s/veh	1.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	21	40	20	15	0
Future Vol, veh/h	0	21	40	20	15	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	70	70	70	70	70	70
Heavy Vehicles, %	1	1	1	1	0	0
Mvmt Flow	0	30	57	29	21	0
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	86	0	-	0	101	71
Stage 1	-	-	-	-	71	-
Stage 2	-	-	-	-	30	-
Critical Hdwy	4.11	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.209	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1517	-	-	-	902	997
Stage 1	-	-	-	-	957	-
Stage 2	-	-	-	-	998	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1517	-	-	-	902	997
Mov Cap-2 Maneuver	-	-	-	-	902	-
Stage 1	-	-	-	-	957	-
Stage 2	-	-	-	-	998	-
Approach	EB	WB		SB		
HCM Ctrl Dly, s/v	0	0		9.09		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1517	-	-	-	902	
HCM Lane V/C Ratio	-	-	-	-	0.024	
HCM Ctrl Dly (s/v)	0	-	-	-	9.1	
HCM Lane LOS	A	-	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

***Intersection Capacity Worksheets:
Year 2028 Background + Project
(with Moonlit Meadows)***

Timings
10/27/2025

1: Poplar St & Jefferson Ave (US 40)
2028 Background +Project (with Moonlit) - AM Peak Hour

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	45	535	66	135	30	12	8	6
Future Volume (vph)	45	535	66	135	30	12	8	6
Lane Group Flow (vph)	54	669	86	176	0	337	0	44
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		8		4
Permitted Phases	2		6		8		4	
Detector Phase	2	2	6	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	25.0	25.0	25.0	25.0	32.0	32.0	32.0	32.0
Total Split (s)	28.0	28.0	28.0	28.0	32.0	32.0	32.0	32.0
Total Split (%)	46.7%	46.7%	46.7%	46.7%	53.3%	53.3%	53.3%	53.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0		6.0		6.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	Max	Max	Max	Max	None	None	None	None
v/c Ratio	0.10	0.81	0.46	0.22		0.67		0.10
Control Delay (s/veh)	9.7	23.7	22.7	10.0		17.3		8.7
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	9.7	23.7	22.7	10.0		17.3		8.7
Queue Length 50th (ft)	7	138	14	25		54		5
Queue Length 95th (ft)	27	#353	#52	62		55		11
Internal Link Dist (ft)		477		408		755		327
Turn Bay Length (ft)	50		100					
Base Capacity (vph)	534	825	187	783		859		832
Starvation Cap Reductn	0	0	0	0		0		0
Spillback Cap Reductn	0	0	0	0		0		0
Storage Cap Reductn	0	0	0	0		0		0
Reduced v/c Ratio	0.10	0.81	0.46	0.22		0.39		0.05

Intersection Summary

Cycle Length: 60

Actuated Cycle Length: 48.1

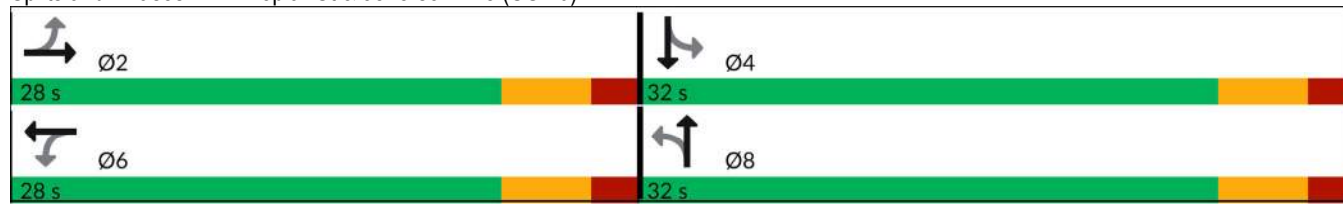
Natural Cycle: 65

Control Type: Semi Act-Uncoord

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Poplar St & Jefferson Ave (US 40)



HCM 7th Signalized Intersection Summary

1: Poplar St & Jefferson Ave (US 40)

10/27/2025

2028 Background +Project (with Moonlit) - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	535	20	66	135	1	30	12	157	8	6	11
Future Volume (veh/h)	45	535	20	66	135	1	30	12	157	8	6	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1811	1811	1811	1722	1722	1722	1796	1796	1796	1885	1885	1885
Adj Flow Rate, veh/h	54	645	24	86	175	1	51	20	266	14	11	19
Peak Hour Factor	0.83	0.83	0.83	0.77	0.77	0.77	0.59	0.59	0.59	0.57	0.57	0.57
Percent Heavy Veh, %	6	6	6	12	12	12	7	7	7	1	1	1
Cap, veh/h	619	802	30	253	790	5	128	51	344	200	161	199
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1167	1735	65	707	1711	10	144	177	1204	350	565	695
Grp Volume(v), veh/h	54	0	669	86	0	176	337	0	0	44	0	0
Grp Sat Flow(s),veh/h/ln	1167	0	1799	707	0	1720	1525	0	0	1610	0	0
Q Serve(g_s), s	1.4	0.0	15.2	5.6	0.0	2.9	4.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.3	0.0	15.2	20.8	0.0	2.9	9.6	0.0	0.0	0.9	0.0	0.0
Prop In Lane	1.00		0.04	1.00		0.01	0.15		0.79	0.32		0.43
Lane Grp Cap(c), veh/h	619	0	831	253	0	795	523	0	0	560	0	0
V/C Ratio(X)	0.09	0.00	0.80	0.34	0.00	0.22	0.64	0.00	0.00	0.08	0.00	0.00
Avail Cap(c_a), veh/h	619	0	831	253	0	795	913	0	0	936	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	9.0	0.0	11.0	19.9	0.0	7.7	15.5	0.0	0.0	12.5	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	8.2	3.6	0.0	0.6	1.3	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	6.4	1.1	0.0	1.0	3.1	0.0	0.0	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	9.2	0.0	19.1	23.5	0.0	8.3	16.8	0.0	0.0	12.5	0.0	0.0
LnGrp LOS	A		B	C	A		B	B				
Approach Vol, veh/h	723		262			337			44			
Approach Delay, s/veh	18.4		13.3			16.8			12.5			
Approach LOS	B		B			B			B			
Timer - Assigned Phs	2		4		6		8					
Phs Duration (G+Y+Rc), s	28.0		19.6		28.0		19.6					
Change Period (Y+Rc), s	6.0		6.0		6.0		6.0					
Max Green Setting (Gmax), s	22.0		26.0		22.0		26.0					
Max Q Clear Time (g_c+I1), s	17.2		2.9		22.8		11.6					
Green Ext Time (p_c), s	2.0		0.2		0.0		2.0					
Intersection Summary												
HCM 7th Control Delay, s/veh	16.8											
HCM 7th LOS	B											

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	11	4	58	1	3	3	71	205	4	4	111	16
Future Vol, veh/h	11	4	58	1	3	3	71	205	4	4	111	16
Conflicting Peds, #/hr	0	0	6	6	0	0	13	0	0	0	0	13
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	100	-	-	-	60	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	57	57	57	50	50	50	59	59	59	60	60	60
Heavy Vehicles, %	9	9	9	17	17	17	2	2	2	4	4	4
Mvmt Flow	19	7	102	2	6	6	120	347	7	7	185	27

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	816	820	217	799	830	351	225	0	0	354	0	0
Stage 1	225	225	-	592	592	-	-	-	-	-	-	-
Stage 2	591	595	-	208	238	-	-	-	-	-	-	-
Critical Hdwy	7.19	6.59	6.29	7.27	6.67	6.37	4.12	-	-	4.14	-	-
Critical Hdwy Stg 1	6.19	5.59	-	6.27	5.67	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.19	5.59	-	6.27	5.67	-	-	-	-	-	-	-
Follow-up Hdwy	3.581	4.081	3.381	3.653	4.153	3.453	2.218	-	-	2.236	-	-
Pot Cap-1 Maneuver	288	302	805	286	290	660	1344	-	-	1193	-	-
Stage 1	762	705	-	468	471	-	-	-	-	-	-	-
Stage 2	481	481	-	761	681	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	249	270	791	219	258	660	1327	-	-	1193	-	-
Mov Cap-2 Maneuver	249	270	-	219	258	-	-	-	-	-	-	-
Stage 1	748	692	-	425	428	-	-	-	-	-	-	-
Stage 2	428	438	-	649	669	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	12.39		16.12		2.02		0.25	
HCM LOS	B		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1327	-	-	254	791	338	54	-	-
HCM Lane V/C Ratio	0.091	-	-	0.103	0.129	0.041	0.006	-	-
HCM Ctrl Dly (s/v)	8	-	-	20.8	10.2	16.1	8	0	-
HCM Lane LOS	A	-	-	C	B	C	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0.3	0.4	0.1	0	-	-

Intersection						
Int Delay, s/veh	5.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	67	26	46	211	65	102
Future Vol, veh/h	67	26	46	211	65	102
Conflicting Peds, #/hr	0	0	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	37	37	70	70	59	59
Heavy Vehicles, %	1	1	3	3	2	2
Mvmt Flow	181	70	66	301	110	173

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	631	199	285	0	-	0
Stage 1	199	-	-	-	-	-
Stage 2	433	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.13	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.227	-	-	-
Pot Cap-1 Maneuver	446	845	1271	-	-	-
Stage 1	837	-	-	-	-	-
Stage 2	656	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	417	843	1269	-	-	-
Mov Cap-2 Maneuver	417	-	-	-	-	-
Stage 1	784	-	-	-	-	-
Stage 2	655	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	17.18	1.43	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	322	-	417	843	-	-
HCM Lane V/C Ratio	0.052	-	0.434	0.083	-	-
HCM Ctrl Dly (s/v)	8	0	20.1	9.7	-	-
HCM Lane LOS	A	A	C	A	-	-
HCM 95th %tile Q(veh)	0.2	-	2.1	0.3	-	-

Intersection						
Int Delay, s/veh	3.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	123	2	0	135	53	38
Future Vol, veh/h	123	2	0	135	53	38
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	75	75	77	77	51	51
Heavy Vehicles, %	1	1	6	6	9	9
Mvmt Flow	164	3	0	175	104	75

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	317	141	178	0	-	0
Stage 1	141	-	-	-	-	-
Stage 2	175	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.16	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.254	-	-	-
Pot Cap-1 Maneuver	679	909	1374	-	-	-
Stage 1	888	-	-	-	-	-
Stage 2	858	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	679	909	1374	-	-	-
Mov Cap-2 Maneuver	679	-	-	-	-	-
Stage 1	888	-	-	-	-	-
Stage 2	858	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	11.99	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1374	-	681	-	-
HCM Lane V/C Ratio	-	-	0.245	-	-
HCM Ctrl Dly (s/v)	0	-	12	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	1	-	-

Intersection						
Int Delay, s/veh	1.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	102	29	9	23	0
Future Vol, veh/h	0	102	29	9	23	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	1	1	1	1	0	0
Mvmt Flow	0	136	39	12	31	0
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	51	0	-	0	181	45
Stage 1	-	-	-	-	45	-
Stage 2	-	-	-	-	136	-
Critical Hdwy	4.11	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.209	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1562	-	-	-	813	1031
Stage 1	-	-	-	-	983	-
Stage 2	-	-	-	-	895	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1562	-	-	-	813	1031
Mov Cap-2 Maneuver	-	-	-	-	813	-
Stage 1	-	-	-	-	983	-
Stage 2	-	-	-	-	895	-
Approach	EB	WB		SB		
HCM Ctrl Dly, s/v	0	0		9.6		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1562	-	-	-	813	
HCM Lane V/C Ratio	-	-	-	-	0.038	
HCM Ctrl Dly (s/v)	0	-	-	-	9.6	
HCM Lane LOS	A	-	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

Timings
10/27/2025

1: Poplar St & Jefferson Ave (US 40)
2028 Background + Project (with Moonlit) - PM Peak Hour

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	19	174	154	538	19	7	4	11
Future Volume (vph)	19	174	154	538	19	7	4	11
Lane Group Flow (vph)	21	231	181	638	0	153	0	53
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		8		4
Permitted Phases	2		6		8		4	
Detector Phase	2	2	6	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	25.0	25.0	25.0	25.0	32.0	32.0	32.0	32.0
Total Split (s)	28.0	28.0	28.0	28.0	32.0	32.0	32.0	32.0
Total Split (%)	46.7%	46.7%	46.7%	46.7%	53.3%	53.3%	53.3%	53.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0		6.0		6.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	Max	Max	Max	Max	None	None	None	None
v/c Ratio	0.06	0.22	0.27	0.57		0.36		0.14
Control Delay (s/veh)	6.4	6.3	7.9	10.8		8.2		8.8
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	6.4	6.3	7.9	10.8		8.2		8.8
Queue Length 50th (ft)	2	27	24	109		7		4
Queue Length 95th (ft)	10	57	51	183		29		21
Internal Link Dist (ft)		477		408		755		327
Turn Bay Length (ft)	50		100					
Base Capacity (vph)	371	1066	681	1110		912		913
Starvation Cap Reductn	0	0	0	0		0		0
Spillback Cap Reductn	0	0	0	0		0		0
Storage Cap Reductn	0	0	0	0		0		0
Reduced v/c Ratio	0.06	0.22	0.27	0.57		0.17		0.06

Intersection Summary

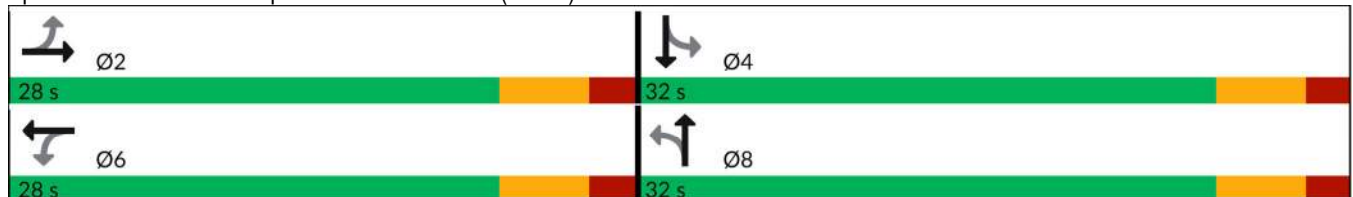
Cycle Length: 60

Actuated Cycle Length: 44.6

Natural Cycle: 60

Control Type: Semi Act-Uncoord

Splits and Phases: 1: Poplar St & Jefferson Ave (US 40)



HCM 7th Signalized Intersection Summary

1: Poplar St & Jefferson Ave (US 40)

10/27/2025

2028 Background + Project (with Moonlit) - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	174	34	154	538	4	19	7	89	4	11	30
Future Volume (veh/h)	19	174	34	154	538	4	19	7	89	4	11	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1811	1811	1811	1841	1841	1841	1796	1796	1796	1826	1826	1826
Adj Flow Rate, veh/h	21	193	38	181	633	5	25	9	119	5	13	35
Peak Hour Factor	0.90	0.90	0.90	0.85	0.85	0.85	0.75	0.75	0.75	0.85	0.85	0.85
Percent Heavy Veh, %	6	6	6	4	4	4	7	7	7	5	5	5
Cap, veh/h	339	731	144	639	907	7	124	48	273	100	114	244
Arrive On Green	0.50	0.50	0.50	0.50	0.50	0.50	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	765	1469	289	1129	1824	14	129	209	1181	49	494	1055
Grp Volume(v), veh/h	21	0	231	181	0	638	153	0	0	53	0	0
Grp Sat Flow(s),veh/h/ln	765	0	1758	1129	0	1838	1518	0	0	1598	0	0
Q Serve(g_s), s	1.0	0.0	3.4	4.9	0.0	11.8	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	12.8	0.0	3.4	8.2	0.0	11.8	3.7	0.0	0.0	1.2	0.0	0.0
Prop In Lane	1.00		0.16	1.00		0.01	0.16		0.78	0.09		0.66
Lane Grp Cap(c), veh/h	339	0	875	639	0	914	446	0	0	459	0	0
V/C Ratio(X)	0.06	0.00	0.26	0.28	0.00	0.70	0.34	0.00	0.00	0.12	0.00	0.00
Avail Cap(c_a), veh/h	339	0	875	639	0	914	974	0	0	1013	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	13.5	0.0	6.4	8.8	0.0	8.6	14.5	0.0	0.0	13.5	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.7	1.1	0.0	4.4	0.5	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	1.1	1.1	0.0	4.3	1.2	0.0	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	13.8	0.0	7.2	9.9	0.0	13.0	14.9	0.0	0.0	13.6	0.0	0.0
LnGrp LOS	B		A		A	B		B	B			
Approach Vol, veh/h	252			819			153			53		
Approach Delay, s/veh	7.7			12.3			14.9			13.6		
Approach LOS	A			B			B			B		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	28.0			16.2			28.0			16.2		
Change Period (Y+Rc), s	6.0			6.0			6.0			6.0		
Max Green Setting (Gmax), s	22.0			26.0			22.0			26.0		
Max Q Clear Time (g_c+l1), s	14.8			3.2			13.8			5.7		
Green Ext Time (p_c), s	0.8			0.2			3.2			0.9		
Intersection Summary												
HCM 7th Control Delay, s/veh	11.8											
HCM 7th LOS	B											

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	7	11	70	2	4	6	59	109	6	11	183	15
Future Vol, veh/h	7	11	70	2	4	6	59	109	6	11	183	15
Conflicting Peds, #/hr	0	0	6	6	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	100	-	-	-	60	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	69	69	69	60	60	60	59	59	59	83	83	83
Heavy Vehicles, %	7	7	7	1	1	1	5	5	5	4	4	4
Mvmt Flow	10	16	101	3	7	10	100	185	10	13	220	18

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	645	652	237	651	656	190	240	0	0	195	0	0
Stage 1	257	257	-	390	390	-	-	-	-	-	-	-
Stage 2	388	395	-	261	266	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.57	6.27	7.11	6.51	6.21	4.15	-	-	4.14	-	-
Critical Hdwy Stg 1	6.17	5.57	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.57	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	3.509	4.009	3.309	2.245	-	-	2.236	-	-
Pot Cap-1 Maneuver	378	381	790	383	387	855	1310	-	-	1366	-	-
Stage 1	737	686	-	636	610	-	-	-	-	-	-	-
Stage 2	626	596	-	746	691	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	335	347	785	290	353	855	1309	-	-	1366	-	-
Mov Cap-2 Maneuver	335	347	-	290	353	-	-	-	-	-	-	-
Stage 1	728	677	-	588	563	-	-	-	-	-	-	-
Stage 2	564	551	-	624	682	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	11.51		12.91		2.71		0.4	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1309	-	-	343	785	475	93	-	-
HCM Lane V/C Ratio	0.076	-	-	0.076	0.129	0.042	0.01	-	-
HCM Ctrl Dly (s/v)	8	-	-	16.4	10.3	12.9	7.7	0	-
HCM Lane LOS	A	-	-	C	B	B	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.2	0.4	0.1	0	-	-

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	21	4	0	152	252	3
Future Vol, veh/h	21	4	0	152	252	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	47	47	82	82	69	69
Heavy Vehicles, %	1	1	7	7	3	3
Mvmt Flow	45	9	0	185	365	4
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	553	367	370	0	-	0
Stage 1	367	-	-	-	-	-
Stage 2	185	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.17	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.263	-	-	-
Pot Cap-1 Maneuver	496	680	1162	-	-	-
Stage 1	703	-	-	-	-	-
Stage 2	849	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	496	680	1162	-	-	-
Mov Cap-2 Maneuver	496	-	-	-	-	-
Stage 1	703	-	-	-	-	-
Stage 2	849	-	-	-	-	-
Approach	EB	NB		SB		
HCM Ctrl Dly, s/v	12.56	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1162	-	496	680	-	-
HCM Lane V/C Ratio	-	-	0.09	0.013	-	-
HCM Ctrl Dly (s/v)	0	-	13	10.4	-	-
HCM Lane LOS	A	-	B	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	0	-	-

Intersection						
Int Delay, s/veh	2.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	73	1	1	80	137	119
Future Vol, veh/h	73	1	1	80	137	119
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	66	66	79	79	89	89
Heavy Vehicles, %	1	1	3	3	1	1
Mvmt Flow	111	2	1	101	154	134

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	325	221	288	0	-	0
Stage 1	221	-	-	-	-	-
Stage 2	104	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.13	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.227	-	-	-
Pot Cap-1 Maneuver	671	821	1269	-	-	-
Stage 1	818	-	-	-	-	-
Stage 2	923	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	671	821	1269	-	-	-
Mov Cap-2 Maneuver	671	-	-	-	-	-
Stage 1	817	-	-	-	-	-
Stage 2	923	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	11.42	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	22	-	672	-	-
HCM Lane V/C Ratio	0.001	-	0.167	-	-
HCM Ctrl Dly (s/v)	7.8	0	11.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.6	-	-

Intersection						
Int Delay, s/veh	0.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	59	100	20	15	0
Future Vol, veh/h	0	59	100	20	15	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	70	70	70	70	70	70
Heavy Vehicles, %	1	1	1	1	0	0
Mvmt Flow	0	84	143	29	21	0

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	171	0	0 241 157
Stage 1	-	-	- 157 -
Stage 2	-	-	- 84 -
Critical Hdwy	4.11	-	- 6.4 6.2
Critical Hdwy Stg 1	-	-	- 5.4 -
Critical Hdwy Stg 2	-	-	- 5.4 -
Follow-up Hdwy	2.209	-	- 3.5 3.3
Pot Cap-1 Maneuver	1412	-	- 751 894
Stage 1	-	-	- 876 -
Stage 2	-	-	- 944 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1412	-	- 751 894
Mov Cap-2 Maneuver	-	-	- 751 -
Stage 1	-	-	- 876 -
Stage 2	-	-	- 944 -

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	9.93
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1412	-	-	-	751
HCM Lane V/C Ratio	-	-	-	-	0.029
HCM Ctrl Dly (s/v)	0	-	-	-	9.9
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

***Intersection Capacity Worksheets:
Year 2045 Background + Project
(with Moonlit Meadows)***

Timings
10/27/2025

1: Poplar St & Jefferson Ave (US 40)
2045 Background + Project (with Moonlit) - AM Peak Hour

									
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	55	630	136	160	83	15	348	10	10
Future Volume (vph)	55	630	136	160	83	15	348	10	10
Lane Group Flow (vph)	66	810	177	214	0	131	464	0	62
Turn Type	pm+pt	NA	pm+pt	NA	Perm	NA	pm+ov	Perm	NA
Protected Phases	5	2	1	6		8	1		4
Permitted Phases	2		6		8		8	4	
Detector Phase	5	2	1	6	8	8	1	4	4
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.5	25.0	9.5	25.0	32.0	32.0	9.5	32.0	32.0
Total Split (s)	9.6	53.0	15.0	58.4	32.0	32.0	15.0	32.0	32.0
Total Split (%)	9.6%	53.0%	15.0%	58.4%	32.0%	32.0%	15.0%	32.0%	32.0%
Yellow Time (s)	3.5	4.0	3.5	4.0	4.0	4.0	3.5	4.0	4.0
All-Red Time (s)	1.0	2.0	1.0	2.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)	4.5	6.0	4.5	6.0		6.0	4.5		6.0
Lead/Lag	Lead	Lag	Lead	Lag			Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes		
Recall Mode	None	Max	None	Max	None	None	None	None	None
v/c Ratio	0.09	0.85	0.55	0.21		0.62	0.78		0.22
Control Delay (s/veh)	5.4	28.8	13.0	9.6		47.5	28.3		22.5
Queue Delay	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)	5.4	28.8	13.0	9.6		47.5	28.3		22.5
Queue Length 50th (ft)	9	363	26	50		69	167		17
Queue Length 95th (ft)	24	#600	51	85		102	201		27
Internal Link Dist (ft)		477		408		755			327
Turn Bay Length (ft)	50		100				100		
Base Capacity (vph)	720	958	338	1034		375	616		477
Starvation Cap Reductn	0	0	0	0		0	0		0
Spillback Cap Reductn	0	0	0	0		0	0		0
Storage Cap Reductn	0	0	0	0		0	0		0
Reduced v/c Ratio	0.09	0.85	0.52	0.21		0.35	0.75		0.13

Intersection Summary

Cycle Length: 100

Actuated Cycle Length: 88.2

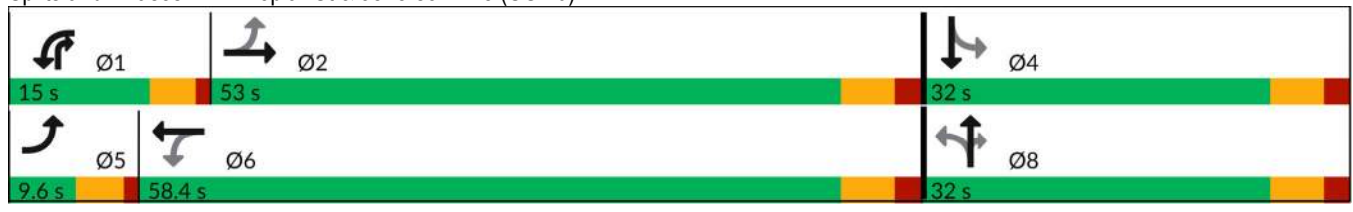
Natural Cycle: 90

Control Type: Semi Act-Uncoord

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Poplar St & Jefferson Ave (US 40)



HCM 7th Signalized Intersection Summary

1: Poplar St & Jefferson Ave (US 40)

10/27/2025

2045 Background + Project (with Moonlit) - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	630	42	136	160	5	83	15	348	10	10	15
Future Volume (veh/h)	55	630	42	136	160	5	83	15	348	10	10	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1811	1811	1811	1722	1722	1722	1796	1796	1796	1885	1885	1885
Adj Flow Rate, veh/h	66	759	51	177	208	6	111	20	464	18	18	26
Peak Hour Factor	0.83	0.83	0.83	0.77	0.77	0.77	0.75	0.75	0.75	0.57	0.57	0.57
Percent Heavy Veh, %	6	6	6	12	12	12	7	7	7	1	1	1
Cap, veh/h	666	837	56	244	881	25	296	48	509	94	97	104
Arrive On Green	0.04	0.50	0.50	0.07	0.53	0.53	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	1725	1678	113	1640	1665	48	870	182	1519	181	370	397
Grp Volume(v), veh/h	66	0	810	177	0	214	131	0	464	62	0	0
Grp Sat Flow(s),veh/h/ln	1725	0	1790	1640	0	1713	1052	0	1519	948	0	0
Q Serve(g_s), s	1.8	0.0	41.0	5.1	0.0	6.7	0.0	0.0	26.0	0.4	0.0	0.0
Cycle Q Clear(g_c), s	1.8	0.0	41.0	5.1	0.0	6.7	14.2	0.0	26.0	14.6	0.0	0.0
Prop In Lane	1.00		0.06	1.00		0.03	0.85		1.00	0.29		0.42
Lane Grp Cap(c), veh/h	666	0	893	244	0	906	343	0	509	296	0	0
V/C Ratio(X)	0.10	0.00	0.91	0.73	0.00	0.24	0.38	0.00	0.91	0.21	0.00	0.00
Avail Cap(c_a), veh/h	682	0	893	299	0	906	343	0	509	296	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	10.9	0.0	22.7	21.3	0.0	12.6	32.0	0.0	31.6	28.4	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	14.6	6.7	0.0	0.6	0.7	0.0	20.7	0.3	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	19.8	2.4	0.0	2.6	2.8	0.0	13.4	1.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.0	0.0	37.4	28.0	0.0	13.2	32.7	0.0	52.3	28.8	0.0	0.0
LnGrp LOS	B		D	C		B	C		D	C		
Approach Vol, veh/h	876		391			595			62			
Approach Delay, s/veh	35.4		19.9			48.0			28.8			
Approach LOS	D		B			D			C			
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	11.7	55.4	32.0		8.7	58.4	32.0					
Change Period (Y+Rc), s	4.5	6.0	6.0		4.5	6.0	6.0					
Max Green Setting (Gmax), s	10.5	47.0	26.0		5.1	52.4	26.0					
Max Q Clear Time (g_c+I1), s	7.1	43.0	16.6		3.8	8.7	28.0					
Green Ext Time (p_c), s	0.1	2.0	0.2		0.0	1.4	0.0					
Intersection Summary												
HCM 7th Control Delay, s/veh	35.9											
HCM 7th LOS	D											
Notes												
User approved pedestrian interval to be less than phase max green.												

Intersection												
Int Delay, s/veh	3.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔		↔	↔			↔	
Traffic Vol, veh/h	15	5	78	5	5	5	114	476	5	5	212	20
Future Vol, veh/h	15	5	78	5	5	5	114	476	5	5	212	20
Conflicting Peds, #/hr	0	0	6	6	0	0	13	0	0	0	0	13
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	100	-	-	-	60	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	57	57	85	50	50	50	85	85	59	60	85	60
Heavy Vehicles, %	9	9	9	17	17	17	2	2	2	4	4	4
Mvmt Flow	26	9	92	10	10	10	134	560	8	8	249	33

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1129	1132	285	1109	1145	564	296	0	0	568	0	0
Stage 1	296	296	-	832	832	-	-	-	-	-	-	-
Stage 2	833	837	-	276	312	-	-	-	-	-	-	-
Critical Hdwy	7.19	6.59	6.29	7.27	6.67	6.37	4.12	-	-	4.14	-	-
Critical Hdwy Stg 1	6.19	5.59	-	6.27	5.67	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.19	5.59	-	6.27	5.67	-	-	-	-	-	-	-
Follow-up Hdwy	3.581	4.081	3.381	3.653	4.153	3.453	2.218	-	-	2.236	-	-
Pot Cap-1 Maneuver	176	197	738	175	187	497	1266	-	-	994	-	-
Stage 1	698	656	-	342	363	-	-	-	-	-	-	-
Stage 2	353	372	-	698	631	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	142	172	724	128	163	497	1250	-	-	994	-	-
Mov Cap-2 Maneuver	142	172	-	128	163	-	-	-	-	-	-	-
Stage 1	682	641	-	306	324	-	-	-	-	-	-	-
Stage 2	299	333	-	592	617	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	17.86		27.71		1.57		0.25	
HCM LOS	C		D					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1250	-	-	148	724	188	50	-	-
HCM Lane V/C Ratio	0.107	-	-	0.236	0.127	0.159	0.008	-	-
HCM Ctrl Dly (s/v)	8.2	-	-	36.6	10.7	27.7	8.7	0	-
HCM Lane LOS	A	-	-	E	B	D	A	A	-
HCM 95th %tile Q(veh)	0.4	-	-	0.9	0.4	0.6	0	-	-

Intersection						
Int Delay, s/veh	12.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	70	32	65	510	165	105
Future Vol, veh/h	70	32	65	510	165	105
Conflicting Peds, #/hr	0	0	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	37	37	70	85	85	59
Heavy Vehicles, %	1	1	3	3	2	2
Mvmt Flow	189	86	93	600	194	178

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1071	285	374	0	-	0
Stage 1	285	-	-	-	-	-
Stage 2	786	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.13	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.227	-	-	-
Pot Cap-1 Maneuver	246	756	1179	-	-	-
Stage 1	766	-	-	-	-	-
Stage 2	451	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	216	755	1177	-	-	-
Mov Cap-2 Maneuver	216	-	-	-	-	-
Stage 1	674	-	-	-	-	-
Stage 2	450	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	58.02	1.12	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	241	-	216	755	-	-
HCM Lane V/C Ratio	0.079	-	0.877	0.115	-	-
HCM Ctrl Dly (s/v)	8.3	0	79.8	10.4	-	-
HCM Lane LOS	A	A	F	B	-	-
HCM 95th %tile Q(veh)	0.3	-	6.9	0.4	-	-

Intersection						
Int Delay, s/veh	5.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	133	6	5	447	160	42
Future Vol, veh/h	133	6	5	447	160	42
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	75	75	77	77	51	51
Heavy Vehicles, %	1	1	6	6	9	9
Mvmt Flow	177	8	6	581	314	82

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	948	355	396	0	-	0
Stage 1	355	-	-	-	-	-
Stage 2	594	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.16	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.254	-	-	-
Pot Cap-1 Maneuver	290	691	1141	-	-	-
Stage 1	712	-	-	-	-	-
Stage 2	554	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	288	691	1141	-	-	-
Mov Cap-2 Maneuver	288	-	-	-	-	-
Stage 1	706	-	-	-	-	-
Stage 2	554	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	35.65	0.09	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	20	-	295	-	-
HCM Lane V/C Ratio	0.006	-	0.627	-	-
HCM Ctrl Dly (s/v)	8.2	0	35.7	-	-
HCM Lane LOS	A	A	E	-	-
HCM 95th %tile Q(veh)	0	-	3.9	-	-

Intersection						
Int Delay, s/veh	1.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	116	33	9	23	0
Future Vol, veh/h	0	116	33	9	23	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	1	1	1	1	0	0
Mvmt Flow	0	155	44	12	31	0
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	56	0	-	0	205	50
Stage 1	-	-	-	-	50	-
Stage 2	-	-	-	-	155	-
Critical Hdwy	4.11	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.209	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1555	-	-	-	788	1024
Stage 1	-	-	-	-	978	-
Stage 2	-	-	-	-	878	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1555	-	-	-	788	1024
Mov Cap-2 Maneuver	-	-	-	-	788	-
Stage 1	-	-	-	-	978	-
Stage 2	-	-	-	-	878	-
Approach	EB	WB		SB		
HCM Ctrl Dly, s/v	0	0		9.75		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1555	-	-	-	788	
HCM Lane V/C Ratio	-	-	-	-	0.039	
HCM Ctrl Dly (s/v)	0	-	-	-	9.8	
HCM Lane LOS	A	-	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

Timings
10/27/2025

1: Poplar St & Jefferson Ave (US 40)
2045 Background + Project (with Moonlit) - PM Peak Hour

									
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	25	205	363	635	55	10	220	5	15
Future Volume (vph)	25	205	363	635	55	10	220	5	15
Lane Group Flow (vph)	28	328	427	753	0	86	293	0	71
Turn Type	pm+pt	NA	pm+pt	NA	Perm	NA	pm+ov	Perm	NA
Protected Phases	5	2	1	6		8	1		4
Permitted Phases	2		6		8		8	4	
Detector Phase	5	2	1	6	8	8	1	4	4
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.5	25.0	9.5	25.0	32.0	32.0	9.5	32.0	32.0
Total Split (s)	10.0	45.0	36.0	71.0	39.0	39.0	36.0	39.0	39.0
Total Split (%)	8.3%	37.5%	30.0%	59.2%	32.5%	32.5%	30.0%	32.5%	32.5%
Yellow Time (s)	3.5	4.0	3.5	4.0	4.0	4.0	3.5	4.0	4.0
All-Red Time (s)	1.0	2.0	1.0	2.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)	4.5	6.0	4.5	6.0		6.0	4.5		6.0
Lead/Lag	Lead	Lag	Lead	Lag			Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes		
Recall Mode	None	Max	None	Max	None	None	None	None	None
v/c Ratio	0.06	0.33	0.51	0.56		0.45	0.45		0.28
Control Delay (s/veh)	5.1	13.3	6.1	11.2		47.2	4.7		20.7
Queue Delay	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Total Delay (s/veh)	5.1	13.3	6.1	11.2		47.2	4.7		20.7
Queue Length 50th (ft)	3	96	65	249		52	0		14
Queue Length 95th (ft)	11	201	118	382		82	20		49
Internal Link Dist (ft)		477		408		755			327
Turn Bay Length (ft)	50		100				100		
Base Capacity (vph)	474	999	1003	1339		514	907		597
Starvation Cap Reductn	0	0	0	0		0	0		0
Spillback Cap Reductn	0	0	0	0		0	0		0
Storage Cap Reductn	0	0	0	0		0	0		0
Reduced v/c Ratio	0.06	0.33	0.43	0.56		0.17	0.32		0.12

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 92.5
Natural Cycle: 80
Control Type: Semi Act-Uncoord

Splits and Phases: 1: Poplar St & Jefferson Ave (US 40)



HCM 7th Signalized Intersection Summary

1: Poplar St & Jefferson Ave (US 40)

10/27/2025

2045 Background + Project (with Moonlit) - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	205	90	363	635	5	55	10	220	5	15	40
Future Volume (veh/h)	25	205	90	363	635	5	55	10	220	5	15	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1811	1811	1811	1841	1841	1841	1796	1796	1796	1826	1826	1826
Adj Flow Rate, veh/h	28	228	100	427	747	6	73	13	293	6	18	47
Peak Hour Factor	0.90	0.90	0.90	0.85	0.85	0.85	0.75	0.75	0.75	0.85	0.85	0.85
Percent Heavy Veh, %	6	6	6	4	4	4	7	7	7	5	5	5
Cap, veh/h	356	601	264	714	1125	9	295	47	513	47	97	209
Arrive On Green	0.03	0.50	0.50	0.14	0.62	0.62	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	1725	1192	523	1753	1823	15	1163	238	1503	49	487	1049
Grp Volume(v), veh/h	28	0	328	427	0	753	86	0	293	71	0	0
Grp Sat Flow(s),veh/h/ln	1725	0	1715	1753	0	1838	1400	0	1503	1585	0	0
Q Serve(g_s), s	0.8	0.0	12.3	11.4	0.0	28.0	0.8	0.0	16.8	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.8	0.0	12.3	11.4	0.0	28.0	4.6	0.0	16.8	3.9	0.0	0.0
Prop In Lane	1.00		0.30	1.00		0.01	0.85		1.00	0.08		0.66
Lane Grp Cap(c), veh/h	356	0	865	714	0	1135	343	0	513	353	0	0
V/C Ratio(X)	0.08	0.00	0.38	0.60	0.00	0.66	0.25	0.00	0.57	0.20	0.00	0.00
Avail Cap(c_a), veh/h	400	0	865	993	0	1135	494	0	684	527	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	13.1	0.0	16.0	9.6	0.0	13.1	35.5	0.0	28.6	35.3	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	1.3	0.8	0.0	3.1	0.4	0.0	1.0	0.3	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	5.0	4.1	0.0	11.6	1.9	0.0	6.2	1.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	13.2	0.0	17.3	10.4	0.0	16.1	35.9	0.0	29.6	35.6	0.0	0.0
LnGrp LOS	B		B	B		B	D		C	D		
Approach Vol, veh/h	356			1180			379			71		
Approach Delay, s/veh	17.0			14.1			31.0			35.6		
Approach LOS	B			B			C			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	19.2	59.1		27.0	7.3	71.0		27.0				
Change Period (Y+Rc), s	4.5	6.0		6.0	4.5	6.0		6.0				
Max Green Setting (Gmax), s	31.5	39.0		33.0	5.5	65.0		33.0				
Max Q Clear Time (g_c+I1), s	13.4	14.3		5.9	2.8	30.0		18.8				
Green Ext Time (p_c), s	1.3	2.1		0.4	0.0	6.5		1.4				
Intersection Summary												
HCM 7th Control Delay, s/veh				18.6								
HCM 7th LOS				B								

Intersection												
Int Delay, s/veh	4.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔		↔	↔			↔	
Traffic Vol, veh/h	10	15	110	5	5	10	89	297	10	15	475	20
Future Vol, veh/h	10	15	110	5	5	10	89	297	10	15	475	20
Conflicting Peds, #/hr	0	0	6	6	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	100	-	-	-	60	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	69	69	85	60	60	60	85	85	59	83	85	83
Heavy Vehicles, %	7	7	7	1	1	1	5	5	5	4	4	4
Mvmt Flow	14	22	129	8	8	17	105	349	17	18	559	24

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1171	1184	578	1179	1187	358	584	0	0	366	0	0
Stage 1	608	608	-	567	567	-	-	-	-	-	-	-
Stage 2	563	576	-	612	620	-	-	-	-	-	-	-
Critical Hdwy	7.17	6.57	6.27	7.11	6.51	6.21	4.15	-	-	4.14	-	-
Critical Hdwy Stg 1	6.17	5.57	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.17	5.57	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	3.509	4.009	3.309	2.245	-	-	2.236	-	-
Pot Cap-1 Maneuver	166	185	506	168	189	689	976	-	-	1181	-	-
Stage 1	474	478	-	510	508	-	-	-	-	-	-	-
Stage 2	502	494	-	482	481	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	135	161	503	95	165	689	975	-	-	1181	-	-
Mov Cap-2 Maneuver	135	161	-	95	165	-	-	-	-	-	-	-
Stage 1	463	467	-	455	454	-	-	-	-	-	-	-
Stage 2	429	441	-	332	470	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	19.43		25.87		2.03		0.24	
HCM LOS	C		D					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	975	-	-	149	503	206	54	-	-
HCM Lane V/C Ratio	0.107	-	-	0.242	0.257	0.162	0.015	-	-
HCM Ctrl Dly (s/v)	9.1	-	-	36.6	14.6	25.9	8.1	0	-
HCM Lane LOS	A	-	-	E	B	D	A	A	-
HCM 95th %tile Q(veh)	0.4	-	-	0.9	1	0.6	0	-	-

Intersection						
Int Delay, s/veh	1.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	25	5	5	361	580	5
Future Vol, veh/h	25	5	5	361	580	5
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	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	47	47	82	85	85	69
Heavy Vehicles, %	1	1	7	7	3	3
Mvmt Flow	53	11	6	425	682	7
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1123	686	690	0	-	0
Stage 1	686	-	-	-	-	-
Stage 2	437	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.17	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.263	-	-	-
Pot Cap-1 Maneuver	229	449	882	-	-	-
Stage 1	502	-	-	-	-	-
Stage 2	653	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	227	449	882	-	-	-
Mov Cap-2 Maneuver	227	-	-	-	-	-
Stage 1	497	-	-	-	-	-
Stage 2	653	-	-	-	-	-
Approach	EB	NB		SB		
HCM Ctrl Dly, s/v	23.62	0.13		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	25	-	227	449	-	-
HCM Lane V/C Ratio	0.007	-	0.235	0.024	-	-
HCM Ctrl Dly (s/v)	9.1	0	25.7	13.2	-	-
HCM Lane LOS	A	A	D	B	-	-
HCM 95th %tile Q(veh)	0	-	0.9	0.1	-	-

Intersection						
Int Delay, s/veh	3.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	82	6	6	284	462	128
Future Vol, veh/h	82	6	6	284	462	128
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	66	66	79	79	89	89
Heavy Vehicles, %	1	1	3	3	1	1
Mvmt Flow	124	9	8	359	519	144

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	966	591	663
Stage 1	591	-	-
Stage 2	375	-	-
Critical Hdwy	6.41	6.21	4.13
Critical Hdwy Stg 1	5.41	-	-
Critical Hdwy Stg 2	5.41	-	-
Follow-up Hdwy	3.509	3.309	2.227
Pot Cap-1 Maneuver	284	509	921
Stage 1	555	-	-
Stage 2	697	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	281	509	921
Mov Cap-2 Maneuver	281	-	-
Stage 1	550	-	-
Stage 2	697	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	27.61	0.18	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	37	-	290	-	-
HCM Lane V/C Ratio	0.008	-	0.46	-	-
HCM Ctrl Dly (s/v)	8.9	0	27.6	-	-
HCM Lane LOS	A	A	D	-	-
HCM 95th %tile Q(veh)	0	-	2.3	-	-

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	73	109	20	15	0
Future Vol, veh/h	0	73	109	20	15	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	70	70	70	70	70	70
Heavy Vehicles, %	1	1	1	1	0	0
Mvmt Flow	0	104	156	29	21	0

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	184	0	0 274 170
Stage 1	-	-	- 170 -
Stage 2	-	-	- 104 -
Critical Hdwy	4.11	-	- 6.4 6.2
Critical Hdwy Stg 1	-	-	- 5.4 -
Critical Hdwy Stg 2	-	-	- 5.4 -
Follow-up Hdwy	2.209	-	- 3.5 3.3
Pot Cap-1 Maneuver	1397	-	- 720 879
Stage 1	-	-	- 865 -
Stage 2	-	-	- 925 -
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	1397	-	- 720 879
Mov Cap-2 Maneuver	-	-	- 720 -
Stage 1	-	-	- 865 -
Stage 2	-	-	- 925 -

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	10.16
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1397	-	-	-	720
HCM Lane V/C Ratio	-	-	-	-	0.03
HCM Ctrl Dly (s/v)	0	-	-	-	10.2
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Signal Warrant Analysis

Warrant 1: 8 Hour Analysis - 2025 Existing

2025	Major Jefferson Ave (US Highway 40) EB / WB Total	Minor* Poplar St NB / SB Highest	Warrant Type Street Designation	Condition A Major Minor		Condition B Major Minor		Condition A + B Major A Minor A Major B Minor B			
Time of Day	Number of Lanes 1 1		Vehicles per Hour Needed to Meet Warrant	350	105	525	53	280	84	420	42
0:00	31	1	Warrant is Met (yes/no)	no	no	no	no	no	no	no	no
1:00	14	0		no	no	no	no	no	no	no	no
2:00	22	1		no	no	no	no	no	no	no	no
3:00	31	1		no	no	no	no	no	no	no	no
4:00	71	3		no	no	no	no	no	no	no	no
5:00	173	10		no	no	no	no	no	no	no	no
6:00	513	17		yes	no	no	no	yes	no	yes	no
7:00	648	110		yes	yes	yes	yes	yes	yes	yes	yes
8:00	482	48		yes	no	no	no	yes	no	yes	yes
9:00	487	35		yes	no	no	no	yes	no	yes	no
10:00	491	28		yes	no	no	no	yes	no	yes	no
11:00	432	43		yes	no	no	no	yes	no	yes	yes
12:00	500	33		yes	no	no	no	yes	no	yes	no
13:00	462	26		yes	no	no	no	yes	no	yes	no
14:00	537	28		yes	no	yes	no	yes	no	yes	no
15:00	578	63		yes	no	yes	yes	yes	no	yes	yes
16:00	684	52		yes	no	yes	no	yes	no	yes	yes
17:00	860	54		yes	no	yes	yes	yes	no	yes	yes
18:00	614	38		yes	no	yes	no	yes	no	yes	no
19:00	388	26		yes	no	no	no	yes	no	no	no
20:00	254	14		no	no	no	no	no	no	no	no
21:00	163	4		no	no	no	no	no	no	no	no
22:00	107	3		no	no	no	no	no	no	no	no
23:00	40	1		no	no	no	no	no	no	no	no
Total	8,582	639		1	Not Met	3	Not Met	1	Not Met		

* Vehicles per hour on higher-volume minor-street approach (one direction only)

Warrant 1: 8 Hour Analysis - 2028 Background without Moonlit Meadows

2028	Major Jefferson Ave (US Highway 40) EB / WB Total	Minor* Poplar St NB / SB Highest	Warrant Type Street Designation	Condition A Major Minor		Condition B Major Minor		Condition A + B Major A Minor A Major B Minor B			
Time of Day	Number of Lanes 1 1		Vehicles per Hour Needed to Meet Warrant	350	105	525	53	280	84	420	42
0:00	32	1	Warrant is Met (yes/no)	no	no	no	no	no	no	no	no
1:00	14	0		no	no	no	no	no	no	no	no
2:00	23	1		no	no	no	no	no	no	no	no
3:00	33	1		no	no	no	no	no	no	no	no
4:00	74	3		no	no	no	no	no	no	no	no
5:00	178	10		no	no	no	no	no	no	no	no
6:00	528	18		yes	no	yes	no	yes	no	yes	no
7:00	668	113		yes	yes	yes	yes	yes	yes	yes	yes
8:00	496	49		yes	no	no	no	yes	no	yes	yes
9:00	500	36		yes	no	no	no	yes	no	yes	no
10:00	505	29		yes	no	no	no	yes	no	yes	no
11:00	445	44		yes	no	no	no	yes	no	yes	yes
12:00	515	34		yes	no	no	no	yes	no	yes	no
13:00	477	27		yes	no	no	no	yes	no	yes	no
14:00	553	29		yes	no	yes	no	yes	no	yes	no
15:00	596	65		yes	no	yes	yes	yes	no	yes	yes
16:00	705	54		yes	no	yes	yes	yes	no	yes	yes
17:00	886	56		yes	no	yes	yes	yes	no	yes	yes
18:00	632	39		yes	no	yes	no	yes	no	yes	no
19:00	400	27		yes	no	no	no	yes	no	no	no
20:00	261	14		no	no	no	no	no	no	no	no
21:00	168	4		no	no	no	no	no	no	no	no
22:00	109	3		no	no	no	no	no	no	no	no
23:00	42	1		no	no	no	no	no	no	no	no
Total	8,840	658		1	Not Met	4	Not Met	1	Not Met		

* Vehicles per hour on higher-volume minor-street approach (one direction only)

Warrant 1: 8 Hour Analysis - 2028 Background with Moonlit Meadows

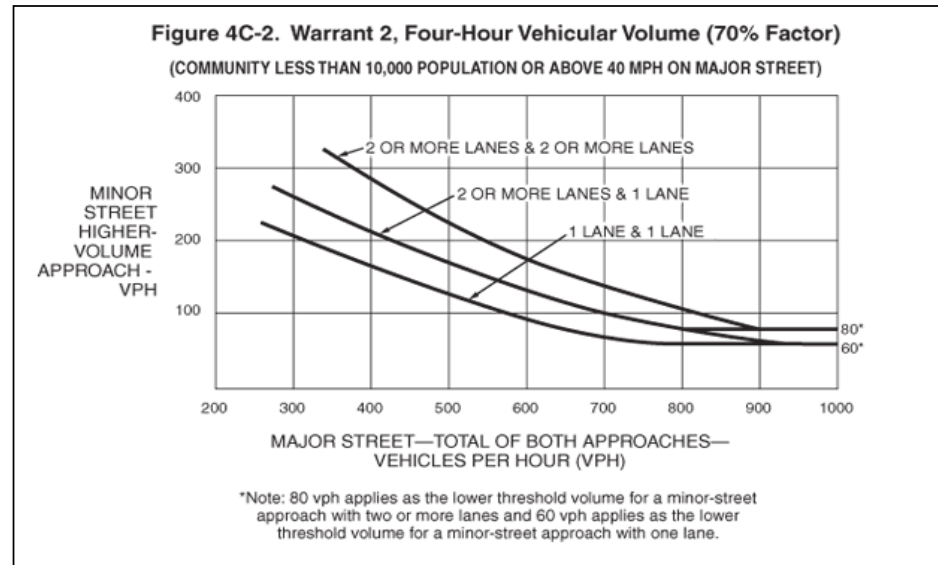
2028	Major Jefferson Ave (US Highway 40) EB / WB Total	Minor* Poplar St NB / SB Highest	Warrant Type Street Designation	Condition A Major Minor		Condition B Major Minor		Condition A + B Major A Minor A Major B Minor B			
Time of Day	Number of Lanes 1 1		Vehicles per Hour Needed to Meet Warrant	350	105	525	53	280	84	420	42
0:00	33	3	Warrant is Met (yes/no)	no	no	no	no	no	no	no	no
1:00	14	1		no	no	no	no	no	no	no	no
2:00	23	2		no	no	no	no	no	no	no	no
3:00	33	2		no	no	no	no	no	no	no	no
4:00	75	6		no	no	no	no	no	no	no	no
5:00	182	16		no	no	no	no	no	no	no	no
6:00	539	35		yes	no	yes	no	yes	no	yes	no
7:00	691	180		yes	yes	yes	yes	yes	yes	yes	yes
8:00	515	78		yes	no	no	yes	yes	no	yes	yes
9:00	514	57		yes	no	no	yes	yes	no	yes	yes
10:00	520	52		yes	no	no	no	yes	no	yes	yes
11:00	461	69		yes	no	no	yes	yes	no	yes	yes
12:00	558	62		yes	no	yes	yes	yes	no	yes	yes
13:00	523	57		yes	no	no	yes	yes	no	yes	yes
14:00	604	62		yes	no	yes	yes	yes	no	yes	yes
15:00	653	102		yes	no	yes	yes	yes	yes	yes	yes
16:00	772	98		yes	no	yes	yes	yes	yes	yes	yes
17:00	962	104		yes	no	yes	yes	yes	yes	yes	yes
18:00	686	74		yes	no	yes	yes	yes	no	yes	yes
19:00	439	52		yes	no	no	no	yes	no	yes	yes
20:00	295	37		no	no	no	no	yes	no	no	no
21:00	193	21		no	no	no	no	no	no	no	no
22:00	120	11		no	no	no	no	no	no	no	no
23:00	50	6		no	no	no	no	no	no	no	no
Total	9,455	1,187		1	Not Met	7	Not Met	4	Not Met		

* Vehicles per hour on higher-volume minor-street approach (one direction only)

Intersection: Jefferson Ave (US 40) at Poplar St

Warrant 2: 4 Hour Analysis - 2025 Existing

2025	Major Jefferson Ave (US Highway 40) EB / WB Total	Minor* Poplar St NB / SB Highest		Warrant 2 (Figure 4C-2)
Time of Day	Number of Lanes			
	1	1		
0:00	31	1		no
1:00	14	0		no
2:00	22	1		no
3:00	31	1		no
4:00	71	3		no
5:00	173	10		no
6:00	513	17		no
7:00	648	110		Yes
8:00	482	48		no
9:00	487	35		no
10:00	491	28		no
11:00	432	43		no
12:00	500	33		no
13:00	462	26		no
14:00	537	28		no
15:00	578	63		no
16:00	684	52		no
17:00	860	54		no
18:00	614	38		no
19:00	388	26		no
20:00	254	14		no
21:00	163	4		no
22:00	107	3		no
23:00	40	1		no
Total	8,582	639	1	Not Met

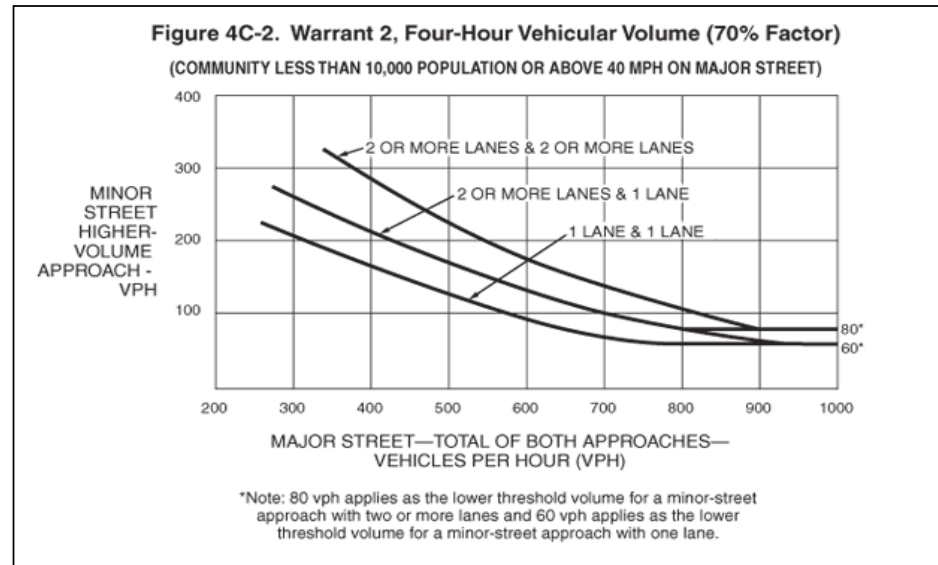
Warrant is
Met
(yes/no)

*The minor volume for each hour represents the higher of either minor approach.

Intersection: Jefferson Ave (US 40) at Poplar St

Warrant 2: 4 Hour Analysis - 2028 Background without Moonlit Meadows

2028	Major Jefferson Ave (US Highway 40) EB / WB Total	Minor* Poplar St NB / SB Highest		Warrant 2 (Figure 4C-2)
Time of Day	Number of Lanes			
	1	1		
0:00	32	1		no
1:00	14	0		no
2:00	23	1		no
3:00	33	1		no
4:00	74	3		no
5:00	178	10		no
6:00	528	18		no
7:00	668	113		Yes
8:00	496	49		no
9:00	500	36		no
10:00	505	29		no
11:00	445	44		no
12:00	515	34		no
13:00	477	27		no
14:00	553	29		no
15:00	596	65		no
16:00	705	54		no
17:00	886	56		no
18:00	632	39		no
19:00	400	27		no
20:00	261	14		no
21:00	168	4		no
22:00	109	3		no
23:00	42	1		no
Total	8,840	658	1	Not Met

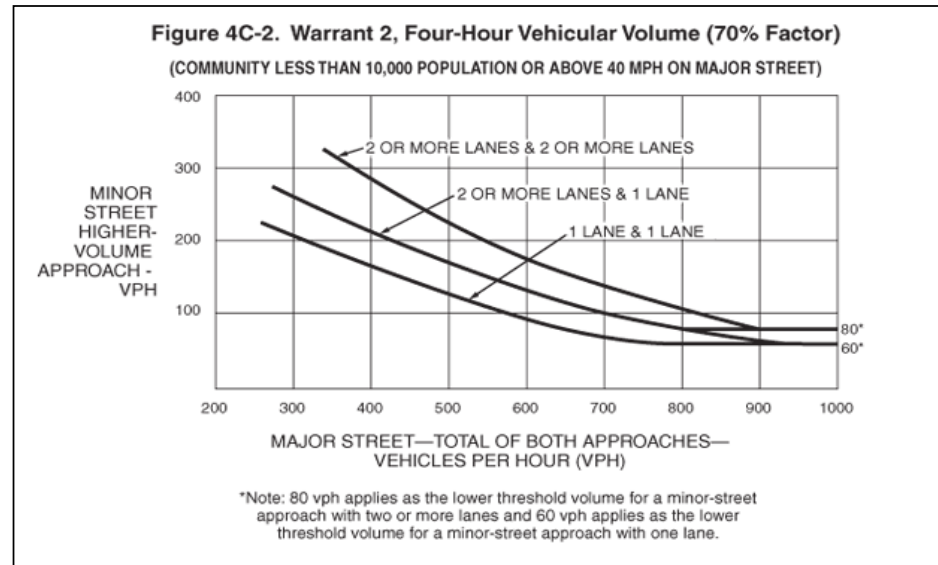
Warrant is
Met
(yes/no)

*The minor volume for each hour represents the higher of either minor approach.

Intersection: Jefferson Ave (US 40) at Poplar St

Warrant 2: 4 Hour Analysis - 2028 Background with Moonlit Meadows

2028	Major Jefferson Ave (US Highway 40) EB / WB Total	Minor* Poplar St NB / SB Highest		Warrant 2 (Figure 4C-2)
Time of Day	Number of Lanes			
	1	1		
0:00	33	3		no
1:00	14	1		no
2:00	23	2		no
3:00	33	2		no
4:00	75	6		no
5:00	182	16		no
6:00	539	35		no
7:00	691	180		Yes
8:00	515	78		no
9:00	514	57		no
10:00	520	52		no
11:00	461	69		no
12:00	558	62		no
13:00	523	57		no
14:00	604	62		no
15:00	653	102		Yes
16:00	772	98		Yes
17:00	962	104		Yes
18:00	686	74		no
19:00	439	52		no
20:00	295	37		no
21:00	193	21		no
22:00	120	11		no
23:00	50	6		no
Total	9,455	1,187	4	Met

Warrant is
Met
(yes/no)

*The minor volume for each hour represents the higher of either minor approach.