



**Tremonton City Corporation
City Council Meeting
April 4, 2023
Meeting to be held at
102 South Tremont Street
Tremonton, Utah**

5:00 p.m.

1. Presentation and discussion of the 2024 Fiscal Year Budget for governmental funds and enterprise funds
2. Review of the agenda items identified on 7:00 p.m. City Council Agenda
3. **CLOSED SESSIONS:**
 - a. *Strategy session to discuss the purchase of real property when public discussion of the transaction would disclose the appraisal or estimated value of the property under consideration or prevent the public body from completing the transaction on the best possible terms; and/or*
 - b. *Strategy session to discuss the character, professional competence or physical or mental health of an individual; and/or*
 - c. *Strategy sessions to discuss pending or reasonably imminent litigation; and/or*
 - d. *Discussions regarding security personnel, devices or systems*

**CITY COUNCIL MEETING AGENDA
7:00 p.m.**

1. Opening Ceremony
2. Introduction of guests
3. Declaration of Conflict of Interest
4. Approval of agenda
5. Approval of minutes – March 21, 2023
6. Presentation
 - a. Tremonton City Citizenship Award to Elementary and Intermediate Students

7. Proclamation
 - a. Arbor Day Proclamation- April 28, 2023
8. Public comments: This is an opportunity to address the City Council regarding your concerns or ideas.
9. New Council Business:
 - a. Discussion and consideration of adopting Resolution No. 23-23 appointing Mike Garrett to serve on the Tremonton City Library Board and reaffirming and appointing existing Library Board Members
 - b. Discussion and consideration of adopting Resolution No. 23-24 approving a Cooperative Agreement for Phased Development Improvements between Utah Department of Transportation (UDOT), Tremonton City, and Rivers Edge Real Holdings, LLC for a future traffic signal at the intersection of Main Street (State Route 102) and 950 East and other improvements at the intersection of 1600 East (State Route 13) and 450 North
10. Calendar Items and Previous Assignment
 - a. Review of calendar
 - b. Unfinished Business/Action Items
 - c. Branding Implementation update
11. Reports & Comments:
 - a. City Administration Reports and Comments
 - b. Development Review Committee Report and Comments
 - c. City Department Head Reports and Comments
 - d. Council Reports and Comments
12. **CLOSED SESSIONS:**
 - a. ***Strategy session to discuss the purchase of real property when public discussion of the transaction would disclose the appraisal or estimated value of the property under consideration or prevent the public body from completing the transaction on the best possible terms; and/or***
 - b. ***Strategy session to discuss the character, professional competence or physical or mental health of an individual; and/or***
 - c. ***Strategy sessions to discuss pending or reasonably imminent litigation; and/or***
 - d. ***Discussions regarding security personnel, devices or systems***
13. Adjournment

Anchor location for Electronic Meeting by Telephone Device. With the adoption of Ordinance No. 13-04, the Council may participate per Electronic Meeting Rules. Please make arrangements in advance.

Persons with disabilities needing special assistance to participate in this meeting should contact

Linsey Nessen no later than 48 hours prior to the meeting.

Notice was posted March 31, 2023 a date not less than 24 hours prior to the date and time of the meeting and remained so posted until after said meeting. A copy of the agenda was delivered to The Leader (Newspaper) on March 31, 2023.

Linsey Nessen, CITY RECORDER

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**TREMONTON CITY CORPORATION
CITY COUNCIL MEETING
MARCH 21, 2023**

Members Present:
Connie Archibald
Wes Estep
Bret Rohde
Rick Seamons
Lyle Vance
Lyle Holmgren, Mayor
Shawn Warnke, City Manager
Marc Christensen, Assistant City Manager
Linsey Nessen, City Recorder

CITY COUNCIL WORKSHOP

Mayor Holmgren called the March 21, 2023 City Council Workshop to order at 5:00 p.m. The meeting was held in the City Council Meeting Room at 102 South Tremont Street, Tremonton, Utah. Those in attendance were Mayor Holmgren, Councilmembers Archibald, Estep, Rohde, Seamons, and Vance, City Manager Warnke, Assistant City Manager Christensen, and City Recorder Nessen. The following Department Heads were also present: Public Works Director Paul Fulgham, Police Chief Dustin Cordova, and Treasurer Sharri Oyler. Also in attendance was Finance Director Curtis Roberts.

The following items were discussed out of order with the Closed Session held first.

- 1. Presentation and discussion of the 2024 Fiscal Year Budget for governmental funds

Assistant City Manager Christensen said this is a continuation of our last discussion. One of the biggest concerns was the sales tax revenue. We projected that based off a trend line and put what we think is going to occur in the budget. Director Roberts said we came at this several different ways, including population, historical trends, and the government office projections. Assistant City Manager Christensen then referred them to a chart on their actual sales tax and what has been transferred for capital projects and UTOPIA debt. I averaged that over the past 11 years and we have transferred 80% of the sales tax revenue annually. We are showing transfers into the Capital Vehicles and Equipment funds. For the Transportation Capacity Fund there is a \$7 million deficit because roads are so expensive. We want to build it up and start paying for road projects coming up in the next five years. Councilmember Vance said my main concern is we are coming up on Truth in Taxation and have to know if we need to ask for more real estate taxes or not. It would be nice to know what is essential and what is cream so we can understand how much we really need. Manager Warnke reminded the Council that property taxes do not keep up with inflation, but sales tax does, which is what is funding these capital projects. Taxes should be looked at every year and thought of in terms of inflation. Director Roberts said these are projections based on five years and the question becomes is this

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really the list the City wants to see. If it is, how much do you want to contribute this year toward that? The plan could be to fund this much this year and then see what the growth is. It is not practical to approximate growth to the revenues, but we can say this is what we are going to commit to in the next year and set that aside. Every year these projects could be shifted based on priority.

Assistant City Manager Christensen then reviewed each fund and the proposed projects with the Council. He said the Food Pantry has nothing proposed and pays for itself. Recreation is also taken care of. They do not have projects for the next five years. The Parks Fund has some costs for engineering and we have parks coming online. There is the canal rail trail along Rocky Mountain Power's property. We made an agreement to develop that trail within x amount of years. A Facilities Impact Study was recommended by the parks and recreation director. We need to build a recreation center in the area, but need a study first. We have earmarked \$35,000 for that. Director Roberts said in this current budget there is nothing being transferred into this fund. It has an income stream and will cover 2024. There is no ask of the General Fund.

Assistant City Manager Christensen said former Fire Chief Robert LaCroix had a five-year plan for the Fire and EMS funds. The biggest is replacing personal protective equipment every year. Director Roberts said the transfer ask for the Fire Fund is \$358,000. That is funding the operational needs, as well as setting money aside for capital. With this plan we are going to come close to being able to fund those by 2027. We are on track for that if this is approved. Manager Warnke said this fund is a little dynamic and one we need to watch closely. Ambulance billing has fluctuations.

Assistant City Manager Christensen said there is also the detention pond on 350 North for a walkway for children from Matheson Apartments to Alice C. Harris Intermediate (ACHI). Manager Warnke said as we continue to grow, we will need to figure out our facilities and engage an architect. Once we have more information we can make good decisions on how to fund those. Assistant City Manager Christensen said we need new carpet in the Civic Center. There is also the chip seal project that has money set aside (\$1.5 million). We have not resurfaced the tennis court in six years and it should be done every five years. We would repaint them with pickleball lines and could bring in portable nets. There is also material storage space for sand, rock, gravel and things for the Parks Department by their building. Senior Center personnel have suggested changing the flooring in their main room that is rented out. They are cleaning constantly due to spills. They would get better flooring there and new carpet in other areas. The fence on the east side has been pushed due to snow removal. We would add a concrete strip and new fence along that side. There is also a rear entrance proposed (\$5,000) since most of the parking is in the rear. There would be a cutout with a man door. The landscape will happen this year. We will continue to put aside money for the expansion of the cemetery.

Councilmember Archibald said our department heads suggested this to us so we need to think hard about it. It is valuable for us to show our support. We appreciate them so much and I think this is awesome they have thought it through. Director Roberts said we have some moving targets. We are asking for \$400,000 for this fund to make sure we have

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money. Our recommendation is to keep it funded so we have enough money to respond to road projects or anything that comes up. This is a critical discussion for the Council to have on what you want to fund. Assistant City Manager Christensen said we need more police department vehicles in 2024. That would be four vehicles and they would have to be equipped. Chief Cordova said those are to staff the additional officers that are inside the budget. Assistant City Manager Christensen said there is also a one-ton dump truck and one six-wheel dump truck needed.

Assistant City Manager Christensen said for the Transportation Capacity Fund in 2024 we need to acquire the rights-of-way on 1000 North. We are ready to go to bid in January of 2024 with construction in July of 2024 so we can get to work on 1000 North and a couple of these other roads. We will continue to apply for grants and other sources of revenue.

- 2. Review of the agenda items identified on 7:00 p.m. City Council Agenda

Motion by Councilmember Estep to move into closed session. Motion seconded by Councilmember Archibald. Vote: Councilmember Archibald - aye, Councilmember Estep - aye, Councilmember Rohde - aye, Councilmember Seamons - aye, Councilmember Vance - aye. Motion approved.

The Council moved into a closed session at 5:01 p.m.

- 3. **CLOSED SESSIONS:**
 - a. *Strategy session to discuss the purchase of real property when public discussion of the transaction would disclose the appraisal or estimated value of the property under consideration or prevent the public body from completing the transaction on the best possible terms; and/or*
 - b. *Strategy session to discuss the character, professional competence or physical or mental health of an individual; and/or*
 - c. *Strategy sessions to discuss pending or reasonably imminent litigation; and/or*
 - d. *Discussions regarding security personnel, devices or systems*

Motion by Councilmember Rohde to return to open session. Motion seconded by Councilmember Archibald. Vote: Councilmember Archibald - aye, Councilmember Estep - aye, Councilmember Rohde - aye, Councilmember Seamons - aye, Councilmember Vance - aye. Motion approved.

The Council returned to open session at 5:59 p.m. Item 1. was discussed at this time.

The meeting adjourned at 7:01 p.m. by consensus of the Council.

CITY COUNCIL MEETING

Mayor Holmgren called the March 21, 2023 City Council Meeting to order at 7:06 p.m. The meeting was held in the Tremonton City Council Meeting Room at 102 South Tremont Street, Tremonton, Utah. Those in attendance were Mayor Holmgren, Councilmembers Archibald, Estep, Rohde, Seamons, and Vance, City Manager Warnke, Assistant City Manager Christensen,

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and City Recorder Nessen. The following Department Heads were also present: Public Works Director Paul Fulgham, Police Chief Dustin Cordova, and Treasurer Sharri Oyler (left at 7:48 p.m.). Also in attendance was Finance Director Curtis Roberts.

1. Opening Ceremony:

Mayor Holmgren informed the audience that he had received no written or oral request to participate in the Opening Ceremony. He asked anyone who may be offended by listening to a prayer to step out into the lobby for this portion of the meeting. The prayer was offered by Assistant City Manager Christensen and the Pledge of Allegiance was led by Recorder Nessen.

2. Introduction of guests: Mayor Holmgren welcomed those in attendance.

3. Declaration of Conflict of Interest: None.

4. Approval of Agenda:

Motion by Councilmember Estep to approve the agenda of March 21, 2023. Motion seconded by Councilmember Archibald. Vote: Councilmember Archibald - aye, Councilmember Estep - aye, Councilmember Rohde - aye, Councilmember Seamons - aye, Councilmember Vance - aye. Motion approved.

5. Approval of minutes – March 7, 2023

Motion by Councilmember Vance to approve the minutes of March 7, 2023. Motion seconded by Councilmember Rohde. Vote: Councilmember Archibald - aye, Councilmember Estep - aye, Councilmember Rohde - aye, Councilmember Seamons - aye, Councilmember Vance - aye. Motion approved.

6. Presentation

a. Report from the Youth City Council – Mayor Reed Bourgeois and City Manager Emmeline Rees

Reed Bourgeois said we are grateful to talk today and to discuss what we have been up to. Our time as a Youth City Council is coming to a close. We start in the spring and will recruit new people. We currently have 34 members that all attend Bear River High School. We have put in 490 hours of service with a one person high of 34 hours. Emmeline Rees said this year we helped with many events including the Daddy Daughter Dance, the 24th of July celebration and the Christmas season. We helped at the Holiday Extravaganza and added lights on Main Street. I loved doing that, it brightened up my night. Reed Bourgeois said we also planned some of our own events. Some were for fun and others were service oriented. One I was really proud of was when we reached out to a local business and asked them to fund us making and putting together hygiene kits. We were able to assemble 20 kits and donated those through an organization in Salt Lake City. Emmeline Rees said a couple weeks ago we went to USU for a leadership conference. It was incredible to learn what it means to be a good leader

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and help those in our community. We learned good problem solving and how to help people. I loved being with other people from cities around Utah. Reed Bourgeois said we got to give a presentation in front of everybody and brag about our little town. In conclusion, we want to say thank you for this opportunity. We have all got to serve and benefit our community, but a lot of that benefit has been for us. We have gained leadership and life skills, and are excited for what lies ahead. We are thankful for this opportunity. The Council thanked them for their time and their advisors who have helped.

7. Public comments: There were no public comments.

8. New Council Business:

a. Discussion and consideration of approving the February Financial Statements

Motion by Councilmember Archibald to approve the February Financial Statements. Motion seconded by Councilmember Seamons. Vote: Councilmember Archibald - aye, Councilmember Estep - aye, Councilmember Rohde - aye, Councilmember Seamons - aye, Councilmember Vance - aye. Motion approved.

b. Discussion and consideration of approving the February Warrant Register

Motion by Councilmember Vance to approve the February Warrant Register. Motion seconded by Councilmember Estep. Vote: Councilmember Archibald - aye, Councilmember Estep - aye, Councilmember Rohde - aye, Councilmember Seamons - aye, Councilmember Vance - aye. Motion approved.

c. Discussion and consideration of approving Resolution No. 23-17 approving a land acquisition agreement between Tremonton City and DC Aston & Company, LLC for Tremonton City's acquisition of 4.309 acres of real property for the intended use of constructing a secondary water equalization basin

Manager Warnke said this was on the last agenda, but we held off on approval so we could include the water right in the agreement (1.45-acre feet). That has been included as one of the assets the City received in that transaction. Both parties have reviewed it and everything is in order.

Motion by Councilmember Estep to approve the resolution. Motion seconded by Councilmember Archibald. Roll Call Vote: Councilmember Archibald - aye, Councilmember Estep - aye, Councilmember Rohde - aye, Councilmember Seamons - aye, Councilmember Vance - aye. Motion approved.

d. Discussion and consideration of adopting Resolution No. 23-18 approving Section XXI: Financial Policies of the Tremonton Personnel Policies and Procedures Manual

Manager Warnke said this is a whole new section attributed to existing policies that we had approved, but not codified in a document. There are also some recommended policies from the State Auditors' Officer that we included.

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Motion by Councilmember Vance to adopt the resolution. Motion seconded by Councilmember Rohde. Roll Call Vote: Councilmember Archibald - aye, Councilmember Estep - aye, Councilmember Rohde - aye, Councilmember Seamons - aye, Councilmember Vance - aye. Motion approved.

- e. Discussion and consideration of adopting Resolution No. 23-19 awarding the 2023 Street Maintenance Project to Staker Parsons

Director Fulgham said we went out to bid. We do have some money set aside from fees-in-lieu that has been on our books for chip seals (\$165,000). Our engineer’s estimate was \$1,550,640. We bid out for two schedules, but when I looked at the price difference (about \$200,000) I was happy with what we have done in the past. In order to conserve money for other projects I would recommend we go with schedule A. The high bidder was CKC from Vernal at \$1,845,080. The next was Intermountain Slurry at \$1,422,840, Advance Paving at \$1,278,000, and Consolidated Paving at \$1,214,100. The low bidder was Staker Parsons who has done the majority of the work for the City over the past 25 years. Their bid was \$1,099,080, which is the bid I suggest we go with.

Director Fulgham said I know we are having issues with 1000 West and there is an option for the north end. If you are interested, I will have our engineer look at it and get an estimate. We would take that road and grind down two inches to get through that layer that keeps flaking off. We could get some good prices with the contractors that will already be working here. The south end needs a whole bunch of work, but that will be a multimillion-dollar project. If you are interested, we would put a package together. Councilmember Vance said let us look at it.

Motion by Councilmember Archibald to adopt the resolution and award the bid to Staker Parsons. Motion seconded by Councilmember Seamons. Roll Call Vote: Councilmember Archibald - aye, Councilmember Estep - aye, Councilmember Rohde - aye, Councilmember Seamons - aye, Councilmember Vance - aye. Motion approved.

- f. Discussion and consideration of adopting Resolution No. 23-20 reaffirming, amending, and enacting new fees and fines in a schedule entitled Tremonton City Consolidated Fees and Fines schedule for fees including, but not limited to, building fees and subdivision street sign fees

Manager Warnke said with bringing on a contractor to do work we thought it would be a good idea to review the fee schedule. We have a table of what building evaluations were as a common practice. Instead of including that we are just referencing the International Code Councils Building Evaluation, which is updated on a regular basis and tied to the cost of construction. We felt this was easier to leave everything we have and show it as new. The other thing we looked at was subdivision street signs. We take a fee-in-lieu with the development and the City installs those. Director Fulgham brought us up to what the current costs are there. We also looked at the fee-in-lieu for storm drain, chip seal, sidewalks, and curb and gutter, which are the common infrastructure we take as a fee-in-lieu. The City engineer will look at those things, which are subject to change. We will

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see an increase in revenue, but there are some boundaries we have to stay in. We are also working on purchasing software to facilitate the plan reviews, inspections and payments. This will help with all the development applications.

Motion by Councilmember Archibald to adopt the resolution. Motion seconded by Councilmember Vance. Roll Call Vote: Councilmember Archibald - aye, Councilmember Estep - aye, Councilmember Rohde - aye, Councilmember Seamons - aye, Councilmember Vance - aye. Motion approved.

- g. Discussion and consideration of adopting Resolution No. 23-21 approving a Professional Services Agreement with B2 Land Services, LLC as the lead acquisition agent for the 1000 North Widening Project from 2300 West to 2650 West

Manager Warnke said at the last Council meeting you selected this person to be the lead. There are easements the City needs to obtain with this expansion. This shows the interfaces with these adjoining properties and their driveways and how they will tie into the expanded right-of-way. This individual will communicate with the 12 property owners that this road affects. She will coordinate and negotiate the easements that are needed for us to construct. This construction season we will acquire the rights-of-way that will put us in a position to go out to bid. It would be ready for construction the summer of 2024.

Manager Warnke said I would like to enter into another contract with this person to do the acquisition for the expanded right-of-way at the intersection of 1000 North and 1000 West. We are trying to position ourselves to have that secured and will submit for CMAC funding. I have been working with BRAG to get funds, too. We need 1000 square feet on each approach for the right turn lanes so all the movements will be separated. This will help with congestion as the City grows. We have to follow the federal process for the acquisition so it would be helpful to have her expertise. Councilmember Vance clarified that there are four owners so the cost would be \$8,000. That is a lot of money for a sliver of land and the amount of work that happens there. Manager Warnke said we can do this in-house, but there are a lot of small projects that add up. We are going after more grant funds, which requires a lot of work. There are other things we can do in-house. She knows the federal process for procurement better than I would. We will be using federal dollars for construction so there is value added there. This is just a recommendation separate from the resolution that I am looking for direction on.

Motion by Councilmember Rohde to adopt the resolution. Motion seconded by Councilmember Archibald. Roll Call Vote: Councilmember Archibald - aye, Councilmember Estep - aye, Councilmember Rohde - aye, Councilmember Seamons - aye, Councilmember Vance - aye. Motion approved.

- h. Discussion and consideration of adopting Resolution No. 23-22 appointing Raulon Van Tassell to serve on the Tremonton City Planning Commission and reaffirming and appointing existing Planning Commission members

Mayor Holmgren said Commission Member Paul Fowler sent me a message

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asking to resign from the Planning Commission since he is moving. We have talked to Raulon Van Tassell and feel he has a lot to offer our Planning Commission. Councilmember Archibald read through the City's mission and vision, which she said speaks positivity. Working on the Planning Commission I was thinking about a community member who would be able to display this and be someone who would add to our Planning Commission. I reached out to Raulon Van Tassell who is someone I felt would do a good job at bringing that to our community—that safe and welcoming type of environment. She then read through his bio. The Council made a motion and thanked him for his willingness to serve.

Motion by Councilmember Archibald to adopt this resolution. Motion seconded by Councilmember Estep. Roll Call Vote: Councilmember Archibald - aye, Councilmember Estep - aye, Councilmember Rohde - aye, Councilmember Seamons - aye, Councilmember Vance - aye. Motion approved.

9. Calendar Items and Previous Assignment
 - a. Review of calendar

The Utah League of Cities and Towns Mid-Year Conference is approaching

- b. Unfinished Business/Action Items: None.
- c. Branding Implementation update

Assistant City Manager Christensen said the biggest thing is the addition of the sign in here. Councilmember Estep said the flags came in, too. They are going on Main Street. We have an American flag and a City flag that will attach to the light poles. They are 3x5 so they will stand out a bit more than previous ones.

10. Reports & Comments:
 - a. City Administration Reports and Comments: None.
 - b. Development Review Committee Report and Comments: None.
 - c. City Department Head Reports and Comments

Director Fulgham said neighborhoods that butted against any field had issues with flooding because water came off in a hurry. There are 240 acres behind Buttar's Tractors and there was a foot of water that came south. That is about 78 million gallons of water. We had this same type of event six years ago and that took us a week to deal with. For this one, because of the new system down Main Street, it was gone in 24 hours. You cannot plan for that much water. It is not a storm event it is a seasonal build up. There is not much we can do for that. We do the best we can, but I think the City Council was wise in putting that 36-inch line there. We provided more than 2,000 sand bags, plus five loads of sand. We have done things to help people prepare. Mayor Holmgren said I have to tell Director Fulgham and his crew what a great job they did. I heard tons of compliments. We really appreciate all your efforts. Director Fulgham said we appreciate your support. There are still a couple issues with the Tremonton Garland Drainage District, but they have been working on it. We have helped them remove tree roots from years of neglect. We have to stay on top of that so they do not get in the sewer.

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Chief Cordova said Brigham City recently notified us that they do not want to be in an agreement with SWAT with both us and the County. That poses many challenges, but we are working through it. I am getting bids from other cities. The issue we will run into is the response time. The national standard is 45 minutes to an hour, but here it could be up to an hour and a half. We will have to create an emergency response team and could do that in-house. This came out of the blue and we did not have a written agreement. We had called them for an incident and they did not come out anyway so this allows us to put something in place where we are guaranteed a response. We will work something out that makes sense for our City and our capabilities. I will keep you posted when we have the solution. Councilmember Archibald is helping me apply for a grant. Other than that, it is business as usual.

Social Media Manager Sara Mohrman said the Farmer’s Market is coming up in six weeks. We had a good meeting with the Chamber of Commerce and local individuals to discuss how we can do more for our businesses here. We have a good plan going forward.

Mayor Holmgren said we appreciate what everyone is doing. You all are making a significant contribution to the City. We appreciate you so much.

d. Council Reports and Comments

Councilmember Estep said thank you to everyone for all they are doing, you sure make us look good.

Councilmember Vance said Assistant City Manager Christensen and Manager Warnke, the numbers you are putting together really helps us to know what is going on so thank you.

Councilmember Rohde said I just want to thank Assistant City Manager Christensen and Director Roberts. Thank you for entertaining us with what we need. I wondered if we could put some language in our public comment that restricts it to only citizens of Tremonton. When it is an annexation or people from other communities are affected, they can talk, but when it is just Tremonton, I would like to keep it to just those citizens. They agreed to look into that.

Councilmember Seamons said thank you to the Public Works for helping with the flooding. Thank you for all you are doing.

- 11. ***CLOSED SESSIONS: No Closed Session held at this time.***
 - a. ***Strategy session to discuss the purchase of real property when public discussion of the transaction would disclose the appraisal or estimated value of the property under consideration or prevent the public body from completing the transaction on the best possible terms; and/or***
 - b. ***Strategy session to discuss the character, professional competence or physical or mental health of an individual; and/or***
 - c. ***Strategy sessions to discuss pending or reasonably imminent litigation; and/or***

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d. Discussions regarding security personnel, devices or systems

12. Adjournment.

Motion by Councilmember Seamons to adjourn the meeting. Motion seconded by Councilmember Rohde. Vote: Councilmember Archibald - aye, Councilmember Estep - aye, Councilmember Rohde - aye, Councilmember Seamons - aye, Councilmember Vance - aye. Motion approved.

The meeting adjourned at 8:08 p.m.

The undersigned duly acting and appointed Recorder for Tremonton City Corporation hereby certifies that the foregoing is a true and correct copy of the minutes for the City Council Meeting held on the above referenced date. Minutes were prepared by Jessica Tanner.

Dated this _____ day of _____, 2023.

Linsey Nessen, City Recorder

Follow-up items for the Council and City Staff

Director Fulgham would have the City Engineer put together a bid for work to be done on the north end of 1000 West.

Chief Cordova is looking into options for SWAT. They will do some in-house options, as well as look at contracts with outside help.

Staff will look into wording and the legality of having only Tremonton residents talk during public comment when dealing with issues that only involve those residents.

Proclamation

ENCOURAGING THE OBSERVANCE OF ARBOR DAY

WHEREAS, in 1872, J. Sterling Morton proposed to the Nebraska Board of Agriculture that a special day be set aside for the planting of trees, and

WHEREAS, this holiday, called Arbor Day, was first observed with the planting of more than a million trees in Nebraska, and

WHEREAS, Arbor Day is now observed throughout the nation and the world, and

WHEREAS, trees can reduce the erosion of our precious topsoil by wind and water, cut heating and cooling costs, moderate the temperature, clean the air, produce oxygen and provide habitat for wildlife, and

WHEREAS, trees are a renewable resource giving us paper, wood for our homes, fuel for our fires and countless other wood products, and

WHEREAS, trees in our City increase property values, enhance the economic vitality of business areas, and beautify our community, and

WHEREAS, trees, wherever they are planted, are a source of joy and spiritual renewal.

NOW THEREFORE, I, Lyle N. Holmgren, Mayor of the City of Tremonton, Utah, do hereby proclaim April 28, 2023, as ARBOR DAY. In the City of Tremonton, I urge all citizens to support efforts to protect our trees and woodlands and to support our City's Urban Forestry Program, and

FURTHER, I urge all citizens to plant trees to gladden hearts and promote the well-being of present and future generations.

DATED this 4th day of April, 2023.

TREMONTON CITY CORPORATION

Lyle N. Holmgren, Mayor

ATTEST:

Linsey Nessen, Recorder

TREMONTON CITY
CITY COUNCIL MEETING
APRIL 4, 2023

TITLE:	Discussion and consideration of adopting Resolution No. 23-23 appointing Mike Garrett to serve on the Tremonton City Library Board and reaffirming and appointing existing Library Board Members
FISCAL IMPACT:	Not applicable
PRESENTER:	Kim Griffiths, Library Director

<p>Prepared By: Kim Griffiths</p>

RECOMMENDATION:

I move that the City Council adopt a resolution to appoint Mike Garrett as a Tremonton City Library Board member.

BACKGROUND:

Mike will be replacing Mercedes Stacey, who has moved. Mike volunteered to serve on the Board and was introduced to the existing Board on March 17, 2023.

As stated in the Tremonton City Library ordinance Section 3 article 3.4: In the event of a vacancy on the Library Board, replacement candidates will be recommended by the Library Board and approved by the Tremonton City Council.

RESOLUTION NO. 23-23

A RESOLUTION OF TREMONTON CITY COUNCIL APPOINTING MIKE GARRETT TO SERVE ON THE TREMONTON CITY LIBRARY BOARD AND REAFFIRMING AND APPOINTING EXISTING LIBRARY BOARD MEMBERS

WHEREAS, Tremonton City believes that public libraries promote literacy and quality of life in a community and provide many other ancillary services; and

WHEREAS, following Utah Code 9-7-402, Tremonton City has established and maintains a public library; and

WHEREAS, Utah Code 9-7-402 requires that when a city’s governing body decides to establish and maintain a city public library, it shall appoint a Library Board of not less than five members and not more than nine members, chosen from the citizens of the city and based upon their fitness for the office; and

WHEREAS, Tremonton City has established a Library Board as required by Utah Code 9-7-402, codified in Title 3. City Government, Part 3-840 Library Board of the Revised Ordinances of Tremonton City Corporation; and

WHEREAS, per Tremonton City Code 3-841 (1), the Library Board consists of seven (7) to nine (9) persons chosen from the citizens at large of Tremonton, Utah, with one member of the board being a member of the Tremonton City Council; and

WHEREAS, per Tremonton City Code 3-841 (2), the Library Board member is appointed for a three (3) year term, or until their successors are appointed, with Board members not serving more than two (2) consecutive full terms; and

WHEREAS, Library Board Member Mercedes Stacey is moving and has resigned from the Library Board, creating a vacant position on the Tremonton City Library Board; and

WHEREAS, Mike Garrett, a Tremonton City resident, has expressed interest in participating in the Tremonton City Library Board and possesses skills and interests that will complement the Library Board as detailed in Exhibit “A.”

NOW BE IT RESOLVED that the Tremonton City Council hereby appoints Mike Garrett to serve on the Tremonton City Library Board and reaffirms and appoints the following individuals as members of the Tremonton City Library Board for the following duration:

<u>Board Member</u>	<u>Term</u>	<u>Can Serve Thru (Two-Term Limits)</u>
Mike Garrett	June 2024	June 2030
Moroni Aguilar	June 2024	June 2024
Lisa Unsworth	June 2024	June 2024
Alysia Chapman	June 2024	June 2027
Annette Macfarlane	June 2024	June 2027

Becca Ashby	June 2025	June 2028
Rick Jeppesen	June 2025	June 2028
Julie Beagley	June 2025	June 2028
Connie Archibald	Not Applicable	Not Applicable

Adopted and passed by the City Council this 4th day of April 2023. Resolution to become effective upon adoption.

TREMONTON CITY
A Utah Municipal Corporation

By _____
Lyle Holmgren, Mayor

ATTEST:

Linsey Nessen, City Recorder

EXHIBIT “A”

A little background about me:

Mike Garrett

Tremont Street

Tremonton Ut. 84337

My wife is Sheri Lott Garrett, we’ve been married for 42 years. We have 4 boys and two girls. The youngest two are twin boys. (*Everyone in life should experience raising twins... just saying.*)

-I was born here in Tremonton, attended part of 1st Grade here at the old McKinley. Grew up in Soda Springs Idaho. Attended Ricks College (BYU-Idaho) and Utah State University in Logan. My education background is in Automotive, Aerospace, and Environmental Protection.

-I’m a licensed Power Plant Operator (Industrial Steam Eng) at the North Plant for Northrop Grumman, Promontory. I work rotating shifts, text me anytime. (*I’m probably awake at 3 am.*) I’m about two years away from retirement.

-I’ve been taking on-line and USU extension classes for Creative Nonfiction Writing for about the past 8 years. I really enjoy writing about adventure and time-travel romance. Indiana Jones and Regency Jane Austen are my favorites. (*Miss Jane Austen is my home-town girl.*) As a writer, I have developed pretty thick skin. I’m a pretty easy going type of guy, it’s hard to offend me. (*Typo’s kill me...*)

-I love to volunteer, I was involved in Cub and Boy Scouts for 39 years. One of my most enjoyable positions was being WEBELOS leader. One year we took the boys flying with Wayne Larsen after they “graduated” from a 5 hour flight school. I’m a S.T.E.M. advocate for a fun way to learn. (*S.T.E.M stands for science, technology, engineering, and mathematics*)



TREMONTON CITY
CITY COUNCIL MEETING
April 4, 2023

TITLE:	Discussion and consideration of adopting Resolution No. 23-24 approving a Cooperative Agreement for Phased Development Improvements between Utah Department of Transportation (UDOT), Tremonton City, and Rivers Edge Real Holdings, LLC for a future traffic signal at the intersection of Main Street (State Route 102) and 950 East and other improvements at the intersection of 1600 East (State Route 13) and 450 North
FISCAL IMPACT:	Not applicable.
PRESENTER:	Shawn Warnke, City Manager

BACKGROUND:

The Rivers Edge - Phase 1 is being proposed as the first phase of the Rivers Edge Development, and the construction of this phase requires access onto State Route 102 (Main Street), which is owned and controlled by the Utah Department of Transportation (UDOT). Accessing State Routes requires access permits from UDOT, and as part of the access permitting process, UDOT requires that Developers submit a traffic impact study.

The Developers of the Rivers Edge Development completed a traffic impact study which identified several site-related traffic mitigation improvements required during the construction of this Development. More specifically, the traffic impact study identifies that a traffic signal at the intersection of Main Street (State Route 102) and 950 East is needed as a site-related improvement when 35% of the Rivers Edge Development is complete. The traffic impact study identified right and left turn lanes that need to be constructed on 1600 East (State Route 13) when the 450 North Collector Road connects to State Route 13.

The proposed River Edge - Phase 1 plat is less than 35% of the total Rivers Edge Development, and the construction of the 450 North Collector Road will be constructed in a future phase of the Rivers Edge Development. UDOT is willing to grant Rivers Edge - Phase 1 an access permit for the intersection of 950 East and Main Street (State Route 102) if the Utah Department of Transportation, Tremonton City, and Rivers Edge Holdings, LLC enter into Cooperative Agreement for Phased Development Improvement.

This Cooperative Agreement for Phased Development Improvements requires that the City not issue any future development approval for future phases of the Rivers Edge Development without requiring the Developer to submit an amended traffic impact study (TIS) to UDOT to verify if the proposed phase meets the warrant for a traffic signal at the intersection of State Route 102 (Main Street) and 950 East. If the TIS finds that the proposed phase meets UDOT's warrants for a traffic signal, the Developer shall provide construction plans of the traffic signal and any other mitigation improvements for review and approval by UDOT. Thereafter the Developer shall construct a traffic signal and any other mitigation improvement required by UDOT concurrent with constructing the subdivision improvements for the proposed phase; and

This Cooperative Agreement for Phased Development Improvements requires that the City not issue any future development approval for future phases, which includes the construction of the city street that connects to State Route 13 unless the Developer shall be required to construct mitigation improvements which include but are not limited to right and left turn lanes on State Route 13. The Developer shall provide construction plans of the mitigation improvements for connecting a city street to State Route 13 for review and approval by UDOT. Thereafter the Developer shall construct right and left turn lanes on State Route 13 and any other mitigation improvement required by UDOT concurrent with constructing the subdivision

improvements for the proposed phase.

City Staff is proposing that this Cooperative Agreement for Phased Development Improvements be recorded in the office of the Box Elder County Recorder so that any successor of interest in the Rivers Edge Development is notified of this future obligation to construct the required traffic mitigation measures and other improvements.

Attachment: Resolution No. 23-24

RESOLUTION NO. 23-24

A RESOLUTION OF TREMONTON CITY CORPORATION APPROVING A COOPERATIVE AGREEMENT FOR PHASED DEVELOPMENT IMPROVEMENTS BETWEEN UTAH DEPARTMENT OF TRANSPORTATION (UDOT), TREMONTON CITY, AND RIVERS EDGE REAL HOLDINGS, LLC FOR A FUTURE TRAFFIC SIGNAL AT THE INTERSECTION OF MAIN STREET (STATE ROUTE 102) AND 950 EAST AND OTHER IMPROVEMENTS AT THE INTERSECTION OF 1600 EAST (STATE ROUTE 13) AND 450 NORTH

WHEREAS, Tremonton City adopted Resolution No. 18-40, approving the Tremonton Transportation Master Plan, which identifies the 950 East Collector Road and the 450 North Collector Road as needed transportation corridors as shown in Exhibit “A”; and

WHEREAS, the Tremonton Transportation Master Plan also identified the intersection of 950 East to be a signalized location, as shown in Exhibit “A”; and

WHEREAS, in accordance with the Tremonton Transportation Master Plan, the Rivers Edge Development, as legally described in Exhibit “B” has incorporated the 950 East Collector Road and the 450 North Collector Road into their development plans as shown in Exhibit “C”; and

WHEREAS, the 950 East Collector Road and the 450 North Collector Road intersect with State Route 102 (Main Street) and State Route 13 (1600 East), respectively, as shown in Exhibit “C”; and

WHEREAS, the Developers of Rivers Edge Development are proposing that the project be developed in phases, as shown in Exhibit “C”; and

WHEREAS, Rivers Edge - Phase 1 is being proposed as the first phase of the Rivers Edge Development, requires access onto State Route 102 (Main Street); and

WHEREAS, State Route 102 (Main Street) is owned and controlled by the Utah Department of Transportation (UDOT), and accessing State Routes requires access permits from UDOT; and

WHEREAS, as part of the access permitting process, UDOT requires that Developers submit a traffic impact study; and

WHEREAS, the Developers of the Rivers Edge Development completed a traffic impact study which identified several improvements as summarized in Exhibit “D” and fully detailed in Exhibit “E”; and

WHEREAS, more specifically, the traffic impact study identifies that a traffic signal at the intersection of Main Street (State Route 102) and 950 East is needed as a site-related improvement when 35% of the Rivers Edge Development is complete; and

WHEREAS, the proposed River Edge - Phase 1 plat is less than 35% of the total Rivers Edge Development; and

WHEREAS, UDOT is willing to grant Rivers Edge - Phase 1 an access permit for the intersection of 950 East and Main Street (State Route 102) if the Utah Department of Transportation, Tremonton City, and Rivers Edge Holdings, LLC enter into Cooperative Agreement for Phased Development Improvement; and

WHEREAS, the Cooperative Agreement for Phased Development Improvements requires that the City not issue any future development approval for future phases of the Rivers Edge Development without requiring the Developer to submit an amended traffic impact study (TIS) to UDOT to verify if the proposed phase meets the warrant for a traffic signal at the intersection of State Route 102 (Main Street) and 950 East. If the TIS finds that the proposed phase meets UDOT's warrants for a traffic signal, the Developer shall provide construction plans of the traffic signal and any other mitigation improvements for review and approval by UDOT. Thereafter the Developer shall construct a traffic signal and any other mitigation improvement required by UDOT concurrent with constructing the subdivision improvements for the proposed phase; and

WHEREAS, the Rivers Edge Development includes a future phase wherein the 450 North Collector Road will require access to State Route 13 (1600 East) as shown in Exhibit "C"; and

WHEREAS, the traffic impact study complete for the River Edge Development as summarized in Exhibit "D" and fully detailed in Exhibit "E" identified right and left turn lanes be construction on 1600 East (State Route 13); and

WHEREAS, the Cooperative Agreement for Phased Development Improvements requires that the City not issue any future development approval for future phases, which includes the construction of the city street that connects to State Route 13, unless the Developer shall be required to construct mitigation improvements which include but are not limited to right and left turn lanes on State Route 13. The Developer shall provide construction plans of the mitigation improvements for connecting a city street to State Route 13 for review and approval by UDOT. Thereafter the Developer shall construct right and left turn lanes on State Route 13 and any other mitigation improvement required by UDOT concurrent with constructing the subdivision improvements for the proposed phase; and

WHEREAS, the complete Cooperative Agreement for Phased Development Improvements is contained within Exhibit "F"; and

WHEREAS, Tremonton City desires that this Cooperative Agreement for Phased Development Improvements be recorded in the office of the Box Elder County Recorder so that any successor of interest in the Rivers Edge Development is notified of this future obligation to construct the required traffic mitigation measures and other improvements.

NOW THEREFORE, BE IT RESOLVED that the Tremonton City Council approves the Cooperative Agreement for Phased Development Improvements between Utah Department of Transportation (UDOT), Tremonton City, and Rivers Edge Real Holdings, LLC for a future traffic signal at the intersection of Main Street (State Route 102) and 950 East and other improvements at the intersection of 1600 East (State Route 13) and 450 North as contained in Exhibit "F."

FURTHER BE IT RESOLVED that the Tremonton City Council authorizes the City Manager to sign the Cooperative Agreement for Phased Development Improvements as contained in Exhibit "F" on behalf of Tremonton City.

LASTLY, BE IT RESOLVED that the City Council directs the City Recorder to record this Cooperative Agreement for Phased Development Improvements in the Box Elder County Recorder's Office so that any successor of interest in the Rivers Edge Development is notified of this future obligation to construct the required traffic mitigation improvements.

PASSED AND ADOPTED by the Tremonton City Council on this the 4th day of April 2023. To become effective upon passage.

TREMONTON CITY CORPORATION
A Utah Municipal Corporation

By _____
Lyle Holmgren, Mayor

ATTEST:

Linsey Nessen, City Recorder

NOTARY PUBLIC

State of Utah)
 §
County of Box Elder)

On this ____ day of _____, in the year 2023, before me _____

a notary public, personally appeared Lyle Holmgren and proved on the basis of satisfactory evidence to be the person(s) whose name(s) subscribed to this instrument, and acknowledge executing the same.

Notary Public

EXHIBIT "A"

Transportation Master Plan

Figure 10: Capital Projects Map

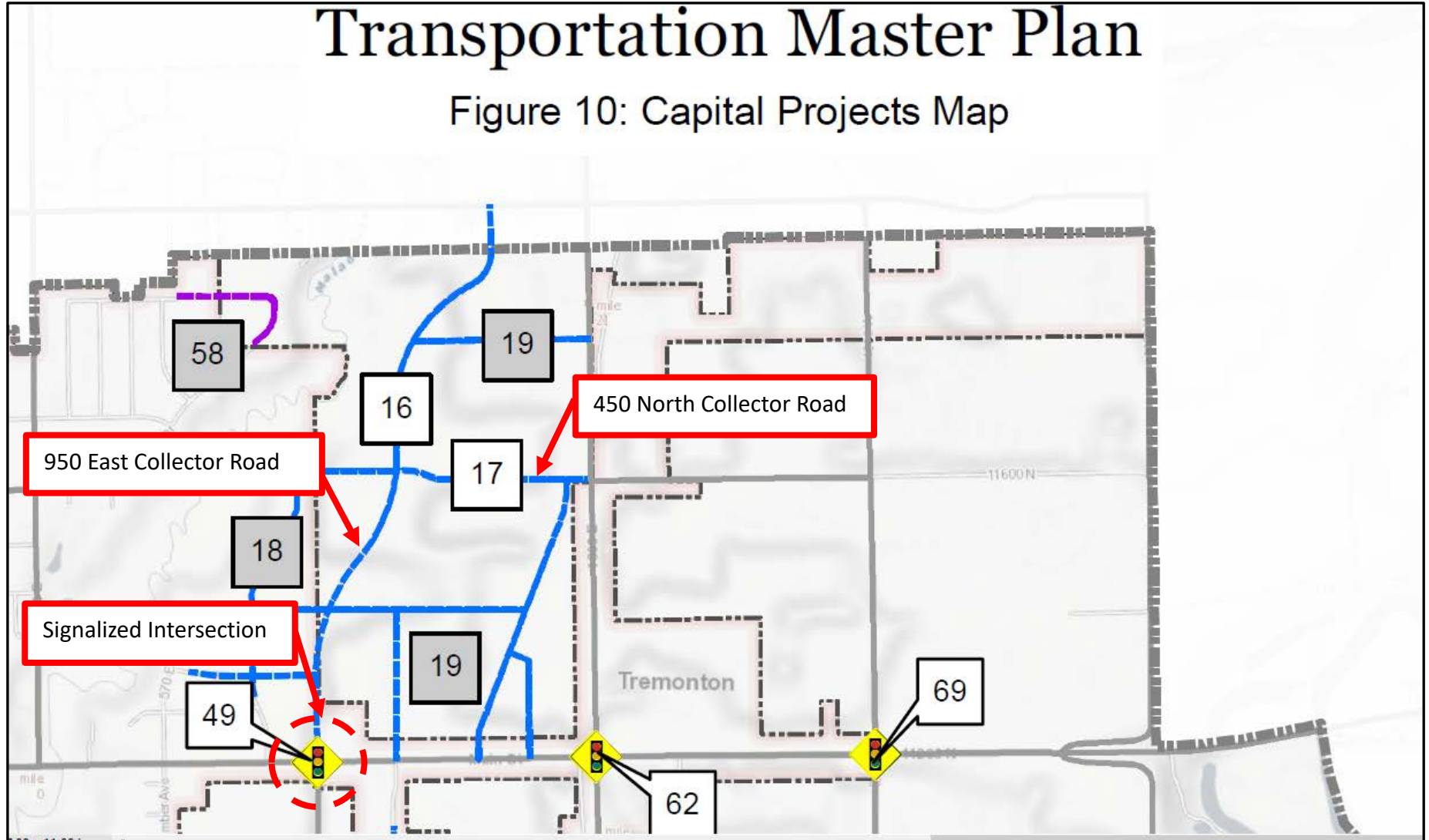


EXHIBIT "B"

LEGAL DESCRIPTION

A part of Section 2, Township 11 North, Range 3 West, Salt Lake Base and Meridian, U.S Survey:

Beginning at the Center of said Section 2 said point being 2639.50 feet North 01°20'04" West from the South Quarter corner of said Section; and running thence North 88°50'54" East 2,004.33 feet; thence South 01°09'01" East 186.64 feet; thence North 89°58'32" East 104.95 feet; thence South 00°01'28" East 126.74 feet; thence North 88°51'00" East 266.41 feet; thence South 08°30'15" West 123.54 feet; thence South 00°01'14" East 206.20 feet; thence South 04°06'23" East 676.79 feet; thence South 88°50'19" West 608.67 feet; thence South 24°20'00" West 1,406.61 feet; thence South 88°49'43" West 35.75 feet; thence North 24°20'00" East 375.60 feet; thence South 88°49'43" West 324.94 feet; thence South 01°10'15" East 7.00 feet; thence South 88°49'43" West 180.00 feet; thence South 01°10'15" East 332.00 feet; thence South 88°49'43" West 97.88 feet; thence North 01°10'15" West 105.00 feet; thence South 87°39'50" West 107.75 feet; thence South 02°19'13" West 103.00 feet; thence South 88°49'43" West 570.25 feet; thence North 01°20'04" West 338.53 feet; thence South 88°49'41" West 357.63 feet; thence North 14°29'46" West 92.49 feet; thence North 14°32'43" West 136.57 feet; thence North 14°31'32" West 54.36 feet; thence North 00°46'38" West 145.74 feet; thence North 08°58'18" East 60.95 feet; thence North 01°11'46" West 120.00 feet; thence South 88°48'14" West 209.45 feet; thence North 87°50'49" West 60.08 feet; thence South 89°13'22" West 200.00 feet; thence South 89°13'28" West 222.96 feet; thence North 74°47'49" West 121.70 feet; thence North 03°34'08" East 157.10 feet; thence North 33°20'49" East 123.47 feet; thence North 77°10'36" East 60.00 feet; thence North 89°56'18" East 568.51 feet; thence North 00°03'41" West 120.16 feet; thence North 04°06'54" West 60.12 feet; thence North 00°03'31" West 99.25 feet; thence North 58°18'35" East 114.42 feet; thence North 16°07'42" East 102.16 feet; thence North 15°50'30" East 101.96 feet; thence North 27°11'56" East 399.77 feet; thence North 62°48'02" West 120.00 feet; thence North 27°11'58" East 66.99 feet; thence North 62°48'02" West 213.04 feet; thence North 29°12'26" East 25.27 feet; thence North 04°52'40" East 159.87 feet; thence North 01°00'48" West 144.50 feet; thence North 27°29'05" East 72.06 feet; thence North 55°12'22" East 419.94 feet; thence South 01°20'01" East 373.07 feet to the POINT OF BEGINNING.

Containing 135.5117 acres, more or less.

END OF DESCRIPTION.

EXHIBIT "C"

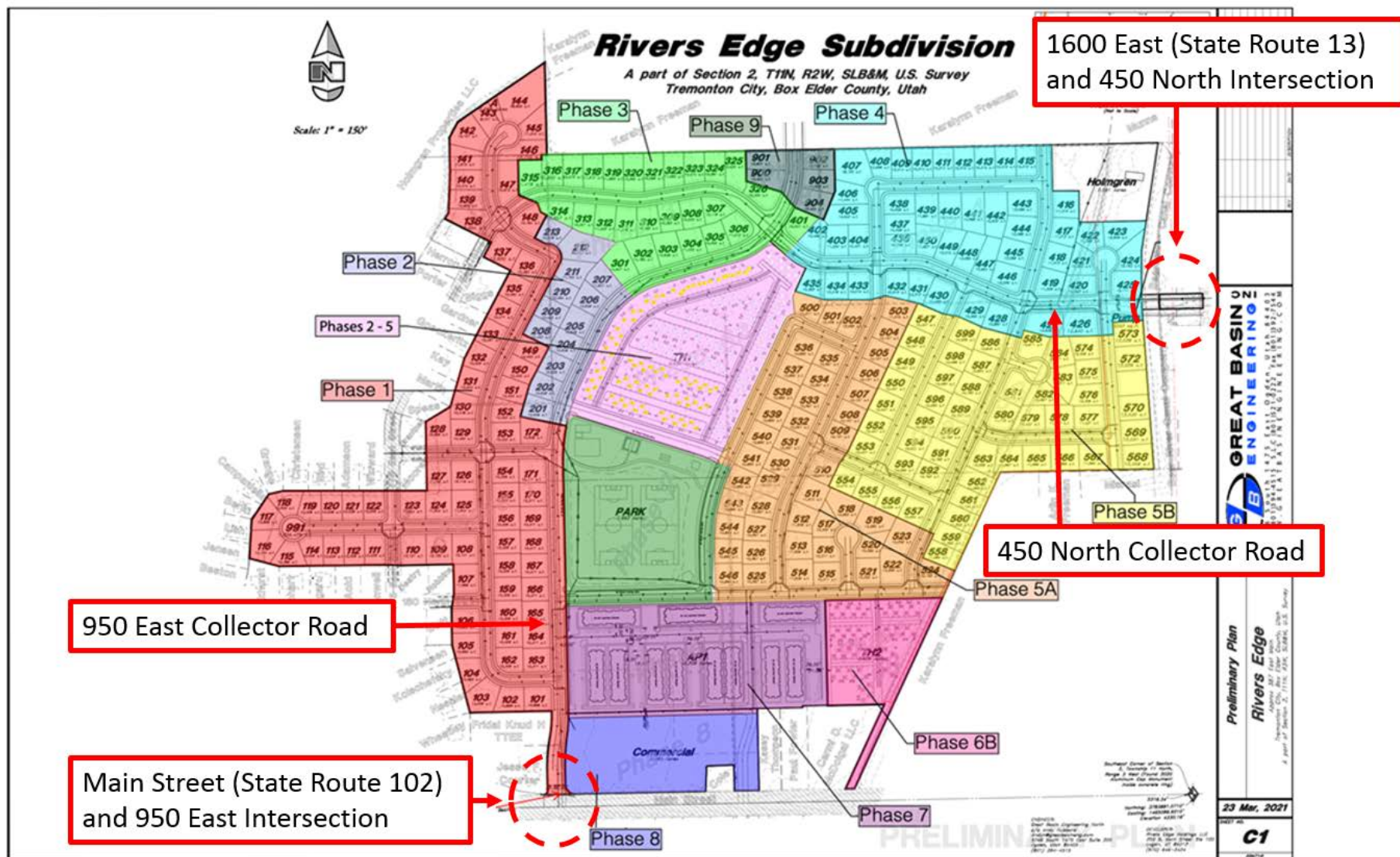


EXHIBIT “D”

Edited Excerpts from Traffic Impact Study for the River, the complete Traffic Impact Study for the Rivers Edge Development is contained in Exhibit “E”

- 950 East Collector Road & Main Street (State Route 102)- Signalize intersection when 35% of the site is complete. Signal should be constructed with left and right turn storage lanes for all approaches. This is a future master planned signalized location. Site traffic increases traffic at this intersection by 40%. This is a site-related improvement.
- The 1150 East Access & Main Street (State Route 102) access requires an eastbound lane (50-foot minimum) and westbound right (50-foot minimum) deceleration lanes, and a southbound right acceleration lane. This is a site-related improvement.
- 450 North Collector Road & 1600 East (State Route 13) requires a northbound lane (50-foot minimum) and southbound right (50-foot minimum) deceleration lanes. This is a site-related improvement.

EXHIBIT “E”

EXHIBIT “F”

**Rivers Edge
5600 West / Main Street
Traffic Impact Study**

Tremonton, Utah

March 2021



**A-Trans Engineering
P.O. Box 521651
Salt Lake City, Utah 84152
(801) 949-0348 telephone
(801) 582-6252 fax**

TRAFFIC STUDY



Rivers Edge 5600 West / Main Street Traffic Impact Analysis

Tremonton, Utah

Category II

March 2021

Prepared by:

A-Trans Engineering
Joseph Perrin, PhD, PE, PTOE
P.O. Box City, 521651
Salt Lake City, Utah 84152
(801) 949-0348
atrans@comcast.net



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I. Introduction and Summary

This traffic impact analysis is for the proposed Rivers Edge residential development located to the north of Main Street (11200 North) and west of 1600 East in Tremonton, Utah. The site is planned to include 210 townhomes, 264 apartments, 369 single family residences and 70,000 sf of retail. It is projected to generate 557 AM, 898 PM peak hour trips and 9,596 daily trips. The site is planning 3 accesses to the site. One access along 1600 East and two accesses along Main Street that align with the existing streets of 5600 West and 1150 East.

1600 East / Main Street operates with overall LOS B in the AM and LOS C in the PM peak period. In 2026 without the site in LOS increases to LOS B in the AM and LOS D in the PM peak period. With the site in 2021 the intersection operates with LOS B in the AM and LOS E in the PM peak period with the NB direction at LOS F. In 2026 with the site the intersection operates with LOS C in the AM and LOS F in the PM peak period with the NB direction at LOS F. With growth in the area plus the addition of site traffic the intersection is operating near capacity and an improvement is recommended by 2026. The intersection was analyzed as an all-way stop with additional lanes in each direction or as a signal. Both of these options allow the intersection to operate at acceptable LOS. It is recommended that UDOT consider the options available at this location and plan this as a future improvement location.

1150 East / Main Street operates with a critical NBLTR at LOS B in the AM and LOS C in the PM peak period. Without the site in 2026 the intersection operates with critical NBLTR at LOS C in the AM and LOS C in the PM peak period. With the addition of site traffic the NBLTR lane will operate at LOS E and the PM peak period and the site SBL traffic will operate at LOS C. 5600 West / Main Street operates with critical NBLTR at LOS B in the AM and LOS C in the PM peak period. This is maintained in 2026 without the site. With the site traffic at this location the delay for the NBL and SBL declines to LOS F. A signal is recommended at this location when the site is 35% complete. With a signal at this location the intersection operates with overall LOS B in the AM and LOS C in the PM peak period. Access Z / 1600 North is projected to operate with critical EBL at LOS B in 2021 and 2026 in the AM and PM peak periods.

Recommendations:

- Main Street / 1600 East (2026) – Improve intersection geometry to an all-way stop with separate left and through right turn lanes or signalize. Signal should be constructed with left and right turn storage lanes for all approaches. This is a future master planned signalized location. Site traffic increases traffic at this intersection by 18%. This is a site related and non-site related improvement. It is recommended that UDOT investigate potential improvement options for this intersection.



- 5600 West / Main Street – Signalize intersection when 35% of the site is complete. Signal should be constructed with left and right turn storage lanes for all approaches. This is a future master planned signalized location. Site traffic increases traffic at this intersection by 40%. This is a site related improvement.
- The 1150 East / Main Street access requires EBL (50 foot minimum) and WBR (50 foot minimum) deceleration lanes and a SBR acceleration lane. This is a site related improvement.
- Access Z / 1600 East requires NBL (50 foot minimum) and SBR (50 foot minimum) deceleration lanes. This is a site related improvement.

II. Proposed Project

The proposed single and multi-family residential community is planned to the north of Main Street (11200 North) and west of 1600 East in Tremonton, Utah. The site is planned to include 210 townhomes, 264 apartments, 369 single family residences and 70,000 sf of retail. It is projected to generate 557 AM, 898 PM peak hour trips and 9,596 daily trips.

The site is proposing 3 accesses; one access (Access Z) is located along SR 13 approximately 580 feet south of 11600 North. There are several residential driveways within 500 feet of the access. Due to the location of the residential driveways and 11600 North along SR 13 the accesses must be approved through the variance process. The two accesses along SR 102 are planned to align with 1150 East and 5600 West. 1150 East is approximately 1780 feet west of 1600 East. 5600 West is located approximately 650 feet west of 1150 East. There are several residential driveways within 500 feet of the proposed roadways. Due to the location of the residential driveways along SR 102 the accesses must be approved through the variance process. The site plan and access location and spacing is shown in Figure 1.



A-TRANS TRANSPORTATION ENGINEERING
 P.O. BOX 521651, SLC, UT 84152
 Phone: 801-949-0348 Fax: 801-582-6252

Figure 1

Conceptual Site Plan

III. Study Area Conditions

The study area includes the following intersection.

- 1600 East / Main Street
- Main Street / 1150 East
- Main Street / 5600 West
- 1600 East / Access Z

Figure 2 shows the location of the site. Figure 3 shows existing intersection geometry.

Main Street

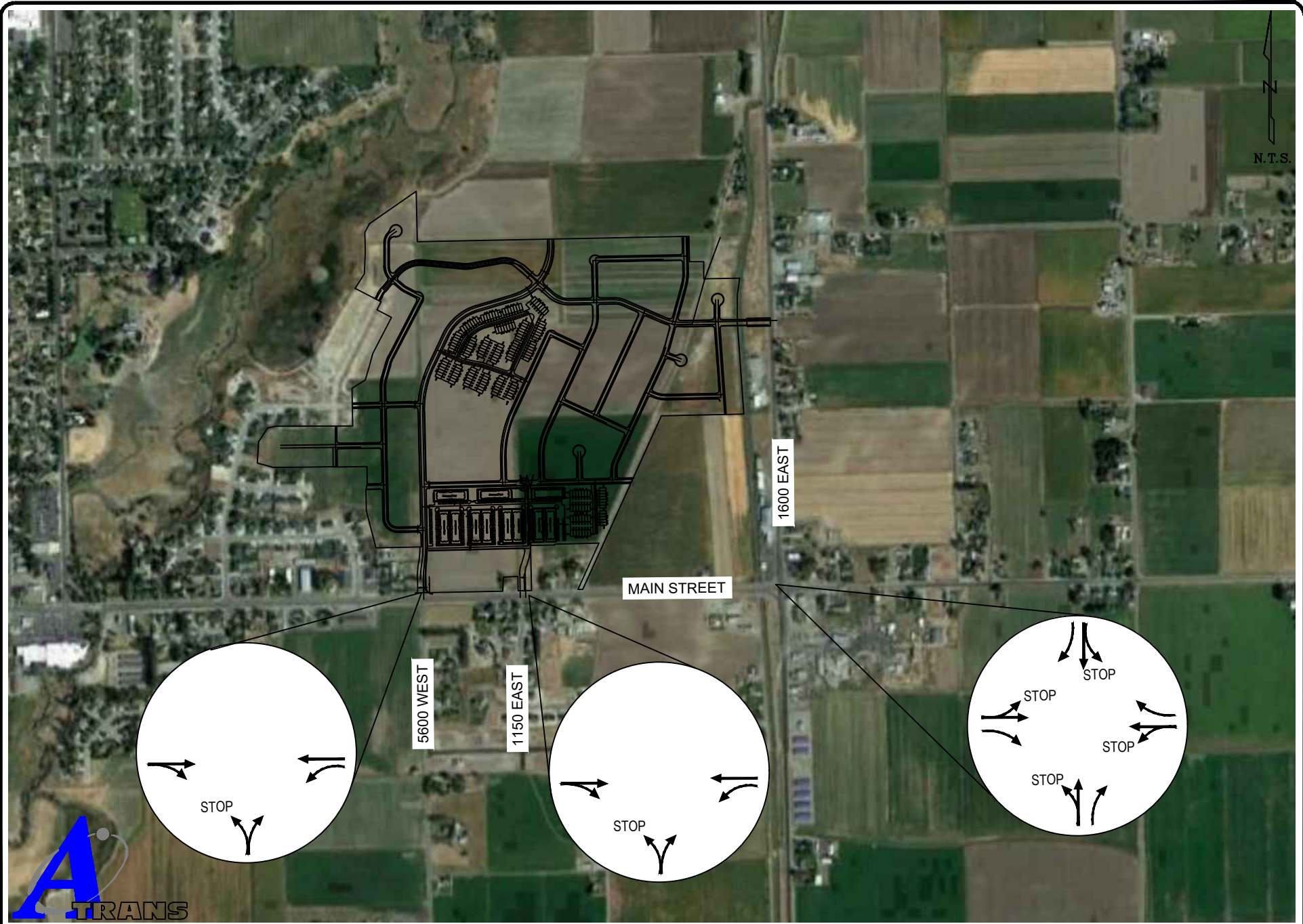
Main Street or 11200 North (SR 102) is currently a 3 lane facility with one lane in each direction and a center turn lane. The 2019 AADT is 8,600 vehicles per day with a posted speed limit is 55 MPH. The Tremonton City Master Transportation Plan classifies Main Street as a Major Arterial.

1600 East

1600 East (SR 13) is currently a 2 lane facility with one lane in each direction. The 2019 AADT is 5,100 vehicles per day with a posted speed limit of 55 MPH. The Tremonton City Master Transportation Plan classifies Main Street as a Major Arterial.

- 5600 West is planned as a collector.
- 1600 East / Main Street is planned as a future signalized location.
- Main Street / 5600 West is planned as a future signalized location.





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Figure 3

Existing Geometry

IV. Analysis of Existing Condition

The existing traffic counts were performed March 2-4, 2021 during the AM and PM peak periods. The 2021 Existing Traffic volumes used in the study are shown in Figure 4.

The 6th Edition Highway Capacity Manual defines the Level of Service (LOS) for both signalized and unsignalized intersections as a range of average experienced delay. LOS is a qualitative rating of traveler satisfaction from A to F whereby LOS A is good and LOS F poor. Table 1 shows the LOS range by delay for unsignalized and signalized intersections and accesses.

Table 1: Intersection LOS-Delay Relationship

	Unsignalized	Signalized
Level of Service	Total Delay per Vehicle (sec)	Total Delay per Vehicle (sec)
A	≤ 10.0	≤ 10.0
B	> 10.0 and ≤ 15.0	> 10.0 and ≤ 20.0
C	> 15.0 and ≤ 25.0	> 20.0 and ≤ 35.0
D	> 25.0 and ≤ 35.0	> 35.0 and ≤ 55.0
E	> 35.0 and ≤ 50.0	> 55.0 and ≤ 80.0
F	> 50.0	> 80.0

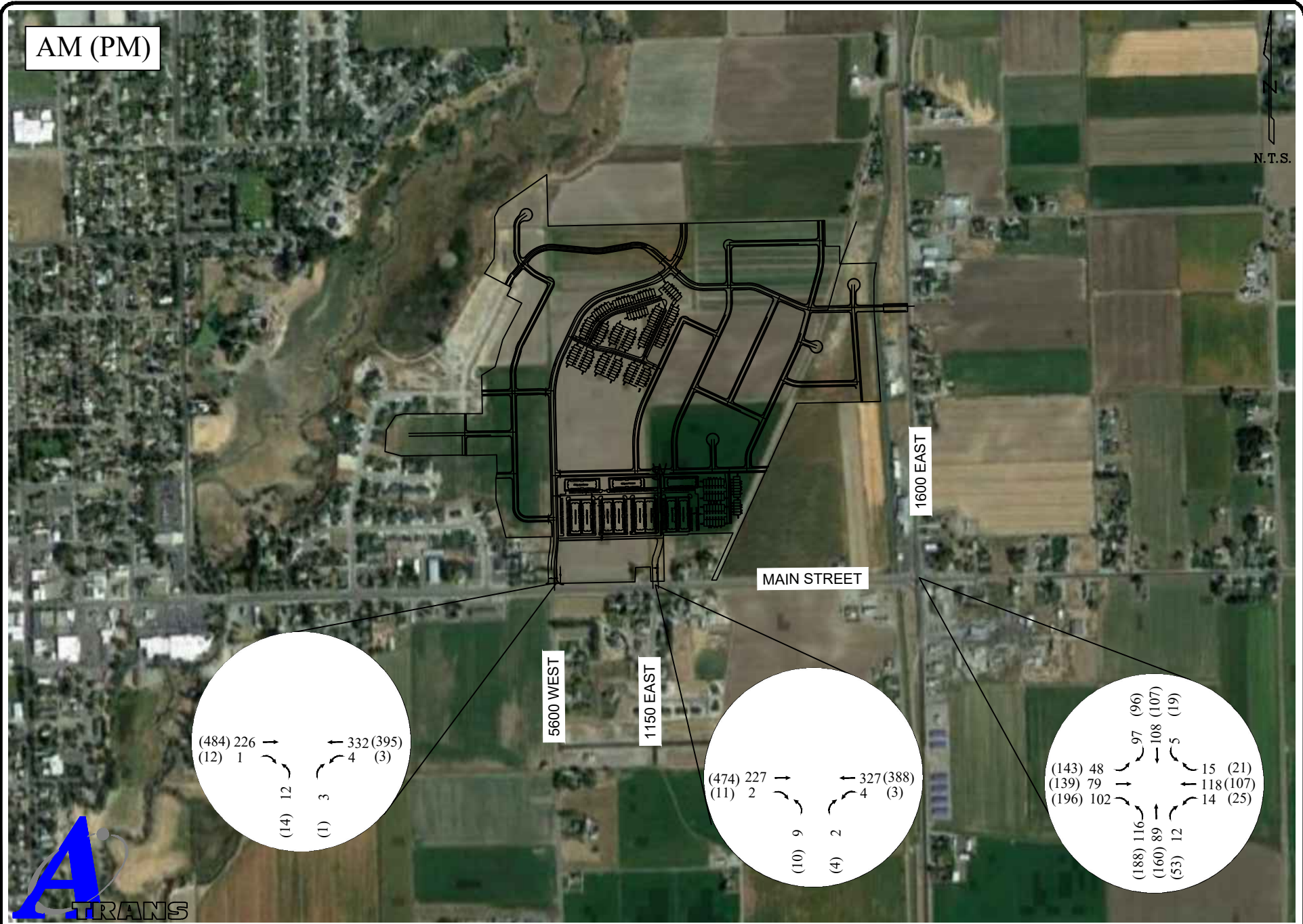
1600 East / Main Street operates with an overall LOS B in the AM and LOS C in the PM peak period. 1150 East / Main Street operates with a critical NBLTR at LOS B in the AM and LOS C in the PM peak period. 5600 West / Main Street operates with a critical NBLTR at LOS B in the AM and LOS C in the PM peak period. Table 2 shows the Existing LOS.

Table 2: Existing Level of Service

Intersection	Delay (sec/veh)
1600 East / Main Street (Overall)	11.9 B
	21.0 C
Main Street / 1150 East (NBLTR)	14.2 B
	18.3 C
Main Street / 5600 West (NBLTR)	14.3 B
	20.9 C

AM (PM)

N.T.S.



V. Projected Traffic

A. Trip Generation

Trip generation for the site was done using The Institute of Transportation Engineers (ITE) *Trip Generation* (10th Edition) handbook. The site is planned to include 210 townhomes, 264 apartments, 369 single family residences and 70,000 sf of retail. It is projected to generate 557 AM, 898 PM peak hour trips and 9,596 daily trips. The trip generation for the site is shown in Table 3.

Table 3: Trip Generation for Site

Land Use Type	Density	Land Use #	Trip Rate	Trips	% In	% Out	Trips In	Trips Out
AM								
Single Family	369	210	0.74	273	25%	75%	68	205
Town Homes	210	220	0.46	97	23%	77%	22	75
Apartments	264	220	0.46	121	23%	77%	28	93
Retail	70,000	820	0.94	66	62%	38%	41	25
Total				557			159	398
PM								
Single Family	369	210	0.99	365	63%	37%	230	135
Town Homes	210	220	0.56	118	63%	37%	74	44
Apartments	264	220	0.56	148	63%	37%	93	55
Retail	70,000	820	3.81	267	48%	52%	128	139
Total				898			525	373
Daily								
Single Family	369	210	9.44	3483				
Town Homes	210	220	7.32	1537				
Apartments	264	220	7.32	1932				
Retail	70,000	820	37.75	2644				
Total				9596				

B. Trip Distribution

Project site traffic was applied to the origin-destination (O-D) for the site. Origin-destination was determined from evaluating the existing traffic patterns and hourly traffic volumes on each leg of the included intersections as well as the location of retail centers and freeways relative to this site. This was used as a baseline for origin destination and engineering judgment was applied to this to determine the following OD for the site.

- 70% to/from west on Main Street
- 10% to/from east on Main Street
- 5% to/from north on 1600 East
- 15% to/from south on 1600 East

Origin Destination is shown in Figure 5. Site trip distribution is shown in Figure 6.



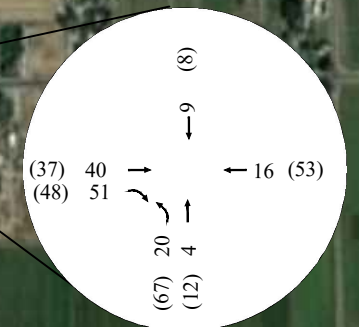
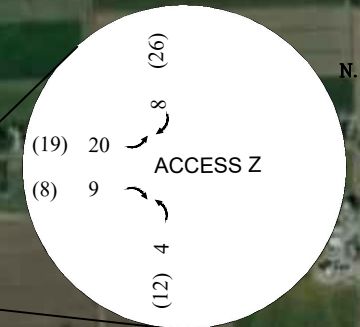
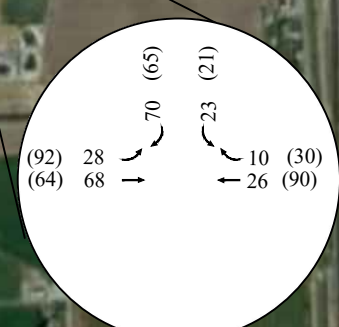
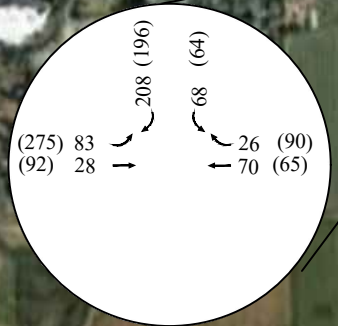
A-TRANS TRANSPORTATION ENGINEERING
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Figure 5

Origin Destination

AM (PM)

N.T.S.



AM - 557; 159 In 398 Out
 PM - 898; 525 In 373 Out



VI. Growth

Growth in the area was determined from the 2019 Traffic on Utah Highways counts. The 2040 projections were taken from Wasatch Front Regional Council. The volumes and utilized to determine growth in the area is shown in Table 4. Based on this data an average growth of 1.4% is assumed for the 2026 analysis (1.07 growth factor).

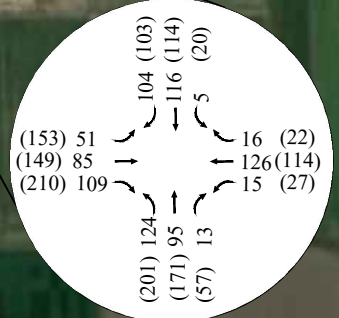
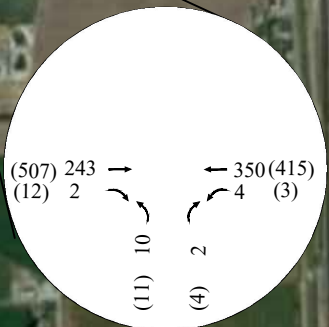
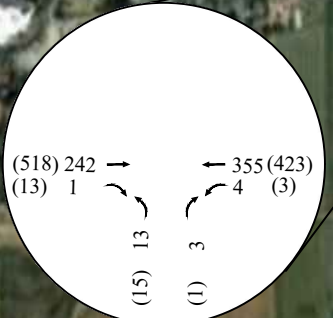
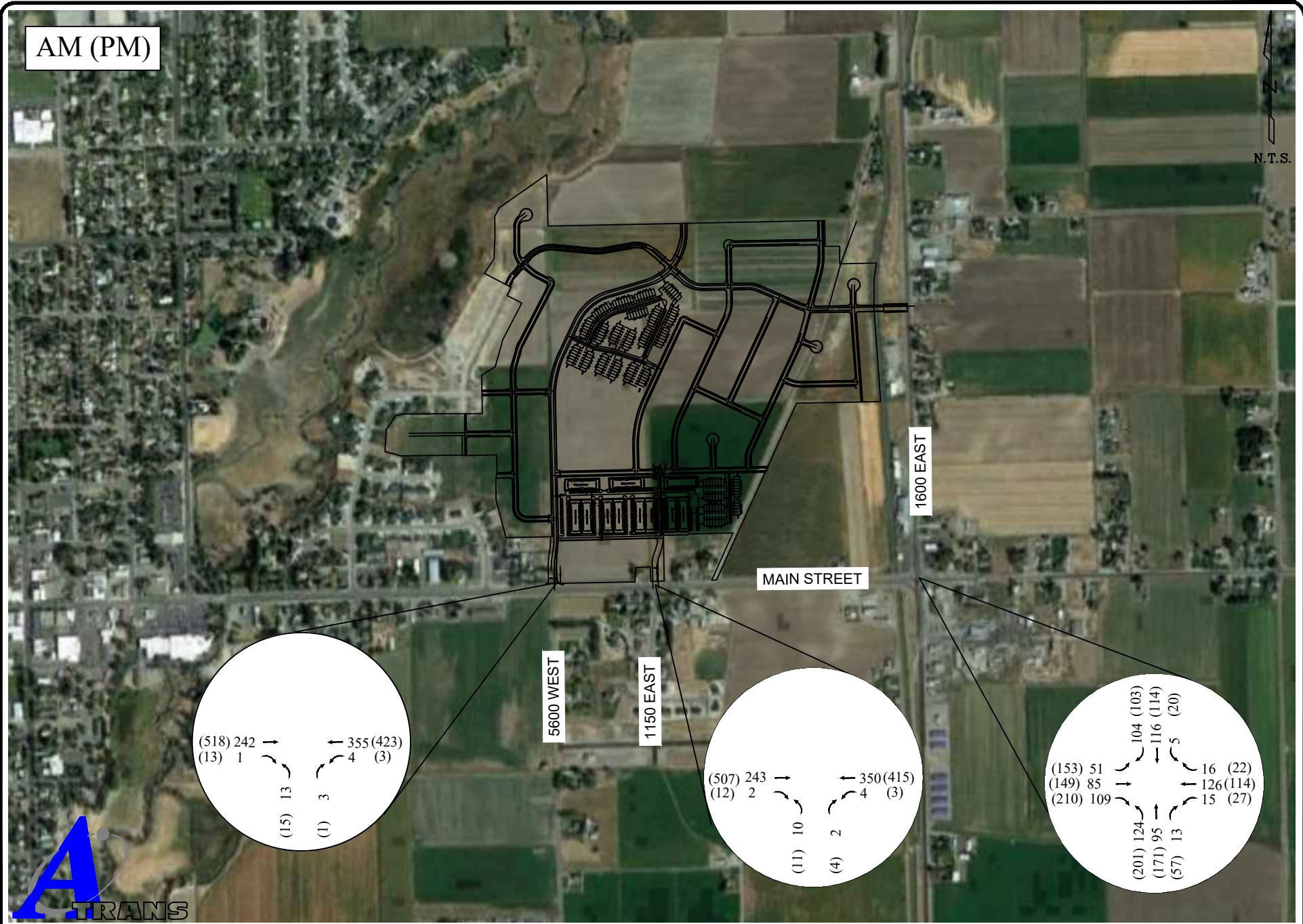
Table 4: Growth Projections

	Main Street	1600 East
2019	8,600	5,100
2040	10,500	7,500
Growth	0.96%	1.85%

Background traffic is determined by multiplying the existing traffic by the growth factor for 2026. 2026 Background Traffic is shown in Figure 7. Total traffic in the area for the future projection years is derived by adding the non-site volume forecasts to the site trip distribution. 2021 Total Traffic is shown in Figure 8. 2026 Total Traffic is shown in Figure 9.

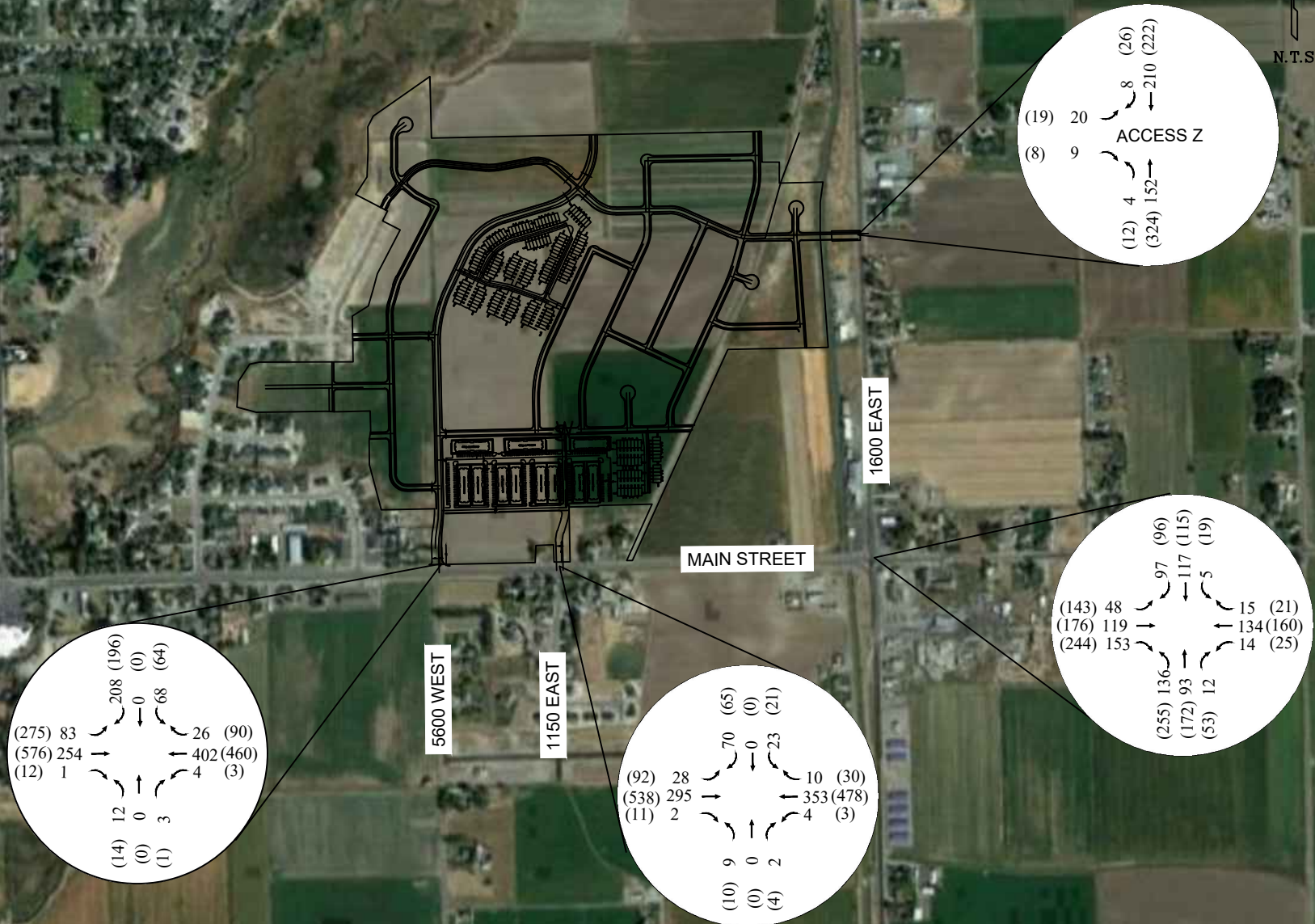
AM (PM)

N.T.S.



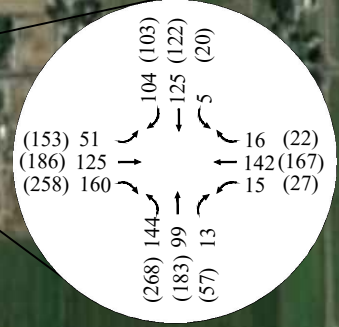
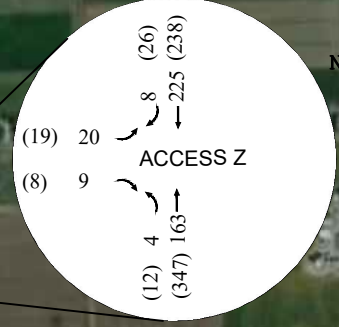
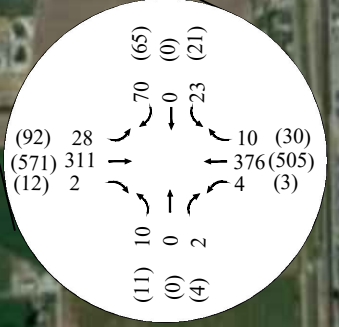
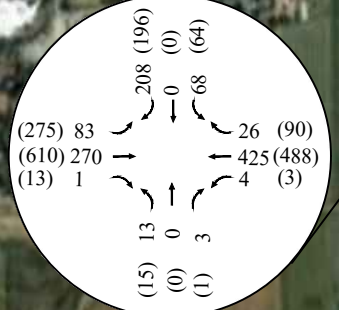
AM (PM)

N.T.S.



AM (PM)

N.T.S.



VII. Traffic Analysis

A. Level of Service Analysis

The intersection and access analysis evaluates the performance of each intersection and access using the measure of performance of delay and level of service (LOS). Tables 5-8 show the intersection and access analysis.

Analysis Results

- 1600 East / Main Street operates with an overall LOS B in the AM and LOS C in the PM peak period. In 2026 without the site in LOS increases to LOS B in the AM and LOS D in the PM peak period. With the site in 2021 the intersection operates with LOS B in the AM and LOS E in the PM peak period with the NB direction at LOS F. In 2026 with the site the intersection operates with LOS C in the AM and LOS F in the PM peak period with the NB direction at LOS F. With growth in the area plus the addition of site traffic the intersection is operating near capacity and an improvement is recommended by 2026. The intersection was analyzed as an all-way stop with additional lanes in each direction or as a signal. Both of these options allow the intersection to operate at acceptable LOS. It is recommended that UDOT consider the options available at this location and plan this as a future improvement location.
- 1150 East / Main Street operates with critical NBLTR at LOS B in the AM and LOS C in the PM peak period. Without the site in 2026 the intersection operates with critical NBLTR at LOS C in the AM and LOS C in the PM peak period. With the addition of site traffic the NBLTR lane will operate at LOS E and the PM peak period and the site SBL traffic will operate at LOS C.
- 5600 West / Main Street operates with critical NBLTR at LOS B in the AM and LOS C in the PM peak period. This is maintained in 2026 without the site. With the site traffic at this location the delay for the NBL and SBL declines to LOS F. A signal is recommended at this location when the site is 35% complete. With a signal at this location the intersection operates with overall LOS B in the AM and LOS C in the PM peak period.
- Access Z / 1600 North is projected to operate with critical EBL at LOS B in 2021 and 2026 in the AM and PM peak periods.

Table 5: 1600 East / Main Street Intersection Analysis

Existing Geometry		EBLT		EBR		WBLT		WBR		NBLT		NBR		SBLT		SBR		INT			
2021 Existing	AM	11.9	B		9.8	A	12.1	B	8.8	A	14.6	B	8.5	A	11.2	B	9.7	A	11.9	B	
	PM	22.9	C		13.4	B	14.7	B	10.4	B	33.5	D	10.1	B	13.9	B	11.6	B	21.0	C	
2026 Background	AM	12.5	B		10.2	B	12.8	B	9.0	A	16.0	C	8.7	A	11.7	B	10.1	B	12.6	B	
	PM	27.8	D		14.8	B	15.9	C	10.8	B	44.9	E	10.5	B	15.0	C	12.3	B	25.8	D	
2021 Total	AM	14.0	B		11.5	B	13.7	B	9.3	A	18.2	C	9.0	A	12.5	B	10.6	B	13.9	B	
	PM	34.9	D		18.1	C	19.7	C	11.3	B	89.8	F	10.9	B	16.2	C	13.1	B	41.8	E	
2026 Total	AM	15.0	C		12.2	B	14.7	B	9.6	A	20.4	C	9.2	A	13.2	B	11.1	B	15.0	C	
	PM	43.3	E		20.1	C	21.4	C	11.7	B	118.2	F	11.2	B	17.3	C	13.8	B	52.4	F	
Improvements		EBL		EBT		EBR		WBL		WBTR		NBL		NBTR		SBL		SBTR		INT	
2021 Total (All-Way Stop)	AM	11.8	B	13.2	B	12.8	B	11.4	B	15.2	C	15.3	C	12.7	B	10.9	B	17.5	C	14.6	B
	PM	18.3	C	19.2	C	22.2	C	14.0	B	23.3	C	33.0	D	23.2	C	13.6	B	25.1	D	23.8	C
2026 Total (All-Way Stop)	AM	12.2	B	13.9	B	13.6	B	11.7	B	16.5	C	16.3	C	13.4	B	11.2	B	19.7	C	15.7	C
	PM	20.5	C	21.8	C	27.1	D	14.8	B	27.1	D	42.2	E	28.5	D	14.3	B	31.0	D	28.8	D
2026 Total (Signal)	AM	15.2	B	16.0	B	4.1	A	23.4	C	26.4	C	11.1	B	9.1	A	20.2	C	22.6	C	15.9	B
	PM	18.9	B	17.2	B	3.8	A	27.9	C	34.9	C	16.1	B	11.4	B	26.2	C	31.1	C	18.5	B

2021 and 2026 Total (All Way Stop) Geometry assumed: EBL, EBT, EBR, WBL, WBTR, NBL, NBTR, SBL and SBTR

2026 Total (Signal) Geometry assumed: EBL, EBT, EBR, WBL, WBTR, NBL, NBTR, SBL and SBTR

Table 6: 5600 West / Main Street Intersection Analysis

Unsignalized		EBL		WBL		NBL		SBL		INT											
2021 Existing	AM			7.8	A			14.3	B		0.4	A									
	PM			8.5	A			20.9	C		0.4	A									
2026 Background	AM			7.8	A			15.0	C		0.4	A									
	PM			8.6	A			22.9	C		0.4	A									
2021 Total	AM	8.8	A	7.9	A			42.8	E	34.2	D	15.7	C	6.6	A						
	PM	10.3	B	8.8	A			>150	F	>150	F	15.0	C	19.7	C						
2026 Total	AM	8.9	A	7.9	A			48.9	E	38.2	E	16.5	C	6.9	A						
	PM	10.5	B	8.9	A			>150	F	>150	F	15.7	C	23.2	C						
Signal		EBL		EBTR	WBL	WBT	WBR	NBL	NBTR	SBL	SBTR	INT									
2021 Total	AM	15.9	B	16.3	B	15.8	B	34.3	C	0.4	A	19.2	B	0.7	A	19.8	B				
	PM	22.4	C	15.1	B	16.0	B	35.5	D	7.0	A	25.6	C	0.0	A	25.8	C	0.7	A	20.2	C
2026 Total	AM	15.0	B	15.5	B	14.8	B	33.3	C	0.4	A	20.5	C	0.0	A	20.4	C	0.7	A	19.5	B
	PM	24.0	C	15.1	B	15.7	B	35.8	D	6.8	A	26.1	C	0.0	A	26.5	C	0.7	A	20.7	C

Table 7: 1150 East / Main Street Intersection Analysis

		EBL	WBL	NBL	SBL	INT
2021 Existing	AM		7.8 A	14.2 B		0.3 A
	PM		8.5 A	18.3 C		0.3 A
2026 Background	AM		7.9 A	15.0 C		0.3 A
	PM		8.6 A	19.7 C		0.4 A
2021 Total	AM	8.3 A	8.0 A	20.3 C	15.0 C	2.4 A
	PM	8.9 A	8.7 A	36.3 E	22.4 C	2.7 A
2026 Total	AM	8.4 A	8.1 A	22.1 C	15.7 C	2.4 A
	PM	9.0 A	8.8 A	41.8 E	24.7 C	2.7 A

Table 8: 1600 East / Access Z Intersection Analysis

		EBL	NBL	INT
2021 Total	AM	11.1 B	7.8 A	0.9 A
	PM	12.4 B	7.8 A	0.7 A
2026 Total	AM	11.4 B	7.8 A	0.8 A
	PM	12.8 B	7.9 A	0.7 A

B. Queue Analysis

Based on the projected traffic, queue storage length requirements can be evaluated to determine if sufficient storage space exists to accommodate the projected demand. The intersection and accesses included in this traffic study are analyzed for queue storage capacity utilizing the HCM analysis and are done through Synchro. Table 9 shows the projected queue at the study intersections in 2026.

Table 9: 2026 Queue Analysis

		EBL	EBR	WBL	WBR	NBL	SBL	SBR
1600 East / Main Street	Signal	125	100	100		150	100	
	All-Way Stop*	100	125	100		175	100	
1150 East / Main Street	Projected Two Way Stop	50			50			
5600 West / Main Street	Projected Signal	150		100	100	100	100	
1600 East / Access Z	Projected Two Way Stop					50		50

*Geometry assumed: EBL, EBT, EBR, WBL, WBTR, NBL, NBTR, SBL and SBTR

C. Signal Warrant

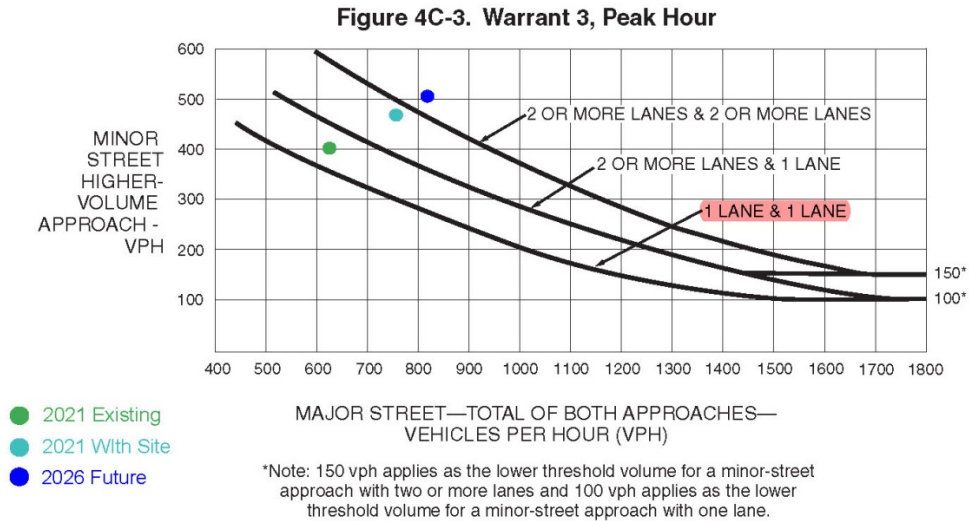
Per the Manual on Uniform Traffic Control Devices (MUTCD) peak hour warrant on Page 441 Figure 4C-3, a Peak Hour Signal Warrant was performed for the existing intersection of Main Street / 1600 East and the proposed site access of 5600 West / Main Street. The sum of the approaches along Main Street was compared against the highest of northbound or southbound approaches. These volumes are shown in Table 10. The analysis was done for the 2021 existing condition, the 2021 with site opening and the 2026 future condition.

Table 10: Signal Warrant Volumes

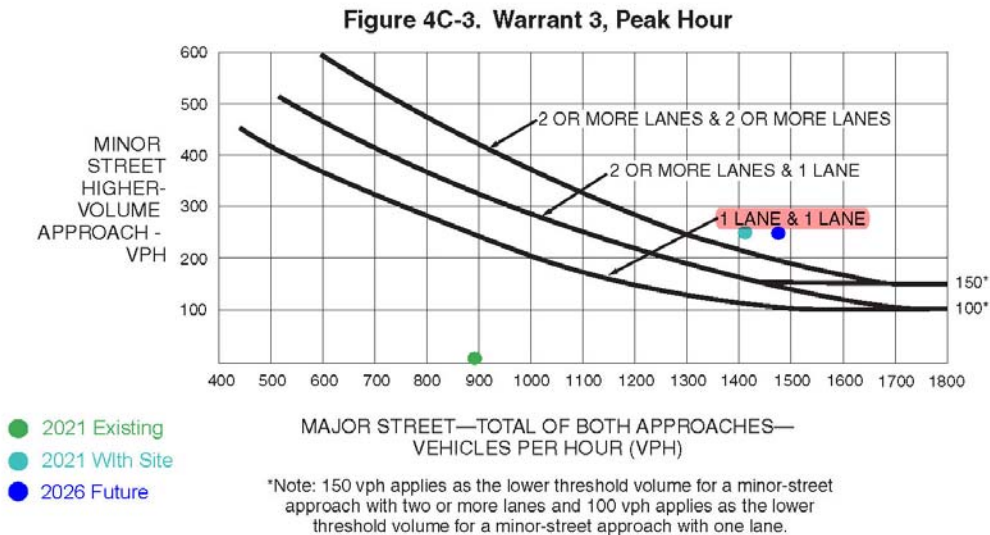
	Existing	2021 Site Opening	2026 Future
Main Street / 1600 East			
Major Direction	E/W	E/W	E/W
Major	631	769	813
Minor	401	480	508
Warranted	Yes	Yes	Yes
Main Street / 5600 West			
Major Direction	E/W	E/W	E/W
Major	894	1416	1479
Minor	15	260	260
Warranted	No	Yes	Yes

The signal warrant is shown in Graph 1 and Graph 2. The signal at Main Street / 1600 East is currently warranted with the existing traffic. The signal at Main Street / 5600 West will be warranted with the addition of site traffic.

Graph 1: Signal Warrant Main Street / 1600 East



Graph 2: Signal Warrant Main Street / 5600 West



D. Access and Roadway Category

According to the UDOT, SR 13 (1600 East) and SR 102 (Main Street) are categorized as a Category 4 roadway. As per UDOT Administrative Rule R930-6, signal spacing is required at 2,640 feet, street spacing is required at 660 feet and access spacing is required at 500 feet or by variance. The distance between access points/intersections is measured from end of radius to end of adjacent radius. The site is proposing 3 accesses, one access (Access Z) is located along SR 13 approximately 580 feet south of 11600 North. There are several residential driveways within 500 feet of the access. Due to the location of the residential driveways and 11600 North along SR 13 the accesses must be approved through the variance process. The two accesses along SR 102 are planned to align with 1150 East and 5600 West. 1150 East is approximately 1780 feet west of 1600 East. 5600 West is located approximately 650 feet west of 1150 East. There are several residential driveways within 500 feet of the proposed roadways. Due to the location of the residential driveways along SR 102 the accesses must be approved through the variance process.

According to UDOT Administrative Rule R930-6 a Category 4 roadway requires:

- A left turn deceleration lane with taper and storage length is required for any access with a projected peak hour left ingress turning volume greater than 10 vehicles per hour. The taper length must be included in the required deceleration length.
- A right turn deceleration lane and taper length is required for any access with a projected peak hour right ingress turning volume greater than 25 vehicles per hour. The taper length must be included in the required deceleration length.
- A right turn acceleration lane and taper length is required for any access with a projected peak hour right turning volume greater than 50 vehicles per hour when the posted speed on the highway is greater than 40 mph. The taper length must be included in the required acceleration length. A right turn acceleration lane may also be required at a signalized intersection if a free-right turn is needed to maintain an appropriate level of service for the intersection.
- Right turn deceleration and acceleration lanes are generally not required on roadways with three or more travel lanes in the direction of the right turn.
- A left turn acceleration lane may be required if it will be a benefit to the safety and operation of the roadway.
- A left turn acceleration lane is generally not required where the posted speed is less than 45 mph, the intersection is signalized, or the acceleration lane would interfere with the left turn ingress movements to any other access.

The 5600 West / Main Street access requires EBL (150 foot minimum) and WBR (100 foot minimum) deceleration lanes.

The 1150 East / Main Street access requires EBL (50 foot minimum) and WBR (50 foot minimum) deceleration lanes and a SBR acceleration lane.

Access Z / 1600 East requires NBL (50 foot minimum) and SBR (50 foot minimum) deceleration lanes. This is a site related improvement.

VIII. Conclusions

This analysis is for the proposed Rivers Edge residential development located to the north of Main Street (11200 North) and west of 1600 East in Tremonton, Utah. The site is planned to include 210 townhomes, 264 apartments, 369 single family residences and 70,000 sf of retail. It is projected to generate 557 AM, 898 PM peak hour trips and 9,596 daily trips. The site is planning 3 accesses to the site. One along 1600 East and two along Main Street that align with the existing streets of 5600 West and 1150 East.

The following comments are made about the project:

- 1600 East / Main Street operates with an overall LOS B in the AM and LOS C in the PM peak period. In 2026 without the site in LOS increases to LOS B in the AM and LOS D in the PM peak period. With the site in 2021 the intersection operates with LOS B in the AM and LOS E in the PM peak period with the NB direction at LOS F. In 2026 with the site the intersection operates with LOS C in the AM and LOS F in the PM peak period with the NB direction at LOS F. With growth in the area plus the addition of site traffic the intersection is operating near capacity and an improvement is recommended by 2026.
- 1600 East / Main Street was analyzed as an all-way stop with additional lanes in each direction or as a signal. Both of these options allow the intersection to operate at acceptable LOS. It is recommended that UDOT consider the options available at this location and plan this as a future (2026) improvement location.
- 1150 East / Main Street operates with critical NBLTR at LOS B in the AM and LOS C in the PM peak period. Without the site in 2026 the intersection operates with critical NBLTR at LOS C in the AM and LOS C in the PM peak period. With the addition of site traffic the NBLTR lane will operate at LOS E and the PM peak period and the site SBL traffic will operate at LOS C.
- 5600 West / Main Street operates with critical NBLTR at LOS B in the AM and LOS C in the PM peak period. This is maintained in 2026 without the site. With the site traffic at this location the delay for the NBL and SBL declines to LOS F. A signal is recommended at this location when the site is 35% complete. With a signal at this location the intersection operates with overall LOS B in the AM and LOS C in the PM peak period.

- Access Z / 1600 North is projected to operate with critical EBL at LOS B in 2021 and 2026 in the AM and PM peak periods.
- Per UDOT standard, the 5600 West / Main Street access requires EBL (150 foot minimum) and WBR (100 foot minimum) deceleration lanes.
- Per UDOT standard, the 1150 East / Main Street access requires EBL (50 foot minimum) and WBR (50 foot minimum) deceleration lanes and a SBR acceleration lane.
- Per UDOT standard, Access Z / 1600 East requires NBL (50 foot minimum) and SBR (50 foot minimum) deceleration lanes. This is a site related improvement.
- All 3 site accesses must be approved through the UDOT variance process.

Recommendations:

- Main Street / 1600 East (2026) – Improve intersection geometry to an all-way stop with separate left and through right turn lanes or signalize. Signal should be constructed with left and right turn storage lanes for all approaches. This is a future master planned signalized location. Site traffic increases traffic at this intersection by 18%. This is a site related and non-site related improvement. It is recommended that UDOT investigate potential improvement options for this intersection.
- 5600 West / Main Street – Signalize intersection when 35% of the site is complete. Signal should be constructed with left and right turn storage lanes for all approaches. This is a future master planned signalized location. Site traffic increases traffic at this intersection by 40%. This is a site related improvement.
- The 1150 East / Main Street access requires EBL (50 foot minimum) and WBR (50 foot minimum) deceleration lanes and a SBR acceleration lane. This is a site related improvement.
- Access Z / 1600 East requires NBL (50 foot minimum) and SBR (50 foot minimum) deceleration lanes. This is a site related improvement.



APPENDICES

Appendix A	Traffic Counts and Projections
Appendix B	Without Site Intersection Analyses
Appendix C	With Site Intersection Analysis
Appendix D	With Site Intersection Analysis with Improvements



Appendix A Traffic Counts and Projections

AM PEAK HOUR VOLUMES

Ped = 0

INTERSECTION: **5600 West** and **Main Street**

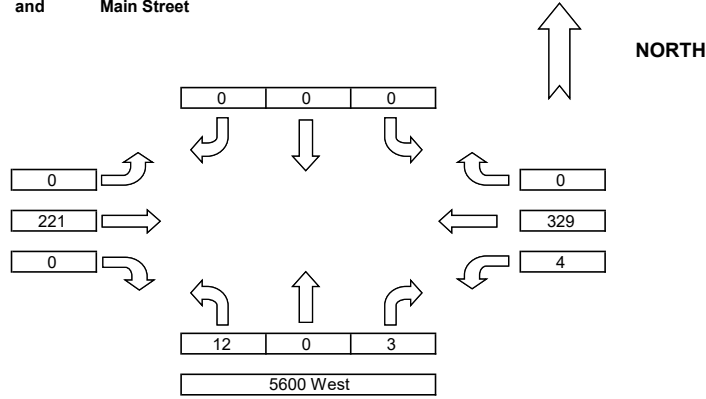
N-S STREET: **5600 West**
E-W STREET: **Main Street**

PK HR VOLUME:	569
PHF:	0.84
PEAK HOUR:	
FROM:	TO:
7:45 AM	8:45 AM

COUNT DATE: **March 3, 2021**
Day of the Week: **Wednesday**
NOTES:

Main Street

COUNT TIME:
FROM: **7:00 AM**
TO: **9:00 AM**



AM Traffic

COUNT DATA INPUT:

Name: Blakely

Name: Blakely

Name: Blakely

Name: Blakely

TIME PERIOD		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL 5'	TOTAL 15'	PEDESTRIAN	
FROM:	TO:	NBL	NBT	NBR	EBL	EBT	EBR	SBL	SBT	SBR	WBL	WBT	WBR	VOLUMES	VOLUMES	E/W	N/S
7:00 AM	7:05 AM	0	0	0	0	16	0	0	0	0	0	15	0	31	97	0	0
7:05 AM	7:10 AM	1	0	1	0	15	0	0	0	0	0	13	0	30	91	0	0
7:10 AM	7:15 AM	0	0	0	0	23	0	0	0	0	0	13	0	36	102	0	0
7:15 AM	7:20 AM	0	0	0	0	14	1	0	0	0	1	9	0	25	101	0	0
7:20 AM	7:25 AM	0	0	0	0	20	2	0	0	0	0	19	0	41	113	0	0
7:25 AM	7:30 AM	0	0	0	0	14	4	0	0	0	0	17	0	35	103	0	0
7:30 AM	7:35 AM	1	0	0	0	18	1	0	0	0	1	16	0	37	106	0	0
7:35 AM	7:40 AM	0	0	0	0	16	1	0	0	0	0	14	0	31	125	0	0
7:40 AM	7:45 AM	1	0	0	0	18	1	0	0	0	0	18	0	38	144	0	0
7:45 AM	7:50 AM	0	0	1	0	23	0	0	0	0	1	31	0	56	145	0	0
7:50 AM	7:55 AM	0	0	1	0	17	0	0	0	0	0	32	0	50	124	0	0
7:55 AM	8:00 AM	1	0	0	0	13	0	0	0	0	0	25	0	39	106	0	0
8:00 AM	8:05 AM	1	0	0	0	10	0	0	0	0	2	22	0	35	109	0	0
8:05 AM	8:10 AM	0	0	0	0	16	0	0	0	0	0	16	0	32	116	0	0
8:10 AM	8:15 AM	1	0	0	0	23	0	0	0	0	0	18	0	42	140	0	0
8:15 AM	8:20 AM	3	0	0	0	17	0	0	0	0	0	22	0	42	161	0	0
8:20 AM	8:25 AM	1	0	1	0	20	0	0	0	0	0	34	0	56	170	0	0
8:25 AM	8:30 AM	2	0	0	0	16	0	0	0	0	1	44	0	63	166	0	0
8:30 AM	8:35 AM	2	0	0	0	21	0	0	0	0	0	28	0	51	154	0	0
8:35 AM	8:40 AM	1	0	0	0	17	0	0	0	0	0	34	0	52	138	0	0
8:40 AM	8:45 AM	0	0	0	0	28	0	0	0	0	0	23	0	51	136	0	0
8:45 AM	8:50 AM	2	0	0	0	13	0	0	0	0	2	18	0	35	133	0	0
8:50 AM	8:55 AM	2	0	0	0	18	1	0	0	0	0	29	0	50	98	0	0
8:55 AM	9:00 AM	0	0	0	0	17	2	0	0	0	0	29	0	48	48	0	0

PM PEAK HOUR VOLUMES

Ped = 0

INTERSECTION: **5600 West** and **Main Street**

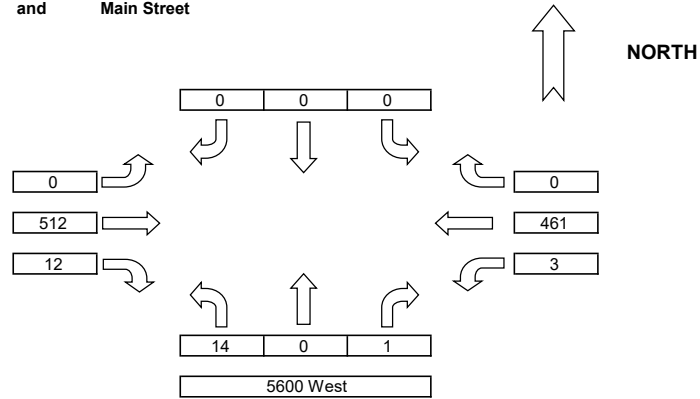
N-S STREET: **5600 West**
E-W STREET: **Main Street**

PK HR VOLUME:	1,003
PHF:	0.93
PEAK HOUR:	
FROM:	TO:
5:00 PM	6:00 PM

COUNT DATE: **March 2, 2021**
Day of the Week: **Tuesday**
NOTES:

COUNT TIME:
FROM: **4:00 PM**
TO: **6:00 PM**

Main Street



PM Traffic

COUNT DATA INPUT:

Name: Blakely

Name: Blakely

Name: Blakely

Name: Blakely

TIME PERIOD	FROM:	TO:	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL 5' VOLUMES	TOTAL 15' VOLUMES	PEDESTRIAN	
			NBL	NBT	NBR	EBL	EBT	EBR	SBL	SBT	SBR	WBL	WBT	WBR			E/W	N/S
4:00 PM	4:00 PM	4:05 PM	0	0	0	0	48	3	0	0	0	0	32	0	83	259	0	0
4:05 PM	4:05 PM	4:10 PM	0	0	0	0	37	2	0	0	0	0	40	0	79	257	0	0
4:10 PM	4:10 PM	4:15 PM	3	0	0	0	45	1	0	0	0	0	48	0	97	265	0	0
4:15 PM	4:15 PM	4:20 PM	2	0	0	0	45	1	0	0	0	0	33	0	81	241	0	0
4:20 PM	4:20 PM	4:25 PM	0	0	1	0	42	0	0	0	0	0	44	0	87	227	0	0
4:25 PM	4:25 PM	4:30 PM	2	0	0	0	26	0	0	0	0	0	45	0	73	209	0	0
4:30 PM	4:30 PM	4:35 PM	1	0	1	0	28	1	0	0	0	0	36	0	67	208	0	0
4:35 PM	4:35 PM	4:40 PM	0	0	0	0	36	0	0	0	0	0	33	0	69	209	0	0
4:40 PM	4:40 PM	4:45 PM	1	0	0	0	33	0	0	0	0	0	38	0	72	224	0	0
4:45 PM	4:45 PM	4:50 PM	0	0	0	0	32	1	0	0	0	0	35	0	68	231	0	0
4:50 PM	4:50 PM	4:55 PM	1	0	0	0	44	0	0	0	0	0	39	0	84	234	0	0
4:55 PM	4:55 PM	5:00 PM	0	0	0	0	35	0	0	0	0	0	44	0	79	217	0	0
5:00 PM	5:00 PM	5:05 PM	1	0	1	0	34	0	0	0	0	0	35	0	71	227	0	0
5:05 PM	5:05 PM	5:10 PM	0	0	0	0	36	0	0	0	0	0	31	0	67	253	0	0
5:10 PM	5:10 PM	5:15 PM	0	0	0	0	48	2	0	0	0	0	39	0	89	259	0	0
5:15 PM	5:15 PM	5:20 PM	4	0	0	0	49	0	0	0	0	1	43	0	97	259	0	0
5:20 PM	5:20 PM	5:25 PM	1	0	0	0	41	2	0	0	0	0	29	0	73	243	0	0
5:25 PM	5:25 PM	5:30 PM	1	0	0	0	49	2	0	0	0	0	37	0	89	251	0	0
5:30 PM	5:30 PM	5:35 PM	0	0	0	0	47	1	0	0	0	0	33	0	81	259	0	0
5:35 PM	5:35 PM	5:40 PM	0	0	0	0	41	1	0	0	0	0	39	0	81	265	0	0
5:40 PM	5:40 PM	5:45 PM	2	0	0	0	50	1	0	0	0	0	44	0	97	271	0	0
5:45 PM	5:45 PM	5:50 PM	1	0	0	0	44	2	0	0	0	1	39	0	87	258	0	0
5:50 PM	5:50 PM	5:55 PM	3	0	0	0	38	0	0	0	0	1	45	0	87	171	0	0
5:55 PM	5:55 PM	6:00 PM	1	0	0	0	35	1	0	0	0	0	47	0	84	84	0	0

AM PEAK HOUR VOLUMES

Ped = 0

INTERSECTION: **1150 East** and **Main Street**

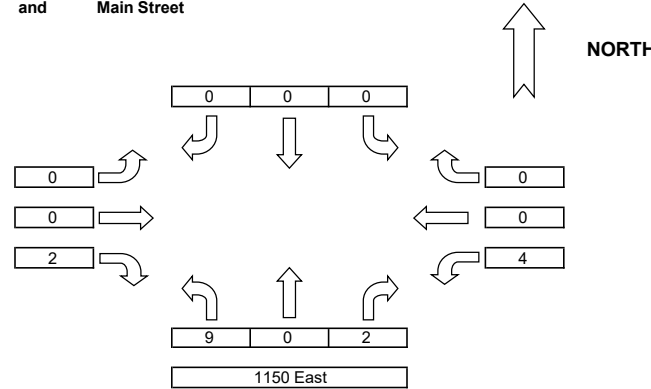
N-S STREET: **1150 East**
E-W STREET: **Main Street**

PK HR VOLUME:	17
PHF:	0.61
PEAK HOUR:	
FROM:	TO:
8:00 AM	9:00 AM

COUNT DATE: **March 3, 2021**
Day of the Week: **Wednesday**
NOTES:

COUNT TIME:
FROM: **7:00 AM**
TO: **9:00 AM**

Main Street



AM Traffic

COUNT DATA INPUT:

Name: Blakely Name: Blakely Name: Blakely Name: Blakely

TIME PERIOD	FROM:	TO:	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL 5' VOLUMES	TOTAL 15' VOLUMES	PEDESTRIAN	
			NBL	NBT	NBR	EBL	EBT	EBR	SBL	SBT	SBR	WBL	WBT	WBR			E/W	N/S
7:00 AM		7:05 AM	1	0	1	0	0	0	0	0	0	1	0	0	3	6	0	0
7:05 AM		7:10 AM	1	0	1	0	0	0	0	0	0	0	0	0	2	4	0	0
7:10 AM		7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	1	3	0	0
7:15 AM		7:20 AM	0	0	1	0	0	0	0	0	0	0	0	0	1	2	0	0
7:20 AM		7:25 AM	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
7:25 AM		7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
7:30 AM		7:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0
7:35 AM		7:40 AM	1	0	1	0	0	0	0	0	0	0	0	0	2	6	0	0
7:40 AM		7:45 AM	1	0	1	0	0	0	0	0	0	0	0	0	2	5	0	0
7:45 AM		7:50 AM	0	0	0	0	0	1	0	0	0	1	0	0	2	3	0	0
7:50 AM		7:55 AM	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
7:55 AM		8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
8:00 AM		8:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
8:05 AM		8:10 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	4	0	0
8:10 AM		8:15 AM	1	0	0	0	0	0	0	0	0	0	0	0	1	5	0	0
8:15 AM		8:20 AM	2	0	0	0	0	0	0	0	0	0	0	0	2	5	0	0
8:20 AM		8:25 AM	2	0	0	0	0	0	0	0	0	0	0	0	2	4	0	0
8:25 AM		8:30 AM	1	0	0	0	0	0	0	0	0	0	0	0	1	4	0	0
8:30 AM		8:35 AM	0	0	1	0	0	0	0	0	0	0	0	0	1	5	0	0
8:35 AM		8:40 AM	1	0	0	0	0	0	0	0	0	1	0	0	2	7	0	0
8:40 AM		8:45 AM	1	0	0	0	0	0	0	0	0	1	0	0	2	5	0	0
8:45 AM		8:50 AM	0	0	1	0	0	2	0	0	0	0	0	0	3	5	0	0
8:50 AM		8:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
8:55 AM		9:00 AM	1	0	0	0	0	0	0	0	0	1	0	0	2	2	0	0

PM PEAK HOUR VOLUMES

Ped =0

INTERSECTION: **1150 East** and **Main Street**

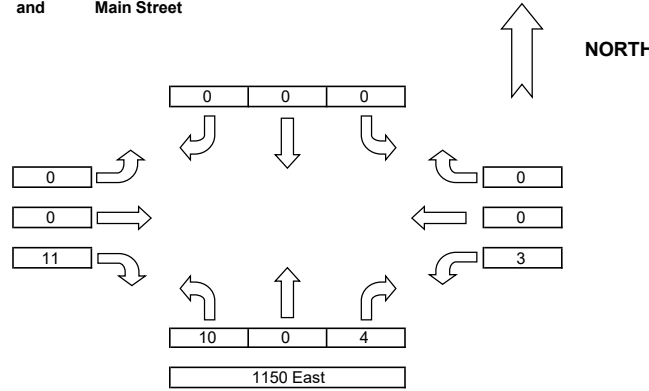
N-S STREET: **1150 East**
E-W STREET: **Main Street**

PK HR VOLUME:	28
PHF:	0.58
PEAK HOUR:	
FROM:	TO:
4:50 PM	5:50 PM

COUNT DATE: **March 2, 2021**
Day of the Week: **Tuesday**
NOTES:

COUNT TIME:
FROM: **4:00 PM**
TO: **6:00 PM**

Main Street



PM Traffic

COUNT DATA INPUT:

Name: Blakely Name: Blakely Name: Blakely Name: Blakely

TIME PERIOD	FROM:	TO:	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL 5' VOLUMES	TOTAL 15' VOLUMES	PEDESTRIAN		
			NBL	NBT	NBR	EBL	EBT	EBR	SBL	SBT	SBR	WBL	WBT	WBR			E/W	N/S	
4:00 PM		4:05 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	1	8	0	0
4:05 PM		4:10 PM	1	0	2	0	0	1	0	0	0	1	0	0	5	10	0	0	
4:10 PM		4:15 PM	1	0	0	0	0	1	0	0	0	0	0	0	2	6	0	0	
4:15 PM		4:20 PM	1	0	0	0	0	1	0	0	0	1	0	0	3	5	0	0	
4:20 PM		4:25 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	4	0	0	
4:25 PM		4:30 PM	1	0	0	0	0	0	0	0	0	0	0	0	1	4	0	0	
4:30 PM		4:35 PM	1	0	1	0	0	0	0	0	0	0	0	0	2	4	0	0	
4:35 PM		4:40 PM	0	0	0	0	0	1	0	0	0	0	0	0	1	2	0	0	
4:40 PM		4:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	1	3	0	0	
4:45 PM		4:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	
4:50 PM		4:55 PM	0	0	0	0	0	2	0	0	0	0	0	0	2	7	0	0	
4:55 PM		5:00 PM	0	0	1	0	0	2	0	0	0	1	0	0	4	6	0	0	
5:00 PM		5:05 PM	1	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	
5:05 PM		5:10 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	3	0	0	
5:10 PM		5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	
5:15 PM		5:20 PM	1	0	0	0	0	1	0	0	0	0	0	0	2	6	0	0	
5:20 PM		5:25 PM	2	0	1	0	0	0	0	0	0	0	0	0	3	6	0	0	
5:25 PM		5:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	1	6	0	0	
5:30 PM		5:35 PM	1	0	0	0	0	0	0	0	0	1	0	0	2	9	0	0	
5:35 PM		5:40 PM	1	0	0	0	0	2	0	0	0	0	0	0	3	12	0	0	
5:40 PM		5:45 PM	2	0	0	0	0	1	0	0	0	1	0	0	4	10	0	0	
5:45 PM		5:50 PM	2	0	1	0	0	2	0	0	0	0	0	0	5	8	0	0	
5:50 PM		5:55 PM	0	0	0	0	0	1	0	0	0	0	0	0	1	3	0	0	
5:55 PM		6:00 PM	0	0	0	0	0	0	0	0	2	0	0	2	2	0	0		

AM PEAK HOUR VOLUMES

Ped = 0

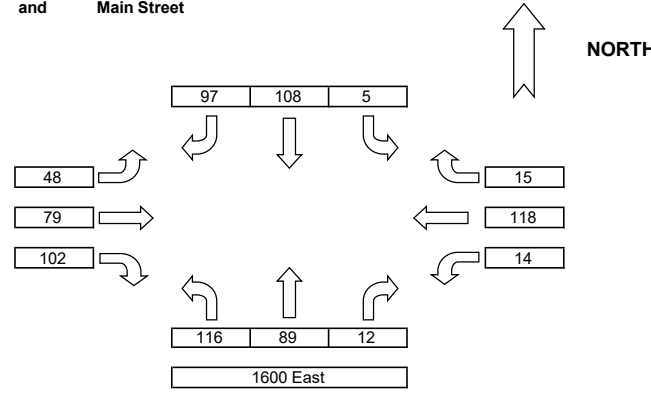
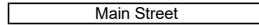
INTERSECTION: **1600 East** and **Main Street**

N-S STREET: **1600 East**
E-W STREET: **Main Street**

PK HR VOLUME:	803
PHF:	0.82
PEAK HOUR:	
FROM:	TO:
7:45 AM	8:45 AM

COUNT DATE: **March 3, 2021**
Day of the Week: **Wednesday**
NOTES:

COUNT TIME:
FROM: **7:00 AM**
TO: **9:00 AM**



AM Traffic

COUNT DATA INPUT:

Name: Barry

Name: Barry

Name: Barry

Name: Barry

TIME PERIOD	FROM:	TO:	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL 5' VOLUMES	TOTAL 15' VOLUMES	PEDESTRIAN	
			NBL	NBT	NBR	EBL	EBT	EBR	SBL	SBT	SBR	WBL	WBT	WBR			E/W	N/S
7:00 AM		7:05 AM	9	2	1	3	4	10	0	5	3	3	5	0	45	158	0	0
7:05 AM		7:10 AM	9	4	3	4	2	8	0	16	3	5	5	0	59	161	0	0
7:10 AM		7:15 AM	4	5	1	3	3	17	0	9	3	5	3	1	54	162	0	0
7:15 AM		7:20 AM	6	7	1	2	7	4	0	11	4	4	2	0	48	166	0	0
7:20 AM		7:25 AM	4	6	1	4	6	10	1	12	3	2	11	0	60	174	0	0
7:25 AM		7:30 AM	6	7	8	3	3	8	0	7	4	6	6	0	58	172	0	0
7:30 AM		7:35 AM	8	7	0	0	6	12	1	13	1	2	6	0	56	177	0	0
7:35 AM		7:40 AM	8	7	3	3	6	7	0	14	3	3	2	2	58	203	0	0
7:40 AM		7:45 AM	9	8	1	5	2	11	0	12	5	3	6	1	63	225	0	0
7:45 AM		7:50 AM	10	8	1	11	6	8	2	13	9	2	12	0	82	213	0	0
7:50 AM		7:55 AM	7	8	0	2	6	11	1	14	11	0	19	1	80	170	0	0
7:55 AM		8:00 AM	7	5	0	2	4	6	0	10	8	0	8	1	51	142	0	0
8:00 AM		8:05 AM	7	4	1	2	3	5	0	6	4	0	7	0	39	158	0	0
8:05 AM		8:10 AM	6	9	0	3	7	7	1	7	1	2	8	1	52	175	0	0
8:10 AM		8:15 AM	8	10	1	3	11	9	0	5	7	3	10	0	67	222	0	0
8:15 AM		8:20 AM	7	7	0	3	6	9	0	8	7	1	3	5	56	223	0	0
8:20 AM		8:25 AM	24	7	3	3	11	6	0	11	11	3	15	5	99	245	0	0
8:25 AM		8:30 AM	10	9	1	3	8	6	0	7	13	2	8	1	68	208	0	0
8:30 AM		8:35 AM	12	7	2	6	2	14	1	12	13	0	8	1	78	209	0	0
8:35 AM		8:40 AM	11	8	2	5	6	6	0	9	4	0	11	0	62	186	0	0
8:40 AM		8:45 AM	7	7	1	5	9	15	0	6	9	1	9	0	69	186	0	0
8:45 AM		8:50 AM	7	4	2	0	4	11	0	11	12	1	3	0	55	181	0	0
8:50 AM		8:55 AM	14	5	2	6	5	3	1	4	4	5	11	2	62	126	0	0
8:55 AM		9:00 AM	15	8	0	4	6	6	0	3	5	1	12	4	64	64	0	0

PM PEAK HOUR VOLUMES

INTERSECTION: **1600 East** and **Main Street**

Ped =

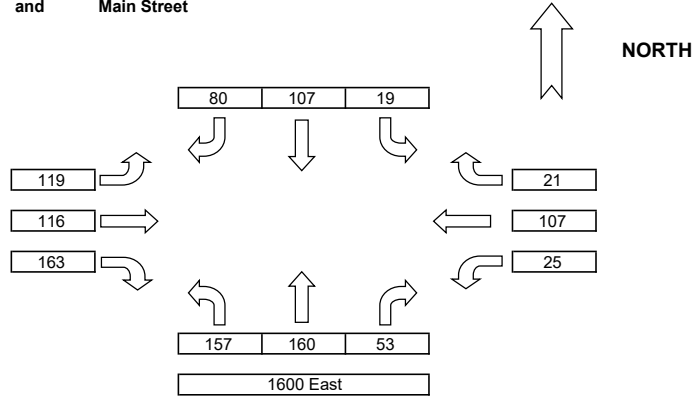
N-S STREET: **1600 East**
E-W STREET: **Main Street**

PK HR VOLUME:	1,127
PHF:	0.97
PEAK HOUR:	
FROM: TO:	
5:00 PM 6:00 PM	

COUNT DATE: **March 4, 2021**
Day of the Week: **Thursday**
NOTES:

COUNT TIME:
FROM: **4:00 PM**
TO: **6:00 PM**

Main Street



PM Traffic

COUNT DATA INPUT:

Name: Blakely

Name: Blakely

Name: Blakely

Name: Blakely

TIME PERIOD	FROM:	TO:	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL 5' VOLUMES	TOTAL 15' VOLUMES	PEDESTRIAN	
			NBL	NBT	NBR	EBL	EBT	EBR	SBL	SBT	SBR	WBL	WBT	WBR			E/W	N/S
4:00 PM	4:05 PM		8	8	2	8	8	21	0	8	8	1	7	0	79	264	0	0
4:05 PM	4:10 PM		14	18	6	4	13	13	2	4	3	5	9	2	93	271	0	0
4:10 PM	4:15 PM		11	11	4	8	16	14	0	9	8	3	7	1	92	284	0	0
4:15 PM	4:20 PM		18	13	1	8	10	6	3	7	7	2	9	2	86	289	0	0
4:20 PM	4:25 PM		14	20	8	11	8	11	0	10	8	3	10	3	106	283	0	0
4:25 PM	4:30 PM		21	9	9	6	10	10	1	10	6	1	11	3	97	270	0	0
4:30 PM	4:35 PM		14	8	0	4	9	15	3	10	6	4	4	3	80	283	0	0
4:35 PM	4:40 PM		16	9	5	11	12	14	2	5	9	1	7	2	93	273	0	0
4:40 PM	4:45 PM		17	22	4	8	12	15	1	7	9	2	10	3	110	247	0	0
4:45 PM	4:50 PM		13	7	3	7	10	7	1	4	5	2	9	2	70	202	0	0
4:50 PM	4:55 PM		13	7	3	8	10	8	0	4	5	1	8	0	67	230	0	0
4:55 PM	5:00 PM		14	8	2	7	11	7	0	4	6	1	5	0	65	257	0	0
5:00 PM	5:05 PM		11	12	6	4	19	13	4	10	7	2	9	1	98	288	0	0
5:05 PM	5:10 PM		7	13	1	16	11	11	2	8	6	2	14	3	94	266	0	0
5:10 PM	5:15 PM		9	13	4	16	17	15	2	5	4	5	4	2	96	278	0	0
5:15 PM	5:20 PM		12	7	10	12	8	9	1	4	3	1	8	1	76	266	0	0
5:20 PM	5:25 PM		14	15	3	10	7	15	1	18	4	3	11	5	106	289	0	0
5:25 PM	5:30 PM		15	7	3	10	8	16	1	8	5	2	7	2	84	286	0	0
5:30 PM	5:35 PM		13	13	6	10	11	15	5	7	8	1	7	3	99	290	0	0
5:35 PM	5:40 PM		12	17	9	11	7	13	1	10	8	4	9	2	103	291	0	0
5:40 PM	5:45 PM		15	16	1	3	8	12	1	13	8	2	8	1	88	287	0	0
5:45 PM	5:50 PM		20	17	2	5	7	11	0	9	10	2	17	0	100	283	0	0
5:50 PM	5:55 PM		16	18	6	10	10	14	0	10	9	0	6	0	99	183	0	0
5:55 PM	6:00 PM		13	12	2	12	3	19	1	5	8	1	7	1	84	84	0	0

TRIP GENERATION

ITE 10th Ed	Size	Land Use	Trip Rate			Trips			In / Out %				New			
			AM	PM	Daily	AM	PM	Daily	AM IN	AM Out	PM IN	PM OU	AM IN	AM Out	PM IN	PM OU
Single Family	369	210	0.74	0.99	9.44	273	365	3483	25%	75%	63%	37%	68	205	230	135
Town Homes	210	220	0.46	0.56	7.32	97	118	1537	23%	77%	63%	37%	22	75	74	44
Apartments	264	220	0.46	0.56	7.32	121	148	1932	23%	77%	63%	37%	28	93	93	55
Retail	70.000	820	0.94	3.81	37.75	66	267	2643	62%	38%	48%	52%	41	25	128	139
			0	0	0	0	0	0	0%	0%	0%	0%	0	0	0	0
Total						557	897	9596					159	398	525	373

Long Term Growth

1.40%	Growth Factor	Years	Analysis Year
	1.00	0	2021
	1.07	5	2026
	1.30	19	2040

Straight line growth assumed between 2016 and 2040

1600 East			
2019	5,100	UDOT Traffic on Utah Highways	
2040	7,500	WFRC	
growth	1.85%		

11200 North			
2019	8,600	UDOT Traffic on Utah Highways	
2040	10,500	WFRC	
growth	0.96%		

2019	114.29	5100	
2020	114.29	5214	2.24%
2021	114.29	5329	2.19%
2022	114.29	5443	2.14%
2023	114.29	5557	2.10%
2024	114.29	5671	2.06%
2025	114.29	5786	2.02%
2026	114.29	5900	1.98%
2027	114.29	6014	1.94%
2028	114.29	6129	1.90%
2029	114.29	6243	1.86%
2030	114.29	6357	1.83%
2031	114.29	6471	1.80%
2032	114.29	6586	1.77%
2033	114.29	6700	1.74%
2034	114.29	6814	1.71%
2035	114.29	6929	1.68%
2036	114.29	7043	1.65%
2037	114.29	7157	1.62%
2038	114.29	7271	1.60%
2039	114.29	7386	1.57%
2040	114.29	7500	1.55%
			1.85%

2019	90.48	8600	
2020	90.48	8690	1.05%
2021	90.48	8781	1.04%
2022	90.48	8871	1.03%
2023	90.48	8962	1.02%
2024	90.48	9052	1.01%
2025	90.48	9143	1.00%
2026	90.48	9233	0.99%
2027	90.48	9324	0.98%
2028	90.48	9414	0.97%
2029	90.48	9505	0.96%
2030	90.48	9595	0.95%
2031	90.48	9686	0.94%
2032	90.48	9776	0.93%
2033	90.48	9867	0.93%
2034	90.48	9957	0.92%
2035	90.48	10048	0.91%
2036	90.48	10138	0.90%
2037	90.48	10229	0.89%
2038	90.48	10319	0.88%
2039	90.48	10410	0.88%
2040	90.48	10500	0.87%
			0.96%

Trip Distribution

11200 North / 1600 East			1.07		
	2021	Site	2021	2026	2026
AM	Existing	Traffic	Total	Growth	Total
EBL	48		48	51	51
EBT	79	40	119	85	125
EBR	102	51	153	109	160
WBL	14		14	15	15
WBT	118	16	134	126	142
WBR	15		15	16	16
NBL	116	20	136	124	144
NBT	89	4	93	95	99
NBR	12		12	13	13
SBL	5		5	5	5
SBT	108	9	117	116	125
SBR	97		97	104	104
East	243	56	299	260	316
West	560	127	687	599	726
North	362	13	375	387	400
South	441	84	525	472	556

17.43%

	2021	Site	2021	2026	2026
PM	Existing	Traffic	Total	Growth	Total
EBL	143		143	153	153
EBT	139	37	176	149	186
EBR	196	48	244	210	258
WBL	25		25	27	27
WBT	107	53	160	114	167
WBR	21		21	22	22
NBL	188	67	255	201	268
NBT	160	12	172	171	183
NBR	53		53	57	57
SBL	19		19	20	20
SBT	107	8	115	114	122
SBR	96		96	103	103
East	364	90	454	389	479
West	869	205	1074	930	1135
North	546	20	566	584	604
South	729	135	864	780	915

17.94%

11200 North / 1150 East			1.07		
	2021	Site	2021	2026	2026
AM	Existing	Traffic	Total	Growth	Total
EBL		28	28	0	28
EBT	227	68	295	243	311
EBR	2		2	2	2
WBL	4		4	4	4
WBT	327	26	353	350	376
WBR		10	10	0	10
NBL	9		9	10	10
NBT			0	0	0
NBR	2		2	2	2
SBL		23	23	0	23
SBT			0	0	0
SBR		70	70	0	70
East	560	127	687	599	726
West	565	192	757	605	797
North	0	131	131	0	131
South	17	0	17	18	18

39.40%

	2021	Site	2021	2026	2026
PM	Existing	Traffic	Total	Growth	Total
EBL		92	92	0	92
EBT	474	64	538	507	571
EBR	11		11	12	12
WBL	3		3	3	3
WBT	388	90	478	415	505
WBR		30	30	0	30
NBL	10		10	11	11
NBT			0	0	0
NBR	4		4	4	4
SBL		21	21	0	21
SBT			0	0	0
SBR		65	65	0	65
East	869	205	1074	930	1135
West	883	311	1194	945	1256
North	0	208	208	0	208
South	28	0	28	30	30

40.67%

Trip Distribution

11200 North / 5600 West			1.07		
AM	2021 Existing	Site Traffic	2021 Total	2026 Growth	2026 Total
EBL		83	83	0	83
EBT	226	28	254	242	270
EBR	1		1	1	1
WBL	4		4	4	4
WBT	332	70	402	355	425
WBR		26	26	0	26
NBL	12		12	13	13
NBT			0	0	0
NBR	3		3	3	3
SBL		68	68	0	68
SBT			0	0	0
SBR		208	208	0	208
East	565	192	757	605	797
West	571	389	960	611	1000
North	0	385	385	0	385
South	20	0	20	21	21

83.56%

PM	2021 Existing	Site Traffic	2021 Total	2026 Growth	2026 Total
EBL		275	275	0	275
EBT	484	92	576	518	610
EBR	12		12	13	13
WBL	3		3	3	3
WBT	395	65	460	423	488
WBR		90	90	0	90
NBL	14		14	15	15
NBT			0	0	0
NBR	1		1	1	1
SBL		64	64	0	64
SBT			0	0	0
SBR		196	196	0	196
East	883	311	1194	945	1256
West	905	628	1533	968	1596
North	0	625	625	0	625
South	30	0	30	32	32

86.03%

Access Z / 1600 East			1.07		
AM	2021 Existing	Site Traffic	2021 Total	2026 Growth	2026 Total
EBL		20	20	0	20
EBT			0	0	0
EBR		9	9	0	9
WBL			0	0	0
WBT			0	0	0
WBR			0	0	0
NBL		4	4	0	4
NBT	152		152	163	163
NBR			0	0	0
SBL			0	0	0
SBT	210		210	225	225
SBR		8	8	0	8
East	0	0	0	0	0
West	0	41	41	0	41
North	362	28	390	387	415
South	362	13	375	387	400

11.33%

PM	2021 Existing	Site Traffic	2021 Total	2026 Growth	2026 Total
EBL		19	19	0	19
EBT			0	0	0
EBR		8	8	0	8
WBL			0	0	0
WBT			0	0	0
WBR			0	0	0
NBL		12	12	0	12
NBT	324		324	347	347
NBR			0	0	0
SBL			0	0	0
SBT	222		222	238	238
SBR		26	26	0	26
East	0	0	0	0	0
West	0	65	65	0	65
North	546	45	591	584	629
South	546	20	566	584	604

11.90%

ArcGIS ▾ UDOT Access Category Identification Map

Details |

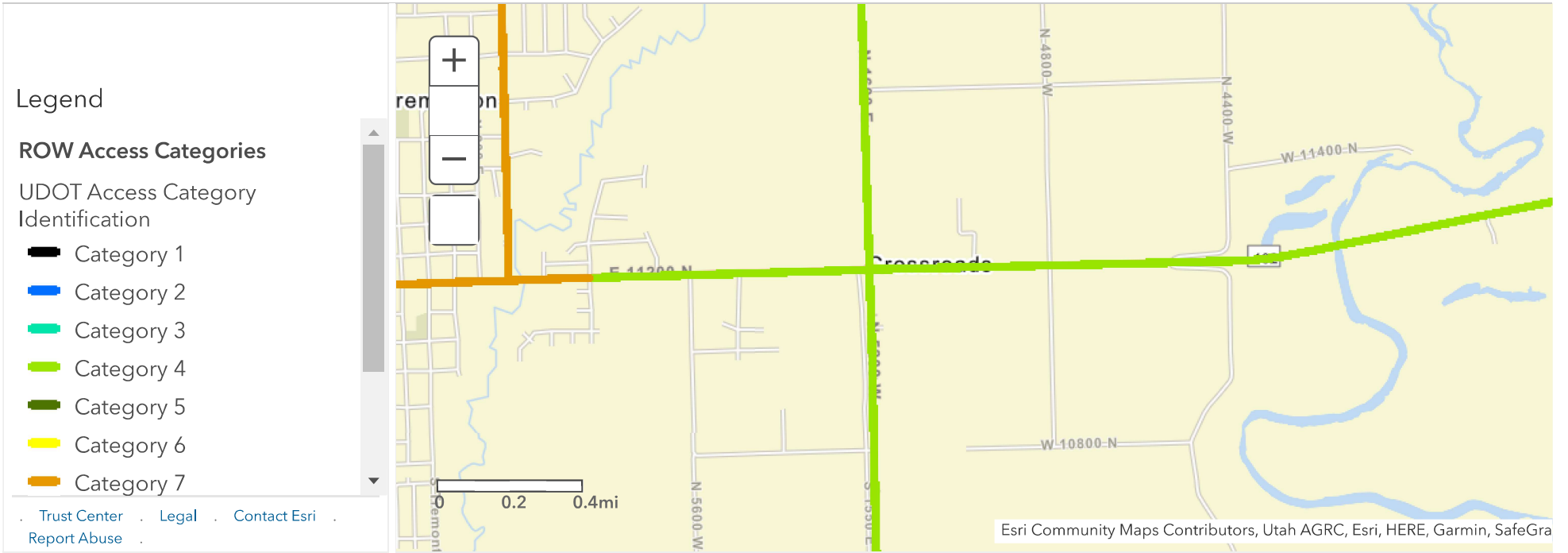
Basemap |

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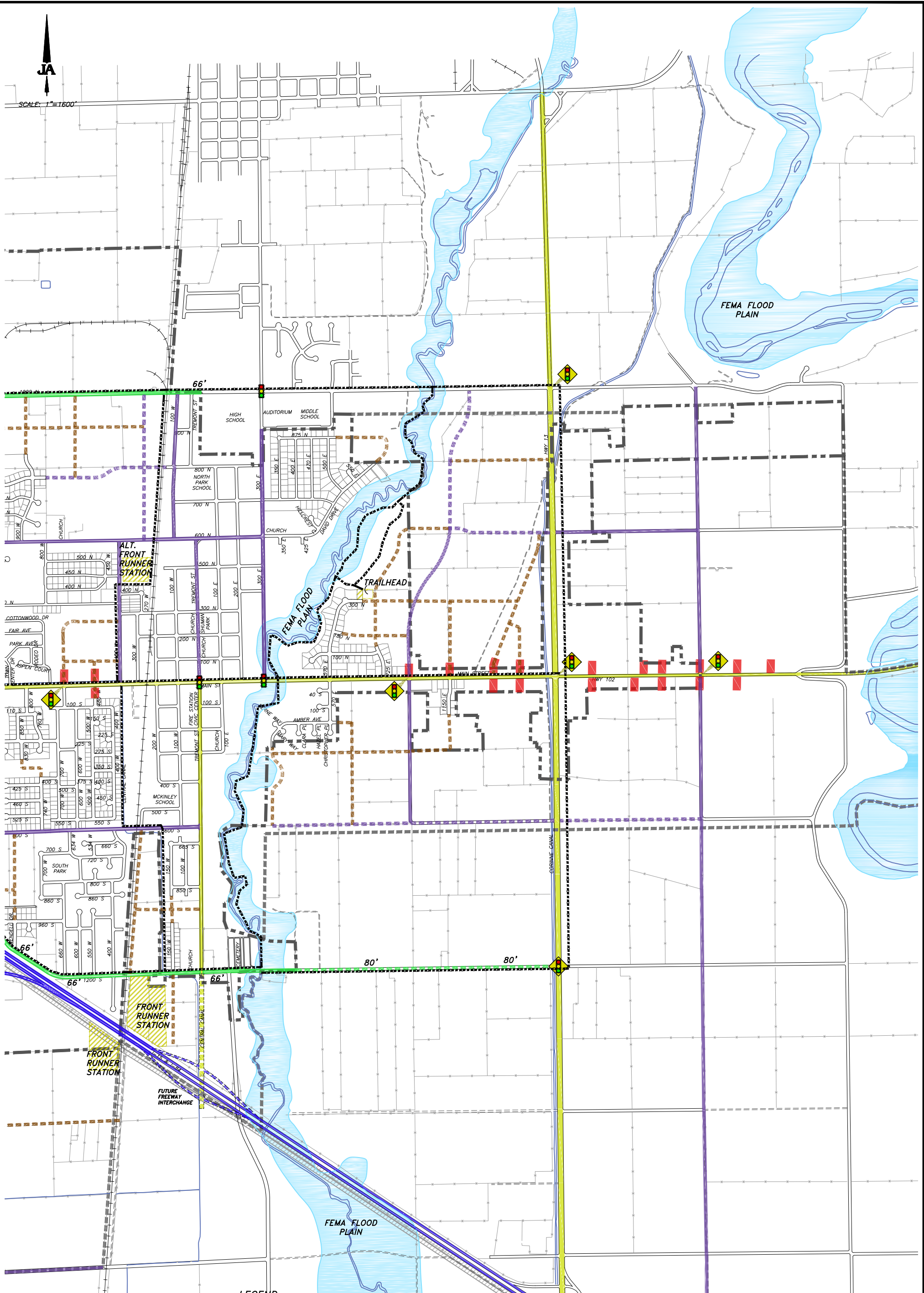
Measure

1600 E Main St, Tremonton, UT, 84337, USA





SCALE: 1"=1600'



LEGEND

- MAIN STREET ACCESS POINTS FOR ROADS
- FREEWAY
- MAJOR ARTERIAL
- MINOR ARTERIAL
- COLLECTOR ROADS
- LOCAL ROADS
- CURRENT CITY BOUNDARY
- FUTURE ANNEXATION BOUNDARY
- POWER CORRIDOR
- CONCEPTUAL ROADS
- EXISTING PUBLIC TRAIL
- FUTURE PUBLIC TRAIL
- EXISTING TRAFFIC LIGHT
- FUTURE TRAFFIC LIGHT



TREMONTON CITY CORPORATION
TRANSPORTATION MASTER PLAN
MAP 1.06B



Appendix B Without Site Intersection Analyses

Intersection	
Intersection Delay, s/veh	11.9
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖	↗		↖	↗		↖	↗
Traffic Vol, veh/h	48	79	102	14	118	15	116	89	12	5	108	97
Future Vol, veh/h	48	79	102	14	118	15	116	89	12	5	108	97
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	58	95	123	17	142	18	140	107	14	6	130	117
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	11	11.8	14.3	10.5
HCM LOS	B	B	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	57%	0%	38%	0%	11%	0%	4%	0%
Vol Thru, %	43%	0%	62%	0%	89%	0%	96%	0%
Vol Right, %	0%	100%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	205	12	127	102	132	15	113	97
LT Vol	116	0	48	0	14	0	5	0
Through Vol	89	0	79	0	118	0	108	0
RT Vol	0	12	0	102	0	15	0	97
Lane Flow Rate	247	14	153	123	159	18	136	117
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.45	0.022	0.28	0.194	0.291	0.029	0.241	0.183
Departure Headway (Hd)	6.562	5.565	6.576	5.673	6.585	5.819	6.363	5.629
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	548	640	545	629	544	612	562	635
Service Time	4.324	3.326	4.339	3.436	4.353	3.586	4.126	3.392
HCM Lane V/C Ratio	0.451	0.022	0.281	0.196	0.292	0.029	0.242	0.184
HCM Control Delay	14.6	8.5	11.9	9.8	12.1	8.8	11.2	9.7
HCM Lane LOS	B	A	B	A	B	A	B	A
HCM 95th-tile Q	2.3	0.1	1.1	0.7	1.2	0.1	0.9	0.7

Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	0	227	2	4	327	0	9	0	2	0	0	0
Future Vol, veh/h	0	227	2	4	327	0	9	0	2	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	273	2	5	394	0	11	0	2	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	394	0	0	275	0	0	678	678	274	679	679	394
Stage 1	-	-	-	-	-	-	274	274	-	404	404	-
Stage 2	-	-	-	-	-	-	404	404	-	275	275	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1165	-	-	1288	-	-	366	374	765	366	374	655
Stage 1	-	-	-	-	-	-	732	683	-	623	599	-
Stage 2	-	-	-	-	-	-	623	599	-	731	683	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1165	-	-	1288	-	-	365	373	765	364	373	655
Mov Cap-2 Maneuver	-	-	-	-	-	-	365	373	-	364	373	-
Stage 1	-	-	-	-	-	-	732	683	-	623	597	-
Stage 2	-	-	-	-	-	-	621	597	-	729	683	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.1			14.2			0		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	403	1165	-	-	1288	-	-	-
HCM Lane V/C Ratio	0.033	-	-	-	0.004	-	-	-
HCM Control Delay (s)	14.2	0	-	-	7.8	-	-	0
HCM Lane LOS	B	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	-

HCM 6th TWSC
3: 5600 West & 11200 North

03/09/2021

Intersection												
Int Delay, s/veh	0.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	0	226	1	4	332	0	12	0	3	0	0	0
Future Vol, veh/h	0	226	1	4	332	0	12	0	3	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	272	1	5	400	0	14	0	4	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	400	0	0	273	0	0	683	683	273	685	683	400
Stage 1	-	-	-	-	-	-	273	273	-	410	410	-
Stage 2	-	-	-	-	-	-	410	410	-	275	273	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1159	-	-	1290	-	-	363	372	766	362	372	650
Stage 1	-	-	-	-	-	-	733	684	-	619	595	-
Stage 2	-	-	-	-	-	-	619	595	-	731	684	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1159	-	-	1290	-	-	362	371	766	359	371	650
Mov Cap-2 Maneuver	-	-	-	-	-	-	362	371	-	359	371	-
Stage 1	-	-	-	-	-	-	733	684	-	619	593	-
Stage 2	-	-	-	-	-	-	617	593	-	728	684	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.1			14.3			0		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	405	1159	-	-	1290	-	-	-
HCM Lane V/C Ratio	0.045	-	-	-	0.004	-	-	-
HCM Control Delay (s)	14.3	0	-	-	7.8	-	-	0
HCM Lane LOS	B	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	-

Intersection	
Intersection Delay, s/veh	21
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖	↗		↖	↗		↖	↗
Traffic Vol, veh/h	143	139	196	25	107	21	188	160	53	19	107	96
Future Vol, veh/h	143	139	196	25	107	21	188	160	53	19	107	96
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	155	151	213	27	116	23	204	174	58	21	116	104
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	19	14.1	30.4	12.9
HCM LOS	C	B	D	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	54%	0%	51%	0%	19%	0%	15%	0%
Vol Thru, %	46%	0%	49%	0%	81%	0%	85%	0%
Vol Right, %	0%	100%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	348	53	282	196	132	21	126	96
LT Vol	188	0	143	0	25	0	19	0
Through Vol	160	0	139	0	107	0	107	0
RT Vol	0	53	0	196	0	21	0	96
Lane Flow Rate	378	58	307	213	143	23	137	104
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.792	0.105	0.641	0.388	0.322	0.046	0.298	0.204
Departure Headway (Hd)	7.535	6.542	7.53	6.553	8.068	7.247	7.827	7.028
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	480	547	478	548	445	492	459	509
Service Time	5.289	4.295	5.287	4.31	5.838	5.016	5.593	4.793
HCM Lane V/C Ratio	0.787	0.106	0.642	0.389	0.321	0.047	0.298	0.204
HCM Control Delay	33.5	10.1	22.9	13.4	14.7	10.4	13.9	11.6
HCM Lane LOS	D	B	C	B	B	B	B	B
HCM 95th-tile Q	7.2	0.3	4.4	1.8	1.4	0.1	1.2	0.8

HCM 6th TWSC
2: 1150 East & 11200 North

03/09/2021

Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↶	↷		↶	↷			↕			↕	
Traffic Vol, veh/h	0	474	11	3	388	0	10	0	4	0	0	0
Future Vol, veh/h	0	474	11	3	388	0	10	0	4	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	515	12	3	422	0	11	0	4	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	422	0	0	527	0	0	949	949	521	951	955	422
Stage 1	-	-	-	-	-	-	521	521	-	428	428	-
Stage 2	-	-	-	-	-	-	428	428	-	523	527	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1137	-	-	1040	-	-	240	260	555	240	258	632
Stage 1	-	-	-	-	-	-	539	532	-	605	585	-
Stage 2	-	-	-	-	-	-	605	585	-	537	528	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1137	-	-	1040	-	-	240	259	555	238	257	632
Mov Cap-2 Maneuver	-	-	-	-	-	-	240	259	-	238	257	-
Stage 1	-	-	-	-	-	-	539	532	-	605	583	-
Stage 2	-	-	-	-	-	-	603	583	-	533	528	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.1			18.3			0		
HCM LOS							C			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	286	1137	-	-	1040	-	-	-
HCM Lane V/C Ratio	0.053	-	-	-	0.003	-	-	-
HCM Control Delay (s)	18.3	0	-	-	8.5	-	-	0
HCM Lane LOS	C	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	-

HCM 6th TWSC
3: 5600 West & 11200 North

03/09/2021

Intersection												
Int Delay, s/veh	0.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↶	↷		↶	↷			↕			↕	
Traffic Vol, veh/h	0	484	12	3	395	0	14	0	1	0	0	0
Future Vol, veh/h	0	484	12	3	395	0	14	0	1	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	526	13	3	429	0	15	0	1	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	429	0	0	539	0	0	968	968	533	968	974	429
Stage 1	-	-	-	-	-	-	533	533	-	435	435	-
Stage 2	-	-	-	-	-	-	435	435	-	533	539	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1130	-	-	1029	-	-	233	254	547	233	252	626
Stage 1	-	-	-	-	-	-	531	525	-	600	580	-
Stage 2	-	-	-	-	-	-	600	580	-	531	522	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1130	-	-	1029	-	-	233	253	547	232	251	626
Mov Cap-2 Maneuver	-	-	-	-	-	-	233	253	-	232	251	-
Stage 1	-	-	-	-	-	-	531	525	-	600	578	-
Stage 2	-	-	-	-	-	-	598	578	-	530	522	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.1			20.9			0		
HCM LOS							C			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	242	1130	-	-	1029	-	-	-
HCM Lane V/C Ratio	0.067	-	-	-	0.003	-	-	-
HCM Control Delay (s)	20.9	0	-	-	8.5	-	-	0
HCM Lane LOS	C	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	-

Intersection	
Intersection Delay, s/veh	12.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖	↗		↖	↗		↖	↗
Traffic Vol, veh/h	48	79	102	14	118	15	116	89	12	5	108	97
Future Vol, veh/h	48	79	102	14	118	15	116	89	12	5	108	97
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	62	102	131	18	152	19	150	115	15	6	139	125
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	11.5	12.4	15.6	11
HCM LOS	B	B	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	57%	0%	38%	0%	11%	0%	4%	0%
Vol Thru, %	43%	0%	62%	0%	89%	0%	96%	0%
Vol Right, %	0%	100%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	205	12	127	102	132	15	113	97
LT Vol	116	0	48	0	14	0	5	0
Through Vol	89	0	79	0	118	0	108	0
RT Vol	0	12	0	102	0	15	0	97
Lane Flow Rate	264	15	164	131	170	19	146	125
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.494	0.025	0.307	0.214	0.32	0.032	0.265	0.202
Departure Headway (Hd)	6.727	5.728	6.752	5.848	6.775	6.007	6.54	5.805
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	534	621	529	610	528	591	546	614
Service Time	4.503	3.503	4.531	3.625	4.56	3.792	4.319	3.583
HCM Lane V/C Ratio	0.494	0.024	0.31	0.215	0.322	0.032	0.267	0.204
HCM Control Delay	16	8.7	12.5	10.2	12.8	9	11.7	10.1
HCM Lane LOS	C	A	B	B	B	A	B	B
HCM 95th-tile Q	2.7	0.1	1.3	0.8	1.4	0.1	1.1	0.8

Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↶	↷		↶	↷			↕			↕	
Traffic Vol, veh/h	0	227	2	4	327	0	9	0	2	0	0	0
Future Vol, veh/h	0	227	2	4	327	0	9	0	2	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	293	3	5	422	0	12	0	3	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	422	0	0	296	0	0	727	727	295	728	728	422
Stage 1	-	-	-	-	-	-	295	295	-	432	432	-
Stage 2	-	-	-	-	-	-	432	432	-	296	296	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1137	-	-	1265	-	-	339	351	744	339	350	632
Stage 1	-	-	-	-	-	-	713	669	-	602	582	-
Stage 2	-	-	-	-	-	-	602	582	-	712	668	-
Platoon blocked, %		-	-	-	-	-						
Mov Cap-1 Maneuver	1137	-	-	1265	-	-	338	350	744	337	349	632
Mov Cap-2 Maneuver	-	-	-	-	-	-	338	350	-	337	349	-
Stage 1	-	-	-	-	-	-	713	669	-	602	580	-
Stage 2	-	-	-	-	-	-	600	580	-	710	668	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.1			15			0		
HCM LOS							C			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	375	1137	-	-	1265	-	-	-
HCM Lane V/C Ratio	0.038	-	-	-	0.004	-	-	-
HCM Control Delay (s)	15	0	-	-	7.9	-	-	0
HCM Lane LOS	C	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	-

Intersection												
Int Delay, s/veh	0.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	0	226	1	4	332	0	12	0	3	0	0	0
Future Vol, veh/h	0	226	1	4	332	0	12	0	3	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	291	1	5	428	0	15	0	4	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	428	0	0	292	0	0	730	730	292	732	730	428
Stage 1	-	-	-	-	-	-	292	292	-	438	438	-
Stage 2	-	-	-	-	-	-	438	438	-	294	292	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1131	-	-	1270	-	-	338	349	747	337	349	627
Stage 1	-	-	-	-	-	-	716	671	-	597	579	-
Stage 2	-	-	-	-	-	-	597	579	-	714	671	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1131	-	-	1270	-	-	337	348	747	334	348	627
Mov Cap-2 Maneuver	-	-	-	-	-	-	337	348	-	334	348	-
Stage 1	-	-	-	-	-	-	716	671	-	597	577	-
Stage 2	-	-	-	-	-	-	595	577	-	710	671	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.1			15			0		
HCM LOS							C			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	379	1131	-	-	1270	-	-	-
HCM Lane V/C Ratio	0.051	-	-	-	0.004	-	-	-
HCM Control Delay (s)	15	0	-	-	7.8	-	-	0
HCM Lane LOS	C	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	-

Intersection	
Intersection Delay, s/veh	25.8
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖	↗		↖	↗		↖	↗
Traffic Vol, veh/h	143	139	196	25	107	21	188	160	53	19	107	96
Future Vol, veh/h	143	139	196	25	107	21	188	160	53	19	107	96
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	166	162	228	29	124	24	219	186	62	22	124	112
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	22.5	15.2	40.4	13.8
HCM LOS	C	C	E	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	54%	0%	51%	0%	19%	0%	15%	0%
Vol Thru, %	46%	0%	49%	0%	81%	0%	85%	0%
Vol Right, %	0%	100%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	348	53	282	196	132	21	126	96
LT Vol	188	0	143	0	25	0	19	0
Through Vol	160	0	139	0	107	0	107	0
RT Vol	0	53	0	196	0	21	0	96
Lane Flow Rate	405	62	328	228	154	24	147	112
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.876	0.116	0.712	0.433	0.359	0.052	0.332	0.228
Departure Headway (Hd)	7.795	6.8	7.813	6.834	8.419	7.595	8.154	7.352
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	465	525	462	524	425	469	440	486
Service Time	5.562	4.566	5.58	4.6	6.201	5.377	5.934	5.132
HCM Lane V/C Ratio	0.871	0.118	0.71	0.435	0.362	0.051	0.334	0.23
HCM Control Delay	44.9	10.5	27.8	14.8	15.9	10.8	15	12.3
HCM Lane LOS	E	B	D	B	C	B	B	B
HCM 95th-tile Q	9.2	0.4	5.5	2.2	1.6	0.2	1.4	0.9

Intersection												
Int Delay, s/veh	0.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	0	474	11	3	388	0	10	0	4	0	0	0
Future Vol, veh/h	0	474	11	3	388	0	10	0	4	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	551	13	3	451	0	12	0	5	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	451	0	0	564	0	0	1015	1015	558	1017	1021	451
Stage 1	-	-	-	-	-	-	558	558	-	457	457	-
Stage 2	-	-	-	-	-	-	457	457	-	560	564	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1109	-	-	1008	-	-	217	238	529	216	236	608
Stage 1	-	-	-	-	-	-	514	512	-	583	568	-
Stage 2	-	-	-	-	-	-	583	568	-	513	508	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1109	-	-	1008	-	-	217	237	529	214	235	608
Mov Cap-2 Maneuver	-	-	-	-	-	-	217	237	-	214	235	-
Stage 1	-	-	-	-	-	-	514	512	-	583	566	-
Stage 2	-	-	-	-	-	-	581	566	-	508	508	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.1			19.7			0		
HCM LOS							C			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	261	1109	-	-	1008	-	-	-
HCM Lane V/C Ratio	0.062	-	-	-	0.003	-	-	-
HCM Control Delay (s)	19.7	0	-	-	8.6	-	-	0
HCM Lane LOS	C	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	-

HCM 6th TWSC
3: 5600 West & 11200 North

03/09/2021

Intersection												
Int Delay, s/veh	0.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↵	↵		↵	↵			↕			↕	
Traffic Vol, veh/h	0	484	12	3	395	0	14	0	1	0	0	0
Future Vol, veh/h	0	484	12	3	395	0	14	0	1	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	563	14	3	459	0	16	0	1	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	459	0	0	577	0	0	1035	1035	570	1036	1042	459
Stage 1	-	-	-	-	-	-	570	570	-	465	465	-
Stage 2	-	-	-	-	-	-	465	465	-	571	577	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1102	-	-	996	-	-	210	232	521	210	230	602
Stage 1	-	-	-	-	-	-	506	505	-	578	563	-
Stage 2	-	-	-	-	-	-	578	563	-	506	502	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1102	-	-	996	-	-	210	231	521	209	229	602
Mov Cap-2 Maneuver	-	-	-	-	-	-	210	231	-	209	229	-
Stage 1	-	-	-	-	-	-	506	505	-	578	561	-
Stage 2	-	-	-	-	-	-	576	561	-	505	502	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.1			22.9			0		
HCM LOS							C			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	219	1102	-	-	996	-	-	-
HCM Lane V/C Ratio	0.08	-	-	-	0.004	-	-	-
HCM Control Delay (s)	22.9	0	-	-	8.6	-	-	0
HCM Lane LOS	C	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	-



Appendix C With Site Intersection Analyses

Intersection	
Intersection Delay, s/veh	13.9
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖	↗		↖	↗		↖	↗
Traffic Vol, veh/h	48	119	153	14	134	15	136	93	12	5	117	97
Future Vol, veh/h	48	119	153	14	134	15	136	93	12	5	117	97
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	58	143	184	17	161	18	164	112	14	6	141	117
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	12.8	13.3	17.7	11.7
HCM LOS	B	B	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	59%	0%	29%	0%	9%	0%	4%	0%
Vol Thru, %	41%	0%	71%	0%	91%	0%	96%	0%
Vol Right, %	0%	100%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	229	12	167	153	148	15	122	97
LT Vol	136	0	48	0	14	0	5	0
Through Vol	93	0	119	0	134	0	117	0
RT Vol	0	12	0	153	0	15	0	97
Lane Flow Rate	276	14	201	184	178	18	147	117
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.548	0.025	0.388	0.311	0.353	0.032	0.285	0.203
Departure Headway (Hd)	7.153	6.136	6.943	6.082	7.132	6.367	6.984	6.247
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	505	585	521	594	505	562	514	574
Service Time	4.872	3.855	4.661	3.8	4.877	4.112	4.726	3.99
HCM Lane V/C Ratio	0.547	0.024	0.386	0.31	0.352	0.032	0.286	0.204
HCM Control Delay	18.2	9	14	11.5	13.7	9.3	12.5	10.6
HCM Lane LOS	C	A	B	B	B	A	B	B
HCM 95th-tile Q	3.3	0.1	1.8	1.3	1.6	0.1	1.2	0.8

HCM 6th TWSC
2: 1150 East & 11200 North

03/09/2021

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗	↖		↕			↕	
Traffic Vol, veh/h	28	295	2	4	353	10	9	0	2	23	0	70
Future Vol, veh/h	28	295	2	4	353	10	9	0	2	23	0	70
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	100	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	34	355	2	5	425	12	11	0	2	28	0	84

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	437	0	0	357	0	0	907	871	356	860	860	425
Stage 1	-	-	-	-	-	-	424	424	-	435	435	-
Stage 2	-	-	-	-	-	-	483	447	-	425	425	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1123	-	-	1202	-	-	257	289	688	276	294	629
Stage 1	-	-	-	-	-	-	608	587	-	600	580	-
Stage 2	-	-	-	-	-	-	565	573	-	607	586	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1123	-	-	1202	-	-	217	279	688	268	284	629
Mov Cap-2 Maneuver	-	-	-	-	-	-	217	279	-	268	284	-
Stage 1	-	-	-	-	-	-	590	569	-	582	578	-
Stage 2	-	-	-	-	-	-	487	571	-	587	568	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.7			0.1			20.3			15		
HCM LOS							C			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	248	1123	-	-	1202	-	-	472
HCM Lane V/C Ratio	0.053	0.03	-	-	0.004	-	-	0.237
HCM Control Delay (s)	20.3	8.3	-	-	8	-	-	15
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	0.9

Intersection												
Int Delay, s/veh	6.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗	↖		↔		↖	↗	
Traffic Vol, veh/h	83	254	1	4	402	26	12	0	3	68	0	208
Future Vol, veh/h	83	254	1	4	402	26	12	0	3	68	0	208
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	100	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	100	306	1	5	484	31	14	0	4	82	0	251

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	515	0	0	307	0	0	1142	1032	307	1003	1001	484
Stage 1	-	-	-	-	-	-	507	507	-	494	494	-
Stage 2	-	-	-	-	-	-	635	525	-	509	507	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1051	-	-	1254	-	-	177	233	733	221	243	583
Stage 1	-	-	-	-	-	-	548	539	-	557	546	-
Stage 2	-	-	-	-	-	-	467	529	-	547	539	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1051	-	-	1254	-	-	93	210	733	203	219	583
Mov Cap-2 Maneuver	-	-	-	-	-	-	93	210	-	203	219	-
Stage 1	-	-	-	-	-	-	496	488	-	504	544	-
Stage 2	-	-	-	-	-	-	265	527	-	493	488	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	2.2			0.1			42.8			20.3		
HCM LOS							E			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	113	1051	-	-	1254	-	-	203	583
HCM Lane V/C Ratio	0.16	0.095	-	-	0.004	-	-	0.404	0.43
HCM Control Delay (s)	42.8	8.8	-	-	7.9	-	-	34.2	15.7
HCM Lane LOS	E	A	-	-	A	-	-	D	C
HCM 95th %tile Q(veh)	0.5	0.3	-	-	0	-	-	1.8	2.1

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y		Y	↑	↑	Y
Traffic Vol, veh/h	20	9	4	152	210	8
Future Vol, veh/h	20	9	4	152	210	8
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	-	100	-	-	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	11	5	183	253	10

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	446	253	263	0	-	0
Stage 1	253	-	-	-	-	-
Stage 2	193	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	570	786	1301	-	-	-
Stage 1	789	-	-	-	-	-
Stage 2	840	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	568	786	1301	-	-	-
Mov Cap-2 Maneuver	568	-	-	-	-	-
Stage 1	786	-	-	-	-	-
Stage 2	840	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.1	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1301	-	621	-	-
HCM Lane V/C Ratio	0.004	-	0.056	-	-
HCM Control Delay (s)	7.8	-	11.1	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Intersection Delay, s/veh	41.8
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖	↗		↖	↗		↖	↗
Traffic Vol, veh/h	143	176	244	25	160	21	255	172	53	19	115	96
Future Vol, veh/h	143	176	244	25	160	21	255	172	53	19	115	96
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	155	191	265	27	174	23	277	187	58	21	125	104
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	27.6	18.8	81.1	14.9
HCM LOS	D	C	F	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	60%	0%	45%	0%	14%	0%	14%	0%
Vol Thru, %	40%	0%	55%	0%	86%	0%	86%	0%
Vol Right, %	0%	100%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	427	53	319	244	185	21	134	96
LT Vol	255	0	143	0	25	0	19	0
Through Vol	172	0	176	0	160	0	115	0
RT Vol	0	53	0	244	0	21	0	96
Lane Flow Rate	464	58	347	265	201	23	146	104
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	1.064	0.116	0.779	0.526	0.482	0.05	0.346	0.225
Departure Headway (Hd)	8.254	7.225	8.392	7.437	8.969	8.169	8.886	8.083
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	441	499	433	488	404	441	408	447
Service Time	5.954	4.925	6.092	5.137	6.669	5.869	6.586	5.783
HCM Lane V/C Ratio	1.052	0.116	0.801	0.543	0.498	0.052	0.358	0.233
HCM Control Delay	89.8	10.9	34.9	18.1	19.7	11.3	16.2	13.1
HCM Lane LOS	F	B	D	C	C	B	C	B
HCM 95th-tile Q	15.1	0.4	6.7	3	2.5	0.2	1.5	0.9

HCM 6th TWSC
2: 1150 East & 11200 North

03/09/2021

Intersection												
Int Delay, s/veh	2.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗	↖		↕			↕	
Traffic Vol, veh/h	92	538	11	3	478	30	10	0	4	21	0	65
Future Vol, veh/h	92	538	11	3	478	30	10	0	4	21	0	65
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	100	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	100	585	12	3	520	33	11	0	4	23	0	71

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	553	0	0	597	0	0	1369	1350	591	1319	1323	520
Stage 1	-	-	-	-	-	-	791	791	-	526	526	-
Stage 2	-	-	-	-	-	-	578	559	-	793	797	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1017	-	-	980	-	-	124	150	507	134	156	556
Stage 1	-	-	-	-	-	-	383	401	-	535	529	-
Stage 2	-	-	-	-	-	-	501	511	-	382	399	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1017	-	-	980	-	-	100	135	507	123	140	556
Mov Cap-2 Maneuver	-	-	-	-	-	-	100	135	-	123	140	-
Stage 1	-	-	-	-	-	-	345	362	-	483	527	-
Stage 2	-	-	-	-	-	-	436	509	-	341	360	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.3			0.1			36.3			22.4		
HCM LOS							E			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	130	1017	-	-	980	-	-	299
HCM Lane V/C Ratio	0.117	0.098	-	-	0.003	-	-	0.313
HCM Control Delay (s)	36.3	8.9	-	-	8.7	-	-	22.4
HCM Lane LOS	E	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.4	0.3	-	-	0	-	-	1.3

Intersection												
Int Delay, s/veh	19.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗	↖		↔		↖	↗	
Traffic Vol, veh/h	275	576	12	3	460	90	14	0	1	64	0	196
Future Vol, veh/h	275	576	12	3	460	90	14	0	1	64	0	196
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	100	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	299	626	13	3	500	98	15	0	1	70	0	213

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	598	0	0	639	0	0	1893	1835	633	1737	1743	500
Stage 1	-	-	-	-	-	-	1231	1231	-	506	506	-
Stage 2	-	-	-	-	-	-	662	604	-	1231	1237	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	979	-	-	945	-	-	53	76	480	~ 68	87	571
Stage 1	-	-	-	-	-	-	217	250	-	549	540	-
Stage 2	-	-	-	-	-	-	451	488	-	217	248	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	979	-	-	945	-	-	25	53	480	~ 52	60	571
Mov Cap-2 Maneuver	-	-	-	-	-	-	25	53	-	~ 52	60	-
Stage 1	-	-	-	-	-	-	151	174	-	382	538	-
Stage 2	-	-	-	-	-	-	282	487	-	150	172	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.3	0	259.4	101.9
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	27	979	-	-	945	-	-	52	571
HCM Lane V/C Ratio	0.604	0.305	-	-	0.003	-	-	1.338	0.373
HCM Control Delay (s)	259.4	10.3	-	-	8.8	-	-	\$ 368.1	15
HCM Lane LOS	F	B	-	-	A	-	-	F	C
HCM 95th %tile Q(veh)	1.9	1.3	-	-	0	-	-	6.3	1.7

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

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↘↗		↘	↑	↑	↘
Traffic Vol, veh/h	19	8	12	324	222	26
Future Vol, veh/h	19	8	12	324	222	26
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	-	100	-	-	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	21	9	13	352	241	28

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	619	241	269	0	-	0
Stage 1	241	-	-	-	-	-
Stage 2	378	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	452	798	1295	-	-	-
Stage 1	799	-	-	-	-	-
Stage 2	693	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	447	798	1295	-	-	-
Mov Cap-2 Maneuver	447	-	-	-	-	-
Stage 1	791	-	-	-	-	-
Stage 2	693	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.4	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1295	-	514	-	-
HCM Lane V/C Ratio	0.01	-	0.057	-	-
HCM Control Delay (s)	7.8	-	12.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Intersection Delay, s/veh	15
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖	↗		↖	↗		↖	↗
Traffic Vol, veh/h	51	125	160	15	142	16	144	99	13	5	125	104
Future Vol, veh/h	51	125	160	15	142	16	144	99	13	5	125	104
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	61	151	193	18	171	19	173	119	16	6	151	125
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	13.7	14.2	19.8	12.3
HCM LOS	B	B	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	59%	0%	29%	0%	10%	0%	4%	0%
Vol Thru, %	41%	0%	71%	0%	90%	0%	96%	0%
Vol Right, %	0%	100%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	243	13	176	160	157	16	130	104
LT Vol	144	0	51	0	15	0	5	0
Through Vol	99	0	125	0	142	0	125	0
RT Vol	0	13	0	160	0	16	0	104
Lane Flow Rate	293	16	212	193	189	19	157	125
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.596	0.027	0.42	0.336	0.387	0.035	0.313	0.225
Departure Headway (Hd)	7.328	6.31	7.133	6.27	7.36	6.594	7.195	6.458
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	492	567	505	573	488	542	500	555
Service Time	5.072	4.054	4.877	4.014	5.111	4.344	4.942	4.204
HCM Lane V/C Ratio	0.596	0.028	0.42	0.337	0.387	0.035	0.314	0.225
HCM Control Delay	20.4	9.2	15	12.2	14.7	9.6	13.2	11.1
HCM Lane LOS	C	A	B	B	B	A	B	B
HCM 95th-tile Q	3.8	0.1	2.1	1.5	1.8	0.1	1.3	0.9

HCM 6th TWSC
2: 1150 East & 11200 North

03/09/2021

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗	↖		↕			↕	
Traffic Vol, veh/h	28	311	2	4	376	10	10	0	2	23	0	70
Future Vol, veh/h	28	311	2	4	376	10	10	0	2	23	0	70
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	100	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	34	375	2	5	453	12	12	0	2	28	0	84

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	465	0	0	377	0	0	955	919	376	908	908	453
Stage 1	-	-	-	-	-	-	444	444	-	463	463	-
Stage 2	-	-	-	-	-	-	511	475	-	445	445	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1096	-	-	1181	-	-	238	271	670	256	275	607
Stage 1	-	-	-	-	-	-	593	575	-	579	564	-
Stage 2	-	-	-	-	-	-	545	557	-	592	575	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1096	-	-	1181	-	-	199	262	670	248	265	607
Mov Cap-2 Maneuver	-	-	-	-	-	-	199	262	-	248	265	-
Stage 1	-	-	-	-	-	-	575	557	-	561	562	-
Stage 2	-	-	-	-	-	-	467	555	-	572	557	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.7			0.1			22.1			15.7		
HCM LOS							C			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	225	1096	-	-	1181	-	-	447
HCM Lane V/C Ratio	0.064	0.031	-	-	0.004	-	-	0.251
HCM Control Delay (s)	22.1	8.4	-	-	8.1	-	-	15.7
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	1

Intersection												
Int Delay, s/veh	6.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	83	270	1	4	425	26	13	0	3	68	0	208
Future Vol, veh/h	83	270	1	4	425	26	13	0	3	68	0	208
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	100	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	100	325	1	5	512	31	16	0	4	82	0	251

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	543	0	0	326	0	0	1189	1079	326	1050	1048	512
Stage 1	-	-	-	-	-	-	526	526	-	522	522	-
Stage 2	-	-	-	-	-	-	663	553	-	528	526	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1026	-	-	1234	-	-	165	218	715	205	228	562
Stage 1	-	-	-	-	-	-	535	529	-	538	531	-
Stage 2	-	-	-	-	-	-	450	514	-	534	529	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1026	-	-	1234	-	-	84	196	715	188	205	562
Mov Cap-2 Maneuver	-	-	-	-	-	-	84	196	-	188	205	-
Stage 1	-	-	-	-	-	-	483	478	-	486	529	-
Stage 2	-	-	-	-	-	-	248	512	-	480	478	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	2.1			0.1			48.9			21.8		
HCM LOS							E			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	101	1026	-	-	1234	-	-	188	562
HCM Lane V/C Ratio	0.191	0.097	-	-	0.004	-	-	0.436	0.446
HCM Control Delay (s)	48.9	8.9	-	-	7.9	-	-	38.2	16.5
HCM Lane LOS	E	A	-	-	A	-	-	E	C
HCM 95th %tile Q(veh)	0.7	0.3	-	-	0	-	-	2	2.3

Intersection						
Int Delay, s/veh	0.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y		Y	↑	↑	Y
Traffic Vol, veh/h	20	9	4	163	225	8
Future Vol, veh/h	20	9	4	163	225	8
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	-	100	-	-	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	11	5	196	271	10

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	477	271	281	0	-	0
Stage 1	271	-	-	-	-	-
Stage 2	206	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	547	768	1282	-	-	-
Stage 1	775	-	-	-	-	-
Stage 2	829	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	545	768	1282	-	-	-
Mov Cap-2 Maneuver	545	-	-	-	-	-
Stage 1	772	-	-	-	-	-
Stage 2	829	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.4	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1282	-	599	-	-
HCM Lane V/C Ratio	0.004	-	0.058	-	-
HCM Control Delay (s)	7.8	-	11.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Intersection Delay, s/veh	52.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖	↗		↖	↗		↖	↗
Traffic Vol, veh/h	153	186	258	27	167	22	268	183	57	20	122	103
Future Vol, veh/h	153	186	258	27	167	22	268	183	57	20	122	103
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	166	202	280	29	182	24	291	199	62	22	133	112
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	33.3	20.4	106.2	15.8
HCM LOS	D	C	F	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	59%	0%	45%	0%	14%	0%	14%	0%
Vol Thru, %	41%	0%	55%	0%	86%	0%	86%	0%
Vol Right, %	0%	100%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	451	57	339	258	194	22	142	103
LT Vol	268	0	153	0	27	0	20	0
Through Vol	183	0	186	0	167	0	122	0
RT Vol	0	57	0	258	0	22	0	103
Lane Flow Rate	490	62	368	280	211	24	154	112
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	1.147	0.127	0.842	0.569	0.514	0.053	0.375	0.248
Departure Headway (Hd)	8.424	7.395	8.667	7.707	9.283	8.478	9.176	8.37
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	431	485	420	471	390	425	395	432
Service Time	6.165	5.135	6.367	5.407	6.983	6.178	6.876	6.07
HCM Lane V/C Ratio	1.137	0.128	0.876	0.594	0.541	0.056	0.39	0.259
HCM Control Delay	118.2	11.2	43.3	20.1	21.4	11.7	17.3	13.8
HCM Lane LOS	F	B	E	C	C	B	C	B
HCM 95th-tile Q	18	0.4	8.1	3.5	2.8	0.2	1.7	1

HCM 6th TWSC
2: 1150 East & 11200 North

03/09/2021

Intersection												
Int Delay, s/veh	2.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗	↖		↕			↕	
Traffic Vol, veh/h	92	571	12	3	505	30	11	0	4	21	0	65
Future Vol, veh/h	92	571	12	3	505	30	11	0	4	21	0	65
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	100	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	100	621	13	3	549	33	12	0	4	23	0	71

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	582	0	0	634	0	0	1435	1416	628	1385	1389	549
Stage 1	-	-	-	-	-	-	828	828	-	555	555	-
Stage 2	-	-	-	-	-	-	607	588	-	830	834	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	992	-	-	949	-	-	111	137	483	121	142	535
Stage 1	-	-	-	-	-	-	365	386	-	516	513	-
Stage 2	-	-	-	-	-	-	483	496	-	364	383	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	992	-	-	949	-	-	89	123	483	110	127	535
Mov Cap-2 Maneuver	-	-	-	-	-	-	89	123	-	110	127	-
Stage 1	-	-	-	-	-	-	328	347	-	464	511	-
Stage 2	-	-	-	-	-	-	418	495	-	324	344	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.2	0	41.8	24.7
HCM LOS			E	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	114	992	-	-	949	-	-	275
HCM Lane V/C Ratio	0.143	0.101	-	-	0.003	-	-	0.34
HCM Control Delay (s)	41.8	9	-	-	8.8	-	-	24.7
HCM Lane LOS	E	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.5	0.3	-	-	0	-	-	1.5

HCM 6th TWSC
3: 5600 West & 11200 North

03/09/2021

Intersection												
Int Delay, s/veh	23.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗	↖		↔		↖	↗	
Traffic Vol, veh/h	275	610	13	3	488	90	15	0	1	64	0	196
Future Vol, veh/h	275	610	13	3	488	90	15	0	1	64	0	196
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	100	-	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	299	663	14	3	530	98	16	0	1	70	0	213

Major/Minor	Major1		Major2		Minor1			Minor2				
Conflicting Flow All	628	0	0	677	0	0	1960	1902	670	1805	1811	530
Stage 1	-	-	-	-	-	-	1268	1268	-	536	536	-
Stage 2	-	-	-	-	-	-	692	634	-	1269	1275	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	954	-	-	915	-	-	48	69	457	~ 61	79	549
Stage 1	-	-	-	-	-	-	207	240	-	529	523	-
Stage 2	-	-	-	-	-	-	434	473	-	206	238	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	954	-	-	915	-	-	22	47	457	~ 46	54	549
Mov Cap-2 Maneuver	-	-	-	-	-	-	22	47	-	~ 46	54	-
Stage 1	-	-	-	-	-	-	142	165	-	363	521	-
Stage 2	-	-	-	-	-	-	265	472	-	141	164	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.2	0	\$ 343.9	124.2
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	23	954	-	-	915	-	-	46	549
HCM Lane V/C Ratio	0.756	0.313	-	-	0.004	-	-	1.512	0.388
HCM Control Delay (s)	\$ 343.9	10.5	-	-	8.9	-	-	\$ 456.5	15.7
HCM Lane LOS	F	B	-	-	A	-	-	F	C
HCM 95th %tile Q(veh)	2.2	1.3	-	-	0	-	-	6.8	1.8

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

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔		↔	↑	↑	↔
Traffic Vol, veh/h	19	8	12	347	238	26
Future Vol, veh/h	19	8	12	347	238	26
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	-	100	-	-	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	21	9	13	377	259	28

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	662	259	287	0	-	0
Stage 1	259	-	-	-	-	-
Stage 2	403	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	427	780	1275	-	-	-
Stage 1	784	-	-	-	-	-
Stage 2	675	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	423	780	1275	-	-	-
Mov Cap-2 Maneuver	423	-	-	-	-	-
Stage 1	776	-	-	-	-	-
Stage 2	675	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.8	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1275	-	489	-	-
HCM Lane V/C Ratio	0.01	-	0.06	-	-
HCM Control Delay (s)	7.9	-	12.8	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-



**Appendix D With Site and With Improvements
Intersection Analyses**

Intersection	
Intersection Delay, s/veh	14.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↶	↑	↷	↶	↷		↶	↷		↶	↷	
Traffic Vol, veh/h	48	119	153	14	134	15	139	93	12	5	117	97
Future Vol, veh/h	48	119	153	14	134	15	139	93	12	5	117	97
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	58	143	184	17	161	18	167	112	14	6	141	117
Number of Lanes	1	1	1	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	3
HCM Control Delay	12.8	14.9	14.2	17.3
HCM LOS	B	B	B	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	100%	0%
Vol Thru, %	0%	89%	0%	100%	0%	0%	90%	0%	55%
Vol Right, %	0%	11%	0%	0%	100%	0%	10%	0%	45%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	139	105	48	119	153	14	149	5	214
LT Vol	139	0	48	0	0	14	0	5	0
Through Vol	0	93	0	119	0	0	134	0	117
RT Vol	0	12	0	0	153	0	15	0	97
Lane Flow Rate	167	127	58	143	184	17	180	6	258
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.37	0.259	0.126	0.293	0.34	0.039	0.384	0.013	0.516
Departure Headway (Hd)	7.952	7.362	7.866	7.356	6.641	8.294	7.708	8.039	7.207
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	452	487	455	487	540	431	467	445	500
Service Time	5.709	5.119	5.623	5.112	4.397	6.058	5.472	5.796	4.964
HCM Lane V/C Ratio	0.369	0.261	0.127	0.294	0.341	0.039	0.385	0.013	0.516
HCM Control Delay	15.3	12.7	11.8	13.2	12.8	11.4	15.2	10.9	17.5
HCM Lane LOS	C	B	B	B	B	B	C	B	C
HCM 95th-tile Q	1.7	1	0.4	1.2	1.5	0.1	1.8	0	2.9

Intersection	
Intersection Delay, s/veh	23.8
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↶	↑	↷	↶	↷		↶	↷		↶	↷	
Traffic Vol, veh/h	143	176	244	25	160	21	255	172	53	19	115	96
Future Vol, veh/h	143	176	244	25	160	21	255	172	53	19	115	96
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	155	191	265	27	174	23	277	187	58	21	125	104
Number of Lanes	1	1	1	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	3
HCM Control Delay	20.3	22.2	28.4	24.2
HCM LOS	C	C	D	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	100%	0%
Vol Thru, %	0%	76%	0%	100%	0%	0%	88%	0%	55%
Vol Right, %	0%	24%	0%	0%	100%	0%	12%	0%	45%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	255	225	143	176	244	25	181	19	211
LT Vol	255	0	143	0	0	25	0	19	0
Through Vol	0	172	0	176	0	0	160	0	115
RT Vol	0	53	0	0	244	0	21	0	96
Lane Flow Rate	277	245	155	191	265	27	197	21	229
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.721	0.589	0.403	0.468	0.596	0.078	0.534	0.059	0.596
Departure Headway (Hd)	9.36	8.676	9.33	8.813	8.09	10.372	9.765	10.205	9.358
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	385	416	385	407	446	345	368	350	385
Service Time	7.13	6.447	7.099	6.582	5.857	8.156	7.549	7.986	7.139
HCM Lane V/C Ratio	0.719	0.589	0.403	0.469	0.594	0.078	0.535	0.06	0.595
HCM Control Delay	33	23.2	18.3	19.2	22.2	14	23.3	13.6	25.1
HCM Lane LOS	D	C	C	C	C	B	C	B	D
HCM 95th-tile Q	5.5	3.7	1.9	2.4	3.8	0.3	3	0.2	3.7

Intersection	
Intersection Delay, s/veh	15.7
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↗		↖	↗		↖	↗	
Traffic Vol, veh/h	51	125	160	15	142	16	144	99	13	5	125	104
Future Vol, veh/h	51	125	160	15	142	16	144	99	13	5	125	104
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	61	151	193	18	171	19	173	119	16	6	151	125
Number of Lanes	1	1	1	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	3
HCM Control Delay	13.5	16.1	15	19.5
HCM LOS	B	C	B	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	100%	0%
Vol Thru, %	0%	88%	0%	100%	0%	0%	90%	0%	55%
Vol Right, %	0%	12%	0%	0%	100%	0%	10%	0%	45%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	144	112	51	125	160	15	158	5	229
LT Vol	144	0	51	0	0	15	0	5	0
Through Vol	0	99	0	125	0	0	142	0	125
RT Vol	0	13	0	0	160	0	16	0	104
Lane Flow Rate	173	135	61	151	193	18	190	6	276
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.395	0.285	0.138	0.318	0.368	0.043	0.421	0.014	0.57
Departure Headway (Hd)	8.2	7.608	8.108	7.596	6.879	8.556	7.969	8.268	7.434
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	437	471	441	471	520	417	449	432	483
Service Time	5.974	5.381	5.879	5.366	4.649	6.337	5.749	6.04	5.206
HCM Lane V/C Ratio	0.396	0.287	0.138	0.321	0.371	0.043	0.423	0.014	0.571
HCM Control Delay	16.3	13.4	12.2	13.9	13.6	11.7	16.5	11.2	19.7
HCM Lane LOS	C	B	B	B	B	B	C	B	C
HCM 95th-tile Q	1.9	1.2	0.5	1.4	1.7	0.1	2.1	0	3.5

Intersection	
Intersection Delay, s/veh	28.8
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↗		↖	↗		↖	↗	
Traffic Vol, veh/h	153	186	258	27	167	22	268	183	57	20	122	103
Future Vol, veh/h	153	186	258	27	167	22	268	183	57	20	122	103
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	166	202	280	29	182	24	291	199	62	22	133	112
Number of Lanes	1	1	1	1	1	0	1	1	0	1	1	0

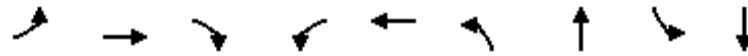
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	3
HCM Control Delay	23.8	25.6	35.7	29.6
HCM LOS	C	D	E	D

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	100%	0%
Vol Thru, %	0%	76%	0%	100%	0%	0%	88%	0%	54%
Vol Right, %	0%	24%	0%	0%	100%	0%	12%	0%	46%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	268	240	153	186	258	27	189	20	225
LT Vol	268	0	153	0	0	27	0	20	0
Through Vol	0	183	0	186	0	0	167	0	122
RT Vol	0	57	0	0	258	0	22	0	103
Lane Flow Rate	291	261	166	202	280	29	205	22	245
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.799	0.666	0.454	0.523	0.669	0.089	0.591	0.065	0.674
Departure Headway (Hd)	9.88	9.192	9.838	9.319	8.592	10.975	10.365	10.77	9.919
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	367	394	368	388	423	327	349	333	364
Service Time	7.6	6.912	7.557	7.038	6.311	8.734	8.124	8.526	7.674
HCM Lane V/C Ratio	0.793	0.662	0.451	0.521	0.662	0.089	0.587	0.066	0.673
HCM Control Delay	42.2	28.5	20.5	21.8	27.1	14.8	27.1	14.3	31
HCM Lane LOS	E	D	C	C	D	B	D	B	D
HCM 95th-tile Q	6.8	4.7	2.3	2.9	4.8	0.3	3.6	0.2	4.7

Timings

1: 1600 East & 11200 North

03/09/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↖	↑	↗	↖	↗	↖	↗	↖	↗
Traffic Volume (vph)	51	125	160	15	142	144	99	5	125
Future Volume (vph)	51	125	160	15	142	144	99	5	125
Turn Type	pm+pt	NA	Perm	Perm	NA	pm+pt	NA	Perm	NA
Protected Phases	7	4			8	5	2		6
Permitted Phases	4		4	8		2		6	
Detector Phase	7	4	4	8	8	5	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	12.0	39.0	39.0	27.0	27.0	17.0	51.0	34.0	34.0
Total Split (%)	13.3%	43.3%	43.3%	30.0%	30.0%	18.9%	56.7%	37.8%	37.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead			Lag	Lag	Lead		Lag	Lag
Lead-Lag Optimize?	Yes			Yes	Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	Min
Act Effct Green (s)	18.1	18.1	18.1	12.3	12.3	25.8	25.8	14.3	14.3
Actuated g/C Ratio	0.33	0.33	0.33	0.22	0.22	0.47	0.47	0.26	0.26
v/c Ratio	0.15	0.25	0.30	0.06	0.46	0.32	0.16	0.02	0.56
Control Delay	15.2	16.0	4.1	23.4	26.4	11.1	9.1	20.2	22.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.2	16.0	4.1	23.4	26.4	11.1	9.1	20.2	22.6
LOS	B	B	A	C	C	B	A	C	C
Approach Delay		10.2			26.1		10.3		22.6
Approach LOS		B			C		B		C

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 54.7

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.56

Intersection Signal Delay: 15.9

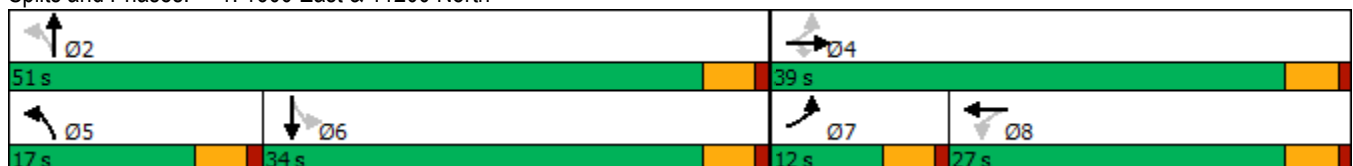
Intersection LOS: B

Intersection Capacity Utilization 48.5%

ICU Level of Service A

Analysis Period (min) 15

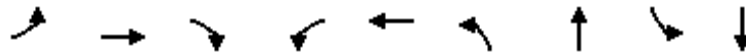
Splits and Phases: 1: 1600 East & 11200 North



Timings

1: 1600 East & 11200 North

03/09/2021

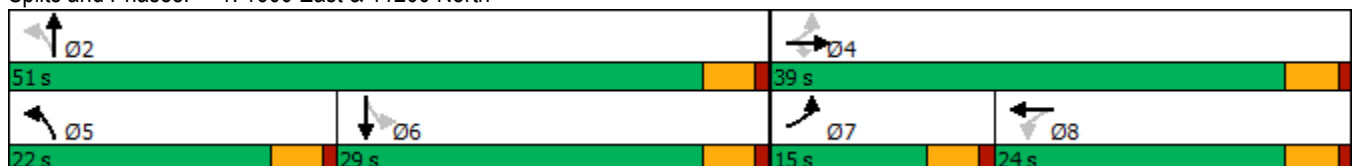


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↖	↑	↗	↖	↗	↖	↗	↖	↗
Traffic Volume (vph)	153	186	258	27	167	268	183	20	122
Future Volume (vph)	153	186	258	27	167	268	183	20	122
Turn Type	pm+pt	NA	Perm	Perm	NA	pm+pt	NA	Perm	NA
Protected Phases	7	4			8	5	2		6
Permitted Phases	4		4	8		2		6	
Detector Phase	7	4	4	8	8	5	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	15.0	39.0	39.0	24.0	24.0	22.0	51.0	29.0	29.0
Total Split (%)	16.7%	43.3%	43.3%	26.7%	26.7%	24.4%	56.7%	32.2%	32.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead			Lag	Lag	Lead		Lag	Lag
Lead-Lag Optimize?	Yes			Yes	Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	Min
Act Effct Green (s)	27.2	27.2	27.2	12.8	12.8	33.2	33.2	13.5	13.5
Actuated g/C Ratio	0.39	0.39	0.39	0.18	0.18	0.48	0.48	0.19	0.19
v/c Ratio	0.40	0.28	0.36	0.13	0.60	0.55	0.30	0.10	0.66
Control Delay	18.9	17.2	3.8	27.9	34.9	16.1	11.4	26.2	31.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.9	17.2	3.8	27.9	34.9	16.1	11.4	26.2	31.1
LOS	B	B	A	C	C	B	B	C	C
Approach Delay		11.8			34.1		13.9		30.7
Approach LOS		B			C		B		C

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 69.7
 Natural Cycle: 65
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.66
 Intersection Signal Delay: 18.5
 Intersection LOS: B
 Intersection Capacity Utilization 61.2%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 1: 1600 East & 11200 North



Timings

3: 5600 West & 11200 North

03/11/2021

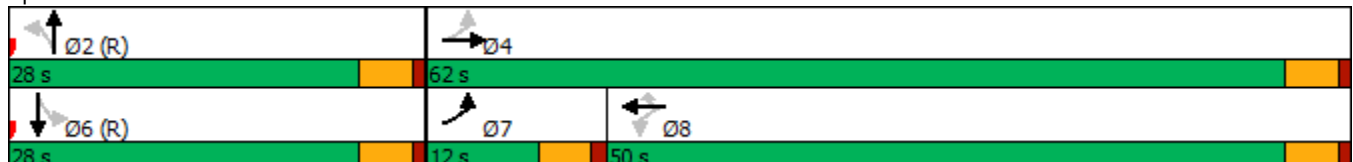


Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations	↖	↗	↖	↗	↖	↖	↗	↖	↗
Traffic Volume (vph)	83	254	4	402	26	12	0	68	0
Future Volume (vph)	83	254	4	402	26	12	0	68	0
Turn Type	pm+pt	NA	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases	7	4		8			2		6
Permitted Phases	4		8		8	2		6	
Detector Phase	7	4	8	8	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	12.0	62.0	50.0	50.0	50.0	28.0	28.0	28.0	28.0
Total Split (%)	13.3%	68.9%	55.6%	55.6%	55.6%	31.1%	31.1%	31.1%	31.1%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag	Lag	Lag				
Lead-Lag Optimize?	Yes		Yes	Yes	Yes				
Recall Mode	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)	40.1	40.1	30.5	30.5	30.5	40.9	40.9	40.9	40.9
Actuated g/C Ratio	0.45	0.45	0.34	0.34	0.34	0.45	0.45	0.45	0.45
v/c Ratio	0.37	0.37	0.01	0.77	0.05	0.03	0.00	0.13	0.26
Control Delay	15.9	16.3	15.8	34.3	0.4	19.2	0.0	19.2	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.9	16.3	15.8	34.3	0.4	19.2	0.0	19.2	0.7
LOS	B	B	B	C	A	B	A	B	A
Approach Delay		16.2		32.1			15.0		5.2
Approach LOS		B		C			B		A

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.77
 Intersection Signal Delay: 19.8
 Intersection LOS: B
 Intersection Capacity Utilization 49.9%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 3: 5600 West & 11200 North



Timings

3: 5600 West & 11200 North

03/11/2021

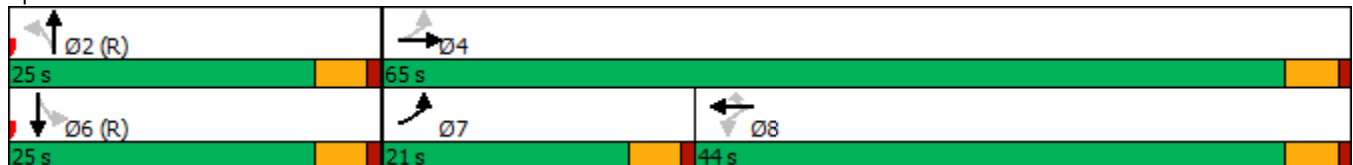


Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations	↖	↗	↖	↗	↖	↖	↗	↖	↗
Traffic Volume (vph)	275	576	3	460	90	14	0	64	0
Future Volume (vph)	275	576	3	460	90	14	0	64	0
Turn Type	pm+pt	NA	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases	7	4		8			2		6
Permitted Phases	4		8		8	2		6	
Detector Phase	7	4	8	8	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	21.0	65.0	44.0	44.0	44.0	25.0	25.0	25.0	25.0
Total Split (%)	23.3%	72.2%	48.9%	48.9%	48.9%	27.8%	27.8%	27.8%	27.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag	Lag	Lag				
Lead-Lag Optimize?	Yes		Yes	Yes	Yes				
Recall Mode	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)	50.5	50.5	30.7	30.7	30.7	30.5	30.5	30.5	30.5
Actuated g/C Ratio	0.56	0.56	0.34	0.34	0.34	0.34	0.34	0.34	0.34
v/c Ratio	0.71	0.61	0.01	0.79	0.17	0.04	0.00	0.15	0.25
Control Delay	22.4	15.1	16.0	35.5	7.0	25.6	0.0	25.8	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.4	15.1	16.0	35.5	7.0	25.6	0.0	25.8	0.7
LOS	C	B	B	D	A	C	A	C	A
Approach Delay		17.4		30.7			24.0		6.9
Approach LOS		B		C			C		A

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.79
 Intersection Signal Delay: 20.2
 Intersection LOS: C
 Intersection Capacity Utilization 62.8%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 3: 5600 West & 11200 North



Timings

3: 5600 West & 11200 North

03/09/2021

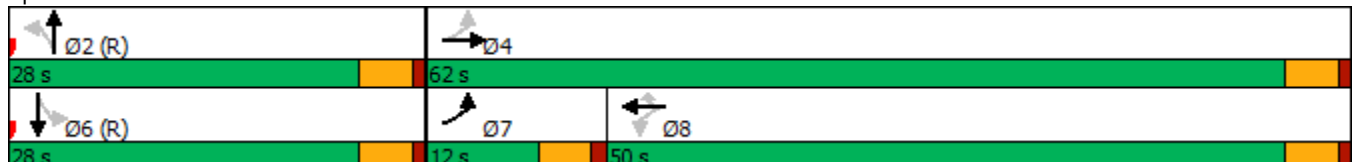


Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	83	270	4	425	26	13	0	68	0
Future Volume (vph)	83	270	4	425	26	13	0	68	0
Turn Type	pm+pt	NA	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases	7	4		8			2		6
Permitted Phases	4		8		8	2		6	
Detector Phase	7	4	8	8	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	12.0	62.0	50.0	50.0	50.0	28.0	28.0	28.0	28.0
Total Split (%)	13.3%	68.9%	55.6%	55.6%	55.6%	31.1%	31.1%	31.1%	31.1%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag	Lag	Lag				
Lead-Lag Optimize?	Yes		Yes	Yes	Yes				
Recall Mode	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)	41.7	41.7	32.1	32.1	32.1	39.3	39.3	39.3	39.3
Actuated g/C Ratio	0.46	0.46	0.36	0.36	0.36	0.44	0.44	0.44	0.44
v/c Ratio	0.37	0.38	0.01	0.77	0.05	0.04	0.00	0.13	0.27
Control Delay	15.0	15.5	14.8	33.3	0.4	20.5	0.0	20.4	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.0	15.5	14.8	33.3	0.4	20.5	0.0	20.4	0.7
LOS	B	B	B	C	A	C	A	C	A
Approach Delay		15.4		31.2			16.4		5.6
Approach LOS		B		C			B		A

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.77
 Intersection Signal Delay: 19.5
 Intersection LOS: B
 Intersection Capacity Utilization 51.1%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 3: 5600 West & 11200 North



Timings

3: 5600 West & 11200 North

03/09/2021

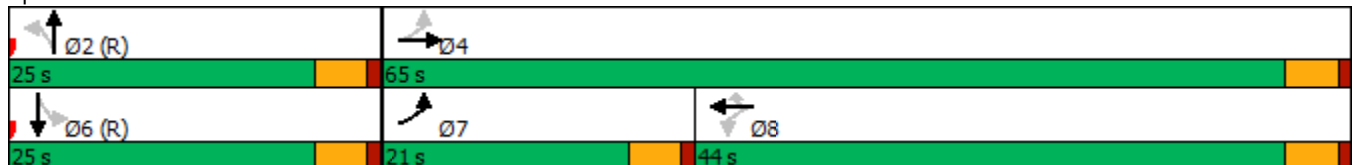


Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations	↖	↗	↖	↗	↖	↖	↗	↖	↗
Traffic Volume (vph)	275	610	3	488	90	15	0	64	0
Future Volume (vph)	275	610	3	488	90	15	0	64	0
Turn Type	pm+pt	NA	Perm	NA	Perm	Perm	NA	Perm	NA
Protected Phases	7	4		8			2		6
Permitted Phases	4		8		8	2		6	
Detector Phase	7	4	8	8	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	21.0	65.0	44.0	44.0	44.0	25.0	25.0	25.0	25.0
Total Split (%)	23.3%	72.2%	48.9%	48.9%	48.9%	27.8%	27.8%	27.8%	27.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag	Lag	Lag				
Lead-Lag Optimize?	Yes		Yes	Yes	Yes				
Recall Mode	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)	51.5	51.5	31.8	31.8	31.8	29.5	29.5	29.5	29.5
Actuated g/C Ratio	0.57	0.57	0.35	0.35	0.35	0.33	0.33	0.33	0.33
v/c Ratio	0.72	0.64	0.01	0.81	0.16	0.05	0.00	0.15	0.25
Control Delay	24.0	15.1	15.7	35.8	6.8	26.1	0.0	26.5	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.0	15.1	15.7	35.8	6.8	26.1	0.0	26.5	0.7
LOS	C	B	B	D	A	C	A	C	A
Approach Delay		17.8		31.2			24.5		7.1
Approach LOS		B		C			C		A

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
 Natural Cycle: 65
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.81
 Intersection Signal Delay: 20.7
 Intersection LOS: C
 Intersection Capacity Utilization 64.6%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 3: 5600 West & 11200 North





**State of Utah
Department of Transportation**

Cooperative Agreement Phased Development Improvements	Development Name		
Application ID	Contract #	Tracking #	Date Executed

This **AGREEMENT**, made and entered into on the executed date, by and between the **UTAH DEPARTMENT OF TRANSPORTATION**, hereinafter referred to as “**UDOT**”, _____, hereinafter referred to as “**LOCAL GOVERNMENT**”, and _____, hereinafter referred to as the “**DEVELOPER**”.

RECITALS

WHEREAS, **UDOT** owns state highway right-of-way for State Route _____; and

WHEREAS, the parties desire to enter into an agreement to establish the scope and schedule of when all improvements will be required within the state route; and

WHEREAS, **UDOT** is willing to permit the installation of an access within _____ at _____; and

WHEREAS, the **DEVELOPER** is required to construct traffic mitigation described herein; and

WHEREAS, this Agreement is made to set forth the terms and conditions for the installation of these mitigation improvements within **UDOT**’s right-of-way.

AGREEMENT

NOW THEREFORE, it is agreed by and between the parties as follows:

- I. Access for the **DEVELOPER**’s site in the **UDOT** right-of-way shall be allowed only by permit issued by **UDOT** in conformance with Utah Administrative Codes R-930-6.
- II. Upon receipt of an encroachment permit from **UDOT**, the **DEVELOPER** will have temporary access within _____ right-of-way at _____ for the sole purpose of the mitigation improvements and access described in “Exhibit A”, which is incorporated by reference.
- III. The **DEVELOPER** will be responsible for all construction materials and design of the traffic mitigation improvements in accordance with the plan set in “Exhibit A” and at no cost to **UDOT** and the **LOCAL GOVERNMENT**. The **DEVELOPER** will construct the traffic

mitigation improvements in strict compliance with the most current UDOT standards at the time of installation. Any part of the plan set that must be re-designed to comply with the UDOT standards will be at the **DEVELOPER's** expense.

- IV. The **DEVELOPER** must obtain **UDOT's** written approval of the traffic mitigation improvements and traffic control plan in accordance with the MUTCD and applicable rules.
- V. **UDOT** will remain the owner of the real properties on which the traffic mitigation improvements are installed. Any changes within the UDOT right-of-way will be reviewed and approved by **UDOT** before work may commence.
- VI. Commencement of the design and subsequent construction of the traffic mitigation improvements shall start when the following conditions are met:
 - VII. The **LOCAL GOVERNMENT** will not issue any permits to the **DEVELOPER** after the conditions included in section VI until the design and subsequent construction of the traffic mitigation improvements are commenced.
 - VIII. The **DEVELOPER** may assign this Agreement to a subsequent property owner with UDOT's prior consent. Any transfer of the property will require the **DEVELOPER** to provide written notice to UDOT. The obligations in this Agreement shall apply to any successors in interest to the parties. The **DEVELOPER** may hire a contractor to perform the installation of the traffic mitigation improvements.
 - IX. The **DEVELOPER** agrees to indemnify, defend, save harmless, and release **UDOT** and **LOCAL GOVERNMENT** from and against any and all loss, damages, injury, liability, suits, claims and proceedings arising out of the performance of this Agreement, except where the claim arises out of **UDOT's** and **LOCAL GOVERNMENT's** sole negligence. This provision shall survive the termination of this Agreement. **DEVELOPER** shall indemnify **UDOT** and **LOCAL GOVERNMENT** for any losses, damages, injury, liability, claims, suits and proceedings arising out of the access improvements installed by the **DEVELOPER** within **UDOT's** right-of-way.
 - X. This Agreement shall be governed by the laws of the State of Utah both as to interpretation and performance.

X. This Agreement in no way creates any type of agency relationship, joint venture, or partnership between the **DEVELOPER** and **UDOT** and the **LOCAL GOVERNMENT**.

XI. This Agreement, together with all exhibits and attachments, constitutes the entire agreement between the parties and supersedes any prior understandings, agreements, or representations, verbal or written. No subsequent modification or amendments will be valid unless in writing and signed by both parties.

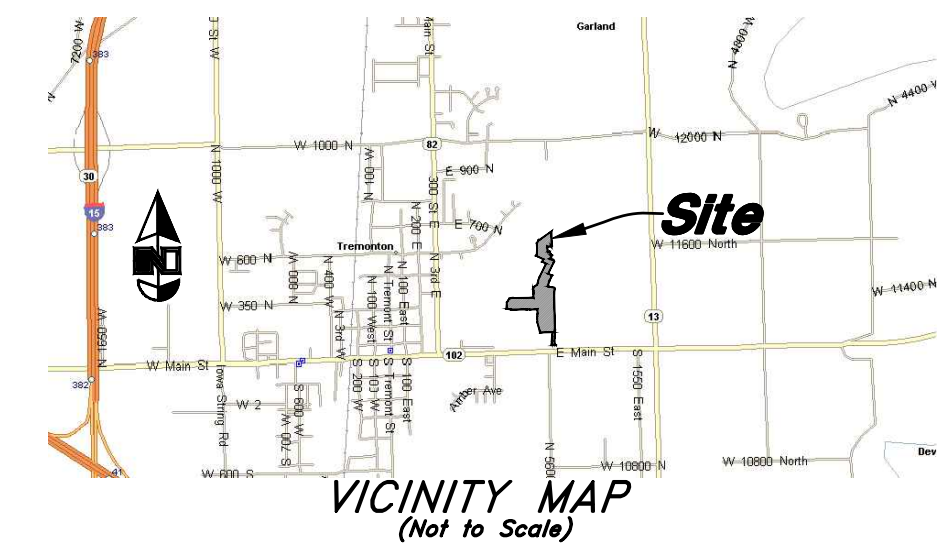
XII. Each party represents that it has the authority to enter into this Agreement.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by its duly authorized officers as of the day and year of the last signature.

				Utah Department of Transportation			
By		Date		By		Date	
				By		Date	
By		Date		By		Date	

Rivers Edge - Phase 1

A part of Section 2, T11N, R2W, SLB&M, U.S. Survey
Tremonton City, Box Elder County, Utah
June 2021



GENERAL NOTES:

- All Construction within the Main Street Right-of-Way shall meet UDOT Standards (See UDOT General Notes).
- All Construction shall meet Tremonton City Construction Standards and Specifications.
- Coordinate all utility connections to building with plumbing plans and building contractor.
- Verify depth and location of all existing utilities prior to constructing any new utility lines. Notify Civil Engineer of any discrepancies or conflicts prior to any connections being made.
- All catch basin and inlet box grates are to be bicycle proof.
- All inlet boxes located in curb and gutter are to be placed parallel to the curb and gutter and set under the frame and grate. Improperly placed boxes will be removed and replaced at no additional cost to the owner. Precast or cast in place boxes are acceptable.
- Any curb that holds water after construction will be removed and replaced until it will flow without holding water.
- Refer to the site electrical plan for details and locations of electrical lines, transformers, and light poles.
- Gas lines, telephone lines, and cable TV lines are not a part of these plans unless otherwise noted.
- Water meters are to be installed per city standards and specifications. It will be the contractor's responsibility to install all items required.
- Water lines, valves, fire hydrants, fittings, etc. are to be constructed as shown. Contractor is responsible to construct any vertical adjustments necessary to clear sewer, storm drain, or other utilities as necessary including valve boxes and hydrant spools to proper grade.
- Field verify all existing and/or proposed Roof Drain/Roof Drain down spout connections to Storm Water System with Civil, Plumbing & Architectural plans. Notify Engineer of any discrepancies.
- All gravity flow utility lines shall be installed prior to any pressurized utilities unless written permission is obtained from the engineer of record before construction begins.
- All construction within the UDOT right-of-way shall conform to the most current UDOT standard (including supplemental) drawings and specifications.
- The contractor is to obtain an encroachment permit from the applicable UDOT Region Permit office prior to commencing work within UDOT right-of-way. Working hour limitations will be listed in the limitations section of the encroachment permit.
- UDOT reserves the right, at its option, to install a raised median island or restrict the access to a right-in or right-out at any time.
- Owner, developer, and contractor are responsible for any damages directly or indirectly within the UDOT right-of-way as a result of development activities.
- Owner, developer, and/or contractor is required to hire an independent company for all testing within the UDOT right-of-way.
- All signs installed on the UDOT right-of-way must be high intensity grade (Type XI sheeting) with a B3 slip base. Install all signs per UDOT SN series Standard Drawings.
- Comply with the requirements of Utah Code 17-23-14 (Disturbed Corners - County surveyor to be notified - Coordination with certain state agencies).
- For asphalt construction within the UDOT ROW match existing, or the anticipated existing of 8 inches of UDOT-approved hot mix asphalt (HMA), PG-grade 64-34 asphalt binder, 1/2 inch nominal max, 7-75-115 gyration per UDOT standard specification 02741; over 6 inches untreated base course (UTBC) per UDOT specification 02721; over 18 inches granular borrow (GB) per UDOT specification 02056 (whichever is greater). Provide documentation of compaction from a UDOT-qualified laboratory.
- Flushing stations should be located at all dead-ends and should discharge into a storm drain box where possible. Where the SD system does not exist, a bubble-up catch basin should be used with a gravel bottom. This box should only be located at a high point in the curb, or into a sewer manhole at points lower than the Storm Drain. Additional flushing stations may be required at the direction of the Public Works Department.
- Refer to the Public Works Standards for details of the flushing and drain stations.

UTILITY PIPING MATERIALS:

- All piping to be installed per manufacturers recommendations. Refer to project specifications for more detailed information regarding materials, installation, etc.
-
- CULINARY SERVICE LATERALS**
- Culinary service laterals need to be 3/4" (200 PSI) CTS poly with a 14 gauge tracing wire along service line from Main to Property line.

WATER MAIN LINES AND FIRE LINES

- Pipe material as shown on utility plan view or to meet Tremonton Standards and Specifications.

SANITARY SEWER LINES

- All sewer piping to be Polyvinyl Chloride (PVC) sewer pipe, ASTM D 3034, Type PSM, SDR 35
- All sewer lines to be marked with marking tape per Tremonton Standards.

STORM DRAIN LINES

- 15" to 21" pipes - Concrete Pipe, ASTM C14, Class III up to 13' of cover. For greater than 13' feet of cover, use reinforced concrete pipe and classes listed below.
- 24" pipes or larger - Reinforced Concrete Pipe, ASTM C76, Class III up to 13' of cover, Class IV for 13' to 21' of cover, Class V for 21' to 32' of cover, and Special Design for cover greater than 32 feet.

IRRIGATION LINES

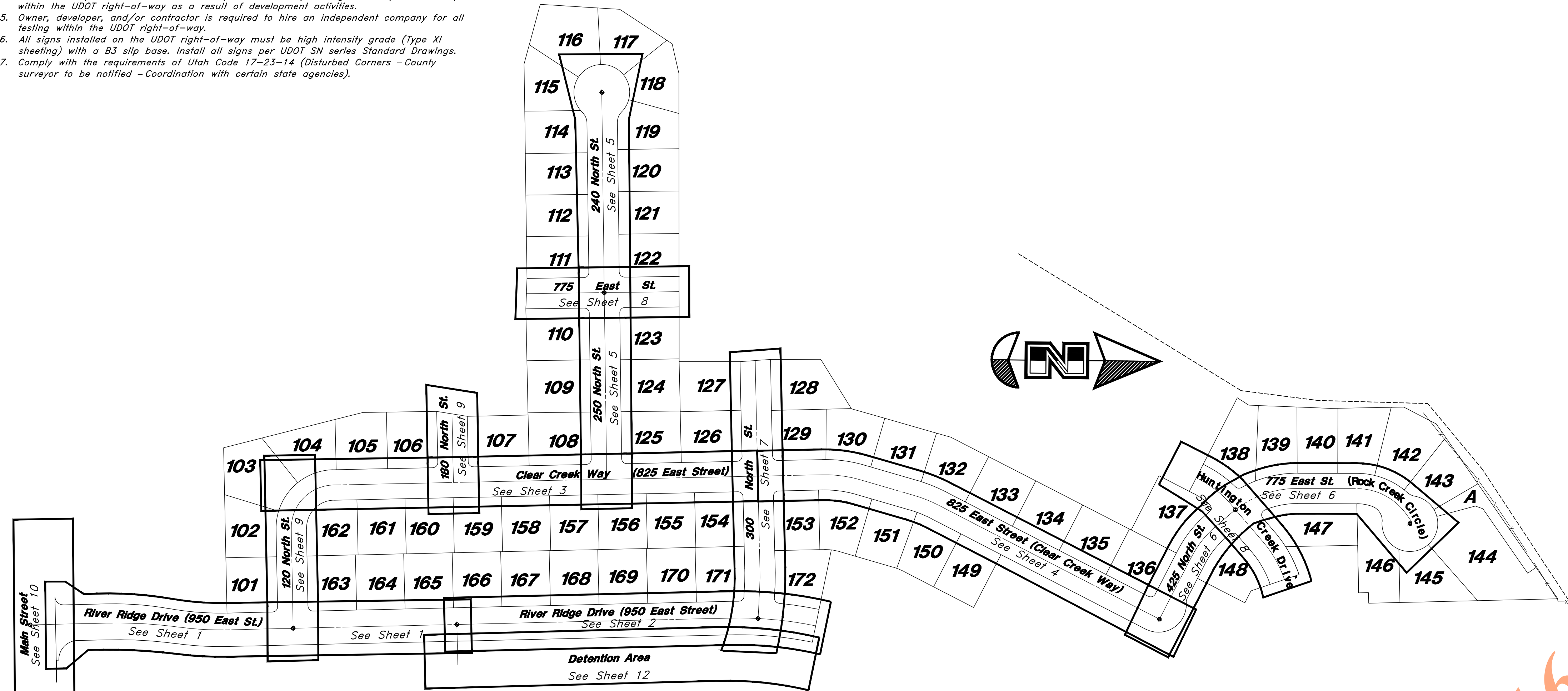
- All irrigation piping is to be purple (24" min. cover) with a locator tape placed at a depth of 1.0' below grade.

NATURAL GAS SERVICE LATERALS (DOMINION ENERGY)

- PLASTIC PIPING MATERIAL:** Plastic polyethylene pipe materials and compression couplings must be approved for natural gas applications and must be installed underground. All plastic pipe and fittings must conform to ASTM D2513 (60 psi and above high density pipe approved 3408).
- Plastic pipe must be joined by individuals qualified in the heat fusion method of connecting pipe and fittings or approved mechanical fittings. A minimum number 18 insulated yellow copper tracer wire shall be installed with underground nonmetallic gas piping and shall terminate above grade at each end. Tracer wire shall not come in contact with plastic piping.
- Risers and prefabricated risers inserted with plastic pipe shall conform to ASTM D2513, shall be metallic, have a space of 10 inches from the bottom of the service valve and grade, and shall be wrapped or coated to a point at least 6 inches above grade or protected in an approved manner. When a riser connects underground to plastic pipe, the underground horizontal metallic portion of the riser shall extend at least 12 inches before connecting to the plastic pipe by means of an approved transition fitting, adapter, or heat fusion.
- Plastic pipe used underground for customer fuel lines must be approved polyethylene material and be buried a minimum of 12 inches. It shall not be used inside buildings or above ground. PVC (Polyvinyl Chloride) is not approved for piping systems in Questar Gas's service area. Individual gas lines (metallic or plastic) to a single outside appliance (outside lights, grills, etc.) shall be installed a minimum of 8 inches below grade, provided such installation is approved and installed in locations not susceptible to physical damage.

UDOT GENERAL NOTES:

- All construction within the UDOT right-of-way shall conform to the most current UDOT Standard (including supplemental) drawings and specifications.
- The contractor is to obtain an encroachment permit from the applicable UDOT Region Permit office prior to commencing work within UDOT right-of-way. Working hour limitations will be listed in the limitations section of the encroachment permit.
- UDOT reserves the right, at its option, to install a raised median island or restrict the access to a right-in or right-out at any time.
- Owner, developer, and contractor are responsible for any damages directly or indirectly within the UDOT right-of-way as a result of development activities.
- Owner, developer, and/or contractor is required to hire an independent company for all testing within the UDOT right-of-way.
- All signs installed on the UDOT right-of-way must be high intensity grade (Type XI sheeting) with a B3 slip base. Install all signs per UDOT SN series Standard Drawings.
- Comply with the requirements of Utah Code 17-23-14 (Disturbed Corners - County surveyor to be notified - Coordination with certain state agencies).



- NOT TO SCALE -

NOTES:

- See Sheet 13 for details

PRIVATE ENGINEER'S NOTICE TO CONTRACTORS
The Contractor agrees that he shall assume sole and complete responsibility for job site conditions during the course of construction of this project, including safety of all persons and property; that this requirement shall apply continuously and not be limited to normal working hours; and that the contractor shall defend, indemnify, and hold the owner and the engineer harmless from any and all liability, real or alleged, in connection with the performance of work on this project, excepting for liability arising from the sole negligence of the owner or the engineer.

CAUTION NOTICE TO CONTRACTOR
The contractor is specifically cautioned that the location and/or elevation of existing utilities as shown on these plans are based on records of the various utility companies and, where possible, measurements taken in the field. The information is not to be relied on as being exact or complete. The contractor must call the appropriate utility company at least 48 hours before any excavation to request exact field location of utilities. It shall be the responsibility of the contractor to relocate all existing utilities which conflict with the proposed improvements shown on the plans.

UDOT CAP 115166
Extended to Apr 2021

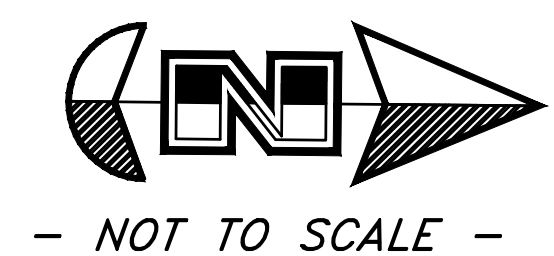
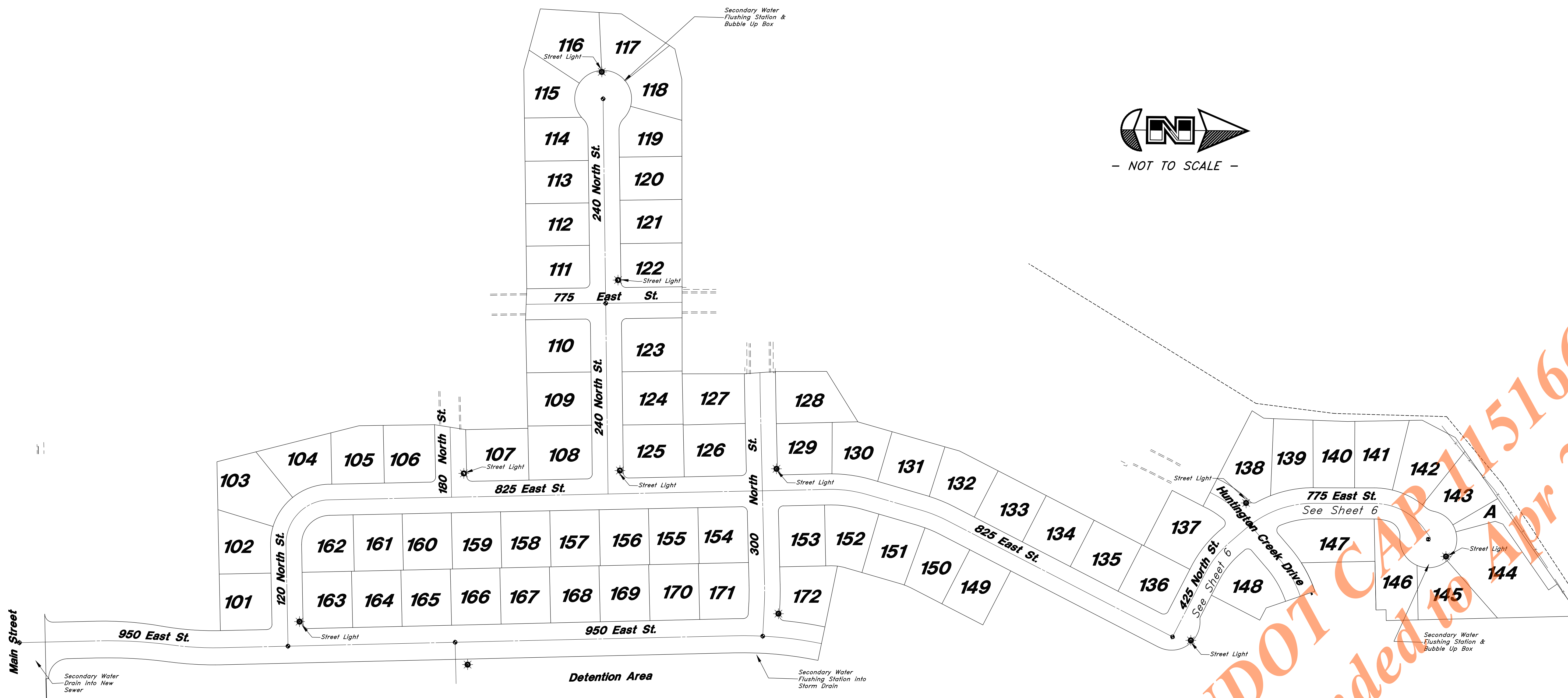
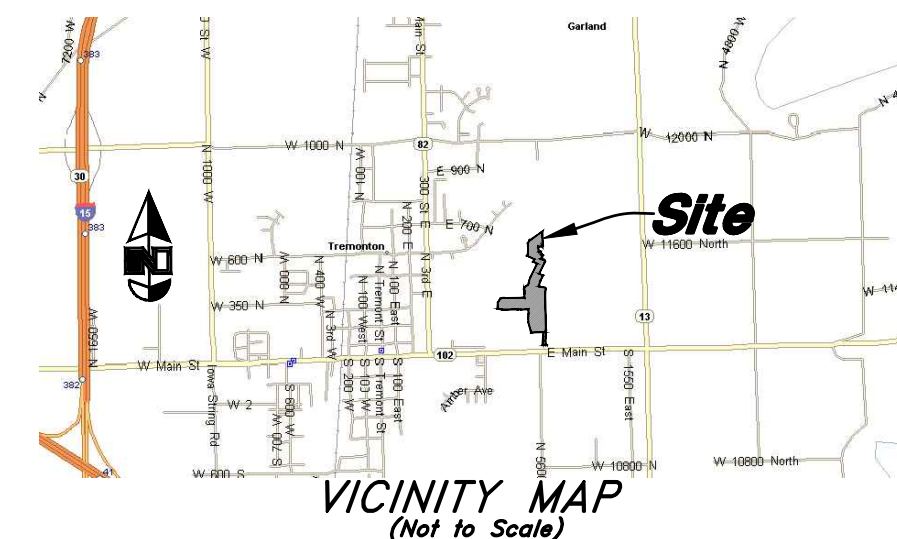
<p>GREAT BASIN ENGINEERING</p> <p>574 SOUTH 1475 EAST, OGDEN, UTAH 84403 MAIN (801) 394-4515, S-L-C (801) 511-0222, FAX (801) 392-7504 WWW.GREATBASINENGINEERING.COM</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;"> <p>COVER</p> <p>Rivers Edge - Phase 1</p> <p>Approx: 935 East Main Street Tremonton City, Box Elder County, Utah A part of Section 2, T11N, R2W, SLB&M, U.S. Survey</p> </td> <td style="width: 50%; text-align: center;"> <p>11 Oct, 2021</p> <p>SHEET NO.</p> <p style="font-size: 2em; font-weight: bold;">GO</p> </td> </tr> </table>	<p>COVER</p> <p>Rivers Edge - Phase 1</p> <p>Approx: 935 East Main Street Tremonton City, Box Elder County, Utah A part of Section 2, T11N, R2W, SLB&M, U.S. Survey</p>	<p>11 Oct, 2021</p> <p>SHEET NO.</p> <p style="font-size: 2em; font-weight: bold;">GO</p>
<p>COVER</p> <p>Rivers Edge - Phase 1</p> <p>Approx: 935 East Main Street Tremonton City, Box Elder County, Utah A part of Section 2, T11N, R2W, SLB&M, U.S. Survey</p>	<p>11 Oct, 2021</p> <p>SHEET NO.</p> <p style="font-size: 2em; font-weight: bold;">GO</p>		



1-800-662-4111

Rivers Edge - Phase 1

A part of Section 2, T11N, R2W, SLB&M, U.S. Survey
Tremonton City, Box Elder County, Utah
June 2021



UDOT CAPITAL 15166
 Extended to Apr 2021

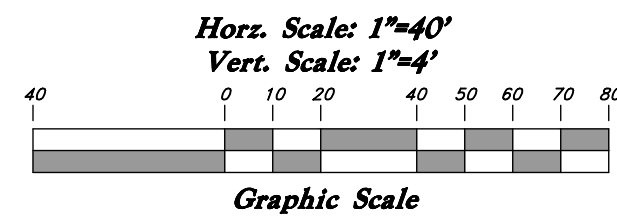
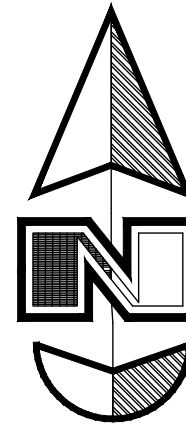
PRIVATE ENGINEER'S NOTICE TO CONTRACTORS
 The Contractor agrees that he shall assume sole and complete responsibility for job site conditions during the course of construction of this project, including safety of all persons and property; that this requirement shall apply continuously and not be limited to normal working hours; and that the contractor shall defend, indemnify, and hold the owner and the engineer harmless from any and all liability, real or alleged, in connection with the performance of work on this project, excepting for liability arising from the sole negligence of the owner or the engineer.

CAUTION NOTICE TO CONTRACTOR
 The contractor is specifically cautioned that the location and/or elevation of existing utilities as shown on these plans are based on records of the various utility companies and, where possible, measurements taken in the field. The information is not to be relied on as being exact or complete. The contractor must call the appropriate utility company at least 48 hours before any excavation to request exact field location of utilities. It shall be the responsibility of the contractor to relocate all existing utilities which conflict with the proposed improvements shown on the plans.

NOTES:
 1. See Sheet 15 for details



<p>Secondary Water Flushing Station and Street Light Layout</p> <p>Rivers Edge - Phase 1</p> <p><small>Approx: 935 East Main Street Tremonton City, Box Elder County, Utah A part of Section 2, T11N, R2W, SLB&M, U.S. Survey</small></p>	<p>GREAT BASIN ENGINEERING</p> <p><small>5746 SOUTH 1475 EAST, GREEN, UTAH 84403 MAIN (801) 394-4515, SLIC (801) 521-0222, FAX (801) 392-7544 WWW.GREATBASINENGINEERING.COM</small></p>
<p>11 Oct, 2021</p>	<p>GO</p>
<p><small>20N710</small></p>	<p><small>1-800-882-4111</small></p>



City is the process of acquiring additional Property in this location to Accommodate Standard Curb Return Design. Verify before Construction of Improvements

Jesse F. Courter

Developer to coordinate with city to curb match this small section, per UDOT requirements.

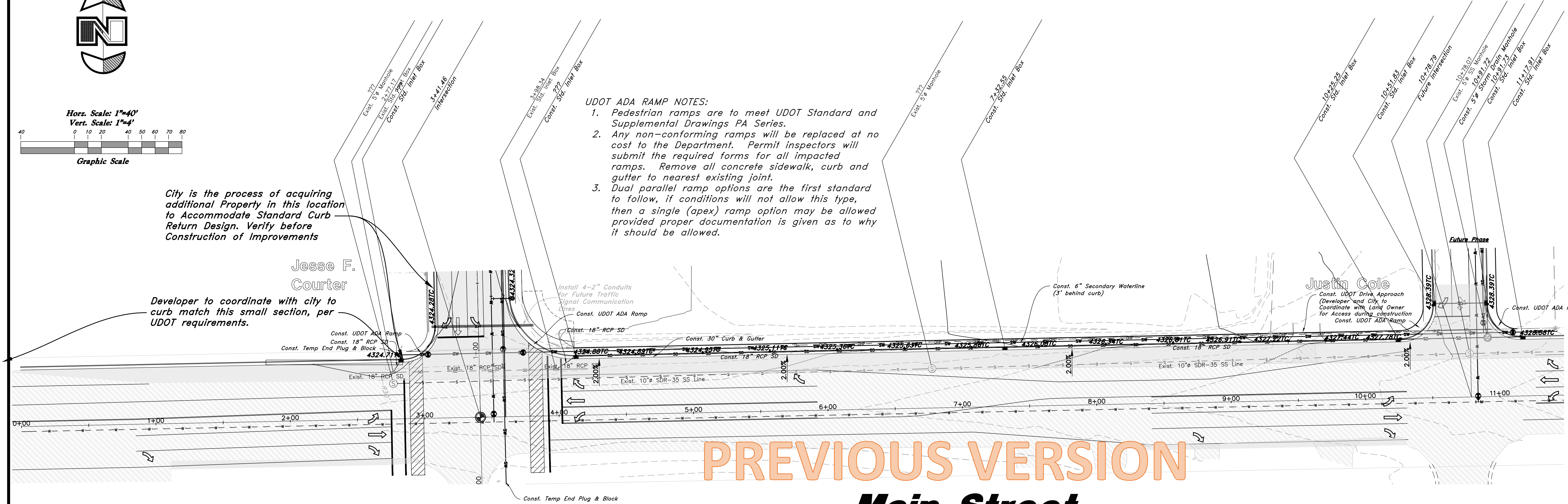
UDOT ADA RAMP NOTES:

1. Pedestrian ramps are to meet UDOT Standard and Supplemental Drawings PA Series.
2. Any non-conforming ramps will be replaced at no cost to the Department. Permit inspectors will submit the required forms for all impacted ramps. Remove all concrete sidewalk, curb and gutter to nearest existing joint.
3. Dual parallel ramp options are the first standard to follow, if conditions will not allow this type, then a single (apex) ramp option may be allowed provided proper documentation is given as to why it should be allowed.

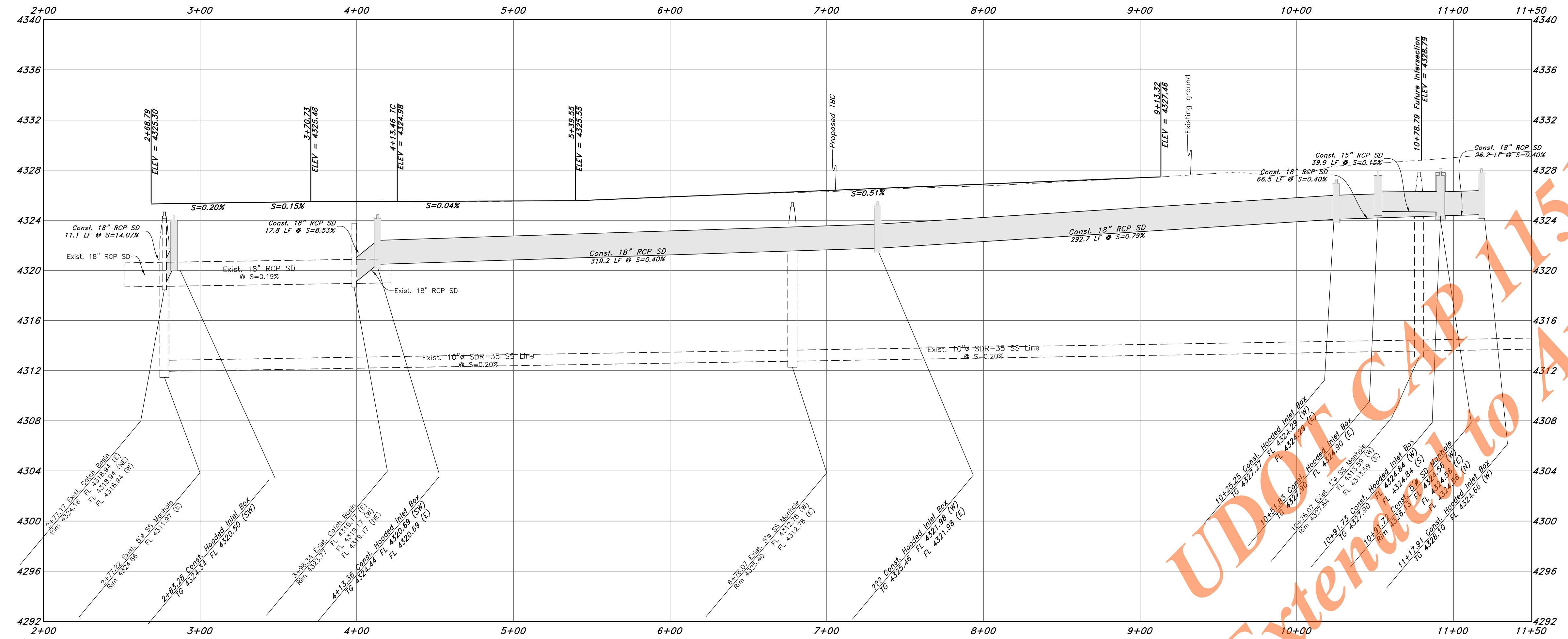
Legend

(Note: All items may not appear on drawing)

- San. Sewer Manhole
- Water Manhole
- Storm Drain Manhole
- Electrical Manhole
- Catch Basins
- Exist. Fire Hydrant
- Exist. Water Valve
- Water Valve
- Sanitary Sewer
- Culinary Water
- Gas Line
- Irrigation Line
- Storm Drain
- Telephone Line
- Secondary Waterline
- Power Line
- Fire Line
- Land Drain
- Power pole
- Power pole w/guy
- Light Pole
- Fence
- Flowline of ditch
- Overhead Power line
- Corrugated Metal Pipe
- Concrete Pipe
- Reinforced Concrete Pipe
- Ductile Iron
- Polyvinyl Chloride
- Top of Asphalt
- Edge of Asphalt
- Centerline
- FL
- EA
- CL
- FF
- TC
- TWL
- TCN
- NG
- 90
- 95.33TA
- 95.72TA
- R
- Direction of Flow
- Existing Asphalt
- New Asphalt
- Heavy Duty Asphalt
- Concrete
- Open Face
- Curb & Gutter



PREVIOUS VERSION
Main Street



UDOT CAP 115166
Extended to Apr 2022

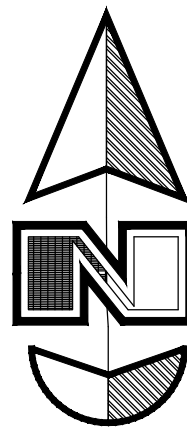
REV	DATE	DESCRIPTION

GREAT BASIN ENGINEERING

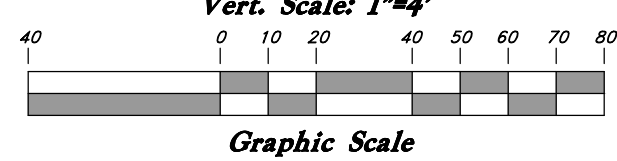
5746 SOUTH 1475 EAST OGDEN, UTAH 84403
 MAIN (801)394-4515 S.L.L.C. (801)521-0222 FAX (801)392-7544
 WWW.GREATBASINENGINEERING.COM

Plan & Profile
Rivers Edge - Phase 1
 Approx: 935 East Main Street
 Tremonton City, Box Elder County, Utah
 A part of Section 2, T11N, R2W, SLB&M, U.S. Survey





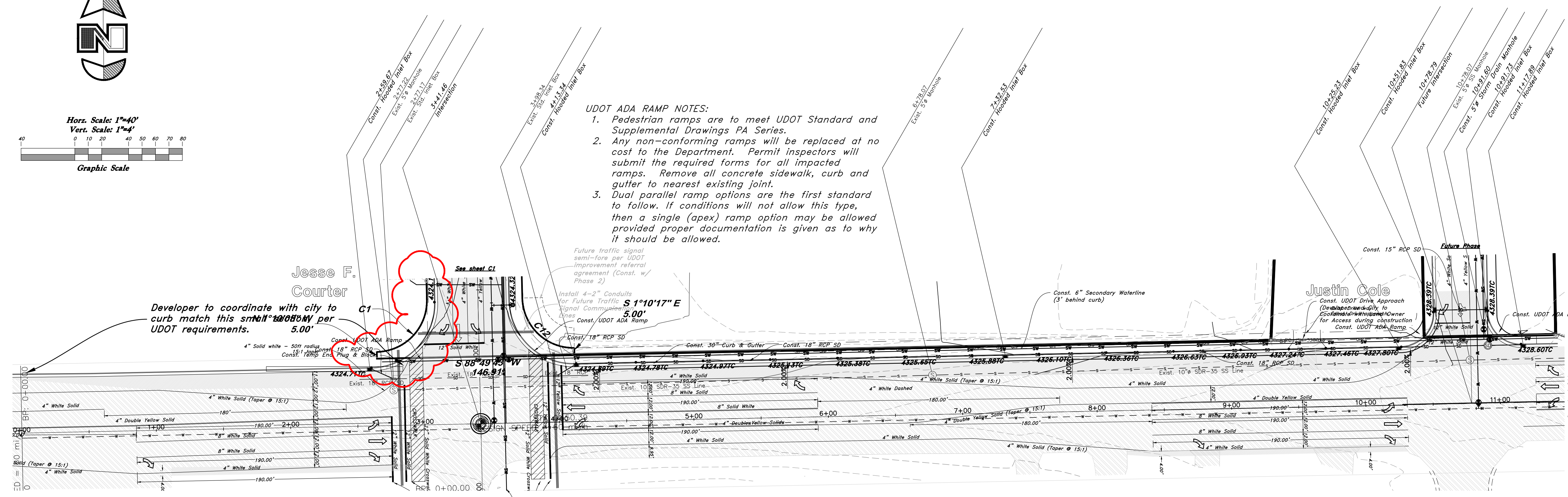
Horz. Scale: 1"=40'
Vert. Scale: 1"=4'



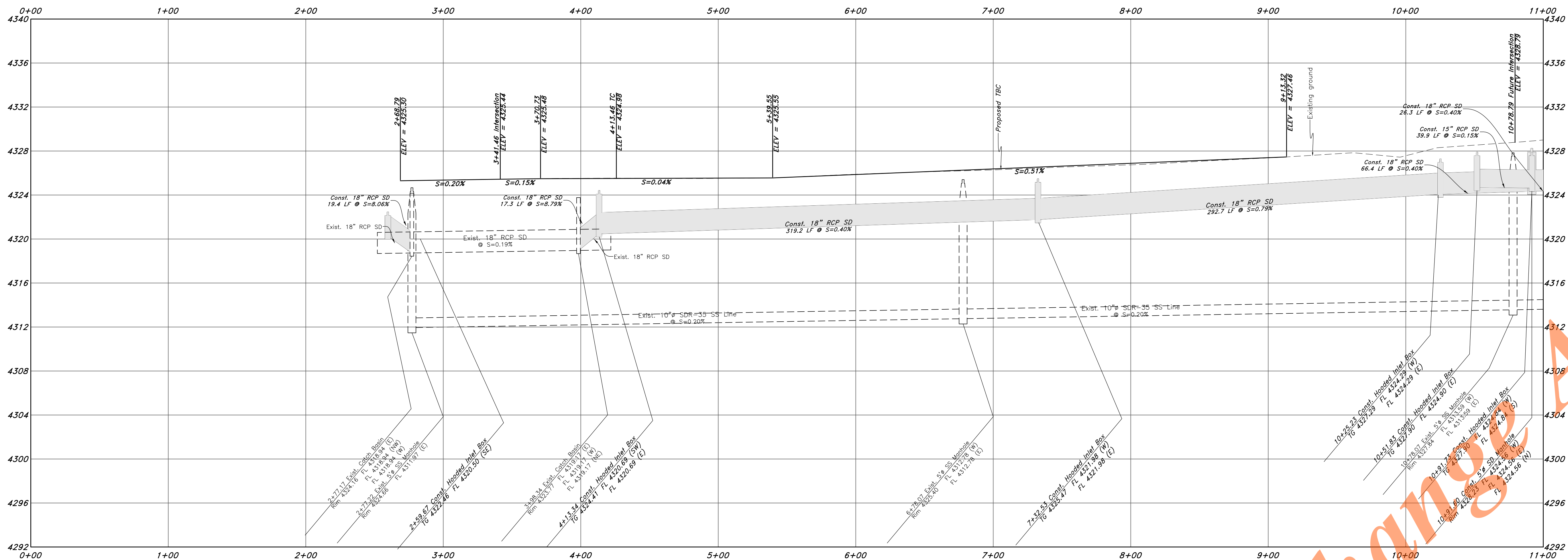
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3. Dual parallel ramp options are the first standard to follow. If conditions will not allow this type, then a single (apex) ramp option may be allowed provided proper documentation is given as to why it should be allowed.

Jesse F. Courter
Developer to coordinate with city to curb match this street to UDOT requirements.
5.00'



Main Street



Legend

(Note: All items may not appear on drawing)

- San Sewer Manhole
- Water Manhole
- Storm Drain Manhole
- Electrical Manhole
- Catch Basins
- Exist. Fire Hydrant
- Fire Hydrant
- Exist. Water Valve
- Water Valve
- Sanitary Sewer
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- Irrigation Line
- Storm Drain
- Telephone Line
- Secondary Waterline
- Power Line
- Fire Line
- Lint Drain
- Power pole
- Power pole w/guy
- Light Pole
- Fence
- Flowline of ditch
- Overhead Power line
- Corrugated Metal Pipe
- Concrete Pipe
- Reinforced Concrete Pipe
- Ductile Iron
- Polyvinyl Chloride
- Top of Asphalt
- Edge of Asphalt
- Centerline
- Flowline
- Finish Floor
- Top of Curb
- Top of Walk
- Top of Concrete
- Natural Ground
- Finish Contour
- Exist. Contour
- Finish Grade
- Exist. Grade
- Ridge Line
- Direction of Flow
- Existing Asphalt
- New Asphalt
- Heavy Duty Asphalt
- Concrete
- Open Face
- Curb & Gutter

GREAT BASIN ENGINEERING

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Plan & Profile

Rivers Edge - Phase 1
 Approx. 935 East Main Street
 Tremonton City, Box Elder County, Utah
 A part of Section 2, T11N, R2W, SLB&M, U.S. Survey

March, 2022

SHEET NO.

C10

20N710

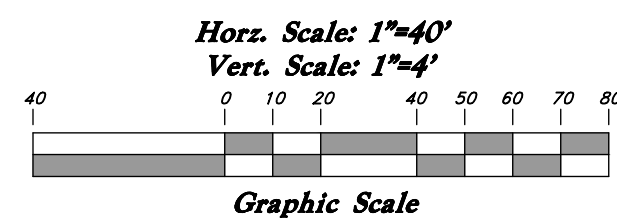
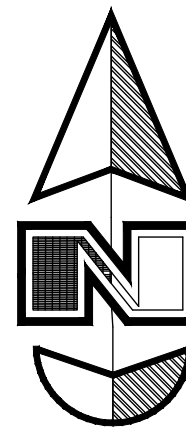
Change Order

Call before you Dig
Avoid cutting underground utility lines, it's costly.



1-800-862-4111

REV	DATE	DESCRIPTION
1	1-30-2023	UPDATED 950 EAST MAINS STREET CONNECTION



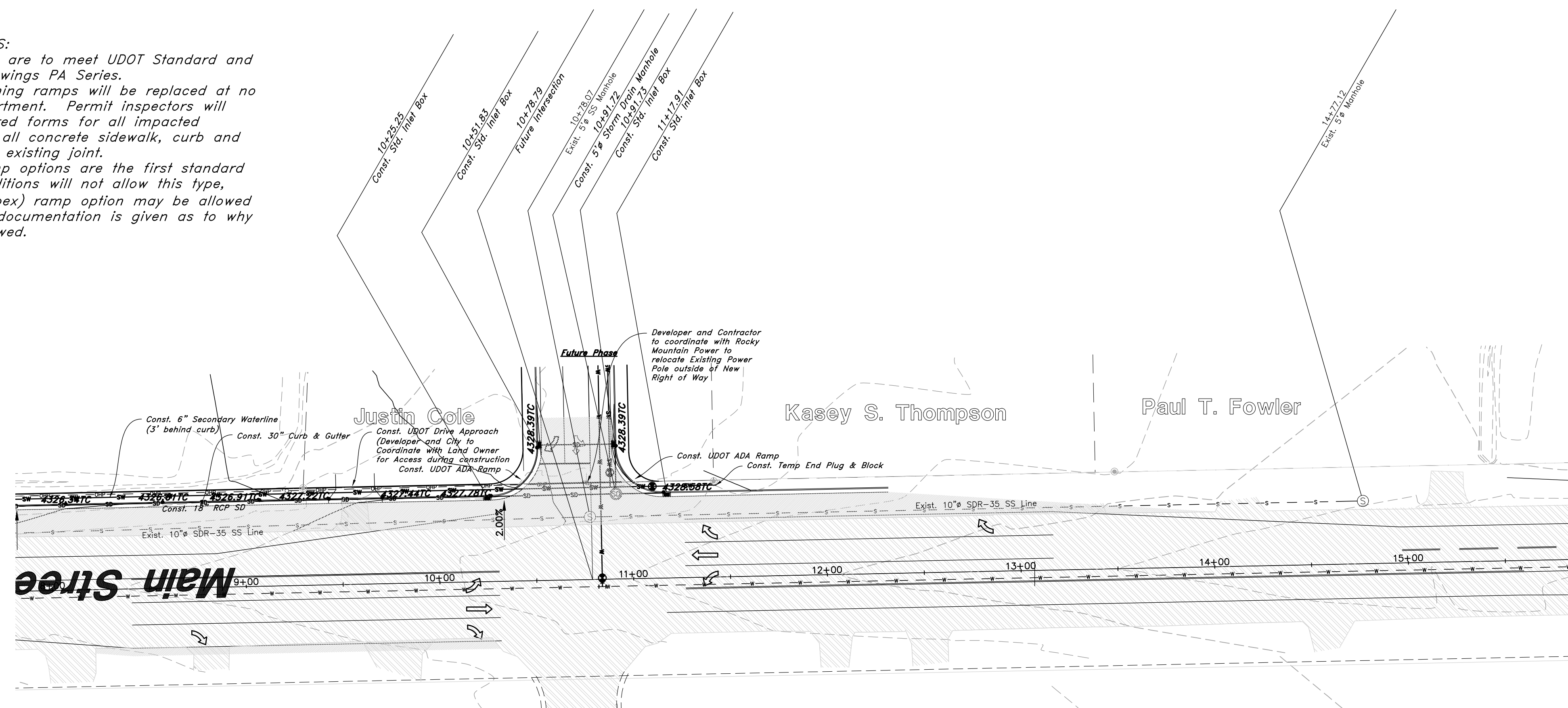
Legend

(Note: All items may not appear on drawing)

- San. Sewer Manhole
- Water Manhole
- Storm Drain Manhole
- Electrical Manhole
- Catch Basins
- Exist. Fire Hydrant
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- Telephone Line
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- Power Line
- Fire Line
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- Light Pole
- Fence
- Flowline of ditch
- Overhead Power line
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- Concrete Pipe
- Reinforced Concrete Pipe
- Ductile Iron
- PVC
- Top of Asphalt
- Edge of Asphalt
- Centerline
- Flowline
- Finish Floor
- Top of Curb
- Top of Wall
- Top of Concrete
- Natural Ground
- Finish Contour
- Exist. Contour
- Finish Grade
- Exist. Grade
- Ridge Line
- Direction of Flow
- Existing Asphalt
- New Asphalt
- Heavy Duty Asphalt
- Concrete
- Open Face
- Curb & Gutter

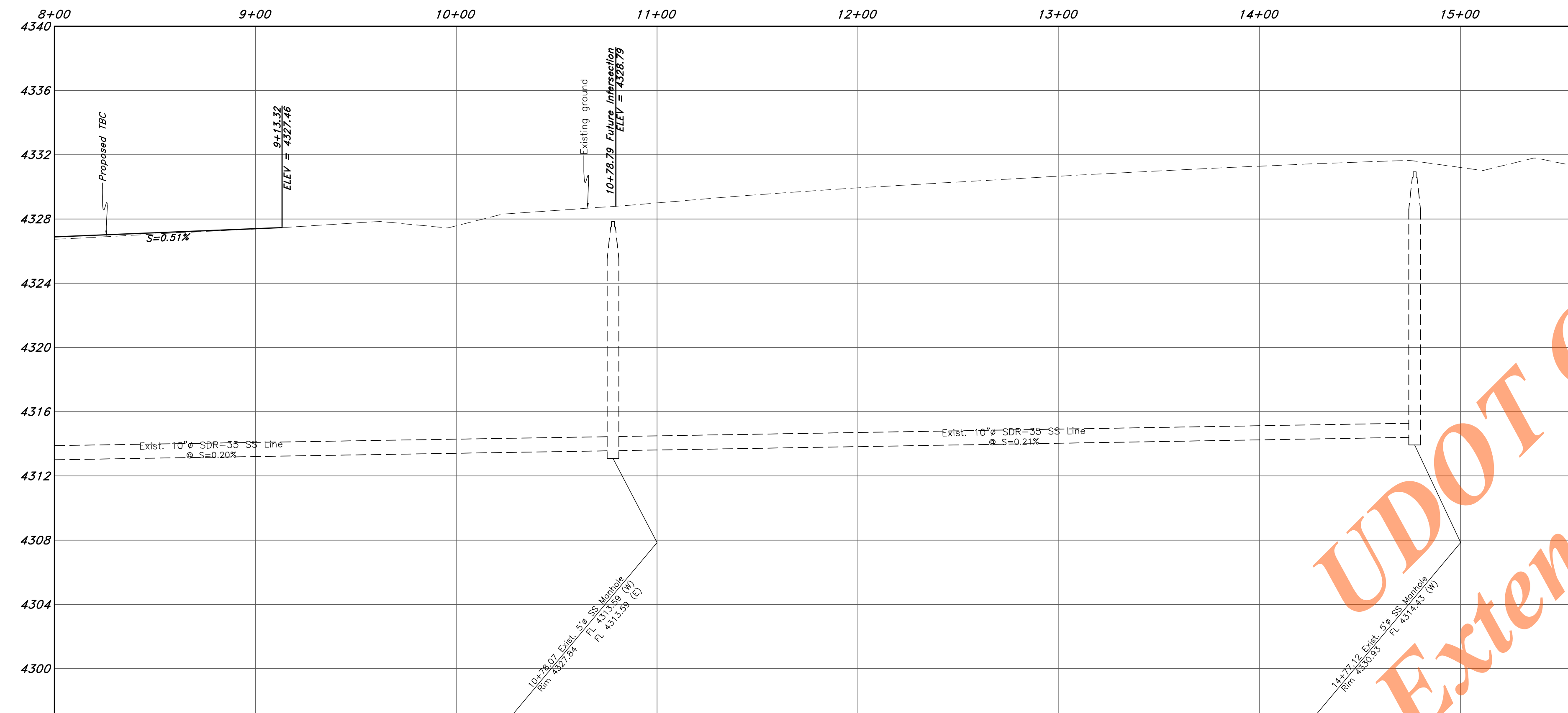
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Main Street

PREVIOUS VERSION



UDOT CAP 115166
Extended to Apr 2022

Call before you Dig
Avoid cutting underground utility lines, it's costly.



1-800-862-4111

REV	DATE	DESCRIPTION

GREAT BASIN ENGINEERING

5746 SOUTH 1475 EAST OGDEN, UTAH 84403
 MAIN (801)399-4451, FAX (801)399-7544
 WWW.GREATBASINENGINEERING.COM

Plan & Profile

Rivers Edge - Phase 1

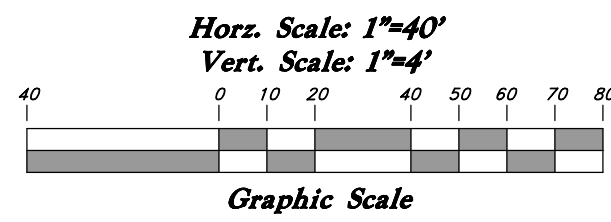
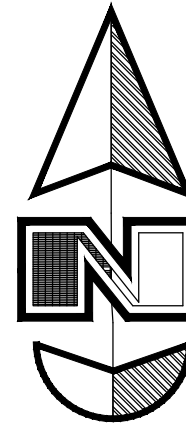
Approx: 935 East Main Street
 Tremonton City, Box Elder County, Utah
 A part of Section 2, T11N, R2W, SLB&M, U.S. Survey

11 Oct, 2021

SHEET NO.

C11

20N710



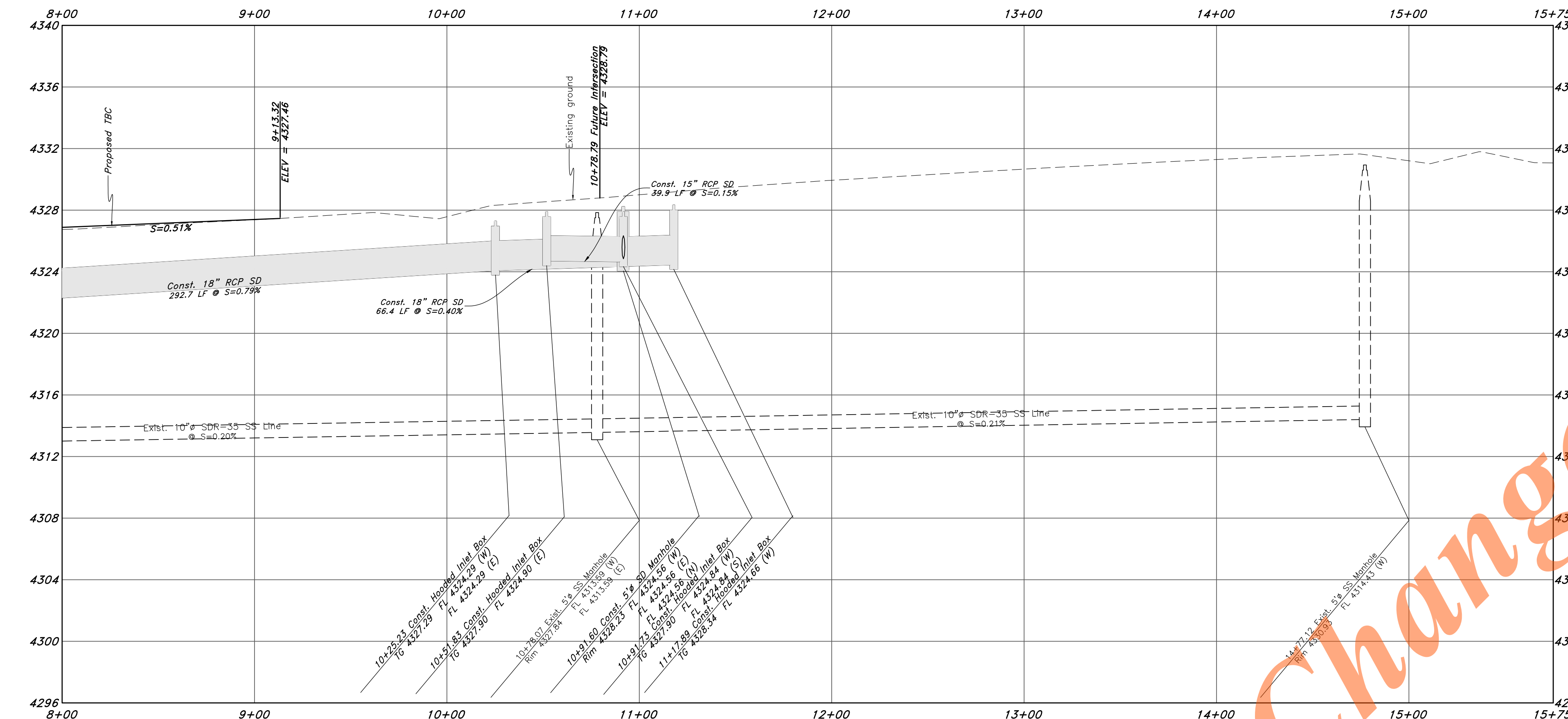
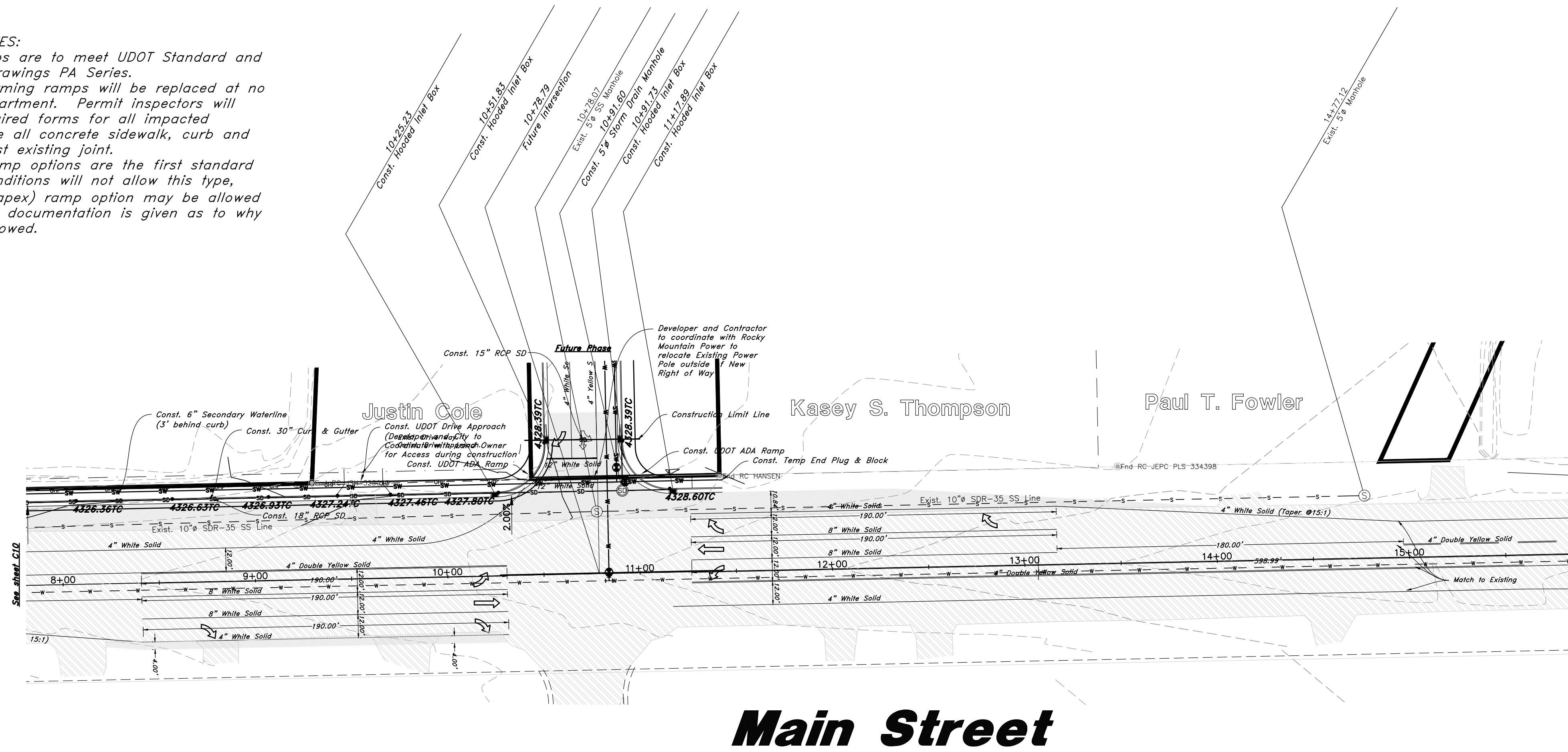
Legend

(Note: All items may not appear on drawing)

- San. Sewer Manhole
- Water Manhole
- Storm Drain Manhole
- Electrical Manhole
- Catch Basins
- Exist. Fire Hydrant
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- Fire Line
- Land Drain
- Power pole
- Power pole w/guy
- Light Pole
- Fence
- Flowline of ditch
- Overhead Power line
- Corrugated Metal Pipe
- Concrete Pipe
- RCP
- DI
- PVC
- TA
- EA
- CL
- FL
- FF
- TC
- TW
- TJ
- TCN
- NG
- 90
- 95.33TA
- 95.33TA
- R
- Direction of Flow
- Existing Asphalt
- New Asphalt
- Heavy Duty Asphalt
- Concrete
- Open Face
- Curb & Gutter

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Change Approved



REV	DATE	DESCRIPTION
1	1-30-2023	UPDATED 850 EAST MAINS STREET CONNECTION

GREAT BASIN ENGINEERING

5746 SOUTH 1475 EAST OGDEN, UTAH 84403
 MAIN (801) 394-4515 S.L.L.C. (801) 521-0222 FAX (801) 392-7544
 WWW.GREATBASINENGINEERING.COM

Plan & Profile

Rivers Edge - Phase 1

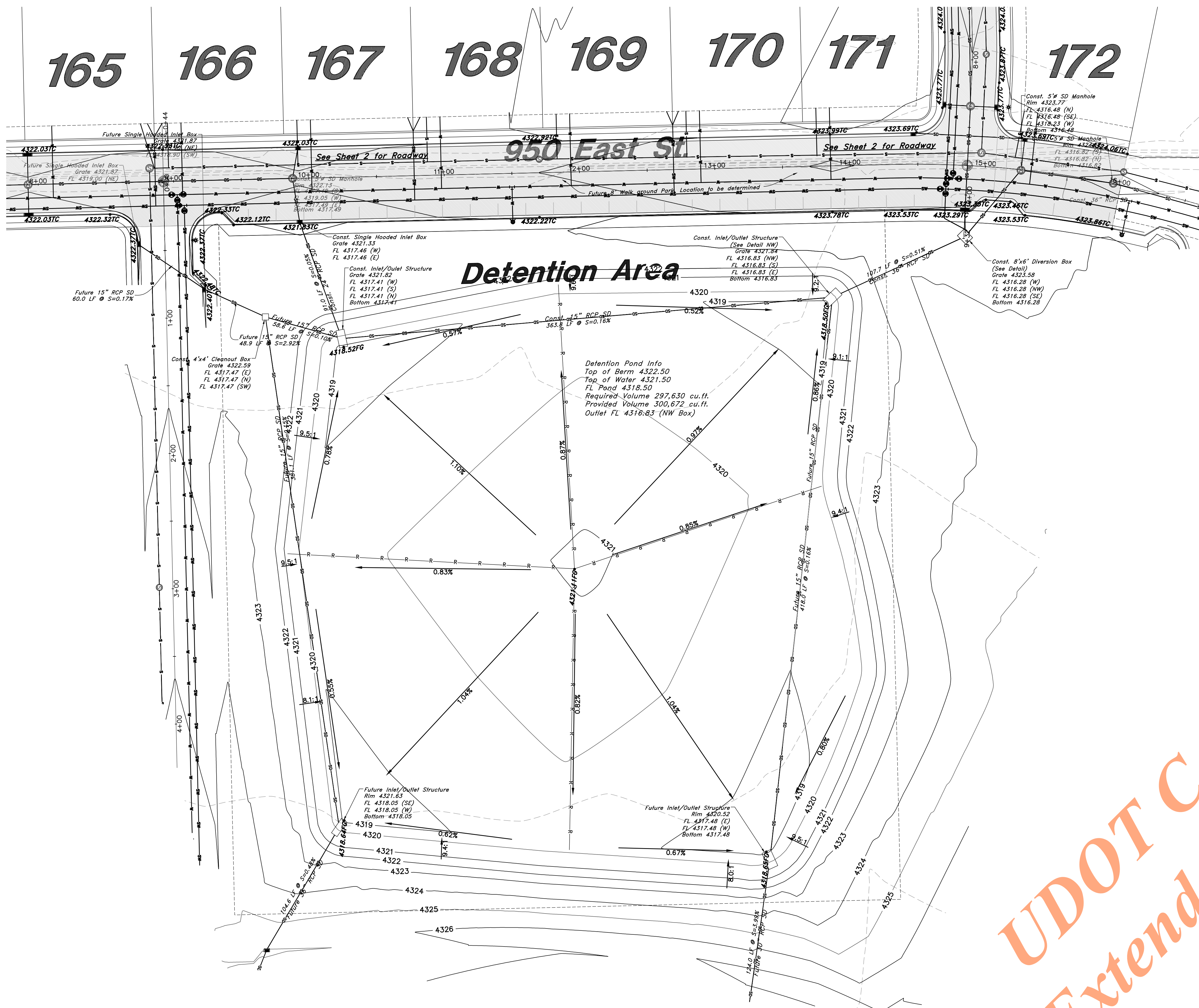
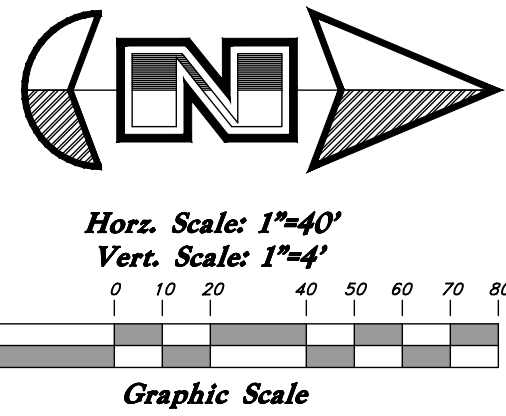
Approx: 835 East Main Street
 Tremonton City, Box Elder County, Utah
 A part of Section 2, T11N, R2W, SLB&M, U.S. Survey

March, 2022

SHEET NO.

C11

20N710



Legend

(Note: All items may not appear on drawing)

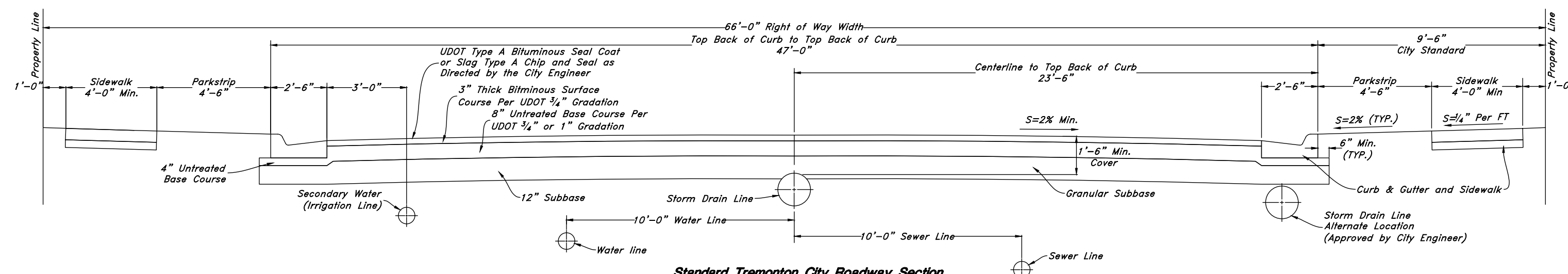
San. Sewer Manhole	⊙
Water Manhole	⊙
Storm Drain Manhole	⊙
Electrical Manhole	⊙
Catch Basins	⊙
Exist. Fire Hydrant	⊙
Fire Hydrant	⊙
Exist. Water Valve	⊙
Water Valve	⊙
Sanitary Sewer	—
Culinary Water	—
Gas Line	—
Irrigation Line	—
Storm Drain	—
Telephone Line	—
Secondary Waterline	—
Power Line	—
Fire Line	—
Land Drain	—
Power pole w/guy	—
Light Pole	—
Fence	—
Flowline of ditch	—
Overhead Power line	—
Corrugated Metal Pipe	—
Concrete Pipe	—
Reinforced Concrete Pipe	—
Ductile Iron	—
Polyvinyl Chloride	—
Top of Asphalt	—
Edge of Asphalt	—
Centerline	—
Flowline	—
Finish Floor	—
Top of Wall	—
Top of Curb	—
Top of Walk	—
Top of Concrete	—
Natural Ground	—
Finish Contour	—
Exist. Contour	—
Finish Grade	—
Exist. Grade	—
Ridge Line	—
Direction of Flow	—
Existing Asphalt	—
New Asphalt	—
Heavy Duty Asphalt	—
Concrete	—
Open Face	—
Curb & Gutter	—

NOTES:

1. Full Pond Design, Landscape, & Amenity Package to be provided as part of Phase 2 Development Package.

UDOT CAP 115166
Extended to Apr 2022

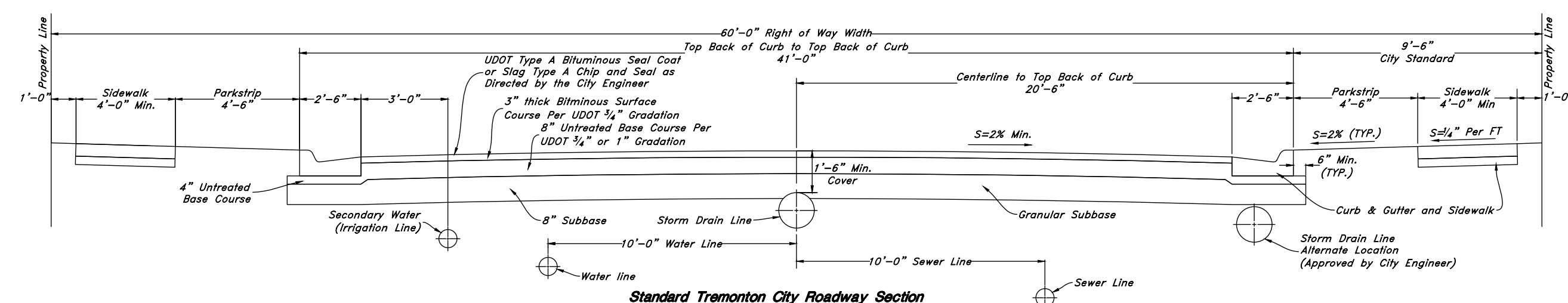
<p>GREAT BASIN ENGINEERING</p> <p>5746 SOUTH 1475 EAST OGDEN, UTAH 84403 MAIN (801)394-4515 S.L.L.C. (801)521-0222 FAX (801)392-7544 WWW.GREATBASINENGINEERING.COM</p>	<p>Plan and Profile</p> <p>Rivers Edge - Phase 1</p> <p>Approx: 935 East Main Street Tremonton City, Box Elder County, Utah A part of Section 2, T11N, R2W, SLB&M, U.S. Survey</p>
<p>11 Oct, 2021</p>	<p>SHEET NO.</p> <p>C12</p>
<p>1-800-862-4111</p>	<p>20N710</p>



NOTES:

1. Provide 4" Thickness of 3/4" or 1" Gravel Base Course Under Sidewalk, Driveway Approached and Curb & Gutter when Subgrade is clay or as directed by the City Engineer.
2. These Pavement thickness shall be increased by the city engineer when a greater depth is necessary to provide sufficient stability.

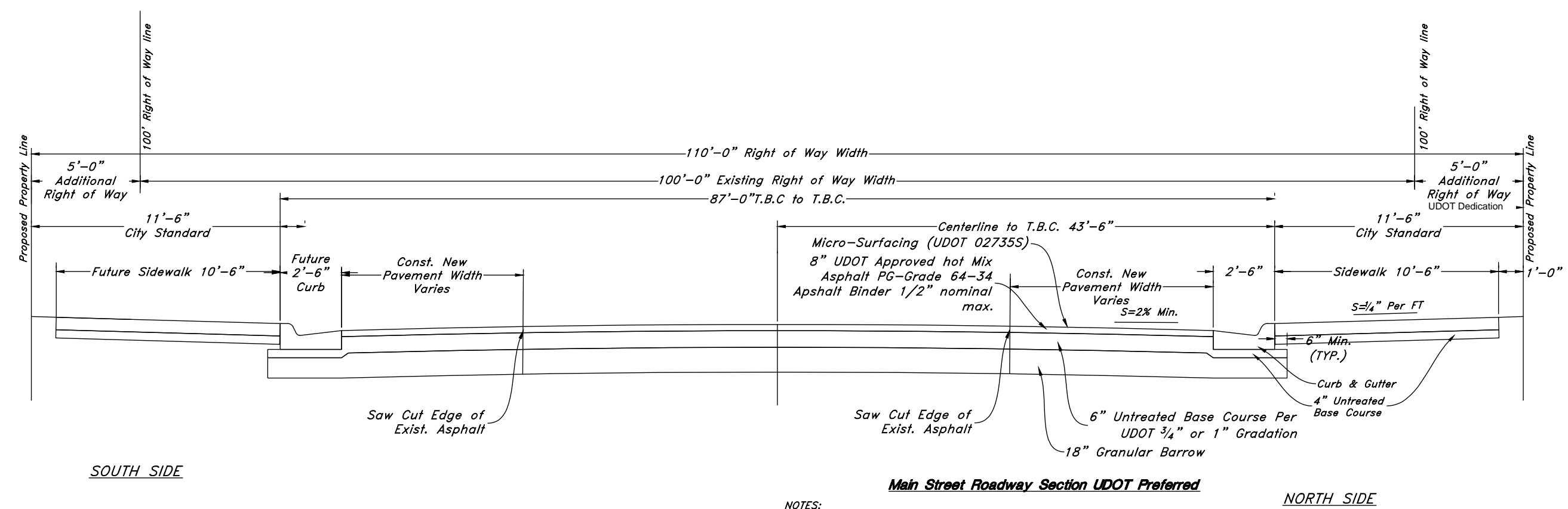
Designer and/or Developer may submit an alternative pavement design based on a detailed soils analysis for the approval by the city engineer which may modify pavement thickness, but in no case shall the bituminous surface course be less than 3" and Gravel base course less than 4" thick.



NOTES:

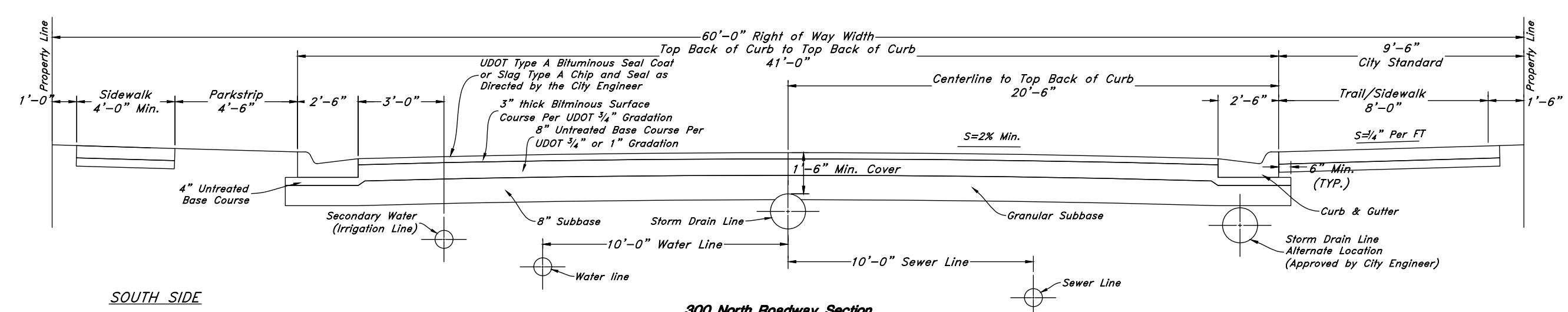
1. Provide 4" Thickness of 3/4" or 1" Gravel Base Course Under Sidewalk, Driveway Approached and Curb & Gutter when Subgrade is clay or as directed by the City Engineer.
2. These Pavement thickness shall be increased by the city engineer when a greater depth is necessary to provide sufficient stability.

Designer and/or Developer may submit an alternative pavement design based on a detailed soils analysis for the approval by the city engineer which may modify pavement thickness, but in no case shall the bituminous surface course be less than 3" and Gravel base course less than 4" thick.



NOTES:

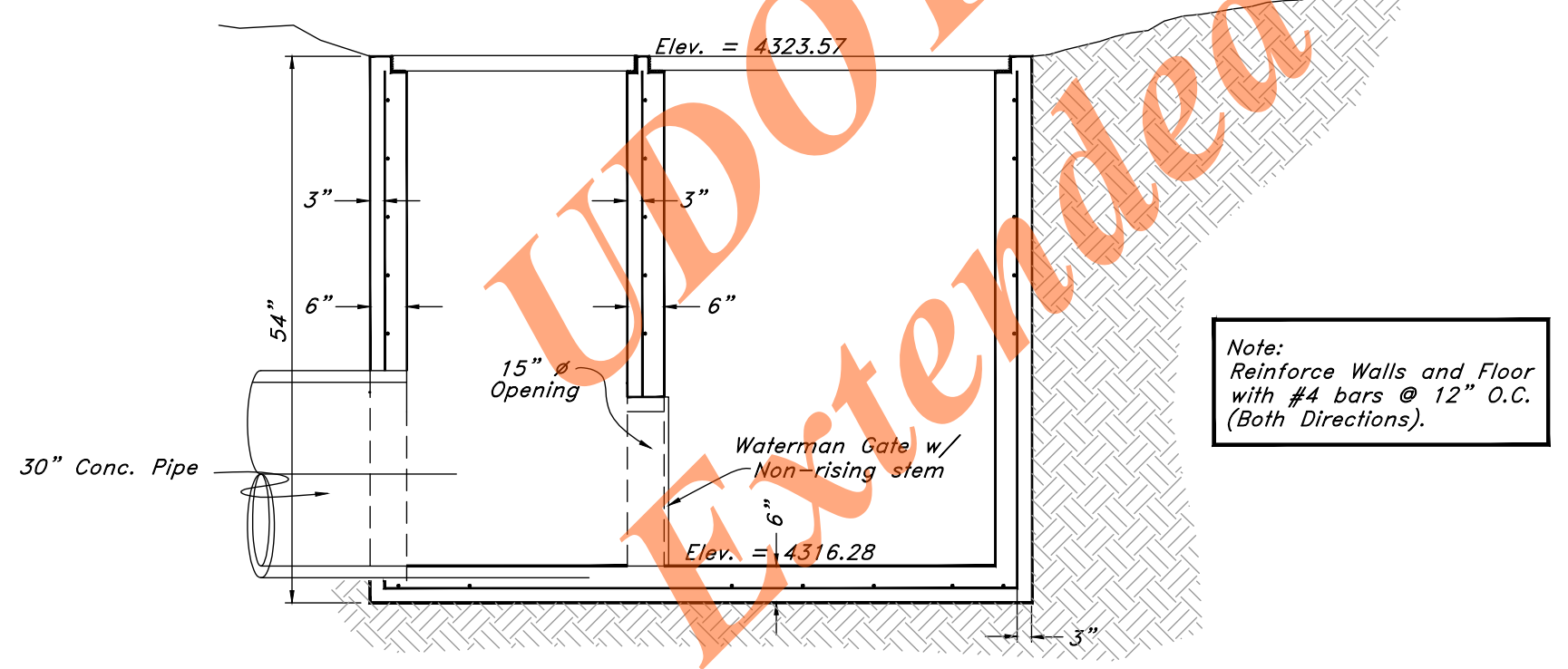
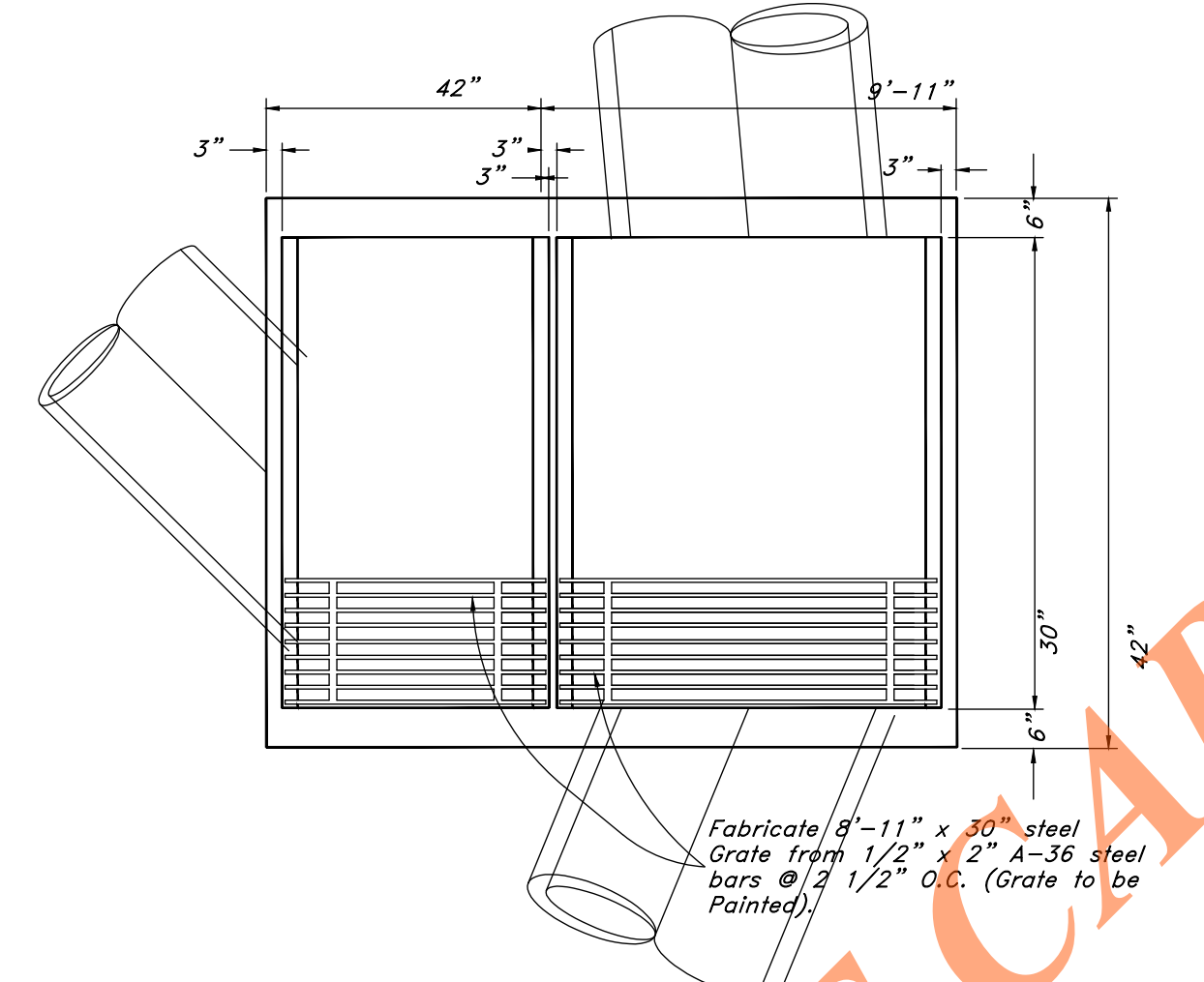
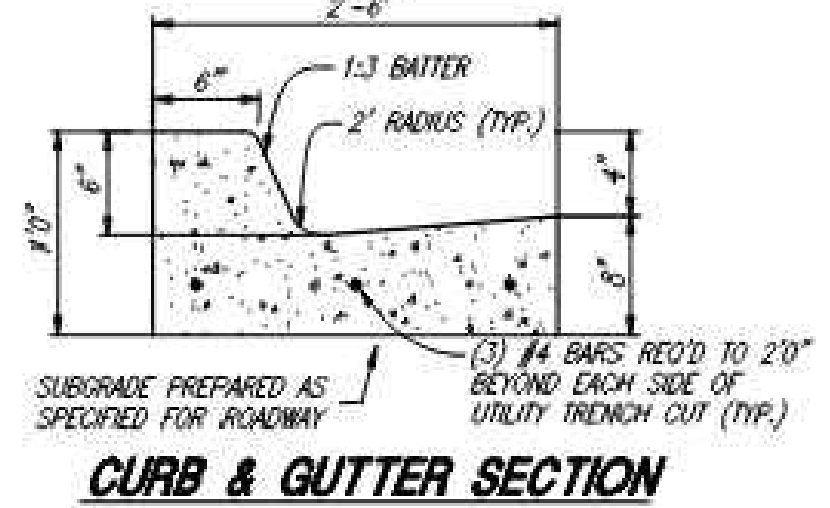
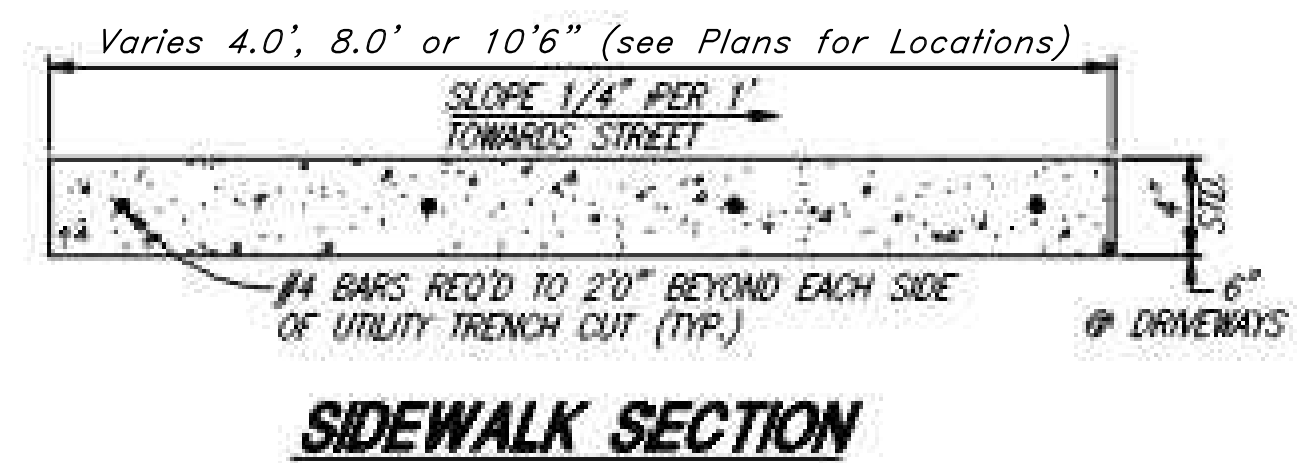
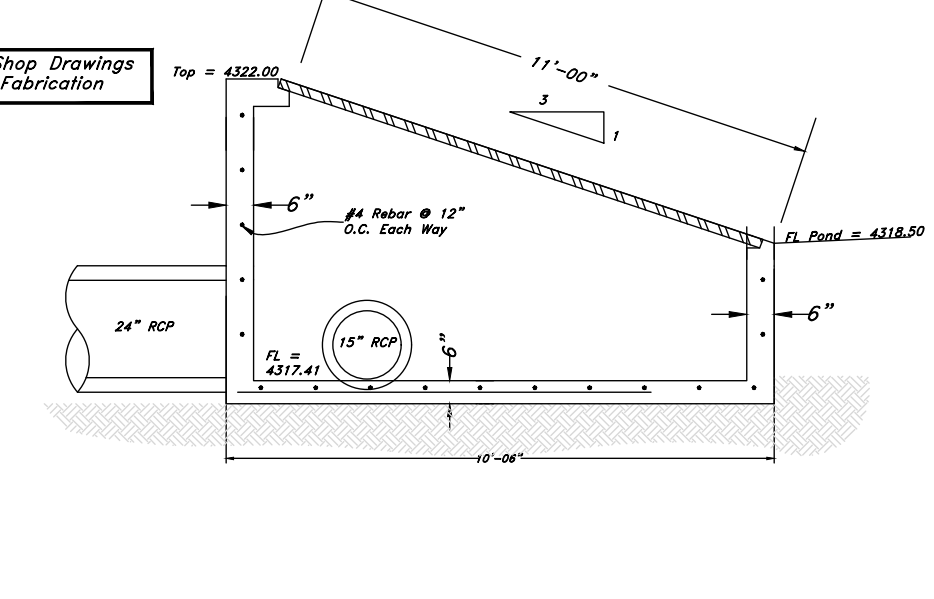
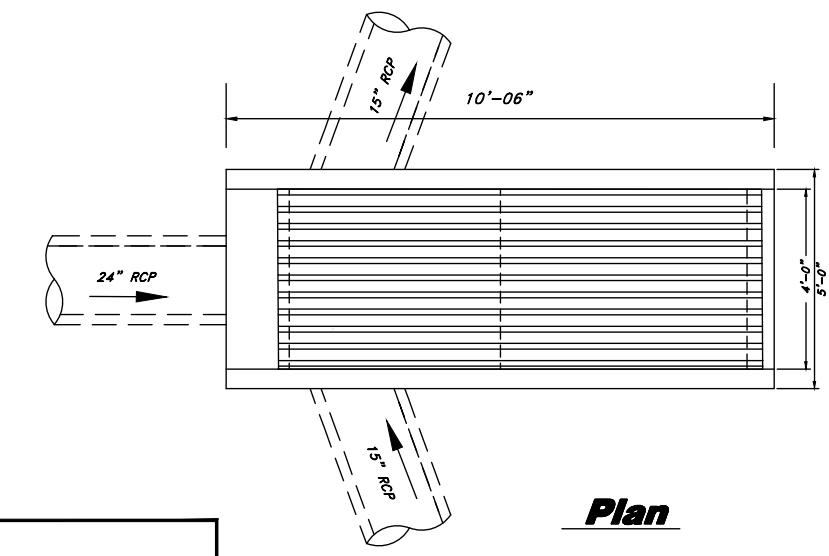
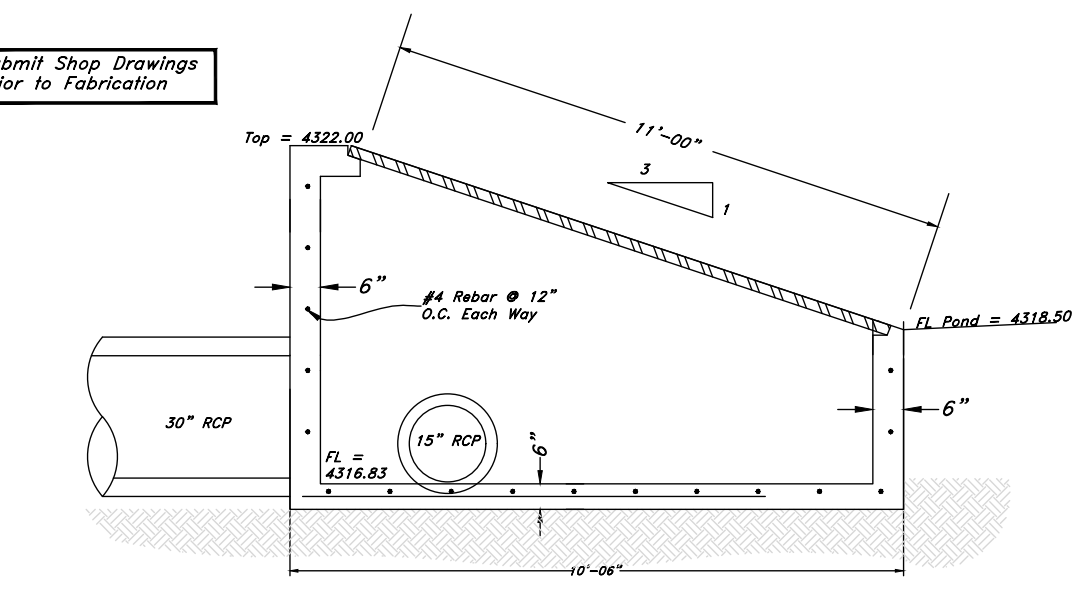
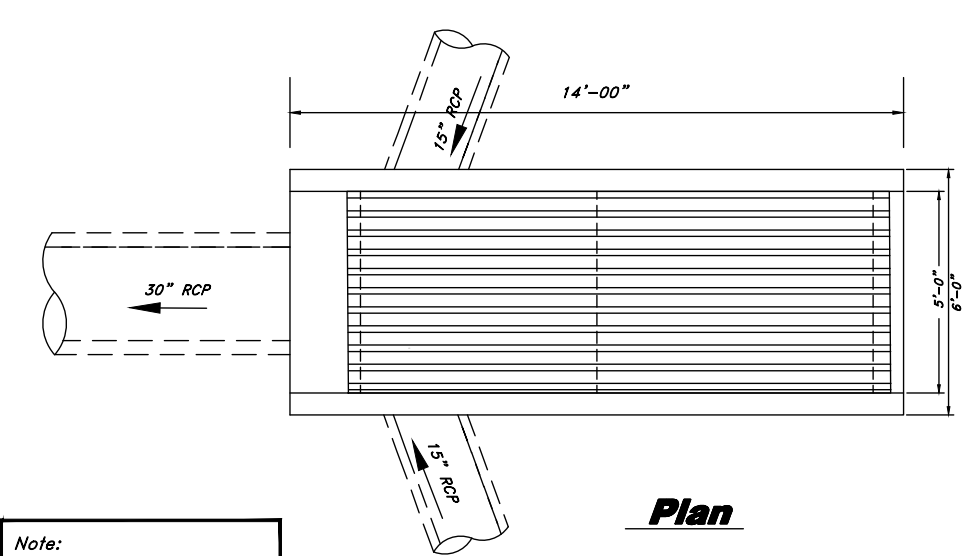
1. See Striping plan for



NOTES:

1. Provide 4" Thickness of 3/4" or 1" Gravel Base Course Under Sidewalk, Driveway Approached and Curb & Gutter when Subgrade is clay or as directed by the City Engineer.
2. These Pavement thickness shall be increased by the city engineer when a greater depth is necessary to provide sufficient stability.

Designer and/or Developer may submit an alternative pavement design based on a detailed soils analysis for the approval by the city engineer which may modify pavement thickness, but in no case shall the bituminous surface course be less than 3" and Gravel base course less than 4" thick.



Detail of Diversion Structure

NO.	DESCRIPTION	DATE	REV.

GREAT BASIN ENGINEERING

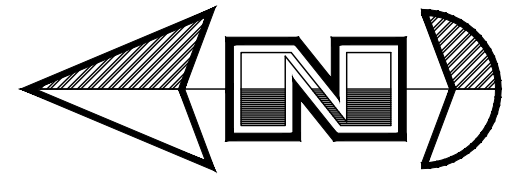
5746 SOUTH 1475 EAST OGDEN, UTAH 84403
 MAIN (801)394-4515 S.L.L.C. (801)392-7544
 WWW.GREATBASINENGINEERING.COM

Rivers Edge - Phase 1

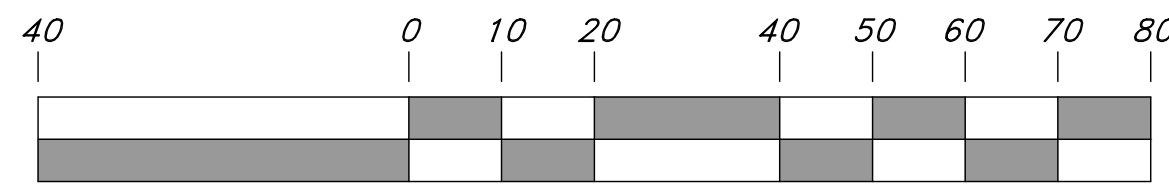
Approx: 935 East Main Street
 Tremont City, Box Elder County, Utah
 A part of Section 2, T11N, R2W, SLB&M, U.S. Survey



UDOT CAP 115166 Extended to Apr 2022



Scale: 1" = 40'

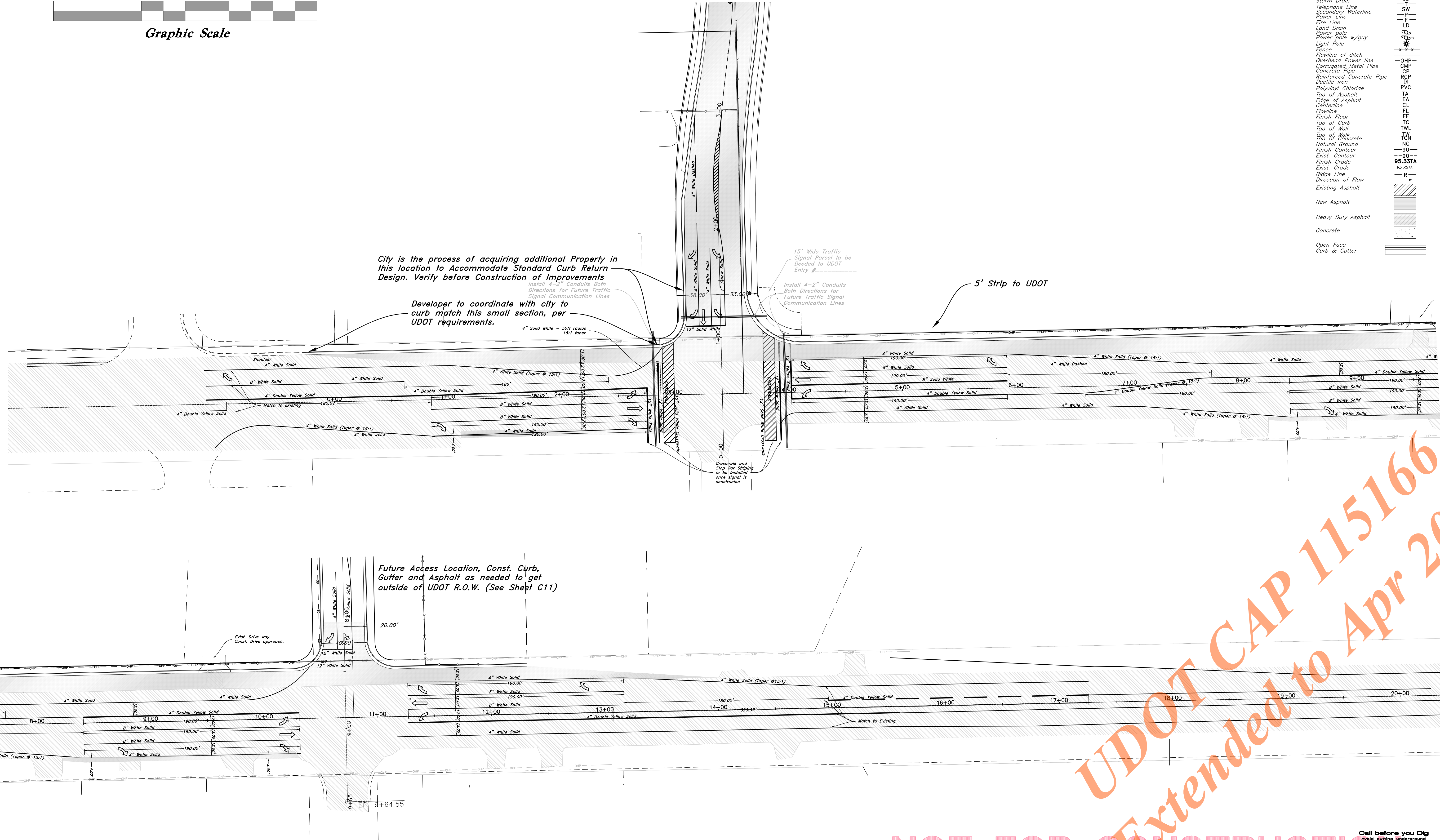


Graphic Scale

Legend

(Note: All items may not appear on drawing)

- San. Sewer Manhole
- Water Manhole
- Storm Drain Manhole
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- Catch Basins
- Exist. Fire Hydrant
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- Corrugated Metal Pipe
- Concrete Pipe
- Reinforced Concrete Pipe
- Ductile Iron
- Polyvinyl Chloride
- Top of Asphalt
- Edge of Asphalt
- Centerline
- Flowline
- Finish Floor
- Top of Curb
- Top of Wall
- Top of Walk
- Top of Concrete
- Natural Ground
- Finish Contour
- Exist. Contour
- Finish Grade
- Ridge Line
- Direction of Flow
- Existing Asphalt
- New Asphalt
- Heavy Duty Asphalt
- Concrete
- Open Face
- Curb & Gutter



City is in the process of acquiring additional Property in this location to Accommodate Standard Curb Return Design. Verify before Construction of Improvements

Developer to coordinate with city to curb match this small section, per UDOT requirements.

15' Wide Traffic Signal Parcel to be Deeded to UDOT Entry #

Install 4-2" Conduits Both Directions for Future Traffic Signal Communication Lines

5' Strip to UDOT

Future Access Location, Const. Curb, Gutter and Asphalt as needed to get outside of UDOT R.O.W. (See Sheet C11)

UDOT CAP 115166
Extended to Apr 2024

NOT FOR CONSTRUCTION



GREAT BASIN ENGINEERING

5746 SOUTH 1475 EAST, GREEN, UTAH 84403
18015 E SLETS BLVD, SUITE 102, FARMINGTON, UT 84404
WWW.GREATBASINENGINEERING.COM

Striping Plan

Rivers Edge Subdivision - Phase 1

Approx 387 East Main
Tremonton City, Box Elder County, Utah
A part of Section 2, T11N, R3W, SL&M, U.S. Survey

March, 2022

SHEET NO. **C14**

20N710

TREMONTON CITY
CITY COUNCIL MEETING
April 4, 2023

TITLE:	Review of Calendar and Review of Past Assignments
FISCAL IMPACT:	Not applicable
PRESENTER:	Marc Christensen

April 10

Fire Chief Interviews:

6 pm – John Connolly

7 pm – Christopher Wells

April 19-21

***No City Council Meeting on April 18 due to the ULCT Midyear Conference.**



Dates: Wednesday, April 19 - 21, 2023

Location: Dixie Convention Center, St. George

April 26

Cathy Newman, Food Pantry Director, is retiring. We appreciate all she has done for the city and wish her well in retirement. There is no event scheduled for her retirement.
