

Louisa May Alcott School

Traffic Impact Study



Mapleton, Utah

August 12, 2026

UT26-3278



EXECUTIVE SUMMARY

This study addresses the traffic impacts associated with the proposed Louisa May Alcott School development located in Mapleton, Utah. The development is located southeast of 1150 East / 1200 North in Mapleton Utah.

The purpose of this traffic impact study is to analyze traffic operations at key intersections for existing (2026) and future (2031) conditions with and without the proposed project and to recommend mitigation measures as needed. The morning and afternoon peak hour level of service (LOS) results are shown in Table ES-1. An exhibit of the proposed mitigated roadway network is shown in Figure ES-1. A site plan of the project is provided in Appendix A.

Table ES-1: Peak Hour Level of Service Results

Intersection		Level of Service							
		Existing (2026)				Future (2031)			
		Background		Plus Project		Background		Plus Project	
		AM	PM	AM	PM	AM	PM	AM	PM
1	1200 North / Main Street	A	A	C	A	A	A	C	B
2	1150 East / 1200 North	a	a	a	a	a	a	a	a
3	Project Access / 1200 North	-	-	b	a	-	-	b	a
1. Intersection LOS values represent the overall intersection average for roundabout, signalized, and all-way stop-controlled (AWSC) intersections (uppercase letter) and the worst movement for all other unsignalized intersections (lowercase letter)									
Source: Hales Engineering, August 2026									

SUMMARY OF KEY FINDINGS & RECOMMENDATIONS

Project Conditions		
- The development will consist of a K-7 charter school with approximately 528 students - The project is anticipated to generate approximately 2,172 weekday daily trips, including 534 trips in the morning peak hour, and 318 trips in the afternoon peak hour - An eastbound right-turn deceleration lane is recommended at the Project Access - An eastbound left-turn lane may be considered at the 1150 E / 1200 N intersection. - It is anticipated that the on-site queue storage will be sufficient.		
2026	Background	Plus Project
Assumptions	• AWSC at 1200 N / Main Street	• None
Findings	• Acceptable LOS	• Acceptable LOS

2031	Background	Plus Project
Findings	• Acceptable LOS	• Acceptable LOS • Excessive queueing at 1200 North / Main St
Mitigations	• None	• 1200 North / Main St: Consider installing roundabout ○ This project is currently planned in the City's TMP ○ The roundabout is anticipated to have a slight reduction on the queueing but a larger effect on reducing the overall delay at the intersection



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I. INTRODUCTION

A. Purpose

This study addresses the traffic impacts associated with the proposed Louisa May Alcott School development located in Mapleton, Utah. The proposed project is located southeast of the 1150 East / 1200 North intersection. Figure 1 shows a vicinity map of the proposed development.

The purpose of this traffic impact study is to analyze traffic operations at key intersections for existing (2026) and future (2031) conditions with and without the proposed project and to recommend mitigation measures as needed.

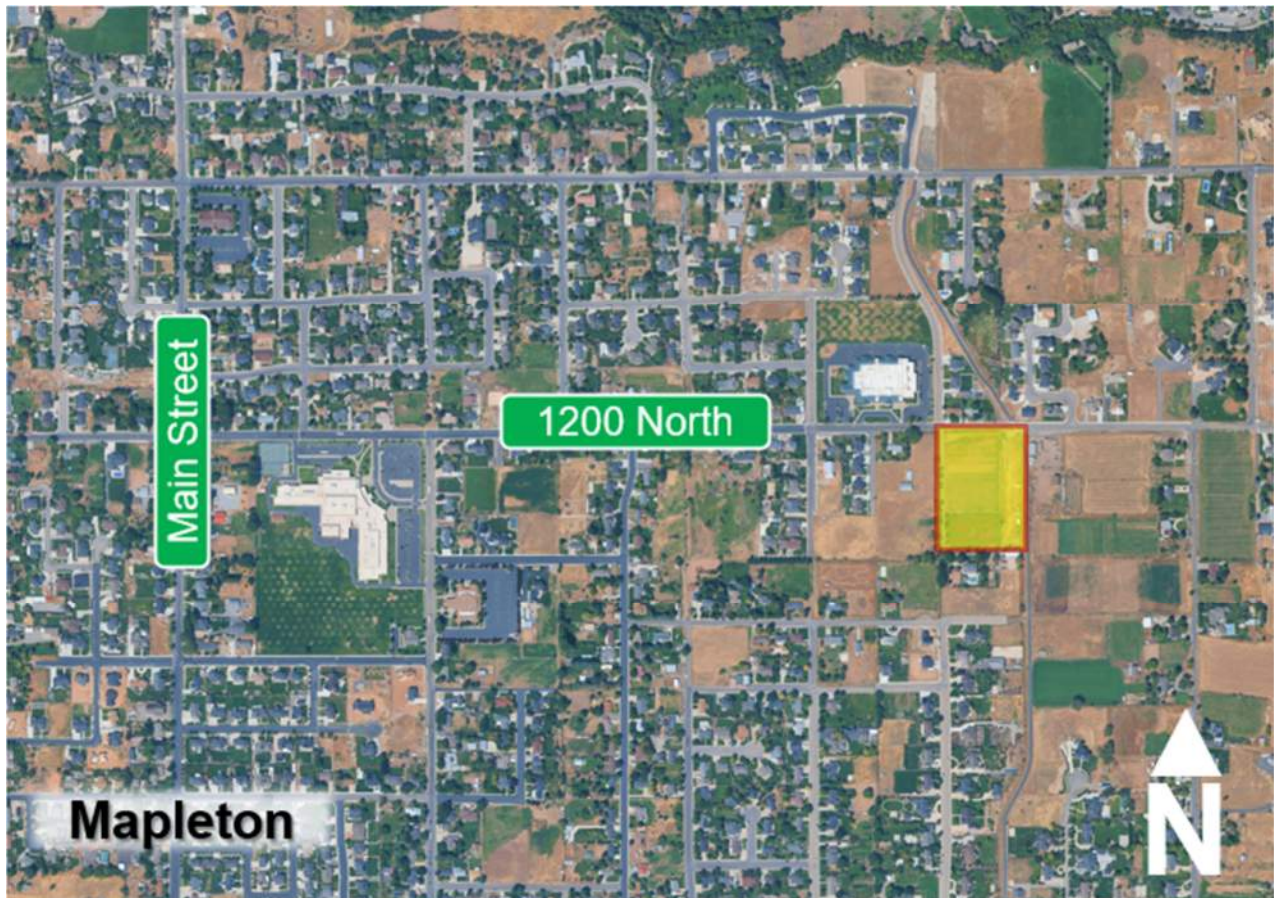


Figure 1: Vicinity map showing the project location in Mapleton, Utah

B. Scope

The study area was defined based on conversations with the development team. This study was scoped to evaluate the traffic operational performance impacts of the project on the following intersections:

- 1200 North / Main Street
- 1150 East / 1200 North
- Project Access / 1200 North

C. Analysis Methodology

Level of service (LOS) is a term that describes the operating performance of an intersection or roadway. LOS is measured quantitatively and reported on a scale from A to F, with A representing the best performance and F the worst. Table 1 provides a brief description of each LOS letter designation and an accompanying average delay per vehicle for both signalized and unsignalized intersections.

The *Highway Capacity Manual* (HCM), 7th Edition, 2022 methodology was used in this study to remain consistent with “state-of-the-practice” professional standards. This methodology has different quantitative evaluations for signalized and unsignalized intersections. For signalized, roundabout, and all-way stop-controlled (AWSC) intersections, the LOS is provided for the overall intersection (weighted average of all approach delays). For all other unsignalized intersections, LOS is reported based on the worst movement.

Using Synchro/SimTraffic software, which follow the HCM methodology, the peak hour LOS was computed for each study intersection. Multiple runs of SimTraffic were used to provide a statistical evaluation of the interaction between the intersections. The detailed LOS reports are provided in Appendix C. Hales Engineering also calculated the 95th percentile queue lengths for the study intersections using SimTraffic. The detailed queue length reports are provided in Appendix D.

Many of the figures in this report are printouts of the Synchro model. These figures are not meant to be a design exhibit for exact lane striping and design, due to the limitations of the Synchro software. Instead, the purpose of these figures is to show assumed peak hour turning movement volumes and the conceptual travel lane configuration of the study roadway network.

D. Level of Service Standards

For the purposes of this study, a minimum acceptable intersection performance for each of the study intersections was set at LOS D. If levels of service E or F conditions exist, an explanation and/or mitigation measures will be presented. A LOS D threshold is consistent with “state-of-the-practice” traffic engineering principles for urbanized areas.

Table 1: Level of Service Description

LOS		Description of Traffic Conditions	Average Delay (seconds/vehicle)	
			Signalized Intersections	Unsignalized Intersections
A		Free Flow / Insignificant Delay	≤ 10	≤ 10
B		Stable Operations / Minimum Delays	> 10 to 20	> 10 to 15
C		Stable Operations / Acceptable Delays	> 20 to 35	> 15 to 25
D		Approaching Unstable Flows / Tolerable Delays	> 35 to 55	> 25 to 35
E		Unstable Operations / Significant Delays	> 55 to 80	> 35 to 50
F		Forced Flows / Unpredictable Flows / Excessive Delays	> 80	> 50

Source: Hales Engineering Descriptions, based on the *Highway Capacity Manual* (HCM), 7th Edition, 2022 Methodology (Transportation Research Board)

II. EXISTING (2026) BACKGROUND CONDITIONS

A. Purpose

The purpose of the background analysis is to study the intersections and roadways during the peak travel periods of the day with background traffic and geometric conditions. Through this analysis, background traffic operational deficiencies can be identified, and potential mitigation measures recommended. This analysis provides a baseline condition that may be compared to the build conditions to identify the impacts of the development.

B. Roadway System

The primary roadways that will provide access to the project site are described below:

Main Street – is a city-maintained roadway which is classified by the Mapleton City Transportation Master Plan (April 2026) as a collector road. The roadway has one travel lane in each direction. The posted speed limit is 35 mph in the study area.

1200 North – is a city-maintained roadway which is classified by the Mapleton City Transportation Master Plan (April 2026) as a major local road. The roadway has one travel lane in each direction. The posted speed limit is 25 mph in the study area.

As of this writing, the City plans to install all-way stop control (AWSC) at the 1200 North / Main Street intersection within the next few weeks. This condition was assumed in the analysis.

C. Traffic Volumes

Weekday morning (7:00 to 9:00 a.m.) and afternoon (2:00 to 4:00 p.m.) peak period traffic counts were performed at the following intersections:

- 1200 North / Main Street
- 1150 East / 1200 North

The counts were performed on Wednesday, June 24, 2026. The morning peak hour was determined to be between 8:00 and 9:00 a.m., and the afternoon peak hour was determined to be between 2:00 and 3:00 p.m. Because the counts were collected in the summer, previous counts collected Thursday, August 24, 2025 by WCG were used to analyze school year conditions at the 1200 North / Main Street intersection. The afternoon peak hour volumes were approximately 42% higher than the morning peak hour volumes. Both the morning and afternoon peak hour volumes were used in the analysis. Detailed count data are included in Appendix B.

Hales Engineering made seasonal adjustments to the observed 2026 traffic volumes. Monthly traffic volume data were obtained from a nearby UDOT automated traffic signal performance measures (ATSPM) on US-89 (Location # 6109). In recent years, traffic volumes in June have

been equal to approximately 75% of average traffic volumes. The observed traffic volumes were adjusted accordingly to determine average turning movement counts at the study intersections. Figure 2 shows the existing morning and afternoon peak hour volumes as well as intersection geometry at the study intersections.

D. Level of Service Analysis

Hales Engineering determined that all study intersections are currently performing at acceptable levels of service, as shown in Table 2. These results serve as a baseline condition for the impact analysis of the proposed development during existing (2026) conditions.

Table 2: Existing (2026) Background Peak Hour LOS

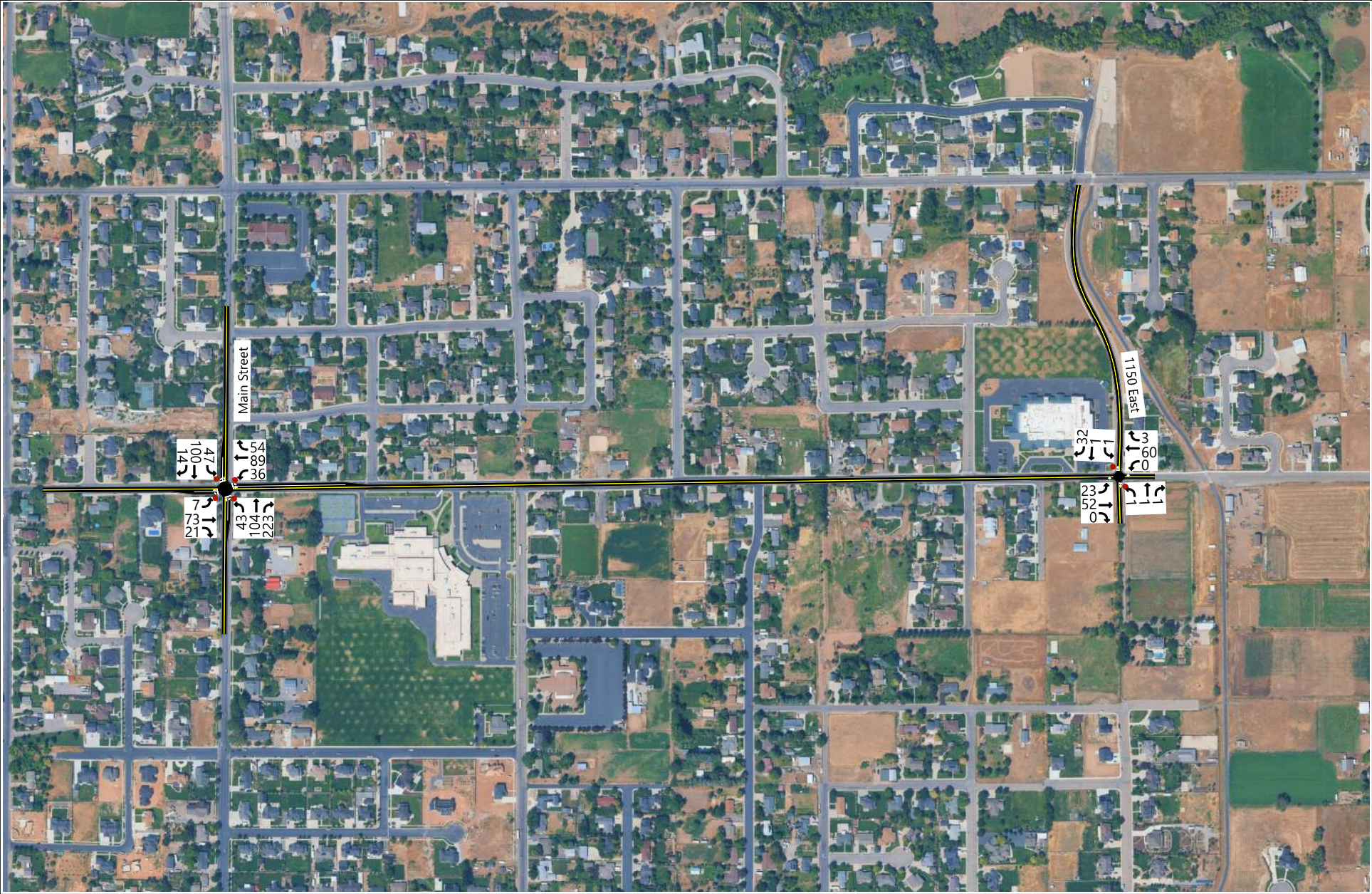
Intersection		LOS (Sec. Delay / Veh.) / Movement ¹	
Description	Control	Morning Peak	Afternoon Peak
1200 North / Main Street	AWSC	A (8.2)	A (8.1)
1150 East / 1200 North	NB/SB Stop	a (8.4) / SBT	a (6.0) / NBT
¹ . Movement indicated for unsignalized intersections where delay and LOS represents worst movement. SBL = Southbound left movement, etc. ² . Uppercase LOS used for signalized, roundabout, and AWSC intersections. Lowercase LOS used for all other unsignalized intersections.			
Source: Hales Engineering, August 2026			

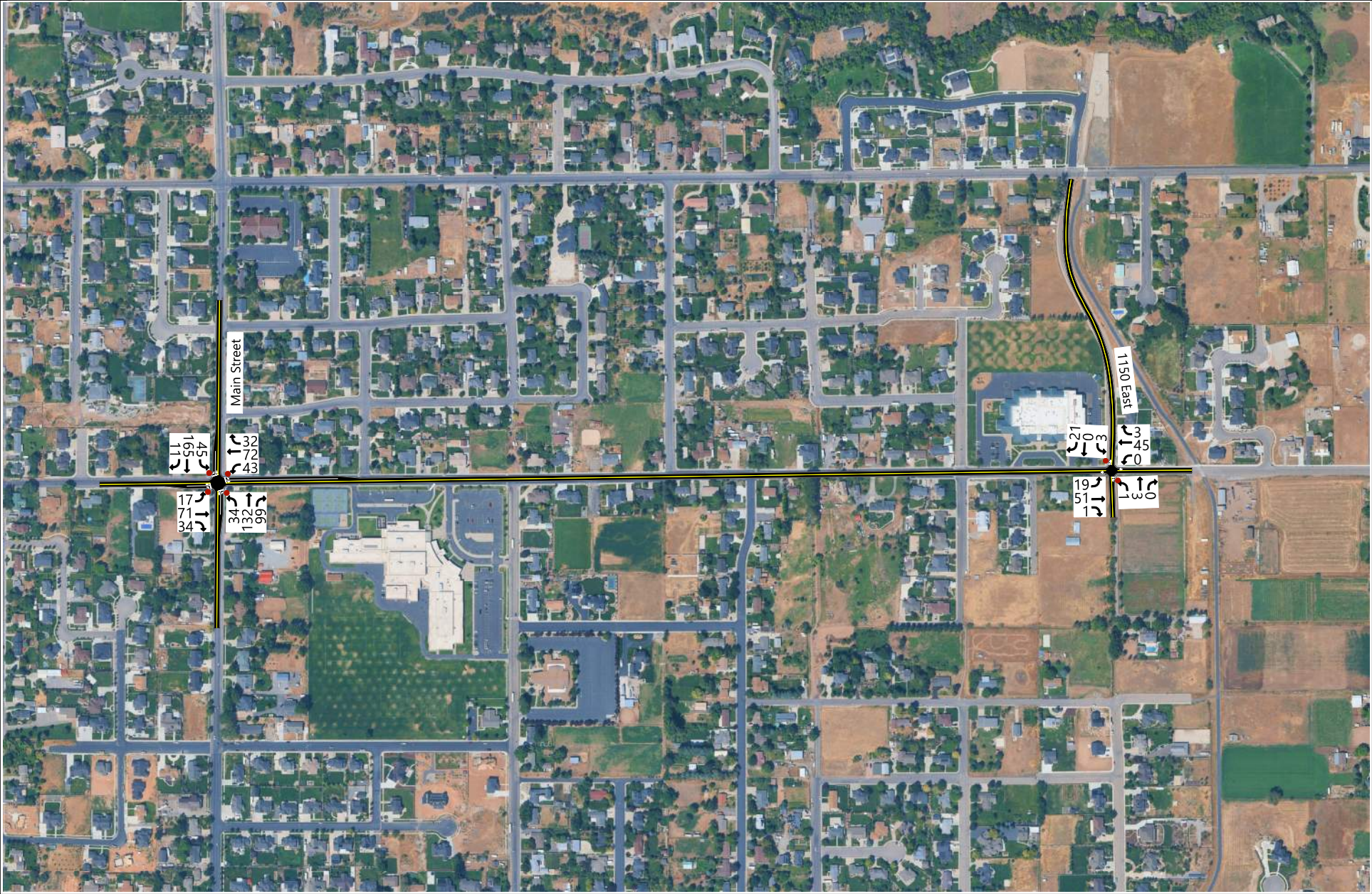
E. Queuing Analysis

Hales Engineering calculated the 95th percentile queue lengths for each of the study intersections. No significant queuing was observed during the morning and afternoon peak hours.

F. Mitigation Measures

No mitigation measures are recommended.





III. PROJECT CONDITIONS

A. Purpose

The project conditions discussion explains the type and intensity of development. This provides the basis for trip generation, distribution, and assignment of project trips to the surrounding study intersections defined in Chapter I.

B. Project Description

The proposed Louisa May Alcott School development is located southeast of 1150 East / 1200 North in Mapleton, Utah. The development will consist of a K-7 charter school with approximately 528 students. A concept plan for the proposed development is provided in Appendix A.

C. Trip Generation

Trip generation for the development was calculated using trip generation rates published in the Institute of Transportation Engineers (ITE), *Trip Generation*, 12th Edition, 2025.

Trip generation for the proposed project is included in Table 3. The total trip generation for the development is as follows:

- Daily Trips: 2,172
- Morning Peak Hour Trips: 534
- Afternoon Peak Hour Trips: 318

Table 3: Trip Generation

Trip Generation Mapleton - Louisa May Alcott School									
	Land Use ¹	# of Units	Unit Type	Trip Generation			New Trips		
				Total	% In	% Out	In	Out	Total
Weekday Daily									
	Private School K-8 (530)	528	Students	2,172	50%	50%	1,086	1,086	2,172
AM Peak Hour									
	Private School K-8 (530)	528	Students	534	56%	44%	299	235	534
PM Peak Hour									
	Private School K-8 (530)	528	Students	318	47%	53%	149	169	318
1. Land Use Code from the Institute of Transportation Engineers (ITE) <i>Trip Generation</i> , 12th Edition, 2025. SOURCE: Hales Engineering, August 2026									

D. Trip Distribution and Assignment

Trip distribution percentages for new trips were based on the type of trip and the proximity of project access points to major streets, high population densities, and regional trip attractions. Existing travel patterns observed during data collection were also used to establish these distribution percentages, especially near the site. The assumed distribution of new trips during the morning and afternoon peak hour is shown in Table 4.

Table 4: New Trip Distribution

Direction	% To/From Project
North	45%
South	20%
East	12%
West	23%

These trip distribution assumptions were used to assign the morning and afternoon peak hour trip generation at the study intersections to create trip assignment for the proposed development. Trip assignment for the development is shown in Figure 3.

E. Access

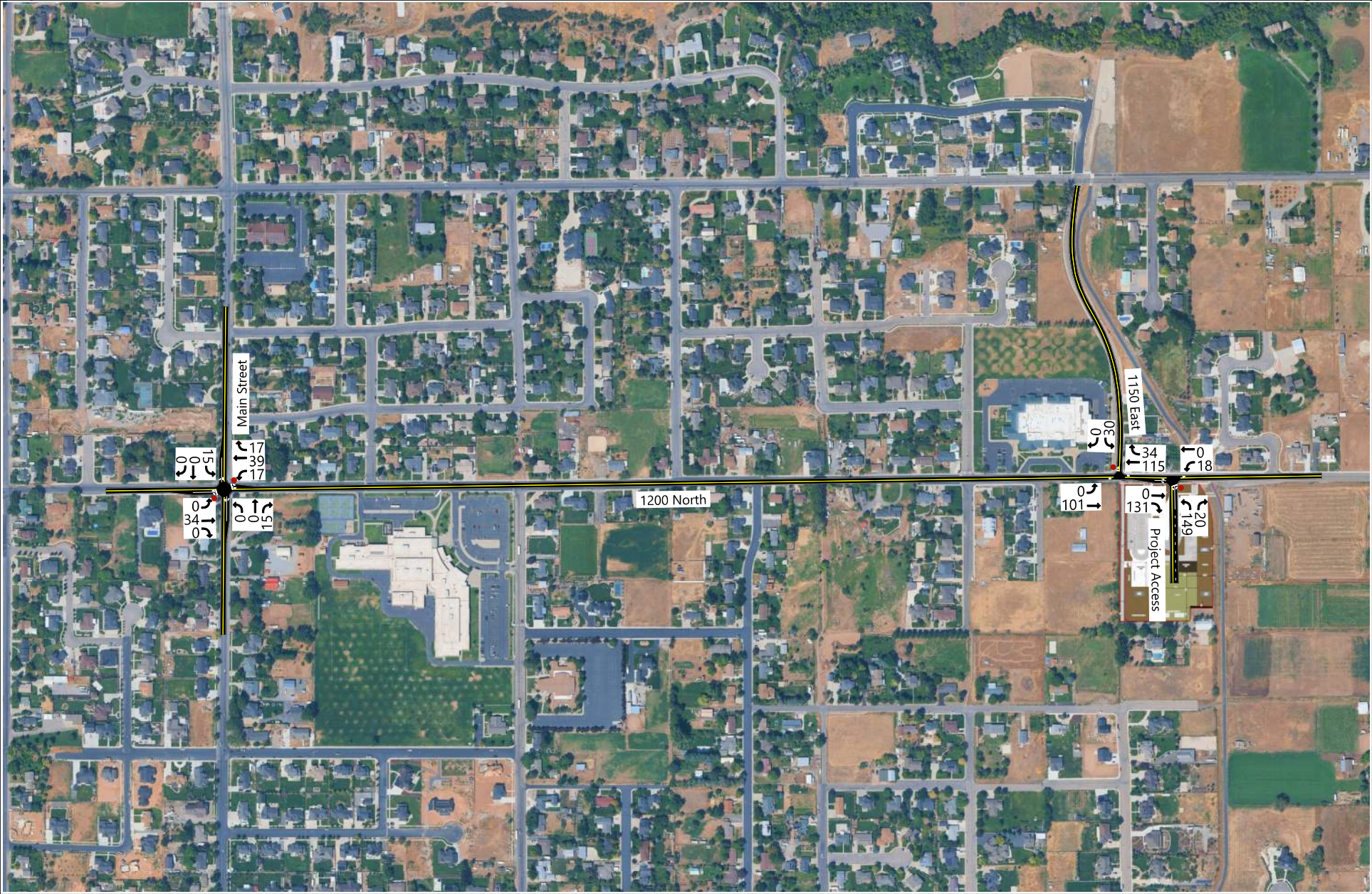
The proposed access for the site will be gained at the following locations:

1200 North:

- The project access will be located approximately 100 feet east of the 1150 / 1200 North intersection. It will access the project on the south side of 1200 North. It is anticipated that the access will be stop-controlled. This proposed access was initially approved by the city as meeting spacing requirements.
- The exit to the east pick-up zone will be located approximately 250 feet east of the 1150 / 1200 North intersection. It will access the project on the south side of 1200 North. It is anticipated that the access will be stop-controlled.

For simplicity, the east and west access points were modeled as one Project Access. Future expansions of 1150 East could allow for additional useful access points to the anticipated future pick-up queue loop.





F. Auxiliary Lanes

Auxiliary lanes are deceleration (ingress) or acceleration (egress) turn lanes that provide for safe turning movements that have less impact on through traffic. These lanes are sometimes needed at accesses or roadway intersections if right- or left-turn volumes are high enough.

Deceleration (ingress) lanes are generally needed when there are at least 50 right-turn vehicles or 25 left-turn vehicles in an hour. These guidelines were used for the City roadways in the study area.

Based on these guidelines and the anticipated project traffic, it is recommended that the following deceleration (ingress) lanes be installed:

- Project Access / 1200 North: Eastbound right-turn

An eastbound left-turn lane at the 1150 East / 1200 North intersection may also help to reduce queues blocking eastbound vehicles. The road is currently not wide enough at this location to accommodate a turn lane but may be considered if a future project widens 1200 North.

G. On-site Queuing Analysis

As of writing, the site plan shows that the school is planning to provide approximately 275 feet of pick-up length with about 1,350 feet (approximately 54 vehicles) of total queue storage.

The on-site circulation and queuing analysis was completed in VISSIM to closely represent the on-site out-loading conditions. 50 runs were used to provide a statistical evaluation of the site circulation operations. Hales used afternoon peak hour volumes and drop-off patterns were analyzed using afternoon patterns because picking up the students generally takes longer than dropping them off, as observed at similar schools.

The 95th percentile queue length for the proposed project is anticipated to be approximately 1,275 feet (approximately 51 vehicles), which is less than the proposed storage length. Therefore, it is anticipated that the proposed site plan will provide enough queue storage length for the proposed development, while keeping the queueing on-site.

The on-site queuing and circulation analysis provided by Hales is intended to be conservative. The recommendations provided by Hales are based on the results of this conservative analysis. The school should consider experimenting with different site circulation plans based on real world conditions, changes in the student population, future expansion of 1150 East, or school expansion. In any case, the school should monitor and update site circulation plans as necessary into the future.

IV. EXISTING (2026) PLUS PROJECT CONDITIONS

A. Purpose

The purpose of the existing (2026) plus project analysis is to study the intersections and roadways during the peak travel periods of the day for existing background traffic and geometric conditions plus the net trips generated by the proposed development. This scenario provides valuable insight into the potential impacts of the proposed project on background traffic conditions.

B. Traffic Volumes

Hales Engineering added the project trips discussed in Chapter III to the existing (2026) background traffic volumes to predict turning movement volumes for existing (2026) plus project conditions. Existing (2026) plus project morning and afternoon peak hour turning movement volumes are shown in Figure 4.

C. Level of Service Analysis

Hales Engineering determined that all intersections are anticipated to operate at acceptable levels of service during the morning and afternoon peak hours with project traffic added, as shown in Table 5.

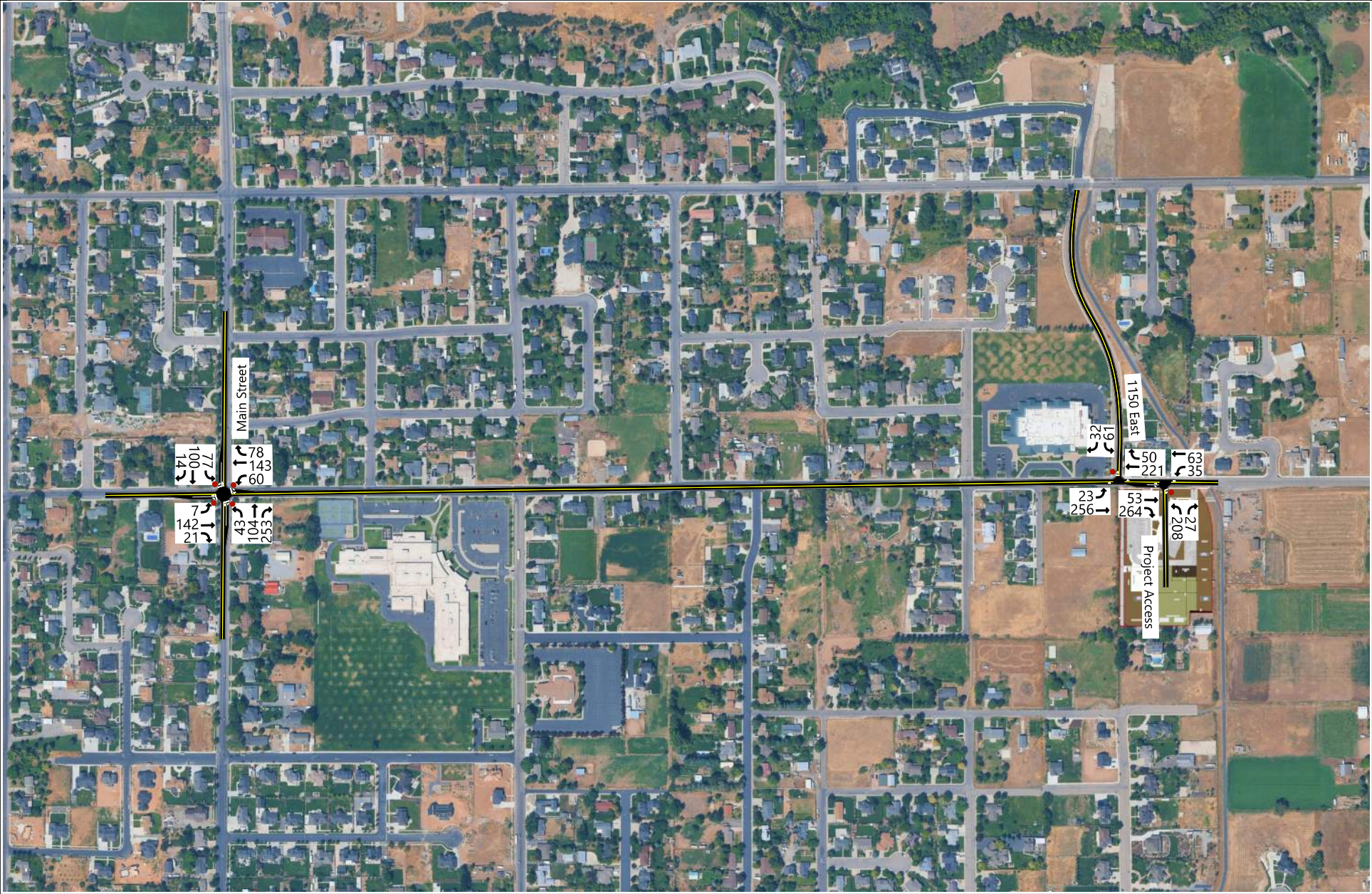
Table 5: Existing (2026) Plus Project Peak Hour LOS

Intersection		LOS (Sec. Delay / Veh.) / Movement ¹	
Description	Control	Morning Peak	Afternoon Peak
1200 North / Main Street	AWSC	C (21.9)	A (10.0)
1150 East / 1200 North	NB/SB Stop	a (9.4) / SBL	a (6.1) / SBL
Project Access / 1200 North	NB Stop	b (13.1) / NBL	a (6.7) / NBL
¹ Movement indicated for unsignalized intersections where delay and LOS represents worst movement. SBL = Southbound left movement, etc. ² Uppercase LOS used for signalized, roundabout, and AWSC intersections. Lowercase LOS used for all other unsignalized intersections.			
Source: Hales Engineering, August 2026			

D. Queuing Analysis

Hales Engineering calculated the 95th percentile queue lengths for each of the study intersections. 95th percentile queue lengths during the morning and afternoon peak hour are summarized as follows:

- 1200 North / Main Street:
 - Northbound: 350 feet





E. Mitigation Measures

No mitigation measures are recommended.

V. FUTURE (2031) BACKGROUND CONDITIONS

A. Purpose

The purpose of the future (2031) background analysis is to study the intersections and roadways during the peak travel periods of the day for future background traffic and geometric conditions. Through this analysis, future background traffic operational deficiencies can be identified, and potential mitigation measures recommended.

B. Roadway Network

According to the Mapleton City Transportation Master Plan, a roundabout is planned at the 1200 North / Main Street intersection and is listed as a high-priority project. No changes were made to the roadway network for the future (2031) background analysis, but a roundabout alternative was considered as a mitigation for the Future (2031) Plus Project scenario.

C. Traffic Volumes

Hales Engineering obtained future (2031) forecasted volumes from the MAG travel demand model. Peak period turning movement counts were estimated using National Cooperative Highway Research Program (NCHRP) 255 and 765 methodologies which utilize existing peak period turn volumes and future average weekday daily traffic (AWDT) volumes to project the future turn volumes at the major intersections. Future (2031) morning and afternoon peak hour turning movement volumes are shown in Table 6.

D. Level of Service Analysis

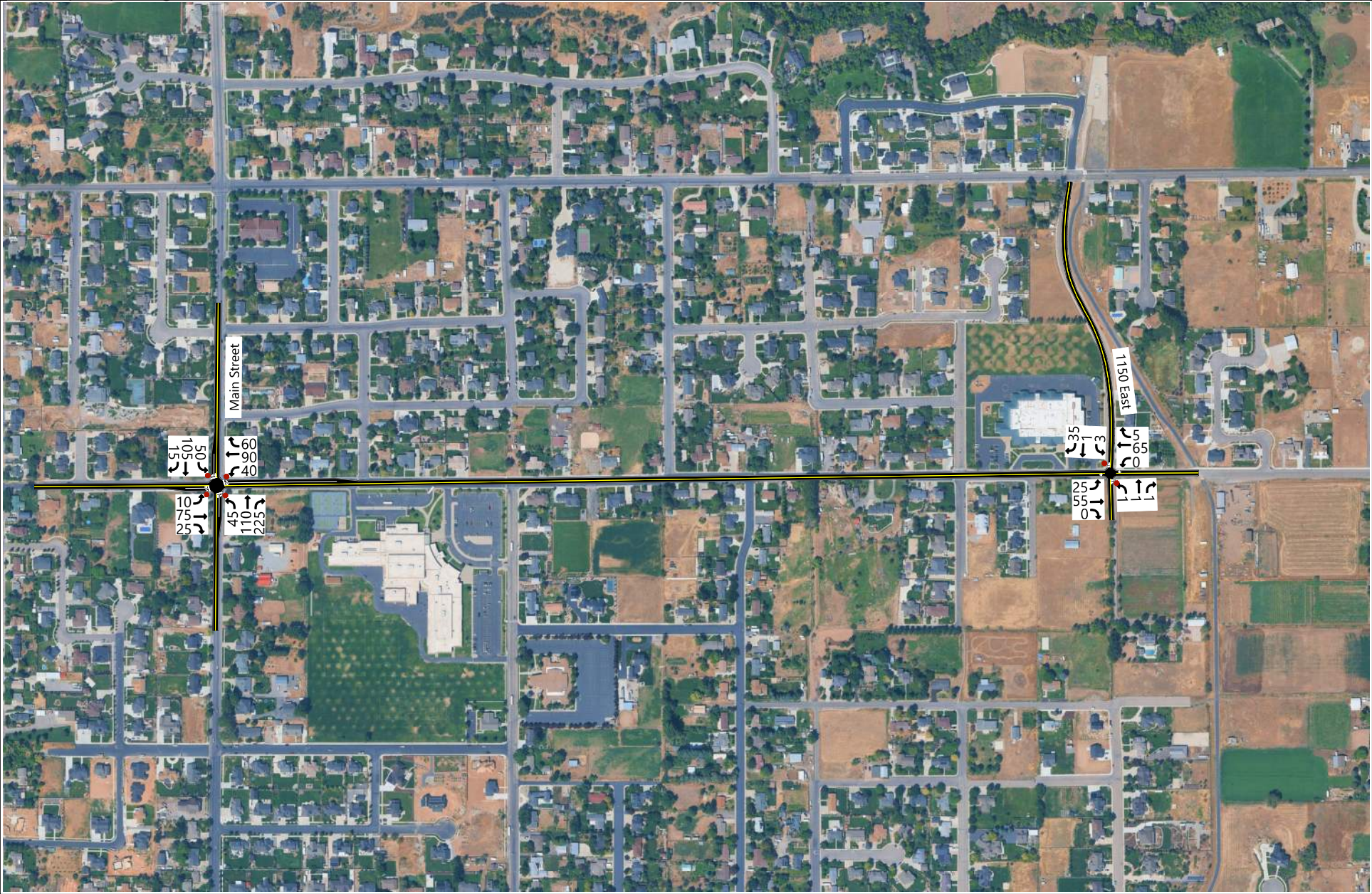
Hales Engineering determined that all study intersections are anticipated to operate at acceptable levels of service during the morning and afternoon peak hours in future (2031) background conditions, as shown in Table 6. These results serve as a baseline condition for the impact analysis of the proposed development for future (2031) conditions.

E. Queuing Analysis

Hales Engineering calculated the 95th percentile queue lengths for each of the study intersections. No significant queueing was observed during the morning and afternoon peak hours.

F. Mitigation Measures

No mitigation measures are recommended.



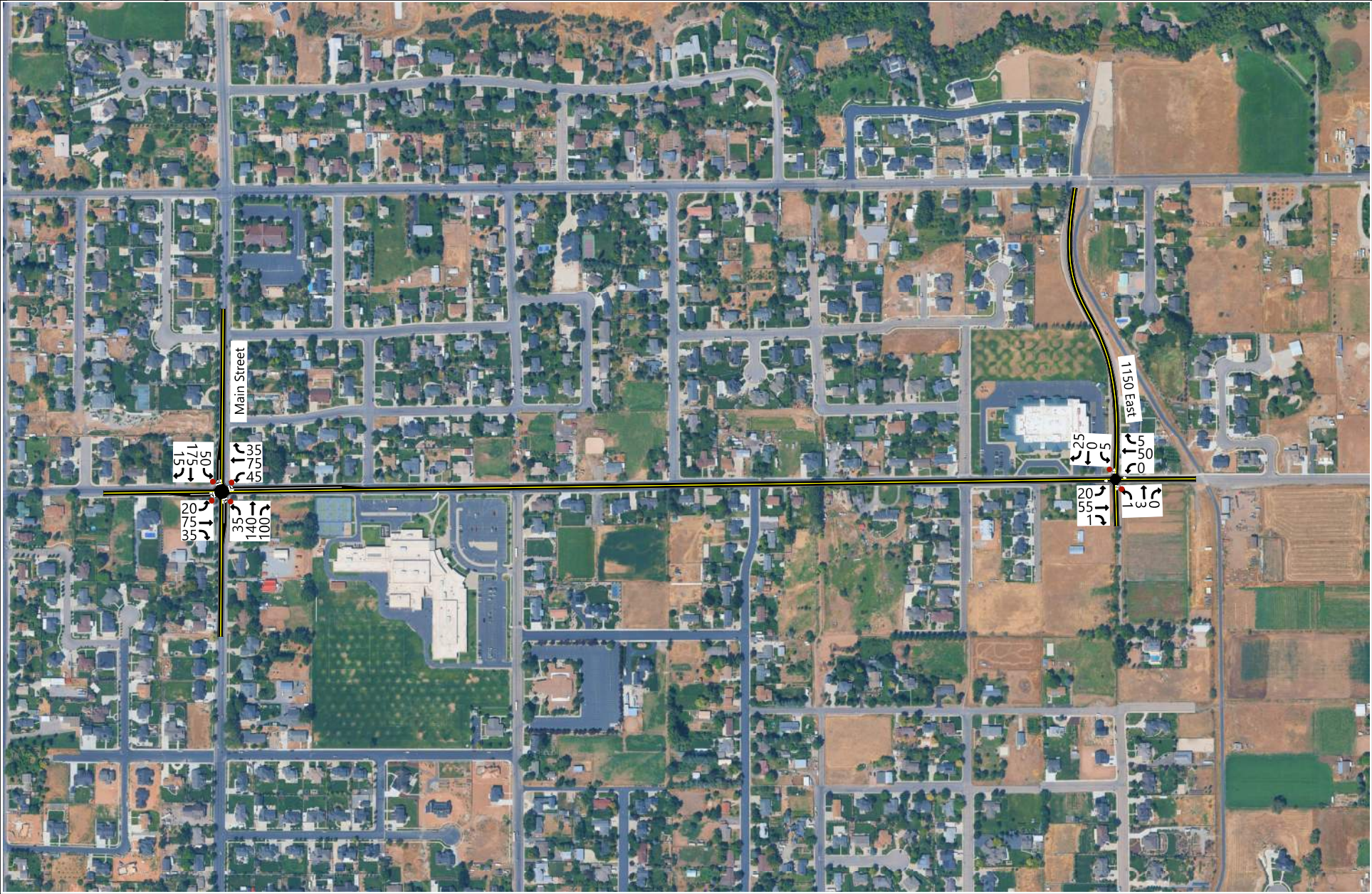


Table 6: Future (2031) Background Peak Hour LOS

Intersection		LOS (Sec. Delay / Veh.) / Movement ¹	
Description	Control	Morning Peak	Afternoon Peak
1200 North / Main Street	AWSC	A (9.7)	A (8.5)
1150 East / 1200 North	NB/SB Stop	A (7.5) / SBT	A (5.4) / EBL
1. Movement indicated for unsignalized intersections where delay and LOS represents worst movement. SBL = Southbound left movement, etc. 2. Uppercase LOS used for signalized, roundabout, and AWSC intersections. Lowercase LOS used for all other unsignalized intersections. Source: Hales Engineering, August 2026			

VI. FUTURE (2031) PLUS PROJECT CONDITIONS

A. Purpose

The purpose of the future (2031) plus project analysis is to study the intersections and roadways during the peak travel periods of the day for future background traffic and geometric conditions plus the net trips generated by the proposed development. This scenario provides valuable insight into the potential impacts of the proposed project on future background traffic conditions.

B. Traffic Volumes

Hales Engineering added the project trips discussed in Chapter III to the future (2031) background traffic volumes to predict turning movement volumes for future (2031) plus project conditions. Future (2031) plus project morning and afternoon peak hour turning movement volumes are shown in Figure 6.

C. Level of Service Analysis

Hales Engineering determined that all intersections are anticipated to operate at acceptable levels of service during the morning and afternoon peak hours in future (2031) plus project conditions, as shown in Table 7.

Table 7: Future (2031) Plus Project Peak Hour LOS

Intersection		LOS (Sec. Delay / Veh.) / Movement ¹	
Description	Control	Morning Peak	Afternoon Peak
1200 North / Main Street	AWSC	C (23.1)	B (11.0)
1150 East / 1200 North	SB Stop	a (9.6) / EBL	a (6.6) / EBL
Project Access / 1200 North	NB Stop	b (10.4) / NBL	a (7.0) / NBL
¹ Movement indicated for unsignalized intersections where delay and LOS represents worst movement. SBL = Southbound left movement, etc. ² Uppercase LOS used for signalized, roundabout, and AWSC intersections. Lowercase LOS used for all other unsignalized intersections.			
Source: Hales Engineering, August 2026			





D. Queuing Analysis

Hales Engineering calculated the 95th percentile queue lengths for each of the study intersections. Significant 95th percentile queue lengths during the morning and afternoon peak hour are summarized as follows:

- 1200 North / Main Street:
 - Northbound: 425 feet

The queues as shown in the future plus project condition are associated with a short peak period corresponding with the school start time and may be considered tolerable because they represent a brief condition.

E. Mitigation Measures

As mentioned previously, the Mapleton City Transportation Master Plan shows plans for a roundabout at the 1200 North / Main Street intersection. The plans call for the roundabout to have an inner radius of 72 feet and an outer radius of 110 feet. As a consideration to mitigate and reduce the excessive queueing, a roundabout could be an option.

F. Mitigated Scenario

With the proposed improvement, the overall delay at the 1200 North / Main Street intersection is anticipated to reduce by about half, as shown in Table 8.

Additionally, with the proposed improvement, the 95th percentile queue is anticipated to lower to 375 feet, which represents a slight 50-foot reduction. Therefore, the primary benefit of a roundabout would be to reduce the overall delay.

Table 8: Mitigated Future (2031) Plus Project Peak Hour LOS

Intersection		LOS (Sec. Delay / Veh.) / Movement ¹	
Description	Control	Morning Peak	Afternoon Peak
1200 North / Main Street	Roundabout	B (12.5)	B (11.0)
1150 East / 1200 North	SB Stop	a (9.7) / EBL	a (6.6) / EBL
Project Access / 1200 North	NB Stop	b (11.0) / NBL	a (7.0) / NBL

1. Movement indicated for unsignalized intersections where delay and LOS represents worst movement. SBL = Southbound left movement, etc.
 2. Uppercase LOS used for signalized, roundabout, and AWSC intersections. Lowercase LOS used for all other unsignalized intersections.

Source: Hales Engineering, August 2026

APPENDIX A

Site Plan

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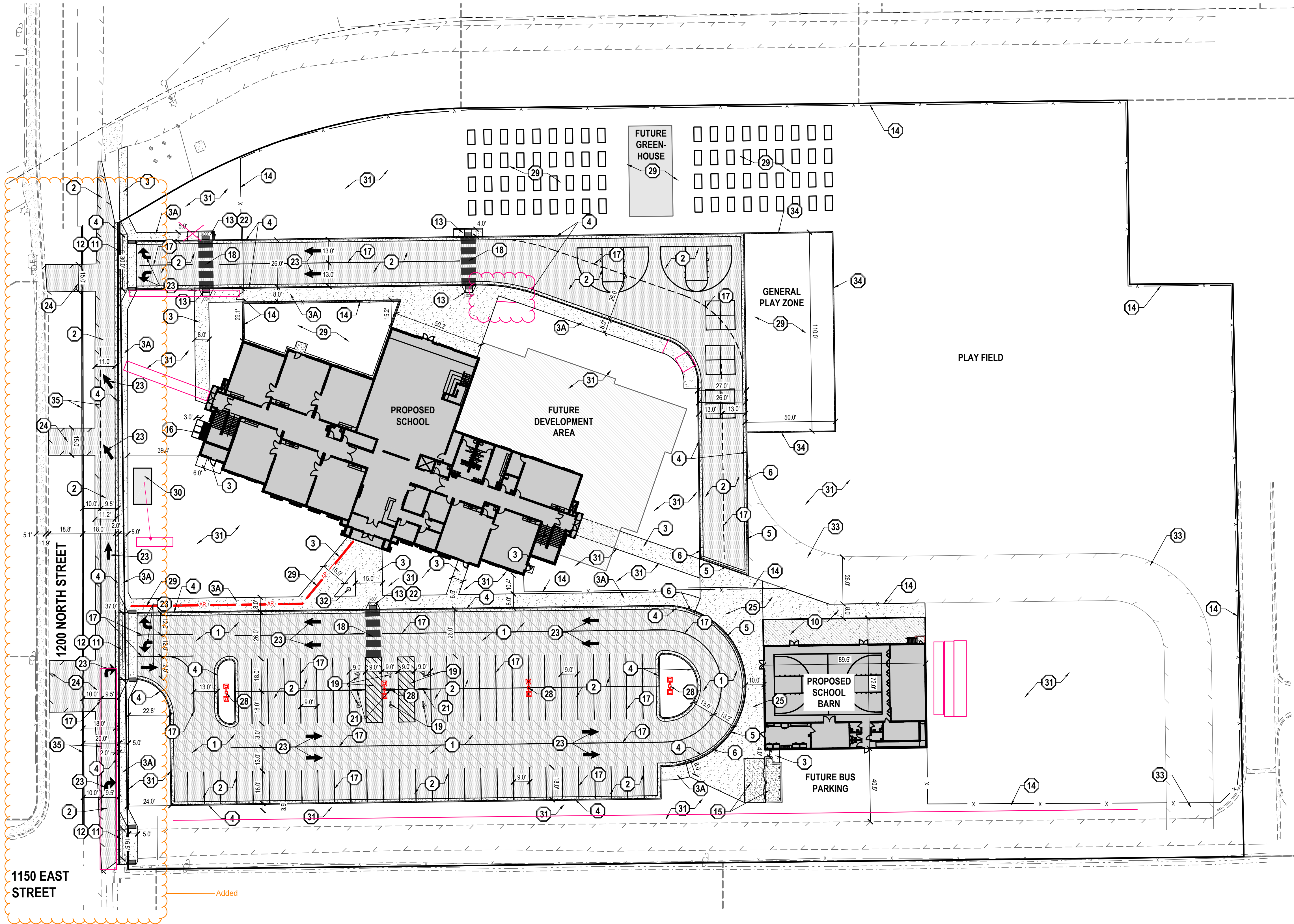
Know what's below.
Call before you dig.

CALL BLUESTAKES
@ 811 AT LEAST 48 HOURS
PRIOR TO THE
COMMENCEMENT OF ANY
CONSTRUCTION.

BENCHMARK

EAST QUARTER CORNER OF SECTION 11,
TOWNSHIP 8 SOUTH, RANGE 3 EAST
SALT LAKE BASE AND MERIDIAN

ELEV = 4828.82'

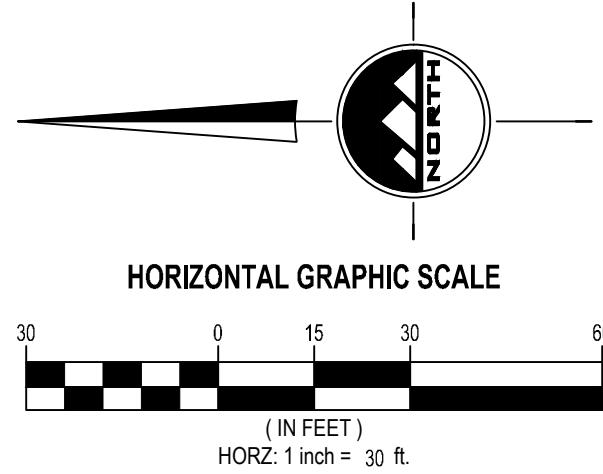


- GENERAL NOTES**
- ALL WORK TO COMPLY WITH THE GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
 - ALL IMPROVEMENTS MUST COMPLY WITH ADA STANDARDS AND RECOMMENDATIONS.
 - SEE LANDSCAPE/ARCHITECTURAL PLANS FOR CONCRETE MATERIAL, COLOR, FINISH, AND SCORE PATTERNS THROUGHOUT SITE.
 - ALL PAVEMENT MARKINGS SHALL CONFORM TO THE LATEST EDITION OF THE M.U.T.C.D. (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES).
 - ALL SURFACE IMPROVEMENTS DISTURBED BY CONSTRUCTION SHALL BE RESTORED OR REPLACED, INCLUDING TREES AND DECORATIVE SHRUBS, SOD, FENCES, WALLS AND STRUCTURES, WHETHER OR NOT THEY ARE SPECIFICALLY SHOWN ON THE CONTRACT DOCUMENTS.
 - NOTIFY ENGINEER OF ANY DISCREPANCIES IN DESIGN OR STAKING BEFORE PLACING CONCRETE OR ASPHALT.
 - THE CONTRACTOR IS TO PROTECT AND PRESERVE ALL EXISTING IMPROVEMENTS, UTILITIES, AND SIGNS, ETC. UNLESS OTHERWISE NOTED ON THESE PLANS.

- SCOPE OF WORK:**
PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS.
- HEAVY-DUTY ASPHALT PAVEMENT PER GEOTECHNICAL REPORT AND DETAIL X/C-XXX.
 - LIGHT-DUTY ASPHALT PAVEMENT PER GEOTECHNICAL REPORT AND DETAIL X/C-XXX.
 - 4" THICK CONCRETE SIDEWALK PER APWA STANDARD PLAN NO. 231 AND DETAIL 5/C-600.
 - 4" THICK CONCRETE SIDEWALK PER APWA STANDARD PLAN NO. 231 AND DETAIL 5/C-600.
 - 24" TYPE "A" CURB AND GUTTER PER APWA STANDARD PLAN NO. 205.1.
 - 24" TYPE "F" MOUNTABLE CURB AND GUTTER PER DETAIL 7/C-600.
 - TRANSITION BETWEEN DIFFERENT CURB AND GUTTER TYPES.
 - 24" REVERSE PAN CURB AND GUTTER PER DETAIL X/C-XXX.
 - TRANSITION BETWEEN COLLECTION CURB AND GUTTER AND REVERSE PAN CURB AND GUTTER.
 - INSTALL CONCRETE BOLLARDS PER DETAIL 10/C-600.
 - CONCRETE PAVEMENT PER GEOTECHNICAL REPORT AND DETAIL X/C-XXX.
 - OPEN DRIVEWAY APPROACH PER APWA STANDARD PLAN NO. 225.
 - 8" THICK CONCRETE SIDEWALK THROUGH DRIVE APPROACH WITH DETECTABLE WARNING SURFACE PER APWA STANDARD PLAN NO. 238 AND SPECIFICATIONS.
 - HANDICAP ACCESS RAMP PER APWA STANDARD PLAN NO. 235 WITH DETECTABLE WARNING SURFACE PER APWA STANDARD PLAN NO. 238.
 - 12" WIDE CONCRETE MOH STRIP WITH FENCE AND GATES PER ARCHITECTURAL PLANS. SEE ARCHITECTURAL PLANS FOR TYPE OF FENCE, AND LOCATION AND TYPE OF ALL ACCESS GATES THROUGHOUT THE PROJECT.
 - TRASH ENCLOSURE PER DETAILS 1/C-500, 2/C-500, 3/C-500, AND 4/C-500 WITH 6" THICK CONCRETE APRON WITH #4 REBAR @ 24" O.C. E.W. ON 6" GRAVEL BASE.
 - CONCRETE PAD FOR ELECTRICAL EQUIPMENT. LAYOUT SHOWN IS SCHEMATIC IN NATURE AND MAY VARY IN THE FIELD. SEE ELECTRICAL PLANS FOR ADDITIONAL INFORMATION.
 - 4" WIDE SOLID WHITE PAVEMENT MARKING PER M.U.T.C.D. STANDARD PLANS.
 - WHITE CROSSWALK MARKING PER M.U.T.C.D. STANDARD PLANS.
 - PAINTED ADA SYMBOL AND ASSOCIATED HATCHING PER M.U.T.C.D. STANDARD PLANS.
 - "HANDICAP PARKING" SIGN PER M.U.T.C.D. STANDARD PLANS.
 - "VAN ACCESSIBLE HANDICAP PARKING" SIGN AND BOLLARD PER M.U.T.C.D. STANDARD PLANS, DETAIL 11/500.
 - INSTALL PAINTED "LOOK" IN CROSS WALK AND "WATCH FOR CROSS TRAFFIC" SIGN.
 - PAINTED LANE-USE ARROWS PER M.U.T.C.D. STANDARD PLANS.
 - 3" ASPHALT PAVEMENT PATCH.
 - 6" THICK CONCRETE PAD WITH MONOLITHIC CURB PER APWA STANDARDS SPECIFICATIONS, SEE DETAIL 1.
 - BIKE RACK SEE DETAIL 13/C501.
 - PEDESTRIAN ASSOCIABLE ROUTE TO PUBLIC RIGHT-OF-WAY.
 - 24" TALL LIGHT POLE AND CONCRETE BASE, SEE ELECTRICAL PLANS FOR ADDITIONAL INFORMATION.
 - FUTURE AMENITY LOCATION PER OWNER.
 - LIGHTED MONUMENT SIGN PER SEPARATE PERMIT.
 - REFER TO LANDSCAPE PLANS. COORDINATE ALL WORK WITH LANDSCAPE PLANS AND SPECIFICATIONS.
 - INSTALL FLAG POLE AND BASE PER MANUFACTURES STANDARDS AND SPECIFICATIONS.
 - FUTURE ASPHALT ACCESS ROAD.
 - 6" TYPE "F" CURB WALL PER APWA STANDARD PLAN NO. 209.

NOTE: MAY CONTAIN KEYNOTES THAT ARE NOT USED ON THIS SHEET.

PARKING TABLE		
STAFF POSITION	CURRENT STAFF #	PARKING STALL REQUIRED
FULL TIME	?	?
PART TIME MODIFIER 0.3	?	?
ADA	5	
TOTAL	72	?



ENSGN

THE STANDARD IN ENGINEERING

TOOELE

3950 N Tealby Way, Ste 200
Erda, UT 84074
Phone: 435.843.3590

SANDY

Phone: 801.255.0529

LAYTON

Phone: 801.547.1100

CEDAR CITY

Phone: 435.865.1453

RICHFIELD

Phone: 435.896.2983

WWW.ENSGNENG.COM

FOR:
BARCOCK DESIGN
52 EXCHANGE PLACE
SALT LAKE CITY, UTAH 84111

CONTACT:
RICKY PARKINSON
PHONE: 385-301-2938

LOUISA MAY ALCOTT COMMUNITY SCHOOL
NEW CHARTER SCHOOL CAMPUS

1250 EAST 1200 NORTH
MAPLETON, UTAH

For Review

07/21/2026 5:50:58 PM

SITE PLAN

PROJECT NUMBER
15106A

PRINT DATE
2026-07-21

PROJECT MANAGER
C. CHILD

DESIGNED BY
C. CHILD

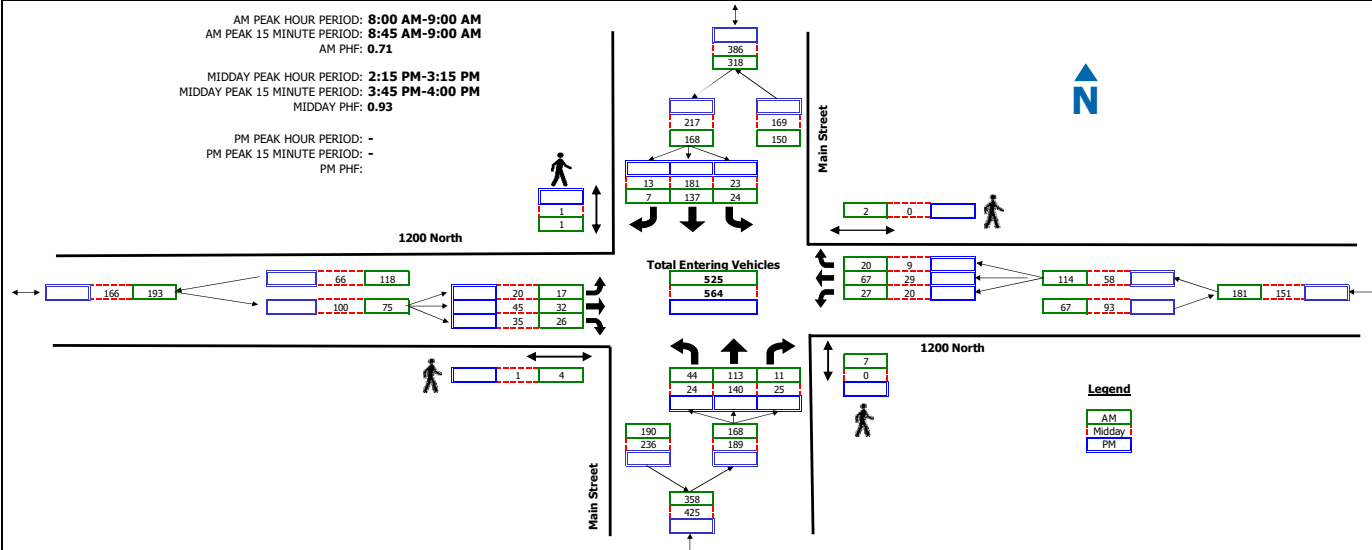
C-200

APPENDIX B

Turning Movement Counts

Intersection: Main Street / 1200 North
North/South Road: Main Street
East/West Road: 1200 North
Jurisdiction: Mapleton
Project Title: Mapleton Louisa May Alcott School
Project No: UT26-3278
Weather: Clear

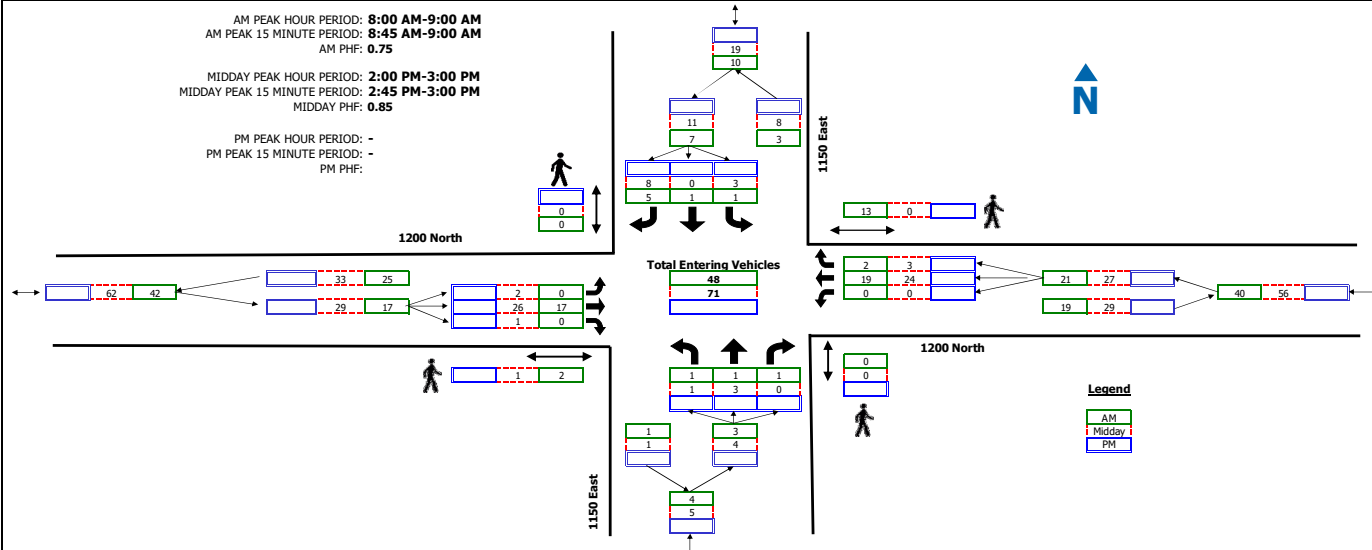
Date:	6-24-26, Wed
Day of Week Adjustment:	100.0%
Month of Year Adjustment:	75.0%
Adjustment Station #:	6109
Growth Rate:	0.0%
Number of Years:	0



COUNT SUMMARY	Main Street Northbound				Main Street Southbound				1200 North Eastbound				1200 North Westbound				TOTAL
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
AM PERIOD COUNTS																	
Period	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	TOTAL
7:00 - 7:15	1	277	3	3	3	17	1	0	3	5	1	4	1	7	7	4	73
7:15 - 7:30	7	17	3	3	3	32	1	4	0	7	4	3	3	15	0	0	92
7:30 - 7:45	9	27	7	1	1	25	3	1	1	7	3	1	5	8	1	1	97
7:45 - 8:00	5	32	8	1	1	32	3	4	3	5	3	0	8	13	7	1	120
8:00 - 8:15	8	28	7	1	4	35	1	0	4	9	3	1	5	20	0	1	124
8:15 - 8:30	7	24	0	1	1	36	0	0	1	7	9	0	3	13	3	0	104
8:30 - 8:45	12	24	1	1	3	31	1	0	5	3	0	7	13	5	0	0	113
8:45 - 9:00	17	37	3	1	16	35	5	0	7	13	7	3	11	21	12	1	184
MIDDAY PERIOD COUNTS																	
Period	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	TOTAL
9:00 - 9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 - 9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 - 9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 - 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 - 10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 - 10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 - 10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 - 11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 - 11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 - 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 - 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 - 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 - 12:15	0	0	0	0	0	0	0	0	0	5	9	0	0	0	0	0	0
12:15 - 12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 - 12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 - 13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00 - 13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15 - 13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30 - 13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45 - 14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00 - 14:15	5	28	3	0	4	43	8	0	3	11	5	0	7	13	4	0	134
14:15 - 14:30	8	33	8	0	3	47	3	17	5	17	7	4	4	14	1	0	143
14:30 - 14:45	8	40	5	0	7	44	4	0	7	9	7	0	4	12	1	0	148
14:45 - 15:00	4	36	8	0	9	43	5	1	3	8	8	0	5	5	4	0	138
15:00 - 15:15	4	31	4	0	4	47	1	0	5	11	13	1	4	8	3	0	135
15:15 - 15:30	5	23	7	1	4	24	0	0	3	8	9	1	4	11	3	0	109
15:30 - 15:45	11	35	4	0	5	36	1	0	4	5	9	0	9	9	5	0	123
15:45 - 16:00	8	33	9	8	0	52	0	4	0	15	8	0	3	19	4	0	151
PM PERIOD COUNTS																	
Period	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	TOTAL
16:00 - 16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15 - 16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30 - 16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45 - 17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00 - 17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15 - 17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30 - 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45 - 18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Intersection: 1150 East / 1200 North
North/South Road: 1150 East
East/West Road: 1200 North
Jurisdiction: Mapleton
Project Title: Mapleton Louisa May Alcott School
Project No: UT26-3278
Weather: Clear

Date:	6-24-26, Wed
Day of Week Adjustment:	100.0%
Month of Year Adjustment:	75.0%
Adjustment Station #:	6109
Growth Rate:	0.0%
Number of Years:	0

[illegible]

1600 N & Main St
Mapleton UT
8/28/2025
4th Thursday

Note																									Source:				Countpro									
	Eastbound								Westbound								Northbound								Southbound								Pedestrians				15 Min Total	Hour Total
	1200 North								1200 North								Main St								Main St								PSWLR PSWR PSWL PSWR					
	EBL	EBL	EBT	EBT	EBR	EBR			WBL	WBL	WBT	WBT	WBR	WBR			NBL	NBL	NBT	NBT	NBR	NBR			SBL	SBL	SBT	SBT	SBR	SBR	EB	WB	NB	SB				
Car	Truck	Car	Truck	Car	Truck			Car	Truck	Car	Truck	Car	Truck			Car	Truck	Car	Truck	Car	Truck			Car	Truck	Car	Truck	Car	Truck									
	0	0	0	0	0	0		0	0	0	0	0	0			0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0	0				
	0	0	0	0	0	0		0	0	0	0	0	0			0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0	0				
	0	0	0	0	0	0		0	0	0	0	0	0			0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0	0				
	0	0	0	0	0	0		0	0	0	0	0	0			0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0	0				
	1	0	7	1	10	0		1	0	10	1	2	0			6	2	22	0	12	0			8	0	14	1	3	0	2	0	1	0	101	101			
	1	0	17	0	5	0		9	1	13	2	10	0			8	0	22	0	26	4			6	0	17	0	3	0	1	0	1	1	144	245			
	1	0	24	0	7	0		3	0	20	1	19	0			9	0	29	2	85	8			23	0	27	0	2	0	4	0	15	0	260	505			
	2	0	17	1	5	0		15	0	32	0	20	0			16	0	32	0	75	2			15	0	33	0	7	0	1	1	1	1	272	777			
	2	1	14	0	4	0		8	0	21	0	5	0			10	0	19	0	23	0			3	0	22	1	2	0	0	0	2	0	135	811			
	0	0	17	0	3	1		8	0	13	0	6	0			3	1	24	1	24	1			7	1	23	0	1	0	0	0	0	0	134	801			
	1	0	13	0	6	0		7	1	12	1	2	0			9	0	26	0	16	0			6	0	19	0	3	0	3	0	0	0	122	663			
	7	0	13	0	6	1		5	0	25	0	6	0			5	0	19	0	11	0			11	2	26	1	1	1	1	0	0	2	140	531			
	5	0	25	0	5	0		10	1	42	2	18	1			10	0	24	0	15	0			17	0	24	0	7	0	0	1	1	0	206	602			
	3	0	11	0	2	0		5	0	18	0	9	1			10	0	20	0	9	0			1	0	14	1	3	0	1	0	0	0	107	575			
	2	1	12	0	2	0		5	0	21	0	3	0			6	0	23	1	9	0			1	0	22	0	2	0	2	1	1	0	110	563			
	2	0	8	0	3	0		7	0	12	0	4	0			3	0	21	0	5	0			4	0	18	0	3	0	0	1	1	2	90	513			
	3	0	10	0	6	0		0	0	11	0	4	0			3	0	20	0	5	0			6	0	15	1	0	0	0	0	1	1	84	391			
	1	0	5	0	1	0		6	0	6	0	4	0			5	0	14	0	6	0			2	0	14	0	1	0	0	0	0	0	65	349			
	0	0	6	0	4	0		4	0	6	0	1	0			2	0	20	0	7	0			2	0	17	0	4	0	0	0	1	0	73	312			
	1	0	9	1	4	0		2	0	10	0	4	0			1	0	24	0	3	0			4	0	23	0	3	0	0	0	1	0	89	311			
	5	0	7	1	5	0		5	1	12	0	3	0			8	0	18	1	4	0			1	0	27	0	2	0	1	0	1	0	100	327			
	3	0	16	1	2	0		2	0	10	0	4	0			6	0	23	0	11	0			2	0	29	0	3	0	0	0	0	0	112	374			
	0	0	10	0	4	0		7	1	7	0	8	1			13	0	25	0	14	0			8	0	18	0	3	0	0	0	0	0	119	420			
	4	0	9	0	6	0		6	0	24	0	3	0			6	0	18	0	9	1			3	0	18	0	2	0	0	0	0	0	109	440			
	3	0	13	0	3	0		10	0	21	0	7	0			8	0	26	0	10	0			3	0	24	1	0	0	2	0	0	0	129	469			
	0	0	11	0	5	0		8	0	11	0	5	0			5	0	24	1	10	0			4	0	15	0	5	0	0	0	0	0	104	461			
	4	0	7	0	6	0		5	0	6	0	3	0			3	0	16	0	6	0			3	0	26	2	2	0	0	0	0	0	89	431			
	2	0	10	0	2	0		6	0	12	0	6	1			6	1	32	0	13	0			7	0	26	0	3	0	0	0	0	0	127	449			
	3	0	9	0	5	0		3	0	10	0	6	0			7	0	20	0	7	0			7	1	27	0	3	0	0	0	0	0	108	428			
	1	0	10	0	6	0		8	0	13	0	4	0			5	0	18	0	13	0			4	0	32	0	2	0	0	0	0	0	116	440			
	0	0	15	1	3	0		2	0	11	0	6	0			2	0	24	2	14	0			4	0	35	1	1	0	2	0	0	0	121	472			
	0	0	11	0	4	1		4	0	18	0	11	0			8	0	17	2	10	0			2	0	16	0	2	0	0	0	5	0	106	451			
	2	0	8	2	6	0		7	0	18	0	5	0			5	0	18	0	15	0			9	2	19	0	2	0	0	0	0	0	118	461			
	2	0	17	8	6	0		6	0	12	0	5	0			10	0	35	0	35	0			13	0	25	0	5	0	0	0	0	0	179	524			
	2	0	18	0	9	0		6	0	23	0	6	0			13	0	39	0	49	2			20	0	51	0	5	0	3	0	20	0	243	646			
	8	1	12	2	5	0		18	0	17	2	14	0			4	0	29	0	19	1			5	1	36	0	1	0	0	0	5	0	175	715			
	1	0	18	0	11	0		9	0	13	0	7	0			10	0	25	1	8	0			8	0	41	0	3	0	0	0	1	0	155	752			
	4	1	21	0	9	0		10	0	17	0	4	1			7	0	38	0	20	0			11	0	37	0	2	0	0	2	0	0	182	755			
	14	0	14	1	5	0		17	0	31	1	17	1			12	0	30	0	12	0			12	1	39	1	0	0	0	1	2	0	198	710			
	6	1	19	1	5	0		10	0	11	1	8	2			7	0	25	0	11	0			8	0	28	1	2	0	3	0	3	0	145	580			
	1	0	12	0	5	0		17	0	16	0	4	0			5	0	37	0	11	0			3	0	37	1	2	0	0	0	0	0	151	676			
	2	0	11	0	4	0		7	0	18	0	3	0			4	0	33	0	4	0			6	0	34	0	4	0	0	0	0	0	130	624			
	3	0	11	0	6	0		7	0	10	1	2	0			7	0	23	0	5	0			5	0	38	1	3	1	0	0	1	0	123	549			
	3	0	22	0	7	0		5	0	15	1	2	0			5	0	28	0	8	0			5	0	30	1	6	0	0	0	0	0	138	542			
	10	0	10	0	6	0		8	1	10	0	6	0			5	0	38	1	9	0			7	0	50	0	5	0	0	0	1	0	166	557			
	4	0	17	0	10	0		5	0	16	0	3	0			4	0	29	0	10	0			4	0	47	1	1	0	0	0	2	0	151	578			
	3	0	14	0	6	0		6	0	8	0	4	0			10	0	26	0	6	0			11	0	44	0	6	0	0	0	1	0	144	599			
	5	0	17	0	11	0		4	0	3	0	7	0			2	0	42	0	5	0			17	0	52	0	3	0	0	0	0	0	168	629			
	0	0	18	0	6	0		9	0	9	0	11	0			10	0	40	0	17	0			11	0	38	0	5	0	0	0	0	0	174	637			
	4	0	15	0	11	0		1	0	13	0	3	0			7	0	27	0	5	0			9	0	46	1	4	0	0	0	0	0	146	632			
	7	0	18	0	6	0		4	0	10	0	5	0			7	0	27	0	5	0			8	0	52	0	4	0	0	0	0	0	153	641			
	5	0	12	0	6	0		10	0	6																												

APPENDIX C

LOS Results

SimTraffic LOS Report

Project: Mapleton Louisa May Alcott School TIS
Analysis Period: Existing (2026) Background
Time Period: Morning Peak Hour
Project #: UT26-3278

Intersection: Main Street & 1200 North
Type: All-way Stop Controlled

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	43	45	105	9.1	A
	T	104	102	98	10.3	B
	R	223	229	103	7.8	A
	Subtotal	370	376	102	8.6	A
SB	L	47	49	104	9.6	A
	T	100	95	95	9.6	A
	R	14	15	109	3.9	A
	Subtotal	161	159	99	9.1	A
EB	L	7	6	89	6.5	A
	T	73	74	101	7.5	A
	R	21	20	94	3.9	A
	Subtotal	101	100	99	6.7	A
WB	L	36	38	106	9.5	A
	T	89	96	108	8.4	A
	R	54	55	102	4.8	A
	Subtotal	179	189	106	7.6	A
Total		810	824	102	8.2	A

Intersection: 1200 North & 1150 East
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	1	1	100	5.8	A
	T	1	2	200	4.8	A
	R	1	2	200	2.1	A
	Subtotal	3	5	167	3.9	A
SB	L	1	0	0		
	T	1	1	100	8.4	A
	R	32	34	107	3.4	A
	Subtotal	34	35	103	3.5	A
EB	L	23	23	100	5.4	A
	T	320	329	103	2.7	A
	Subtotal	343	352	103	2.9	A
WB	T	60	63	105	0.2	A
	R	3	4	123	0.0	A
	Subtotal	63	67	106	0.2	A
Total		443	459	104	2.6	A

SimTraffic LOS Report

Project: Mapleton Louisa May Alcott School TIS
Analysis Period: Existing (2026) Background
Time Period: Afternoon Peak Hour
Project #: UT26-3278

Intersection: Main Street & 1200 North
Type: All-way Stop Controlled

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	34	32	94	8.8	A
	T	132	123	93	9.5	A
	R	99	101	102	5.3	A
	Subtotal	265	256	97	7.8	A
SB	L	45	44	98	9.8	A
	T	165	162	98	10.5	B
	R	11	11	100	4.0	A
	Subtotal	221	217	98	10.0	A
EB	L	17	15	87	7.2	A
	T	71	74	104	7.1	A
	R	34	36	105	4.3	A
	Subtotal	122	125	102	6.3	A
WB	L	43	44	103	8.3	A
	T	72	72	100	7.7	A
	R	32	30	94	4.3	A
	Subtotal	147	146	99	7.2	A
Total		755	744	99	8.1	A

Intersection: 1200 North & 1150 East
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	1	0	0		
	T	3	3	100	6.0	A
	Subtotal	4	3	75	6.0	A
SB	L	3	3	100	4.3	A
	R	21	20	96	2.8	A
	Subtotal	24	23	96	3.0	A
EB	L	19	17	88	5.3	A
	T	195	201	103	2.4	A
	R	1	1	100	5.0	A
	Subtotal	215	219	102	2.6	A
WB	T	45	42	93	0.0	A
	R	3	4	133	0.0	A
	Subtotal	48	46	96	0.0	A
Total		291	291	100	2.3	A

SimTraffic LOS Report

Project: Mapleton Louisa May Alcott School TIS
Analysis Period: Existing (2026) Plus Project
Time Period: Morning Peak Hour
Project #: UT26-3278

Intersection: Main Street & 1200 North
Type: All-way Stop Controlled

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	43	45	105	21.1	C
	T	104	102	98	20.1	C
	R	253	259	102	32.3	D
	Subtotal	400	406	102	28.0	D
SB	L	77	76	99	25.0	C
	T	100	101	101	21.1	C
	R	14	15	109	6.8	A
	Subtotal	191	192	101	21.5	C
EB	L	7	6	89	12.5	B
	T	142	146	103	14.8	B
	R	21	21	99	5.0	A
	Subtotal	170	173	102	13.5	B
WB	L	60	57	95	21.7	C
	T	143	144	101	19.8	C
	R	78	77	99	13.5	B
	Subtotal	281	278	99	18.4	C
Total		1,040	1,049	101	21.9	C

Intersection: 1200 North & 1150 East
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
SB	L	61	62	102	9.4	A
	R	32	34	107	5.5	A
	Subtotal	93	96	103	8.0	A
EB	L	23	24	104	8.7	A
	T	448	456	102	5.0	A
	Subtotal	471	480	102	5.2	A
WB	T	241	237	98	1.2	A
	R	50	47	94	1.0	A
	Subtotal	291	284	98	1.2	A
Total		854	860	101	4.2	A

SimTraffic LOS Report

Project: Mapleton Louisa May Alcott School TIS
Analysis Period: Existing (2026) Plus Project
Time Period: Morning Peak Hour **Project #:** UT26-3278

Intersection: Project Access & 1200 North
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	208	206	99	13.1	B
	R	27	28	104	10.1	B
	Subtotal	235	234	100	12.7	B
EB	T	80	79	98	0.5	A
	R	264	270	102	1.0	A
	Subtotal	344	349	101	0.9	A
WB	L	35	36	104	4.9	A
	T	63	61	97	0.7	A
	Subtotal	98	97	99	2.3	A
Total		678	680	100	5.2	A

SimTraffic LOS Report

Project: City Project Name TIS
Analysis Period: Existing (2026) Plus Project
Time Period: Afternoon Peak Hour

Project #: UT26-3278

Intersection: Main Street & 1200 North
Type: All-way Stop Controlled

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	34	36	106	9.7	A
	T	132	132	100	10.8	B
	R	114	113	99	6.8	A
	Subtotal	280	281	100	9.1	A
SB	L	60	62	103	12.6	B
	T	165	163	99	12.4	B
	R	11	12	109	4.9	A
	Subtotal	236	237	100	12.1	B
EB	L	17	16	93	8.7	A
	T	105	111	106	8.3	A
	R	34	36	105	4.6	A
	Subtotal	156	163	104	7.5	A
WB	L	60	59	98	12.4	B
	T	111	109	98	11.4	B
	R	49	52	106	8.0	A
	Subtotal	220	220	100	10.9	B
Total		893	901	101	10.0	A

Intersection: 1200 North & 1150 East
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
SB	L	33	32	98	6.1	A
	R	21	23	111	3.8	A
	Subtotal	54	55	102	5.1	A
EB	L	19	15	78	5.9	A
	T	260	269	104	3.7	A
	Subtotal	279	284	102	3.8	A
WB	T	188	186	99	1.0	A
	R	37	35	95	0.8	A
	Subtotal	225	221	98	1.0	A
Total		557	560	101	2.8	A

SimTraffic LOS Report

Project: City Project Name TIS
Analysis Period: Existing (2026) Plus Project
Time Period: Afternoon Peak Hour

Project #: UT26-3278

Intersection: Project Access & 1200 North
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	149	145	97	6.7	A
	R	20	21	106	3.0	A
	Subtotal	169	166	98	6.2	A
EB	T	77	74	96	0.4	A
	R	131	133	102	0.7	A
	Subtotal	208	207	100	0.6	A
WB	L	18	18	100	3.1	A
	T	48	48	100	0.2	A
	Subtotal	66	66	100	1.0	A
Total		442	439	99	2.8	A

SimTraffic LOS Report

Project: Mapleton Louisa May Alcott School TIS
Analysis Period: Future (2031) Background
Time Period: Morning Peak Hour
Project #: UT26-3278

Intersection: Main Street & 1200 North
Type: All-way Stop Controlled

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	45	48	106	11.0	B
	T	110	110	100	11.6	B
	R	225	236	105	11.3	B
	Subtotal	380	394	104	11.3	B
SB	L	50	54	108	10.7	B
	T	105	103	98	10.6	B
	R	15	15	100	4.2	A
	Subtotal	170	172	101	10.1	A
EB	L	10	10	98	7.7	A
	T	75	80	107	8.0	A
	R	25	27	108	4.2	A
	Subtotal	110	117	106	7.1	A
WB	L	40	37	93	10.2	B
	T	90	94	104	8.4	A
	R	60	60	100	5.1	A
	Subtotal	190	191	101	7.7	A
Total		850	874	103	9.7	A

Intersection: 1200 North & 1150 East
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	1	0	0		
	T	1	1	100	6.2	A
	R	1	1	100	2.8	A
	Subtotal	3	2	67	4.5	A
SB	L	3	4	123	4.4	A
	T	1	1	100	7.5	A
	R	35	36	103	3.3	A
	Subtotal	39	41	105	3.5	A
EB	L	25	23	93	6.1	A
	T	325	349	107	2.9	A
	Subtotal	350	372	106	3.1	A
WB	T	65	62	95	0.1	A
	R	5	6	126	0.0	A
	Subtotal	70	68	97	0.1	A
Total		462	483	105	2.7	A

SimTraffic LOS Report

Project: Mapleton Louisa May Alcott School TIS
Analysis Period: Future (2031) Background
Time Period: Afternoon Peak Hour

Project #: UT26-3278

Intersection: Main Street & 1200 North
Type: All-way Stop Controlled

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	35	34	96	9.4	A
	T	140	129	92	9.9	A
	R	100	99	99	5.6	A
	Subtotal	275	262	95	8.2	A
SB	L	50	53	106	10.3	B
	T	175	170	97	11.2	B
	R	15	16	107	4.3	A
	Subtotal	240	239	100	10.5	B
EB	L	20	19	96	7.8	A
	T	75	76	101	7.3	A
	R	35	35	99	4.3	A
	Subtotal	130	130	100	6.6	A
WB	L	45	45	100	9.1	A
	T	75	73	97	7.8	A
	R	35	35	101	4.9	A
	Subtotal	155	153	99	7.5	A
Total		800	784	98	8.5	A

Intersection: 1200 North & 1150 East
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	1	0	0		
	T	3	4	133	4.5	A
	Subtotal	4	4	100	4.5	A
SB	L	5	5	100	4.8	A
	R	25	26	104	2.9	A
	Subtotal	30	31	103	3.2	A
EB	L	20	18	91	5.4	A
	T	204	208	102	2.4	A
	R	1	2	200	2.9	A
	Subtotal	225	228	101	2.6	A
WB	T	50	47	94	0.0	A
	R	5	6	120	0.0	A
	Subtotal	55	53	96	0.0	A
Total		314	316	101	2.3	A

SimTraffic LOS Report

Project: Mapleton Louisa May Alcott School TIS
Analysis Period: Future (2031) Plus Project
Time Period: Morning Peak Hour
Project #: UT26-3278

Intersection: Main Street & 1200 North
Type: All-way Stop Controlled

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	45	48	106	25.3	D
	T	110	110	100	22.9	C
	R	255	254	100	34.8	D
	Subtotal	410	412	100	30.5	D
SB	L	80	78	98	19.7	C
	T	105	106	101	17.3	C
	R	15	17	113	5.7	A
	Subtotal	200	201	101	17.3	C
EB	L	10	10	98	19.4	C
	T	144	147	102	20.8	C
	R	25	22	88	6.3	A
	Subtotal	179	179	100	18.9	C
WB	L	64	65	101	24.2	C
	T	144	145	101	20.2	C
	R	84	82	98	13.8	B
	Subtotal	292	292	100	19.3	C
Total		1,081	1,084	100	23.1	C

Intersection: 1200 North & 1150 East
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
SB	L	60	66	110	8.6	A
	R	35	36	103	5.7	A
	Subtotal	95	102	107	7.6	A
EB	L	25	23	93	9.6	A
	T	454	455	100	5.0	A
	Subtotal	479	478	100	5.2	A
WB	T	246	244	99	1.2	A
	R	52	50	96	0.9	A
	Subtotal	298	294	99	1.1	A
Total		871	874	100	4.1	A

SimTraffic LOS Report

Project: Mapleton Louisa May Alcott School TIS
Analysis Period: Future (2031) Plus Project
Time Period: Morning Peak Hour **Project #:** UT26-3278

Intersection: Project Access & 1200 North
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	208	203	97	10.4	B
	R	27	30	111	7.1	A
	Subtotal	235	233	99	10.0	A
EB	T	65	60	92	0.6	A
	R	264	269	102	0.9	A
	Subtotal	329	329	100	0.8	A
WB	L	35	34	98	4.6	A
	T	70	71	101	0.5	A
	Subtotal	105	105	100	1.8	A
Total		669	667	100	4.2	A

SimTraffic LOS Report

Project: Mapleton Louisa May Alcott School TIS
Analysis Period: Future (2031) Plus Project
Time Period: Afternoon Peak Hour **Project #:** UT26-3278

Intersection: Main Street & 1200 North
Type: All-way Stop Controlled

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	35	39	111	10.9	B
	T	140	143	102	11.4	B
	R	115	112	97	6.4	A
	Subtotal	290	294	101	9.4	A
SB	L	65	65	100	15.7	C
	T	175	173	99	14.2	B
	R	15	16	107	5.3	A
	Subtotal	255	254	100	14.0	B
EB	L	20	19	96	10.7	B
	T	109	111	102	8.9	A
	R	35	37	105	4.8	A
	Subtotal	164	167	102	8.2	A
WB	L	62	58	94	13.8	B
	T	114	110	96	12.5	B
	R	52	54	103	8.0	A
	Subtotal	228	222	97	11.7	B
Total		937	937	100	11.0	B

Intersection: 1200 North & 1150 East
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
SB	L	35	33	94	6.0	A
	R	25	26	104	3.9	A
	Subtotal	60	59	98	5.1	A
EB	L	20	19	96	6.6	A
	T	269	269	100	3.7	A
	Subtotal	289	288	100	3.9	A
WB	T	193	185	96	1.0	A
	R	39	38	98	0.8	A
	Subtotal	232	223	96	1.0	A
Total		580	570	98	2.9	A

SimTraffic LOS Report

Project: Mapleton Louisa May Alcott School TIS
Analysis Period: Future (2031) Plus Project
Time Period: Afternoon Peak Hour **Project #:** UT26-3278

Intersection: Project Access & 1200 North
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	149	144	97	7.0	A
	R	20	22	111	2.9	A
	Subtotal	169	166	98	6.5	A
EB	T	86	82	95	0.4	A
	R	131	128	98	0.7	A
	Subtotal	217	210	97	0.6	A
WB	L	18	16	89	3.3	A
	T	55	54	98	0.3	A
	Subtotal	73	70	96	1.0	A
Total		458	446	97	2.8	A

SimTraffic LOS Report

Project: Mapleton Louisa May Alcott School TIS
Analysis Period: Future (2031) Plus Project MIT
Time Period: Morning Peak Hour
Project #: UT26-3278

Intersection: Main Street & 1200 North
Type: Roundabout

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	45	48	106	21.9	C
	T	110	113	103	21.8	C
	R	255	254	100	24.4	C
	Subtotal	410	415	101	23.4	C
SB	L	80	78	98	4.4	A
	T	105	101	96	5.5	A
	R	15	17	113	4.1	A
	Subtotal	200	196	98	4.9	A
EB	L	10	10	98	4.0	A
	T	144	151	105	4.2	A
	R	25	24	96	3.4	A
	Subtotal	179	185	103	4.1	A
WB	L	64	63	98	7.3	A
	T	144	142	99	7.3	A
	R	84	82	98	7.4	A
	Subtotal	292	287	98	7.3	A
Total		1,081	1,083	100	12.5	B

Intersection: 1200 North & 1150 East
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
SB	L	60	62	104	8.3	A
	R	35	34	97	4.9	A
	Subtotal	95	96	101	7.1	A
EB	L	25	24	97	9.7	A
	T	454	457	101	5.0	A
	Subtotal	479	481	100	5.2	A
WB	T	246	242	99	1.2	A
	R	52	53	101	0.9	A
	Subtotal	298	295	99	1.1	A
Total		871	872	100	4.1	A

SimTraffic LOS Report

Project: Mapleton Louisa May Alcott School TIS
Analysis Period: Future (2031) Plus Project MIT
Time Period: Morning Peak Hour **Project #:** UT26-3278

Intersection: Project Access & 1200 North
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	208	206	99	11.0	B
	R	27	32	119	7.3	A
	Subtotal	235	238	101	10.5	B
EB	T	65	58	89	0.6	A
	R	264	269	102	1.0	A
	Subtotal	329	327	99	0.9	A
WB	L	35	36	104	4.1	A
	T	70	70	100	0.5	A
	Subtotal	105	106	101	1.7	A
Total		669	671	100	4.4	A

SimTraffic LOS Report

Project: Mapleton Louisa May Alcott School TIS
Analysis Period: Future (2031) Plus Project MIT
Time Period: Afternoon Peak Hour
Project #: UT26-3278

Intersection: Main Street & 1200 North
Type: Roundabout

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	35	39	111	10.9	B
	T	140	143	102	11.4	B
	R	115	112	97	6.4	A
	Subtotal	290	294	101	9.4	A
SB	L	65	65	100	15.7	C
	T	175	173	99	14.2	B
	R	15	16	107	5.3	A
	Subtotal	255	254	100	14.0	B
EB	L	20	19	96	10.7	B
	T	109	111	102	8.9	A
	R	35	37	105	4.8	A
	Subtotal	164	167	102	8.2	A
WB	L	62	58	94	13.8	B
	T	114	110	96	12.5	B
	R	52	54	103	8.0	A
	Subtotal	228	222	97	11.7	B
Total		937	937	100	11.0	B

Intersection: 1200 North & 1150 East
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
SB	L	35	33	94	6.0	A
	R	25	26	104	3.9	A
	Subtotal	60	59	98	5.1	A
EB	L	20	19	96	6.6	A
	T	269	269	100	3.7	A
	Subtotal	289	288	100	3.9	A
WB	T	193	185	96	1.0	A
	R	39	38	98	0.8	A
	Subtotal	232	223	96	1.0	A
Total		580	570	98	2.9	A

SimTraffic LOS Report

Project: Mapleton Louisa May Alcott School TIS
Analysis Period: Future (2031) Plus Project MIT
Time Period: Afternoon Peak Hour **Project #:** UT26-3278

Intersection: Project Access & 1200 North
Type: Unsignalized

Approach	Movement	Demand Volume	Volume Served		Delay/Veh (sec)	
			Avg	%	Avg	LOS
NB	L	149	144	97	7.0	A
	R	20	22	111	2.9	A
	Subtotal	169	166	98	6.5	A
EB	T	86	82	95	0.4	A
	R	131	128	98	0.7	A
	Subtotal	217	210	97	0.6	A
WB	L	18	16	89	3.3	A
	T	55	54	98	0.3	A
	Subtotal	73	70	96	1.0	A
Total		458	446	97	2.8	A

APPENDIX D

95th Percentile Queue Length Reports

SimTraffic Queueing Report

Project: Mapleton Louisa May Alcott School TIS

Analysis: Existing (2026) Background

Time Period: Morning Peak Hour

95th Percentile Queue Length (feet) - Rounded Up to Nearest Multiple of 25 ft



Project #: UT26-3278

Intersection	NB			SB			EB			WB	
	LT	LTR	R	LT	LTR	R	LT	LTR	R	LT	R
01: Main Street & 1200 North	100		125	75			75		50	100	50
02: 1200 North & 1150 East					50						

SimTraffic Queueing Report
Project: Mapleton Louisa May Alcott School TIS

Analysis: Existing (2026) Background

Time Period: Afternoon Peak Hour

95th Percentile Queue Length (feet) - Rounded Up to Nearest Multiple of 25 ft



Project #: UT26-3278

Intersection	NB			SB			EB			WB	
	LT	LTR	R	LT	LTR	R	LT	LTR	R	LT	R
01: Main Street & 1200 North	75		75	100			75		50	75	50
02: 1200 North & 1150 East					50						

[illegible]

SimTraffic Queueing Report

Project: Mapleton Louisa May Alcott School TIS

Analysis: Future (2031) Background

Time Period: Morning Peak Hour

95th Percentile Queue Length (feet) - Rounded Up to Nearest Multiple of 25 ft



Project #: UT26-3278

Intersection	NB			SB			EB			WB	
	LT	LTR	R	LT	LTR	R	LT	LTR	R	LT	R
01: Main Street & 1200 North	175		125	75			75		50	100	50
02: 1200 North & 1150 East				75							

SimTraffic Queueing Report

Project: Mapleton Louisa May Alcott School TIS

Analysis: Future (2031) Background

Time Period: Afternoon Peak Hour

95th Percentile Queue Length (feet) - Rounded Up to Nearest Multiple of 25 ft



Project #: UT26-3278

Intersection	NB			SB			EB			WB	
	LT	LTR	R	LT	LTR	R	LT	LTR	R	LT	R
01: Main Street & 1200 North	75		75	100			75		50	75	50
02: 1200 North & 1150 East					50						

SimTraffic Queueing Report

Project: Mapleton Louisa May Alcott School TIS

Analysis: Future (2031) Plus Project

Time Period: Afternoon Peak Hour

95th Percentile Queue Length (feet) - Rounded Up to Nearest Multiple of 25 ft



Project #: UT26-3278

Intersection	NB			SB			EB			WB	
	L	LT	R	LR	LT	R	LT	R	T	LT	R
01: Main Street & 1200 North		100	75		125	75	100	50		125	75
02: 1200 North & 1150 East				75			50				
03: Project Access & 1200 North	100		50								

SimTraffic Queueing Report

Project: Mapleton Louisa May Alcott School TIS

Analysis: Future (2031) Plus Project MIT

Time Period: Morning Peak Hour

95th Percentile Queue Length (feet) - Rounded Up to Nearest Multiple of 25 ft



Project #: UT26-3278

Intersection	NB		SB		EB			WB	
	LR	LTR	LR	LTR	LT	LTR	R	LT	LTR
01: Main Street & 1200 North		375		75		75			100
02: 1200 North & 1150 East			75		50				
03: Project Access & 1200 North	150							50	

SimTraffic Queueing Report
Project: Mapleton Louisa May Alcott School TIS

Analysis: Future (2031) Plus Project MIT

Time Period: Afternoon Peak Hour

95th Percentile Queue Length (feet) - Rounded Up to Nearest Multiple of 25 ft



Project #: UT26-3278

Intersection	NB			SB			EB			WB	
	L	LT	R	LR	LT	R	LT	R	T	LT	R
01: Main Street & 1200 North		100	75		125	75	100	50		125	75
02: 1200 North & 1150 East				75			50				
03: Project Access & 1200 North	100		50								