



MEETING NOTICE AND AGENDA

Notice is hereby given that the Kaysville City Council will hold a regular council meeting on Thursday, September 7, 2023, starting at 7:00 PM in the **Council Chambers in Kaysville City Hall at 23 East Center Street, Kaysville, UT**. The meeting will be streamed on YouTube, and the link to the meeting will be posted on www.KaysvilleLive.com.

Public comment is only taken during a meeting for Action Items, "Call to the Public", or for a public hearing. **Those wishing to speak during these times must sign-up in person before the meeting begins.** Comments may also be directed to the City Council via email to publiccomment@kaysville.gov. Emailed comments will NOT be read out-loud at the meeting.

CITY COUNCIL Q&A – 6:30 PM

The City Council will be available to answer questions or discuss any matters the public may have.

CITY COUNCIL MEETING – 7:00 PM

The agenda shall be as follows:

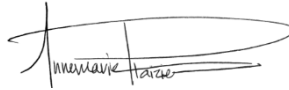
- 1) OPENING
 - a) Presented by Council Member John Adams
- 2) CALL TO THE PUBLIC (3 MINUTE LIMIT, MUST SIGN UP IN PERSON)
- 3) PRESENTATIONS AND AWARDS
 - a) A Proclamation declaring September 2023 as Suicide Awareness and Prevention Month
 - b) A Proclamation observing the month of September 2023 as Constitution Month
 - c) A Proclamation declaring October 8-14, 2023 as Fire Prevention Week
- 4) DECLARATION OF ANY CONFLICTS OF INTEREST
- 5) CONSENT ITEMS
 - a) Approval of Minutes of August 3, 2023
 - b) Appointment of Debora Shephard as Planning Commissioner
 - c) Reappointment of Judy Rigby and Rob Dansie as Historic Preservation Committee Members
 - d) A Resolution adopting and approving an Interlocal Agreement with the Davis School District for School Resource Officers
- 6) ACTION ITEMS
 - a) A Resolution indicating the intent of the Kaysville City Council to maintain their Current Boundary with Farmington City
 - b) Consideration of a development agreement and request to rezone 6.26 acres of property located at 521 West 350 North from General Commercial (GC) to include a Mixed Use Zoning District Overlay - Phil Holland/H Group Ventures LLC
- 7) WORK ITEMS
 - a) Detached accessory dwelling units (ADUs) discussion
- 8) COUNCIL MEMBERS REPORTS

9) CITY MANAGER REPORT

10) ADJOURNMENT

Kaysville City is dedicated to a policy of non-discrimination in admission to, access to, or operations of its programs, services, or activities. If you need special assistance due to a disability, please contact the Kaysville City Offices at (801) 546-1235 at least 24 hours in advance of the meeting to be held.

I hereby certify that I posted a copy of the foregoing Notice and Agenda at Kaysville City Hall, Kaysville City website at www.kaysville.gov, and the Utah Public Notice website at www.utah.gov/pmn. Posted on September 1, 2023.

A handwritten signature in black ink, appearing to read "Annemarie Plaizier", written over a horizontal line.

Annemarie Plaizier
City Recorder

Proclamation for Suicide Awareness & Prevention Month September 2023

WHEREAS, September is known as National Suicide Prevention Month, during which mental health advocates, individuals, prevention organizations, survivors, allies, and communities across the nation come together to raise awareness about suicide prevention; and

WHEREAS, suicidal thoughts can affect anyone, irrespective of age, gender, race, orientation, income level, religion, or background; and

WHEREAS, in 2022, suicide claimed an estimated 49,449 Americans in the United State, an increase of approximately 2.6% from 2021; and

WHEREAS, for over a decade, Utah's suicide rate has consistently exceeded the national rate, with an annual average of 648 Utahns losing their lives to suicide and 4,221 Utahns attempting suicide; and

WHEREAS, on a daily average, 2 Utahns die as a result of suicide and 12 Utahns receive treatment for attempted suicide; and

WHEREAS, suicide is the leading cause of death of youth and young adults aged 10-17 in Davis County and throughout Utah; and

WHEREAS, each suicide profoundly affects family members, friends, loved ones, and the entire community; and

WHEREAS, suicide is a preventable public health concern necessitating collective efforts from all segments of our community to increase awareness, reduce stigma, and provide education regarding warning signs and how to assist those in need; and

WHEREAS, the Davis County Health Department, in collaboration with over 50 community partners, has identified suicide as a priority health matter in its Community Health Improvement Plan; and

WHEREAS, suicide prevention in our community should extend beyond an annual observance, and should be a call to action to revolutionize how our community discusses, perceives and addresses suicide in our community.

NOW THEREFORE, I, Mayor Tamara Tran, joined by the Kaysville City Council members, do hereby proclaim September 2023 as **Suicide Awareness and Prevention Month** in Kaysville City. I strongly encourage all Kaysville residents to actively participate in suicide prevention by familiarizing themselves with the importance of mental health, and by promoting mental well-being as we work towards reducing instances of suicides.

IN WITNESS WHEREOF, I have affixed the Seal of the City of Kaysville City on this 7th day of September 2023.

Mayor Tamara Tran



Proclamation Observing Constitution Month September 2023

WHEREAS, September 17, 2023 marks the two hundred and thirty-sixth anniversary of the drafting of the Constitution of the United States of America by the Constitutional Convention;

WHEREAS, America's Constitutional form of government is exceptional and unique and changed the course of history for the entire world;

WHEREAS, it is essential that the rising generation and citizens of all ages understand our history and form of government so it can be honored and perpetuated;

WHEREAS, America is founded on moral principles, including the sovereignty of the people and the belief that all people are created equal and have unalienable rights bestowed upon them by their Creator;

WHEREAS, the genius of the Constitution is its ability to decentralize power between the state and federal governments, known as federalism;

WHEREAS, we are a nation under God as evidenced by our pledge of allegiance and a nation which puts its trust in God as evidenced by our national motto;

WHEREAS, a recent study showed that between 1998 and 2018, the percentage of Americans who think "patriotism is important" declined from 70 to 38 percent;

WHEREAS, recognizing the vital need for patriotism, the Utah State Legislature passed HB 179 in 2023 designating September as American Founders' and Constitution Month, which encourages organizations throughout the state to observe this occasion, with a particular focus on (1) restoring a spirit of patriotism for our nation and state by flying our national flag and engaging in other patriotic activities; (2) educating ourselves about our U.S. Constitution, and (3) acknowledging and expressing gratitude to God for His hand in our nation's origin and destiny. Then we will be entitled to the promise of the psalmist: "Blessed is the nation whose God is the Lord" (Psalm 33:12);

WHEREAS, Kaysville has a proud history of valuing and celebrating patriotism as well as honoring the men and women who have sacrificed their lives to preserve and protect the rights and responsibilities embodied in the Constitution.

NOW, THEREFORE, BE IT RESOLVED, that I, Tamara Tran, Mayor of Kaysville City, along with the Kaysville City Council, do hereby observe the month of September 2023, as

Constitution Month

and urge all citizens to study the Constitution and reflect on the privilege of being an American with all the rights and responsibilities which that privilege involves.

IN WITNESS WHEREOF, I have hereunto set my hand and cause the Seal of the City of Kaysville to be affixed this 7th day of September, 2023.



Mayor Tamara Tran



Kaysville City Fire Prevention Week Proclamation



WHEREAS, planning, preparedness and situational awareness are critical to surviving a home fire. That is the message behind this year's Fire Prevention Week campaign, "Cooking Safety Starts with YOU, Pay attention to fire prevention"

WHEREAS, The Kaysville City Fire Department is dedicated to the safety and security of everyone living, working, and visiting our city. Fire is a serious public safety concern both locally and nationally. Since 1922, the National Fire Protection Association has sponsored the public observance of Fire Prevention Week. In 1925, President Calvin Coolidge proclaimed Fire Prevention Week a national observance, making it the longest-running public health observance in our country. Fire Prevention Week is observed each year during the week of October 9th in commemoration of the Great Chicago Fire, which began on October 8, 1871, and caused devastating damage. This horrific conflagration killed more than 250 people, left 100,000 homeless, destroyed more than 17,400 structures, and burned more than 2,000 acres of land. During Fire Prevention Week, children, adults, and teachers learn how to stay safe in case of a fire. Firefighters provide lifesaving public education in an effort to drastically decrease casualties caused by fires.

Kaysville's First responders are dedicated to reducing the occurrence of home fires and home fire injuries through prevention and protection education. Correspondingly, Kaysville personnel are responsive to public education measures and are able to take action to increase their safety from fire, especially in their homes; and

WHEREAS, this year's Fire Prevention Week campaign includes the following recommendations:

- Pay Attention to Fire Prevention.
- Safer cooking.

THEREFORE, BE IT RESOLVED, that I, Tamara Tran, Kaysville City Mayor, along with Kaysville City Council members, do hereby proclaim October 8-14, 2023, as Fire Prevention Week throughout Kaysville City, Utah. I encourage all the people in Kaysville to be aware of their surroundings, look for available ways out in the event of a fire or other emergencies, respond when the smoke alarm sounds by exiting the building immediately.

Tamara Tran, Mayor

Paul Erickson, Fire Chief

KAYSVILLE CITY COUNCIL

August 3, 2023

Minutes of a regular Kaysville City Council meeting held on August 3, 2023 at 7:00 p.m. in the Council Chambers in Kaysville City Hall at 23 East Center Street, Kaysville, UT.

Council Members present: Mayor Tamara Tran, Council Member John Swan Adams, Council Member Mike Blackham, Council Member Abbigayle Hunt, Council Member Nate Jackson, and Council Member Perry Oaks

Others Present: City Manager Jaysen Christensen, Finance Director Dean Storey, City Attorney Nic Mills, City Recorder Annemarie Plaizier, Community Development Director Melinda Greenwood, Information Systems Manager Ryan Judd, Paul Hayward, Gayle McGraw, Bruce McGraw, Brigg Lewis, Laurene Starkey, Val Starkey, Jill Dredge, Flemming Hyllested, Scott White, Juleen White, Jed F. Barker, Brigg Lewis, Greg Fisher, Steve Lyon

6:00 P.M. – PUBLIC HEARING – FISCAL YEAR 2024 BUDGET TRUTH IN TAXATION

Mayor Tran opened the public hearing.

Paul Hayward stated that he had reached out to city staff over the past week and was pleased with the professionalism he encountered. Mr. Hayward said that his wife could not be present tonight but she wanted him to convey the message urging the council to consider reducing the proposed property tax increase to below 20%. Discussions have taken place concerning a future public works building renovation and a second fire station, both of which will cost the city over forty-three million dollars in total spending. The city needs to consider exploring methods of saving money on these projects. Mr. Hayward said that the last time he had spoken with the council was in regards to a proposed large tax increase to support the paramedic program, and when it passed he'd applauded; not because of the increased taxes, but because the proposed increase had been reduced by a third of what had originally been proposed. While he recognized that he was joining the budget project at this late stage, Mr. Hayward said that he had wished he'd been made aware of it sooner and pleaded with the council that they find a way to decrease the amount proposed for the tax increase, as the community has experienced continual property tax increases for years.

Gayle McGraw extended her gratitude to the Council for their dedicated efforts on behalf of the city. Mrs. McGraw also voiced her concern regarding the proposed tax increase and questioned whether the increase was driven by wants or needs. What happened to the idea that the council would not raise taxes higher than the cost of living or the inflation rate, as discussed a few years ago? Residents living on a fixed income lack the means to cover the cost of increased rates. Mrs. McGraw asked if there was an urgent need for these additional funds or if there were any areas of the budget that could be cut. Mrs. McGraw also asked about the potential impact the proposed tax increase would have on businesses in Kaysville.

Brigg Lewis asked that the city reconsider imposing additional taxes. There are a significant number of residents that are on fixed incomes, including himself. Mr. Lewis said that his pension will remain unchanged, and the last time that he had received an increase from Social Security it

was absorbed by rising Medicare expenses. Mr. Briggs asked the council to have compassion for the people of Kaysville, as inflation is an ongoing concern for everyone and it is not over yet. Numerous residents may face the risk of losing their homes due to financial strain. There may be areas that the council could look at reducing costs. Mr. Briggs added that residents were burdened with a road fee about four years ago, yet certain roads in the city remain in poor condition.

Council Member Oaks arrived.

Laurene Starkey thanked the council for upholding their oath of office in representing the citizens of Kaysville. In 2017, a road fee was implemented, and residents have been paying seven dollars a month towards it each month since then. Residents will have to pay a similar amount each month with this proposed increase in property tax. Additionally, there was a thirty percent tax hike a few years ago when taxes were increased to support the paramedic program. Many individuals these days are finding themselves taking on secondary jobs or extra shifts in order to make ends meet. Mrs. Starkey said that she appreciates the comments made by the council and city staff indicating that Kaysville's financial resources are respected and honored. When prices rise and income does not, we work to make due with less. Mrs. Starkey invited the city's representatives to do the same.

Jill Dredge expressed her appreciation for the city's dedication to hearing its citizens and commended the time and effort invested. Ms. Dredge said that over the last few years she had participated in a citizen group that led legislative bills. With each passing year, their concerns have only grown regarding the overreach of these bills and how they will affect Kaysville. Ms. Dredge said that she had reviewed parts of the city budget and expressed concern about the electric meters that were installed last summer, as well as the water meters that are currently being installed. There is a chance that residents will see a twenty-nine percent increase in water taxation. Ms. Dredge said that another item listed on the budget was for surveillance cameras, and while it is good to have some cameras, she is concerned about the number of cameras being installed and potential infringement on citizens' privacy. She is also concerned about tax allocation to special districts that might not align with the Utah constitution. Education taxes keep going up and yet we continue to lose students and teachers in Davis County. There are some big projects planned for Kaysville and there is a question as to how that will affect the taxpayers both now and after the project is completed. It is important that there is more increased citizen involvement in budget scrutiny alongside the council and the decisions that shape the city.

Jed Barker, a resident of Kaysville for sixty-three years, thanked the council for the opportunity citizens have to speak to the council. It is part of the obligation of the council as the representatives of residents. Mr. Barker expressed concern about what the increased tax funds may potentially be spent on, and questioned whether the expenditures would be spent on essential needs or discretionary wants. Most residents will not be receiving a cost-of-living increase this year. There are various areas of the budget where Mr. Barker feels that the city could save money or trim costs. Mr. Barker said that he had become aware of the proposed tax increase through a news source. Financial concerns are prevalent among all citizens at present, and he urged the council to be cautious and prudent with managing the city's funds in our current economic climate.

Greg Fisher said that he had come to the meeting tonight in hopes of seeing a little more detail on the specifics within the FY 2024 budget proposal. Mr. Fisher said that he had some questions regarding the utilization of the city's fund balances or retained earnings. Specifically, he was curious if the city had planned to tap into the available unrestricted balance from the city's funds.

Mr. Fisher asked if the city had experienced decreases in our revenue streams, necessitating a proposition of a tax increase in order to make up for a shortfall.

Bruce McGraw asked if the funds acquired through the proposed tax increase had been earmarked for any specific purposes and asked how much the city would be receiving from the tax increase. Mr. McGraw asked about when residents might see subsequent tax increases, and where in the budget the city had implemented cost-cutting measures.

Val Starkey said that they had been actively following the budget process for several months and one of the more significant expenses in the budget was for the purchase of a fire truck. They understand that it costs money to support the city's fire department, and as part of that, it is necessary to provide required resources for them. However, it seems that these major expenses are ongoing. Mr. Starkey added that he felt there was a lack of public information disseminated and questioned if the city had specific requirements they had to meet for sharing information. Mr. Starkey questioned whether these requirements needed to be reconsidered to ensure that all residents are adequately informed. Tax increases are one of these things that effects everyone and where everyone has some interest in it.

There were no further comments or questions from the public.

Council Member Blackham made a motion to close the public hearing 6:26 P.M. The motions was seconded by Council Member Oaks and it passed unanimously.

SPECIAL CITY COUNCIL MEETING

ADOPTION OF THE 2023 CERTIFIED TAX RATE FOR KAYSVILLE AND THE FISCAL YEAR 2024 BUDGETS

Mayor Tran opened the special city council meeting at 6:40 P.M. Mayor Tran explained the process that led the council to their present point where they are about to vote on the certified tax rate for 2023, and the Fiscal Year 2024 budget. Throughout the year, numerous discussions have transpired during council meetings and three work sessions where the council thoroughly examined the budget. One work session included the participation of the city's department heads. Each meeting and work session adhered to proper notice procedures and requirements. Mayor Tran emphasized the gravity with which the city council has approached this budget decision and expressed gratitude for the questions and feedback received from residents. The impact of tax changes affects all of us. When the proposed FY 2024 budget was initially presented to the council, there was a deficit of 2.3 million dollars. Several factors contributed to this deficiency. The discontinuations of fire support services to Fruit Heights City through Kaysville City resulted in a loss of funds. The time it now takes to order and receive a new fire engine led to an unexpected decision to purchase a fire engine in anticipation of future needs. Additionally, increased staffing costs and the need for the city to maintain competitive market salary rates were necessary to be able to retain our workforce. Through their many discussions, the council has continued to focus on potential cost-cutting measures, and distinguishing between wants and needs. The result of their rigorous deliberation has led to a reduction in the deficit to \$958,000. Consequently, the decision to raise taxes is being considered in order to cover this shortfall. Mayor Tran said that Kaysville's character as a hometown community sets our city apart from other cities. Many of Kaysville's residents prefer this area because of its lack of commercial. However, this absence of

a commercial foundation leads to lower revenue coming into the city in comparison to neighboring municipalities. Inflation is something that is out of our control, and is something that the city is not exempt from.

Council Member Hunt said that she appreciates the many residents who have reached out to the council through the whole budget review process. The city budget is complicated. Having citizen input has helped the council to look at other angles and consider things that we might not have before. This last year has been unique and we have faced many interesting challenges, including what was mentioned by Mayor Tran. During this prior year, the city had to find other additional revenue streams in order to cover the cost of a wage increase for our police officers so that we did not lose them. It seemed that every police force had a hard time hiring and keeping police officers on staff after the George Floyd riots occurred. On a national level, police departments had to increase wages of officers in order to keep police departments staffed, and Kaysville's police department was no exception. The council is aware that some citizens feel the city is spending too much. However, the money being approved in the proposed FY 2024 budget is going towards exactly the kinds of things that our residents expect to have, such as our public safety and city infrastructure. People expect to have access to those amenities. Kaysville struggles to bring in more sales tax revenue, but that is something that we can work to improve by trying to bring in more businesses. It is important for our residents and businesses to know that the mayor and city council have been working aggressively to try to find ways to bring in more sales tax revenue so that we do not have to keep falling back on increasing taxes to cover costs. Nobody wants to raise taxes. We will all be effected by a tax increase. Our residents need to know that the city council and staff have done their best on trying to keep costs down in the budget.

City Manager Jayson Christensen stated that when comparing Kaysville's tax rate with other cities in the county, only three cities have a lower tax rate than Kaysville. Among these are Farmington and Layton, both with substantially more commercial base and sales tax revenue than Kaysville.

Mayor Tran said that a member of the audience had asked if the city had considered doing a fund balance transfer. For the last couple of years the city has used fund balance to help supplement deficiencies in the budget. However, this is a problem because there is only so much money saved in the fund balance. What funds there were in the fund balance was accrued over time, not just within a calendar year. At the beginning of 2022, the council had considered doing some enterprise fund transfers using power funds. After much discussion, in the end citizens of Kaysville said they did not want the city using power funds in other areas of the budget. The City has been focused on trying to bring in more businesses to the city that would complement what we already have here, and would speak to our hometown feel. If the City continues to only use fund balance to supplement our budget, we will run out of money and then have to implement a much larger tax increase in order to cover costs. This is why the council felt it important to hold the Truth in Taxation hearing this year. Costs have increased everywhere, and we have all felt it and we experience it every day. The council feels that the only way to continue to be honest and responsible with the money of Kaysville citizens is to implement smaller incremental tax increases each year, rather than a large increase at once. The city has some major necessary projects that will need to be completed in the future and we will need to find ways to fund them.

Council Member Jackson said that the council members had walked through the operations center building and while it appears to be in rough shape, the bones of the building are still good. We are looking for into creative ways that we can make improvements to the building while keeping costs

low. There are already plans in place to have a new roof installed on the building. Throughout budget discussions, the council continued to ask city staff to rework the budget and to try to get by with what they have. The council has put a suspension on discretionary spending and have implemented a hiring freeze. As a city, we have invested a lot into our EMS and fire department and we have one of the best departments in Davis County. What happened with Fruit Heights City was unfortunate, but the city was not getting what was owed and that, in turn, ended up being put on Kaysville taxpayers. We want to continue to have a good relationship with Fruit Heights and there may be another opportunity to partnership with them again. Council Member Jackson added that the state legislature required all cities to install water meters on secondary water connections. However, there was never a clear answer from the state on how cities would pay for those meters. National and state politics effect our city and more residents need to be reaching out to our legislatures about how their decisions effect our city.

Council Member Oaks said the funds that the city will receive from a tax increase has not been specifically earmarked for anything, but rather it will be used to cover general cost increases. Taxes were not increased last year, and because of that, the city used fund balance to cover increased costs. The council looked at every option we could think of in order to not have to raise taxes this year. Our city was hit by inflation, just like everyone else in the nation. Had the city increased taxes by even just a small amount last year, we would be facing a smaller tax increase this year or maybe none at all. Council Member Oaks said he was grateful the city was able to get the deficit amount down as much as we were able to.

Council Member Adams asked about how much of the budget went towards salaries.

Dean Storey responded that it amounts to about ten million dollars a year for salaries.

Council Member Adams said that the social security cost-of-living adjustment was 1.6% in 2019, 1.3% in 2020, 5.9% in 2021, and 8.7% in 2022. Our employees live off a similar wage pattern, and if the city were to do a similar increase to what social security did in 2022, we would be looking at a cost-of-living increase of 8.7%. Cost-of-living raises are vital in retaining our employees. Council members have collectively been seeking ways to avoid raising taxes. It is something they do not want to have to do, given that they respect the value of residents' money.

Council Member Blackham expressed his opposition to tax increases and stated that he feels that one of the most important responsibilities of the city council members is to oversee the city budget and make careful decisions on how resources are spent in order to cater to residents' needs. Over the last year, the city has seen many increases. In order to retain existing police officers, the decision was made to increase their salaries to align with the average market pay. This adjustment amounted to an additional \$600,000 for the city. The city also had to assume responsibility for its paramedic services, previously managed by Davis County, which led to unanticipated costs. Davis County had not been collecting sufficient funds from residents to cover paramedic service expenses, adding to our financial burden and the need for a tax increase. Both of these expenses cannot be funded with sales tax revenues. In an effort to avoid tax increases, in 2022 the city decided to borrow money from the general reserve funds. However, this strategy is not sustainable long-term. The city has witness significant increases to operational costs, such as in our fuel and power expenses. It is important that the city have competitive employee salaries, particularly for public safety workers who require extensive training. These ongoing needs are funded through property taxes, as there is no dedicated revenue stream for police and fire departments. Kaysville

runs lean already, and we do not want to decrease the level of service that we are providing to our residents. City departments have already cut back on many things, and have deterred projects to future years. The timing of the fire truck purchase was driven by a three-year delivery timeframe for a truck order. The engine that the new fire truck will replace will be twenty-five years in three-years, and it was necessary to make the purchase. The tax increase being proposed stems from necessary purchases and essential costs that the city must make. Council Member Blackham said that the major rainstorm that occurred the day prior showed the city the need to maintain reserve fund balances for emergency or unexpected situations. The city council and city staff have worked hard on the budget to get it to where it is at now. Nobody likes tax increases, and the one proposed will allow the city to just break even. There are more projects planned for the future and we will have to figure out how to pay for them as they come.

Council Member Hunt made a motion to approve a Resolution adopting the 2023 Certified Tax Rate for Kaysville City and the Fiscal Year 2024 Budgets, seconded by Council Member Blackham.

The vote on the motion was as follows:

Council Member Blackham, yea
Council Member Adams, yea
Council Member Hunt, yea
Council Member Oaks, yea
Council Member Jackson, yea

The motion passed unanimously.

Council Member Oaks made a motion to adjourn the special City Council meeting at 7:08 P.M. The motion was seconded by Council Member Jackson and passed unanimously.

CITY COUNCIL MEETING

OPENING

Council Member Oaks opened the meeting at 7:08 P.M. with a thought and a prayer, and led the audience in the Pledge of Allegiance.

CALL TO THE PUBLIC

Laurene Starkey commented that there had been discussions with the Planning Commission regarding potential multi-family housing developments in the city. The idea of multi-family housing was introduced by the state legislature and is being imposed on every city in the state. Non-compliance by the city will result in fines. Having ownership of property teaches and encourages feelings of pride and wanting to enhance things for our city. The Planning Commission has considered allowing taller apartment buildings, as long as enough parking is provided. Mrs. Starkey urged the city to consider the consequences that may come from rezoning this property from its current commercial use, which could bring in commercial revenue for the city, to a housing zone. Many residents live in Kaysville because we like the way it is now, and we appreciate the council striving to preserve the character of Kaysville as it is. Allowing for apartment buildings

might be degrading to the city.

DECLARATION OF ANY CONFLICTS OF INTEREST

No conflicts were disclosed.

ACTION ITEMS

AN ORDINANCE AMENDING SECTION 17-19 “GENERAL COMMERCIAL DISTRICT” AND SECTION 17-20 “CENTRAL COMMERCIAL” OF THE KAYSVILLE CITY CODE TO ADD RESTRICTIONS FOR VEHICLE-CENTERED USES

Community Development Director Melinda Greenwood explained that this item originally went before the Planning Commission in March as a draft ordinance to restrict additional car washes within close proximity to existing or permitted car washes. The draft concept was introduced after an influx of tunnel car washes, all within a few blocks of each other, was proposed or permitted in the city center area. The Planning Commission felt the original draft of the ordinance was inadvisable due to the wording of the ordinance and the limited action it would implement. The Commission directed city staff to expand the proposed restrictions to better support the 2022 General Plan City Center concept. A revised draft of the ordinance, which would eliminate uses which are singularly focused on vehicles, was presented at the July 13, 2023 Planning Commission meeting. At the meeting, the Planning commission held a public hearing and discussed the expanded draft ordinance. During the public hearing, one comment was received from a representative of Quick Quack car wash. While the commenter was supportive of the ordinance change, they asked for an exemption from the non-conforming use section of the City’s ordinance. Their request would allow The Good Spray car wash to demolish their existing facility and construct a tunnel wash over two adjacent parcels. After a lengthy discussion, the Planning Commission voted unanimously to send a recommendation of approval of the draft ordinance to the City Council. The Planning Commission also recommended that the city’s Redevelopment Agency use a Community Reinvestment Area and funding to assist property owners in the area to comply with the proposed ordinance change.

Mayor Tran opened the public comment period for this item.

Chase Bryan asked the council to consider adding an exception from the proposed language in Section 17-9-8 of the ordinance so that existing auto-related services would have the ability to improve or expand their business. The Staff Report for this item shows that it is unknown if there will be a fiscal impact by approving the ordinance. However, those property owners that have existing auto-related businesses will be financially effected by this ordinance because it will prevent them from being able to redevelop or improve their business. The owner of The Good Spray, Sydney King, has indicated that it will cost her \$2.7 million dollars if she is unable to make the improvements she wants to her property. Any time you prohibit someone from being able to make improvements to their property, their property could potentially degrade over time. The Kings have also indicated that they have had six different proposals for their property but all have failed because of deed restrictions on their property and other limiting factors. Adding more limitations to their property will be devastating for them. They should be allowed opportunities to improve their property.

Sydney King, the owner of The Good Spray, said that the proposed ordinance mentions "...spray and tunnel car washes which are not accompanied with a convenience store..." are prohibited. Ms. King said she would like the city to consider an exemption for her property to allow her to replace her current carwash with a new, updated carwash with an accompanying business that would not be a convenience store. It would be a small store, such as a soda shop or coffee shop, with inside seating and would be the combined use, as specified in the ordinance. Being allowed to do this type of mixed-used would create a better space for this area and would allow the city to continue to move forward with their redevelopment design.

There were no further comments or questions from the public.

Council Member Adams asked if the Quick Quack would be allowed here if they could keep their building the same as the existing building.

Melinda Greenwood responded that the city's code does not allow for expansion outside the existing footprint or of that use. Repairs and modifications could be made to the building as long as they remain within the footprint of the existing building. However, if the building of a non-conforming use were voluntarily demolished, they would not be allowed to rebuild that same non-conforming use in its place.

Council Member Hunt asked if they would be allowed to remodel their building to make it taller in order to accommodate taller vehicles.

Melinda Greenwood said that as long as it did not expand the footprint of the building it would be allowed.

Council Member Jackson asked why the language was written to only allow for car washes that are accompanied with a convenience store.

Melinda Greenwood said that the city's general plan encourages the creation of opportunities for mixed-uses. The idea behind including this language is to provide more opportunities for people to shop conveniently if it was tied to a use that was also automobile focused. The use would have to be a convenience store type of use, and not just general retail sales in order to be allowed.

Council Member Jackson asked about revising the language to be more specific about what we are looking for in a convenience store type of use with a car wash. Council Member Jackson also suggested removing the language "which are not accompanied with a convenience store..." in the prohibited uses section, after spray and tunnel car washes, and direct staff to add language to the ordinance defining a convenience store.

Melinda Greenwood clarified that by removing that section of language in the ordinance, the ordinance would not allow any new spray or tunnel car washes. If the council does not want to allow these types of uses in these areas of the city any longer, then there would not need to be further discussion about the convenience store mixed use aspect.

Council Member Jackson said that he feels that the city is looking for more diversity in our downtown area, and feels it would be worthwhile to have further discussion about these types of mixed uses with car washes.

Council Member Blackham commented that he has some concerns about Council Member Jackson's suggested language removal within the ordinance because the city is trying to encourage convenience stores to come to the city because of their retail sale. The Good Spray has been in the city for several years and Council Member Blackham said that he struggles with the idea of telling an existing business they cannot expand their business. The city council has been working on finding what kind of vision we want for Main Street, but we do not know what that vision is yet. Keeping the language as it is being proposed could open up more opportunities for diverse businesses come in. We have a lot of existing single family homes still along north Main Street that are zoned for commercial, and it's unlikely they will sell their homes anytime soon.

Council Member Jackson said that we need to protect our already established businesses. Council Member Jackson said that he feels that the vision for Main Street will come as the city makes more decisions creating more opportunities for diversity in the city.

Council Member Jackson made a motion to approve an Ordinance amending Section 17-19 "General Commercial District" and Section 17-20 "Central Commercial" of the Kaysville City Code to add restrictions for vehicle-centered uses, with the stipulation that the language in both Sections 17-19 and 17-20 be amended to remove the phrase "which are not accompanied with a convenience store". Council Member Hunt seconded the motion.

Council Member Oaks clarified that this ordinance would only prohibit these spray and tunnel car washes along Main Street between the city's northern border and 100 South Street, and along 200 North between I-15 and 100 East Street.

The vote on the motion was as follows:

Council Member Adams, yea
Council Member Hunt, yea
Council Member Oaks, yea
Council Member Jackson, yea
Council Member Blackham, yea

The motion passed unanimously.

AN ORDINANCE ENACTING SECTION 17-31-4 "FIREWORKS STANDS, CHRISTMAS TREE STANDS, AND TEMPORARY OR SEASONAL RETAIL SALES" OF THE KAYSVILLE CITY CODE

Melinda Greenwood explained that this item is before the City Council for consideration because of a text amendment application that was submitted by TNT Fireworks. The request is for the city to allow seasonal retail sales of fireworks at Davis High School. In 2022, city staff mistakenly issued a business license for TNT Fireworks to sell fireworks from the parking lot of Davis High School, which is zoned R-1-8. Retail sales are not allowed in any of the R-1-8 zoning districts, so TNT Fireworks was notified that future sales could only take place if the city's zoning code was amended to allow for such uses. The City did not receive any complaints because of last year's sales, and the sales benefitted the high school as a fundraiser. At their July 13, 2023 meeting, the Planning Commission deliberated the draft ordinance, conducted a public hearing, and heard from

the applicant. The applicant spoke during the public hearing, but no other comments were received. Based on applicant comments and Planning Commission discussion, a portion of the draft ordinance was amended to require that adequate parking be provided, but did not set a hard number for that requirement. The Planning Commission voted unanimously to forward an approval recommendation to the City Council, and that motion included the minor adjustment to parking requirements as mentioned.

Council Member Adams commented that he would have liked to have the applicants present at tonight's meeting.

Melinda Greenwood said that the applicants were notified about their item being on the tonight's meeting agenda.

Mayor Tran opened the public comment period for this item.

There were no comments or questions from the public.

Council Member Hunt made a motion to approve an ordinance enacting Section 17-31-4 "Fireworks Stands, Christmas Tree Stands, and Temporary or Seasonal Retail Sales" of the Kaysville City Code. Council Member Oaks seconded the motion.

The vote on the motion was as follows:

Council Member Hunt, yea
Council Member Oaks, yea
Council Member Jackson, yea
Council Member Blackham, yea
Council Member Adams, yea

The motion passed unanimously.

AN ORDINANCE ENACTING SECTION 17-31-5 "BEEKEEPING" OF THE KAYSVILLE CITY CODE

Melinda Greenwood explained that Planning Commissioner, Steve Lyon, is a beekeeping hobbyist and had submitted a text amendment application to the City requesting that the City adopt an ordinance allowing beekeeping in residential zones, as long as certain standards are maintained. Dan Jessop, the city's Zoning Administrator, reviewed the information submitted by Mr. Lyons and conducted some independent research. Through this process, he validated that the standards proposed by Mr. Lyons are acceptable for healthy hives and bees. If adopted, the ordinance would require that beekeepers obtain an appropriate license registration from the State of Utah and that they meet state requirements to keep hives. Those state requirements include that hives be inspected by the state, that hives be placed in rear yards, away from contact with humans and domestic animals, that the hives be placed at least five feet away from property lines, and that the hives have removable section frames, are six inches above the ground and have weather resistant tops. This item was reviewed by the Planning Commission on July 13, 2023 where a public hearing was conducted, but no comments were received. The Commission discussed the proposed ordinance and agreed that allowing beekeeping in the city is a favorable addition to the city's code.

Mayor Tran opened the public comment period for this item.

There were no comments or questions from the public.

Council Member Blackham said that beekeepers will sometimes call the Davis County Mosquito Abatement to ask for no-spray zones, and he asked that this ordinance be adopted with the condition that beekeepers would not be able to request a no-spray zone in Kaysville anymore. It becomes a problem because the neighbors of the requestor will complain to Mosquito Abatement because of the increase of mosquitos in their area. It also is harder for Mosquito Abatement to be able to control mosquitos that carry viruses in the area.

Steve Lyons said that most beekeepers keep their hives in their backyards, and as long as the Mosquito Abatement crews are correctly spraying, the spray should not reach the backyards, and therefore it should not be an issue for beekeepers. Bees are not typically active at night when the crews are out spraying for mosquitos.

Council Member Adams made a motion to approve an Ordinance enacting Section 17-31-5 “Beekeeping” of the Kaysville City Code, with the stipulation that language be added to the ordinance stating that residents keeping bees may not request a no-spray zone with the Davis County Mosquito Abatement District. Council Member Oaks seconded the motion

Council Member Jackson said that he is not in favor of restricting beekeepers from requesting no-spray zones because he does not feel he has enough information about how this could negatively affect bees.

Council Member Blackham said that there have been many studies done by all different kinds of groups both across the country, as well as locally, and they have found that as long as the mosquito abatement districts are correctly spraying the chemicals as per label, there is no detriment to bees. The Davis County Mosquito Abatement District is very careful in what they do, and they calibrate all of their equipment and have to show that it has been calibrated correctly.

The vote on the motion was as follows:

Council Member Oaks, yea
Council Member Jackson, nay
Council Member Blackham, yea
Council Member Adams, yea
Council Member Hunt, yea

The motion passed with a vote of four to one.

COUNCIL MEMBER REPORTS

Council Member Jackson said that he had recently met with the City Engineer to discuss street improvements that are planned for 200 North Street, and the potential of adding trees and handicapped wheelchair access for sidewalks along 200 North. This street is the gateway for our city and Council Member Jackson said that he would love to see the street lined with trees.

Mayor Tran said that UDOT is working on restriping 200 North near the I-15 interchange so that there will be double turning lanes in both directions. This will help with traffic flow in the area, and they hope to have the project finished by the end of September. Also, the Burton Lane roundabout installation is going very well and should be completed this fall.

Council Member Jackson said that the Heritage Days would be held on August 3-5, 2023 at the USU Botanical Center.

CITY MANAGER REPORT

City Manager Jaysen Christensen thanked all of the public works, police, and fire crews that responded to calls in response to the large storm that occurred last night. There were multiple calls throughout the city and they did a great job prioritizing and addressing all of them. Mr. Christensen added that the city is working on implementing the new outage management communication system and hope to have it ready to go in the next couple of months.

ADJOURNMENT

Council Member Oaks made a motion to adjourn the City Council meeting at 8:14 p.m. The motion was seconded by Council Member Adams and passed unanimously.

CITY COUNCIL STAFF REPORT



MEETING DATE: September 7, 2023

TYPE OF ITEM: Consent Items

PRESENTED BY: Melinda Greenwood, Community Development Director

SUBJECT/AGENDA TITLE: Appointment of Debora Shephard as Planning Commissioner

EXECUTIVE SUMMARY:

Recently Mr. Toby Barrus resigned as a member of the Planning Commission. Ms. Debora Shephard has been serving as a Planning Commission Alternate member and has accepted Mayor Tran's invitation to fill the vacancy as Planning Commissioner and will serve the remainder of Mr. Barrus' term (June 30, 2025).

The Planning Commission consists of seven (7) members, all of whom must reside in the City for at least one year prior to their appointment. The term of office for each appointed member is three (3) years with no limit to the number of terms that they can be reappointed.

City Council Options:

Approve or Reject

Staff Recommendation:

Approve

Fiscal Impact:

None

ATTACHMENTS:

None

CITY COUNCIL STAFF REPORT



MEETING DATE: September 7, 2023

TYPE OF ITEM: Consent Items

PRESENTED BY: Mayor Tran

SUBJECT/AGENDA TITLE: Reappointment of Judy Rigby and Rob Dansie as Historic Preservation Committee Members

EXECUTIVE SUMMARY:

Historic Preservation Committee Members Judy Rigby and Rob Dansie have been serving on the committee since its original creation in 2019. Both members have had their terms expire this year and have requested to be allowed to continue serving on the committee. Mayor Tran has accepted their request and is asking the city council to reappoint both Judy Rigby and Rob Dansie as Historic Preservation Committee members.

The Historic Preservation Committee is composed of 7 members, including one member of the City Council, and the Mayor, who is an ex-officio member. At least 5 of the 7 members shall reside in Kaysville City. The term of office for each appointed member (excluding the city council member and mayor) is 4 years, with no limit to the number of terms that they can be reappointed. Further details and responsibilities of the Historic Preservation Committee are found in [Chapter 4-9](#) of the Kaysville City Ordinances.

City Council Options:

Approve or Reject

Staff Recommendation:

Approve

Fiscal Impact:

None

ATTACHMENTS:

None

CITY COUNCIL STAFF REPORT



MEETING DATE: September 7, 2023

TYPE OF ITEM: Consent Items

PRESENTED BY: Nic Mills

SUBJECT/AGENDA TITLE: A Resolution adopting and approving an Interlocal Agreement with the Davis School District for School Resource Officers

EXECUTIVE SUMMARY:

For many years, the City has provided school resource officers to local high schools and junior high schools. The School District partners with the City in this effort by paying for a portion of the assigned officers' salary. This agreement would continue that partnership and incorporate certain provisions that are now required by state law.

City Council Options:

Approve, Deny, Table for more information.

Staff Recommendation:

Staff recommends that the City Council approve this resolution and continue to partner with the School District to provide SRO services.

Fiscal Impact:

None beyond currently budgeted funds for SROs.

ATTACHMENTS:

1. Resolution - Agreement with Davis School District
 2. Interlocal Agreement for School Resource Officers
-

RESOLUTION 23-~~XX-XX~~

A RESOLUTION ADOPTING AND APPROVING THE INTERLOCAL AGREEMENT BETWEEN KAYSVILLE CITY AND THE DAVIS SCHOOL DISTRICT FOR THE SCHOOL RESOURCE OFFICER PROGRAM

WHEREAS, Kaysville City provides School Resource Officers to the Davis School District for high schools and junior high schools in the city; and

WHEREAS, the City and the District have an existing Interlocal Agreement to outline the expectations and responsibilities that each has; and

WHEREAS, the City and the District would like to continue that relationship because it is mutually beneficial; and

WHEREAS, the City Council deems it to be in the best interest of the health, safety, and welfare of its citizens to continue to participate in the School Resource Officer program.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF KAYSVILLE, UTAH:

1. That the City is hereby authorized to enter into the Interlocal Agreement between the City and the District for SROs, which is attached hereto and incorporated herein by this reference.
2. That the Mayor is authorized to execute this Agreement.

PASSED AND ADOPTED by the City Council of Kaysville, Utah, this **7th day of September, 2023.**

Tamara Tran, Mayor

ATTEST:

Annemarie Plaizier, City Recorder

INTERLOCAL AGREEMENT
for
SCHOOL RESOURCE OFFICERS
in
KAYSVILLE CITY

THIS AGREEMENT is made and entered into this _____ day of _____, 2023, by and between the BOARD OF EDUCATION OF DAVIS SCHOOL DISTRICT, of Farmington City, Davis County, State of Utah, (hereinafter referred to as the “District”), and KAYSVILLE CITY CORPORATION, located in Kaysville, Davis County, State of Utah, (hereinafter referred to as the “City”), as follows:

RECITALS

- I. The District is a School District organized and existing pursuant to and in accordance with the Constitution and statutory laws of the State of Utah.
- II. The City is a Municipal Corporation organized and existing pursuant to and in accordance with the Constitution and statutory laws of the State of Utah.
- III. The District owns educational facilities and provides educational services to children residing within the boundaries of Davis County.
- IV. The City employs trained law enforcement officers qualified to act as School Resource Officers (SROs).
- V. The District has need for SROs to perform law enforcement related services in connection with its facilities and programs.
- VI. The City and the District are desirous of entering into an Interlocal Cooperation Agreement for their mutual benefit and for the further purpose of more efficiently and effectively providing SROs on District property and in connection with District programs.

AGREEMENT

NOW THEREFORE, in consideration of the mutual promises, covenants and conditions as hereinafter set forth, the District and the City hereby agree as follows:

1. DURATION OF AGREEMENT

This Agreement shall continue and remain in full force and effect for a period of five (5) years, unless terminated by the mutual consent of both parties or terminated in accordance with the termination provisions contained herein.

2. ANNUAL REVIEW, COSTS AND SERVICES

Representatives of each party shall meet annually to review the continued applicability of the provision of services and the associated reimbursements outlined in this Agreement. The District shall annually compensate the City for the services provided hereunder, as agreed to annually, no later than January 15th of each calendar year for the current school year.

In the event that the parties are unable to agree upon the continued applicability of the provision of services and the reimbursements associated therewith during the Annual Review, this Agreement may be terminated by either party as outlined in Section 17 below.

3. NO SEPARATE ENTITY

No separate legal entity is created by the terms of this Agreement. There shall be no personal property acquired jointly by the parties as a result of this Agreement and nothing contained herein shall be construed to create any fiduciary relationship between the parties. The respective managers of the City and the District are hereby appointed and empowered to take such cooperative action or undertaking as necessary to administer this Agreement and to carry out the terms hereof.

4. PURPOSE

The purpose of this Agreement is to provide a legal means for the parties to more efficiently and effectively provide SROs to District facilities and programs to accomplish the following:

- A. To foster educational programs and activities that will increase students' knowledge of and respect for the law and the function of law enforcement agencies;
- B. To provide for and maintain a safe, healthy, and productive learning environment in a school; act as a positive role model to students; work to create a cooperative, proactive, and problem-

solving partnership between law enforcement and the District; emphasize the use of restorative approaches to address negative behavior; and at the request of the District, teach a vocational law enforcement class;

C. To report serious crimes that occur on campus and to cooperate with the law enforcement officials in their investigation of crimes that occur at school; and

D. To cooperate with law enforcement officials in their investigations of criminal offenses which occur off campus.

E. To increase cooperation between the City and the District for the shared purposes of maintaining safe schools; improving school climate; and supporting educational opportunities for students.

5. DESIGNATION OF SCHOOL RESOURCE OFFICERS

A. The City shall designate and/or assign six (6) of its law enforcement officers to act as and provide SRO's services during the term of this Agreement as follows:

Davis High School – One full-time SRO.

Mountain High School – One full-time SRO.

Renaissance Academy - One full-time SRO

Centennial Junior High School – One part-time SRO.

Fairfield Junior High School – One part-time SRO.

Kaysville Junior High School – One part-time SRO.

B. Both Parties agree to jointly discuss SRO applicants. SROs shall at all times remain employees of the City and shall be subject to the administration, supervision and control of the City, except as outlined in this Agreement;

C. The City will, at least annually seek out and accept feedback from the District about an SRO's performance. The City, in its sole discretion, shall have the power and authority to hire, discharge and discipline SRO's.;

D. In the event an SRO is absent from work, the City agrees upon request from the District to make reasonable efforts to assign a substitute SRO to provide necessary services to

that campus during the regularly assigned SRO's absence; and

E. Special circumstances occur from time to time beyond the control of the City. Special circumstances may temporarily remove the SROs from the schools as listed herein without replacing the officers for the duration of the special circumstances. In such instances, the City will respond to emergency situations or criminal acts in a reasonable manner.

6. BASIC QUALIFICATIONS OF SCHOOL RESOURCE OFFICERS

In designating or assigning law enforcement officers to act as SROs pursuant to this Agreement, the City shall take the following qualifications and factors into consideration:

- A. Shall be a sworn law enforcement and should have at least two years of law enforcement experience;
- B. Shall possess a sufficient knowledge of the applicable federal and state laws, City and County ordinances, and Board of Education policies and regulations as applicable to SROs;
- C. Shall be capable of conducting in-depth criminal investigations;
- D. Shall possess even temperament and set a good example for students; and
- E. Shall possess communication skills which would enable the officer to function effectively within the school environment.

7. DUTIES OF SCHOOL RESOURCE OFFICERS

SROs are intended to provide the following services pursuant to the terms of this Agreement.

- A. To protect lives and property for the citizens and public school students of the District;
- B. To enforce federal, state, and local criminal laws and ordinances within their jurisdiction;
- C. Shall not enforce school administrative regulations. Infractions of school rules should be handled at the school level. SROs should be available to the school for advice, assistance, and consultation. School administrators should handle issues that are the exclusive concern of school officials and do not constitute a violation of the law;
- D. To investigate criminal activity committed on or adjacent to school property;

E. To counsel public school students in special situations, such as students suspected of engaging in criminal misconduct, when requested by the principal or the principal's designee or by the parents of a student;

F. To answer questions that students may have about Utah criminal or juvenile laws;

G. To assist other law enforcement officers with outside investigations concerning students attending the school(s) to which the SRO is assigned;

H. To assist in providing security for special school events or functions at the request of the principal or the principal's designee;

I. To provide traffic control and enforcement at schools when deemed necessary for the safety and protection of students and the general public;

J. To notify his/her immediate supervisor and the school principal or the principal's designee when absent from work due to illness, training, vacation, or an agency emergency;

K. To notify his/her immediate supervisor and the School Safety Coordinator of any event that could cause media representatives to inquire about a newsworthy incident;

L. To submit all incidents and arrest reports to the SRO's agency according to their departmental policy;

M. To maintain communications with supervisors, school administration, and school safety personnel through assigned radios, pagers, voicemail, and cellular phones. Voicemail and e-mail should be checked each working day for any broadcast messages;

N. To assist the administration and faculty in formulating criminal justice programs if implemented in the assigned school; and

O. To formulate educational crime prevention programs designed to reduce the opportunity for crimes to occur.

8. CHAIN OF COMMAND

As employees of the City, SROs shall follow the chain of command as set forth in the Kaysville City Police Department Policies and Procedure Manual. In the performance of their duties, SROs shall coordinate and communicate with the principal or the principal's designee of the school to which they are assigned.

9. TRAINING

Both the SRO and the Principal or his/her designee will jointly complete the SRO training described in UCA 53G-8-702.

Training of SROs for the purpose of maintaining their law enforcement certification shall be at the direction of the City.

The District may also provide training in Board of Education Policies, regulations, and procedures.

10. DRESS CODE

Dress for the SRO will be the uniform of the day, as set forth by the SRO's agency.

11. SUPPLIES AND EQUIPMENT

The City agrees to provide each SRO with the following equipment:

A. Motor vehicles. The City shall provide a standard patrol vehicle for each SRO. In addition, the City agrees to provide all maintenance for such vehicles and purchase and maintain comprehensive general auto liability insurance on the said vehicles in an amount not less than the coverage recommended by the Risk Manager for the City;

B. Weapons and ammunition. The City agrees to provide the standard issue pistol and rounds of ammunition for each SRO;

C. Office Supplies. The City agrees to provide each SRO with the usual and customary office supplies and forms required in the performance of their duties;

D. Communication. The City agrees to provide SROs with the necessary communication equipment; and

E. The school should provide the SRO with a desk, chair, computer; office work area; and keys for school access.

12. DUTY HOURS

Specific SRO duty hours at a particular school shall be set by mutual agreement between the City and the principal or the principal's designee of the school to which the SRO is assigned.

13. INVESTIGATION, INTERROGATION, SEARCH AND ARREST PROCEDURES

A. The protections afforded an individual suspected of wrongdoing are different for law enforcement officials than for school administrators. It is the responsibility of the SRO to assure that his/her actions regarding involvement in investigations and searches complies with the applicable standards to assure any evidence obtained is admissible in a court of law;

B. When investigating an allegation that a student may have committed an offense that is a class C misdemeanor, an infraction, a status offense on school property, the SRO may refer the student to a prosecuting attorney or a court of law only if the minor allegedly committed the same offense on school property on two previous occasions; and the minor was referred to an evidence-based alternative intervention, or early intervention youth services, as described in UCA 53G-8-211(3).

C. Notwithstanding section 13B, when investigating an alleged traffic offense that is an infraction, the SRO may refer the minor to a law enforcement officer or agency, a prosecuting attorney, or a court for the traffic offense without referral to evidence-based alternative interventions, or early intervention youth services.

D. An SRO shall notify the school principal or the principal's designee before removing a student from campus who has been placed into temporary custody.

E. Students are entitled to the rights regarding searches, questioning, arrests, and information privacy as described in District Policy 5S-100, and as otherwise outlined in State and Federal law.

14. ACCESS TO EDUCATION RECORDS

A. SROs shall be designated as "law enforcement units" for the purposes of school records as required by the Family Educational Rights and Privacy Act, 20 USCA § 1232g (FERPA). Schools may freely share information about students with their SROs for the purpose of maintaining safe schools;

B. Records or files which the SRO creates and maintains for a law enforcement purposes rather than school disciplinary purposes are not student education records and are not protected by FERPA. These law enforcement unit records may be disclosed to third parties without parental consent in accordance with applicable provisions of law;

C. Law enforcement officials other than the SRO may inspect and copy any public records maintained by the school including student directory information such as yearbooks. However, these law enforcement officials may not inspect and/or copy confidential student education records except in emergency situations;

D. If information in a student's cumulative record is needed in an emergency to protect the health or safety of the student or other individuals, school officials may disclose to other law enforcement officials that information which is needed to respond to the emergency situation based on the seriousness of the threat to someone's health or safety; the need of the information to meet the emergency situation and the extent to which time is of the essence; and

E. If confidential student records information is needed, but no emergency situation exists, the information may be released to other law enforcement officials only upon the issuance of a search warrant or subpoena to produce the records, with written consent of the student's parent or guardian, or as otherwise provided by law.

15. ACCESS TO SECURITY FEED

A. To provide faster response times to emergencies in our communities, the District shall provide limited, cost free, live access to its closed caption security cameras (hereinafter "Security Feed") to the City's Police Department employees. The District will maintain all software related to the transmission of this Security Feed to the City and will provide password-protected accounts to City employees by which they can access the Security Feed;

B. The City may not allow its employees to view Security Feeds of schools located outside their City's jurisdiction. The City may not allow employees to use another employee's account. The City must report to the District any security concern as soon as possible; and

C. The District reserves the right to suspend or cancel the City's access to the Security Feed unilaterally for cause or not for cause.

16. LIABILITY AND INDEMNIFICATION

The District and the City shall each be responsible for conducting their respective activities provided for and contemplated herein, and each waives all claims against the other in connection with any claim arising out of or connected with the conduct of any of the activities

contemplated by this Agreement, including the right to contribution for loss or damage by reason of injury to persons or damages to property arising out of or in any way connected with or incident to the activity of such party as contemplated by this Agreement. Furthermore, each party agrees to indemnify and hold the other party harmless for any claim, injury, or damage arising out of or connected with the actions of such other party in connection with any activity contemplated by this Agreement. Each party agrees to maintain public liability insurance coverage during the term of this Agreement with coverage in an amount recommended by the party's insurance carrier.

17. TERMINATION PROVISIONS

This Agreement may be terminated at any time by either party giving written notice to the other party of its intent to terminate this Agreement, which notice shall be given not less than ninety (90) days prior to termination.

18. ASSIGNMENT

Neither party hereto may assign this Agreement or any interest therein without first obtaining the written consent of the other party. Any attempt to assign any right or privilege connected with this Agreement without the prior written consent of the other party shall be void.

19. BINDING

This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective officers, agents, employees, representatives, successors, and assigns.

20. AMENDMENTS

This Agreement may be amended only in writing signed by the parties hereto. A copy of each amendment shall be given to each of the parties and attached to and incorporated into this Agreement as an Addendum with the date of applicability corresponding with the fiscal year of the District.

21. NO WAIVER OF IMMUNITY

Officers and employees performing services pursuant to this Agreement shall be deemed to be officers and employees of the party employing their services even if performing functions outside of the territorial limits of such party, and shall be deemed officers and employees of such party under the provisions of the Utah Governmental Immunity Act. Nothing herein shall be construed to waive any of the privileges and immunities available to either party and their employees under the Government Immunity Act as set forth in *Utah Code Ann. Title 63G, Chapter 7* as amended.

22. NO THIRD PARTY BENEFICIARIES

This Agreement is not intended to benefit any party or person not named as a party hereto.

23. SEVERABILITY

If any portion of this Agreement is held to be unenforceable or invalid for any reason by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

24. APPROVAL BY GOVERNING BODY

This Agreement shall not be effective until approved by Resolution of the governing body of each party and filing of duplicate originals with the official keeper of records of each party.

25. ENTIRE AGREEMENT

The parties hereto agree that this document contains the entire agreement and understanding between the parties and constitutes their entire agreement and supersedes any and all oral representations and agreements made by either party prior to the date hereof and is binding upon the successors of the respective parties.

26. APPROVAL OF AGREEMENT BY AUTHORIZED ATTORNEY

As required by UCA § 11-13-202.5, prior to and as a condition precedent to this Agreement's entry into force, it shall be submitted to an authorized attorney who shall approve

the Agreement upon finding that it is in proper form and compatible with the laws of the State of Utah.

27. DISPUTE RESOLUTION

The parties agree to make good faith efforts in resolving any dispute arising out of or in relation to this Agreement. In attempting to resolve any disputes, the Davis School District Security Coordinator and Kaysville City Chief of Police shall be involved.

Should the parties be unable to resolve a dispute and the services of an attorney are required to enforce this Agreement, the defaulting party agrees to pay reasonable attorney's fees and costs.

IN WITNESS WHEREOF, the parties hereto have signed this Interlocal Cooperation Agreement the day and year first above written.

BOARD OF EDUCATION OF
DAVIS SCHOOL DISTRICT

KAYSVILLE CITY

ELIZABETH MUMFORD
President

Tamara Tran
Mayor

ATTEST:

CRAIG CARTER
Business Manager

ANNEMARIE PLAIZIER
City Recorder

APPROVED AND REVIEWED AS TO
PROPER FORM AND COMPLIANCE
WITH APPLICABLE LAW:

APPROVED AND REVIEWED AS TO
PROPER FORM AND COMPLIANCE
WITH APPLICABLE LAW:

BENJAMIN ONOFRIO
General Counsel

Nicholas C. Mills
City Attorney

STATE OF UTAH)

) ss.
COUNTY OF DAVIS)

On the _____ day of _____, 2021, personally appeared before me ELIZABETH MUMFORD and CRAIG CARTER, who being by me duly sworn did say, each for himself, that she, Elizabeth Mumford, is the President of the Board of Education of Davis School District, and he, Craig Carter, is the Business Administrator of the Board, and that the foregoing instrument was signed on behalf of the Board by authority of the Board and Elizabeth Mumford and Craig Carter each duly acknowledged to me that the Board executed the same and that the seal affixed is the seal of the Board.

NOTARY PUBLIC

Residing at:

My Commission Expires:

STATE OF UTAH)
) ss.
COUNTY OF DAVIS)

On the _____ day of _____, 2023, personally appeared before me, Tamara Tran and ANNEMARIE PLAIZER, who being by me duly sworn did say, each for himself, that she, Tamara Tran is the Mayor, and that she, Annemarie Plaizier, is the City Recorder, and that the foregoing instrument was signed on behalf of Kaysville City and each did duly acknowledge that Kaysville City executed the same and that the seal affixed is the seal of Kaysville City Corporation.

NOTARY PUBLIC
Residing at:
My Commission Expires:

CITY COUNCIL STAFF REPORT



MEETING DATE: September 7, 2023

TYPE OF ITEM: Action Item

PRESENTED BY: Nic Mills

SUBJECT/AGENDA TITLE: A Resolution indicating the intent of the Kaysville City Council to maintain their Current Boundary with Farmington City

EXECUTIVE SUMMARY:

Kaysville and Farmington recently began exploring whether altering Kaysville City's southwestern border was in both cities' best interest. Kaysville adopted a resolution, as required by State Statute, and began formal Council discussions. After these discussions, it seems clear that Kaysville would benefit from keeping this property and may enjoy some tax revenue from the anticipated land uses on the property. This resolution formally notifies all parties that Kaysville has concluded its investigation and intends to keep this property.

City Council Options:

Approve, Deny, Table for more information.

Staff Recommendation:

Staff recommends that the City Council approve this resolution and maintain its current boundary with Farmington City.

Fiscal Impact:

City Staff anticipates that keeping this property will result in a potential tax revenue greater than any maintenance costs. Specific numbers are merely speculative at this point though.

ATTACHMENTS:

1. Resolution - Boundary Line Adjustment Termination
-

RESOLUTION __-__-__

A RESOLUTION INDICATING THE INTENT OF THE KAYSVILLE CITY COUNCIL TO MAINTAIN THEIR CURRENT BOUNDARY WITH FARMINGTON CITY

WHEREAS, Kaysville City has property within its municipal boundary which the City wanted to see if it would be better served by Farmington City; and

WHEREAS, the Kaysville City Council received reports from City Staff indicating that keeping this property would likely result in tax revenue in excess of maintenance costs for this property; and

WHEREAS, the City Council of Kaysville City desires to terminate proceedings to effect the proposed boundary adjustment as provided herein;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF KAYSVILLE, UTAH:

1. The Kaysville City Council intends to maintain their current common municipal boundary with Farmington City
3. This Resolution shall take effect upon the date of adoption.

PASSED AND ADOPTED by the City Council of Kaysville, Utah, this ____ day of _____, 20__.

—
ATTEST:

Tamara Tran, Mayor

Annemarie Plaizier, City Recorder

CITY COUNCIL STAFF REPORT



MEETING DATE: September 7, 2023

TYPE OF ITEM: Action Item

PRESENTED BY: Melinda Greenwood, Community Development Director

SUBJECT/AGENDA TITLE: Consideration of a development agreement and request to rezone 6.26 acres of property located at 521 West 350 North from General Commercial (GC) to include a Mixed Use Zoning District Overlay - Phil Holland/H Group Ventures LLC

EXECUTIVE SUMMARY:

Phil Holland/H Group Ventures LLC has applied for a MU rezone of 6.26 acres of property located at 521 West 350 North, with a project that would include a 15,000 square foot three-story office, 3,000 square feet of retail space, a 57,971 square foot four-story hotel, and two 67,600 square foot four-story apartment buildings. The property is currently undeveloped and zoned General Commercial. The MU zone provides for both vertical and horizontal mixed use projects, with this one being horizontal mixed use, which combines uses across the entirety of the property instead of the more traditionally thought of vertical fashion with ground floor commercial with residential units above that. The MU overlay zone allows offices, retail services and sales, arcades, hotels and entertainment facilities. The proposed project is a mix of office, hotel, retail and residential uses. As proposed, the project uses are in compliance with the zoning code.

The initial project request was for 132 residential units and two three-story apartments, but based on Moderate Income Housing needs, the Planning Commission asked the applicant to add additional units to the project and make landscaping enhancements. The current request is now for 160 units, with 80 units per apartment building. Each apartment building is proposed to have 8 studios, 48 one-bedroom and 24 two-bedroom units. Residential amenities for the apartments include a nature path along Holmes Creek, a pool or pickle ball courts, a dog park, clubhouse and a barbeque pavilion.

The project would provide 302 parking stalls, which is a request for a 24% reduction from the 396 parking stalls as required by the City's ordinances. The MU ordinance allows for a reduction of 10%, but the City Council is free to adopt alternate standards in the development agreement if they feel it's appropriate.

In its entirety, the project provides 211,171 square feet of building space, with the commercial space totaling 36% (75,971 square feet) of the building space. The MU code requires a minimum of 30%, so the project exceeds the requirement.

Occupants for the office and retail space are to be determined. The hotelier brand is a national chain, but confidentiality agreements prohibit the disclosure of the exact hotel. This is a common restriction in development negotiations, and until projects are entitled, non-disclosures will remain in place. The broker for the hotelier has provided an email confirmation (attached) that the property is under contract and the intended hotelier is anxiously awaiting approval to begin moving forward with the project. Kaysville City does not currently collect Transient Room Tax (TRT), which is a tax imposed on hotels, motels and other short-term rentals. Bringing a 114-room hotel to the City would add an additional tax revenue source and diversify our tax base. The applicant has submitted a detailed economic impact study (attached), which gives insight to project specific impacts. Not only would the

City receive TRT, visitors to our community would be spending money to dine, fuel vehicles, and patron other retail services in Kaysville.

Staff has done a review for utility capacity including power, water, and storm water and find that adequate capacity is available.

Please refer to the [July 13, 2023 Planning Commission staff report](#), which is included in this packet, to review how the 2022 General Plan supports this rezone request. An excerpt of the minutes from this meeting are attached to this staff report.

For final project specifics, please review item section number 3. *2022 General Plan* of the [August 10, 2023 Planning Commission staff report](#). The *draft* minutes of this meeting are provided as an attachment.

This item was before the Planning Commission on August 10, 2023, where a public hearing was held and the Planning Commission voted unanimously (6-0) to recommend approval of the rezone request and development agreement for 6.26 acres of property located at 521 West 350 North from General Commercial (GC) to include a Mixed Use Zoning District Overlay as recommended by the Planning Commission.

Only two comments were received during the public hearing, but additional comments have been received since that time. Most comments (attached) received cited concerns about traffic and congestion, opposition to apartments or density and wanting to have a small town feel remain in the City.

The Planning Commission cited the following findings for their recommendation of approval.

1. The Mixed Use Zoning District Overlay is compliant with Map 2.2 Future Land Use Map approved in the 2022 General Plan.
2. The project is in keeping with the following Guiding Principles of the 2022 General Plan: (a) Enrich our city center and downtown - We will enhance our city center with commercial and mixed-use development and investing in streetscape and parking; (b) Provide diverse housing options - We will work to preserve our existing neighborhoods while accommodating a full range of housing opportunities to meet the economic, lifestyle and life-cycle needs of our residents; and (c) Preserve our open space, trails and natural resources - We will encourage the preservation of open space through clustered development and the protection of foothills, natural drainages and remaining agricultural areas.
3. Chapters 1, 3 and 5 of the 2022 General Plan contain adequate goals, policy objectives and implementation measures which support approval of the rezone request.
4. Concerns from the July 13, 2023 Planning Commission meeting have been addressed through the development agreement and project revisions.
5. With the addition of 160 housing units, the rezone approval would allow the city to account for positive progress to the State for the 2024 Moderate Income Housing reporting.
6. The implementation of a parking reduction will allow the City to communicate measurable progress to the State for the 2024 Moderate Income Housing report.

7. The approval of the rezone for higher density and for mixed use in an existing commercial center will allow for the City to communicate measurable progress to the State for the 2024 Moderate Income Housing report.
8. The design of the project as outlined in the site plan and development agreement would not negatively impact the existing character of the area.
9. The project would diversify the housing products available in Kaysville and provide opportunities for a live-work environment.
10. The project would diversify and strengthen the City's economic and commercial base, adding office space, retail and an opportunity to collect Transient Room Tax with the hotel.
11. Staff review found the project to be compliant with 17-27 Mixed Use Zoning Overlay purpose statement and code requirements.

City Council Options:

1. **Approve** the rezone request and development agreement for 6.26 acres of property located at 521 West 350 North from General Commercial (GC) to include a Mixed Use Zoning District Overlay as recommended by the Planning Commission.
2. **Approve** the rezone request and development agreement for 6.26 acres of property located at 521 West 350 North from General Commercial (GC) to include a Mixed Use Zoning District Overlay **with modifications**.
3. **Deny** the rezone and development agreement for 6.26 acres of property located at 521 West 350 North from General Commercial (GC) to include a Mixed Use Zoning District Overlay.

Staff Recommendation:

The Planning Commission recommends approval of the rezone request and development agreement for 6.26 acres of property located at 521 West 350 North from General Commercial (GC) to include a Mixed Use Zoning District Overlay as presented.

Fiscal Impact:

The project will bring an increase in property tax revenue, sales tax and the collection of transient room tax. According to the attached economic impact study, over the course of 25 years, the project could have as much as \$91.4M in economic impacts to the City. The project is estimated to be \$62.4M in value and additional details on fiscal impacts are in the study.

ATTACHMENTS:

1. Project Area Map 521 West 350 North
 2. Planning Commission Staff Report Holland 521 W 350 N MU 8-10-23
 3. Planning Commission DRAFT Minutes 8-10-2023
 4. Planning Commission Staff Report Holland 521 W 350 N M-U 7.13.23
 5. Planning Commission Minutes EXCERPT 7-13-2023
 6. 521 West 350 North Holland MU Development Agreement CLEAN COPY 8.10.23
 7. Applicant Statement of Project Compliance
 8. CreekSide_Commons SitePlan PC 8-10-23
 9. Holland MU Project Renderings
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10. Creekside Commons Architectural Color & Materials Board
 11. Creekside Commons Landscape Master Plan 8-2-2023
 12. Creekside Commons Mixed Use Development Parking Analysis 7. 31.23
 13. Creekside Commons Mixed Use Traffic Impact Analysis 2.21.23
 14. Confirmation of Hotel Under Contract for MU Project 8.24.23_Redacted
 15. Kaysville Creekside Commons Fiscal and Economic Impact Memorandum - 7.28.23
 16. Planning Commission Email Comments Submissions
 17. 521 West 350 North Holland MU Development Agreement REDLINE COPY 8.10.23
 18. Economic Impact of Hotel Development by: Alan Suzuki
 19. Ordinance 521 W 350 N RZN MU 9.7.23
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Legend

 Parcels

PLANNING COMMISSION STAFF REPORT

To: Kaysville City Planning Commission
From: Melinda Greenwood, Community Development Director
Date: August 3, 2023

Agenda Item #6: Consideration of a rezone application from Phil Holland for 521 West 350 North from General Commercial to Mixed Use Zoning District Overlay

Meeting Date	August 10, 2023 (Continued from July 13, 2023)
Application Type	Rezone
Applicant Owner	Phil Holland H Group Ventures LLC
Address Parcel ID Number	521 West 350 North 11-879-0002 and 11-879-0007
Lot Size	6.26 acres 272,685 ft ²
Current Use	Undeveloped
Current Zoning	GC General Commercial
Density Entitlement	NA
Requested Zoning	GC Mixed Use Overlay
Density Entitlement	Density Approved Through Development Agreement (160 units proposed; 25.6 units/acre)

1. BACKGROUND

This rezone application was before the Planning Commission on July 13, 2023. The Commission held a public hearing at that meeting, discussed the item and made a motion to bring requested changes on the project back to the Commission at a future meeting date.

A quick review of the Planning Commission's requested changes include:

- Height flexibility for architectural variation.
- Increasing residential density.
- Solidifying architectural details.
- Requiring a lighting plan.
- The request for a monument sign on 350 West and pole signage per code on the I-15 side of the property.



- A parking reduction allowance.
- The addition of dwelling units by reducing the number of parking stalls or landscaping.
- The reduction in turf and the addition of perennial trees in parking.

The project site totals 6.26 acres and the applicant requested a rezone from GC General Commercial District to GC Mixed Use Zoning District Overlay (GC MU). The updated project still includes five buildings, three of which are commercial and consist of a hotel, office and a retail building. The two apartment buildings are now proposed to be four-stories, with 80 units each for a total of 160 residential units.

For information regarding the surrounding land use and 2022 General Plan information, please refer to the attached July 13, 2023 staff report for this item.

2. PROJECT SPECIFICS AND DEVELOPMENT AGREEMENT DETAILS

This mixed-use project would include a hotel, office space, a retail area and two apartment buildings with 160 residential units and 302 parking stalls. The apartments include amenities such as a pool or pickle ball court, clubhouse, walking path, dog park area and walking trail.

The hotelier brand is a national chain, but confidentiality agreements prohibit the disclosure of the exact hotel. This is a common restriction in development negotiations, and until projects are entitled, non-disclosures will remain in place.

The applicant recently submitted an economic analysis of the project, which is included as an attachment. According to the study, over the course of 25 years, the project could produce as much as \$91.4M in economic impacts to the City. The project is estimated to be \$62.4M in value and the details on the five proposed buildings follow.

Building Use	Square Footage	Additional Details
Hotel	57,971	Four stories 114 rooms
Office	15,000	Either two or three stories
Retail	3,000	Single story
Apartment Building 1	67,600	Four stories 80 unit mix: 8 studio, 48 one-bedroom, 24 two-bedroom
Apartment Building 2	67,600	Four stories 80 unit mix: 8 studio, 48 one-bedroom, 24 two-bedroom

Updated plans and submittals are attached to this staff report. The Planning Commission's requested changes to the project have been made and are included in the revised development agreement. For convenience staff has attached a redlined and a clean copy of the development agreement. The requested changes are also addressed by topic, noted in the matrix that follows.

Requested Change	Proposed Updates
Height Flexibility	Section 2.A.iv <u>Building Height.</u> Developer shall construct the buildings in compliance with the following: a. The four-story hotel shall not exceed fifty feet (50') in height except to allow for flexibility in overall average height for architectural details and variations. b. The four-story apartment buildings shall not exceed 45 feet (45') in height except to allow for flexibility in overall average height for architectural details and variations. c. All other buildings in the project shall not exceed thirty-five feet (35') as defined by Kaysville City Ordinances except to allow for flexibility in overall average height for architectural details and variations.
Increasing residential density	160 units proposed; 25.6 units per acre (Previously 132 units; 21 units per acre)
Architectural Details	A color and materials board has been submitted. Section 2.A.ii <u>Architecture.</u> Developer shall construct the Project in substantial compliance and conformance with the architectural style, renderings and color and materials board shown in Exhibit D.
Lighting Plan	Section 2.A.vii <u>Lighting.</u> Developer agrees to provide a detailed photometric plan to the City which shall include efficient lighting materials and shall also include shielded lighting, down lighting and parking lot lighting for security. Lighting shall not penetrate beyond the property in such a manner as to annoy or interfere with the use of adjacent properties.
Signage	Section 2.A.viii <u>Signage.</u> A monument sign is to be provided on 350 North. A pole sign up to 45 feet in height is permitted within 300 feet of I-15 as allowed by KCC 17-33 Sign Regulations.
Parking	An updated parking analysis is attached.

	Section 2.A.vi.b <u>Parking Reduction.</u> Developer submitted a parking study included as Exhibit E along with a request to reduce parking by 24%. City agrees to reduce required parking by 24%, reducing the 396 required stalls by 94 and requiring a minimum of 302 parking stalls.
Landscaping	An updated landscaping plan is attached. Section 2.A.xiii <u>Landscaping.</u> a. Developer agrees to use turf only in active recreation areas for the Project as defined in Kaysville City Code 17-5 Water Efficient Landscape Standards. b. Developer shall not install turf or grass in park strip or parking lot areas but will use water wise vegetation and materials. c. Developer agrees to use water wise vegetation and materials in other landscaping areas where reasonable. d. Developer agrees to plant perennial trees throughout the parking lot as indicated in the landscape plan.

Parking. With the 28 additional residential units, city code requires 396 parking stalls, though the project is only supplying 302. The MU code allows for up to a 10 percent in reduction for shared parking facilities, but the requested parking reduction of 94 stalls is a 24 percent reduction. The previous reduction request was 12 percent and 43 stalls. It is worth noting the project is within .5 mile of the 200 North Park and Ride and there is bus service on Main Street. However the pedestrian route to the Park and Ride involves crossing underneath the I-15 and while sidewalk exists on the south side of 200 North, there is not adequate sidewalk on the north side. A

breakdown of parking requirements and the study can be found on the table to the left.

The updated parking analysis concludes the same number of parking stalls are needed for the project, even with the added units. Jason Watson, PTOE, PE, with Focus Engineering conducted the parking study and stated “If all four of these land uses need all their required parking stalls, at the same time, it would need 339 parking stalls. However, we used the

Parking				
Residential				
Units	Number units	# Spaces/Unit	KCC	ITE Study
Studio	16	1	16	-
1-bedroom	96	1.5	144	-
2-bedroom	48	2	96	-
Residential Total	160		256	210
Commercial				
Units	S.F./Units	# Spaces/S.F.	KCC	ITE Study
Office	15,000	3.5/1,000 S.F.	53	36
Retail	3,000	3.5/1,000 S.F.	11	8
Hotel Units	114	1/1.5 units	76	85
Commercial Total			140	129
Total (Residential & Commercial)			396	339
10% Allowed Reduction			40	
Total w/ Parking Reduction			356	
Parking Provided			302	
Parking Deficiency			54	
Parking Reduction Request			94	
Parking Reduction %			24%	

Parking Demand Percentages, which looks at different times of the day that the parking stalls would be used, and the maximum is only 292 parking stalls needed. With the 302 parking stalls that the site plan shows, there should be enough parking stalls taking into account the time of day percentages.”

Parking is a difficult topic to address, especially when residential units are present. The provision of a parking study is helpful to determine the proper balance needed for adequate parking. The practicality of human nature is to place convenience at the forefront of parking. With a site that is over six acres, and a substantial reduction request, some thought should be given to the potential of parking overflowing onto neighboring properties and the public streets because those options would be in closer proximity.

Traffic. At the time this memo was written, an updated traffic impact analysis has not been submitted. The previous traffic analysis was reviewed by both the Public Works Director and City Engineer, and while there are significant impacts to traffic in the area, specifically at 200 North, no mitigation measures are being proposed at this time. In the next few months, UDOT will be restriping the 200 North interchange area to add a second left-hand turn lane, which will help with some traffic congestion. Additional traffic improvements are already needed at 200 North and 400 West, and those modifications may need to be accelerated. Staff expects the roadway impact fees will be significant (nearly \$400k) and can be used to mitigate some of the impacts at the intersection of Main Street and 400 West.

Staff has completed a review of the proposed project in relation to the zoning regulations and believes the project, proposed site plan and development agreement are in compliance with the zoning code and are reasonable based on the odd shape of the project site.

3. PUBLIC NOTICE AND PUBLIC COMMENT

At the June 13, 2023 Planning Commission meeting, a public hearing was conducted, and no comments were received.

4. RECOMMENDATION

Based on the findings outlined in this staff report, staff recommends the Planning Commission forward a recommendation of approval to the City Council for the development agreement and the rezone of 521 West 350 North from GC General Commercial to General Commercial Mixed Use Overlay.

Findings for a recommendation of approval include:

- a. The Mixed Use Zoning District Overlay is compliant with Map 2.2 Future Land Use Map approved with the 2022 General Plan.
- b. The project is in keeping with the following Guiding Principles of the 2022 General Plan:
 - i. Enrich our city center and downtown - We will enhance our city center with commercial and mixed-use development and investing in streetscape and parking.

- ii. Provide diverse housing options - We will work to preserve our existing neighborhoods while accommodating a full range of housing opportunities to meet the economic, lifestyle and life-cycle needs of our residents.
 - iii. Preserve our open space, trails and natural resources - We will encourage the preservation of open space through clustered development and the protection of foothills, natural drainages and remaining agricultural areas.
- c. Chapters 1, 3 and 5 of the 2022 General Plan contain adequate goals, policy objectives and implementation measures which support approval of the rezone request.
- d. Concerns from the July 13, 2023 Planning Commission meeting have been addressed through the development agreement and project revisions.
- e. With the addition of 160 housing units, the rezone approval would allow the city to account for positive progress to the State for the 2024 Moderate Income Housing reporting.
- f. The implementation of a parking reduction will allow the City to communicate measureable progress to the State for the 2024 Moderate Income Housing report.
- g. The approval of the rezone for higher density and for mixed use in an existing commercial center will allow for the City communicate measureable progress to the State for the 2024 Moderate Income Housing report.
- h. The design of the project as outlined in the site plan and development agreement would not negatively impact the existing character of the area.
- i. The project would diversify the housing product available in Kaysville and provide opportunities for a live-work environment.
- j. The project would diversify and strengthen the City's economic and commercial base, adding new office, retail and an opportunity to collect Transient Room Tax with the hotel.
- k. Staff review has found the project to be compliant with 17-27 Mixed Use Zoning Overlay purpose statement and code requirements.

ATTACHMENTS:

- 1. Project Location Map 521 West 350 North
- 2. Draft Development Agreement for 521 West 350 North Clean Copy (updated)
- 3. Draft Development Agreement for 521 West 350 North Redlined Copy (updated)
- 4. Creekside Commons Site Plan (updated)
- 5. Project Renderings
- 6. Project Materials & Color Board (new submittal)
- 7. Landscape Plan (updated)
- 8. Applicant Statement of Compliance
- 9. Kaysville Mixed-Use Development Parking Analysis (July 21, 2023)
- 10. Kaysville Creekside Commons Fiscal and Economic Impact Memorandum (July 28, 2023)
- 11. July 13, 2023 Planning Commission Staff Report: Public Hearing for Rezone Application Phil Holland for 521 West 350 North from General Commercial to Mixed Use Zoning District Overlay
- 12. Kaysville Mixed-Use Development Traffic Impact Study (February 21, 2023)
- 13. Economic Impact of Hotel Development by: Alan Suzuki



Legend

 Parcels

**DEVELOPMENT AGREEMENT
FOR 521 WEST 350 NORTH**

THIS AGREEMENT is made and entered into this ____ day of _____, 2023 by and between Kaysville City, a municipal corporation organized and existing under the laws of the State of Utah (hereinafter the "City") and H Group Ventures LLC (hereinafter the "Developer").

RECITALS

WHEREAS, Developer is desirous of developing a mixed-use project consisting of residential apartments and commercial facilities (the "Project") on certain real property located at 521 West 350 North, in the City of Kaysville, County of Davis, State of Utah and more particularly described as parcel number 11-879-0007 which is .619 acres in size and parcel number 11-879-0002 which is 5.64 acres for a combined total of 6.259 acres; and

WHEREAS, the Property Location Map is attached hereto as Exhibit A and the legal description is attached as Exhibit B; and

WHEREAS, the purpose of this Agreement is to define development standards, conditions and improvements for the Project as well as other terms and conditions pursuant to which the Project proposed by Developer shall be developed within the City; and

WHEREAS the City is willing to grant the Mixed Use Zoning District Overlay (MU) rezone of the property and authorize the development of the Project proposed by Developer in conformance with this Agreement, City Ordinances, and applicable Utah law;

NOW, THEREFORE, in consideration of the mutual covenants and conditions set forth herein, and other good and valuable consideration, the sufficiency of which is hereby acknowledged, the parties agree as follows:

AGREEMENT

1. GENERAL DESCRIPTION.

- A. Area Description. The property upon which the Project shall be developed (the "Property") is located as shown on the Property Location Map, a copy of which is attached as Exhibit A hereto and incorporated by reference herein. The property is further described in Exhibit B as parcel ID 11-879-0007 which is .619 acres in size and parcel number 11-879-0002 which is 5.64 addressed as 521 West 350 North.
- B. Project Description. The Project proposed is a horizontal mixed-use development as shown in Exhibit C (the "Site Plan") and shall include commercial, retail and residential buildings and shall be constructed in substantial conformance to the attached concept Site Plan.

- a. Commercial Space. The Project includes a total of approximately 75,971 square feet of commercial building space, which is 36% of the total square footage of the Project. The commercial buildings shall include:
 - i. Hotel. One four-story hotel, which shall not exceed 50 feet in height and will have approximately:
 - 1. 57,971 square feet of space; and
 - 2. 114 rooms.
 - ii. Office. An office building with approximately 15,000 square feet of space.
 - iii. Retail. One single-story retail building with approximately 3,000 square feet of space and possible drive-thru.
- b. Residential Space. Two four-story apartment buildings totaling approximately 135,200 square feet with each building consisting of:
 - 1. Approximately 67,600 square feet of space per building.
 - 2. Subject to final design, no more than 160 residential units shall be constructed.
- c. Substantial Conformance. Substantial Conformance noted in section 1.B shall mean and include minimal fluctuations in overall project square footage, which is subject to final design.
 - i. A reduction in the number of residential units or residential building square footage may be approved by Community Development staff.
 - ii. An increase in the total commercial square footage shall be acceptable and approved by Community Development staff subject to the provision of adequate parking.
 - iii. Reductions in the total commercial square footage provided may not fall below 30% without an amendment to this agreement, which shall be approved by the City Council.

2. DEVELOPMENT STANDARDS AND GUIDELINES

- A. Adoption of Development Standards. As allowed by Kaysville City Code 17-27-7, the City hereby adopts, as the development standards, regulations and guidelines for the Project (the "Development Standards"), the following standards in addition to all other applicable City Ordinances, standards and guidelines:
 - i. Compliance with Approved Plans. Developer shall develop the site in general conformance with the concept site plan outlined in section 1B and attached to this Agreement as Exhibit C.
 - ii. Architecture. Developer shall construct the Project in substantial compliance and conformance with the architectural style, renderings and color and materials board shown in Exhibit D.

- iii. Building Materials. Developer shall construct all buildings in substantial compliance with materials shown in the concept renderings depicted in Exhibit D, which show rock and/or brick, wood, steel, and glass.
- iv. Building Height. Developer shall construct the buildings in compliance with the following:
 - a. The four-story hotel shall not exceed fifty feet (50') in height except to allow for flexibility in overall average height for architectural details and variations.
 - b. The four-story apartment buildings shall not exceed 45 feet (45') in height except to allow for flexibility in overall average height for architectural details and variations.
 - c. All other buildings in the project shall not exceed thirty-five feet (35') as defined by Kaysville City Ordinances except to allow for flexibility in overall average height for architectural details and variations.
- v. Amenities Plan. Developer agrees to providing the following amenities for residents living in the apartments in the development:
 - a. Walking path around the property.
 - i. Developer will attempt to make walking path connections into properties which are adjacent to the Project.
 - b. Dog park.
 - c. Pickleball courts or a swimming pool.
 - d. Clubhouse.
 - e. Pavilion, picnic and barbeque area.
- vi. Parking.
 - a. Required Parking. Calculations of required parking based on the adopted Kaysville City Code 17-27 Mixed Use Zoning and 17-32 Off-Street Parking and Loading. Required parking of 396 total stalls is demonstrated in the breakdown noted below.
 - i. Apartment Building – 256 parking stalls required
 - ii. Office – 53 parking spaces required
 - iii. Hotel – 76 spaces required
 - iv. Retail – 11 units required
 - b. Parking Reduction. Developer submitted a parking study included as Exhibit E along with a request to reduce parking by 24%. City agrees to reduce required parking by 24%, reducing the 396 required stalls by 94 and requiring a minimum of 302 parking stalls.
 - c. For parcels that will be owned outside of H Ventures Group, LLC, cross-parking agreements shall be created between property owners and recorded against the property.

- vii. Lighting. Developer agrees to provide a detailed photometric plan to the City which shall include efficient lighting materials and shall also include shielded lighting, down lighting and parking lot lighting for security. Lighting shall not penetrate beyond the property in such a manner as to annoy or interfere with the use of adjacent properties.
- viii. Signage. A monument sign is to be provided on 350 North. A pole sign up to 45 feet in height is permitted within 300 feet of I-15 as allowed by KCC 17-33 Sign Regulations.
- ix. Access.
- a. The Project has access to their site from 350 North. Developer will provide cross-access agreements to be recorded against the properties for any parcels that will not have street frontage.
 - b. If a subdivision occurs, Developer shall provide cross-access agreements between all properties created by the subdivision.
 - c. Developer will attempt to get access agreements for pedestrian and vehicle traffic through neighboring properties to the east.
- x. Density. Developer may construct up to 160 residential dwelling units within Project. The overall residential unit count shall not exceed 160 units. Any increase in the count of residential dwelling units shall be approved by the City Council through an amendment to this agreement.
- xi. Commercial Uses. Developer agrees to provide a four-story hotel consisting of 114 rooms, a 15,000 square foot office, and 3,000 of retail space. Removal of the hotel from the Project or any substantial changes to the hotel plans shall be approved by the City Council through an amendment to this agreement. Any changes to the commercial spacing for the office and retail space resulting in a substantial reduction of square footage shall only be approved by the City Council through an amendment to this agreement.
- xii. Traffic Mitigation. Developer agrees to construct any road improvements or traffic mitigation measures on 350 North as necessitated by the Project. Any such improvements shall be built to adopted City standards.
- xiii. Landscaping.
- a. Developer agrees to use turf only in active recreation areas for the Project as defined in Kaysville City Code 17-5 Water Efficient Landscape Standards.
 - b. Developer shall not install turf or grass in park strip or parking lot areas but will use water wise vegetation and materials.
 - c. Developer agrees to use water wise vegetation and materials in other landscaping areas where reasonable.

- d. Developer agrees to plant perennial trees throughout the parking lot as indicated in the landscape plan.
- xiv. Subdivision for Mixed-Use Overlay. Development of the Project may require a subdivision of the Property into two or more individual parcels.
 - a. Developer shall apply for a subdivision of the Property and shall follow all process and code requirements for the subdivision, including payment of fees, and submission of all outlined documents required for a subdivision.
 - b. This development agreement shall be subject to the entirety of the two parcels outlined in section 1A and will continue to run with the land regardless of subdivisions or how many lots are created in the future.
 - c. This agreement shall be recorded along with any subdivision plat and the plat shall have language placed on it to maintain the integrity of this agreement and Project.
- B. Phasing of Project.

Phasing of the Project and issuance of building permits shall be completed as outlined in either i or ii below.

 - i. The hotel shall be permitted prior to the residential apartment buildings or simultaneously with the residential apartment buildings.
 - ii. The office building and the retail building shall be permitted prior to or simultaneously with the residential apartment buildings.
- C. Holmes Creek. Developer will coordinate with Davis County and follow all regulatory requirements for protection of Holmes Creek during construction and after occupancy.
- D. Findings of Compatibility. In adopting the Development Standards identified in Section 2, the City hereby expressly finds that the development of the Project, in conformance with the Development Standards and this Agreement, promotes the creation of a desirable mixed-use Project in an appropriate location and is in harmony with the 2022 General Plan. The City further finds that the development of the Project, in conformance with the Development Standards and this Agreement, will not violate the general purpose, goals and objectives of the City Ordinances and any plans adopted by the Planning Commission and City Council.

Subject to the Developer's performance and compliance with the terms of this Agreement and City Ordinances in effect on the date of this Agreement, Developer's rights to develop the Project in accordance with the approved site plan, construction drawings and building plans are vested.

3. MAINTENANCE AND CARE OF THE PROJECT AND PROPERTY

Developer agrees to keep property, grounds and buildings in good condition, maintaining, repairing, replacing, etc. all commonly owned ground, property, and amenities, including the trail, playground area, pool, dog park, landscaped areas, parking areas, driveways, sidewalks,

park strips, lighting, benches, etc. Developer agrees to remain in compliance with Kaysville City code.

4. APPLICABILITY AND AMENDMENTS

This agreement runs with the land and shall be considered a master plan for all properties outlined in Section 1A and is applicable and enforceable in perpetuity. Any substantial or significant changes to the Project outside of those defined in this agreement shall be approved by the City Council in an amendment to this agreement.

5. ON-SITE PROJECT IMPROVEMENTS

Developer shall construct and install all site improvements, including utilities, required for the Project, at Developer's sole cost and expense, in compliance with approvals, and all applicable ordinances, regulations, standards as approved by the City, the secondary water provider, Central Davis Sewer District, other providers and the State of Utah.

6. OFF-SITE PROJECT IMPROVEMENTS

In accordance with applicable standards and subject to the design approval of the City Engineer, Developer shall construct and install street improvements, sidewalks, utilities, and drainage improvements, on 521 West 350 North with the construction of the on-site improvements.

7. REPRESENTATIONS OF DEVELOPER

- A. Authority. Developer hereby represents that Developer has authority to proceed with the Project.
- B. Ability. Developer represents that it has the ability to timely proceed with the development and construction of the Project. Developer agrees to begin construction of the Project as soon as practicable and complete occupancy approval with at least on commercial building by December 31, 2026.

8. ASSIGNMENT

Developer may assign this Agreement to any other third party provided that the City consents to such assignment, which consent shall not be unreasonably withheld, upon a showing to the satisfaction of the City that such third party has the financial ability to perform Developer's obligations hereunder.

9. BINDING EFFECT

This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns.

10. ATTORNEY'S FEES

In the event that this Agreement or any provision hereof shall be enforced by an attorney retained by a party hereto, whether by suit or otherwise, the fees and costs of such attorney shall be paid by the party who breaches or defaults hereunder, including fees and costs

incurred upon appeal or in bankruptcy court.

11. SEVERABILITY

If any term or provision of this Agreement shall, to any extent, be determined by a court of competent jurisdiction to be void, voidable, or unenforceable, such void, voidable or unenforceable term or provision shall not affect the enforceability of any other term or provision of this Agreement.

12. CAPTIONS

The section and paragraph headings contained in this Agreement are for the purposes of reference only and shall not limit, expand or otherwise affect the construction of any provisions hereof.

13. GOVERNING LAW

This Agreement and all matters relating hereto, shall be governed by, construed and interpreted in accordance with the laws of the State of Utah.

14. ENTIRE AGREEMENT

This Agreement, together with the exhibits attached hereto, constitutes the entire understanding and agreement by and among the parties hereto, and supersedes all prior agreements, representations or understandings by and among them, whether written or oral, pertaining to the subject matter hereof.

15. AUTHORIZATION OF EXECUTION

A. City. The execution of this Agreement by the City has been authorized by the City Council of Kaysville City at a regularly scheduled meeting of that body, pursuant to the notice.

B. Developer. The execution of this Agreement has been duly authorized by the Developer.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day and year first above written.

H Group Ventures, LLC

By: _____

Title

Attest:

Kaysville City

By: _____

Annemarie Plaizier
City Recorder

Tamara Tran
Mayor

On the ____ day of _____, 2023, personally appeared before me TAMARA TRAN, and ANNEMARIE PLAIZIER, who being by me duly sworn did say, each for himself and herself that he, the said TAMARA TRAN, is the Mayor of Kaysville City, Davis County, State of Utah and that she, the said ANNEMARIE PLAIZIER, is the City Recorder of Kaysville City, and that the within and foregoing instrument was signed on behalf of the said Kaysville City by authority of the City Council of Kaysville City and said TAMARA TRAN and ANNEMARIE PLAIZIER, each duly acknowledged to me that the said Kaysville City executed the same and that the seal affixed is the seal of the said Kaysville City.

NOTARY PUBLIC

(SEAL)

STATE OF UTAH)
: ss.
COUNTY OF DAVIS)

On the ____ day of _____, 2023, personally appeared before me, _____, the signer of the foregoing Development Agreement for Phil Holland, who duly acknowledged to me that he executed the same for and on behalf of H Group Ventures LLC.

NOTARY PUBLIC

(SEAL)

STATE OF UTAH

)

: ss.

COUNTY OF DAVIS

)

- Exhibit A – Property Location Map
- Exhibit B – Legal Description of the Project property
- Exhibit C – Site Plans
- Exhibit D – Architectural Renderings
- Exhibit E – Traffic Impact Study
- Exhibit F – Parking study
- Exhibit G – Application materials – Statement of Compliance

DRAFT

**DEVELOPMENT AGREEMENT
FOR 521 WEST 350 NORTH**

THIS AGREEMENT is made and entered into this ____ day of _____, 2023 by and between Kaysville City, a municipal corporation organized and existing under the laws of the State of Utah (hereinafter the “City”) and H Group Ventures LLC (hereinafter the “Developer”).

RECITALS

WHEREAS, Developer is desirous of developing a mixed-use project consisting of residential apartments and commercial facilities (the “Project”) on certain real property located at 521 West 350 North, in the City of Kaysville, County of Davis, State of Utah and more particularly described as parcel number 11-879-0007 which is .619 acres in size and parcel number 11-879-0002 which is 5.64 acres for a combined total of 6.259 acres; and

WHEREAS, the Property Location Map is attached hereto as Exhibit A and the legal description is attached as Exhibit B; and

WHEREAS, the purpose of this Agreement is to define development standards, conditions and improvements for the Project as well as other terms and conditions pursuant to which the Project proposed by Developer shall be developed within the City; and

WHEREAS the City is willing to grant the Mixed Use Zoning District Overlay (MU) rezone of the property and authorize the development of the Project proposed by Developer in conformance with this Agreement, City Ordinances, and applicable Utah law;

NOW, THEREFORE, in consideration of the mutual covenants and conditions set forth herein, and other good and valuable consideration, the sufficiency of which is hereby acknowledged, the parties agree as follows:

AGREEMENT

1. GENERAL DESCRIPTION.

- A. Area Description. The property upon which the Project shall be developed (the “Property”) is located as shown on the Property Location Map, a copy of which is attached as Exhibit A hereto and incorporated by reference herein. The property is further described in Exhibit B as parcel ID 11-879-0007 which is .619 acres in size and parcel number 11-879-0002 which is 5.64 addressed as 521 West 350 North.
- B. Project Description. The Project proposed is a horizontal mixed-use development as shown in Exhibit C (the “Site Plan”) and shall include commercial, retail and residential buildings and shall be constructed in substantial conformance to the attached concept Site Plan.

- a. Commercial Space. The Project includes a total of approximately 75,971 square feet of commercial building space, which is ~~4236~~% of the total square footage of the Project. The commercial buildings shall include:
 - i. Hotel. One four-story hotel, which shall not exceed 50 feet in height and will have approximately:
 - 1. 57,971 square feet of space; and
 - 2. 114 rooms.
 - ii. Office. An office building with approximately 15,000 square feet of space.
 - iii. Retail. One single-story retail building with approximately 3,000 square feet of space and possible drive-thru.
- b. Residential Space. Two ~~three~~four-story apartment buildings totaling approximately ~~106,740~~135,200 square feet with each building consisting of:
 - 1. Approximately ~~53,370~~67,600 square feet of space per building, ~~for a total of approximately 106,740 square feet of space.~~
 - 2. Subject to final design, no more than ~~132~~160 residential units shall be constructed.
- c. Substantial Conformance. Substantial Conformance noted in section 1.B shall mean and include minimal fluctuations in overall project square footage, which is subject to final design.
 - i. A reduction in the number of residential units or residential building square footage may be approved by Community Development staff.
 - ii. An increase in the total commercial square footage shall be acceptable and approved by Community Development staff subject to the provision of adequate parking.
 - iii. Reductions in the total commercial square footage provided may not fall below ~~40~~30% without an amendment to this agreement, which shall be approved by the City Council.

2. DEVELOPMENT STANDARDS AND GUIDELINES

- A. Adoption of Development Standards. As allowed by Kaysville City Code 17-27-7, the City hereby adopts, as the development standards, regulations and guidelines for the Project (the "Development Standards"), the following standards in addition to all other applicable City Ordinances, standards and guidelines:
 - i. Compliance with Approved Plans. Developer shall develop the site in general conformance with the concept site plan outlined in section 1B and attached to this Agreement as Exhibit C.
 - ii. Architecture. Developer shall construct the Project in substantial compliance and conformance with the architectural style, ~~and~~ renderings and color and materials board shown in Exhibit D.

- iii. Building Materials. Developer shall construct all buildings in substantial compliance with materials shown in the concept renderings depicted in Exhibit D, which show rock and/or brick, wood, steel, and glass.
- iv. Building Height. Developer shall construct the buildings in compliance with the following:
- a. The four-story hotel shall not exceed fifty feet (50') in height except to allow for flexibility in overall average height for architectural details and variations.
 - ~~a-b.~~ The four-story apartment buildings shall not exceed 45 feet (45') in height except to allow for flexibility in overall average height for architectural details and variations.
 - ~~b-c.~~ All other buildings in the project shall not exceed thirty-five feet (35') as defined by Kaysville City Ordinances except to allow for flexibility in overall average height for architectural details and variations.-
- v. Amenities Plan. Developer agrees to providing the following amenities for residents living in the apartments in the development:
- a. Walking path around the property.
 - i. Developer will attempt to make walking path connections into properties which are adjacent to the Project.
 - b. Dog park.
 - c. Pickleball courts or a swimming pool.
 - d. Clubhouse.
 - e. Pavilion, picnic and barbeque area.
- vi. Parking.
- a. Required Parking. Calculations of required parking based on the adopted Kaysville City Code 17-27 Mixed Use Zoning and 17-32 Off-Street Parking and Loading. Required parking of 344 396 total stalls is demonstrated in the breakdown noted below.
 - i. Apartment Building – 204 256 parking stalls required
 - ii. Office – 53 parking spaces required
 - iii. Hotel – 76 spaces required
 - iv. Retail – 11 units required
 - b. Parking Reduction. Developer submitted a parking study included as Exhibit E along with a request to reduce parking by 12-32 24%. City agrees to reduce required parking by 12.32 24%, reducing the 344 396 required stalls by 43 94 and requiring a minimum of 301 302 parking stalls.
 - c. For parcels that will be owned outside of H Ventures Group, LLC, cross-parking agreements shall be created between property owners and recorded against the property.

vii. Lighting. Developer agrees to provide a detailed photometric plan to the City which shall include efficient lighting materials and shall also include shielded lighting, down lighting and parking lot lighting for security. Lighting shall not penetrate beyond the property in such a manner as to annoy or interfere with the use of adjacent properties.

viii. Signage. A monument sign is to be provided on 350 North. A pole sign up to 45 feet in height is permitted within 300 feet of I-15 as allowed by KCC 17-33 Sign Regulations.

vii-ix. Access.

- a. The Project has access to their site from 350 North. Developer will provide cross-access agreements to be recorded against the properties for any parcels that will not have street frontage.
- b. If a subdivision occurs, Developer shall provide cross-access agreements between all properties created by the subdivision.
- c. Developer will attempt to get access agreements for pedestrian and vehicle traffic through neighboring properties to the east.

viii-x. Density. Developer may construct up to ~~132~~ 160 residential dwelling units within Project. The overall residential unit count shall not exceed ~~132~~ 160 units. Any increase in the count of residential dwelling units shall be approved by the City Council through an amendment to this agreement.

ix-xi. Commercial Uses. Developer agrees to provide a four-story hotel consisting of 114 rooms, a 15,000 square foot office, and 3,000 of retail space. Removal of the hotel from the Project or any substantial changes to the hotel plans shall be approved by the City Council through an amendment to this agreement. Any changes to the commercial spacing for the office and retail space resulting in a substantial reduction of square footage shall only be approved by the City Council through an amendment to this agreement.

x-xii. Traffic Mitigation. Developer agrees to construct any road improvements or traffic mitigation measures on 350 North as necessitated by the Project. Any such improvements shall be built to adopted City standards.

xi-xiii. Landscaping.

- a. Developer agrees to use turf only in active recreation areas for the Project as defined in Kaysville City Code 17-5 Water Efficient Landscape Standards.
- b. Developer shall not install turf or grass in park strip or parking lot areas but will use water wise vegetation and materials.
- c. Developer agrees to use water wise vegetation and materials in other landscaping areas where reasonable.

d. Developer agrees to plant perennial trees throughout the parking lot as indicated in the landscape plan.

- ii. xiv. Subdivision for Mixed-Use Overlay. Development of the Project may require a subdivision of the Property into two or more individual parcels.
- a. Developer shall apply for a subdivision of the Property and shall follow all process and code requirements for the subdivision, including payment of fees, and submission of all outlined documents required for a subdivision.
 - b. This development agreement shall be subject to the entirety of the two parcels outlined in section 1A and will continue to run with the land regardless of subdivisions or how many lots are created in the future.
 - c. This agreement shall be recorded along with any subdivision plat and the plat shall have language placed on it to maintain the integrity of this agreement and Project.
- B. Phasing of Project.
Phasing of the Project and issuance of building permits shall be completed as outlined in either i or ii below.
- i. The hotel shall be permitted prior to the residential apartment buildings or simultaneously with the residential apartment buildings.
 - ii. The office building and the retail building shall be permitted prior to or simultaneously with the residential apartment buildings.
- C. Holmes Creek. Developer will coordinate with Davis County and follow all regulatory requirements for protection of Holmes Creek during construction and after occupancy.
- D. Findings of Compatibility. In adopting the Development Standards identified in Section 2, the City hereby expressly finds that the development of the Project, in conformance with the Development Standards and this Agreement, promotes the creation of a desirable mixed-use Project in an appropriate location and is in harmony with the 2022 General Plan. The City further finds that the development of the Project, in conformance with the Development Standards and this Agreement, will not violate the general purpose, goals and objectives of the City Ordinances and any plans adopted by the Planning Commission and City Council.

Subject to the Developer's performance and compliance with the terms of this Agreement and City Ordinances in effect on the date of this Agreement, Developer's rights to develop the Project in accordance with the approved site plan, construction drawings and building plans are vested.

3. MAINTENANCE AND CARE OF THE PROJECT AND PROPERTY

Developer agrees to keep property, grounds and buildings in good condition, maintaining, repairing, replacing, etc. all commonly owned ground, property, and amenities, including the trail, playground area, pool, dog park, landscaped areas, parking areas, driveways, sidewalks,

park strips, lighting, benches, etc. Developer agrees to remain in compliance with Kaysville City code.

4. APPLICABILITY AND AMENDMENTS

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A. City. The execution of this Agreement by the City has been authorized by the City Council of Kaysville City at a regularly scheduled meeting of that body, pursuant to the notice.

B. Developer. The execution of this Agreement has been duly authorized by the Developer.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day and year first above written.

On the ____ day of _____, 2023, personally appeared before me, _____, the signer of the foregoing Development Agreement for Phil Holland, who duly acknowledged to me that he executed the same for and on behalf of H Group Ventures LLC.

NOTARY PUBLIC

(SEAL)

STATE OF UTAH

)

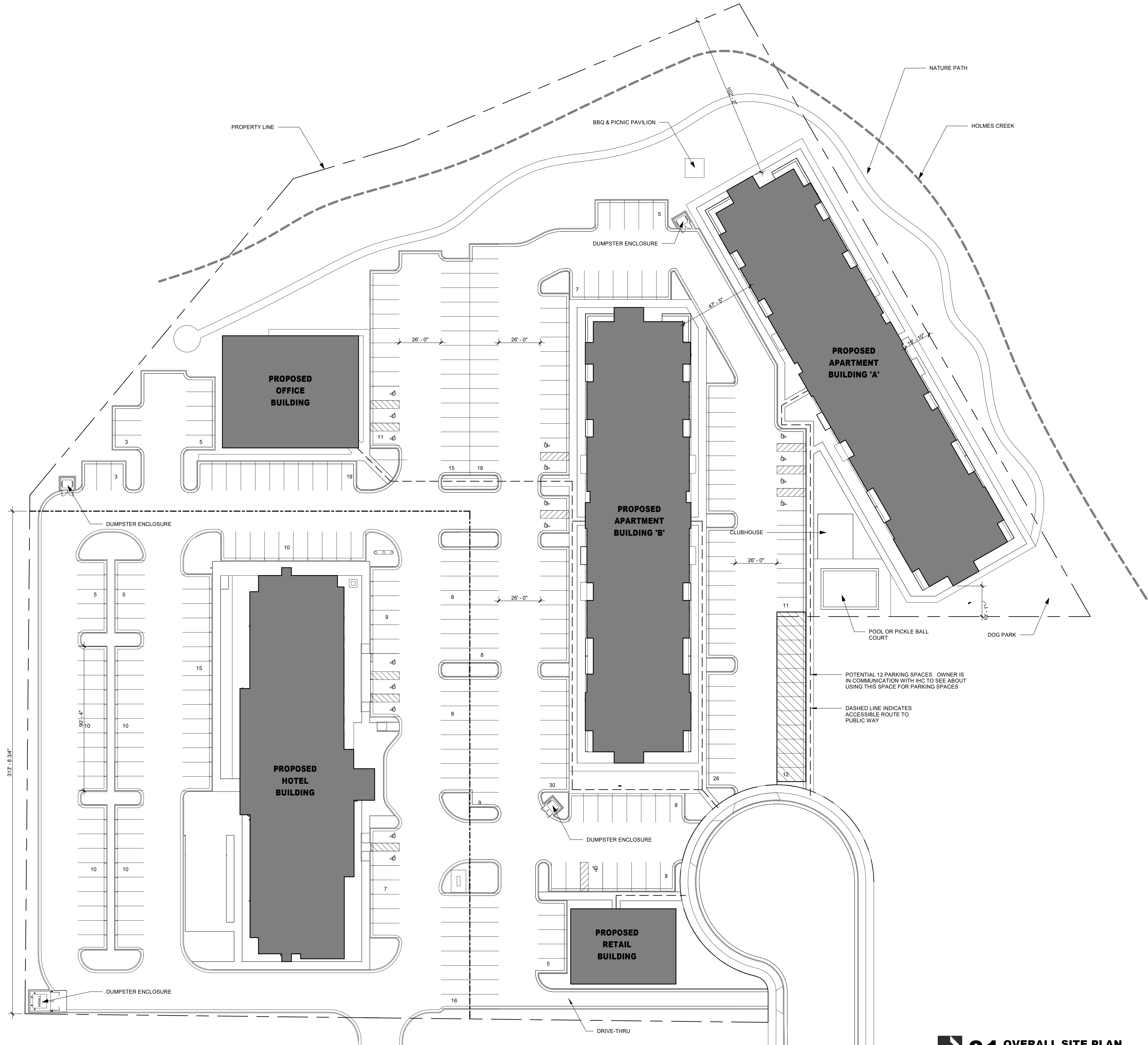
: ss.

COUNTY OF DAVIS

)

- Exhibit A – Property Location Map
- Exhibit B – Legal Description of the Project property
- Exhibit C – Site Plans
- Exhibit D – Architectural Renderings
- Exhibit E – Traffic Impact Study
- Exhibit F – Parking study
- Exhibit G – Application materials – Statement of Compliance

DRAFT



SITE PLAN CALCULATIONS

APARTMENT DATA	
BUILDING 'A' FOOTPRINT	16,900 SQ. FT.
BUILDING 'A' SQ. FT. =	67,600 SQ. FT.
BUILDING 'B' FOOTPRINT	16,900 SQ. FT.
BUILDING 'A' SQ. FT. =	67,600 SQ. FT.
BUILDING HEIGHT =	4 STORIES
UNIT COUNT	
BUILDING 'A'	
STUDIO	= 8
1 BED	= 48
2 BED	= 24
TOTAL	= 80
BUILDING 'B'	
STUDIO	= 8
1 BED	= 48
2 BED	= 24
TOTAL	= 80
TOTAL APARTMENTS = 160 UNITS	

HOTEL DATA	
BUILDING SQUARE FOOTAGE =	67,971 S. FT.
BUILDING HEIGHT =	4 STORIES
UNIT COUNT =	114

OFFICE DATA	
BUILDING SQUARE FOOTAGE =	15,000 SF
BUILDING HEIGHT =	3 STORIES

RETAIL DATA	
BUILDING SQUARE FOOTAGE =	3,000 SF
BUILDING HEIGHT =	1 STORY

PARKING	
REQUIRED	
APARTMENTS	256 STALLS
OFFICE	63 STALLS
RETAIL	11 STALLS
HOTEL	76 STALLS
STALLS REQ'D	386 STALLS
10% REDUCTION	386 X 10% = 39.6
TOTAL REQ'D	356 STALLS
TOTAL PROVIDED	302 STALLS

AMENITIES	
POOL OR PICKLE BALL COURT	
DOG PARK	
NATURE PATH	
BBQ & PICNIC PAVILION	
CLUBHOUSE	



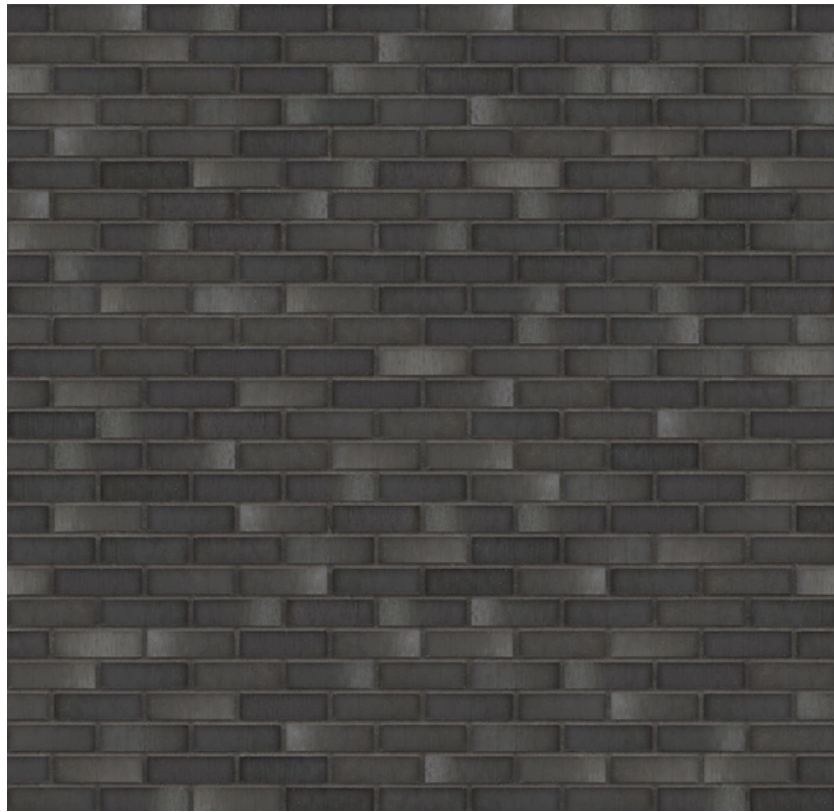




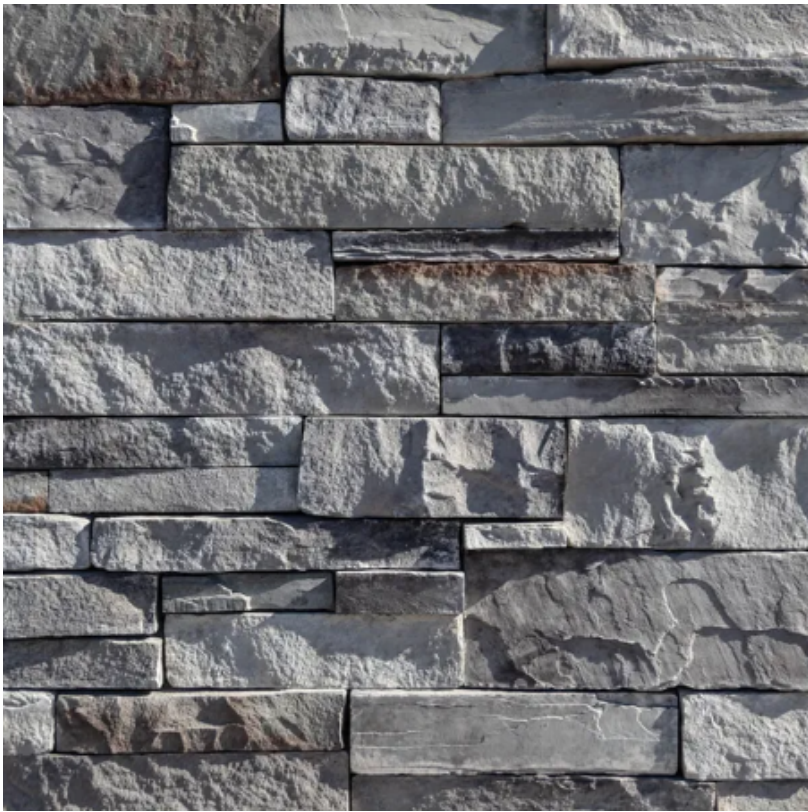








WHITE NIGHT - THIN BRICK
KING KLINKER - KING SIZE



HIGHLAND - DRYSTONE
HARRISTONE - WHITE MORTAR



ASPEN RIDGE - LAP
WOODTONE

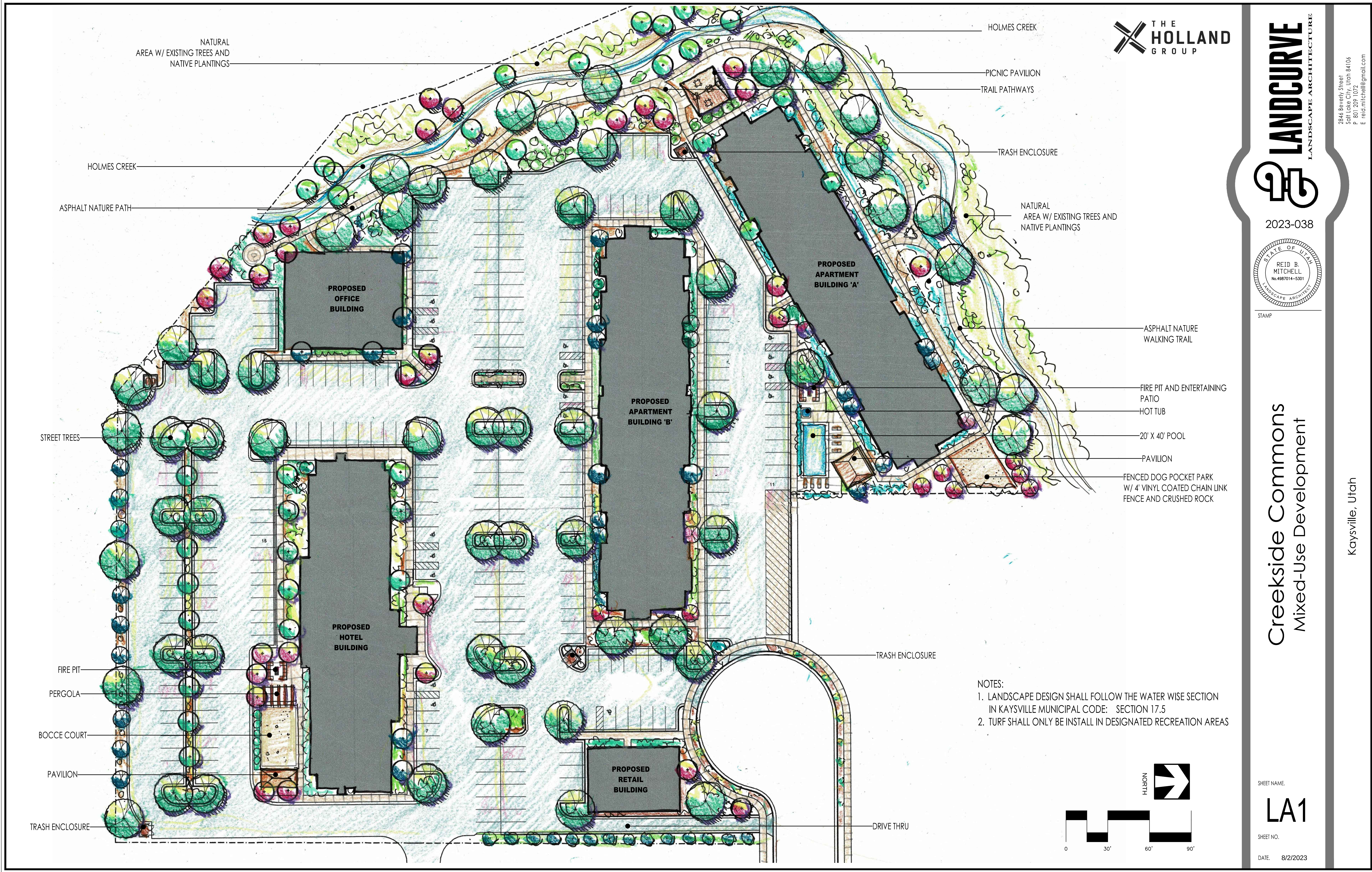


SOFT WHITE - STUCCO

CREEKSIDE | MULTI-FAMILY

EXTERIOR FINISHES

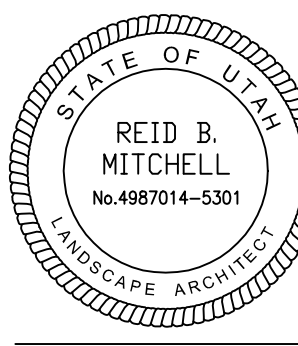




LANDCURVE
LANDSCAPE ARCHITECTURE



2023-038



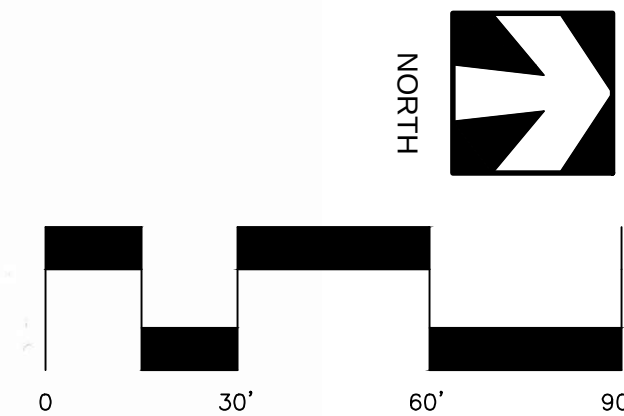
STAMP

Creekside Commons
Mixed-Use Development

Kaysville, Utah

2844 Beverly Street
Salt Lake City, Utah 84106
P 801 209 1072
E reid.mitchell@gmail.com

- NOTES:
- 1. LANDSCAPE DESIGN SHALL FOLLOW THE WATER WISE SECTION IN KAYSVILLE MUNICIPAL CODE: SECTION 17.5
 - 2. TURF SHALL ONLY BE INSTALL IN DESIGNATED RECREATION AREAS



SHEET NAME:
LA1
SHEET NO.:
DATE: 8/2/2023

Creekside Commons



Our Vision

We appreciate the opportunity to introduce Creekside Commons to Kaysville City. The project aims to foster growth, boost economic activity, and integrate within the existing community. Our development, in its form and function, supports the city's long-term vision.



Project Compatability

Overview

Creekside Commons is a mixed-use development containing Office, Retail, Apartments, and Hotel uses. The development's location, near downtown and transportation corridors, lends itself well to these use types. Additionally, the development keeps consistent with Kaysville's General Plan.

General Plan

1. Land Use

Creekside Commons is located next to I-15 and Kaysville's main commercial area. Placing these types of developments near transportation hubs allows Kaysville, over time, to maintain the "small town" atmosphere in other parts of the City, while still providing much-needed commercial and residential uses. Creekside will also promote and benefit all adjacent commercial and future projects in the area.

Building a hotel, the land's highest and best use, will encourage commercial opportunities and serve residents and existing commercial uses within Kaysville.



2. Transportation & Connectivity

The site has been laid out with connectivity in mind. The Development will benefit from two main accesses. We will also have main pedestrian connectivities throughout the development. Creekside Commons will have low impact to the traffic of Kaysville's general roadways, as shown in the traffic study done on our project. Page 80 of 400



3. Housing and Neighborhoods

As shown in the city's General Plan Table 3.8, the future demands of the renter population are greatly needed and increasing. Implementing apartments in this development provides the city's great long-term need. Also, developing housing close to I-15 and the commercial corridors keeps higher densities away from less dense areas in Kaysville. The proposed apartment community will also be rich in amenities, which until now have been scarce for Kaysville's multifamily.

Table 3.8 - Renter Population Projection

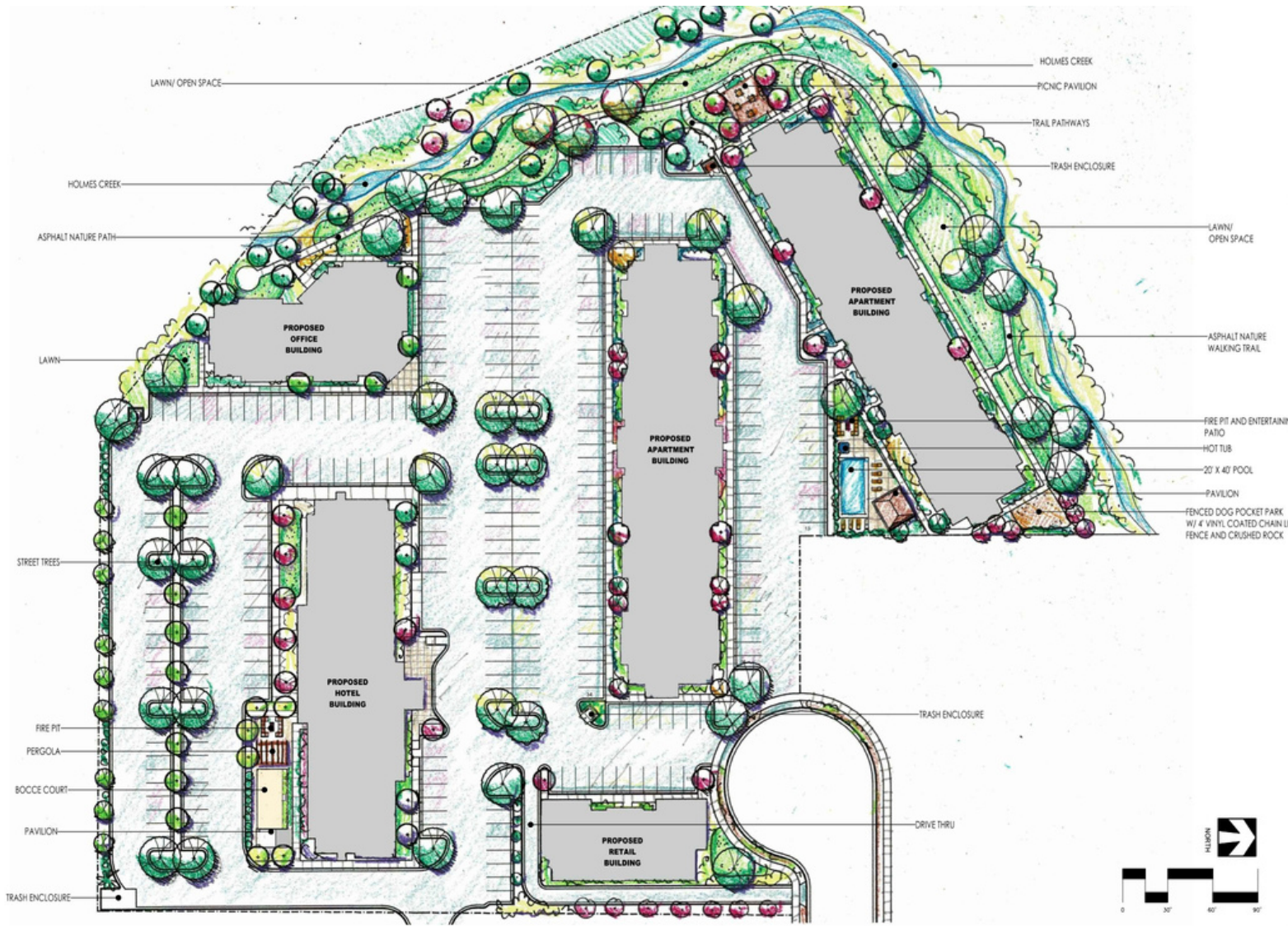
	5 YEAR PROJECTION	10 YEAR PROJECTION
≤ 80% HAMFI	3,982	4,621
≤ 50% HAMFI	3,755	5,441
≤ 30% HAMFI	1,157	1,358

Table 3.9 - Projected Affordable Housing Needs

	AFFORDABLE RENTAL UNITS	GROWTH RATE	5 YEAR UNIT DEMAND	10 YEAR UNIT DEMAND
≤ 80% HAMFI	940	3.02%	1,091	1,266
≤ 50% HAMFI	710	7.70%	1,029	1,491
≤ 30% HAMFI	270	3.26%	317	372

4. Open Space Trails and Natural Resources

We will maintain trees along historic Holmes Creek to provide a buffer between our projects and the adjacent land uses. The Landscape plan demonstrates the natural beauty of this project as we balance the fine line of efficient land use with the nature of Kaysville. A walking path is outlined within our project to create safe travel for pedestrians and interconnectivity.



5. Economic Development & Prosperity

Creating a mixed-use project with 3 commercial uses and with the residential use will strengthen the adjacent commercial hub. Kaysville will boost local businesses' ability to operate and thrive with the supported office and hotel patrons closer to them. The 6.2-acre site will be developed to its highest and best use. The development is estimated to be worth over \$50 million upon completion. This would put this 6-acre property as the top value in Kaysville. The property tax to the city as well as the hotel's transient room tax will be a great long-term benefit for Kaysville City and its residents.



Kaysville Zoning Ordinances

We have created our vision based upon, and consistent with, the newly created Mixed Use zone outlined in Kaysville City's zoning ordinance.



Purpose of MU Zone

As indicated in the ordinance, the intent is to integrate a diverse and compatible option for individuals wishing to be in different family unit types. This achieves the objective by providing a broader range of residential and commercial options not currently found in Kaysville.



Surrounding land Uses

The adjacent land uses to the subject property are all General Commercial. Creekside Commons enhances and benefits all adjacent uses due to the increased office and residential presence coupled with Hotel patrons. It will increase all business in the area, promoting a flourishing commercial hub for Kaysville.



MEMORANDUM

To: Kaysville City

From: Jason Watson, PE, PTOE

FOCUS Engineering & Surveying, LLC

File: Kaysville Mixed-Use Development

Date: July 31, 2023

Reference: Kaysville Mixed-Use Development Parking Analysis - REVISED

INTRODUCTION

FOCUS Engineering and Surveying, LLC (FOCUS) has been retained to complete a Parking Analysis for the addition of a new mixed-use development located along 400 West between Main Street and 200 North in Kaysville, Utah. The purpose of this Parking Analysis is to project the number of parking stalls that will be needed on the proposed site with the planned land uses. This memorandum will also compare the parking demand percentages between the different land uses proposed for this site. This will help determine the peak time periods for parking onsite and how the parking stalls can be shared between the different land uses. The proposed development will access onto 400 West. The site is currently undeveloped land that surrounds commercial and industrial buildings. Exhibit 1 illustrates the vicinity map of the proposed project site.

Exhibit 1 – Project Vicinity Map



Reference: Kaysville Mixed-Use Development Parking Analysis - REVISED

EXISTING CONDITIONS

Surrounding Land Uses and Roadways

This mixed-use development is bordered to the south by a commercial development, to the north by a medical facility, I-15 to the west and 400 West to the east. The proposed site for the new mixed-use development is currently vacant land and in a heavily commercialized area of Kaysville.

To the north is Main Street and to the south is 200 North, which are major roadways that provide access to Interstate 15 both north and south of the proposed development. There are existing roadways that the proposed development will use to access onto 400 West. One road is located just south of the Intermountain Kaysville Creekside Clinic and is currently a cul-de-sac. The second road is an existing access to the property, located roughly 280 feet south of the cul-de-sac.

Roadways

Main Street: Main Street currently consists of two lanes in each direction with bike lanes, curb, and gutter. Currently Main Street consists of a 12-foot two-way left turn lane for vehicles to access the many developments along this roadway. Main Street provides access to Layton Parkway to the north and 200 West to the south. The posted speed limit is 30 mph.

200 North: 200 North currently consists of two lanes in each direction with a center two-way left turn lane. 200 North runs east and west and provides access to I-15 to the west and US 89 to the east. 200 North is located on the south of the proposed development and the posted speed limit is 35 mph.

400 West: 400 West is a north/south roadway that provides access to the proposed development. 400 West is a local roadway owned by the Kaysville City and is currently not striped, but consists of one lane in each direction. The pavement is wide enough that vehicles making a left turn leave enough room for a vehicle to pass, basically functioning as a two-way left turn lane. The posted speed limit is 30 mph.

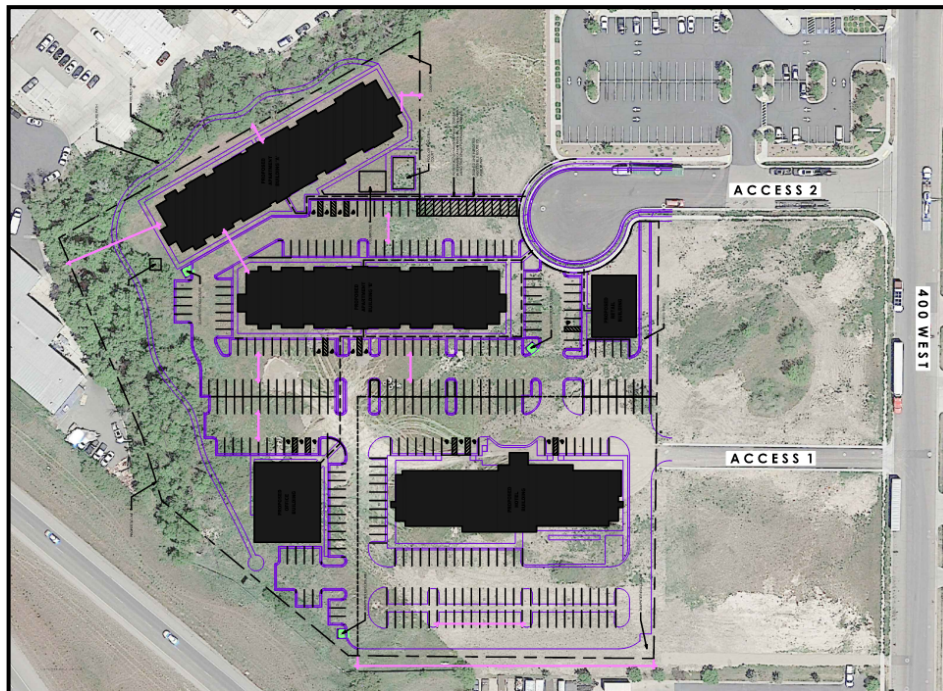
PROPOSED SITE CONDITIONS

The proposed mixed-use development located along 400 West will consist of a 15,000 SF general office building, a 3,000 SF small office space/retail, 160 apartment units, and a 114-room hotel. All traffic exiting and entering the proposed site will access to and from 400 West. The proposed site plan has been designed to provide a total of 302 parking stalls.

Reference: Kaysville Mixed-Use Development Parking Analysis - REVISED

Refer to Exhibit 2 for the proposed site plan of this mixed-use development. As illustrated in the proposed site plan some of the parking spaces within this area can be shared. With the types of uses planned for this site, there will be many times in an average day where the peak parking times will not overlap between land uses and therefore the parking stalls can be shared.

Exhibit 2 – Kaysville Mixed-Use Development Site Plan



PARKING GENERATION

Using the *Institute of Transportation Engineer's (ITE) Parking Generation Manual 5th Edition*, the proposed number of parking stalls needed for this mixed-use development were generated. Land Use Code 221 – Multifamily (Mid-Rise), Land Use Code 710 – General Office Building, Land Use Code 712 – Small Office Building, Land Use Code 310 – Hotel were all used to generate the number of parking stalls. The description of Land Use Code 221 – Multifamily (Mid-Rise) states "multifamily housing includes apartments, townhouses, and condominiums located within the same building with at least three or more dwelling units and between three and ten levels(floors) of residence." In this proposed Mixed-Use Development, there will be 160 residential units in three levels. The description of Land Use Code 710 – General Office Building states, "A general office building is a location

Reference: Kaysville Mixed-Use Development Parking Analysis - REVISED

where affairs of businesses, commercial or industrial organizations, or professional person or firms are conducted." The description of Land Use Code 712 – Small Office Building states, "A small office building typically houses a single tenant and is less than or equal to 3,000 gross square feet in size." The description of Land Use Code 310 – Hotel states, "A place of lodging that provides sleeping accommodation and supporting facilities such as a full-service restaurant, cocktail lounge, meeting rooms, banquet room, and convention facilities."

It is proposed that this new development will include four different land uses in order to meet the needs of the community. Within the land uses in the *Parking Generation Manual*, there are also different settings/locations depending on where the development is located. There are urban/suburban settings to dense multi-use urban settings. Depending if the development is located near rail transit or not, there are also different calculations. For purposes of this mixed-use development, and according to the location of these land uses, the general urban/suburban settings were used to represent the proposed land uses in the area. Refer to the appendix of this statement for the full description and parking generation research from the *ITE Parking Generation Manual*. Table 1 illustrates the number of parking stalls needed for this development using the average rates from the manual.

Table 1 – Parking Generation for Mixed-Use Development

Table 1 - Parking Generation for Mixed-Use Development

ITE Land Use Code	Land Use Description	Size	Weekday Ave. Rate	Parking Stalls	Saturday Ave. Rate	Parking Stalls	Sunday Ave. Rate	Parking Stalls
221	Multifamily Units	160 DU	1.31	210	1.22	196	2.05	328
710	General Office Building	15,000 SF	2.39	36	0.28	5	-	-
712	Small Office Building	3,000 SF	2.56	8	-	-	-	-
310	Hotel	114 ROOMS	0.74	85	1.15	132	-	-
Total				339		333		328

Reference: Kaysville Mixed-Use Development Parking Analysis - REVISED

As can be seen in Table 1, the number of parking stalls needed for this mixed-use development varies from a typical weekday (Monday – Friday) to a typical Saturday and Sunday. The proposed mixed-use development will need 339 parking stalls during a typical weekday, 333 stalls on a typical Saturday and 328 stalls on a typical Sunday. These calculations are assuming full occupancy of all four different land uses for the proposed development. This also assumes all four land uses need their full amount of parking at the same time of day, which in this case will not occur. Office Space will need their maximum number of parking stalls during the middle of a typical week day, where an apartment or hotel will need their maximum number of stalls throughout the night time. Therefore, the majority of the parking can be shared between the different land uses within this proposed development.

The proposed layout of the site plan shows that there is a total of 302 parking stalls planned for this development. This is 37 parking stalls shy of the calculated number of stalls per the *ITE Parking Generation Manual* under the worst-case scenario, which would be on a typical weekday with 339 parking stalls. However, this scenario is unlikely to ever happen due to the difference in operating hours between the four land uses.

The *ITE Parking Generation Manual* also provides the “Percent of Weekday Peak Parking Demand” tables. These tables provide an average percentage of the number of stalls that are used throughout the day based on that land use. These tables present a time-of-day distribution of parking demand and can be found in the appendix of this analysis.

The peak demand for parking for Small Office land use is typically between the 10:00am to 11:00am hours. The peak demand for parking for General Office land use is typically between the 10:00am to 11:00am hours. The peak demand for parking for the Hotel land use is typically between the 9:00am to 10:00am hours. Unlike the other three land uses, Multi-family Housing (Mid-Rise) has a peak parking demand between 12:00am and 4:00am. This shows that many of the parking stalls within the proposed development can be shared between the four different land uses. Tables 2 thru 5 illustrate the parking demand percentages and number of stalls needed at different times of the day based on the parking generation numbers from the *ITE Parking Generation Manual for the four different land uses*. Table 6 illustrates the combined parking demand with all four land uses.

Reference: Kaysville Mixed-Use Development Parking Analysis - REVISED

Table 2 – Land Use 221 Multifamily (Mid-Rise) Weekday Parking Demand Percentages

Hour Beginning	ITE Land use: 221: (%)	Parking Stalls
12:00-4:00 a.m.	100%	210
5:00 a.m.	94%	197
6:00 a.m.	83%	174
7:00 a.m.	71%	149
8:00 a.m.	61%	128
9:00 a.m.	55%	116
10:00 a.m.	54%	113
11:00 a.m.	53%	111
12:00 p.m.	50%	105
1:00 p.m.	49%	103
2:00 p.m.	49%	103
3:00 p.m.	50%	105
4:00 p.m.	58%	122
5:00 p.m.	64%	134
6:00 p.m.	67%	141
7:00 p.m.	70%	147
8:00 p.m.	76%	160
9:00 p.m.	83%	174
10:00 p.m.	90%	189
11:00 p.m.	93%	195

Reference: Kaysville Mixed-Use Development Parking Analysis - REVISED

Table 3 – Land Use 710 General Office Building Weekday Parking Demand Percentages

Hour Beginning	ITE Land Use 710: (%)	Parking Stalls
12:00-4:00 a.m.	0%	0
5:00 a.m.	0%	0
6:00 a.m.	0%	0
7:00 a.m.	13%	5
8:00 a.m.	48%	17
9:00 a.m.	88%	32
10:00 a.m.	100%	36
11:00 a.m.	100%	36
12:00 p.m.	85%	31
1:00 p.m.	84%	30
2:00 p.m.	93%	33
3:00 p.m.	94%	34
4:00 p.m.	85%	31
5:00 p.m.	56%	20
6:00 p.m.	20%	7
7:00 p.m.	11%	4
8:00 p.m.	0%	0
9:00 p.m.	0%	0
10:00 p.m.	0%	0
11:00 p.m.	0%	0

Reference: Kaysville Mixed-Use Development Parking Analysis - REVISED

Table 4 – Land Use 712 Small Office building Weekday Parking Demand Percentages

Hour Beginning	ITE Land Use 712: (%)	Parking Stalls
12:00-4:00 a.m.	0%	0
5:00 a.m.	0%	0
6:00 a.m.	0%	0
7:00 a.m.	0%	0
8:00 a.m.	27%	2
9:00 a.m.	69%	6
10:00 a.m.	88%	7
11:00 a.m.	100%	8
12:00 p.m.	81%	6
1:00 p.m.	81%	6
2:00 p.m.	84%	7
3:00 p.m.	86%	7
4:00 p.m.	92%	7
5:00 p.m.	85%	7
6:00 p.m.	4%	0
7:00 p.m.	0%	0
8:00 p.m.	0%	0
9:00 p.m.	0%	0
10:00 p.m.	0%	0
11:00 p.m.	0%	0

Reference: Kaysville Mixed-Use Development Parking Analysis - REVISED

Table 5 – Land Use 310 Hotel Weekday Parking Demand Percentages

Hour Beginning	ITE Land use: 310: (%)	Parking Stalls
12:00-4:00 a.m.	96%	82
5:00 a.m.	0%	0
6:00 a.m.	91%	77
7:00 a.m.	89%	76
8:00 a.m.	90%	77
9:00 a.m.	100%	85
10:00 a.m.	98%	83
11:00 a.m.	89%	76
12:00 p.m.	85%	72
1:00 p.m.	75%	64
2:00 p.m.	81%	69
3:00 p.m.	70%	60
4:00 p.m.	74%	63
5:00 p.m.	65%	55
6:00 p.m.	73%	62
7:00 p.m.	78%	66
8:00 p.m.	93%	79
9:00 p.m.	96%	82
10:00 p.m.	95%	81
11:00 p.m.	95%	81

Reference: Kaysville Mixed-Use Development Parking Analysis - REVISED

Table 6 – Total Parking Stalls with all Four Land Uses

Hour Beginning	Parking Stalls Land Use (221)	Parking Stalls Land Use (710)	Parking Stalls Land Use (310)	Parking Stalls Land Use (712)	Total Parking Stalls
12:00-4:00 a.m.	210	0	82	0	292
5:00 a.m.	197	0	0	0	197
6:00 a.m.	174	0	77	0	251
7:00 a.m.	149	5	76	0	230
8:00 a.m.	128	17	77	2	224
9:00 a.m.	116	32	85	6	239
10:00 a.m.	113	36	83	7	239
11:00 a.m.	111	36	76	8	231
12:00 p.m.	105	31	72	6	214
1:00 p.m.	103	30	64	6	203
2:00 p.m.	103	33	69	7	212
3:00 p.m.	105	34	60	7	206
4:00 p.m.	122	31	63	7	223
5:00 p.m.	134	20	55	7	216
6:00 p.m.	141	7	62	0	210
7:00 p.m.	147	4	66	0	217
8:00 p.m.	160	0	79	0	239
9:00 p.m.	174	0	82	0	256
10:00 p.m.	189	0	81	0	270
11:00 p.m.	195	0	81	0	276

As illustrated in Table 6, taking all four land uses into account, the maximum number of parking stalls that would be needed is 292 which would be between 12:00am and 4:00am.

CONCLUSION

Based on the provided site plan, the Kaysville Mixed-Use Development consists of two apartment buildings with 160 residential units, a 3,000 square foot small office space/retail, a 15,000 square foot general office space, and a 114-room hotel. The proposed layout of the development will provide a total of 302 parking stalls on site. Using the *ITE Parking Generation Manual*, the calculated number of parking stalls for these land uses will range from 339 parking stalls during a typical weekday, to 333 stalls on a typical

Reference: Kaysville Mixed-Use Development Parking Analysis - REVISED

Saturday, to 328 stalls on a typical Sunday. This is taking the worst-case scenario where all four land uses, Multifamily (Mid-Rise), Hotel, General Office Building and Small Office Building, are using their maximum number of parking stalls at the same time. This will most likely never occur, therefore we also looked at the "Peak Time of Day Percentages" for each land use.

Using the percentage of peak parking demand for each land use, and as illustrated in Table 6, the highest number of parking stalls needed is 292, which would occur between 12:00am and 4:00am. It has been observed that the peak parking demand for a multifamily residential land use occurs between the hours of 12:00am and 4:00am, while the peak demand for parking for the other three land uses occurs during the hours of 9:00am to 11:00am. In this instance, the total number of parking stalls indicates that there was a high demand for parking between 12:00am and 4:00am, however the general office and small office space do not require parking during these hours. With a total of 302 parking stalls provided on site with the proposed layout, this will provide enough parking stalls at any particular hour during the week.

Therefore, it is concluded that the proposed site plan for the Kaysville Mixed-Use Development will provide adequate number of parking stalls, compared to the number of parking stalls calculated per the *ITE Parking Generation Manual*, and the number of parking stalls using the peak parking demand percentages.

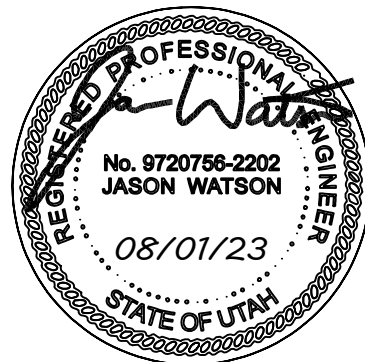
Please feel free to contact me with any questions or comments.

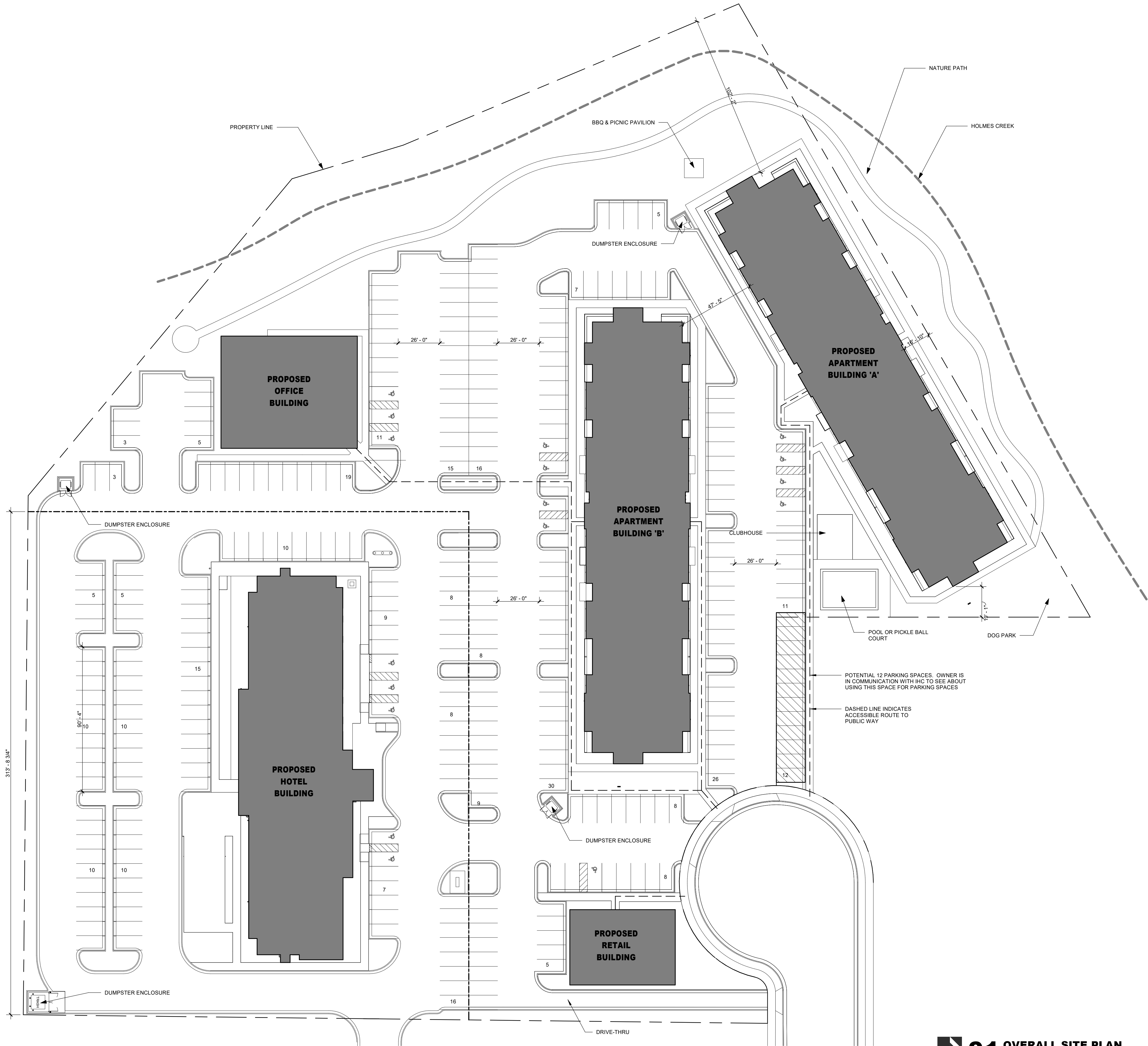
Sincerely,

FOCUS ENGINEERING & SURVEYING, LLC



Jason Watson, PE, PTOE
Transportation Department Manager
801.352.0075
jwatson@focusutah.com





SITE PLAN CALCULATIONS

APARTMENT DATA	
BUILDING 'A' FOOTPRINT	16,900 SQ. FT.
BUILDING 'A' SQ. FT. =	67,600 SQ. FT.
BUILDING 'B' FOOTPRINT	16,900 SQ. FT.
BUILDING 'A' SQ. FT. =	67,600 SQ. FT.
BUILDING HEIGHT =	4 STORIES
UNIT COUNT	
BUILDING 'A'	
STUDIO	= 8
1 BED	= 48
2 BED	= 24
TOTAL	= 80
BUILDING 'B'	
STUDIO	= 8
1 BED	= 48
2 BED	= 24
TOTAL	= 80
TOTAL APARTMENTS = 160 UNITS	

HOTEL DATA	
BUILDING SQUARE FOOTAGE =	67,971 S. FT.
BUILDING HEIGHT =	4 STORIES
UNIT COUNT =	114

OFFICE DATA	
BUILDING SQUARE FOOTAGE =	15,000 SF
BUILDING HEIGHT =	3 STORIES

RETAIL DATA	
BUILDING SQUARE FOOTAGE =	3,000 SF
BUILDING HEIGHT =	1 STORY

PARKING	
REQUIRED	
APARTMENTS	256 STALLS
OFFICE	63 STALLS
RETAIL	11 STALLS
HOTEL	76 STALLS
STALLS REQ'D	386 STALLS
10% REDUCTION	386 X 10% = 39.6
TOTAL REQ'D	356 STALLS
TOTAL PROVIDED	302 STALLS

AMENITIES	
POOL OR PICKLE BALL COURT	
DOG PARK	
NATURE PATH	
BBQ & PICNIC PAVILION	
CLUBHOUSE	

REVISION NO.	DESCRIPTION	DATE

MEMORANDUM

To: Phil Holland, The Holland Group
From: Rob Sant, Urban & Main Consulting
Date: July 28, 2023
RE: Kaysville Creekside Commons Fiscal and Economic Impact

INTRODUCTION

The Creekside Commons is a proposed mixed-use development on 5.64 acres of land within Kaysville, Utah (the “City”) east of I-15, west of 400 West, and north of 200 North. The Holland Group (the “Developer”) has requested Urban & Main conduct an objective, third-party analysis of the economic and fiscal impacts of the proposed Development within the City. Specifically, the analysis aims to understand better the Development’s total economic and fiscal impact on the City over 25 years.

Urban & Main has significant experience in economic development and feasibility of development projects. With over a decade of economic development financial services, Urban & Main fully understands what is needed to provide an independent analysis to determine the costs and benefits of development projects.

KAYSVILLE CREEKSIDE COMMONS

The Development is anticipated to begin infrastructure improvements in 2023, with a completion date of 2026. The Development will include the following:

- 114-room boutique hotel
- 160 studio, 1-bedroom, and 2-bedroom apartment units,
- 15,000 square feet of office space, and
- 3,000 square feet of retail.

If all aspects outlined above are constructed, the Development could produce **\$64.24 million** of new taxable assessed value.

TABLE 1 ABSORPTION SCHEDULE

Residential Type	Total Units/Sq. Ft.	Start Date	End Date	Taxable Value
Boutique Hotel	114 Rooms	2024	2026	\$13,661,801
Apartments	160 Units	2024	2026	\$41,492,219
Office Space	15,000 Sq. Ft.	2024	2026	\$5,516,118
Retail	3,000 Sq. Ft.	2024	2026	\$1,150,852
Land	245,678 Sq. Ft.	-	-	\$2,420,185
Total				\$64,241,175

FISCAL BENEFITS

The proposed Development will generate a **\$5.22 million** fiscal benefit for the City over the 25-year analysis period (2026-2050). The Development will have a positive impact on the following revenues:

- Property tax
- Sales tax
- Botanical & Zoo Sales Tax
- Transient room tax
- Franchise tax

Property Tax Revenue

Assessed values of the proposed real and personal property investments were obtained by collecting current, comparable development values in the City and Davis County (the "County") and data provided by the Developer. Assuming a two and a half percent annual growth rate in property value, the proposed Development will generate **\$1.57 million** of property tax revenue during the 25-year period.

TABLE 2 PROPERTY TAX REVENUES

Taxing Entity	Total – 25 Years
Assessed Value	\$36,599,487
Annual Growth	2.50%
Kaysville City 2023 Certified Tax Rate	0.001281
Average Annual Property Tax	\$62,922
Total Property Tax Revenue	\$1,573,059

After the analysis period, the proposed Development will generate **\$82,293** of annual City property tax revenue. This substantially benefits the City more than the \$2,113 of property tax revenue received from the currently vacant land.

Sales Tax Revenue

The proposed Development will generate sales tax on the 3,000 square feet of retail space, 114-room hotel, and online purchases made by the new full-time residents. The proposed Development will produce **\$1.41 million** in sales tax revenue during the 25-year analysis period.

TABLE 3 SALES TAX REVENUE

Assumptions	Amount
Retail Square Feet	3,000 Sq. Ft.
Average Sales/Sq. Ft.	\$350.00
Hotel Rooms	114
Average Daily Rate (ADR)	\$175.00
Online Taxable Sales per Resident	\$4,500
New Residents	320
Average Gross Taxable Sales	\$9,371,592
City Sales Tax Rate	0.50%
City Botanical & Zoo Sales Tax Rate	0.10%
Annual Growth	2.50%
Average Annual Sales Tax Revenue	\$46,858
Average Annual Botanical & Zoo Sales Tax	\$9,372
Total Sales Tax Revenue	\$1,171,449
Total Botanical & Zoo Sales Tax	\$234,290
Total Sales Tax Revenue	\$1,405,739

The City will likely receive additional sales tax revenues through residents, employees, and hotel occupants shopping and dining within the City. As this is not a direct fiscal benefit of the Development itself, the potential sales tax revenue and overall economic impact are discussed in greater detail in the Tourism and New Residents Per Capita Spending Economic Impact sections.

Transient Tax Revenue¹

The City will receive tourism tax revenue from the transient room tax generated by the hotel. The proposed Development will generate **\$1.49 million** in transient room tax revenue during the 25-year analysis period.

TABLE 4 TRANSIENT ROOM TAX REVENUE

Assumptions	Amount
Number of Hotel Rooms	114
Occupancy Rate	60%
Average Daily Rate	\$175.00
Annual Growth	2.50%
City TRT Rate	1.00%
Average Annual Transient Room Tax Revenue	\$59,695
Total Tourism Tax Revenue	\$1,492,370

Municipal Energy Tax Revenue

The City currently imposes a six percent municipal energy (“Franchise”) tax on all taxable portions of electric and natural gas sales. Rocky Mountain Power and Dominion Energy provided estimates of average usage per year. The proposed Development will produce **\$737,216** in municipal energy tax revenue during the 25-year analysis period.

TABLE 5 MUNICIPAL ENERGY TAX REVENUE

Assumptions	Amount
Residential Electric Usage per Unit per Year	\$1,134.06
Non-Residential Electric Usage per Square Foot per Year	\$1.36
Annual Inflation	2.50%
Electricity Franchise Tax Rate	6.00%
Average Electric Tax Revenue	\$22,982
25-Year Electric Tax Revenue	\$574,557
Residential Natural Gas Usage per Unit per Year	\$430.57
Non-Residential Natural Gas Usage per Square Feet per Year	\$0.16
Annual Inflation	2.50%
Natural Gas Franchise Tax Rate	6.00%
Average Natural Gas Tax Revenue	\$6,506
25-Year Natural Gas Tax Revenue	\$162,659
Total Municipal Energy Tax Revenue	\$737,216

Total Fiscal Benefit

The Development will produce **\$5.22 million** in fiscal benefits over the 25-year analysis period.

TABLE 6 FISCAL BENEFIT

Fiscal Benefits	Average Annual Benefit	Total – 25 Years
Property Tax	\$62,922	\$1,573,059
Sales Tax	\$46,858	\$1,171,449

¹ Kaysville City does not currently impose the 1.00% municipal transient room tax. The analysis assumes the City will elect to impose the tax upon approval of the Development and construction of the hotel.

Fiscal Benefits	Average Annual Benefit	Total – 25 Years
Botanical & Zoo Sales Tax	\$9,372	\$234,290
Transient Room Tax	\$59,695	\$1,492,370
Franchise Tax	\$29,764	\$744,091
Total Fiscal Benefits	\$208,610	\$5,215,259

FISCAL EXPENSES

The proposed Development will also impact the City's fiscal expenses. In evaluating the benefits of development, it is crucial to ensure that costs do not outweigh the benefits. Using the projected new assessed value of the Development, this analysis assumes that the City will see an increase of **\$1.55 million** in expenses over the 25-year analysis period. The proposed Development will create an impact on the following expenses:

- General Government
- Public Safety
- Public Works

These expenses are anticipated to increase proportionally as development occurs. Incremental expenses were calculated by dividing the City's 2022 annual expenditure for each expense category by the City's total 2022 assessed value. This calculation shows how much money the City spends per dollar of assessed value on each expense category.

This figure is then multiplied by the projected assessed value of each planned use in the Development to calculate the Development's incremental expenditure for each expense category.

TABLE 7 FISCAL EXPENSES

Fiscal Expenses	Total – 25 Years
General Government	\$304,687
Public Safety	\$828,378
Public Works	\$420,008
Total Fiscal Expenses	\$1,553,073

COST/BENEFIT ANALYSIS

Based on the development assumptions utilized in the analysis, the Development produces a **\$3.66 million** cumulative net benefit to the City projected over 25 years. The absorption and timing of the Development may impact the current projections. The Development will also likely create additional benefits for the City through new resident and hotel occupant purchases, which are not included in the cost-benefit table below.

TABLE 8 CREEKSIDE COMMONS COST/BENEFIT

Revenue	Year 1	Year 5	Year 10	Year 15	Year 20	Year 25	Total
Property Tax	\$46,884	\$51,429	\$57,780	\$64,965	\$73,095	\$82,293	\$1,573,059
Sales Tax	\$34,295	\$37,856	\$42,830	\$48,458	\$54,826	\$62,031	\$1,171,449
Botanical & Zoo Sales Tax	\$6,859	\$7,571	\$8,566	\$9,692	\$10,965	\$12,406	\$234,290
Transient Room Tax	\$43,691	\$48,226	\$54,563	\$61,734	\$69,846	\$79,024	\$1,429,370
Franchise Tax	\$21,784	\$24,045	\$27,205	\$30,780	\$34,825	\$39,401	\$744,091
Total Revenues	\$153,513	\$169,127	\$190,945	\$215,629	\$243,557	\$275,155	\$5,215,259
Expense							
General Government	(\$6,329)	(\$7,711)	(\$9,871)	(\$12,636)	(\$16,175)	(\$20,706)	(\$304,687)
Public Safety	(\$17,208)	(\$20,966)	(\$26,838)	(\$34,355)	(\$43,977)	(\$56,294)	(\$828,378)
Public Works	(\$8,725)	(\$10,630)	(\$13,607)	(\$17,419)	(\$22,297)	(\$28,543)	(\$420,008)
Total Expenses	(\$32,261)	(\$39,307)	(\$50,317)	(\$64,410)	(\$82,450)	(\$105,543)	(\$1,553,073)
Net Benefit/(Cost)	\$121,251	\$129,820	\$140,628	\$151,220	\$161,107	\$169,613	\$3,662,186

ECONOMIC BENEFITS

The economic benefits of the Development include 1) construction wages and supplies, 2) new job wages, 3) local purchases by tourists, and 4) local purchases by new residents. The proposed Development will create a **\$914.40 million** economic impact on the local economy over 25 years.

The actual economic benefit of the Development is likely much higher due to additional indirect and induced benefits. Positive economic impacts will be felt through business, construction, and leisure supplies purchased by the Developers, new residents, businesses, and hotel occupants. Additional demand for goods and services will also be attracted to the area. This benefit is commonly called the “multiplier effect,” in which only certain elements were considered in this study.

Construction Economic Benefit

The construction of the Development will necessitate construction jobs and wages. Infrastructure construction is anticipated to begin in 2023, with a final build-out date of 2026. This 3-year build-out period will have approximately 750,000 hours of construction labor, generating **\$21.53 million** in construction wages. These wages will be reinvested into the local economy, creating additional induced benefits.

TABLE 9 CONSTRUCTION WAGES

Assumptions	Amount
Average Annual Construction Hours	250,000
Average Hourly Wage	\$28.00
Annual Salary Increase	2.50%
Total Construction Hours	750,000
Average Annual Construction Wages	\$7,176,458
Total Construction Wages	\$21,529,375

Another economic benefit to the construction of the Development will be one-time purchases of construction supplies. Assuming that a portion of the hard-cost construction investment is for supplies purchased within the region and state, approximately **\$25.00 million** will be invested into the regional and state economy.

New Job Wages

It is anticipated that several jobs will be created by the Development. Future employee estimates have been made based on an employee per square foot average collected from CoreNet Global and comparable regional development. This analysis assumes that the development will create 481 jobs.

TABLE 10 NEW JOBS

Assumptions	Amount
Office Jobs per Square Foot	1 per 200 Square Feet
Office Square Feet	15,000
Office Jobs	75
Commercial Jobs per Square Foot	1 per 150 Square Feet
Commercial Square Feet	60,971
Commercial Jobs	406
Total New Jobs	481

The 481 new jobs will produce **\$356.42 million** in cumulative net wages during the 25-year analysis period. This figure was derived from taking average salaries of various office and commercial jobs on the U.S. Bureau of Labor Statistics and local job postings and applying an annual salary increase of two and a half percent. The salaries were then multiplied by the total number of jobs.

TABLE 11 NEW JOB WAGES

Assumptions	Amount
Office Average Salary	\$65,000
Office Jobs	75
Commercial Average Salary	\$27,500
Commercial Jobs	406
Annual Salary Increase	2.50%
Personal Adjusted Income Ratio	65.00%
Average Annual Wages	\$14,256,714
Total Wages	\$356,417,850

At the end of the 25-year analysis period, the Development will generate over **\$30 million** in annual wages. This number will continue to increase on an annual basis.

Tourist Spending Per Travel Party²

The hotel occupants will spend some of their trip expenditures on restaurants and stores within the City. Using a 60% occupancy rate and an average trip length of two days, the 114-room hotel will result in 12,483 annual trips. On average, the total trip expenditure per party is \$836. Excluding the 63% of travel expenses for transportation and lodging equates to the average party spending \$309 on other local expenses.

TABLE 12 HOTEL ASSUMPTIONS

Assumptions	Amount
Hotel Rooms	114
Occupancy Rate	60%
Number of Nightly Annual Stays	24,966
Average Trip Length	2 Days
Number of Annual Trips	12,483
Average Party Size	3
Number of Annual Visitors	37,449
Average Total Trip Expenditure Per Party	\$836
Non-Lodging/Transportation Trip Expenditure %	37%
Total Non-Lodging/Transportation Expenditure Per Person Per Day	\$309

Using the assumptions outlined in Table 12, the Development's hotel occupants will expend **\$131.81 million** in the local economy during the 25-year analysis period. This equates to an average of \$5.27 million annually.

TABLE 13 HOTEL OCCUPANT SPENDING

Assumptions	Amount
Number of Annual Trips	12,483
Total Non-Lodging/Transportation Trip Expenditure	\$309
Annual Growth Rate	2.5%
Average Annual Nightly Rental Occupant Spending	\$5,272,500
Total Nightly Rental Occupant Spending	\$131,812,495

A percentage of the hotel occupant spending will be spent in the City, which will create additional sales tax revenue for the City. The following table shows the potential sales tax revenue impacts on the City if different percentages of total nightly rental occupant spending occur within the City.

² Tourism data was estimated using the State of Utah's 2021 Utah Visitor Profile & Insights Report.

TABLE 14 HOTEL OCCUPANT SPENDING – POTENTIAL SALES TAX REVENUE

Percent Purchased	Average Annual City Sales Tax Revenue	25-Year Total
10%	\$3,164	\$79,087
25%	\$7,909	\$197,719
50%	\$15,818	\$395,437
75%	\$23,726	\$593,156

New Resident Per Household Spending

The approach to estimating per household spending of new residents is based on a potential “typical household” that would likely occupy the various multi-family units in the Development. The U.S. Bureau of Labor Statistics publishes consumer expenditure data for various household types. Three households were used to estimate per household spending of potential residents of the new Development. Using these assumptions, the Development will generate **\$379.64 million** of new resident per household spending during the 25-year analysis period.

TABLE 15 NEW RESIDENT PER HOUSEHOLD SPENDING

Assumptions	Amount
Studio Units	16
Average Annual Studio Per Household Spending	\$893,217
25-Year Total Studio Per Household Spending	\$22,330,433
1-Bedroom Units	96
Average Annual 1-Bedroom Per Household Spending	\$9,100,546
25-Year Total 1-Bedroom Per Household Spending	\$227,513,662
2-Bedroom Units	48
Average Annual 2-Bedroom Per Household Spending	\$5,191,740
25-Year Total 2-Bedroom Per Household Spending	\$129,793,491
Average Annual Per Household Spending	\$15,185,503
Total New Resident Per Household Spending	\$379,637,586

A percentage of the new resident per household spending will be spent in the City. This spending will create additional sales tax revenue for the City. The following table shows the potential sales tax revenue impacts on the City if different percentages of new resident per household spending occur within the City.

TABLE 16 NEW RESIDENT PER HOUSEHOLD SPENDING – SALES TAX REVENUE

Percent Purchased	Average Annual City Sales Tax Revenue	25-Year Total
10%	\$9,111	\$227,783
25%	\$22,778	\$569,456
50%	\$45,557	\$1,138,913
75%	\$68,335	\$1,708,369

Total Economic Impact

The Development will produce **\$914.40 million** in economic benefits over the 25-year analysis period.

TABLE 17 ECONOMIC BENEFIT

Economic Benefit	Total – 25 Years
Construction Wages	\$21,529,375
Construction Supplies	\$25,000,000
Wages	\$356,417,850
Tourist Spending Per Travel Party	\$131,812,495
New Resident Per Household Spending	\$379,637,586
Total Economic Benefit	\$941,397,306

PLANNING COMMISSION STAFF REPORT

To: Kaysville City Planning Commission
From: Melinda Greenwood, Community Development Director
Date: July 7, 2023

Agenda Item #6: Public Hearing for a rezone application from Phil Holland for 521 West 350 North from General Commercial to Mixed Use Zoning District Overlay

Meeting Date	July 13, 2023
Application Type	Rezone
Applicant Owner	Phil Holland H Group Ventures LLC
Address Parcel ID Number	521 West 350 North 11-879-0002 and 11-879-0007
Lot Size	6.26 acres 272,685 ft ²
Current Use	Undeveloped
Current Zoning	GC General Commercial
Density Entitlement	NA
Requested Zoning	GC Mixed Use Overlay
Density Entitlement	Density Approved Through Development Agreement (132 units proposed)

1. BACKGROUND

The two subject properties combine to create a 6.26 acre (272,685 ft²) area bordered by I-15 to the west, Holmes Creek to the north and the new Taco Bell and upcoming Charlie's Car Wash to the east. The applicant has requested a rezone from GC General Commercial District to GC Mixed Use Zoning District Overlay (GC MU).

A mixed-use overlay is technically a rezone which adds in a residential use to the General Commercial (GC) zone. All MU projects require a development agreement upfront, which will solidify



details of the intended project, phasing and other details.

The proposed GC MU project includes a five total buildings, three of which will be commercial and consist of a hotel, office and a retail building. The other two buildings are 3-story apartments with 66 units each for a total of 132 residential units.

2. SURROUNDING LAND USE

When considering a zone change, a review and analysis of the existing character of the area is appropriate. The project parcels are located at 521 West 350 North and are found at the end of an existing cul-de-sac. The area currently includes a variety of businesses including healthcare, restaurants, fueling stations and other commercial services. The existing zoning and surrounding area characteristics are discussed in more detail in the bulleted list which follows.

- **Adjacent** – Directly adjacent to the subject property is I-15, Holmes Creek, Taco Bell, Charlie's Car Wash (which is under construction), Les Schwab Tire Center and an IHC clinic.
- **North** – Properties to the north are General Commercial.
- **South** – Directly south of the parcel is Les Schwab Tire Center, which is zoned General Commercial.
- **East** – Properties to the east are all zoned General Commercial.
- **West** – The property is bordered by Holmes Creek and I-15.

The rezone approval would not detrimentally impact the surround neighborhoods. Alternatively, based on the highly commercial nature of the area, the addition of residential apartments and hotel visitors would bring new customers and provide regular patrons which would augment existing and planned retail and commercial services.

3. 2022 GENERAL PLAN

The 2022 General Plan Future Land Use Map indicates the property is to be used as a mixed use development, so the proposed zone change is supported by 2022 General Plan.

Diving deeper into the 2022 General Plan, we see the rezone application and proposed project is supported by three of the guiding principles, including:

Enrich our city center and downtown - We will enhance our city center with commercial and mixed-use development and investing in streetscape and parking.

The project is located in the city center area, is a mixed use project and will provide opportunities for added commercial services.

Provide diverse housing options - We will work to preserve our existing neighborhoods while accommodating a full range of housing opportunities to meet the economic, lifestyle and life-cycle needs of our residents.

The project includes two apartment buildings with each building having 66 dwelling units. Kaysville's rental units and apartment style housing only accounts for 2 percent of our housing. The location of this project is ideal as there is no single family housing in the area. Often times the public is averse to having any kind of density near their homes. Due to the distance from single family housing, the project will not negatively impact established residential neighborhoods.

Preserve our open space, trails and natural resources - We will encourage the preservation of open space through clustered development and the protection of foothills, natural drainages and remaining agricultural areas.

The applicant plans to preserve existing trees near Holmes Creek and provide a walking path amenity and barbeque area near the creek, maximizing opportunities the existing natural area provides.

Each chapter of the 2022 General Plan concludes with goals, objectives and implementation measures. When considering a rezone application, we look to these goals to see if the project and rezone can be supported by the guidance set forward in the General Plan.

Chapter 1 Land Use & Placemaking Plan outlines specific goals and implementation measures which further support the mixed use rezone application and proposed project.

Chapter 1 Goal 2 is listed as: **Make Kaysville City Center Distinct and Identifiable from Adjacent Neighborhoods and Surrounding Cities** with specific ***Objective 2.2: Create a distinct city center and expand the "heart of the community" to include areas beyond the historic core.*** Development of vacant and undeveloped property to include missing services, add additional housing and create additional revenues for the City will allow for a natural extension of the core commercial area.

Chapter 1, Goal 8 continues with **"Provide a range of housing options and price points that help ensure Kaysville is an affordable place to live."** With only 2 percent of housing consisting of apartments with 10 or more units, Kaysville is limited in its existing housing options and affordability. The provision of 132 new residential units in varying sizes would diversify housing options and cost levels, fulfilling this goal.

Chapter 1 Goal 9 asks City leaders to: **Encourage Diverse Commercial Uses to Meet the Needs of the Community and Visitors** and ***Objective 9.1*** continues to say: ***Focus primary commercial uses in the City Center and secondary uses in smaller existing/future nodes.*** The attached *Implementation Measure* adds additional information to support the project: *Encourage mixed use and flex development in the City Center.* As the subject property is located in the middle of the City Center concept and the project would diversify the services presently delivered in our community, the project supports positive outcomes for this goal. Specifically, the addition of a hotel would be a new service which is not currently provided within City boundaries.

Chapter 3: Housing and Neighborhoods was amended in November of 2022 to account for state requirements for moderate income housing elements in the general plans. The chapter reports that 92% of housing in Kaysville is single family housing. This project would provide needed housing

which is outside the customary housing product offered in the city. The goals and objectives in this chapter offer ample support for this rezone and project.

Chapter 3, Goal 1 states Kaysville should aim to “Provide a full range of housing opportunities to meet economic, lifestyle, and lifecycle needs and expectations for residents.” Objectives prescribed for this goal include:

Objective 1.1: Allow for higher density and mixed use within the City Center to diversify housing stock.

Objective 1.2: (H) Amend land use regulations to eliminate or reduce parking requirements for residential development where a resident is less likely to rely on the resident's own vehicle, such as residential development near major transit investment corridors or senior living facilities.

Objective 1.3: Rezone for densities necessary to facilitate the production of moderate income housing.

Objective 1.4: (F) Zone or rezone for higher density or moderate income residential development in commercial or mixed-use zones near major transit investment corridors, commercial centers, or employment centers.

The GC MU rezone and the proposed project creates an avenue to meet these objectives and approval would allow the City to report encouraging progress back to the State in subsequent Moderate Income Housing reports. The requested parking reduction, supported by a parking analysis is a reasonable reduction given the nature of the shared uses on the project site.

Lastly, **Chapter 5 Economic Development & Prosperity** contains three goals and several objectives that support the proposed project, including:

- Goal 1: Promote Kaysville City Center redevelopment to strengthen commercial areas.**
- Goal 2: Utilize a wide variety of tools and incentives available to help achieve economic development goals.**
- Goal 3: Allow for mixed use development in identified areas to generate more rooftops and prevent Sales leakage.**

Kaysville City does not currently collect Transient Room Tax (TRT), which is a tax imposed on hotels, motels and other

Goals & Objectives

GOAL 1: PROMOTE KAYSVILLE CITY CENTER REDEVELOPMENT TO STRENGTHEN COMMERCIAL AREAS

- Objective 1.1: Allow for greater densities in Kaysville City Center to generate an increase in buying power and capture rates.
- Objective 1.2: Focus on small scale and local services to meet public requests and provide local growth.

GOAL 2: UTILIZE THE WIDE VARIETY OF TOOLS AND INCENTIVES AVAILABLE TO HELP ACHIEVE ECONOMIC DEVELOPMENT GOALS

- Objective 2.1: Establish redevelopment areas to fund infrastructure and future developments.

GOAL 3: ALLOW FOR MIXED USE DEVELOPMENT IN IDENTIFIED AREAS TO GENERATE MORE ROOFTOPS AND PREVENT SALES LEAKAGE

short-term rentals. Bringing a 114-room hotel to the City would add an additional tax revenue source and diversify our tax base. The applicant submitted a white paper study (attached) which gives insight to impacts a hotel has on spending in a community. Not only would the City receive TRT, visitors to our community would be spending money to dine, fuel vehicles, and patron other retail services in Kaysville.

The 2022 General Plan contains substantial principals, goals, objectives and specific implementation measures to support the requested GC MU rezone and the mixed use project proposed by H Group Ventures LLC.

4. MIXED USE ZONING DISTRICT OVERLAY

[KCC 17-27-2 Project Evaluation/Review Process](#) requires a number of documents and details to be submitted with the application. H Group Ventures LLC has submitted all the required items and those are attached to this staff report.

The [Mixed Use Zoning District Overlay](#) also requires a development agreement (DA) to be accompanied with the zone change application, and that agreement is attached to this memo. The [purpose statement of the MU overlay zoning code](#) says the district is designed:

“...to facilitate the integration of diverse but compatible uses into a single development, with the goal of creating a community with more diverse development types providing a broader range in residential and commercial choice.”

The purpose statement continues with:

“The flexibility in use provided by this zone should help promote "live, work, and play" opportunities within the city while creating an appropriate transition from surrounding development.”

The MU zone provides for both vertical and horizontal mixed use projects. The proposed project is the latter, and mixes uses across the entirety of the property instead of the more traditionally thought of vertical fashion. The MU overlay zone allows offices, retail services and sales, arcades, hotels and entertainment facilities. The proposed project is a mix of office, hotel, retail and residential uses. As proposed, the project uses are in compliance with the zoning code.

[Section 27-3-2\(b\)ii](#) requires a minimum of 30 percent of the combined square footage of the project be commercial building space. This project exceeds that requirement by 12 percent, offering a total of 42 percent of the project as commercial uses (see chart to the right).

[KCC 17-27-7 Development Standards](#) creates a base for project standards, but realizing the unique characteristics that each mixed use project has, the code allows for some

Building	Square Footage
Apartment Building 1	53,370
Apartment Building 2	53,370
Residential Total	106,740
Hotel	57,971
Office	15,000
Retail	3,000
Commercial Total	75,971
Total Square Footage	182,711
% Commercial	42%
% Residential	58%

variations through the DA. One such variation requested with this project is due to the unique shape, nature and location of the parcels. Requirements such as no more than 30 percent of the lot frontage being drive access or parking are not practicable at the end of a cul-de-sac. The applicant has been through many site plan iterations and offers the proposed layout as the best possible.

Staff believes the rezone request and proposed project meet the stated purpose of the Mixed Use Zoning District Overlay.

5. PROJECT SPECIFICS AND DEVELOPMENT AGREEMENT DETAILS

The full site plan, concept and building renderings are attached as well as the development agreement, parking analysis and the traffic impact study. The project would bring an additional 132 rooftops to Kaysville and position them in an area where access to I-15 for commuting, the park and ride, retail services and employment opportunities are in close proximity. The project is estimated to be \$50M in value and proposes a total of five buildings with use and square footage broken out below.

Building Use	Square Footage	Additional Details
Hotel	57,971	Four stories, not to exceed 50' in height 114 rooms
Office	15,000	May be 2 or 3 stories, not to exceed 35' in height
Retail	3,000	Single story
Apartment Building 1	53,370	Three stories, not to exceed 35' in height Proposed 66 unit mix: 12 studio, 36 one-bedroom, 18 two-bedroom
Apartment Building 2	53,370	Three stories, not to exceed 35' in height Proposed 66 unit mix: 12 studio, 36 one-bedroom, 18 two-bedroom

Large projects such as this can have some fluid aspects which may need to be adjusted as financing, market research and timing comes into play. For this reason, the DA allows for some flexibility in minor adjustments. As noted in the table, the office building may be two or three stories, but must be a total of 15,000 ft². Similarly, the applicant would like the flexibility to determine at a later date if a residential amenity would be a pool or pickle ball court, but promises to provide a walking path, dog park and walking trail. Staff has drafted the DA to accommodate reasonable adjustments, but major changes must be approved by the City Council in an amendment to the DA.

The hotelier brand is a national chain, but confidentiality agreements prohibit the disclosure of the exact company. This is a common restriction in development negotiations and until projects are entitled, non-disclosures will remain in place.

Per code requirements in the MU zone and the City's parking code, a total of 344 parking stalls are required. A parking analysis has been provided and the site plan states 301 parking stalls will be provided for the project. The MU code allows for up to a 10 percent in reduction for shared parking facilities. A 10 percent reduction would allow for a decrease of 34.4 stalls. The applicant is

requesting a slightly higher reduction of 12.3 percent and 43 stalls. Given the study provided and the nature of the shared uses, this reduction is a reasonable amount.

The traffic study has been reviewed by both the Public Works Director and City Engineer and while there are significant impacts to traffic in the area, no mitigation measures are being proposed at this time. The City Engineer has initiated discussions with UDOT regarding the intersection at 400 West and 200 North to determine timing of their improvements to the intersection and the interchange. Traffic improvements are already needed in the area but may need to be accelerated. Staff expects the roadway impact fees will be significant and can be used to mitigate impacts at the intersection of Main Street and 400 West.

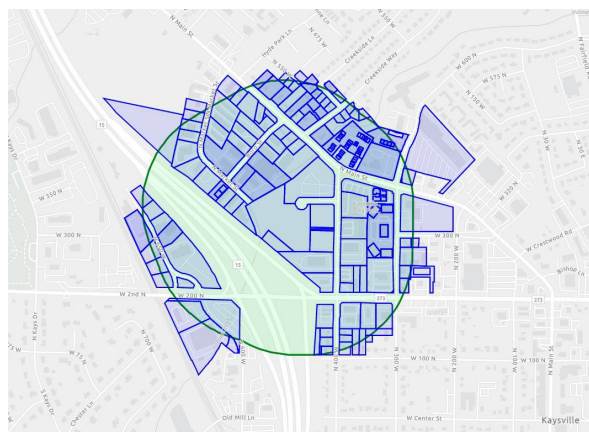
Staff has completed a review of the proposed project in relation to the zoning regulations and believes the project, proposed site plan and development agreement are in compliance with the zoning code and are reasonable based on the odd shape of the project site.

6. PUBLIC NOTICE AND PUBLIC COMMENT

On Friday, June 30, 2023, public notices were mailed to property owners within 500' of the subject property as shown in the map. As of the date of this report, no comments have been received.

7. RECOMMENDATION

Based on the findings outlined in this staff report, staff recommends the Planning Commission forward a recommendation of approval to the City Council for the development agreement and the rezone of 521 West 350 North from GC General Commercial to General Commercial Mixed Use Overlay.



- e. The design of the project as outlined in the site plan and development agreement would not negatively impact the character of the area.
- f. The project would diversify the housing product available in Kaysville and provide opportunities for a live-work environment.
- g. The project would diversify and strengthen the City's economic and commercial base, adding new office, retail and an opportunity to collect Transient Room Tax with the hotel.
- h. Staff review has found the project to be compliant with 17-27 Mixed Use Zoning Overlay purpose statement and code requirements.

ATTACHMENTS:

- 1. Project Location Map 521 West 350 North
- 2. Applicant Statement of Compliance
- 3. Draft Development Agreement for 521 West 350 North
- 4. Proposed Mixed Use Site Plan
- 5. Proposed Project Renderings
- 6. Proposed Landscape Plan
- 7. Kaysville Mixed-Use Development Traffic Impact Study (February 21, 2023)
- 8. Kaysville Mixed-Use Development Parking Analysis (March 3, 2023)
- 9. Economic Impact of Hotel Development by: Alan Suzuki

KAYSVILLE MIXED-USE DEVELOPMENT

TRAFFIC IMPACT STUDY

KAYSVILLE, UT



February 21, 2023

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1.0 Executive Summary

1.1 DESCRIPTION OF PROJECT

This report presents the results of a traffic impact analysis for the Kaysville Mixed Use Development, located east of I-15, north of 200 North, south of Main Street and west of 400 West in Kaysville, Utah. The Kaysville Mixed Use Development is planned for both residential and commercial usage with two accesses onto 400 West. The two accesses will use existing roadways that connect to 400 West. The proposed parcel of land for the Kaysville Mixed Use development is currently undeveloped land that surrounds existing commercial and industrial buildings. Figure 1 illustrates the vicinity map and the location of this development in relation to the adjacent roadway network.

The Kaysville Mixed Use Development will consist of 132 apartments, a 15,000 SF general office building, a 5,000 SF small office building/retail space, and a 115-room hotel. For purposes of this study, and following UDOT's guidelines for a Level II traffic impact study, the analysis will consist of the following intersections:

- Main Street & 400 West
- 200 North & 400 West
- Access #1 & 400 West
- Access #2 & 400 West

The proposed development is planned to be built out by the end of 2025. Refer to Figure 2 for the overall site plan of the Kaysville Mixed Use Development and the proposed access locations.

The traffic associated with this development is generated using the Trip Generation Manuals published by the *Institute of Transportation Engineers (ITE)*. On an average weekday, the 132 residential apartment units are expected to generate 49 AM peak hour trips and 51 PM peak hour trips, with 599 trips generated on an average day. The general office building will generate 23 AM peak hour trips and 22 PM peak hour trips with an ADT of 163 trips. The small office space will generate 8 AM peak hour trips and 11 PM peak hour trips on an average day, with an ADT of 72 trips. The hotel will generate 53 AM peak hour trips and 68 PM peak hour trips, with an ADT of 919 trips generated on an average day.

1.2 FINDINGS

Based on the analysis performed in this traffic impact study, the following tables present the findings under the study scenarios for the 2023 Existing, 2025 Opening and 2030 Future Year scenarios and illustrates the Level of Service (LOS) and delay time at each intersection.

Table E1 – Existing, Opening & Future Year Level of Service

INTERSECTION	EXISTING, OPENING & FUTURE LEVEL OF SERVICE					
	2023 EXISTING YEAR		2025 OPENING YEAR		2030 FUTURE YEAR	
	AM	PM	AM	PM	AM	PM
400 West & 200 North	f(375.2)	f(380.4)	f(566.4)	f(976.5)	f(2086.9)	f(**)
400 West & Access #1	a(0.0)	a(0.0)	a(0.0)	a(0.0)	a(0.0)	a(0.0)
400 West & Access #2	b(10.0)	b(10.0)	b(10.1)	b(10.0)	b(10.3)	b(10.1)
400 West & Main Street	d(27.0)	c(17.6)	d(30.6)	c(18.6)	e(40.8)	c(22.0)
Values represent the overall LOS for all signalized intersections (uppercase letters) and the worst movement for all unsignalized intersections (lowercase letters) ** value is not provided in Synchro as the delay exceeds capacity						

Table E2 – Opening & Future Year with Project Level of Service

INTERSECTION	OPENING & FUTURE YEAR W/ PROJECT LEVEL OF SERVICE			
	2025 OPENING w/ PROJ		2030 FUTURE w/ PROJ	
	AM	PM	AM	PM
400 West & 200 North	f(1339.9)	f(**)	f(**)	f(**)
400 West & Access #1	b(10.4)	a(9.9)	b(10.6)	b(10.0)
400 West & Access #2	b(10.6)	b(10.2)	b(10.8)	b(10.4)
400 West & Main Street	d(34.9)	c(20.6)	e(48.8)	d(25.4)
Values represent the overall LOS for all signalized intersections (uppercase letters) and the worst movement for all unsignalized intersections (lowercase letters) ** value is not provided in Synchro as the delay exceeds capacity				

As seen in Table E1 and Table E2, the level of service for the southbound approach at 400 West & 200 North currently fails. The northbound approach at 400 West & Main Street also currently fails. With the growth in this area being minimal as open space is not as available, these approaches will continue to fail in the Opening and Future Years. With heavy traffic volumes along Main Street and 200 North, it is typical for side streets to fail

and have heavy delay to access the major streets as is the case here. With traffic signal located within close proximity to these intersections, the signals will provide gaps in traffic that allow vehicles to make the turning movements on and off of the major streets, which is not necessarily analyzed by Synchro. This was observed while collecting the traffic data.

With the addition of the traffic generated by the Kaysville Mixed Use Development at full build-out, the 400 West & Main Street intersection will continue to experience heavy delay in the northbound direction under the 2030 Future Year scenario. The 400 West & 200 North intersections will also continue to experience heavy delays in the southbound direction under the 2025 Opening Year scenarios.

In order to look at mitigations to improve the flow of traffic at these two intersections, a Peak Hour Traffic Signal Warrant Analysis was performed under the 2025 Opening Year scenario for the 200 North and 400 West intersection. Since the level of service for the northbound approach of the Main Street and 400 West intersection does not fall below acceptable levels of service until 2030 Future Year, the signal warrant analysis for this intersection was performed under the 2030 Future Year scenario. The 200 North and 400 West intersections does meet the warrant for a traffic signal analyzing the Peak Hour traffic volumes under the 2025 Opening Year scenario. Similarly, the Main Street and 400 West intersection will meet traffic signal warrants for peak hour volumes under the 2030 Future Year scenario.

Using the existing and projected traffic volumes at each of the study area intersections, both with and without the Kaysville Mixed Use development traffic, the following are the recommendations to improve the flow of traffic.

400 West and 200 North

2025 Opening Year Scenario

With the projected 2% growth in traffic to the 2025 Opening Year of the Kaysville Mixed Use Development, the northbound and southbound approaches will continue to experience excessive delay and failing levels of service. A traffic signal warrant analysis was performed under this scenario, and the projected traffic volumes do meet the warrant for a traffic signal. Although signalizing this intersection will improve the LOS, the close proximity of this intersection to the northbound on and off ramps to I-15 may increase delay with traffic flow along 200 North. It is recommended this intersection continue to be monitored. Another possible recommendation is to construct a raised median to control access along 200 North as a right-in/right-out. These are all mitigations that will be needed without the proposed Kaysville Mixed Use Development.

2025 Opening Year with Project Scenario

With the full build-out of the Kaysville Mixed-Use Development by 2025, 400 West and 200 North intersection will continue to function with similar levels of service as under the 2025 Opening Year scenario (without the development). No additional mitigations at this intersection are needed.

2030 Future Year Scenario

Similar to the 2025 Opening Year scenario, the northbound and southbound traffic movements will continue to fail. Similar mitigations will be necessary.

2030 Future Year with Project Scenario

With the previously mentioned mitigations of either a signal or right-in/right-out intersection, the traffic movements will function with acceptable levels under the 2030 Future Year with Project scenario.

400 West and Main Street

2025 Opening Year Scenario

All traffic movements will continue to function with acceptable levels of service under the 2025 Opening Year scenario and no mitigations are needed.

2025 Opening Year with Project Scenario

All traffic movements will continue to function with acceptable levels of service with the addition of the traffic from the Kaysville Mixed Use Development. No additional mitigations are needed.

2030 Future Year Scenario

By 2030, the northbound approach at the 400 West and Main Street intersection will fall to a LOS E in the AM Peak Hour. A traffic signal warrant analysis was also performed for this intersection under the 2030 Future Year scenario. The projected traffic volumes do meet the warrant under the Peak Hour analysis. It is recommended this intersection be monitored for when future traffic volumes may meet the warrant.

2030 Future Year with Project Scenario

With the addition of the Kaysville Mixed Use Development traffic, 400 West and Main Street will continue to function with similar unacceptable levels of service as under the 2030 Future Year scenario without the development. If a traffic signal is warranted and constructed to improve this intersection in the future year, this intersection will function acceptably with the addition of the proposed development.

Access 1 and 400 West

Access 1 currently functions with a single receiving lane and one exiting lane onto 400 West. With the addition of the Kaysville Mixed Use Development, it is recommended this intersection continue to function with the existing lane configuration. This intersection will function with acceptable levels of service and very minimal delays along 400 West.

Access 2 and 400 West

Access 2 currently functions with acceptable levels of service. With the addition of the Kaysville Mixed Use Development, this access will continue to function with acceptable levels of service. This intersection currently functions with one receiving lane and one exiting lane and it is recommended this intersection continue to function with this lane configuration. Access to the existing Intermountain Kaysville Creekside Clinic will be maintained.

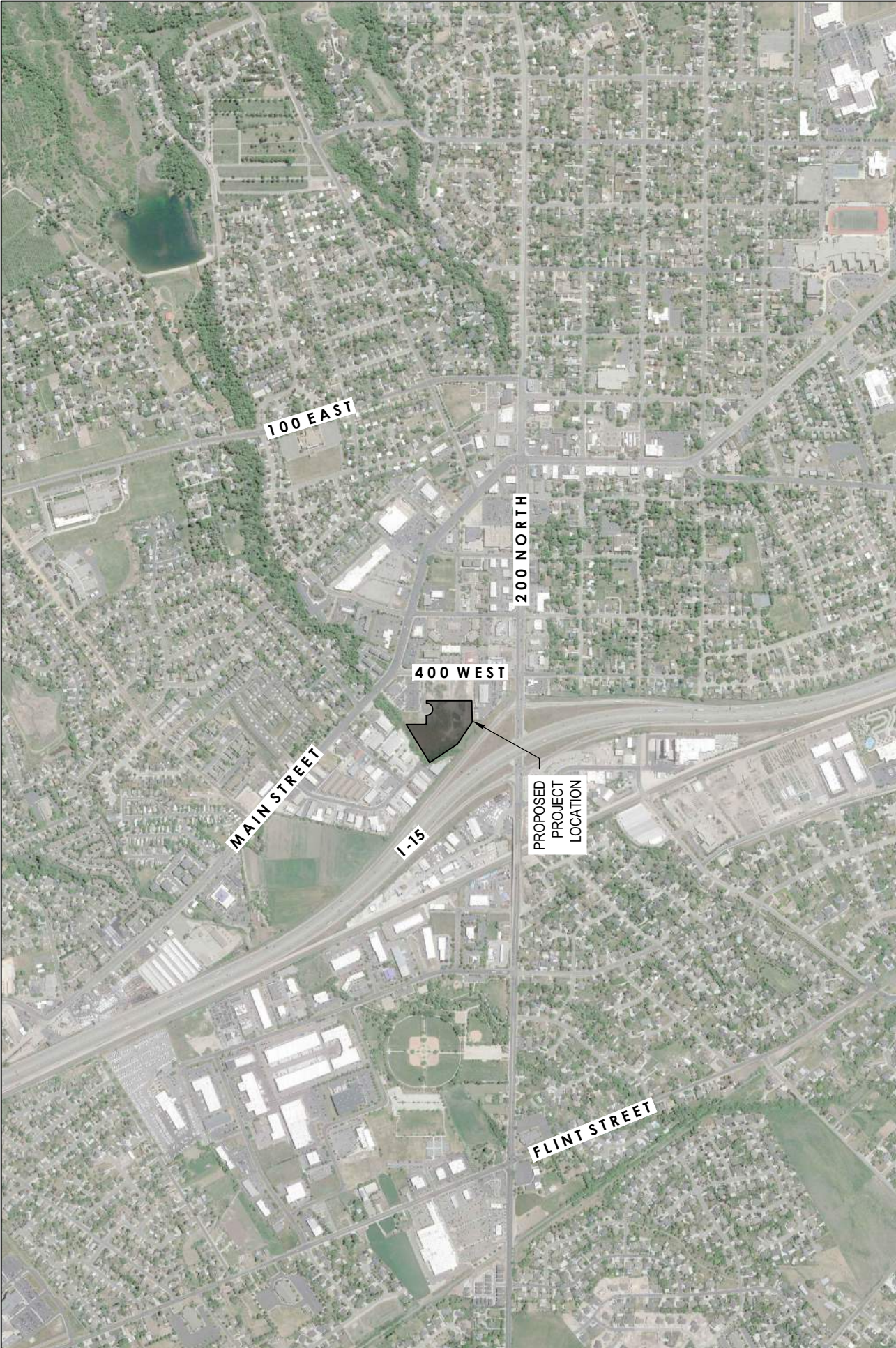
2.0 Introduction

2.1 DEVELOPMENT DESCRIPTION

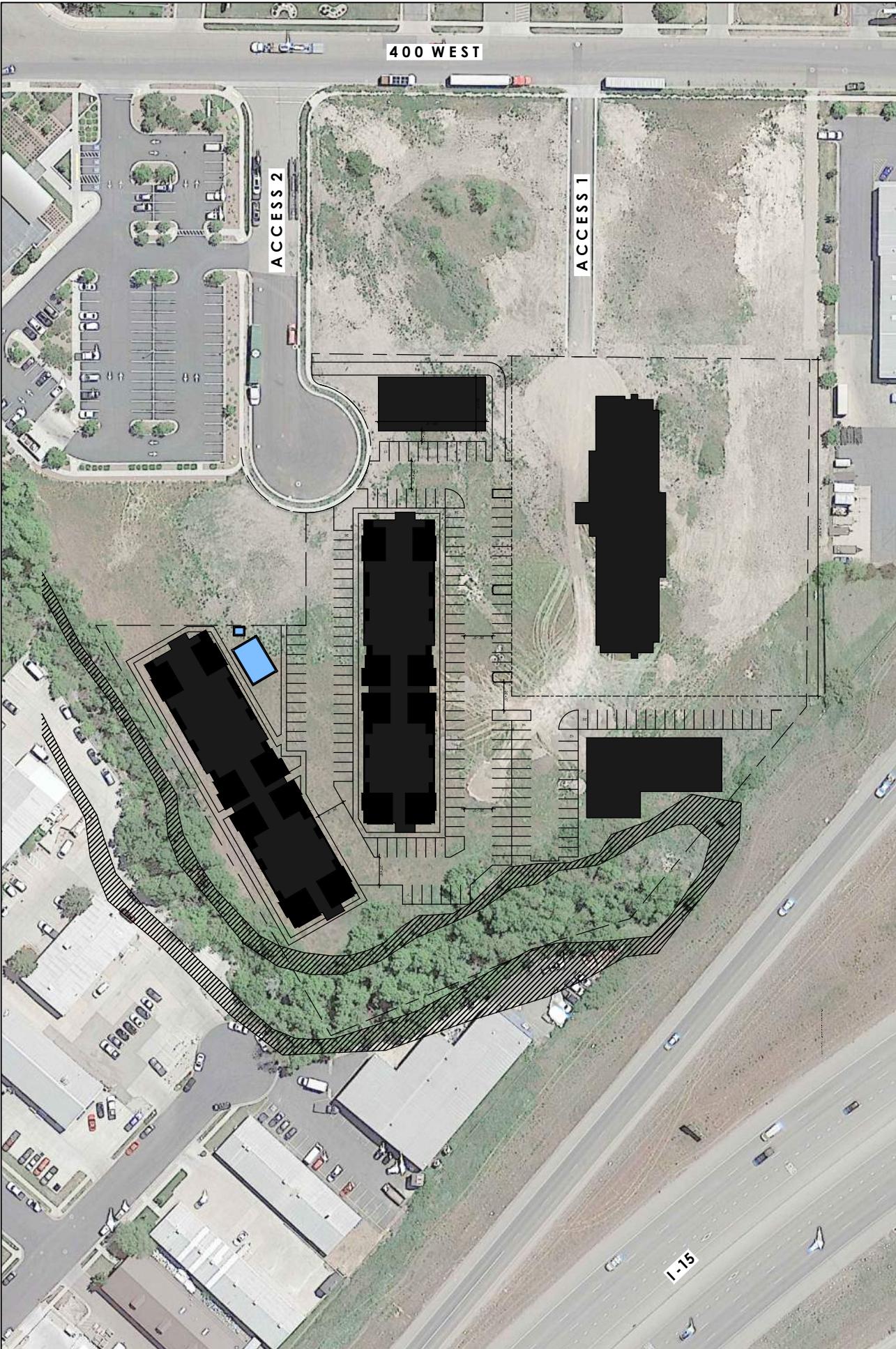
The proposed development is situated on roughly 6 acres of land located east of I-15, south of Main Street, west of 400 West and north of 200 North in Kaysville. The proposed Kaysville Mixed-Use Development will consist of 132 residential apartment units, a 15,000 SF office building, a 5,000 SF office space/retail building, and a 115-room hotel. The buildings will be used for both residential and commercial purposes and are planned to be fully built out by 2025.

The Kaysville Mixed Use Development will use the two existing accesses which connect to 400 West. Access 1 is located along the existing stub road to the property and is located roughly 660 feet to the north of 200 North. Access 2 will connect onto the existing roadway which currently provides access along the south of Intermountain Kaysville Creekside Clinic. Access 2 is located roughly 280 feet to the north of Access 1.

Refer to the Vicinity Map and Site Plan in Figures 1 and 2, respectively, for the location of the new development and the layout of the site and location of the proposed accesses onto 400 West.



KAYSVILLE MIXED-USE DEVELOPMENT
FIGURE 1 - VICINITY MAP



KAYSVILLE MIXED-USE DEVELOPMENT
FIGURE 2 - SITE PLAN

3.0 Existing Conditions

3.1 ROADWAYS

Main Street: Main Street currently consists of two lanes in each direction with bike lanes, curb, and gutter. Currently Main Street consists of a 12-foot two-way left turn lane for vehicles to access the many developments along this roadway. Main Street provided access to Layton Parkway to the north and 200 West to the south. The posted speed limit is 30 mph.

200 North: 200 North currently consists of two lanes in each direction with a center two-way left turn lane. 200 North runs east and west and provides access to I-15 to the west and US 89 to the east. 200 North is located on the south of the proposed development and the posted speed limit is 35 mph.

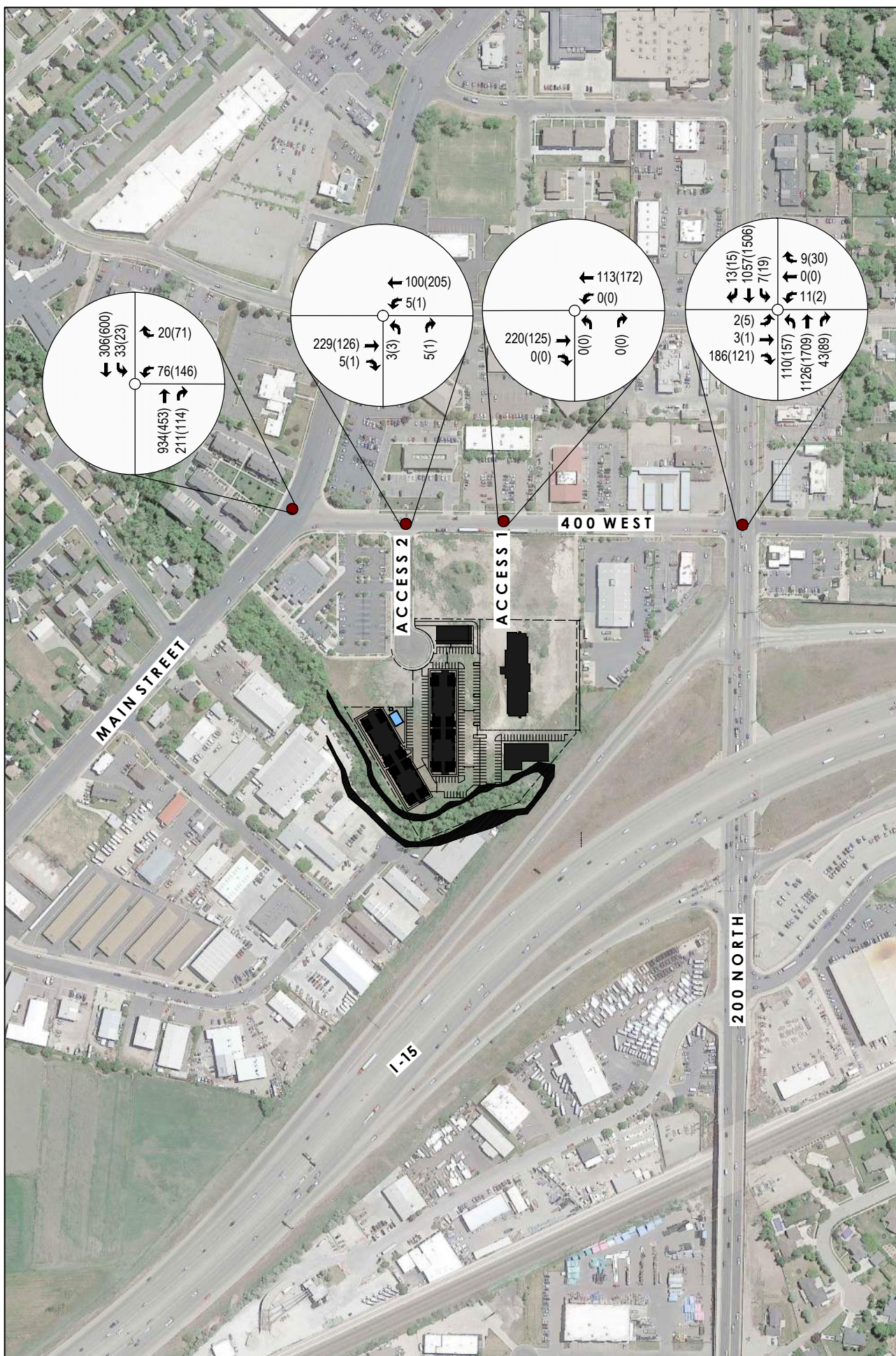
400 West: 400 West is a north/south roadway that provides access to the proposed development. 400 West is a local roadway owned by the Kaysville City and is currently not striped. The pavement width is wide enough to allow for vehicles to turn left into the adjacent development and a vehicle to pass on the right that is traveling north or south. 400 West is posted at 30 mph.

3.2 EXISTING TRAFFIC VOLUMES

Using UDOT's Traffic Study Guidelines for a Level II Traffic Study, it was determined existing traffic counts would be collected at the following intersections which fall within ½ mile of the proposed project boundary:

- 400 West & Main Street
- 400 West & 200 North
- 400 West & South Access to Intermountain Kaysville Creekside Clinic
- 400 West & Existing Road to proposed property.

Existing AM and PM peak hour traffic volumes were collected on February 28, 2023 at these two intersections, between the peak hours of 7 AM to 9 AM and 4 PM to 6 PM. From the existing counts that were collected, it was determined the peak hours at the 400 West and Main Street intersection are from 7:45 AM to 8:45 AM and 4:45 PM to 5:45 PM. The peak hours at the 400 West and 200 North intersection are from 8:00 AM to 9:00 AM and from 4:45 PM to 5:45 PM. These volumes are illustrated in Figure 3.



KAYSVILLE MIXED-USE DEVELOPMENT

XXX(X) = AM(PM) PEAK HOUR TRAFFIC VOLUMES



4.0 Opening and Future Year Traffic Conditions

Opening Year traffic, also known as Background traffic, is the traffic that is on the roadways within the study area regardless if the proposed development is constructed or not. These traffic volumes are a projection of growth within the study area based on current land available and opportunities for future development within this area.

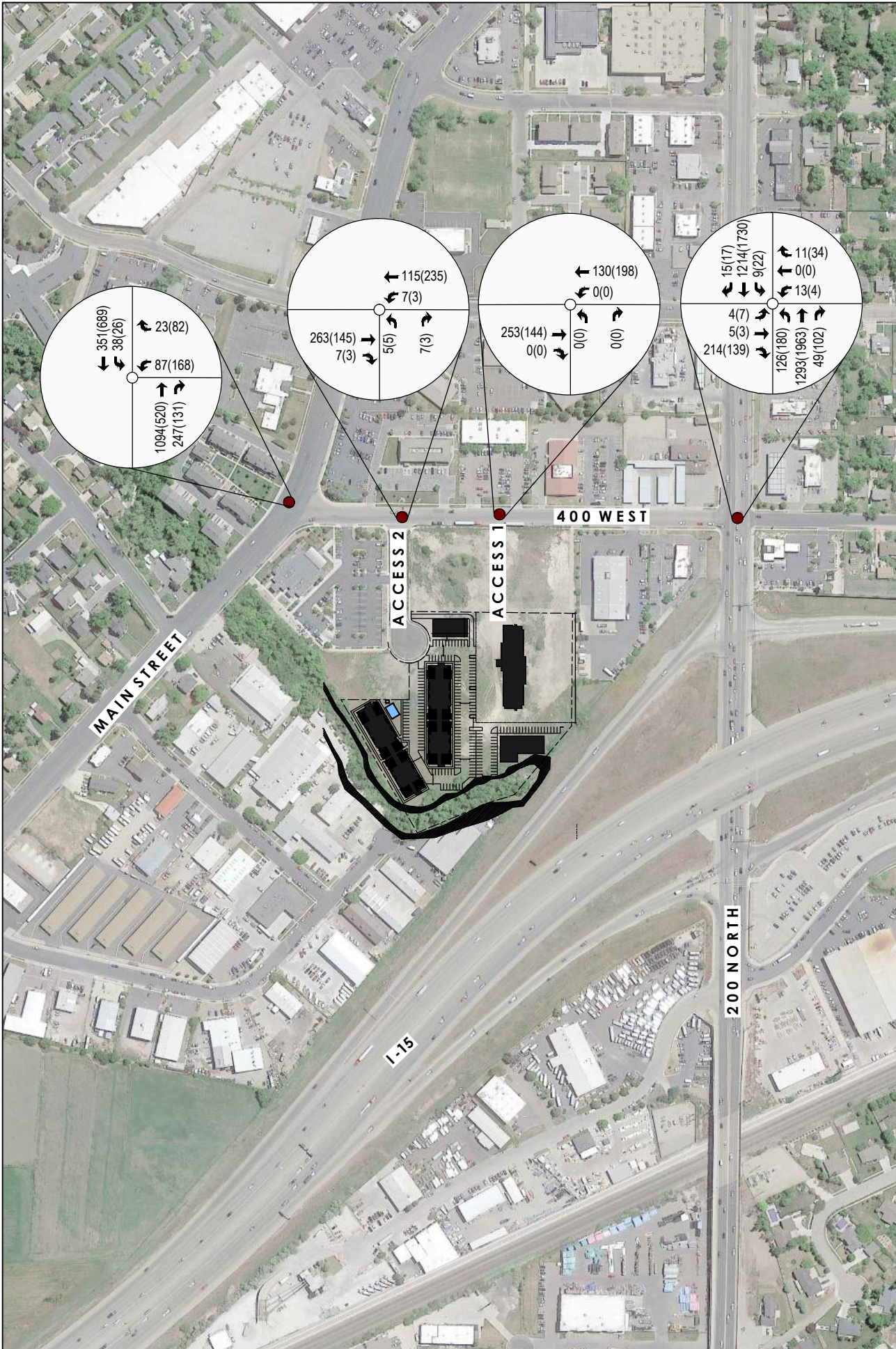
It is assumed an average growth of 2% will occur from 2023 to 2030 along the roadways within the study area. 2025 is the planned year for the completion of the Kaysville Mixed Use Development. Applying the assumed growth rate to the existing traffic volumes, the projected traffic volumes for the 2025 Opening Year traffic volumes are illustrated in Figure 4.

Following the UDOT Traffic Impact Study Guidelines, a Level II traffic study will also look at five years after Opening Year. These are recognized as the Future Year conditions. It is assumed after 2025, the growth rate will continue at 2% as vacant land becomes developed and less growth is available. Applying this growth to the Existing and Opening Year traffic volumes, the 2030 Future Year traffic volumes are generated. These volumes can be found in Figure 5.



FIGURE 4 - 2025 OPENING YEAR TRAFFIC VOLUMES

XX(XX) = AM(PM) PEAK HOUR TRAFFIC VOLUMES



KAYSVILLE MIXED-USE DEVELOPMENT

FIGURE 5 - 2030 FUTURE YEAR TRAFFIC VOLUMES

XX(XX) = AM(PM) PEAK HOUR TRAFFIC VOLUMES



5.0 Trip Generation and Trip Distribution

The full build-out of the proposed Kaysville Mixed Use Development will consist of 132 apartment units, a 15,000 SF general office building, a 5,000 SF small office building/retail and a 115-room hotel. Using land use codes 221, 710, 712 and 310 for each of these different land uses, the trip generation rates were determined using the 11th Edition of the Trip Generation Manual. This manual is an ITE information report, published by the *Institute of Transportation Engineers*. Trips generated by the proposed development which will occur during the peak hours of the proposed development were used for the analysis. The Peak Hour of Adjacent Street Traffic rates are used to generate the AM and PM peak hour volumes. The trips generated from the Kaysville Mixed Use Development are presented in Table 1.

Table 1 - Trip Generation

ITE Land Use Code	Land Use	Land Use Description	Size	Daily (AADT)	Trip Generation (AM)		Trip Generation (PM)	
					Enter	Exit	Enter	Exit
221	Multifamily Housing (Mid-Rise)	Dwelling Units	132	599	11	38	31	20
710	General Office Building	1000 Sq. Ft. GFA	15	163	20	3	4	18
712	Small Office Building	1000 Sq. Ft. GFA	5	72	7	1	4	7
310	Hotel	ROOMS	115	919	30	23	35	33
Total				1753	68	65	74	78

5.1 PASS-BY TRIP & INTERNAL CAPTURE REDUCTION

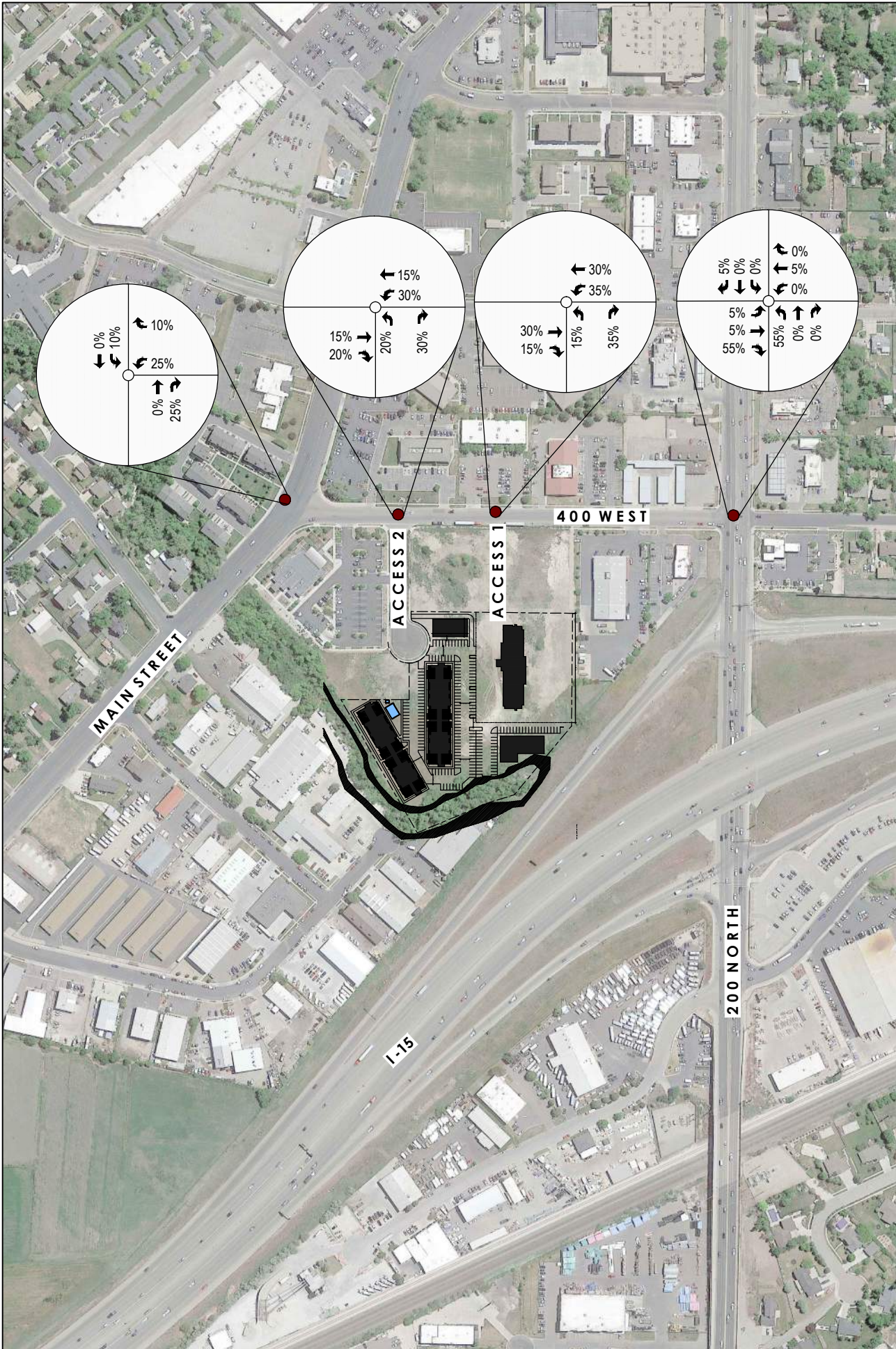
Pass-by trips are represented as traffic already on the surrounding roadways and not a new trip generated by the proposed development. For instance, someone on their way home from work and stops by the gas station, but then continues on to their final destination, i.e., home. Internal Capture trips are vehicles that will enter the site and visit more than one land use in their visit. For instance, someone enters the development to visit a retail store, and also stops at a gas station. The internal capture helps so trips generated by one vehicle that visit multiple land uses, aren't counted multiple times. The land uses proposed with the Kaysville Mixed-Use Development will not likely have pass-

by traffic or internal capture, therefore no reduction in the amount of traffic was accounted for.

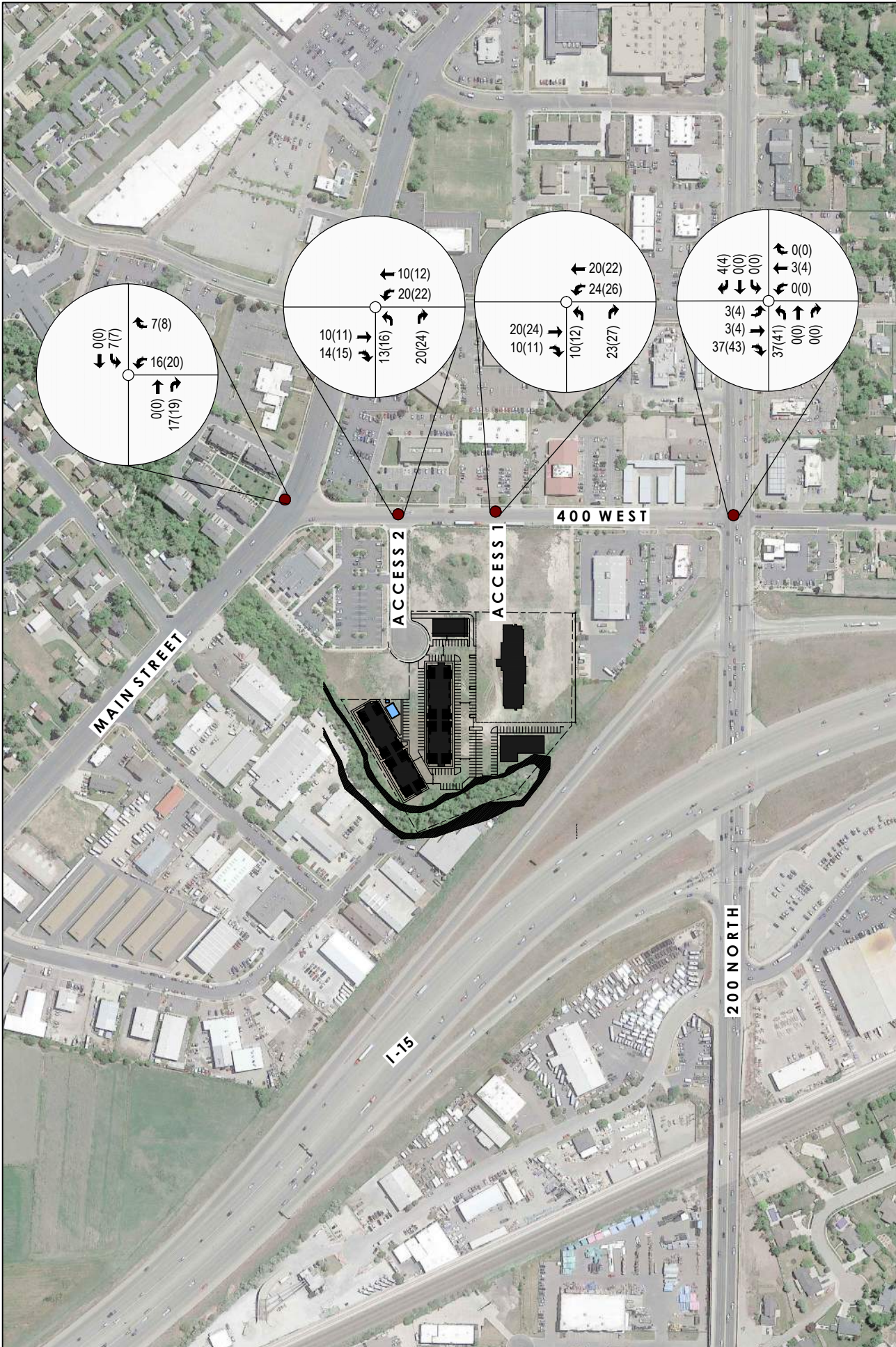
5.2 SITE TRAFFIC DISTRIBUTION

Site ingress/egress traffic at the proposed accesses were distributed based on the anticipated direction vehicles would be coming from or going to. Directional distribution was estimated based on current traffic patterns and also current land uses within the proximity of the proposed development, mainly access to highways, employment districts, shopping area, schools, etc. Figure 6 illustrates the site traffic distribution percentages throughout the study area.

Using the distribution percentages along with the projected traffic volumes outlined in Table 1, Figure 7 illustrates the site traffic volumes anticipated at the study area intersections.



KAYSVILLE MIXED-USE DEVELOPMENT
FIGURE 6 - PROJECT DISTRIBUTION PERCENTAGES
XX% = PROJECT DISTRIBUTION PERCENTAGE

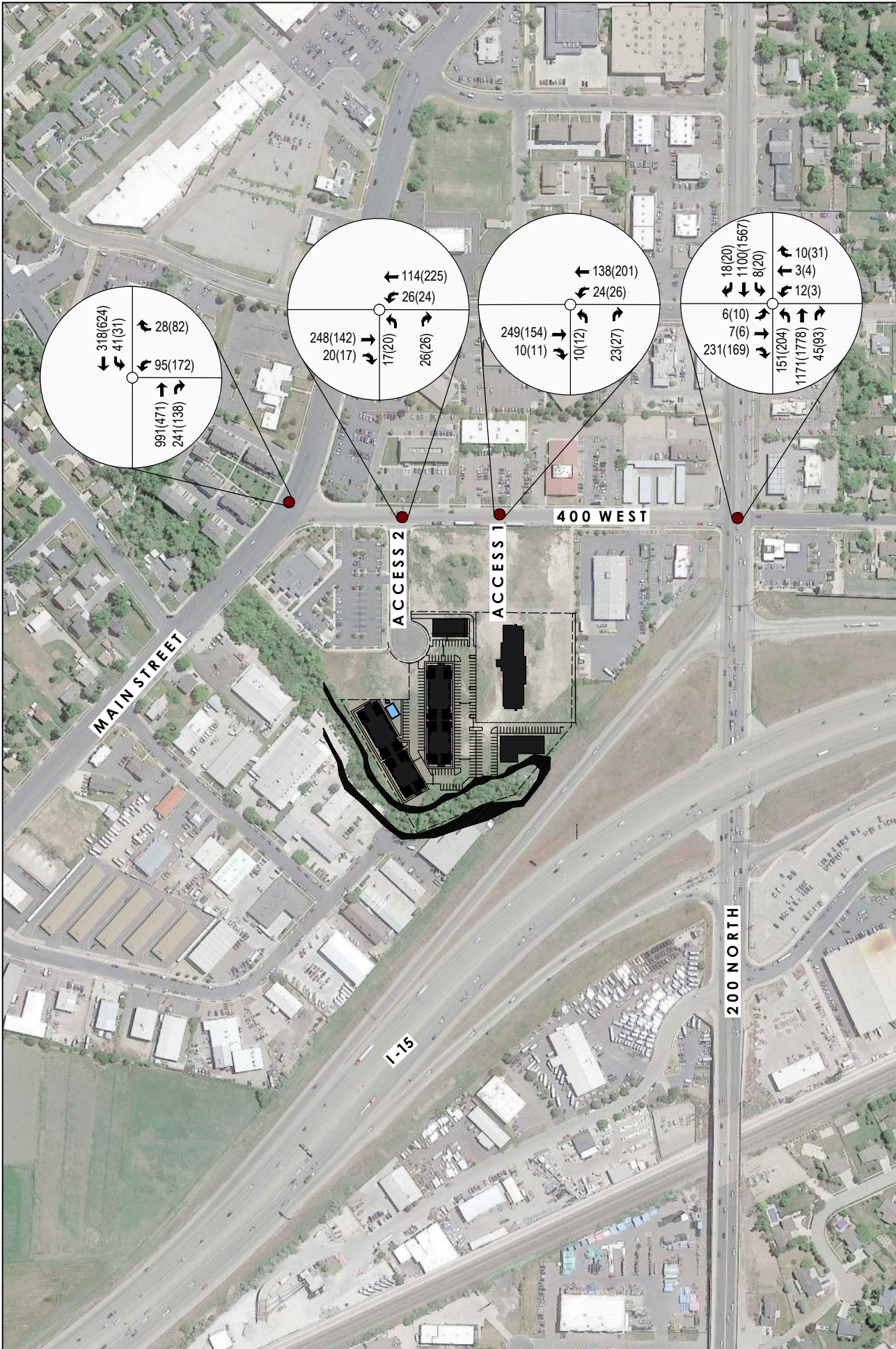


KAYSVILLE MIXED-USE DEVELOPMENT
FIGURE 7 - TRIP DISTRIBUTION VOLUMES
 XX(XX) = AM(PM) PEAK HOUR TRAFFIC VOLUMES

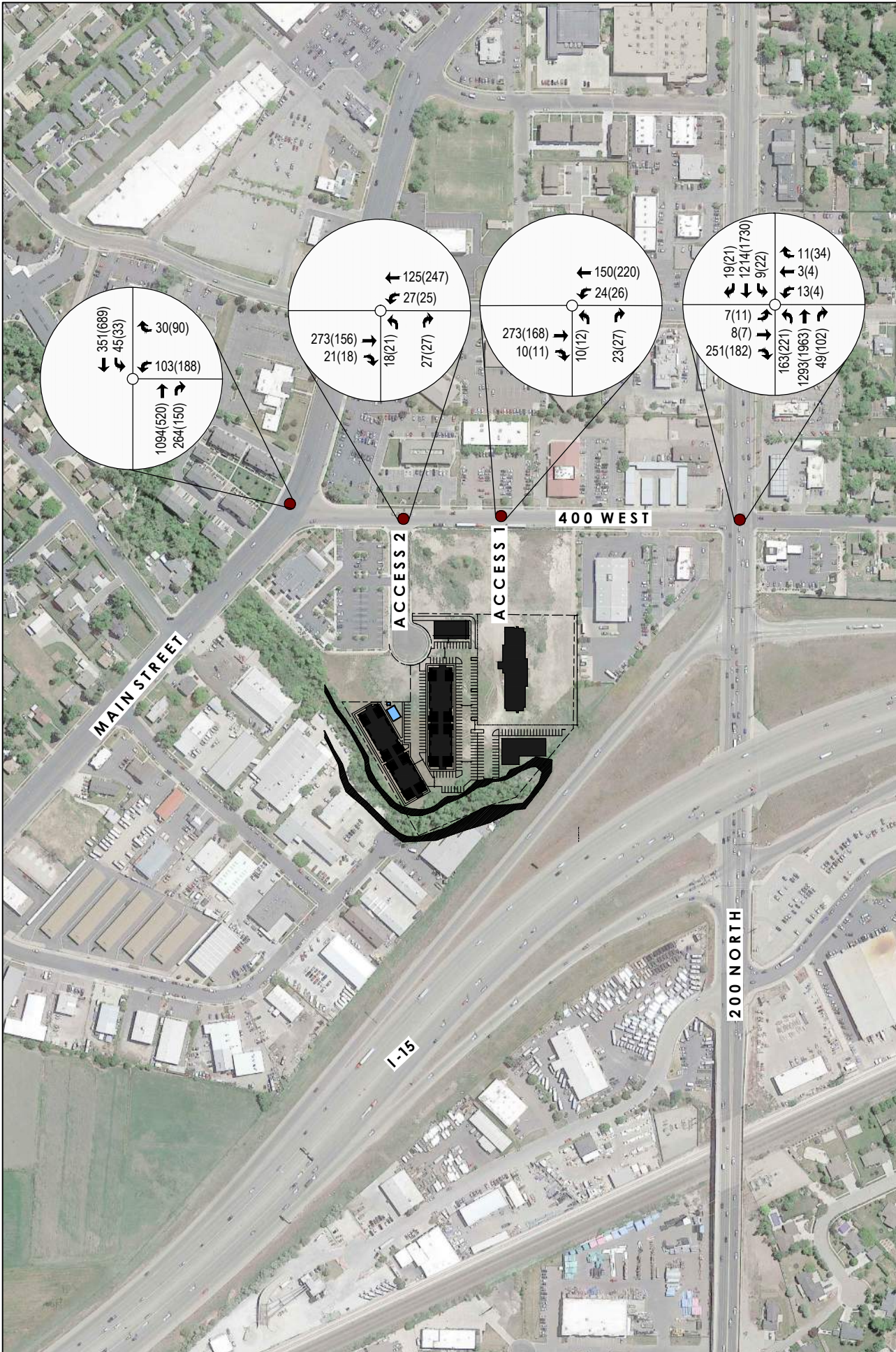
6.0 Opening and Future Year with Project Traffic Conditions

The Opening and Future Year with Project traffic volumes represent the traffic that will be added to the study area with the addition of the Kaysville Mixed Use Development. Using the 2025 Opening Year traffic volumes (Figure 4) and the site generated traffic volumes (Figure 7), the 2025 Opening Year with Project traffic volumes are generated. Per the developer's schedule, it is anticipated the Kaysville Mixed Use Development will be built out in 2025. The 2025 Opening Year with Project traffic volumes, which illustrates the full build-out of the development, are illustrated in Figure 8.

Applying this same approach, using the 2030 Future Year traffic volumes (Figure 5) and the site generated traffic volumes (Figure 7), the 2030 Future Year with Project traffic volumes are generated. These volumes are found in Figure 9.



KAYSVILLE MIXED-USE DEVELOPMENT
FIGURE 8 - 2025 OPENING YEAR W/ PROJECT TRAFFIC VOLUMES
 XX(XX) = AM(PM) PEAK HOUR TRAFFIC VOLUMES



KAYVILLE MIXED-USE DEVELOPMENT
FIGURE 9 - 2030 FUTURE YEAR W/ PROJECT TRAFFIC VOLUMES
 XX(XX) = AM(PM) PEAK HOUR TRAFFIC VOLUMES

7.0 Capacity Analysis

Intersection capacity analysis was performed at the study area intersections and the proposed accesses to the Kaysville Mixed Use Development. Synchro® Version 11 was used to analyze the study intersections for the proposed trip conditions according to methods put forth by the Transportation Research Board's **Highway Capacity Manual (HCM 6th Edition)**.

The Level of Service (LOS) of an intersection range from A to F, where LOS A has a low vehicular delay indicating smooth free-flowing traffic. LOS F has a high vehicular delay and indicates the worst-case scenario with high congestion and a complete breakdown of traffic flow. Although LOS A through C are the desired levels, LOS D is considered acceptable in urban conditions. Traffic conditions with LOS of E or F are generally deemed unacceptable and represent significant travel delay, increased accident potential, and inefficient motor vehicle operation. Table 2 shows the relation between LOS and vehicular delay for signalized and unsignalized intersections.

Table 2 - Signalized and Unsignalized intersection LOS and Delay Parameters

Level of Service (LOS)	Vehicular Delay (seconds/vehicle)	
	Signalized Intersection	Stop Controlled Approach
A	$0.0 \leq 10.0$	$0.0 < 10.0$
B	$> 10.0 \leq 20.0$	$> 10.0 < 15.0$
C	$> 20.0 \leq 35.0$	$> 15.0 < 25.0$
D	$> 35.0 \leq 55.0$	$> 25.0 < 35.0$
E	$> 55.0 \leq 80.0$	$> 35.0 < 50.0$
F	> 80.0	> 50.0

The 2023 Existing traffic volumes at the study area intersections were analyzed using Synchro. The levels of service at each of the turning movements can be seen in the following table.

Table 3 – 2023 Existing Traffic LOS

Intersection	2023 Existing Year Traffic LOS(Delay)				
	Overall LOS	Northbound	Southbound	Eastbound	Westbound
1: 400 West & 200 North					
AM Peak Hour	-	F(375.2)	D(34.3)	A(1.1)	A(0.1)
PM Peak Hour	-	F(380.4)	F(215.7)	A(1.7)	A(0.2)
2: 400 West & Access 1					
AM Peak Hour	-	A(0.0)	A(0.0)	A(0.0)	-
PM Peak Hour	-	A(0.0)	A(0.0)	A(0.0)	-
3: 400 West & Access 2					
AM Peak Hour	-	A(0.4)	A(0.0)	B(10.0)	-
PM Peak Hour	-	A(0.1)	A(0.0)	B(10.0)	-
4: 400 West & Main Street					
AM Peak Hour	-	D(27.0)	-	A(0.0)	A(1.2)
PM Peak Hour	-	C(17.6)	-	A(0.0)	A(0.3)

As can be seen in Table 3, under the existing traffic conditions, the northbound and southbound traffic movements at 400 West and 200 North currently experience heavy delays and function at unacceptable levels of service (LOS). All other movements at the study area intersection function with acceptable levels of service.

With the projected growth to the Opening Year of 2025 and the Future Year of 2030, the following tables illustrate the LOS for the study area intersections under these scenarios.

Table 4 – 2025 Opening Year Traffic LOS

Intersection	2025 Opening Year Traffic LOS(Delay)				
	Overall LOS	Northbound	Southbound	Eastbound	Westbound
1: 400 West & 200 North					
AM Peak Hour	-	F(566.4)	F(51.4)	A(1.1)	A(0.1)
PM Peak Hour	-	F(*)	F(976.5)	A(1.9)	A(0.2)
2: 400 West & Access 1					
AM Peak Hour	-	A(0.0)	A(0.0)	A(0.0)	-
PM Peak Hour	-	A(0.0)	A(0.0)	A(0.0)	-
3: 400 West & Access 2					
AM Peak Hour	-	A(0.4)	A(0.0)	B(10.1)	-
PM Peak Hour	-	A(0.1)	A(0.0)	B(10.0)	-
4: 400 West & Main Street					
AM Peak Hour	-	D(30.6)	-	A(0.0)	A(1.2)
PM Peak Hour	-	C(18.6)	-	A(0.0)	A(0.3)

* = Synchro analysis provides an "error" as delay time exceed capacity.

As seen in Table 4, the northbound and southbound traffic movements at 200 North and 400 West will continue to fail. The other traffic movements at the other intersection will continue with similar levels of services as under the existing year conditions.

Table 5 – 2030 Future Year Traffic LOS

Intersection	2030 Future Year Traffic LOS(Delay)				
	Overall LOS	Northbound	Southbound	Eastbound	Westbound
1: 400 West & 200 North					
AM Peak Hour	-	F(2086.9)	F(170.9)	A(1.3)	A(0.1)
PM Peak Hour	-	F(*)	F(452.6)	A(2.8)	A(0.3)
2: 400 West & Access 1					
AM Peak Hour	-	A(0.0)	A(0.0)	A(0.0)	-
PM Peak Hour	-	A(0.0)	A(0.0)	A(0.0)	-
3: 400 West & Access 2					
AM Peak Hour	-	A(0.5)	A(0.0)	B(10.3)	-
PM Peak Hour	-	A(0.1)	A(0.0)	B(10.1)	-
4: 400 West & Main Street					
AM Peak Hour	-	E(40.8)	-	A(0.0)	A(1.3)
PM Peak Hour	-	C(22.0)	-	A(0.0)	A(0.3)

* = Synchro analysis provides an "error" as delay time exceed capacity.

Table 5 illustrates similar results at the 200 North and 400 West intersection as the northbound and southbound movements will continue to fail. The northbound movements at the 400 West and Main Street intersection will fall to a LOS E in the AM peak hour.

With the addition of Kaysville Mixed Use Development within this study area, the following tables illustrates the projected levels of service at the study area intersections under the 2025 Opening Year with Project and the 2030 Future Year with Project scenarios.

Table 6 – 2025 Opening Year w/ Project LOS

Intersection	2025 Opening Year w/ Project LOS				
	Overall LOS	Northbound	Southbound	Eastbound	Westbound
1: 400 West & 200 North					
AM Peak Hour	-	F(1339.9)	F(198.5)	A(1.5)	A(0.1)
PM Peak Hour	-	F(*)	F(*)	A(2.9)	A(0.2)
2: 400 West & Access 1					
AM Peak Hour	-	A(1.2)	A(0.0)	B(10.4)	-
PM Peak Hour	-	A(0.9)	A(0.0)	A(9.9)	-
3: 400 West & Access 2					
AM Peak Hour	-	A(1.5)	A(0.0)	B(10.6)	-
PM Peak Hour	-	A(0.7)	A(0.0)	B(10.2)	-
4: 400 West & Main Street					
AM Peak Hour	-	D(34.9)	-	A(0.0)	A(1.5)
PM Peak Hour	-	C(20.6)	-	A(0.0)	A(0.4)

* = Synchro analysis provides an "error" as delay time exceed capacity.

With the addition of the Kaysville Mixed Use Development, traffic movements will continue to function with the same levels of service as under the 2025 Opening Year scenario (without the proposed development).

Table 7 – 2030 Future Year w/ Project LOS

Intersection	2030 Future Year w/ Project LOS				
	Overall LOS	Northbound	Southbound	Eastbound	Westbound
1: 400 West & 200 North					
AM Peak Hour	-	F(*)	F(497.8)	A(1.7)	A(0.1)
PM Peak Hour	-	F(*)	F(661.8)	A(4.6)	A(0.3)
2: 400 West & Access 1					
AM Peak Hour	-	A(1.1)	A(0.0)	B(10.6)	-
PM Peak Hour	-	A(0.8)	A(0.0)	B(10.0)	-
3: 400 West & Access 2					
AM Peak Hour	-	A(1.4)	A(0.0)	B(10.8)	-
PM Peak Hour	-	A(0.7)	A(0.0)	B(10.4)	-
4: 400 West & Main Street					
AM Peak Hour	-	E(48.8)	-	A(0.0)	A(1.6)
PM Peak Hour	-	D(25.4)	-	A(0.0)	A(0.4)

* = Synchro analysis provides an “error” as delay time exceed capacity.

Under the 2030 Future Year with Project analysis, the northbound and southbound traffic movements at 400 West and 200 North will continue to function with unacceptable levels of service. The northbound approach at 400 West and Main Street will also continue to function with unacceptable levels of service.

8.0 Traffic Signal Warrant Analysis

With the unacceptable levels of service at the northbound and southbound approaches at 400 West and 200 North under all of the study scenarios, a peak hour signal warrant analysis was performed to look at a possible mitigation at this intersection. It should be noted that this intersection is only located roughly 300 feet from the northbound on and off ramp to I-15, which is signalized. Having two intersections within this close proximity, may not be viable. In order to analyze the need for a traffic signal, the 2009 Edition of the Manual on Traffic Control Devices (MUTCD), Part 4 is used. As per the MUTCD there are nine signal warrants and even if one warrant is met, a signal may be installed at the study intersection. The warrants are:

Warrant 1 - Eight Hour Vehicular Volume

Warrant 2 - Four Hour Vehicular Volume

Warrant 3 - Peak Hour

Warrant 4 - Pedestrian Volume

Warrant 5 - School Crossing

Warrant 6 - Coordinated Signal System

Warrant 7 - Crash Experience

Warrant 8 - Roadway Network

Warrant 9 - Intersection near a Grade Crossing

Based on the study location, traffic patterns and information we have available at this time, only Warrant 3 - Peak Hour was able to be analyzed with the projected peak hour traffic volumes under the 2025 Opening Year scenario. The following paragraphs provide the details of the signal warrant analysis.

Note that in all scenarios that were analyzed at the 400 West and 200 North intersection for a traffic signal warrant, the Major Street (200 North) total for both directions do not include the vehicles making a right turn from 200 North as these vehicles are not often counted in a traffic signal warrant analysis as they do not impede the Minor Street (400 West) traffic from making their movement.

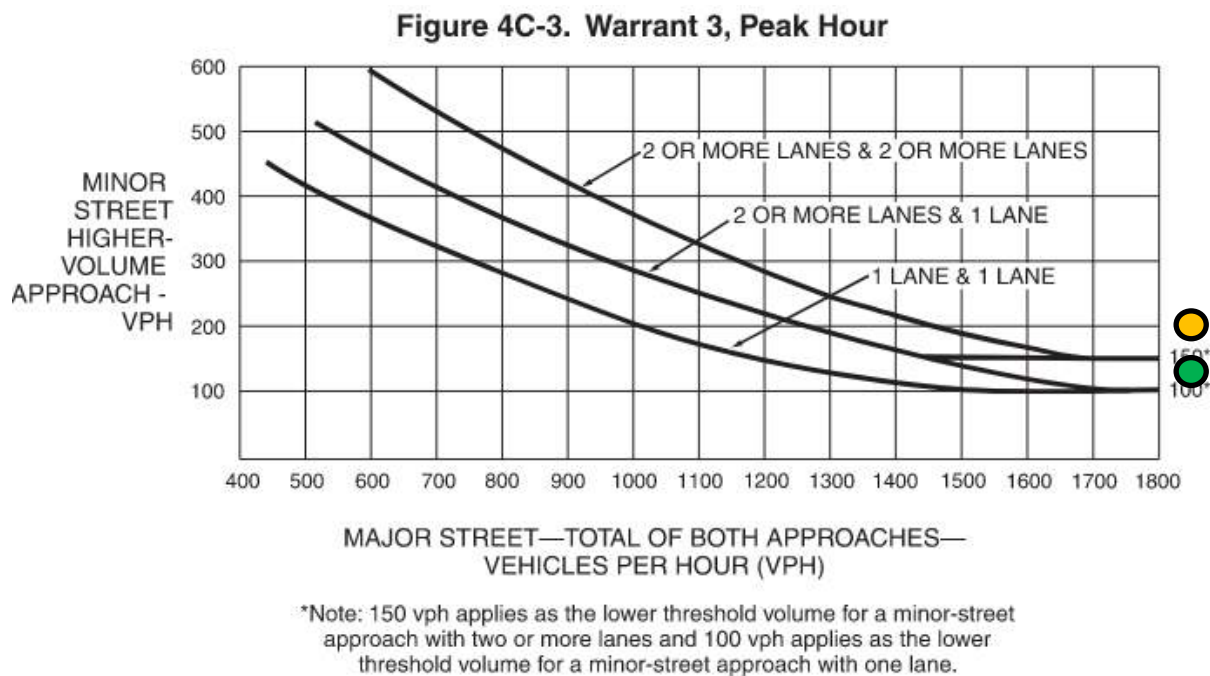
Warrant 3 (Peak Hour)

400 West and 200 North

This traffic signal warrant analysis was performed at 400 West and 200 North intersection. The Major Street is 200 North and the Minor Street is 400 West. It is projected under the 2025 Opening Year traffic volumes, along 200 North, the combined vehicles per hours (vph) of the Major Street in the AM Peak Hour will be 2438 vph and in the PM Peak Hour, 3621 vph. The higher volume of the Minor Street (400 West) under the 2025 Opening Year scenario, will be 201 vph in the AM peak hour and 134 vph in the PM peak hour.

As seen in the figure below, the plotted points of these volumes fall above the applicable curve and therefore warrant a traffic signal under the 2025 Opening Year scenario.

Figure 10 – 400 West & 200 North 2025 Opening Year Scenario Signal Warrant



● = 2025 Opening Year Traffic Volumes at 400 West and 200 North Intersection (AM Peak Hour)

● = 2025 Opening Year Traffic Volumes at 400 West and 200 North Intersection (PM Peak Hour)

With the 400 West and 200 North traffic volumes warranting a traffic signal under the 2025 Opening Year scenario, the other scenarios were not analyzed as they would also meet the warrant.

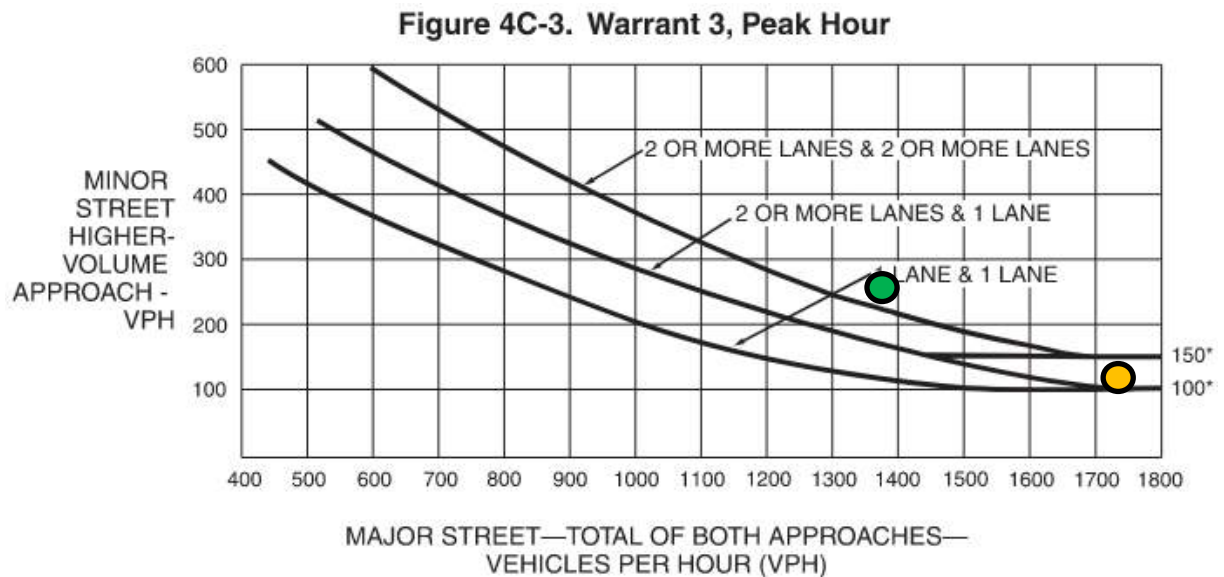
400 West and Main Street

This traffic signal warrant analysis was performed at 400 West and Main Street intersection under the 2030 Future Year scenario as the level of service falls below the acceptable threshold. The Major Street is Main Street and the Minor Street is 400 West. It is anticipated that 2030 Future Years and 2030 Future with Project are used in this analysis.

It is projected under the 2030 Future Year traffic volumes, along Main Street, the combined vehicles per hours (vph) of the Major Street in the AM Peak Hour will be 1730 vph and in the PM Peak Hour, 1366 vph. The higher volume of the Minor Street (400 West) under the 2030 Future Year scenario, will be 110 vph in the AM peak hour and 250 vph in the PM peak hour.

As seen in the figure below, the plotted points of these volumes fall above the applicable curve and therefore warrant a traffic signal under the 2030 Future Year scenario.

Figure 11 – 400 West & Main Street 2030 Future Year Scenario Signal Warrant



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

● = 2030 Future Year Traffic Volumes at 400 West and Main Street Intersection (AM Peak Hour)

● = 2030 Future Year Traffic Volumes at 400 West and Main Street Intersection (PM Peak Hour)

9.0 Recommendations

Based on the information and findings presented in this report, the following recommendations are proposed under the different study scenarios.

2025 Opening Year Scenario

The 200 North and 400 West intersection currently and under the 2025 Opening Year scenario functions with a LOS F in the northbound and southbound movements. The 200 North and 400 West intersection does meet the Peak Hour Warrant for a traffic signal which will improve the LOS. However, with the close proximity to I-15 on and off ramps, it would not make for a viable location with access spacing to signalize this intersection. It is recommended the city look at the entire corridor of 200 North for access control. Possible solution may be right-in/right-out, or continue the existing traffic operations and as delays increase, vehicles will find alternate routes if the delay is too excessive.

2025 Opening Year w/ Project Scenario

With the addition of the Kaysville Mixed Use Development, all intersections will continue to function with similar levels of service as under the scenarios without the development.

It is recommended Access 1 use the existing roadway with one receiving lane and one exiting lane. This access will meet city standards with appropriate driveway approach, signing and striping.

It is recommended Access 2 continue to function with one receiving lane and one exiting lane. This will continue to serve access to the adjacent property.

2030 Future Year Scenario

Similar to the 2025 Opening Year scenario, the 400 West and 200 North intersection will meet signal warrants. It is recommended this intersection be further analyzed to appropriate improvements, such as a signal, right-in/right-out or simply leave as existing functions.

400 West and Main Street will fall to a LOS E in the northbound direction under the 2030 Future Year scenario. It is the 400 West and Main Street intersection be monitored for when traffic volumes warrant a signal. The projected volumes illustrate a signal will meet warrants for the peak hour under the 2030 Future Year scenario.

2030 Future Year with Project Scenario

With the addition of the Kaysville Mixed Use Development and the implementation of a signal as recommended under the 2030 Future Year scenario, this intersection will function with acceptable levels of service. However, if no improvements are implemented under the 2030 Future Year scenario, this intersection will function with the similar levels of service.

Appendix

Existing Traffic Counts

TURNING MOVEMENT COUNT SUMMARY

FOCUS ENGINEERING & SURVEYING, LLC

AM PEAK HOUR VOLUMES

INTERSECTION:
N-S STREET:
E-W STREET:

400 W and 200 N
400 W
200 N

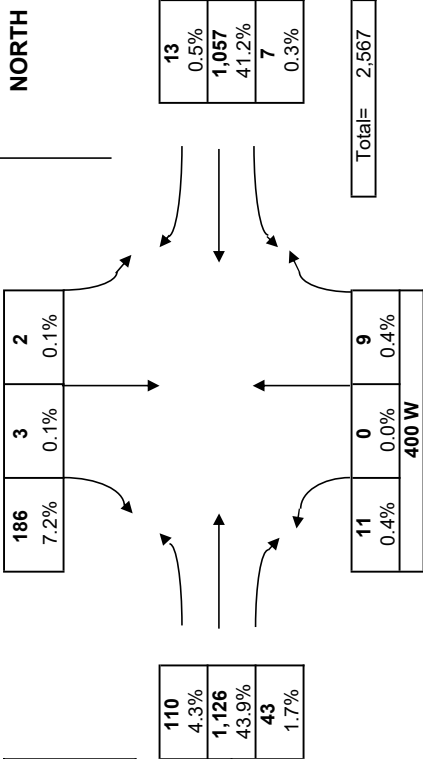
FOCUS PROJ. NO.:
COUNT DATE:
NOTES:

23-8001
28-Feb-23

COUNT TIME:
FROM:
TO:

7:00 AM
9:00 AM

PK HR VOLUME: 2,567
PHF: 0.82
PEAK HOUR:
FROM: 8:00 AM
TO: 9:00 AM



COUNT DATA INPUT:

TIME PERIOD		NORTHBOUND		EASTBOUND		SOUTHBOUND		WESTBOUND		TOTAL VOLUMES
FROM:	TO:	L	T	L	T	L	T	L	T	
7:00 AM	7:15 AM	5	0	1	20	1	1	0	144	0
7:15 AM	7:30 AM	1	0	2	20	1	1	39	1	180
7:30 AM	7:45 AM	3	0	1	17	1	0	48	1	221
7:45 AM	8:00 AM	3	0	4	35	0	0	30	3	211
8:00 AM	8:15 AM	2	0	1	33	0	0	51	0	226
8:15 AM	8:30 AM	3	0	3	29	1	2	42	3	196
8:30 AM	8:45 AM	6	0	3	12	1	0	43	1	288
8:45 AM	9:00 AM	0	0	2	36	0	1	50	3	347
										782

HOURLY TOTALS:

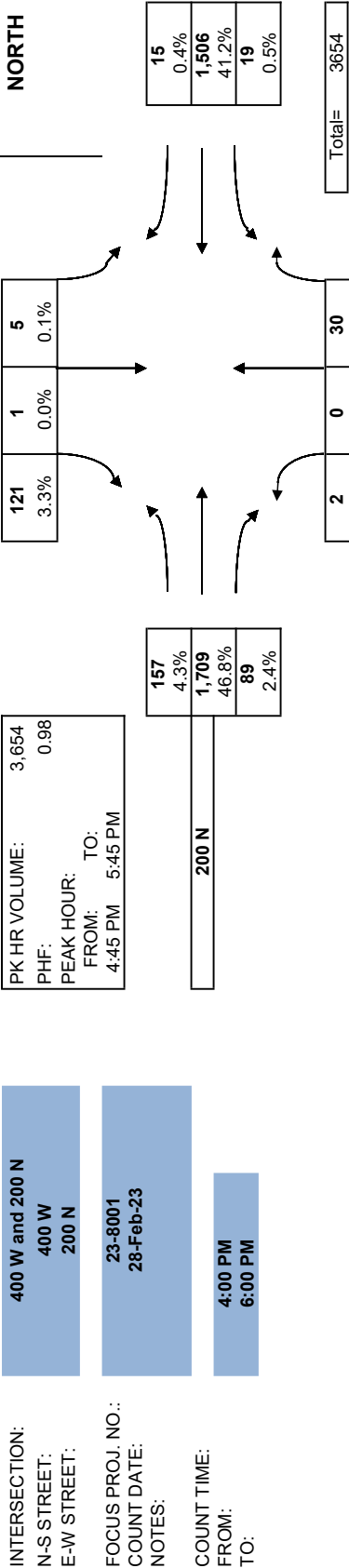
TIME PERIOD		NORTHBOUND		EASTBOUND		SOUTHBOUND		WESTBOUND		TOTAL VOLUMES
FROM:	TO:	L	T	L	T	L	T	L	T	
7:00 AM	8:00 AM	12	0	8	92	1	1	5	756	8
7:15 AM	8:15 AM	9	0	8	105	2	1	5	838	9
7:30 AM	8:30 AM	11	0	9	114	2	2	7	854	9
7:45 AM	8:45 AM	14	0	11	109	2	2	7	921	15
8:00 AM	9:00 AM	11	0	9	110	2	3	7	1,057	13
										2,567

NOTE PHF IS BASED ON 15 MIN. PEAK WITHIN THE PEAK HOUR.

TURNING MOVEMENT COUNT SUMMARY

FOCUS ENGINEERING & SURVEYING, LLC

PM PEAK HOUR VOLUMES



COUNT DATA INPUT:

FROM:	NORTHBOUND		EASTBOUND		SOUTHBOUND		WESTBOUND		TOTAL VOLUMES
	L	T	L	T	L	T	L	T	
4:00 PM	0	0	5	38	1	0	31	8	0
4:15 PM	3	0	8	35	2	0	44	4	3
4:30 PM	1	0	5	21	2	0	12	2	1
4:45 PM	1	0	9	43	1	1	15	6	3
5:00 PM	0	0	6	38	2	0	17	4	2
5:15 PM	0	0	7	48	2	0	48	5	7
5:30 PM	1	0	8	28	0	0	41	4	3
5:45 PM	2	0	5	28	2	1	50	5	1
									6,987

HOURLY TOTALS:

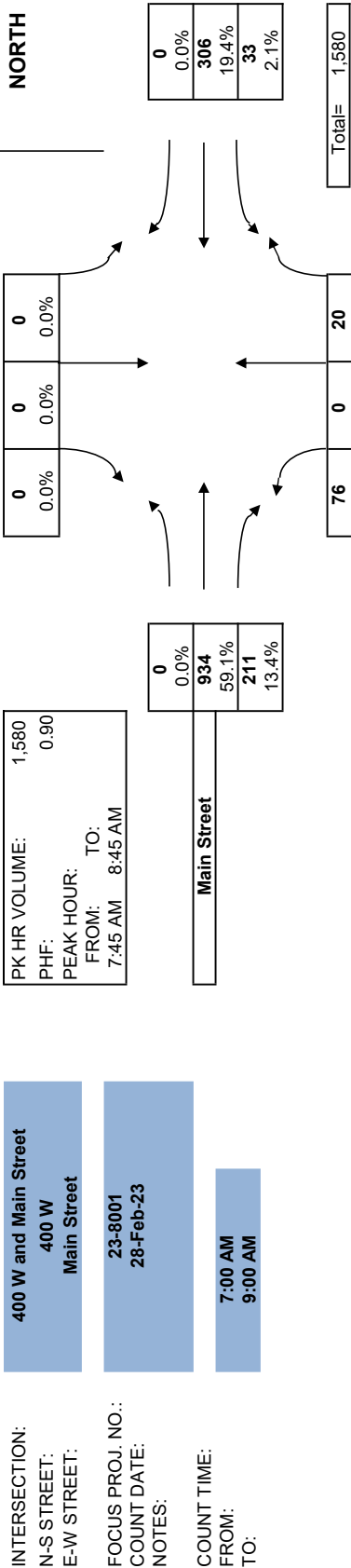
FROM:	NORTHBOUND		EASTBOUND		SOUTHBOUND		WESTBOUND		TOTAL VOLUMES
	L	T	L	T	L	T	L	T	
4:00 PM	5	0	137	1,577	6	1	102	7	3,353
4:15 PM	5	0	137	1,623	7	1	88	16	3,420
4:30 PM	2	0	150	1,671	7	1	92	17	3,538
4:45 PM	2	0	157	1,709	5	1	121	19	3,654
5:00 PM	3	0	142	1,715	6	1	156	18	3,634

NOTE PHF IS BASED ON 15 MIN. PEAK WITHIN THE PEAK HOUR.

TURNING MOVEMENT COUNT SUMMARY

FOCUS ENGINEERING & SURVEYING, LLC

AM PEAK HOUR VOLUMES



COUNT DATA INPUT:

TIME PERIOD		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL VOLUMES
FROM:	TO:	L	T	R	L	T	R	L	T	R	L	T	R	
7:00 AM	7:15 AM	7	0	3	0	99	28	0	0	0	3	39	0	179
7:15 AM	7:30 AM	26	0	3	0	159	28	0	0	0	6	36	0	258
7:30 AM	7:45 AM	16	0	2	0	189	46	0	0	0	2	49	0	304
7:45 AM	8:00 AM	17	0	7	0	266	58	0	0	0	7	71	0	426
8:00 AM	8:15 AM	23	0	7	0	272	58	0	0	0	9	68	0	437
8:15 AM	8:30 AM	19	0	1	0	203	49	0	0	0	6	88	0	366
8:30 AM	8:45 AM	17	0	5	0	193	46	0	0	0	11	79	0	351
8:45 AM	9:00 AM	17	0	15	0	213	56	0	0	0	24	76	0	401

HOURLY TOTALS:

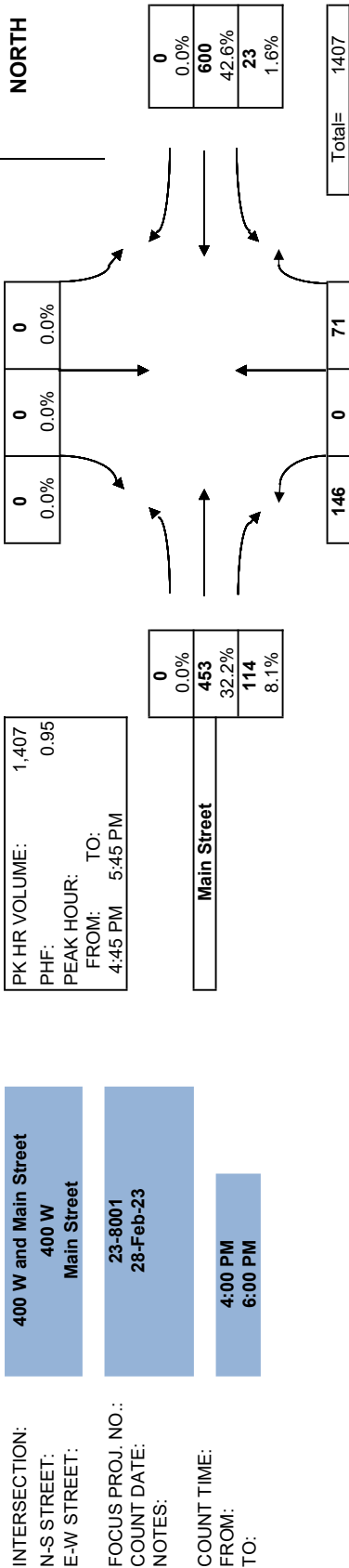
TIME PERIOD		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL VOLUMES
FROM:	TO:	L	T	R	L	T	R	L	T	R	L	T	R	
7:00 AM	8:00 AM	66	0	15	0	713	160	0	0	0	18	195	0	1,167
7:15 AM	8:15 AM	82	0	19	0	886	190	0	0	0	24	224	0	1,425
7:30 AM	8:30 AM	75	0	17	0	930	211	0	0	0	24	276	0	1,533
7:45 AM	8:45 AM	76	0	20	0	934	211	0	0	0	33	306	0	1,580
8:00 AM	9:00 AM	76	0	28	0	881	209	0	0	0	50	311	0	1,555

NOTE PHF IS BASED ON 15 MIN. PEAK WITHIN THE PEAK HOUR.

TURNING MOVEMENT COUNT SUMMARY

FOCUS ENGINEERING & SURVEYING, LLC

PM PEAK HOUR VOLUMES



COUNT DATA INPUT:

TIME PERIOD	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL VOLUMES
	L	T	R	L	T	R	L	T	R	L	T	R	
FROM: 4:00 PM TO: 4:15 PM	31	0	12	0	101	26	0	0	0	13	168	0	351
4:15 PM TO: 4:30 PM	29	0	9	0	111	38	0	0	0	6	123	0	316
4:30 PM TO: 4:45 PM	36	0	18	0	109	36	0	0	0	5	132	0	336
4:45 PM TO: 5:00 PM	33	0	21	0	112	24	0	0	0	8	151	0	349
5:00 PM TO: 5:15 PM	23	0	15	0	129	27	0	0	0	4	172	0	370
5:15 PM TO: 5:30 PM	50	0	20	0	106	30	0	0	0	7	135	0	348
5:30 PM TO: 5:45 PM	40	0	15	0	106	33	0	0	0	4	142	0	340
5:45 PM TO: 6:00 PM	20	0	15	0	105	24	0	0	0	9	133	0	306
2,716													

HOURLY TOTALS:

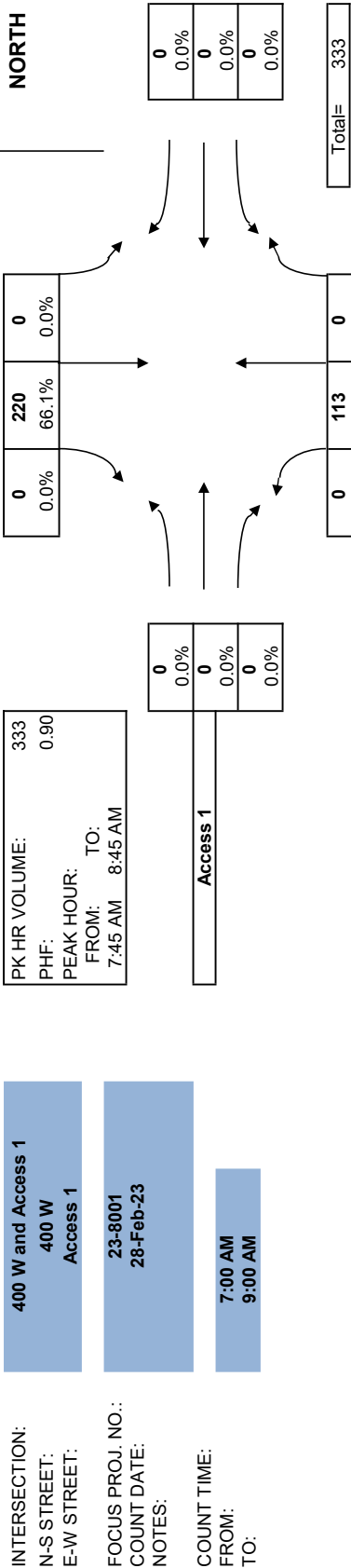
TIME PERIOD	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL VOLUMES
	L	T	R	L	T	R	L	T	R	L	T	R	
FROM: 4:00 PM TO: 5:00 PM	129	0	60	0	433	124	0	0	0	32	574	0	1,352
4:15 PM TO: 5:15 PM	121	0	63	0	461	125	0	0	0	23	578	0	1,371
4:30 PM TO: 5:30 PM	142	0	74	0	456	117	0	0	0	24	590	0	1,403
4:45 PM TO: 5:45 PM	146	0	71	0	453	114	0	0	0	23	600	0	1,407
5:00 PM TO: 6:00 PM	133	0	65	0	446	114	0	0	0	24	582	0	1,364

NOTE PHF IS BASED ON 15 MIN. PEAK WITHIN THE PEAK HOUR.

TURNING MOVEMENT COUNT SUMMARY

FOCUS ENGINEERING & SURVEYING, LLC

AM PEAK HOUR VOLUMES



COUNT DATA INPUT:

FROM:	TIME PERIOD	TO:	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL VOLUMES
			L	T	R	L	T	R	L	T	R	L	T	R	
7:00 AM	7:15 AM	7:30 AM	1	13	0	0	0	0	0	39	0	0	0	0	53
7:15 AM	7:30 AM	7:45 AM	1	12	0	0	0	0	0	37	0	0	0	0	50
7:30 AM	7:45 AM	8:00 AM	1	11	0	0	0	0	0	42	0	0	0	0	54
7:45 AM	8:00 AM	8:15 AM	0	38	0	0	0	0	0	43	0	0	0	0	81
8:00 AM	8:15 AM	8:30 AM	0	29	0	0	0	0	0	64	0	0	0	0	93
8:15 AM	8:30 AM	8:45 AM	0	26	0	0	0	0	0	59	0	0	0	0	85
8:30 AM	8:45 AM	9:00 AM	0	20	0	0	0	0	0	54	0	0	0	0	74
8:45 AM	9:00 AM		0	5	0	0	0	0	0	32	0	0	0	0	37

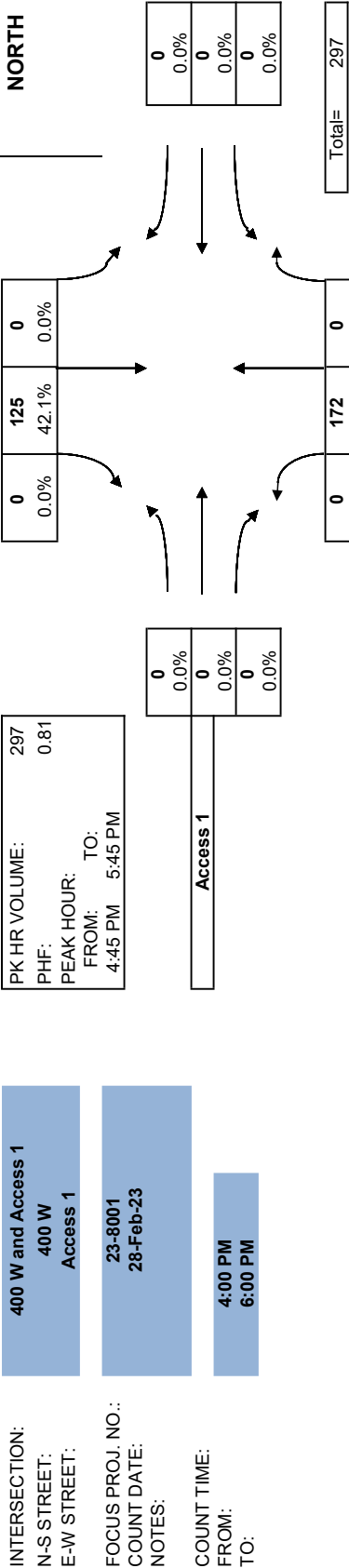
HOURLY TOTALS:

FROM:	TIME PERIOD	TO:	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL VOLUMES
			L	T	R	L	T	R	L	T	R	L	T	R	
7:00 AM	8:00 AM		3	74	0	0	0	0	0	161	0	0	0	0	238
7:15 AM	8:15 AM		2	90	0	0	0	0	0	186	0	0	0	0	278
7:30 AM	8:30 AM		1	104	0	0	0	0	0	208	0	0	0	0	313
7:45 AM	8:45 AM		0	113	0	0	0	0	0	220	0	0	0	0	333
8:00 AM	9:00 AM		0	80	0	0	0	0	0	209	0	0	0	0	289

NOTE PHF IS BASED ON 15 MIN. PEAK WITHIN THE PEAK HOUR.

FOCUS ENGINEERING & SURVEYING, LLC

PM PEAK HOUR VOLUMES



COUNT DATA INPUT:

TIME PERIOD	NORTHBOUND		EASTBOUND		SOUTHBOUND		WESTBOUND		TOTAL VOLUMES
FROM: TO:	L	T	L	T	L	T	L	T	
4:00 PM 4:15 PM	0	26	0	1	0	29	0	0	57
4:15 PM 4:30 PM	0	33	0	1	0	25	1	0	60
4:30 PM 4:45 PM	1	34	0	0	0	23	0	0	58
4:45 PM 5:00 PM	0	37	0	0	0	21	0	0	58
5:00 PM 5:15 PM	0	56	0	0	0	36	0	0	92
5:15 PM 5:30 PM	0	41	0	0	0	29	0	0	70
5:30 PM 5:45 PM	0	38	0	0	0	39	0	0	77
5:45 PM 6:00 PM	0	29	0	2	0	24	0	0	55
									527

HOURLY TOTALS:

TIME PERIOD	NORTHBOUND		EASTBOUND		SOUTHBOUND		WESTBOUND		TOTAL VOLUMES
FROM: TO:	L	T	L	T	L	T	L	T	
4:00 PM 5:00 PM	1	130	0	1	0	98	1	0	233
4:15 PM 5:15 PM	1	160	0	0	0	105	1	0	268
4:30 PM 5:30 PM	1	168	0	0	0	109	0	0	278
4:45 PM 5:45 PM	0	172	0	0	0	125	0	0	297
5:00 PM 6:00 PM	0	164	0	0	0	128	0	0	294

NOTE PHF IS BASED ON 15 MIN. PEAK WITHIN THE PEAK HOUR.

TURNING MOVEMENT COUNT SUMMARY

FOCUS ENGINEERING & SURVEYING, LLC

AM PEAK HOUR VOLUMES

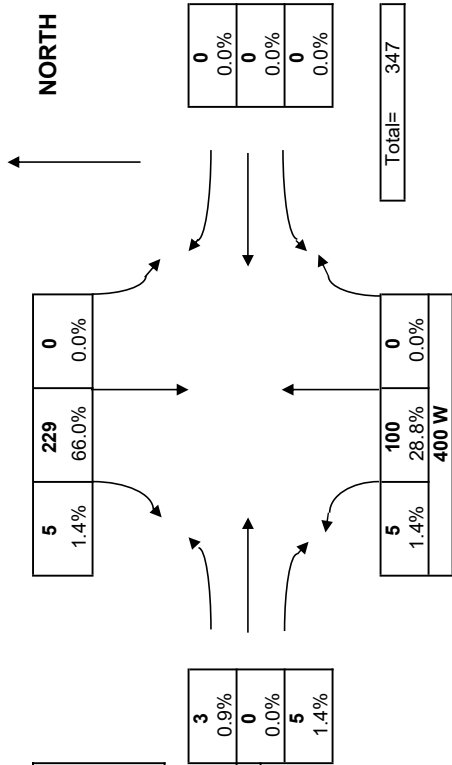
INTERSECTION: 400 W and Access 2
N-S STREET: 400 W
E-W STREET: Access 2

PK HR VOLUME: 347
PHF: 0.88
PEAK HOUR: FROM: 7:45 AM TO: 8:45 AM

FOCUS PROJ. NO.: 23-8001
COUNT DATE: 28-Feb-23

NOTES:

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



COUNT DATA INPUT:

TIME PERIOD		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL VOLUMES
FROM:	TO:	L	T	R	L	T	R	L	T	R	L	T	R	
7:00 AM	7:15 AM	0	13	0	1	0	0	0	41	3	0	0	0	58
7:15 AM	7:30 AM	0	11	0	0	0	0	0	34	0	0	0	0	45
7:30 AM	7:45 AM	1	12	0	1	0	1	0	39	0	0	0	0	54
7:45 AM	8:00 AM	1	34	0	0	0	0	0	45	2	0	0	0	82
8:00 AM	8:15 AM	1	24	0	0	0	1	0	59	0	0	0	0	85
8:15 AM	8:30 AM	2	23	0	3	0	2	0	67	2	0	0	0	99
8:30 AM	8:45 AM	1	19	0	0	0	2	0	58	1	0	0	0	81
8:45 AM	9:00 AM	0	5	0	0	0	1	0	32	0	0	0	0	38

HOURLY TOTALS:

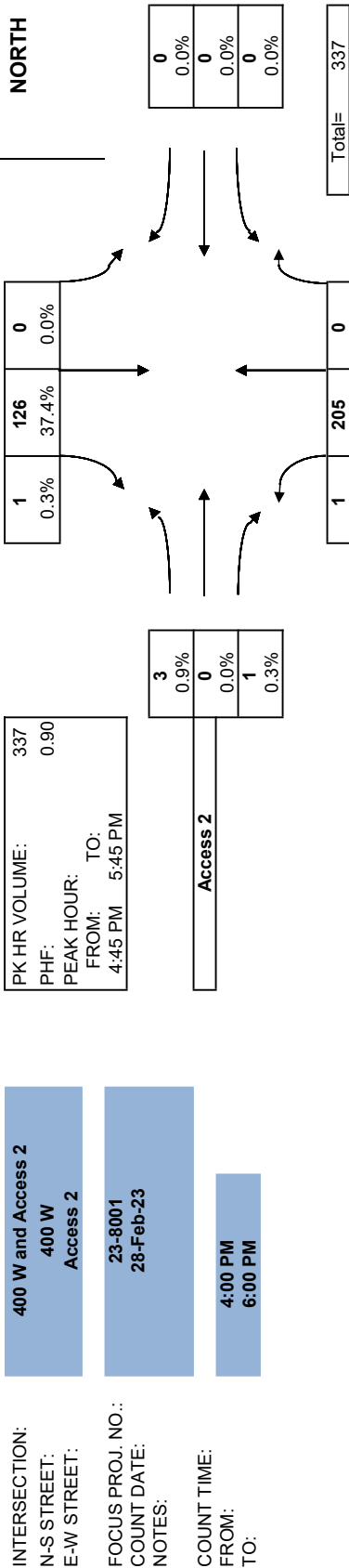
TIME PERIOD		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL VOLUMES
FROM:	TO:	L	T	R	L	T	R	L	T	R	L	T	R	
7:00 AM	8:00 AM	2	70	0	2	0	1	0	159	5	0	0	0	239
7:15 AM	8:15 AM	3	81	0	1	0	2	0	177	2	0	0	0	266
7:30 AM	8:30 AM	5	93	0	4	0	4	0	210	4	0	0	0	320
7:45 AM	8:45 AM	5	100	0	3	0	5	0	229	5	0	0	0	347
8:00 AM	9:00 AM	4	71	0	3	0	6	0	216	3	0	0	0	303

NOTE PHF IS BASED ON 15 MIN. PEAK WITHIN THE PEAK HOUR.

TURNING MOVEMENT COUNT SUMMARY

FOCUS ENGINEERING & SURVEYING, LLC

PM PEAK HOUR VOLUMES



COUNT DATA INPUT:

TIME PERIOD		NORTHBOUND		EASTBOUND		SOUTHBOUND		WESTBOUND		TOTAL VOLUMES	
FROM:	TO:	L	T	R	L	T	R	L	T	R	
4:00 PM	4:15 PM	0	28	0	2	0	1	0	23	0	0
4:15 PM	4:30 PM	0	32	0	1	0	0	0	19	0	52
4:30 PM	4:45 PM	0	39	0	0	0	0	0	21	1	0
4:45 PM	5:00 PM	0	51	0	0	0	0	0	24	0	0
5:00 PM	5:15 PM	0	58	0	1	0	0	0	32	1	0
5:15 PM	5:30 PM	1	44	0	1	0	1	0	29	0	0
5:30 PM	5:45 PM	0	52	0	1	0	0	0	41	0	0
5:45 PM	6:00 PM	0	19	0	0	0	0	0	19	0	0
											542

HOURLY TOTALS:

FROM:	TIME PERIOD	TO:	NORTHBOUND		EASTBOUND		SOUTHBOUND		WESTBOUND		TOTAL VOLUMES
			L	T	L	T	L	T	L	T	
4:00 PM		5:00 PM	0	150	0	3	0	1	0	0	242
4:15 PM		5:15 PM	0	180	0	2	0	0	0	0	280
4:30 PM		5:30 PM	1	192	0	2	0	1	0	0	304
4:45 PM		5:45 PM	1	205	0	3	0	1	0	0	337
5:00 PM		6:00 PM	1	173	0	3	0	1	0	0	300

NOTE PHF IS BASED ON 15 MIN. PEAK WITHIN THE PEAK HOUR.

Trip Generation Reports

Multifamily Housing (Mid-Rise) Not Close to Rail Transit (221)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

**Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.**

Setting/Location: General Urban/Suburban

Number of Studies: 30

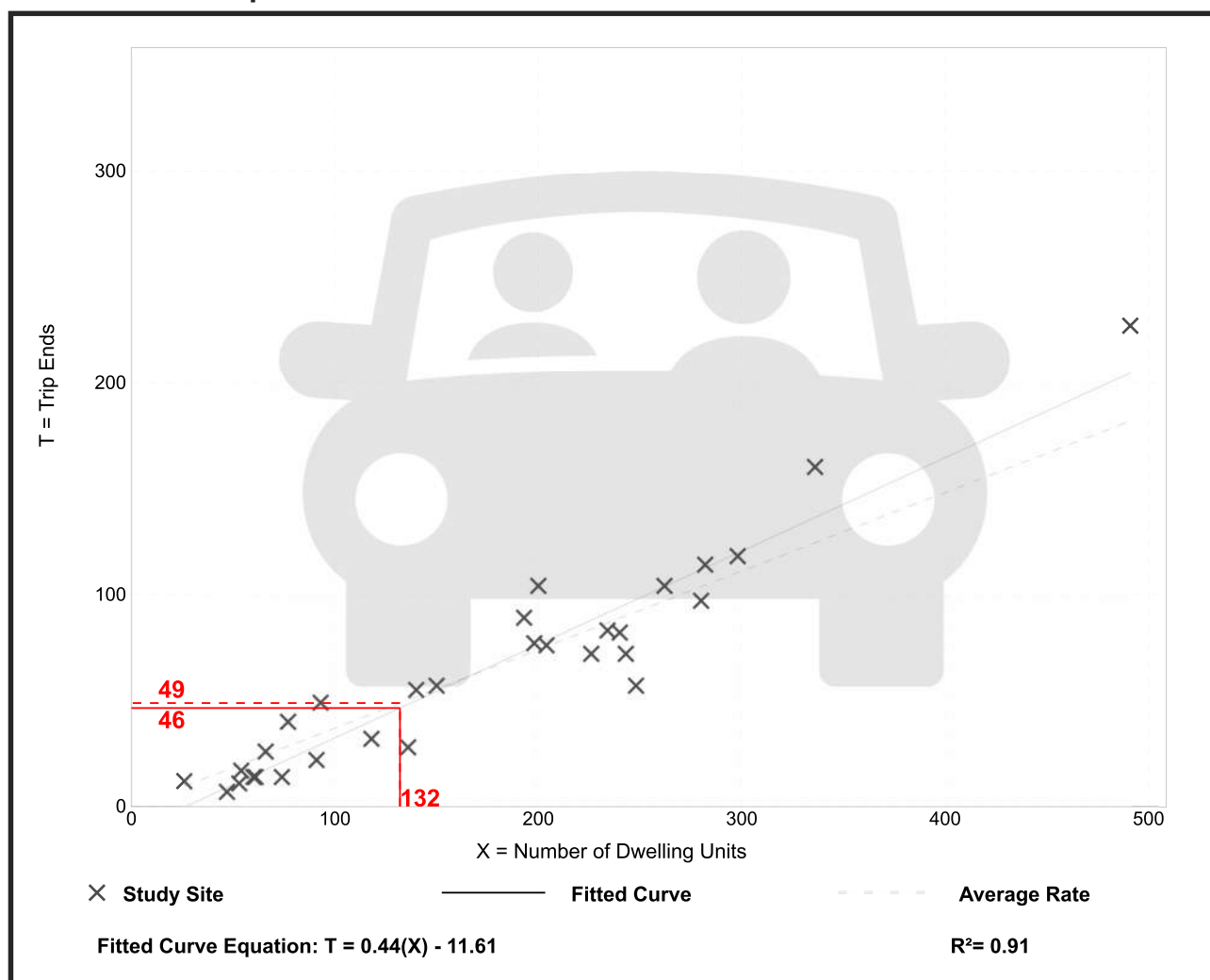
Avg. Num. of Dwelling Units: 173

Directional Distribution: 23% entering, 77% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.37	0.15 - 0.53	0.09

Data Plot and Equation



Multifamily Housing (Mid-Rise) Not Close to Rail Transit (221)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

**Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.**

Setting/Location: General Urban/Suburban

Number of Studies: 31

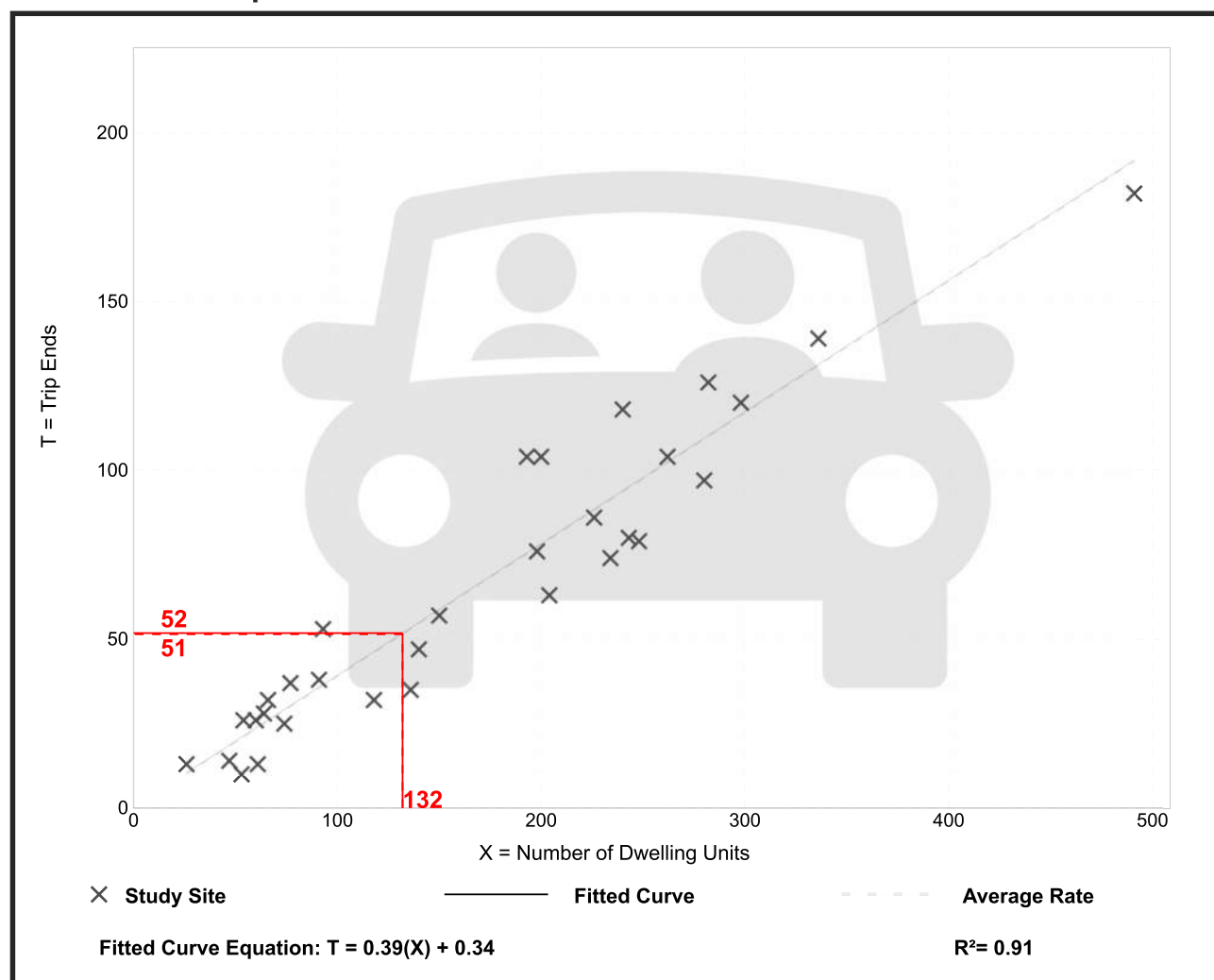
Avg. Num. of Dwelling Units: 169

Directional Distribution: 61% entering, 39% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.39	0.19 - 0.57	0.08

Data Plot and Equation



Hotel (310)

Vehicle Trip Ends vs: Rooms

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

Setting/Location: General Urban/Suburban

Number of Studies: 28

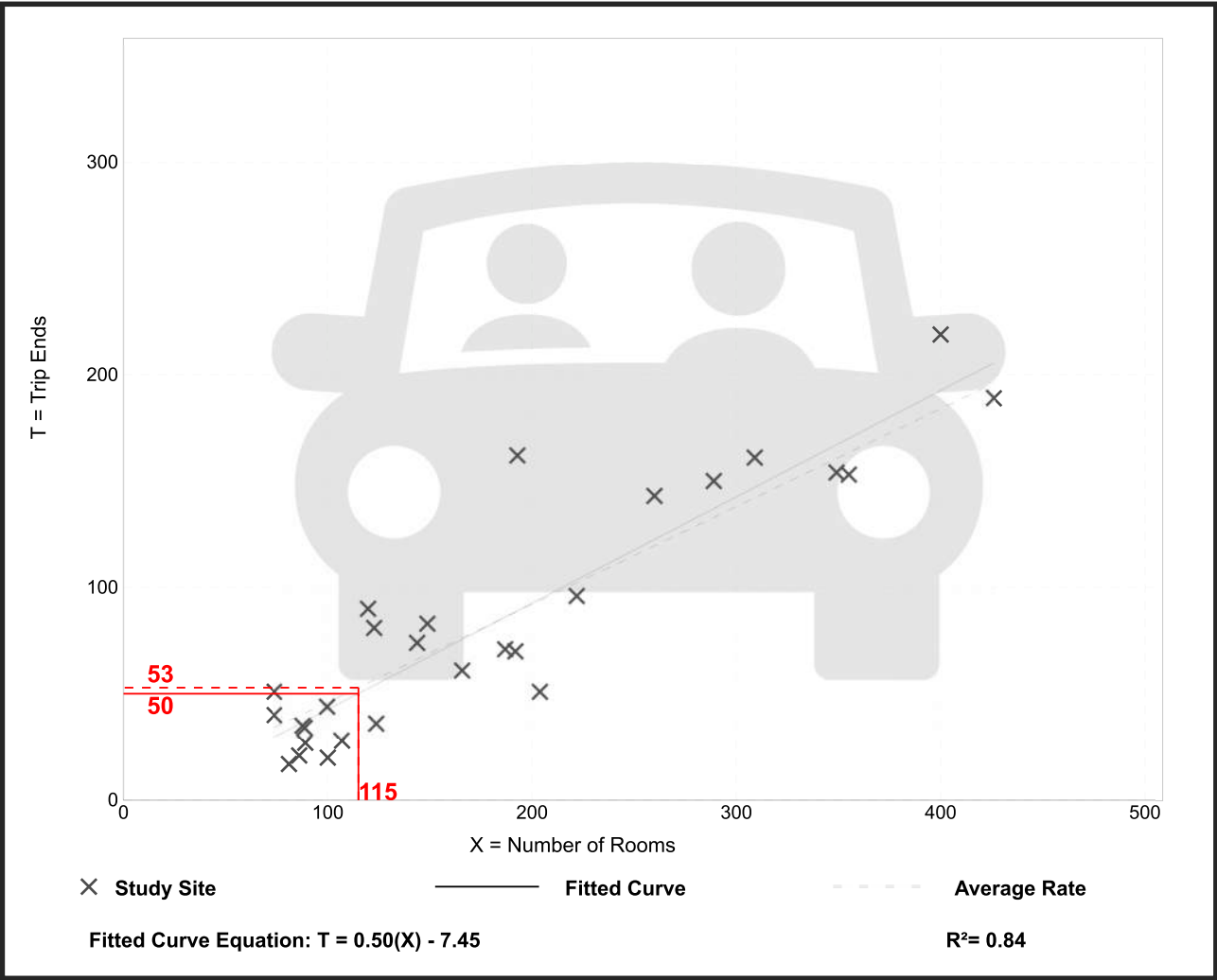
Avg. Num. of Rooms: 182

Directional Distribution: 56% entering, 44% exiting

Vehicle Trip Generation per Room

Average Rate	Range of Rates	Standard Deviation
0.46	0.20 - 0.84	0.14

Data Plot and Equation



Hotel (310)

Vehicle Trip Ends vs: Rooms

On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 31

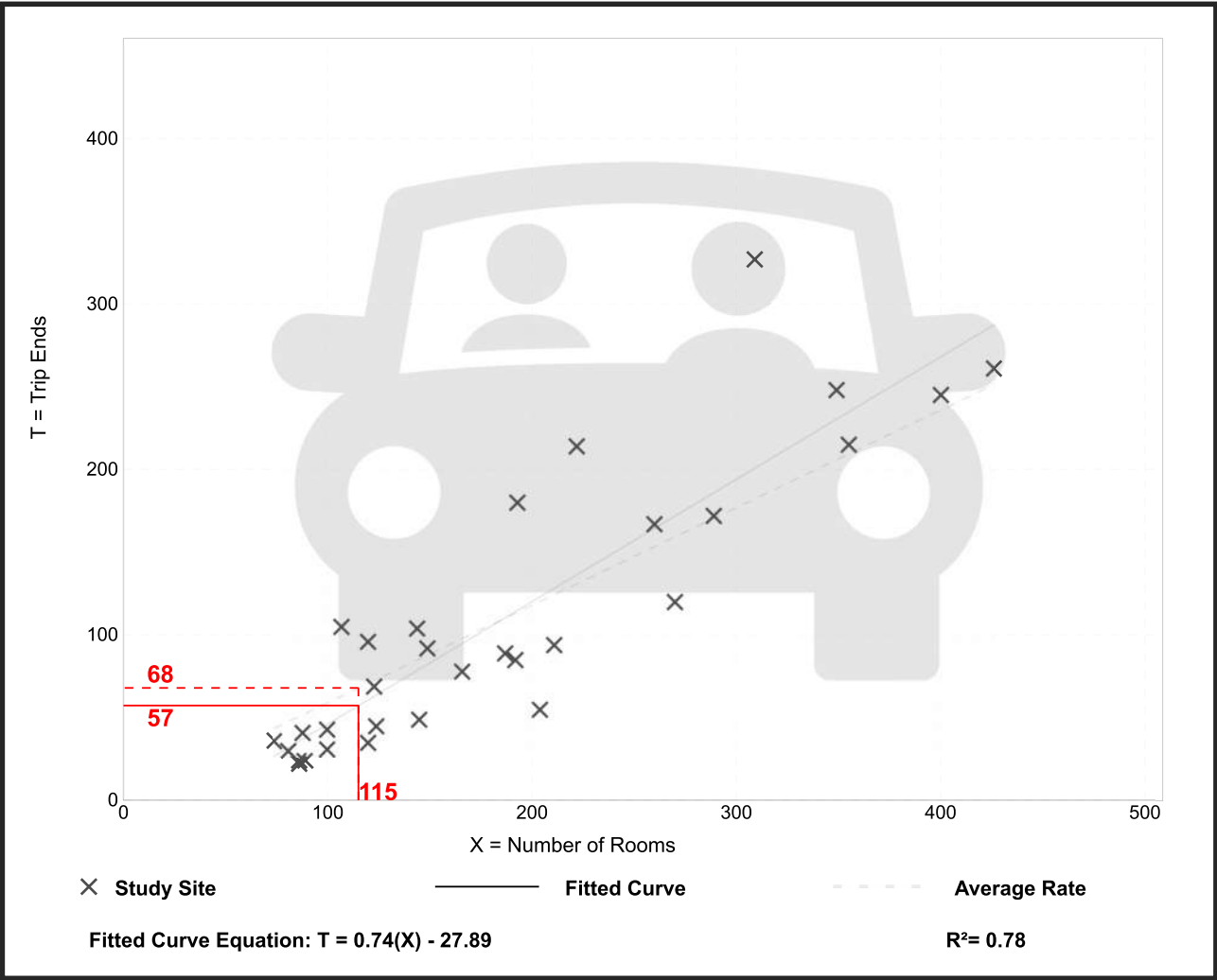
Avg. Num. of Rooms: 186

Directional Distribution: 51% entering, 49% exiting

Vehicle Trip Generation per Room

Average Rate	Range of Rates	Standard Deviation
0.59	0.26 - 1.06	0.22

Data Plot and Equation



General Office Building (710)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

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

Setting/Location: General Urban/Suburban

Number of Studies: 221

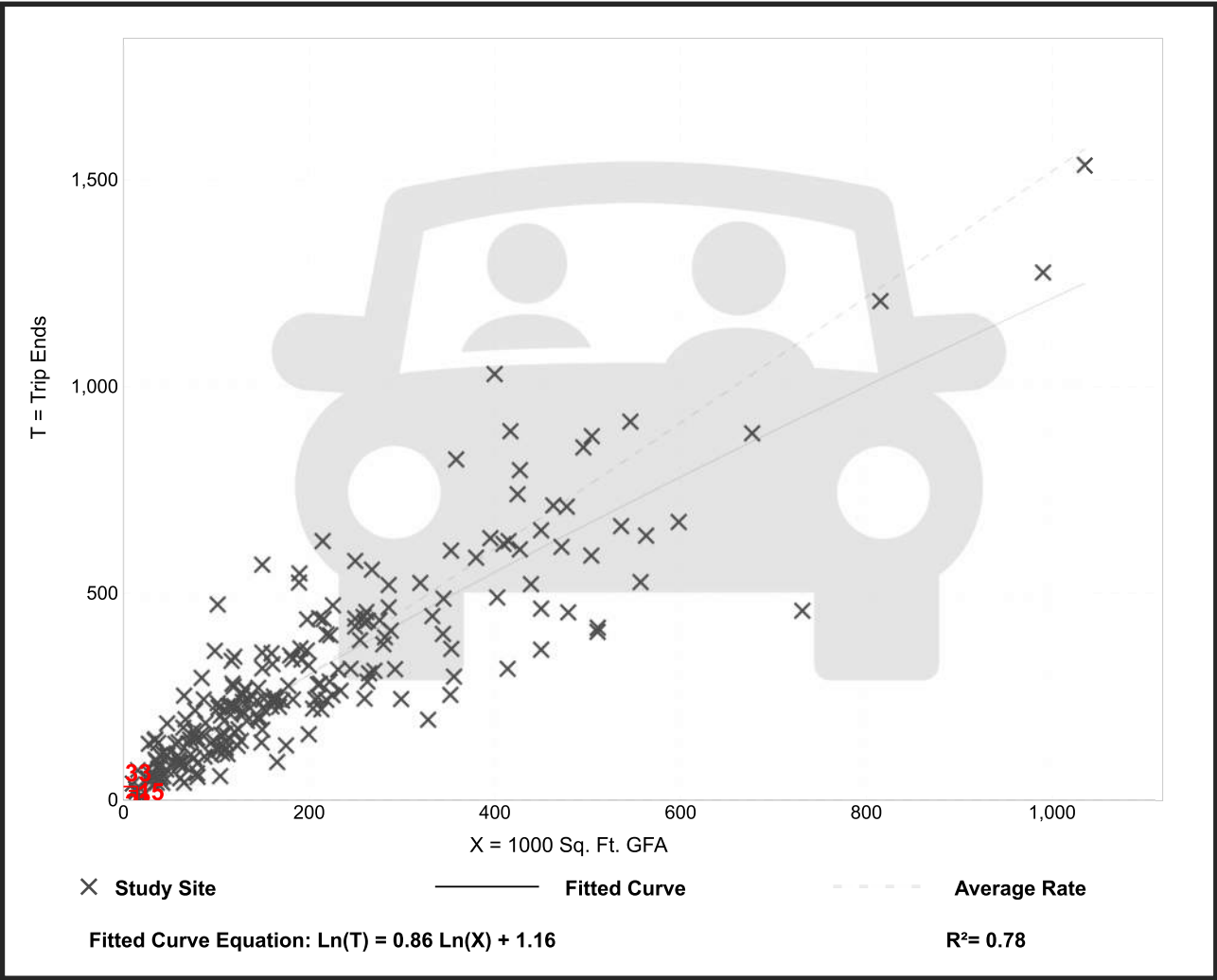
Avg. 1000 Sq. Ft. GFA: 201

Directional Distribution: 88% entering, 12% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.52	0.32 - 4.93	0.58

Data Plot and Equation



General Office Building (710)

Vehicle Trip Ends vs:

1000 Sq. Ft. GFA

On a:

Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Setting/Location:

General Urban/Suburban

Number of Studies:

232

Avg. 1000 Sq. Ft. GFA:

199

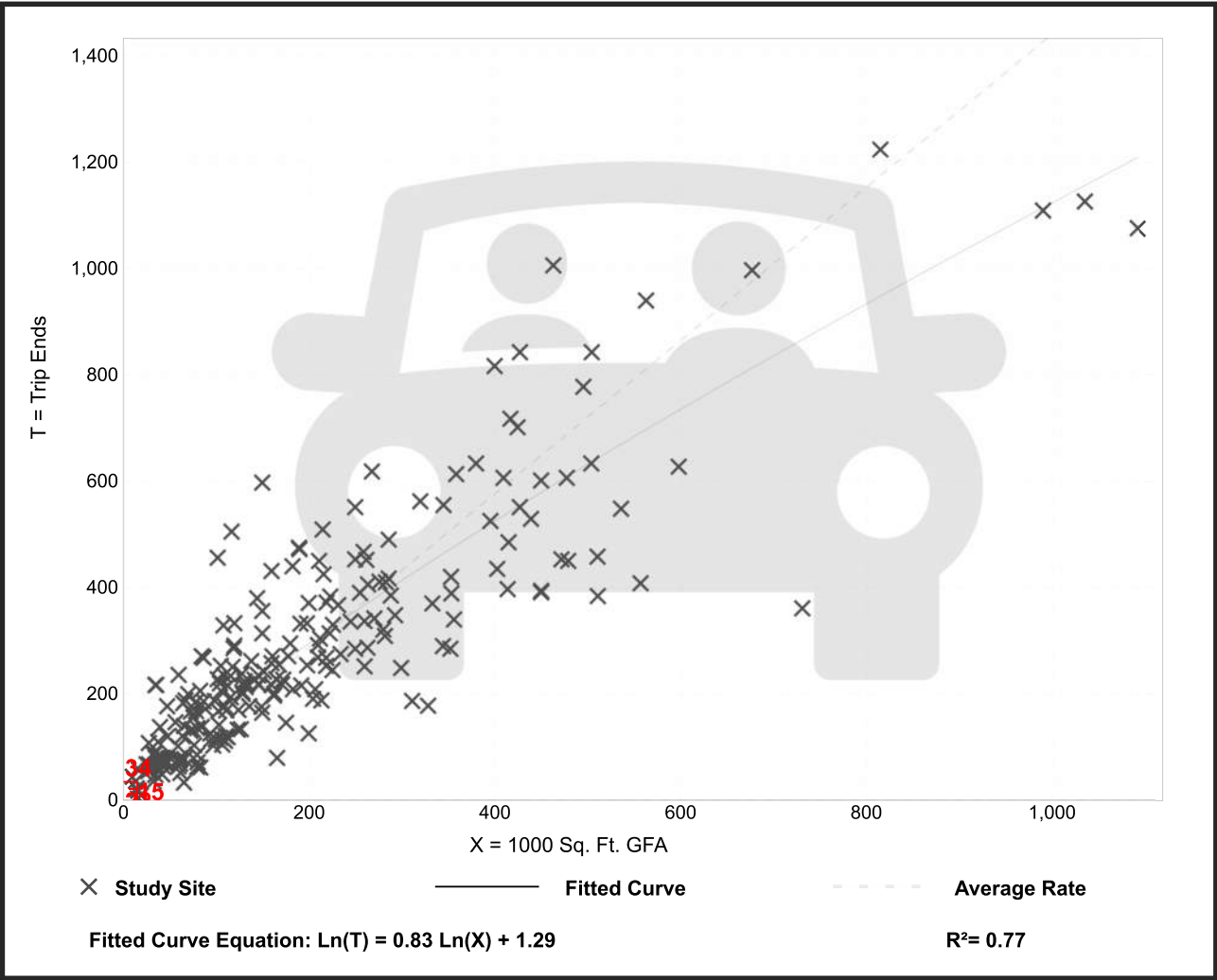
Directional Distribution:

17% entering, 83% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.44	0.26 - 6.20	0.60

Data Plot and Equation



Small Office Building

(712)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

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

Setting/Location: General Urban/Suburban

Number of Studies: 21

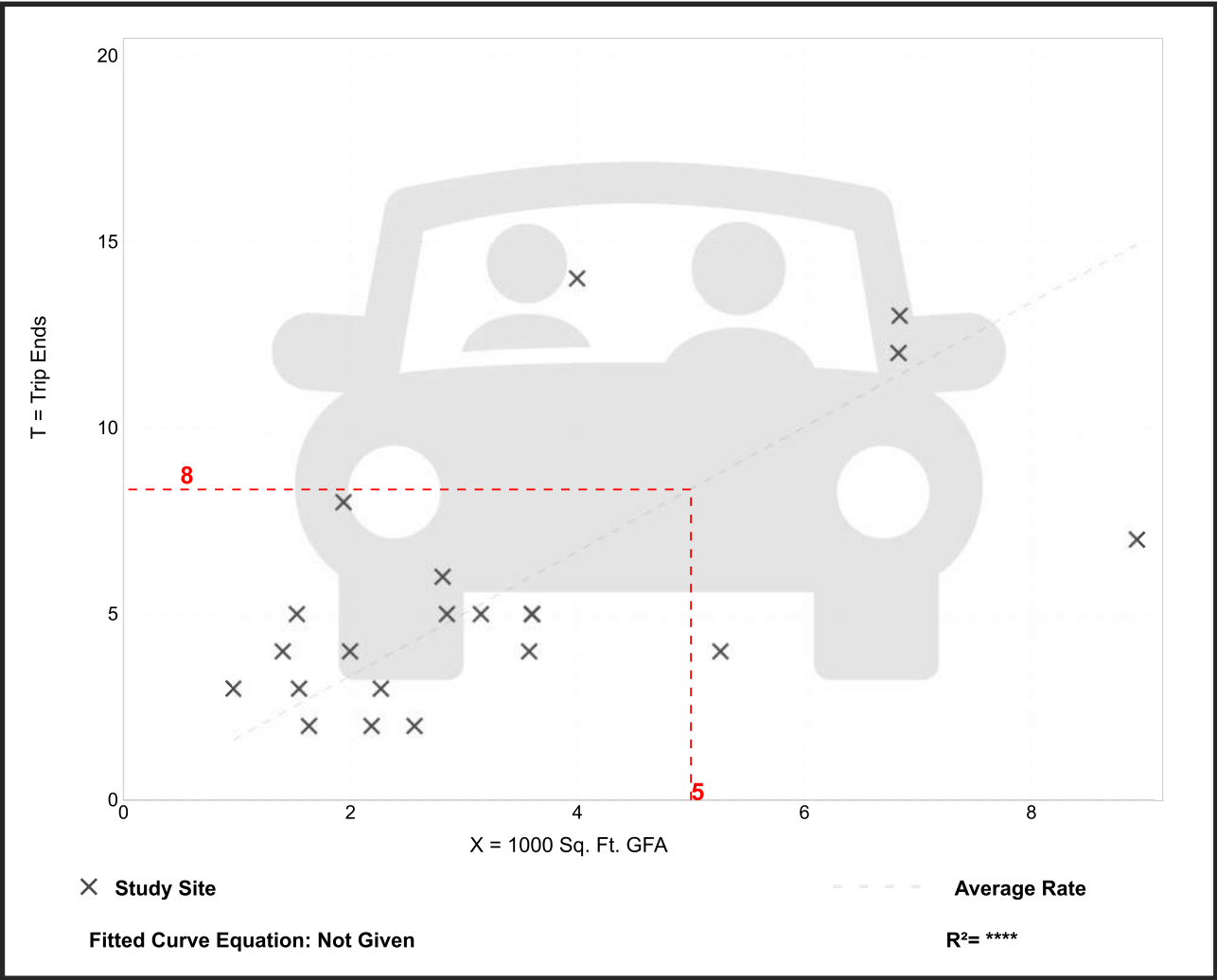
Avg. 1000 Sq. Ft. GFA: 3

Directional Distribution: 82% entering, 18% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.67	0.76 - 4.12	0.88

Data Plot and Equation



Small Office Building

(712)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 21

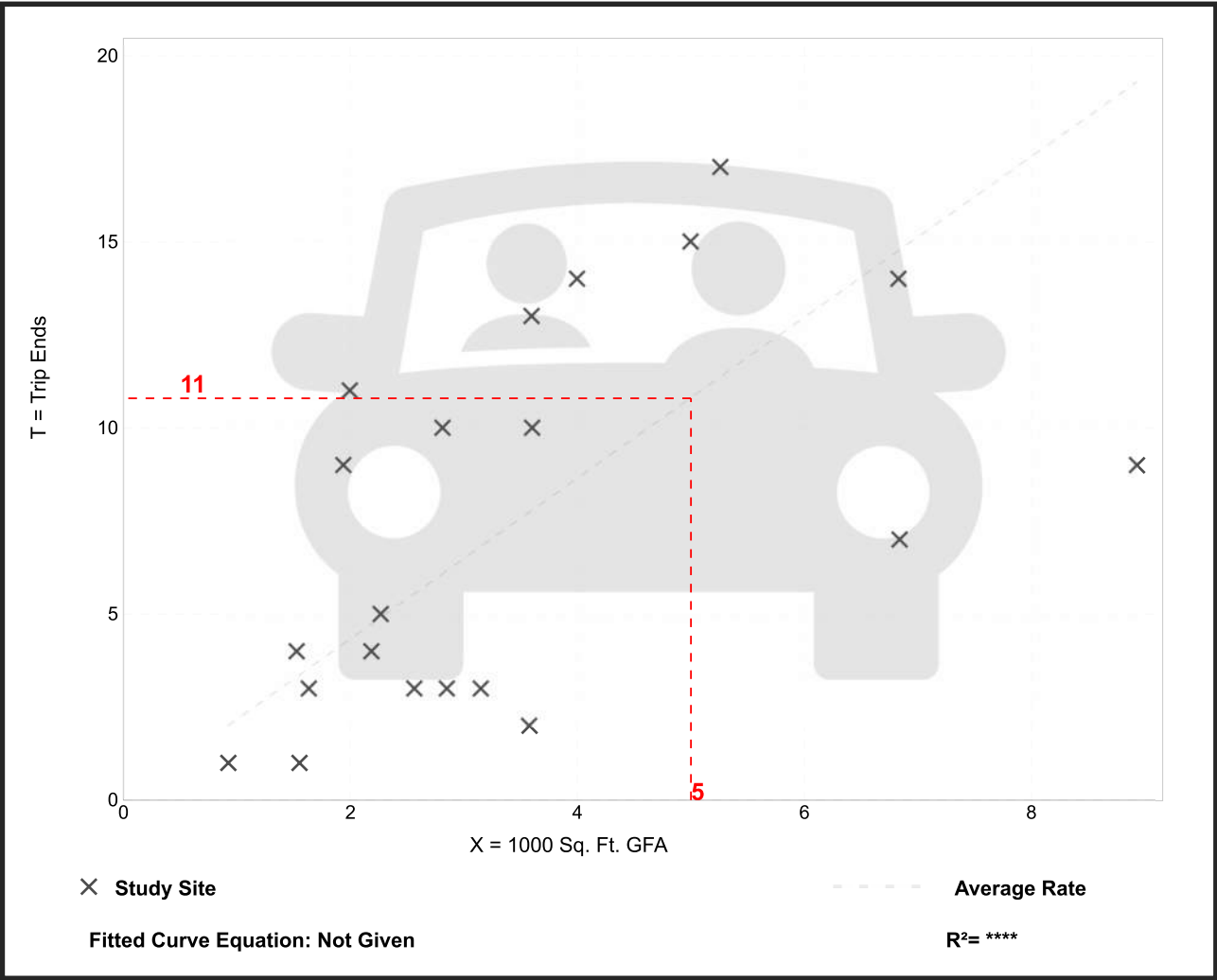
Avg. 1000 Sq. Ft. GFA: 3

Directional Distribution: 34% entering, 66% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
2.16	0.56 - 5.50	1.26

Data Plot and Equation



Traffic Analysis Reports

2023 Existing Traffic Analysis

Intersection												
Int Delay, s/veh	6.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	110	1126	43	7	1057	13	11	0	9	2	3	186
Future Vol, veh/h	110	1126	43	7	1057	13	11	0	9	2	3	186
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	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	120	1224	47	8	1149	14	12	0	10	2	3	202
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1163	0	0	1271	0	0	2080	2667	636	2017	2676	575
Stage 1	-	-	-	-	-	-	1488	1488	-	1165	1165	-
Stage 2	-	-	-	-	-	-	592	1179	-	852	1511	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	596	-	-	542	-	-	31	22	421	34	22	461
Stage 1	-	-	-	-	-	-	130	186	-	206	267	-
Stage 2	-	-	-	-	-	-	460	262	-	321	181	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	596	-	-	542	-	-	12	17	421	28	17	461
Mov Cap-2 Maneuver	-	-	-	-	-	-	12	17	-	28	17	-
Stage 1	-	-	-	-	-	-	104	149	-	165	263	-
Stage 2	-	-	-	-	-	-	251	258	-	250	145	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.1			0.1			\$ 375.2			34.3		
HCM LOS							F			D		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	12	421	596	-	-	542	-	-	28	326		
HCM Lane V/C Ratio	0.996	0.023	0.201	-	-	0.014	-	-	0.078	0.63		
HCM Control Delay (s)	\$ 670.9	13.8	12.6	-	-	11.7	-	-	144.1	33.1		
HCM Lane LOS	F	B	B	-	-	B	-	-	F	D		
HCM 95th %tile Q(veh)	2.1	0.1	0.7	-	-	0	-	-	0.2	4		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s				+: Computation Not Defined				*: All major volume in platoon		

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	113	220	0
Future Vol, veh/h	0	0	0	113	220	0
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	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	123	239	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	362	239	239	0	-	0
Stage 1	239	-	-	-	-	-
Stage 2	123	-	-	-	-	-
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	637	800	1328	-	-	-
Stage 1	801	-	-	-	-	-
Stage 2	902	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	637	800	1328	-	-	-
Mov Cap-2 Maneuver	674	-	-	-	-	-
Stage 1	801	-	-	-	-	-
Stage 2	902	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1328	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	5	5	100	229	5
Future Vol, veh/h	3	5	5	100	229	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	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	3	5	5	109	249	5
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	371	252	254	0	-	0
Stage 1	252	-	-	-	-	-
Stage 2	119	-	-	-	-	-
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	630	787	1311	-	-	-
Stage 1	790	-	-	-	-	-
Stage 2	906	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	627	787	1311	-	-	-
Mov Cap-2 Maneuver	665	-	-	-	-	-
Stage 1	787	-	-	-	-	-
Stage 2	906	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10	0.4		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1311	-	736	-	-	
HCM Lane V/C Ratio	0.004	-	0.012	-	-	
HCM Control Delay (s)	7.8	-	10	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

Intersection						
Int Delay, s/veh	1.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↱		↱	↑↑	↱	↱
Traffic Vol, veh/h	934	211	33	306	76	20
Future Vol, veh/h	934	211	33	306	76	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	100	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1015	229	36	333	83	22
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1244	0	1369	622
Stage 1	-	-	-	-	1130	-
Stage 2	-	-	-	-	239	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	555	-	138	430
Stage 1	-	-	-	-	270	-
Stage 2	-	-	-	-	778	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	555	-	129	430
Mov Cap-2 Maneuver	-	-	-	-	222	-
Stage 1	-	-	-	-	270	-
Stage 2	-	-	-	-	727	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		1.2		27	
HCM LOS					D	
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	222	430	-	-	555	-
HCM Lane V/C Ratio	0.372	0.051	-	-	0.065	-
HCM Control Delay (s)	30.5	13.8	-	-	11.9	-
HCM Lane LOS	D	B	-	-	B	-
HCM 95th %tile Q(veh)	1.6	0.2	-	-	0.2	-

Intersection												
Int Delay, s/veh	11.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	157	1709	89	19	1506	15	2	0	30	5	1	121
Future Vol, veh/h	157	1709	89	19	1506	15	2	0	30	5	1	121
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	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	171	1858	97	21	1637	16	2	0	33	5	1	132
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1653	0	0	1955	0	0	3110	3944	978	2950	3976	819
Stage 1	-	-	-	-	-	-	2249	2249	-	1679	1679	-
Stage 2	-	-	-	-	-	-	861	1695	-	1271	2297	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	386	-	-	295	-	-	5	3	250	6	3	319
Stage 1	-	-	-	-	-	-	43	77	-	99	150	-
Stage 2	-	-	-	-	-	-	317	147	-	178	73	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	386	-	-	295	-	-	~ 1	2	250	~ 3	2	319
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 1	2	-	~ 3	2	-
Stage 1	-	-	-	-	-	-	24	43	-	55	139	-
Stage 2	-	-	-	-	-	-	172	137	-	86	41	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.7			0.2			\$ 380.4			215.7		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	1 250		386	-	-	295	-	-	3	139		
HCM Lane V/C Ratio	2.174 0.13		0.442	-	-	0.07	-	-	1.812	0.954		
HCM Control Delay (s)	\$ 5764.3		21.5	21.5	-	-	18.1	-	\$ 2393.4	126.5		
HCM Lane LOS	F C		C	-	-	C	-	-	F	F		
HCM 95th %tile Q(veh)	1 0.4		2.2	-	-	0.2	-	-	1.6	6.7		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s				+: Computation Not Defined				*: All major volume in platoon		

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	172	125	0
Future Vol, veh/h	0	0	0	172	125	0
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	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	187	136	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	323	136	136	0	-	0
Stage 1	136	-	-	-	-	-
Stage 2	187	-	-	-	-	-
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	671	913	1448	-	-	-
Stage 1	890	-	-	-	-	-
Stage 2	845	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	671	913	1448	-	-	-
Mov Cap-2 Maneuver	701	-	-	-	-	-
Stage 1	890	-	-	-	-	-
Stage 2	845	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1448	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	1	1	205	126	1
Future Vol, veh/h	3	1	1	205	126	1
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	-	-	-
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	3	1	1	223	137	1
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	363	138	138	0	-	0
Stage 1	138	-	-	-	-	-
Stage 2	225	-	-	-	-	-
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	636	910	1446	-	-	-
Stage 1	889	-	-	-	-	-
Stage 2	812	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	635	910	1446	-	-	-
Mov Cap-2 Maneuver	675	-	-	-	-	-
Stage 1	888	-	-	-	-	-
Stage 2	812	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1446	-	722	-	-	
HCM Lane V/C Ratio	0.001	-	0.006	-	-	
HCM Control Delay (s)	7.5	-	10	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

Intersection						
Int Delay, s/veh	2.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↱		↱	↑↑	↱	↱
Traffic Vol, veh/h	453	114	23	600	146	71
Future Vol, veh/h	453	114	23	600	146	71
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	100	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	492	124	25	652	159	77
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	616	0	930	308
Stage 1	-	-	-	-	554	-
Stage 2	-	-	-	-	376	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	960	-	266	688
Stage 1	-	-	-	-	539	-
Stage 2	-	-	-	-	664	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	960	-	259	688
Mov Cap-2 Maneuver	-	-	-	-	385	-
Stage 1	-	-	-	-	539	-
Stage 2	-	-	-	-	647	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.3		17.6	
HCM LOS	C					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	385	688	-	-	960	-
HCM Lane V/C Ratio	0.412	0.112	-	-	0.026	-
HCM Control Delay (s)	20.8	10.9	-	-	8.8	-
HCM Lane LOS	C	B	-	-	A	-
HCM 95th %tile Q(veh)	2	0.4	-	-	0.1	-

2025 Opening Year Traffic Analysis

Intersection												
Int Delay, s/veh	9.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	114	1171	45	8	1100	14	12	0	10	3	4	194
Future Vol, veh/h	114	1171	45	8	1100	14	12	0	10	3	4	194
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	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	124	1273	49	9	1196	15	13	0	11	3	4	211
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1211	0	0	1322	0	0	2164	2775	661	2099	2784	598
Stage 1	-	-	-	-	-	-	1546	1546	-	1214	1214	-
Stage 2	-	-	-	-	-	-	618	1229	-	885	1570	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	572	-	-	519	-	-	26	19	405	30	19	445
Stage 1	-	-	-	-	-	-	120	174	-	193	253	-
Stage 2	-	-	-	-	-	-	443	248	-	306	170	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	572	-	-	519	-	-	~ 9	15	405	24	15	445
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 9	15	-	24	15	-
Stage 1	-	-	-	-	-	-	94	136	-	151	249	-
Stage 2	-	-	-	-	-	-	225	244	-	233	133	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.1			0.1			\$ 566.4			51.4		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	9 405		572	-	-	519	-	-	24	282		
HCM Lane V/C Ratio	1.449 0.027		0.217	-	-	0.017	-	-	0.136	0.763		
HCM Control Delay (s)	\$ 1026.7 14.1		13	-	-	12.1	-	-	177.3	49.5		
HCM Lane LOS	F B		B	-	-	B	-	-	F	E		
HCM 95th %tile Q(veh)	2.5 0.1		0.8	-	-	0.1	-	-	0.4	5.7		
Notes												
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon												

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	118	229	0
Future Vol, veh/h	0	0	0	118	229	0
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	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	128	249	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	377	249	249	0	-	0
Stage 1	249	-	-	-	-	-
Stage 2	128	-	-	-	-	-
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	625	790	1317	-	-	-
Stage 1	792	-	-	-	-	-
Stage 2	898	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	625	790	1317	-	-	-
Mov Cap-2 Maneuver	665	-	-	-	-	-
Stage 1	792	-	-	-	-	-
Stage 2	898	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1317	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	6	6	104	238	6
Future Vol, veh/h	4	6	6	104	238	6
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	-	-	-
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	4	7	7	113	259	7
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	390	263	266	0	-	0
Stage 1	263	-	-	-	-	-
Stage 2	127	-	-	-	-	-
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	614	776	1298	-	-	-
Stage 1	781	-	-	-	-	-
Stage 2	899	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	611	776	1298	-	-	-
Mov Cap-2 Maneuver	654	-	-	-	-	-
Stage 1	777	-	-	-	-	-
Stage 2	899	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10.1	0.4		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1298	-	722	-	-	
HCM Lane V/C Ratio	0.005	-	0.015	-	-	
HCM Control Delay (s)	7.8	-	10.1	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

Intersection						
Int Delay, s/veh	2.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↱		↱	↑↑	↱	↱
Traffic Vol, veh/h	991	224	34	318	79	21
Future Vol, veh/h	991	224	34	318	79	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	100	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1077	243	37	346	86	23
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1320	0	1446	660
Stage 1	-	-	-	-	1199	-
Stage 2	-	-	-	-	247	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	519	-	122	406
Stage 1	-	-	-	-	248	-
Stage 2	-	-	-	-	771	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	519	-	113	406
Mov Cap-2 Maneuver	-	-	-	-	204	-
Stage 1	-	-	-	-	248	-
Stage 2	-	-	-	-	716	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		1.2		30.6	
HCM LOS	D					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	204	406	-	-	519	-
HCM Lane V/C Ratio	0.421	0.056	-	-	0.071	-
HCM Control Delay (s)	34.9	14.4	-	-	12.5	-
HCM Lane LOS	D	B	-	-	B	-
HCM 95th %tile Q(veh)	1.9	0.2	-	-	0.2	-

Intersection												
Int Delay, s/veh	35.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	163	1778	93	20	1567	16	3	0	31	6	2	126
Future Vol, veh/h	163	1778	93	20	1567	16	3	0	31	6	2	126
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	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	177	1933	101	22	1703	17	3	0	34	7	2	137

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1720	0	0	2034	0	0	3235	4102	1017	3068	4135	852
Stage 1	-	-	-	-	-	-	2338	2338	-	1747	1747	-
Stage 2	-	-	-	-	-	-	897	1764	-	1321	2388	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	364	-	-	274	-	-	4	2	235	~ 5	~ 2	303
Stage 1	-	-	-	-	-	-	37	69	-	89	138	-
Stage 2	-	-	-	-	-	-	301	136	-	165	65	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	364	-	-	274	-	-	-	1	235	~ 3	~ 1	303
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	1	-	~ 3	~ 1	-
Stage 1	-	-	-	-	-	-	19	35	-	46	127	-
Stage 2	-	-	-	-	-	-	149	125	-	73	33	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.9	0.2		\$ 976.5
HCM LOS			-	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	235	364	-	-	274	-	-	3	53
HCM Lane V/C Ratio	-	0.143	0.487	-	-	0.079	-	-	2.174	2.625
HCM Control Delay (s)	-	22.9	23.9	-	-	19.3	-	-	\$ 2584.3	\$ 901.1
HCM Lane LOS	-	C	C	-	-	C	-	-	F	F
HCM 95th %tile Q(veh)	-	0.5	2.6	-	-	0.3	-	-	1.8	14.4

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

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	179	130	0
Future Vol, veh/h	0	0	0	179	130	0
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	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	195	141	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	336	141	141	0	-	0
Stage 1	141	-	-	-	-	-
Stage 2	195	-	-	-	-	-
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	659	907	1442	-	-	-
Stage 1	886	-	-	-	-	-
Stage 2	838	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	659	907	1442	-	-	-
Mov Cap-2 Maneuver	693	-	-	-	-	-
Stage 1	886	-	-	-	-	-
Stage 2	838	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1442	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	2	2	213	131	2
Future Vol, veh/h	4	2	2	213	131	2
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	-	-	-
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	4	2	2	232	142	2
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	379	143	144	0	-	0
Stage 1	143	-	-	-	-	-
Stage 2	236	-	-	-	-	-
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	623	905	1438	-	-	-
Stage 1	884	-	-	-	-	-
Stage 2	803	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	622	905	1438	-	-	-
Mov Cap-2 Maneuver	665	-	-	-	-	-
Stage 1	883	-	-	-	-	-
Stage 2	803	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10	0.1		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1438	-	729	-	-	
HCM Lane V/C Ratio	0.002	-	0.009	-	-	
HCM Control Delay (s)	7.5	-	10	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

Intersection						
Int Delay, s/veh	3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↱		↱	↑↑	↱	↱
Traffic Vol, veh/h	471	119	24	624	152	74
Future Vol, veh/h	471	119	24	624	152	74
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	100	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	512	129	26	678	165	80
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	641	0	968	321
Stage 1	-	-	-	-	577	-
Stage 2	-	-	-	-	391	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	939	-	251	675
Stage 1	-	-	-	-	525	-
Stage 2	-	-	-	-	653	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	939	-	244	675
Mov Cap-2 Maneuver	-	-	-	-	372	-
Stage 1	-	-	-	-	525	-
Stage 2	-	-	-	-	635	-
Approach	EB	WB	NB			
HCM Control Delay, s	0	0.3	18.6			
HCM LOS	C					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	372	675	-	-	939	-
HCM Lane V/C Ratio	0.444	0.119	-	-	0.028	-
HCM Control Delay (s)	22.2	11.1	-	-	8.9	-
HCM Lane LOS	C	B	-	-	A	-
HCM 95th %tile Q(veh)	2.2	0.4	-	-	0.1	-

2025 Opening Year with Project Traffic Analysis

Intersection												
Int Delay, s/veh	30.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	151	1171	45	8	1100	18	12	3	10	6	7	231
Future Vol, veh/h	151	1171	45	8	1100	18	12	3	10	6	7	231
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	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	164	1273	49	9	1196	20	13	3	11	7	8	251

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1216	0	0	1322	0	0	2246	2860	661	2180	2864	598
Stage 1	-	-	-	-	-	-	1626	1626	-	1214	1214	-
Stage 2	-	-	-	-	-	-	620	1234	-	966	1650	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	569	-	-	519	-	-	23	17	405	26	16	445
Stage 1	-	-	-	-	-	-	106	159	-	193	253	-
Stage 2	-	-	-	-	-	-	442	247	-	273	155	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	569	-	-	519	-	-	~ 4	12	405	16	11	445
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 4	12	-	16	11	-
Stage 1	-	-	-	-	-	-	75	113	-	137	249	-
Stage 2	-	-	-	-	-	-	183	243	-	184	110	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.5	0.1	\$ 1339.9	198.5
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	4	47	569	-	-	519	-	-	16	206
HCM Lane V/C Ratio	3.261	0.301	0.288	-	-	0.017	-	-	0.408	1.256
HCM Control Delay (s)	\$ 2670.4	111.7	13.9	-	-	12.1	-	-	\$ 339.7	194.9
HCM Lane LOS	F	F	B	-	-	B	-	-	F	F
HCM 95th %tile Q(veh)	2.8	1	1.2	-	-	0.1	-	-	1.1	13.7

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

Intersection						
Int Delay, s/veh	1.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	23	24	138	249	10
Future Vol, veh/h	10	23	24	138	249	10
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	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	25	26	150	271	11
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	479	277	282	0	-	0
Stage 1	277	-	-	-	-	-
Stage 2	202	-	-	-	-	-
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	545	762	1280	-	-	-
Stage 1	770	-	-	-	-	-
Stage 2	832	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	534	762	1280	-	-	-
Mov Cap-2 Maneuver	603	-	-	-	-	-
Stage 1	755	-	-	-	-	-
Stage 2	832	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10.4	1.2		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1280	-	706	-	-	
HCM Lane V/C Ratio	0.02	-	0.051	-	-	
HCM Control Delay (s)	7.9	-	10.4	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-	

Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	26	26	114	248	20
Future Vol, veh/h	17	26	26	114	248	20
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	-	-	-
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	18	28	28	124	270	22
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	461	281	292	0	-	0
Stage 1	281	-	-	-	-	-
Stage 2	180	-	-	-	-	-
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	559	758	1270	-	-	-
Stage 1	767	-	-	-	-	-
Stage 2	851	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	547	758	1270	-	-	-
Mov Cap-2 Maneuver	610	-	-	-	-	-
Stage 1	750	-	-	-	-	-
Stage 2	851	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10.6	1.5		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1270	-	692	-	-	
HCM Lane V/C Ratio	0.022	-	0.068	-	-	
HCM Control Delay (s)	7.9	-	10.6	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-	

Intersection								
Int Delay, s/veh	2.8							
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑↱		↱	↑↑	↱	↱		
Traffic Vol, veh/h	991	241	41	318	95	28		
Future Vol, veh/h	991	241	41	318	95	28		
Conflicting Peds, #/hr	0	0	0	0	0	0		
Sign Control	Free	Free	Free	Free	Stop	Stop		
RT Channelized	-	None	-	None	-	None		
Storage Length	-	-	100	-	100	0		
Veh in Median Storage, #	0	-	-	0	0	-		
Grade, %	0	-	-	0	0	-		
Peak Hour Factor	92	92	92	92	92	92		
Heavy Vehicles, %	2	2	2	2	2	2		
Mvmt Flow	1077	262	45	346	103	30		
Major/Minor	Major1		Major2		Minor1			
Conflicting Flow All	0	0	1339	0	1471	670		
Stage 1	-	-	-	-	1208	-		
Stage 2	-	-	-	-	263	-		
Critical Hdwy	-	-	4.14	-	6.84	6.94		
Critical Hdwy Stg 1	-	-	-	-	5.84	-		
Critical Hdwy Stg 2	-	-	-	-	5.84	-		
Follow-up Hdwy	-	-	2.22	-	3.52	3.32		
Pot Cap-1 Maneuver	-	-	511	-	118	399		
Stage 1	-	-	-	-	246	-		
Stage 2	-	-	-	-	757	-		
Platoon blocked, %	-	-		-				
Mov Cap-1 Maneuver	-	-	511	-	108	399		
Mov Cap-2 Maneuver	-	-	-	-	200	-		
Stage 1	-	-	-	-	246	-		
Stage 2	-	-	-	-	690	-		
Approach	EB		WB		NB			
HCM Control Delay, s	0		1.5		34.9			
HCM LOS	D							
Minor Lane/Major Mvmt	NBLn1		NBLn2		EBT	EBR	WBL	WBT
Capacity (veh/h)	200		399		-	-	511	-
HCM Lane V/C Ratio	0.516		0.076		-	-	0.087	-
HCM Control Delay (s)	40.8		14.8		-	-	12.7	-
HCM Lane LOS	E		B		-	-	B	-
HCM 95th %tile Q(veh)	2.6		0.2		-	-	0.3	-

Intersection												
Int Delay, s/veh	1.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	204	1778	93	20	1567	20	3	4	31	10	6	169
Future Vol, veh/h	204	1778	93	20	1567	20	3	4	31	10	6	169
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	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	222	1933	101	22	1703	22	3	4	34	11	7	184
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1725	0	0	2034	0	0	3327	4197	1017	3160	4225	852
Stage 1	-	-	-	-	-	-	2428	2428	-	1747	1747	-
Stage 2	-	-	-	-	-	-	899	1769	-	1413	2478	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	362	-	-	274	-	-	~ 3	~ 2	235	~ 4	~ 2	303
Stage 1	-	-	-	-	-	-	33	62	-	89	138	-
Stage 2	-	-	-	-	-	-	300	135	-	145	58	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	362	-	-	274	-	-	-	~ 1	235	-	~ 1	303
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	~ 1	-	-	~ 1	-
Stage 1	-	-	-	-	-	-	13	24	-	34	127	-
Stage 2	-	-	-	-	-	-	103	124	-	39	22	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	2.9			0.2								
HCM LOS							-			-		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	-	8	362	-	-	274	-	-	-	27		
HCM Lane V/C Ratio	-	4.755	0.613	-	-	0.079	-	-	-	7.045		
HCM Control Delay (s)	\$ 2594.9		29.5	-	-	19.3	-	-	-	\$ 3006		
HCM Lane LOS	-	F	D	-	-	C	-	-	-	F		
HCM 95th %tile Q(veh)	-	6.1	3.9	-	-	0.3	-	-	-	23.4		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s				+: Computation Not Defined				*: All major volume in platoon		

Intersection						
Int Delay, s/veh	1.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	27	26	201	154	11
Future Vol, veh/h	12	27	26	201	154	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	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	13	29	28	218	167	12
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	447	173	179	0	-	0
Stage 1	173	-	-	-	-	-
Stage 2	274	-	-	-	-	-
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	569	871	1397	-	-	-
Stage 1	857	-	-	-	-	-
Stage 2	772	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	558	871	1397	-	-	-
Mov Cap-2 Maneuver	620	-	-	-	-	-
Stage 1	840	-	-	-	-	-
Stage 2	772	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9.9	0.9		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1397	-	775	-	-	
HCM Lane V/C Ratio	0.02	-	0.055	-	-	
HCM Control Delay (s)	7.6	-	9.9	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-	

Intersection						
Int Delay, s/veh	1.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	26	24	225	142	17
Future Vol, veh/h	20	26	24	225	142	17
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	-	-	-
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	22	28	26	245	154	18
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	460	163	172	0	-	0
Stage 1	163	-	-	-	-	-
Stage 2	297	-	-	-	-	-
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	559	882	1405	-	-	-
Stage 1	866	-	-	-	-	-
Stage 2	754	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	548	882	1405	-	-	-
Mov Cap-2 Maneuver	612	-	-	-	-	-
Stage 1	850	-	-	-	-	-
Stage 2	754	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10.2	0.7		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1405	-	740	-	-	
HCM Lane V/C Ratio	0.019	-	0.068	-	-	
HCM Control Delay (s)	7.6	-	10.2	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-	

Intersection						
Int Delay, s/veh	3.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↱		↱	↑↑	↱	↱
Traffic Vol, veh/h	471	138	31	624	172	82
Future Vol, veh/h	471	138	31	624	172	82
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	100	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	512	150	34	678	187	89
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	662	0	994	331
Stage 1	-	-	-	-	587	-
Stage 2	-	-	-	-	407	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	922	-	242	665
Stage 1	-	-	-	-	519	-
Stage 2	-	-	-	-	641	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	922	-	233	665
Mov Cap-2 Maneuver	-	-	-	-	362	-
Stage 1	-	-	-	-	519	-
Stage 2	-	-	-	-	617	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.4		20.6	
HCM LOS	C					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	362	665	-	-	922	-
HCM Lane V/C Ratio	0.516	0.134	-	-	0.037	-
HCM Control Delay (s)	25.1	11.3	-	-	9.1	-
HCM Lane LOS	D	B	-	-	A	-
HCM 95th %tile Q(veh)	2.8	0.5	-	-	0.1	-

2030 Future Year Traffic Analysis

Intersection												
Int Delay, s/veh	30.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	126	1293	49	9	1214	15	13	0	11	4	5	214
Future Vol, veh/h	126	1293	49	9	1214	15	13	0	11	4	5	214
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	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	137	1405	53	10	1320	16	14	0	12	4	5	233
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1336	0	0	1458	0	0	2389	3062	729	2317	3072	660
Stage 1	-	-	-	-	-	-	1706	1706	-	1340	1340	-
Stage 2	-	-	-	-	-	-	683	1356	-	977	1732	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	512	-	-	460	-	-	18	12	365	20	12	406
Stage 1	-	-	-	-	-	-	95	145	-	161	220	-
Stage 2	-	-	-	-	-	-	405	216	-	269	141	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	512	-	-	460	-	-	~ 3	9	365	15	9	406
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 3	9	-	15	9	-
Stage 1	-	-	-	-	-	-	70	106	-	118	215	-
Stage 2	-	-	-	-	-	-	165	211	-	191	103	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.3			0.1			\$ 2086.9			170.9		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	3 365		512	-	-	460	-	-	15	202		
HCM Lane V/C Ratio	4.71 0.033		0.267	-	-	0.021	-	-	0.29	1.178		
HCM Control Delay (s)	\$ 3839.9 15.2		14.6	-	-	13	-	-	\$ 323.6	168.1		
HCM Lane LOS	F C		B	-	-	B	-	-	F	F		
HCM 95th %tile Q(veh)	3.1 0.1		1.1	-	-	0.1	-	-	0.8	12		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s				+: Computation Not Defined				*: All major volume in platoon		

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	130	253	0
Future Vol, veh/h	0	0	0	130	253	0
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	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	141	275	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	416	275	275	0	-	0
Stage 1	275	-	-	-	-	-
Stage 2	141	-	-	-	-	-
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	593	764	1288	-	-	-
Stage 1	771	-	-	-	-	-
Stage 2	886	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	593	764	1288	-	-	-
Mov Cap-2 Maneuver	642	-	-	-	-	-
Stage 1	771	-	-	-	-	-
Stage 2	886	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1288	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	7	7	115	263	7
Future Vol, veh/h	5	7	7	115	263	7
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	-	-	-
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	5	8	8	125	286	8
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	431	290	294	0	-	0
Stage 1	290	-	-	-	-	-
Stage 2	141	-	-	-	-	-
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	581	749	1268	-	-	-
Stage 1	759	-	-	-	-	-
Stage 2	886	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	578	749	1268	-	-	-
Mov Cap-2 Maneuver	630	-	-	-	-	-
Stage 1	754	-	-	-	-	-
Stage 2	886	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10.3	0.5		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1268	-	694	-	-	
HCM Lane V/C Ratio	0.006	-	0.019	-	-	
HCM Control Delay (s)	7.9	-	10.3	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0	-	0.1	-	-	

Intersection						
Int Delay, s/veh	2.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↱		↱	↑↑	↱	↱
Traffic Vol, veh/h	1094	247	38	351	87	23
Future Vol, veh/h	1094	247	38	351	87	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	100	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1189	268	41	382	95	25
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1457	0	1596	729
Stage 1	-	-	-	-	1323	-
Stage 2	-	-	-	-	273	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	460	-	97	365
Stage 1	-	-	-	-	213	-
Stage 2	-	-	-	-	748	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	460	-	~ 88	365
Mov Cap-2 Maneuver	-	-	-	-	175	-
Stage 1	-	-	-	-	213	-
Stage 2	-	-	-	-	681	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		1.3		40.8	
HCM LOS	E					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	175	365	-	-	460	-
HCM Lane V/C Ratio	0.54	0.068	-	-	0.09	-
HCM Control Delay (s)	47.4	15.6	-	-	13.6	-
HCM Lane LOS	E	C	-	-	B	-
HCM 95th %tile Q(veh)	2.8	0.2	-	-	0.3	-
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Intersection												
Int Delay, s/veh	17.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	180	1963	102	22	1730	17	4	0	34	7	3	139
Future Vol, veh/h	180	1963	102	22	1730	17	4	0	34	7	3	139
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	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	196	2134	111	24	1880	18	4	0	37	8	3	151
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1898	0	0	2245	0	0	3572	4528	1123	3387	4565	940
Stage 1	-	-	-	-	-	-	2582	2582	-	1928	1928	-
Stage 2	-	-	-	-	-	-	990	1946	-	1459	2637	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	310	-	-	227	-	-	~ 2	1	200	~ 3	~ 1	265
Stage 1	-	-	-	-	-	-	26	51	-	68	112	-
Stage 2	-	-	-	-	-	-	264	110	-	136	48	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	310	-	-	227	-	-	0	0	200	~ 1	0	265
Mov Cap-2 Maneuver	-	-	-	-	-	-	0	0	-	~ 1	0	-
Stage 1	-	-	-	-	-	-	10	19	-	25	100	-
Stage 2	-	-	-	-	-	-	98	98	-	41	18	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	2.8			0.3						\$ 452.6		
HCM LOS							-			F		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	-	200	310	-	-	227	-	-	-	1	265	
HCM Lane V/C Ratio	-	0.185	0.631	-	-	0.105	-	-	-	7.609	0.582	
HCM Control Delay (s)	-	27	34.5	-	-	22.7	-	-	-	\$ 8904.7	35.9	
HCM Lane LOS	-	D	D	-	-	C	-	-	-	F	E	
HCM 95th %tile Q(veh)	-	0.7	4	-	-	0.3	-	-	-	2.2	3.4	
Notes												
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon												

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	198	144	0
Future Vol, veh/h	0	0	0	198	144	0
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	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	215	157	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	372	157	157	0	-	0
Stage 1	157	-	-	-	-	-
Stage 2	215	-	-	-	-	-
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	629	889	1423	-	-	-
Stage 1	871	-	-	-	-	-
Stage 2	821	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	629	889	1423	-	-	-
Mov Cap-2 Maneuver	672	-	-	-	-	-
Stage 1	871	-	-	-	-	-
Stage 2	821	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1423	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	3	3	235	145	3
Future Vol, veh/h	5	3	3	235	145	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	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	5	3	3	255	158	3
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	421	160	161	0	-	0
Stage 1	160	-	-	-	-	-
Stage 2	261	-	-	-	-	-
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	589	885	1418	-	-	-
Stage 1	869	-	-	-	-	-
Stage 2	783	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	588	885	1418	-	-	-
Mov Cap-2 Maneuver	641	-	-	-	-	-
Stage 1	867	-	-	-	-	-
Stage 2	783	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10.1	0.1		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1418	-	715	-	-	
HCM Lane V/C Ratio	0.002	-	0.012	-	-	
HCM Control Delay (s)	7.5	-	10.1	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

Intersection						
Int Delay, s/veh	3.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↱		↱	↑↑	↱	↱
Traffic Vol, veh/h	520	131	26	689	168	82
Future Vol, veh/h	520	131	26	689	168	82
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	100	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	565	142	28	749	183	89
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	707	0	1067	354
Stage 1	-	-	-	-	636	-
Stage 2	-	-	-	-	431	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	887	-	217	642
Stage 1	-	-	-	-	489	-
Stage 2	-	-	-	-	623	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	887	-	210	642
Mov Cap-2 Maneuver	-	-	-	-	341	-
Stage 1	-	-	-	-	489	-
Stage 2	-	-	-	-	603	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0.3		22		
HCM LOS	C					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	341	642	-	-	887	-
HCM Lane V/C Ratio	0.536	0.139	-	-	0.032	-
HCM Control Delay (s)	27.1	11.5	-	-	9.2	-
HCM Lane LOS	D	B	-	-	A	-
HCM 95th %tile Q(veh)	3	0.5	-	-	0.1	-

2030 Future Year with Project Traffic Analysis

Intersection												
Int Delay, s/veh	44.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	163	1293	49	9	1214	19	13	3	11	7	8	251
Future Vol, veh/h	163	1293	49	9	1214	19	13	3	11	7	8	251
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	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	177	1405	53	10	1320	21	14	3	12	8	9	273
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1341	0	0	1458	0	0	2471	3147	729	2398	3152	660
Stage 1	-	-	-	-	-	-	1786	1786	-	1340	1340	-
Stage 2	-	-	-	-	-	-	685	1361	-	1058	1812	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	510	-	-	460	-	-	15	11	365	17	11	406
Stage 1	-	-	-	-	-	-	84	132	-	161	220	-
Stage 2	-	-	-	-	-	-	404	215	-	240	128	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	510	-	-	460	-	-	-	7	365	8	~ 7	406
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	7	-	8	~ 7	-
Stage 1	-	-	-	-	-	-	55	86	-	105	215	-
Stage 2	-	-	-	-	-	-	124	210	-	146	84	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.7			0.1						\$ 497.8		
HCM LOS							-			F		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	-	31	510	-	-	460	-	-	8	147		
HCM Lane V/C Ratio	-	0.491	0.347	-	-	0.021	-	-	0.951	1.915		
HCM Control Delay (s)	-	203.5	15.8	-	-	13	-	-	\$ 883	\$ 487.4		
HCM Lane LOS	-	F	C	-	-	B	-	-	F	F		
HCM 95th %tile Q(veh)	-	1.6	1.5	-	-	0.1	-	-	1.7	21.7		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s				+: Computation Not Defined				*: All major volume in platoon		

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	23	24	150	273	10
Future Vol, veh/h	10	23	24	150	273	10
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	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	25	26	163	297	11
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	518	303	308	0	-	0
Stage 1	303	-	-	-	-	-
Stage 2	215	-	-	-	-	-
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	518	737	1253	-	-	-
Stage 1	749	-	-	-	-	-
Stage 2	821	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	507	737	1253	-	-	-
Mov Cap-2 Maneuver	583	-	-	-	-	-
Stage 1	733	-	-	-	-	-
Stage 2	821	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10.6	1.1		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1253	-	682	-	-	
HCM Lane V/C Ratio	0.021	-	0.053	-	-	
HCM Control Delay (s)	7.9	-	10.6	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-	

Intersection						
Int Delay, s/veh	1.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	18	27	27	125	273	21
Future Vol, veh/h	18	27	27	125	273	21
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	-	-	-
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	20	29	29	136	297	23

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	503	309	320
Stage 1	309	-	-
Stage 2	194	-	-
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	528	731	1240
Stage 1	745	-	-
Stage 2	839	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	516	731	1240
Mov Cap-2 Maneuver	588	-	-
Stage 1	728	-	-
Stage 2	839	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.8	1.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1240	-	666	-	-
HCM Lane V/C Ratio	0.024	-	0.073	-	-
HCM Control Delay (s)	8	-	10.8	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection						
Int Delay, s/veh	3.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↱		↱	↑↑	↱	↱
Traffic Vol, veh/h	1094	264	45	351	103	30
Future Vol, veh/h	1094	264	45	351	103	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	100	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1189	287	49	382	112	33
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1476	0	1622	738
Stage 1	-	-	-	-	1333	-
Stage 2	-	-	-	-	289	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	452	-	~ 94	360
Stage 1	-	-	-	-	211	-
Stage 2	-	-	-	-	735	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	452	-	~ 84	360
Mov Cap-2 Maneuver	-	-	-	-	172	-
Stage 1	-	-	-	-	211	-
Stage 2	-	-	-	-	656	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		1.6		48.8	
HCM LOS	E					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	172	360	-	-	452	-
HCM Lane V/C Ratio	0.651	0.091	-	-	0.108	-
HCM Control Delay (s)	58.3	16	-	-	13.9	-
HCM Lane LOS	F	C	-	-	B	-
HCM 95th %tile Q(veh)	3.7	0.3	-	-	0.4	-
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Intersection												
Int Delay, s/veh	33.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	221	1963	102	22	1730	21	4	4	34	11	7	182
Future Vol, veh/h	221	1963	102	22	1730	21	4	4	34	11	7	182
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	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	240	2134	111	24	1880	23	4	4	37	12	8	198
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1903	0	0	2245	0	0	3662	4621	1123	3477	4653	940
Stage 1	-	-	-	-	-	-	2670	2670	-	1928	1928	-
Stage 2	-	-	-	-	-	-	992	1951	-	1549	2725	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	309	-	-	227	-	-	~ 2	~ 1	200	~ 2	~ 1	265
Stage 1	-	-	-	-	-	-	23	46	-	68	112	-
Stage 2	-	-	-	-	-	-	264	109	-	119	43	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	309	-	-	227	-	-	0	0	200	~ 1	0	265
Mov Cap-2 Maneuver	-	-	-	-	-	-	0	0	-	~ 1	0	-
Stage 1	-	-	-	-	-	-	5	10	-	15	100	-
Stage 2	-	-	-	-	-	-	55	97	-	12	10	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	4.6			0.3						\$ 661.8		
HCM LOS							-			F		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	-	200	309	-	-	227	-	-	1	265		
HCM Lane V/C Ratio	-	0.207	0.777	-	-	0.105	-	-	11.957	0.775		
HCM Control Delay (s)	-	27.6	47.7	-	-	22.7	-	-	\$ 11114.7	53.4		
HCM Lane LOS	-	D	E	-	-	C	-	-	F	F		
HCM 95th %tile Q(veh)	-	0.8	6.1	-	-	0.3	-	-	2.9	5.8		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s				+: Computation Not Defined				*: All major volume in platoon		

Intersection						
Int Delay, s/veh	1.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	27	26	220	168	11
Future Vol, veh/h	12	27	26	220	168	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	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	13	29	28	239	183	12
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	484	189	195	0	-	0
Stage 1	189	-	-	-	-	-
Stage 2	295	-	-	-	-	-
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	542	853	1378	-	-	-
Stage 1	843	-	-	-	-	-
Stage 2	755	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	531	853	1378	-	-	-
Mov Cap-2 Maneuver	601	-	-	-	-	-
Stage 1	826	-	-	-	-	-
Stage 2	755	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10	0.8		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1378	-	756	-	-	
HCM Lane V/C Ratio	0.021	-	0.056	-	-	
HCM Control Delay (s)	7.7	-	10	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-	

Intersection						
Int Delay, s/veh	1.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	21	27	25	247	156	18
Future Vol, veh/h	21	27	25	247	156	18
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	-	-	-
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	23	29	27	268	170	20
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	502	180	190	0	-	0
Stage 1	180	-	-	-	-	-
Stage 2	322	-	-	-	-	-
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	529	863	1384	-	-	-
Stage 1	851	-	-	-	-	-
Stage 2	735	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	518	863	1384	-	-	-
Mov Cap-2 Maneuver	590	-	-	-	-	-
Stage 1	834	-	-	-	-	-
Stage 2	735	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10.4	0.7		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1384	-	718	-	-	
HCM Lane V/C Ratio	0.02	-	0.073	-	-	
HCM Control Delay (s)	7.7	-	10.4	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-	

Intersection						
Int Delay, s/veh	4.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↱		↱	↑↑	↱	↱
Traffic Vol, veh/h	520	150	33	689	188	90
Future Vol, veh/h	520	150	33	689	188	90
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	100	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	565	163	36	749	204	98
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	728	0	1094	364
Stage 1	-	-	-	-	647	-
Stage 2	-	-	-	-	447	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	871	-	208	633
Stage 1	-	-	-	-	483	-
Stage 2	-	-	-	-	611	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	871	- ~	199	633
Mov Cap-2 Maneuver	-	-	-	-	331	-
Stage 1	-	-	-	-	483	-
Stage 2	-	-	-	-	586	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.4		25.4	
HCM LOS	D					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	331	633	-	-	871	-
HCM Lane V/C Ratio	0.617	0.155	-	-	0.041	-
HCM Control Delay (s)	31.9	11.7	-	-	9.3	-
HCM Lane LOS	D	B	-	-	A	-
HCM 95th %tile Q(veh)	3.9	0.5	-	-	0.1	-
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

THE ECONOMIC IMPACT OF HOTEL DEVELOPMENT BY: ALAN SUZUKI
Presented by: Alan Suzuki, Senior Consultant – Pinnacle Advisory Group

Hotels are considered an important economic component to any community. In some cases, cities and municipalities will offer incentives in order to stimulate hotel development. These incentives can be in the form of tax breaks, favorable land leases, or assistance with financing. Prior to establishing incentives for hotel development, a city or municipality should conduct an economic impact study to estimate the economic benefits that results from the development. This assessment should evaluate the economic benefits of the initial investment both in the short term and over the long-term. The economic impact to local and regional economies from hotel development is typically separated into four categories: direct, fiscal, indirect, and induced.

Direct Impact

Direct impact includes all projected revenues that will be generated from consumers at the new hotel. This will include all rooms revenues, food and beverage revenues from restaurants and banqueting, as well as other potential revenue sources such as spa or parking. Direct impact also includes total payroll paid out to employees hired at the hotel as well as all payroll paid out to temporary construction workers who construct the hotel.

Fiscal Impact

Fiscal impact refers to all federal, state, and local taxes that will be collected from the development and operations of the new hotel. Taxes include all sales taxes collected in association with the hotel generated revenues, as well as all payroll related taxes collected from full-time hotel employees and temporary construction workers. Local governments will also collect new property taxes from the operation of the hotel. Many local governments will also collect revenues through lodging taxes.

Indirect Impact

In addition to local governments and hotel owners/employees, contractors and suppliers to a newly developed hotel will also benefit. Indirect impact includes all jobs and income generated by businesses that supply goods and services to the hotel. Examples of businesses that will indirectly benefit from the development of a hotel include suppliers of rooms related goods (housekeeping supplies, room amenities, etc), telecommunication vendors (internet, cable, etc.), utility companies, food and beverage suppliers, and other hotel related vendors.

Induced Impact

Induced impact refers to economic effects generated when employees (full-time and temporary) and suppliers re-spend their wages on local consumer purchases. For example, an employee may purchase gas for their car on their way home from work.

Calculation of Impact

Pinnacle Advisory Group has conducted several economic impact studies as a result of hotel development. In most cases, direct and fiscal impacts can be calculated with relative confidence and accuracy. A hotel pro-forma will calculate the revenues in direct impact, while full-time and temporary payroll projections can be calculated from the preparation of staffing schedules combined with knowledge of local wages.

Indirect and induced impact, on the other hand involves a certain degree of subjectivity. While expenditures of goods and services can be estimated, it is difficult to accurately calculate how much of those expenditures will be generated from contractors and suppliers from the local area. Induced impact, which results from the re-spending of wages on local consumer products, is also difficult to estimate. Several complex models have been created by various economists that recommend multipliers that can be applied to total direct impact dollars. In general, depending on several factors including the size and economic diversity of the regional economy, multipliers typically range between 1.1 to 2 of total direct impacts.

A hotel's impact to the local community is often more than just job creation and additional tax revenue. When all economic considerations are accounted for, the calculation of total direct, fiscal, indirect, and induced impact can give the public a more universal understanding of a hotel development's impact.



Kaysville City Planning Commission Meeting Minutes
August 10, 2023

The Planning Commission meeting was held on Thursday, August 10, 2023 at 7:00 pm in the Kaysville City Hall located at 23 East Center Street.

Planning Commission Members in Attendance: Chair Steve Lyon, Commissioners Toby Barrus, Debora Shepard, Mike Packer, Wilf Sommerkorn and Erin Young

Staff Present: Annemarie Plaizier and Melinda Greenwood

Public Attendees: Phil Holland, Trek Loveridge, and City Councilmember Abbi Hunt

1-OPENING

Chair Steve Lyon opened the meeting by welcoming all in attendance to the August 10, 2023 Planning Commission meeting.

2- APPROVAL OF THE MINUTES FROM THE JULY 13, 2023 PLANNING COMMISSION MEETING

Commissioner Packer made a motion to approve the July 13, 2023 minutes. The motion was seconded by Commissioner Young and the vote was unanimous in favor of the motion (6-0).

3-CONSIDERATION OF A REZONE APPLICATION FROM PHIL HOLLAND FOR 521 WEST 350 NORTH FROM GENERAL COMMERCIAL TO MIXED USE ZONING DISTRICT OVERLAY (CONTINUED FROM THE JULY 13, 2023 MEETING)

The item was introduced by Melinda Greenwood.

She explained the proposed mixed-use project is a little over 6 acres at 521 West 350 North. Based on the request from the Planning Commission to add density, the applicant has proposed 160 units which is 28 more from the 132 initially proposed at the July 13, 2023 meeting. She shared how this project is supported by the Kaysville 2022 General Plan. Ms. Greenwood explained the changes which had been made to the project based on the feedback from the Commissioners. She continued to explain there were no changes made to the hotel, office or retail space, but the two apartment buildings have increased from three stories to four and the unit mix was 132 units and the new proposal is 80 units per building, consisting of 8 studio apartments, 48 one-bedroom units and 24 two-bedroom units. The footprint of both apartment buildings changes so additional parking could be added. Mr. Holland also provided an updated landscape plan showing a reduction of some of the turf area and more trees being provided for shade.

A new parking study was submitted by Mr. Holland and the outcome of the study shows that there is still adequate parking with the 302 stalls provided.

Ms. Greenwood said that 40 public hearing notices were mailed in June 2023 and a Public Hearing was held on July 13, 2023. There were 2 comments received with concerns of utilities, rental rates, parking, traffic and desirability of the project. Another handful of emails came in before the meeting and their main concerns were parking and traffic. Ms. Greenwood also said the project has been reviewed by our Power and Public Works Departments and there were no concerns regarding utility capacity. There was a question regarding impact fees from the project and Ms. Greenwood said the roadway impact fees would be nearly \$400,000, and city could use that funding to accommodate some traffic concerns with those impact fees. She also said that Kaysville City doesn't own the right of way between 200 North and I-15 but UDOT is working on a project to add double left hand turns in this area. The additional left turn lane will be a short-term fix that will alleviate some congestion in the area until UDOT does a full interchange construction project. One of the mitigation efforts that will most likely be installed is a raised median that will restrict people from turning left onto 400 West.

Ms. Greenwood said that staff is recommending approval of the Development Agreement and the rezone of 521 West 350 North and that Mr. Holland, the applicant was in attendance and happy to answer any questions.

Commissioner Sommerkorn asked if the Mixed-Use Zone has a height limit and would the height be modified with the Development Agreement.

Ms. Greenwood said that General Commercial zones and Light Industrial zones allow for 35' heights on buildings, however with a Conditional Use Permit anything over 35' can be requested. The Mixed-Use zone also has a height limitation of 35' for buildings that are not fully commercial buildings. Buildings that are full commercial have a height limitation of 50', however, City Council can adopt any standards outside of those in the code that they feel are appropriate.

Commissioner Sommerkorn asked if the parking requirements would be modified in the Development Agreement. He reiterated that while it is a significant reduction in stalls, the parking experts seemed to think it would be fine.

Ms. Greenwood said standards for parking were included in the code is to set a benchmark for those looking into mixed use zoning, so they have an idea of where they would need to be with parking. It also allows for some flexibility with City Council for each application. In a community that does not have a lot of transit options, a reduction of 24% is a significant reduction.

Commissioner Sommerkorn said parking is an issue and most projects are over-parked. He said projects which are under-parked are a real problem because it forces cars into other neighborhoods or other areas to park and in this instance, there isn't really a lot of space for cars to go.

Commissioner Shepard said that you almost need 350-370 overnight parking for both the hotel and the apartment building and even by doing a 10% reduction they would still need 357 stalls. She said to only have 302 stalls feels like the project is under-parked. It would make more of a difference if there were commercial uses where you would have more day parking.

Ms. Greenwood said that people are creatures of convenience and will park wherever is closer, even if it is on the street. The laws allow for people to park on the streets but with the project there isn't a lot of public streets for anyone to park on. It is important to consider the proximity of the commercial parking stalls to the apartments and guest parking for those in the apartments.

Mr. Holland approached the Commission and said the best way to determine the amount of parking needed is to get an expert to look at it. Mixed-Use zones are great because you don't need seas of parking. He referred to the parking analysis which shows he doesn't need more parking than what he is providing. Mr. Holland said some of the buildings had the footprint condensed on the apartment buildings to create additional landscaping area. The southeast building will be 45 feet tall. He also shared that there has been a shift in housing, affordability and variety. Many cities are saying this kind of housing is needed, and he feels this is the best location for it because it is close to transportation, shopping and in the future, there will be better opportunities for walkability for residents. Mr. Holland said he thinks this project is a great opportunity for Kaysville.

Commissioner Shepard asked Mr. Holland about the timeline for this project.

Mr. Holland said once the project receives approval, they will begin construction as soon as possible. The hotel and retail users are ready to get going and it will take 12-18 months to build.

Ms. Greenwood said that UDOT is aware of this project and will start restriping 200 North in from 400 West to the interchange in the next few weeks.

Commissioner Young said there is a lot of concern regarding traffic from the emails that were received by staff and the Commissioners. Other than traffic concerns, she feels this is the perfect place for this project to go, but she doesn't want to see a bad street get worse because of a lot of on-street parking. Commissioner Young said if the parking study was done by a reputable expert for the parking, then we should defer to them. She also said that oftentimes

these projects are the kind of thing that pushes other transit options because it creates a need for it.

Commissioner Shepard feels the project is under-parked because there is such a need for overnight parking. She would rather see a number of parking stalls at 325. Ms. Shepard asked Mr. Holland if the 11 or 12 stalls on the site plan located by the IHC office were included in his parking numbers.

Mr. Holland saying IHC owns the property and those spaces are not counted in the parking total.

Commissioner Shepard said that she would rather not remove the parking islands since the shade from the trees would help the project from being a heat island. Commissioner Shepard feels that 322 stalls with 114 for the hotel, accounting for one car per room would be appropriate and would be less than the 10% reduction.

Commissioner Sommerkorn suggested doing less apartments and more commercial would not necessarily make a difference with traffic. If more apartments were on Main Street, much of that traffic would end up on 200 North. He understands what the consultants are saying, what residents are saying and what Commissioners are saying, but noted this is a more self-contained mixed-use with no other areas to walk to.

Commissioner Lyon said we should consider more parking but that, the project is supported by the General Plan.

Mr. Holland said he is working with IHC to have a connector piece for a sidewalk and parking, but he cannot ensure that is something IHC will allow. He said that he bought everything from them except a half-acre, which is a vacant piece they may or may not use in future expansion. Mr. Holland told IHC there needs to be pedestrian access to go across properties and that he would be happy to take care of the improvements.

Mr. Holland also said that the conversation from the Planning Commission meeting on July 13th has shifted from adding more apartments and less parking to just having more parking. Mr. Holland said that he would rather cut down on unit types then add parking.

Commissioner Packer said that he feels more comfortable with the number of stalls and units from the previous plan and going up to 160 units made him nervous between parking and density. He said that if we have an issue with parking then one option could be to reduce the number of units.

Commissioner Lyon said Mr. Holland has done what we have asked him to do and if he could get the 11 parking spaces from IHC then this project is where it needs to be for density and parking.

Commissioner Young asked if including IHC stalls to the project could be added into the Development Agreement so by the time Mr. Holland is done constructing the project it would give him time to work things out with IHC.

Mr. Holland said that he doesn't want his project handcuffed to IHC's 11 parking stalls.

Commissioner Sommerkorn said if IHC is planning on expanding that would be more parking and wondered if Mr. Holland felt like there is any way to get a cross parking agreement to share parking between both projects.

Commissioner Barrus commented that he understands the concern and from an engineering perspective, you try to build to a maximum situation so you will always be over parked and believes that the parking study probably has the right number.

Commissioner Lyon said that this project is bringing in apartments, housing, commercial retail and is meeting our housing density requirements. It will help the city with economic development and there will be a generation shift with the people who live there. The developer has done their due diligence on this project and the Commissioners need to make the recommendation to go one way or another.

Commissioner Sommerkorn made the motion to recommend approval of the proposed MU rezone application for Phil Holland LLC at 521 West 350 North to the City Council and Commissioner Young seconded the motion. The vote was unanimous in favor of the motion (6-0).

4- CALL TO THE PUBLIC

No comments were made.

5- OTHER MATTERS THAT PROPERLY COME BEFORE THE PLANNING COMMISSION

Ms. Greenwood said we will get Commissioners registered for the APA Conference. She also said that the Utah League of Cities and Towns is holding their annual conference at the Salt Palace and that is another opportunity for the Commissioners to attend training sessions.

Commissioner Young mentioned the training opportunity with Get Healthy Utah and how it might cross sect with the Planning Commission. Commissioner Lyon said that the Davis County Health Department looks at this as well and presents at Healthy Utah.

Commissioner Sommerkorn mentioned the Utah Land Use Institute conference on October 24th

and 25th in Sandy.

Ms. Greenwood said grants for small area plans are due at the end of the month and hopefully she will be getting some submitted for grant funding for a small area plan for the City Center area. Commissioner Lyon offered to help write the grants.

6- ADJOURNMENT

Commissioner Barrus motioned to adjourn the meeting at 8:36 pm.

DRAFT

PLANNING COMMISSION STAFF REPORT

To: Kaysville City Planning Commission
From: Melinda Greenwood, Community Development Director
Date: July 7, 2023

Agenda Item #6: Public Hearing for a rezone application from Phil Holland for 521 West 350 North from General Commercial to Mixed Use Zoning District Overlay

Meeting Date	July 13, 2023
Application Type	Rezone
Applicant Owner	Phil Holland H Group Ventures LLC
Address Parcel ID Number	521 West 350 North 11-879-0002 and 11-879-0007
Lot Size	6.26 acres 272,685 ft ²
Current Use	Undeveloped
Current Zoning	GC General Commercial
Density Entitlement	NA
Requested Zoning	GC Mixed Use Overlay
Density Entitlement	Density Approved Through Development Agreement (132 units proposed)

1. BACKGROUND

The two subject properties combine to create a 6.26 acre (272,685 ft²) area bordered by I-15 to the west, Holmes Creek to the north and the new Taco Bell and upcoming Charlie's Car Wash to the east. The applicant has requested a rezone from GC General Commercial District to GC Mixed Use Zoning District Overlay (GC MU).

A mixed-use overlay is technically a rezone which adds in a residential use to the General Commercial (GC) zone. All MU projects require a development agreement upfront, which will solidify



details of the intended project, phasing and other details.

The proposed GC MU project includes a five total buildings, three of which will be commercial and consist of a hotel, office and a retail building. The other two buildings are 3-story apartments with 66 units each for a total of 132 residential units.

2. SURROUNDING LAND USE

When considering a zone change, a review and analysis of the existing character of the area is appropriate. The project parcels are located at 521 West 350 North and are found at the end of an existing cul-de-sac. The area currently includes a variety of businesses including healthcare, restaurants, fueling stations and other commercial services. The existing zoning and surrounding area characteristics are discussed in more detail in the bulleted list which follows.

- **Adjacent** – Directly adjacent to the subject property is I-15, Holmes Creek, Taco Bell, Charlie's Car Wash (which is under construction), Les Schwab Tire Center and an IHC clinic.
- **North** – Properties to the north are General Commercial.
- **South** – Directly south of the parcel is Les Schwab Tire Center, which is zoned General Commercial.
- **East** – Properties to the east are all zoned General Commercial.
- **West** – The property is bordered by Holmes Creek and I-15.

The rezone approval would not detrimentally impact the surround neighborhoods. Alternatively, based on the highly commercial nature of the area, the addition of residential apartments and hotel visitors would bring new customers and provide regular patrons which would augment existing and planned retail and commercial services.

3. 2022 GENERAL PLAN

The 2022 General Plan Future Land Use Map indicates the property is to be used as a mixed use development, so the proposed zone change is supported by 2022 General Plan.

Diving deeper into the 2022 General Plan, we see the rezone application and proposed project is supported by three of the guiding principles, including:

Enrich our city center and downtown - We will enhance our city center with commercial and mixed-use development and investing in streetscape and parking.

The project is located in the city center area, is a mixed use project and will provide opportunities for added commercial services.

Provide diverse housing options - We will work to preserve our existing neighborhoods while accommodating a full range of housing opportunities to meet the economic, lifestyle and life-cycle needs of our residents.

The project includes two apartment buildings with each building having 66 dwelling units. Kaysville's rental units and apartment style housing only accounts for 2 percent of our housing. The location of this project is ideal as there is no single family housing in the area. Often times the public is averse to having any kind of density near their homes. Due to the distance from single family housing, the project will not negatively impact established residential neighborhoods.

Preserve our open space, trails and natural resources - We will encourage the preservation of open space through clustered development and the protection of foothills, natural drainages and remaining agricultural areas.

The applicant plans to preserve existing trees near Holmes Creek and provide a walking path amenity and barbeque area near the creek, maximizing opportunities the existing natural area provides.

Each chapter of the 2022 General Plan concludes with goals, objectives and implementation measures. When considering a rezone application, we look to these goals to see if the project and rezone can be supported by the guidance set forward in the General Plan.

Chapter 1 Land Use & Placemaking Plan outlines specific goals and implementation measures which further support the mixed use rezone application and proposed project.

Chapter 1 Goal 2 is listed as: **Make Kaysville City Center Distinct and Identifiable from Adjacent Neighborhoods and Surrounding Cities** with specific ***Objective 2.2: Create a distinct city center and expand the "heart of the community" to include areas beyond the historic core.*** Development of vacant and undeveloped property to include missing services, add additional housing and create additional revenues for the City will allow for a natural extension of the core commercial area.

Chapter 1, Goal 8 continues with **"Provide a range of housing options and price points that help ensure Kaysville is an affordable place to live."** With only 2 percent of housing consisting of apartments with 10 or more units, Kaysville is limited in its existing housing options and affordability. The provision of 132 new residential units in varying sizes would diversify housing options and cost levels, fulfilling this goal.

Chapter 1 Goal 9 asks City leaders to: **Encourage Diverse Commercial Uses to Meet the Needs of the Community and Visitors** and ***Objective 9.1*** continues to say: ***Focus primary commercial uses in the City Center and secondary uses in smaller existing/future nodes.*** The attached *Implementation Measure* adds additional information to support the project: *Encourage mixed use and flex development in the City Center.* As the subject property is located in the middle of the City Center concept and the project would diversify the services presently delivered in our community, the project supports positive outcomes for this goal. Specifically, the addition of a hotel would be a new service which is not currently provided within City boundaries.

Chapter 3: Housing and Neighborhoods was amended in November of 2022 to account for state requirements for moderate income housing elements in the general plans. The chapter reports that 92% of housing in Kaysville is single family housing. This project would provide needed housing

which is outside the customary housing product offered in the city. The goals and objectives in this chapter offer ample support for this rezone and project.

Chapter 3, Goal 1 states Kaysville should aim to “Provide a full range of housing opportunities to meet economic, lifestyle, and lifecycle needs and expectations for residents.” Objectives prescribed for this goal include:

Objective 1.1: Allow for higher density and mixed use within the City Center to diversify housing stock.

Objective 1.2: (H) Amend land use regulations to eliminate or reduce parking requirements for residential development where a resident is less likely to rely on the resident's own vehicle, such as residential development near major transit investment corridors or senior living facilities.

Objective 1.3: Rezone for densities necessary to facilitate the production of moderate income housing.

Objective 1.4: (F) Zone or rezone for higher density or moderate income residential development in commercial or mixed-use zones near major transit investment corridors, commercial centers, or employment centers.

The GC MU rezone and the proposed project creates an avenue to meet these objectives and approval would allow the City to report encouraging progress back to the State in subsequent Moderate Income Housing reports. The requested parking reduction, supported by a parking analysis is a reasonable reduction given the nature of the shared uses on the project site.

Lastly, **Chapter 5 Economic Development & Prosperity** contains three goals and several objectives that support the proposed project, including:

- Goal 1: Promote Kaysville City Center redevelopment to strengthen commercial areas.**
- Goal 2: Utilize a wide variety of tools and incentives available to help achieve economic development goals.**
- Goal 3: Allow for mixed use development in identified areas to generate more rooftops and prevent Sales leakage.**

Kaysville City does not currently collect Transient Room Tax (TRT), which is a tax imposed on hotels, motels and other

Goals & Objectives

GOAL 1: PROMOTE KAYSVILLE CITY CENTER REDEVELOPMENT TO STRENGTHEN COMMERCIAL AREAS

- Objective 1.1: Allow for greater densities in Kaysville City Center to generate an increase in buying power and capture rates.
- Objective 1.2: Focus on small scale and local services to meet public requests and provide local growth.

GOAL 2: UTILIZE THE WIDE VARIETY OF TOOLS AND INCENTIVES AVAILABLE TO HELP ACHIEVE ECONOMIC DEVELOPMENT GOALS

- Objective 2.1: Establish redevelopment areas to fund infrastructure and future developments.

GOAL 3: ALLOW FOR MIXED USE DEVELOPMENT IN IDENTIFIED AREAS TO GENERATE MORE ROOFTOPS AND PREVENT SALES LEAKAGE

short-term rentals. Bringing a 114-room hotel to the City would add an additional tax revenue source and diversify our tax base. The applicant submitted a white paper study (attached) which gives insight to impacts a hotel has on spending in a community. Not only would the City receive TRT, visitors to our community would be spending money to dine, fuel vehicles, and patron other retail services in Kaysville.

The 2022 General Plan contains substantial principals, goals, objectives and specific implementation measures to support the requested GC MU rezone and the mixed use project proposed by H Group Ventures LLC.

4. MIXED USE ZONING DISTRICT OVERLAY

[KCC 17-27-2 Project Evaluation/Review Process](#) requires a number of documents and details to be submitted with the application. H Group Ventures LLC has submitted all the required items and those are attached to this staff report.

The [Mixed Use Zoning District Overlay](#) also requires a development agreement (DA) to be accompanied with the zone change application, and that agreement is attached to this memo. The [purpose statement of the MU overlay zoning code](#) says the district is designed:

“...to facilitate the integration of diverse but compatible uses into a single development, with the goal of creating a community with more diverse development types providing a broader range in residential and commercial choice.”

The purpose statement continues with:

“The flexibility in use provided by this zone should help promote "live, work, and play" opportunities within the city while creating an appropriate transition from surrounding development.”

The MU zone provides for both vertical and horizontal mixed use projects. The proposed project is the latter, and mixes uses across the entirety of the property instead of the more traditionally thought of vertical fashion. The MU overlay zone allows offices, retail services and sales, arcades, hotels and entertainment facilities. The proposed project is a mix of office, hotel, retail and residential uses. As proposed, the project uses are in compliance with the zoning code.

[Section 27-3-2\(b\)ii](#) requires a minimum of 30 percent of the combined square footage of the project be commercial building space. This project exceeds that requirement by 12 percent, offering a total of 42 percent of the project as commercial uses (see chart to the right).

[KCC 17-27-7 Development Standards](#) creates a base for project standards, but realizing the unique characteristics that each mixed use project has, the code allows for some

Building	Square Footage
Apartment Building 1	53,370
Apartment Building 2	53,370
Residential Total	106,740
Hotel	57,971
Office	15,000
Retail	3,000
Commercial Total	75,971
Total Square Footage	182,711
% Commercial	42%
% Residential	58%

variations through the DA. One such variation requested with this project is due to the unique shape, nature and location of the parcels. Requirements such as no more than 30 percent of the lot frontage being drive access or parking are not practicable at the end of a cul-de-sac. The applicant has been through many site plan iterations and offers the proposed layout as the best possible.

Staff believes the rezone request and proposed project meet the stated purpose of the Mixed Use Zoning District Overlay.

5. PROJECT SPECIFICS AND DEVELOPMENT AGREEMENT DETAILS

The full site plan, concept and building renderings are attached as well as the development agreement, parking analysis and the traffic impact study. The project would bring an additional 132 rooftops to Kaysville and position them in an area where access to I-15 for commuting, the park and ride, retail services and employment opportunities are in close proximity. The project is estimated to be \$50M in value and proposes a total of five buildings with use and square footage broken out below.

Building Use	Square Footage	Additional Details
Hotel	57,971	Four stories, not to exceed 50' in height 114 rooms
Office	15,000	May be 2 or 3 stories, not to exceed 35' in height
Retail	3,000	Single story
Apartment Building 1	53,370	Three stories, not to exceed 35' in height Proposed 66 unit mix: 12 studio, 36 one-bedroom, 18 two-bedroom
Apartment Building 2	53,370	Three stories, not to exceed 35' in height Proposed 66 unit mix: 12 studio, 36 one-bedroom, 18 two-bedroom

Large projects such as this can have some fluid aspects which may need to be adjusted as financing, market research and timing comes into play. For this reason, the DA allows for some flexibility in minor adjustments. As noted in the table, the office building may be two or three stories, but must be a total of 15,000 ft². Similarly, the applicant would like the flexibility to determine at a later date if a residential amenity would be a pool or pickle ball court, but promises to provide a walking path, dog park and walking trail. Staff has drafted the DA to accommodate reasonable adjustments, but major changes must be approved by the City Council in an amendment to the DA.

The hotelier brand is a national chain, but confidentiality agreements prohibit the disclosure of the exact company. This is a common restriction in development negotiations and until projects are entitled, non-disclosures will remain in place.

Per code requirements in the MU zone and the City's parking code, a total of 344 parking stalls are required. A parking analysis has been provided and the site plan states 301 parking stalls will be provided for the project. The MU code allows for up to a 10 percent in reduction for shared parking facilities. A 10 percent reduction would allow for a decrease of 34.4 stalls. The applicant is

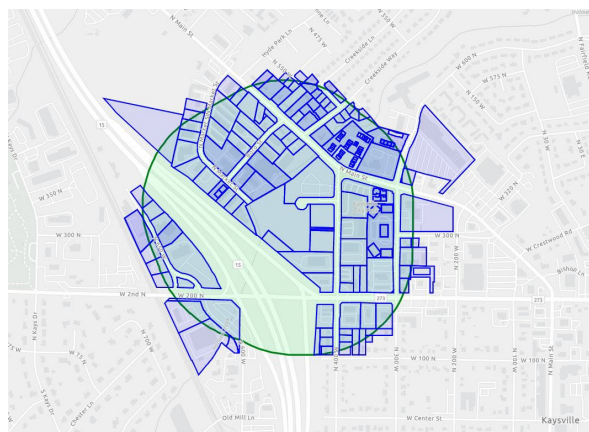
requesting a slightly higher reduction of 12.3 percent and 43 stalls. Given the study provided and the nature of the shared uses, this reduction is a reasonable amount.

The traffic study has been reviewed by both the Public Works Director and City Engineer and while there are significant impacts to traffic in the area, no mitigation measures are being proposed at this time. The City Engineer has initiated discussions with UDOT regarding the intersection at 400 West and 200 North to determine timing of their improvements to the intersection and the interchange. Traffic improvements are already needed in the area but may need to be accelerated. Staff expects the roadway impact fees will be significant and can be used to mitigate impacts at the intersection of Main Street and 400 West.

Staff has completed a review of the proposed project in relation to the zoning regulations and believes the project, proposed site plan and development agreement are in compliance with the zoning code and are reasonable based on the odd shape of the project site.

6. PUBLIC NOTICE AND PUBLIC COMMENT

On Friday, June 30, 2023, public notices were mailed to property owners within 500' of the subject property as shown in the map. As of the date of this report, no comments have been received.



7. RECOMMENDATION

Based on the findings outlined in this staff report, staff recommends the Planning Commission forward a recommendation of approval to the City Council for the development agreement and the rezone of 521 West 350 North from GC General Commercial to General Commercial Mixed Use Overlay.

Findings for a recommendation of approval include:

- a. The Mixed Use Zoning District Overlay is compliant with Map 2.2 Future Land Use Map approved with the 2022 General Plan.
- b. The project is in keeping with the following Guiding Principles of the 2022 General Plan:
 - i. Enrich our city center and downtown - We will enhance our city center with commercial and mixed-use development and investing in streetscape and parking.
 - ii. Provide diverse housing options - We will work to preserve our existing neighborhoods while accommodating a full range of housing opportunities to meet the economic, lifestyle and life-cycle needs of our residents.
 - iii. Preserve our open space, trails and natural resources - We will encourage the preservation of open space through clustered development and the protection of foothills, natural drainages and remaining agricultural areas.
- c. Chapters 1, 3 and 5 of the 2022 General Plan contain adequate goals, policy objectives and implementation measures which support approval of the rezone request.
- d. With the addition of 132 housing units, the rezone approval would allow the city to account for positive progress to the State for the 2023 Moderate Income Housing reporting.

- e. The design of the project as outlined in the site plan and development agreement would not negatively impact the character of the area.
- f. The project would diversify the housing product available in Kaysville and provide opportunities for a live-work environment.
- g. The project would diversify and strengthen the City's economic and commercial base, adding new office, retail and an opportunity to collect Transient Room Tax with the hotel.
- h. Staff review has found the project to be compliant with 17-27 Mixed Use Zoning Overlay purpose statement and code requirements.

ATTACHMENTS:

- 1. Project Location Map 521 West 350 North
- 2. Applicant Statement of Compliance
- 3. Draft Development Agreement for 521 West 350 North
- 4. Proposed Mixed Use Site Plan
- 5. Proposed Project Renderings
- 6. Proposed Landscape Plan
- 7. Kaysville Mixed-Use Development Traffic Impact Study (February 21, 2023)
- 8. Kaysville Mixed-Use Development Parking Analysis (March 3, 2023)
- 9. Economic Impact of Hotel Development by: Alan Suzuki



**Kaysville City Planning Commission Meeting Minutes
July 13, 2023**

The Planning Commission meeting was held on Thursday, July 13, 2023 at 7:00 pm in the Kaysville City Hall located at 23 East Center Street.

Planning Commission Members in Attendance: Temporary Chair Steve Lyon, Commissioners Paul Allred, Wilf Sommerkorn, Erin Young and Mike Packer

Staff Present: Melinda Greenwood and Mindi Edstrom

Public Attendees Who Signed In: Val Starkey, Laurene Starkey, Cameron Talbot, Britton Cottrell, and Jill Dredge

6- PUBLIC HEARING FOR A REZONE APPLICATION FROM PHIL HOLLAND FOR 521 WEST 350 NORTH FROM GENERAL COMMERCIAL TO MIXED USE ZONING DISTRICT OVERLAY

This item was introduced by Melinda Greenwood.

Ms. Greenwood started out by saying that Mr. Holland closely followed the General Plan process and his property is one of area in the 2022 General Plan future land use map that indicates mixed-use zoning. Mr. Holland is proposing a mixed use project with a hotel, retail office and 132 residential units.

Ms. Greenwood shared two guiding principles from the 2022 General Plan which support the proposed rezone application, which are enriching the city center and downtown and provide diverse housing options. Ms. Greenwood said that there are three chapters in the 2022 General Plan that provide further support, including Chapter 1: Land Use and Placemaking Plan, Chapter 3: Housing and Neighborhoods, and Chapter 5: Economic Development and Prosperity.

Ms. Greenwood continued with project specific details including a four-story hotel with 114 rooms, a 15,000 square foot office building with two or three stories, one-story retail space, and two apartment buildings with a proposed mix of units of studios, one-bedroom and two-bedroom units. The Mixed Use overlay requires at least 30% of a project to be commercial space and this project is at 42%.

Ms. Greenwood shared the site plan and renderings for the project and indicated that about 40 public hearing notices were sent out to effected entities and those within a 500 square foot

radius of the property. She said the city did not receive any public comments regarding the project.

She said that staff recommends the Planning Commission send a recommendation of approval to the City Council for the development agreement and the rezone of 521 West 350 North from GC General Commercial to General Commercial Mixed Use Overlay.

Commissioner Allred asked who drafts the development agreement.

Ms. Greenwood said that she drafted the agreement and was open for any changes the Commissioners would like to make. Commissioner Allred felt that the building height is too restrictive for a project that is located on the freeway. Commissioner Allred asked if whether or not the parapet was included in the roof height and suggested we allow for more flexibility on the height for both the residential and commercial buildings. Commissioner Allred inquired if a pole sign was being proposed for the property on 350 West or the freeway. Ms. Greenwood said that it has not been discussed. She also answered Commissioner Allred's question regarding the parapet height and she said that it is not considered in the overall height.

Commissioner Allred asked if the project has a unified lighting plan for parking lot lights and suggested staying away from over-lighting the project while still having enough light so it is safe. He said he read the whole traffic study and even though the project received an F, he explained that it just means that residents will just need to wait a bit longer and said he feels that there should never be a traffic signal at 350 West.

Commissioner Allred made a comment about the landscape plan and said that it should mostly be xeriscape with an emphasis on perennial trees with big shade potential.

Commissioner Young commented on the usage for the hotel, apartment, and walking trail but wondered how much control or input could the Planning Commissioners have on architectural and landscape design.

Ms. Greenwood responded that the Commissioners can do what they would like in the development agreement, however the development agreement calls for substantial conformance to what is included with the attachments in the packet and needs to be presented at this point in the process.

Commissioner Sommerkorn suggested perhaps having less pavement and more trees in the landscape plan. Commissioner Sommerkorn also wondered about allowing for more height with the building and in return the developer could add in more landscaping.

Commissioner Allred discussed the suggested architecture of the proposed project and said that the over time it will look outdated and not timeless. He suggested having more emphasis on movement and shadows on the building.

Commissioner Packer inquired about the trail on the north side of the project and how much of the landscaping that is shown is actually over the property line and wondered who owns the drainage and if this plan is realistic.

Commissioner Lyon said that Davis County is over the drainage and Holmes Creek.

Commissioner Lyon opened the public hearing.

Val Starkey shared his concerns which include:

- 1- What are the projected rents for the apartments?
- 2- Concerns about infrastructure regarding parking.
- 3- What are the power requirements? He would like to make sure the project has the ability or what it will take to get power.
- 4- What are the water requirements for the project and said that hotels can use anywhere from 100-400 gallons of water per room per day on average?

Laurene Starkey said that 350 West is a busy street and many residents avoid that street. She stated that many residents of Kaysville City have chosen to live here and made sacrifices to have a more tranquil city and feels that many would not support the mixed-use project.

Phil Holland, the applicant, said he began working with the project over five years ago and loves the direction the new General Plan is going for Kaysville. He said that the project that he is proposing will be a \$50M project and has the potential of being the most valuable development in Kaysville. He wants this project to be something that everyone will be proud of in 60 years.

Mr. Holland said that this project is incredibly overparked and said that the parking study said that if every thing was occupied from 11:00 pm-4:00 am he would need 302 stalls. Mr. Holland said that his project has 301 stalls but that does meet requirements for City's parking ordinance. He relayed that most of the landscaping along Holmes Creek will not be new plantings but are existing 100-year-old trees and will have a natural trail.

Commissioner Lyon closed the public hearing.

Commissioner Allred shared his support for the project. He added that he believes the project is completely over parked but loves that it will bring in some needed density to the community and feels it is a great location. His concern about this project is if it will help the city comply with lower rents for the moderate-income housing crisis.

Commissioner Sommerkorn asked Phil Holland if he was willing to go higher with the project and suggested having additional discussions with staff about parking versus additional height and landscaping.

Commissioner Allred asked if the motion should be to recommend approval of the development agreement as proposed in addition to the rezone or if they should recommend on the rezone and make advisory recommendations on the development agreement?

Ms. Greenwood responded that you can't have one without the other so there would need to be a recommendation made for both.

Commissioner Allred made a motion to approve a rezone proposal from the current zoning GC General Commercial to the requested zoning of General Commercial Mixed-Use Overlay per the following findings and recommendations.

- a. The Mixed-Use Zoning District Overlay is compliant with Map 2.2 Future Land Use Map approved with the 2022 General Plan.
- b. The project is in keeping with the following Guiding Principles of the 2022 General Plan:
 - i. Enrich our city center and downtown - We will enhance our city center with commercial and mixed-use development and investing in streetscape and parking.
 - ii. Provide diverse housing options - We will work to preserve our existing neighborhoods while accommodating a full range of housing opportunities to meet the economic, lifestyle and life-cycle needs of our residents.
 - iii. Preserve our open space, trails and natural resources - We will encourage the preservation of open space through clustered development and the protection of foothills, natural drainages and remaining agricultural areas.
- c. Chapters 1, 3 and 5 of the 2022 General Plan contain adequate goals, policy objectives and implementation measures which support approval of the rezone request.
- d. With the addition of 132 housing units in the city, the rezone approval would allow the city to account for positive progress to the State for the 2023 Moderate Income Housing reporting.
- e. The hotel and the residential buildings be allowed some additional flexibility for average height of the building to allow for architectural variation
- f. The addition of more density on this site as it follows the 2022 General Plan and adds to the overall moderate-income housing based on the mix of dwelling sizes proposed.
- g. A detailed lighting plan must be submitted and reviewed by staff to make sure that the lighting works from a security perspective, down lighting and minimizing urban lighting.

- h. A monument sign on 350 West and are they are okay with a pole sign on I-15.
- i. A parking reduction be allowed to specifically reduce parking per the Planning Commission and parking analysis.
- j. The Developer and staff work together to add dwelling units by reducing the number of parking stalls or landscaping, with a preference to add dwellings over landscaping.
- k. The landscaping specifically address a reduction in turf and an addition in xeriscaping to comply with the City ordinance recently passed for water wise landscaping, as well as the addition of perennial trees in parking areas to break up the urban asphalt heat island problem.

Planning Commissioner Young said that she is in favor of this general idea, but would prefer to have more time to review the project based on the amount of changes and wants to see an updated project come back to the Planning Commission.

Ms. Greenwood asked if that was a substitute motion or an amendment.

Commissioner Sommerkorn said that it would be a substitute motion. So rather than approve the motion we would continue the discussion.

Ms. Greenwood said that if there is going to be a substitute motion then there needs to be second on the substitute motion because there wasn't one on Commissioner Allred's motion.

Commissioner Sommerkorn seconded the substitute motion with Commissioner Allred's amendments and to bring the project back as soon as possible.

The vote was:

Commissioner Allred - No

Commissioner Young - Yes

Commissioner Sommerkorn - Yes

Commissioner Lyon - Yes

Commissioner Packer - Yes

The motion passed 4-1.

**DEVELOPMENT AGREEMENT
FOR 521 WEST 350 NORTH**

THIS AGREEMENT is made and entered into this ____ day of _____, 2023 by and between Kaysville City, a municipal corporation organized and existing under the laws of the State of Utah (hereinafter the "City") and H Group Ventures LLC (hereinafter the "Developer").

RECITALS

WHEREAS, Developer is desirous of developing a mixed-use project consisting of residential apartments and commercial facilities (the "Project") on certain real property located at 521 West 350 North, in the City of Kaysville, County of Davis, State of Utah and more particularly described as parcel number 11-879-0007 which is .619 acres in size and parcel number 11-879-0002 which is 5.64 acres for a combined total of 6.259 acres; and

WHEREAS, the Property Location Map is attached hereto as Exhibit A and the legal description is attached as Exhibit B; and

WHEREAS, the purpose of this Agreement is to define development standards, conditions and improvements for the Project as well as other terms and conditions pursuant to which the Project proposed by Developer shall be developed within the City; and

WHEREAS the City is willing to grant the Mixed Use Zoning District Overlay (MU) rezone of the property and authorize the development of the Project proposed by Developer in conformance with this Agreement, City Ordinances, and applicable Utah law;

NOW, THEREFORE, in consideration of the mutual covenants and conditions set forth herein, and other good and valuable consideration, the sufficiency of which is hereby acknowledged, the parties agree as follows:

AGREEMENT

1. GENERAL DESCRIPTION.

- A. Area Description. The property upon which the Project shall be developed (the "Property") is located as shown on the Property Location Map, a copy of which is attached as Exhibit A hereto and incorporated by reference herein. The property is further described in Exhibit B as parcel ID 11-879-0007 which is .619 acres in size and parcel number 11-879-0002 which is 5.64 addressed as 521 West 350 North.
- B. Project Description. The Project proposed is a horizontal mixed-use development as shown in Exhibit C (the "Site Plan") and shall include commercial, retail and residential buildings and shall be constructed in substantial conformance to the attached concept Site Plan.

- a. Commercial Space. The Project includes a total of approximately 75,971 square feet of commercial building space, which is 36% of the total square footage of the Project. The commercial buildings shall include:
 - i. Hotel. One four-story hotel, which shall not exceed 50 feet in height and will have approximately:
 - 1. 57,971 square feet of space; and
 - 2. 114 rooms.
 - ii. Office. An office building with approximately 15,000 square feet of space.
 - iii. Retail. One single-story retail building with approximately 3,000 square feet of space and possible drive-thru.
- b. Residential Space. Two four-story apartment buildings totaling approximately 135,200 square feet with each building consisting of:
 - 1. Approximately 67,600 square feet of space per building.
 - 2. Subject to final design, no more than 160 residential units shall be constructed.
- c. Substantial Conformance. Substantial Conformance noted in section 1.B shall mean and include minimal fluctuations in overall project square footage, which is subject to final design.
 - i. A reduction in the number of residential units or residential building square footage may be approved by Community Development staff.
 - ii. An increase in the total commercial square footage shall be acceptable and approved by Community Development staff subject to the provision of adequate parking.
 - iii. Reductions in the total commercial square footage provided may not fall below 30% without an amendment to this agreement, which shall be approved by the City Council.

2. DEVELOPMENT STANDARDS AND GUIDELINES

- A. Adoption of Development Standards. As allowed by Kaysville City Code 17-27-7, the City hereby adopts, as the development standards, regulations and guidelines for the Project (the "Development Standards"), the following standards in addition to all other applicable City Ordinances, standards and guidelines:
 - i. Compliance with Approved Plans. Developer shall develop the site in general conformance with the concept site plan outlined in section 1B and attached to this Agreement as Exhibit C.
 - ii. Architecture. Developer shall construct the Project in substantial compliance and conformance with the architectural style, renderings and color and materials board shown in Exhibit D.

- iii. Building Materials. Developer shall construct all buildings in substantial compliance with materials shown in the concept renderings depicted in Exhibit D, which show rock and/or brick, wood, steel, and glass.
- iv. Building Height. Developer shall construct the buildings in compliance with the following:
 - a. The four-story hotel shall not exceed fifty feet (50') in height except to allow for flexibility in overall average height for architectural details and variations.
 - b. The four-story apartment buildings shall not exceed 45 feet (45') in height except to allow for flexibility in overall average height for architectural details and variations.
 - c. All other buildings in the project shall not exceed thirty-five feet (35') as defined by Kaysville City Ordinances except to allow for flexibility in overall average height for architectural details and variations.
- v. Amenities Plan. Developer agrees to providing the following amenities for residents living in the apartments in the development:
 - a. Walking path around the property.
 - i. Developer will attempt to make walking path connections into properties which are adjacent to the Project.
 - b. Dog park.
 - c. Pickleball courts or a swimming pool.
 - d. Clubhouse.
 - e. Pavilion, picnic and barbeque area.
- vi. Parking.
 - a. Required Parking. Calculations of required parking based on the adopted Kaysville City Code 17-27 Mixed Use Zoning and 17-32 Off-Street Parking and Loading. Required parking of 396 total stalls is demonstrated in the breakdown noted below.
 - i. Apartment Building – 256 parking stalls required
 - ii. Office – 53 parking spaces required
 - iii. Hotel – 76 spaces required
 - iv. Retail – 11 units required
 - b. Parking Reduction. Developer submitted a parking study included as Exhibit E along with a request to reduce parking by 24%. City agrees to reduce required parking by 24%, reducing the 396 required stalls by 94 and requiring a minimum of 302 parking stalls.
 - c. For parcels that will be owned outside of H Ventures Group, LLC, cross-parking agreements shall be created between property owners and recorded against the property.

- vii. Lighting. Developer agrees to provide a detailed photometric plan to the City which shall include efficient lighting materials and shall also include shielded lighting, down lighting and parking lot lighting for security. Lighting shall not penetrate beyond the property in such a manner as to annoy or interfere with the use of adjacent properties.
- viii. Signage. A monument sign is to be provided on 350 North. A pole sign up to 45 feet in height is permitted within 300 feet of I-15 as allowed by KCC 17-33 Sign Regulations.
- ix. Access.
- a. The Project has access to their site from 350 North. Developer will provide cross-access agreements to be recorded against the properties for any parcels that will not have street frontage.
 - b. If a subdivision occurs, Developer shall provide cross-access agreements between all properties created by the subdivision.
 - c. Developer will attempt to get access agreements for pedestrian and vehicle traffic through neighboring properties to the east.
- x. Density. Developer may construct up to 160 residential dwelling units within Project. The overall residential unit count shall not exceed 160 units. Any increase in the count of residential dwelling units shall be approved by the City Council through an amendment to this agreement.
- xi. Commercial Uses. Developer agrees to provide a four-story hotel consisting of 114 rooms, a 15,000 square foot office, and 3,000 of retail space. Removal of the hotel from the Project or any substantial changes to the hotel plans shall be approved by the City Council through an amendment to this agreement. Any changes to the commercial spacing for the office and retail space resulting in a substantial reduction of square footage shall only be approved by the City Council through an amendment to this agreement.
- xii. Traffic Mitigation. Developer agrees to construct any road improvements or traffic mitigation measures on 350 North as necessitated by the Project. Any such improvements shall be built to adopted City standards.
- xiii. Landscaping.
- a. Developer agrees to use turf only in active recreation areas for the Project as defined in Kaysville City Code 17-5 Water Efficient Landscape Standards.
 - b. Developer shall not install turf or grass in park strip or parking lot areas but will use water wise vegetation and materials.
 - c. Developer agrees to use water wise vegetation and materials in other landscaping areas where reasonable.

- d. Developer agrees to plant perennial trees throughout the parking lot as indicated in the landscape plan.
- xiv. Subdivision for Mixed-Use Overlay. Development of the Project may require a subdivision of the Property into two or more individual parcels.
 - a. Developer shall apply for a subdivision of the Property and shall follow all process and code requirements for the subdivision, including payment of fees, and submission of all outlined documents required for a subdivision.
 - b. This development agreement shall be subject to the entirety of the two parcels outlined in section 1A and will continue to run with the land regardless of subdivisions or how many lots are created in the future.
 - c. This agreement shall be recorded along with any subdivision plat and the plat shall have language placed on it to maintain the integrity of this agreement and Project.
- B. Phasing of Project.

Phasing of the Project and issuance of building permits shall be completed as outlined in either i or ii below.

 - i. The hotel shall be permitted prior to the residential apartment buildings or simultaneously with the residential apartment buildings.
 - ii. The office building and the retail building shall be permitted prior to or simultaneously with the residential apartment buildings.
- C. Holmes Creek. Developer will coordinate with Davis County and follow all regulatory requirements for protection of Holmes Creek during construction and after occupancy.
- D. Findings of Compatibility. In adopting the Development Standards identified in Section 2, the City hereby expressly finds that the development of the Project, in conformance with the Development Standards and this Agreement, promotes the creation of a desirable mixed-use Project in an appropriate location and is in harmony with the 2022 General Plan. The City further finds that the development of the Project, in conformance with the Development Standards and this Agreement, will not violate the general purpose, goals and objectives of the City Ordinances and any plans adopted by the Planning Commission and City Council.

Subject to the Developer's performance and compliance with the terms of this Agreement and City Ordinances in effect on the date of this Agreement, Developer's rights to develop the Project in accordance with the approved site plan, construction drawings and building plans are vested.

3. MAINTENANCE AND CARE OF THE PROJECT AND PROPERTY

Developer agrees to keep property, grounds and buildings in good condition, maintaining, repairing, replacing, etc. all commonly owned ground, property, and amenities, including the trail, playground area, pool, dog park, landscaped areas, parking areas, driveways, sidewalks,

park strips, lighting, benches, etc. Developer agrees to remain in compliance with Kaysville City code.

4. APPLICABILITY AND AMENDMENTS

This agreement runs with the land and shall be considered a master plan for all properties outlined in Section 1A and is applicable and enforceable in perpetuity. Any substantial or significant changes to the Project outside of those defined in this agreement shall be approved by the City Council in an amendment to this agreement.

5. ON-SITE PROJECT IMPROVEMENTS

Developer shall construct and install all site improvements, including utilities, required for the Project, at Developer's sole cost and expense, in compliance with approvals, and all applicable ordinances, regulations, standards as approved by the City, the secondary water provider, Central Davis Sewer District, other providers and the State of Utah.

6. OFF-SITE PROJECT IMPROVEMENTS

In accordance with applicable standards and subject to the design approval of the City Engineer, Developer shall construct and install street improvements, sidewalks, utilities, and drainage improvements, on 521 West 350 North with the construction of the on-site improvements.

7. REPRESENTATIONS OF DEVELOPER

- A. Authority. Developer hereby represents that Developer has authority to proceed with the Project.
- B. Ability. Developer represents that it has the ability to timely proceed with the development and construction of the Project. Developer agrees to begin construction of the Project as soon as practicable and complete occupancy approval with at least on commercial building by December 31, 2026.

8. ASSIGNMENT

Developer may assign this Agreement to any other third party provided that the City consents to such assignment, which consent shall not be unreasonably withheld, upon a showing to the satisfaction of the City that such third party has the financial ability to perform Developer's obligations hereunder.

9. BINDING EFFECT

This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns.

10. ATTORNEY'S FEES

In the event that this Agreement or any provision hereof shall be enforced by an attorney retained by a party hereto, whether by suit or otherwise, the fees and costs of such attorney shall be paid by the party who breaches or defaults hereunder, including fees and costs

incurred upon appeal or in bankruptcy court.

11. SEVERABILITY

If any term or provision of this Agreement shall, to any extent, be determined by a court of competent jurisdiction to be void, voidable, or unenforceable, such void, voidable or unenforceable term or provision shall not affect the enforceability of any other term or provision of this Agreement.

12. CAPTIONS

The section and paragraph headings contained in this Agreement are for the purposes of reference only and shall not limit, expand or otherwise affect the construction of any provisions hereof.

13. GOVERNING LAW

This Agreement and all matters relating hereto, shall be governed by, construed and interpreted in accordance with the laws of the State of Utah.

14. ENTIRE AGREEMENT

This Agreement, together with the exhibits attached hereto, constitutes the entire understanding and agreement by and among the parties hereto, and supersedes all prior agreements, representations or understandings by and among them, whether written or oral, pertaining to the subject matter hereof.

15. AUTHORIZATION OF EXECUTION

A. City. The execution of this Agreement by the City has been authorized by the City Council of Kaysville City at a regularly scheduled meeting of that body, pursuant to the notice.

B. Developer. The execution of this Agreement has been duly authorized by the Developer.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day and year first above written.

H Group Ventures, LLC

By: _____

Title

Attest:

Kaysville City

By: _____

Annemarie Plaizier
City Recorder

Tamara Tran
Mayor

On the ____ day of _____, 2023, personally appeared before me TAMARA TRAN, and ANNEMARIE PLAIZIER, who being by me duly sworn did say, each for himself and herself that he, the said TAMARA TRAN, is the Mayor of Kaysville City, Davis County, State of Utah and that she, the said ANNEMARIE PLAIZIER, is the City Recorder of Kaysville City, and that the within and foregoing instrument was signed on behalf of the said Kaysville City by authority of the City Council of Kaysville City and said TAMARA TRAN and ANNEMARIE PLAIZIER, each duly acknowledged to me that the said Kaysville City executed the same and that the seal affixed is the seal of the said Kaysville City.

NOTARY PUBLIC

(SEAL)

STATE OF UTAH)
: ss.
COUNTY OF DAVIS)

On the ____ day of _____, 2023, personally appeared before me, _____, the signer of the foregoing Development Agreement for Phil Holland, who duly acknowledged to me that he executed the same for and on behalf of H Group Ventures LLC.

NOTARY PUBLIC

(SEAL)

STATE OF UTAH

)

: ss.

COUNTY OF DAVIS

)

Exhibit A – Property Location Map
Exhibit B – Legal Description of the Project property
Exhibit C – Site Plans
Exhibit D – Architectural Renderings
Exhibit E – Traffic Impact Study
Exhibit F – Parking study
Exhibit G – Application materials – Statement of Compliance

DRAFT

Creekside Commons



Our Vision

We appreciate the opportunity to introduce Creekside Commons to Kaysville City. The project aims to foster growth, boost economic activity, and integrate within the existing community. Our development, in its form and function, supports the city's long-term vision.



Project Compatability

Overview

Creekside Commons is a mixed-use development containing Office, Retail, Apartments, and Hotel uses. The development's location, near downtown and transportation corridors, lends itself well to these use types. Additionally, the development keeps consistent with Kaysville's General Plan.

General Plan

1. Land Use

Creekside Commons is located next to I-15 and Kaysville's main commercial area. Placing these types of developments near transportation hubs allows Kaysville, over time, to maintain the "small town" atmosphere in other parts of the City, while still providing much-needed commercial and residential uses. Creekside will also promote and benefit all adjacent commercial and future projects in the area.

Building a hotel, the land's highest and best use, will encourage commercial opportunities and serve residents and existing commercial uses within Kaysville.



2. Transportation & Connectivity

The site has been laid out with connectivity in mind. The Development will benefit from two main accesses. We will also have main pedestrian connectivities throughout the development. Creekside Commons will have low impact to the traffic of Kaysville's general roadways, as shown in the traffic study done on our



3. Housing and Neighborhoods

As shown in the city's General Plan Table 3.8, the future demands of the renter population are greatly needed and increasing. Implementing apartments in this development provides the city's great long-term need. Also, developing housing close to I-15 and the commercial corridors keeps higher densities away from less dense areas in Kaysville. The proposed apartment community will also be rich in amenities, which until now have been scarce for Kaysville's multifamily.

Table 3.8 - Renter Population Projection

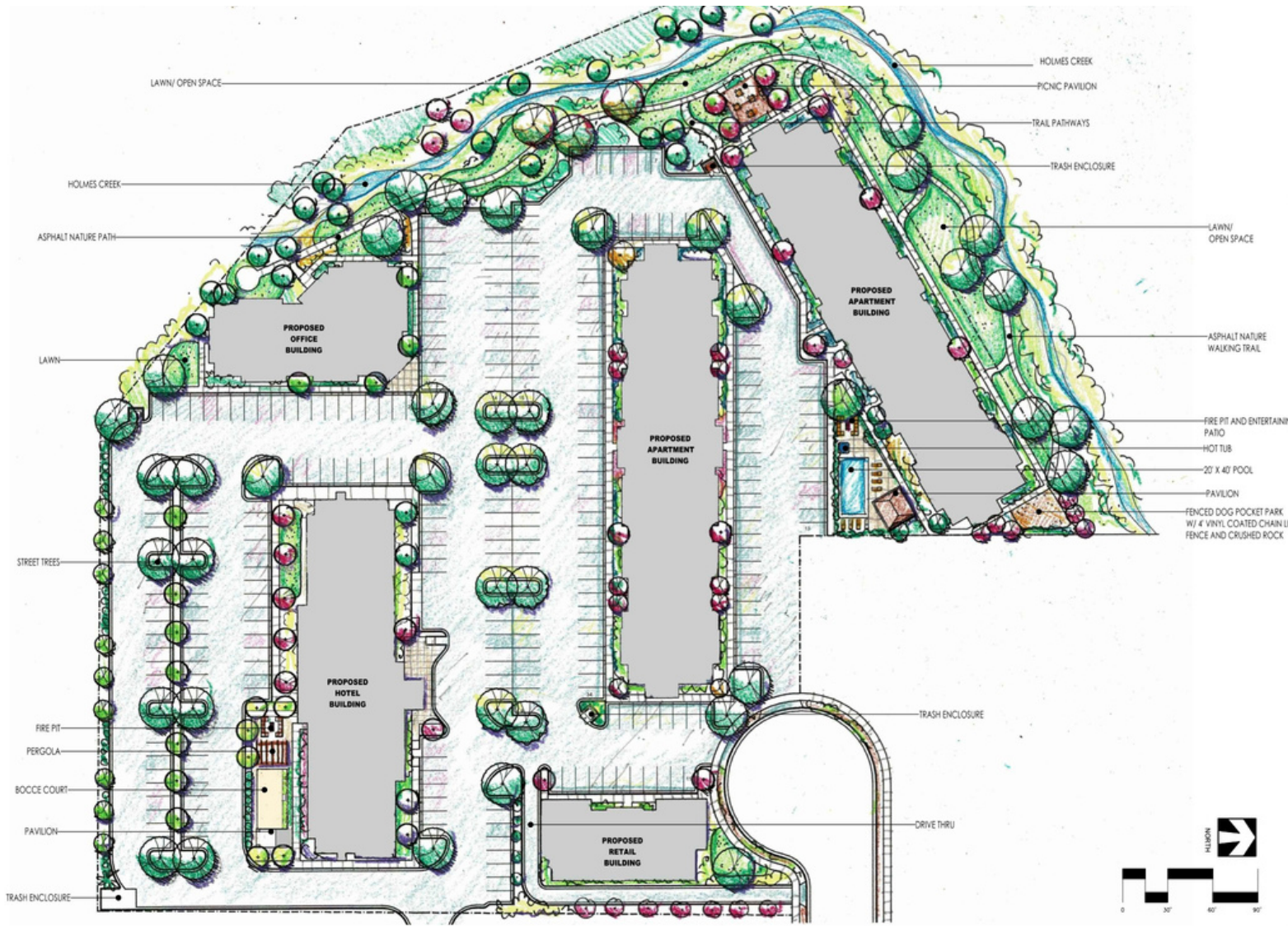
	5 YEAR PROJECTION	10 YEAR PROJECTION
≤ 80% HAMFI	3,982	4,621
≤ 50% HAMFI	3,755	5,441
≤ 30% HAMFI	1,157	1,358

Table 3.9 - Projected Affordable Housing Needs

	AFFORDABLE RENTAL UNITS	GROWTH RATE	5 YEAR UNIT DEMAND	10 YEAR UNIT DEMAND
≤ 80% HAMFI	940	3.02%	1,091	1,266
≤ 50% HAMFI	710	7.70%	1,029	1,491
≤ 30% HAMFI	270	3.26%	317	372

4. Open Space Trails and Natural Resources

We will maintain trees along historic Holmes Creek to provide a buffer between our projects and the adjacent land uses. The Landscape plan demonstrates the natural beauty of this project as we balance the fine line of efficient land use with the nature of Kaysville. A walking path is outlined within our project to create safe travel for pedestrians and interconnectivity.



5. Economic Development & Prosperity

Creating a mixed-use project with 3 commercial uses and with the residential use will strengthen the adjacent commercial hub. Kaysville will boost local businesses' ability to operate and thrive with the supported office and hotel patrons closer to them. The 6.2-acre site will be developed to its highest and best use. The development is estimated to be worth over \$50 million upon completion. This would put this 6-acre property as the top value in Kaysville. The property tax to the city as well as the hotel's transient room tax will be a great long-term benefit for Kaysville City and its residents.



Kaysville Zoning Ordinances

We have created our vision based upon, and consistent with, the newly created Mixed Use zone outlined in Kaysville City's zoning ordinance.



Purpose of MU Zone

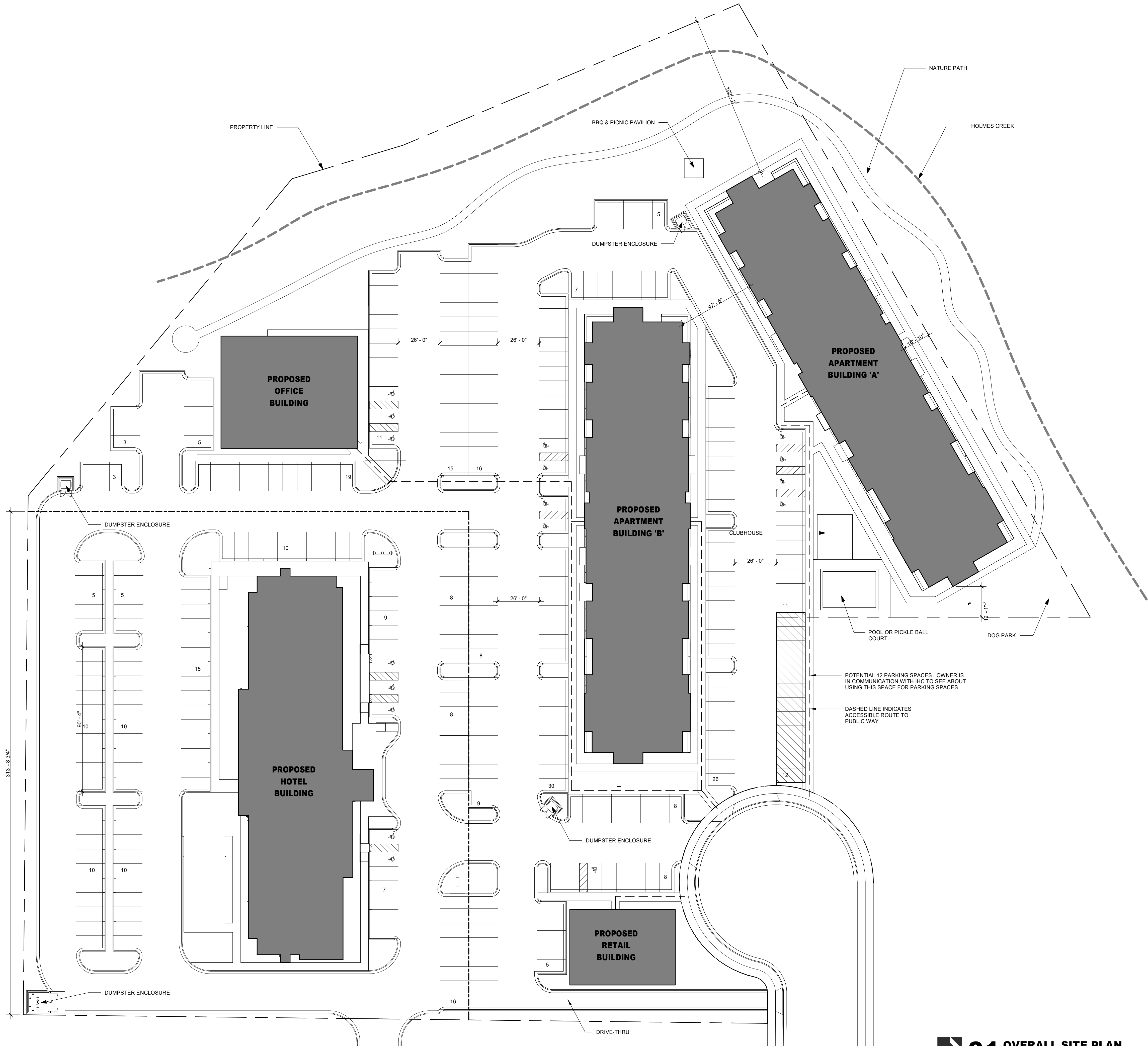
As indicated in the ordinance, the intent is to integrate a diverse and compatible option for individuals wishing to be in different family unit types. This achieves the objective by providing a broader range of residential and commercial options not currently found in Kaysville.



Surrounding land Uses

The adjacent land uses to the subject property are all General Commercial. Creekside Commons enhances and benefits all adjacent uses due to the increased office and residential presence coupled with Hotel patrons. It will increase all business in the area, promoting a flourishing commercial hub for Kaysville.





SITE PLAN CALCULATIONS

APARTMENT DATA

BUILDING 'A' FOOTPRINT	16,900 SQ. FT.
BUILDING 'A' SQ. FT.	= 67,600 SQ. FT.
BUILDING 'B' FOOTPRINT	16,900 SQ. FT.
BUILDING 'A' SQ. FT.	= 67,600 SQ. FT.
BUILDING HEIGHT	= 4 STORIES
UNIT COUNT	
BUILDING 'A'	
STUDIO	= 8
1 BED	= 48
2 BED	= 24
TOTAL	= 80
BUILDING 'B'	
STUDIO	= 8
1 BED	= 48
2 BED	= 24
TOTAL	= 80
TOTAL APARTMENTS	= 160 UNITS

HOTEL DATA

BUILDING SQUARE FOOTAGE	= 67,971 S. FT.
BUILDING HEIGHT	= 4 STORIES
UNIT COUNT	= 114

OFFICE DATA

BUILDING SQUARE FOOTAGE	= 15,000 SF
BUILDING HEIGHT	= 3 STORIES

RETAIL DATA

BUILDING SQUARE FOOTAGE	= 3,000 SF
BUILDING HEIGHT	= 1 STORY

PARKING

REQUIRED	
APARTMENTS	256 STALLS
OFFICE	63 STALLS
RETAIL	11 STALLS
HOTEL	76 STALLS
STALLS REQ'D	386 STALLS
10% REDUCTION	386 X 10% = 39.6
TOTAL REQ'D	356 STALLS
TOTAL PROVIDED	302 STALLS

AMENITIES

POOL OR PICKLE BALL COURT	
DOG PARK	
NATURE PATH	
BBQ & PICNIC PAVILION	
CLUBHOUSE	

REVISION NO.	DESCRIPTION	DATE



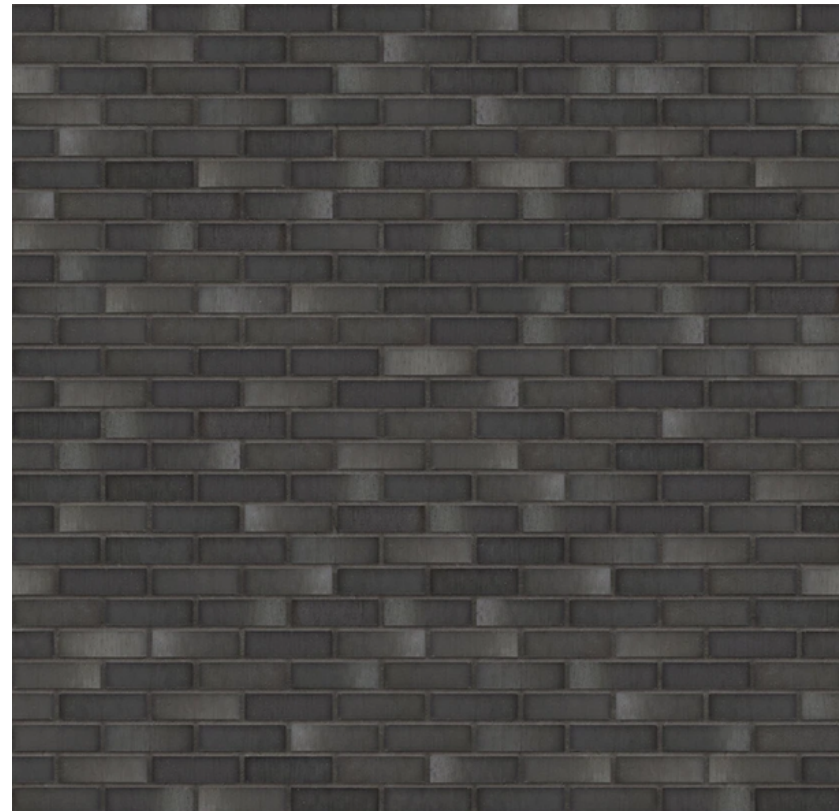




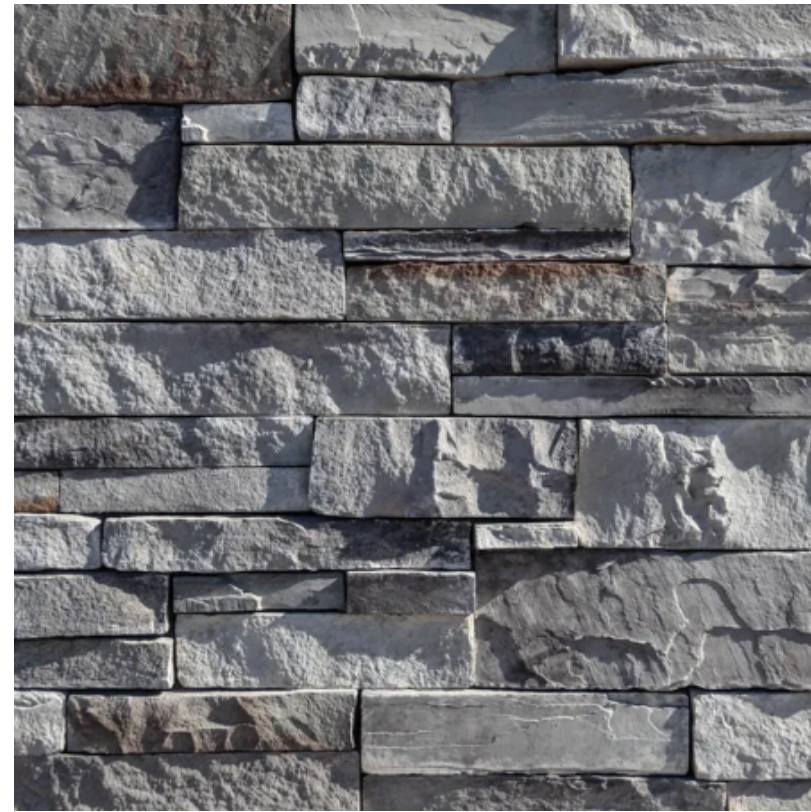








WHITE NIGHT - THIN BRICK
KING KLINKER - KING SIZE



HIGHLAND - DRYSTONE
HARRISTONE - WHITE MORTAR



ASPEN RIDGE - LAP
WOODTONE

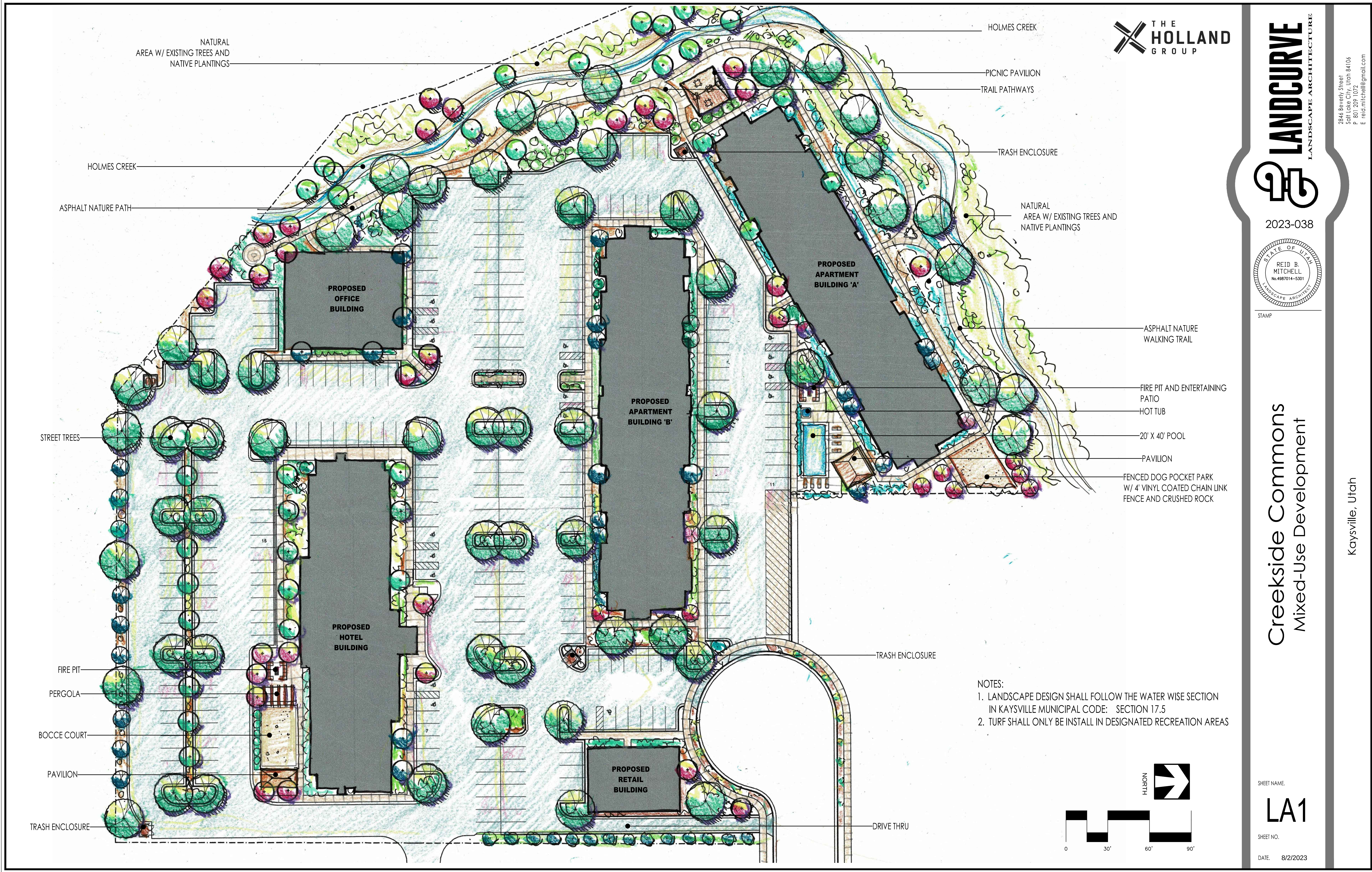


SOFT WHITE - STUCCO

CREEKSIDE | MULTI-FAMILY

EXTERIOR FINISHES

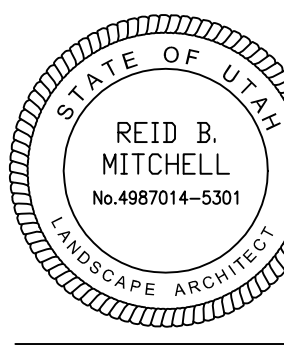




LANDCURVE
LANDSCAPE ARCHITECTURE



2023-038



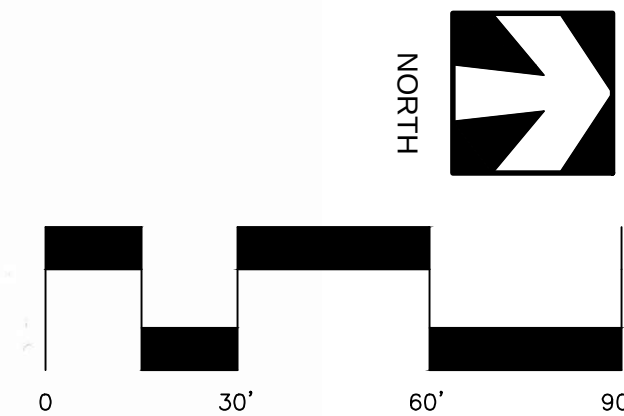
STAMP

Creekside Commons
Mixed-Use Development

Kaysville, Utah

2844 Beverly Street
Salt Lake City, Utah 84106
P 801 209 1072
E reid.mitchell@gmail.com

- NOTES:
- 1. LANDSCAPE DESIGN SHALL FOLLOW THE WATER WISE SECTION IN KAYSVILLE MUNICIPAL CODE: SECTION 17.5
 - 2. TURF SHALL ONLY BE INSTALL IN DESIGNATED RECREATION AREAS



SHEET NAME:
LA1
SHEET NO.:
DATE: 8/2/2023

MEMORANDUM

To: Kaysville City

From: Jason Watson, PE, PTOE

FOCUS Engineering & Surveying, LLC

File: Kaysville Mixed-Use Development

Date: July 31, 2023

Reference: Kaysville Mixed-Use Development Parking Analysis - REVISED

INTRODUCTION

FOCUS Engineering and Surveying, LLC (FOCUS) has been retained to complete a Parking Analysis for the addition of a new mixed-use development located along 400 West between Main Street and 200 North in Kaysville, Utah. The purpose of this Parking Analysis is to project the number of parking stalls that will be needed on the proposed site with the planned land uses. This memorandum will also compare the parking demand percentages between the different land uses proposed for this site. This will help determine the peak time periods for parking onsite and how the parking stalls can be shared between the different land uses. The proposed development will access onto 400 West. The site is currently undeveloped land that surrounds commercial and industrial buildings. Exhibit 1 illustrates the vicinity map of the proposed project site.

Exhibit 1 – Project Vicinity Map



Reference: Kaysville Mixed-Use Development Parking Analysis - REVISED

EXISTING CONDITIONS

Surrounding Land Uses and Roadways

This mixed-use development is bordered to the south by a commercial development, to the north by a medical facility, I-15 to the west and 400 West to the east. The proposed site for the new mixed-use development is currently vacant land and in a heavily commercialized area of Kaysville.

To the north is Main Street and to the south is 200 North, which are major roadways that provide access to Interstate 15 both north and south of the proposed development. There are existing roadways that the proposed development will use to access onto 400 West. One road is located just south of the Intermountain Kaysville Creekside Clinic and is currently a cul-de-sac. The second road is an existing access to the property, located roughly 280 feet south of the cul-de-sac.

Roadways

Main Street: Main Street currently consists of two lanes in each direction with bike lanes, curb, and gutter. Currently Main Street consists of a 12-foot two-way left turn lane for vehicles to access the many developments along this roadway. Main Street provides access to Layton Parkway to the north and 200 West to the south. The posted speed limit is 30 mph.

200 North: 200 North currently consists of two lanes in each direction with a center two-way left turn lane. 200 North runs east and west and provides access to I-15 to the west and US 89 to the east. 200 North is located on the south of the proposed development and the posted speed limit is 35 mph.

400 West: 400 West is a north/south roadway that provides access to the proposed development. 400 West is a local roadway owned by the Kaysville City and is currently not striped, but consists of one lane in each direction. The pavement is wide enough that vehicles making a left turn leave enough room for a vehicle to pass, basically functioning as a two-way left turn lane. The posted speed limit is 30 mph.

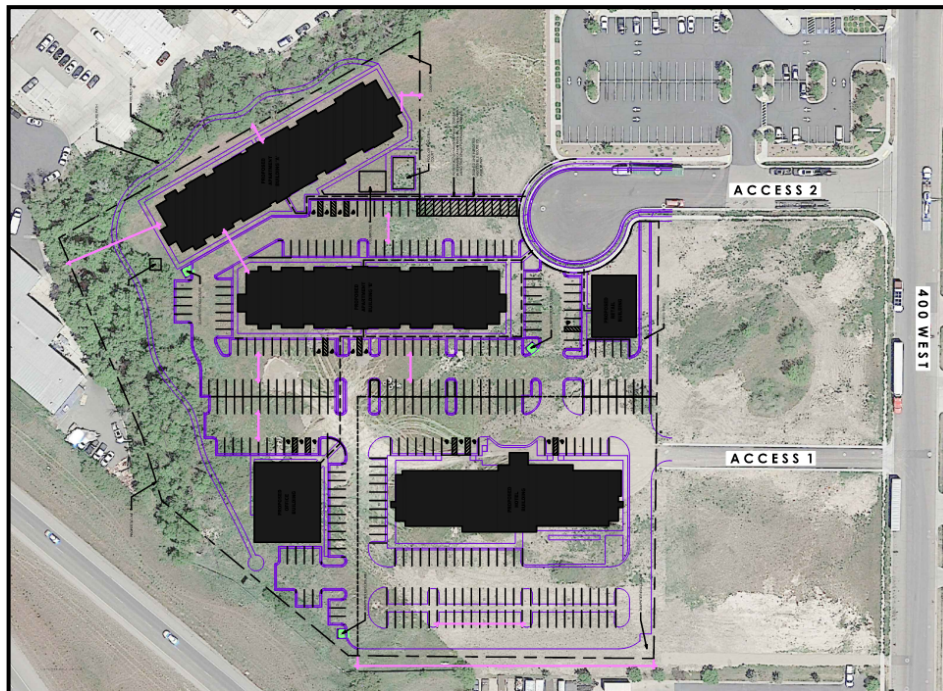
PROPOSED SITE CONDITIONS

The proposed mixed-use development located along 400 West will consist of a 15,000 SF general office building, a 3,000 SF small office space/retail, 160 apartment units, and a 114-room hotel. All traffic exiting and entering the proposed site will access to and from 400 West. The proposed site plan has been designed to provide a total of 302 parking stalls.

Reference: Kaysville Mixed-Use Development Parking Analysis - REVISED

Refer to Exhibit 2 for the proposed site plan of this mixed-use development. As illustrated in the proposed site plan some of the parking spaces within this area can be shared. With the types of uses planned for this site, there will be many times in an average day where the peak parking times will not overlap between land uses and therefore the parking stalls can be shared.

Exhibit 2 – Kaysville Mixed-Use Development Site Plan



PARKING GENERATION

Using the *Institute of Transportation Engineer's (ITE) Parking Generation Manual 5th Edition*, the proposed number of parking stalls needed for this mixed-use development were generated. Land Use Code 221 – Multifamily (Mid-Rise), Land Use Code 710 – General Office Building, Land Use Code 712 – Small Office Building, Land Use Code 310 – Hotel were all used to generate the number of parking stalls. The description of Land Use Code 221 – Multifamily (Mid-Rise) states "multifamily housing includes apartments, townhouses, and condominiums located within the same building with at least three or more dwelling units and between three and ten levels(floors) of residence." In this proposed Mixed-Use Development, there will be 160 residential units in three levels. The description of Land Use Code 710 – General Office Building states, "A general office building is a location

Reference: Kaysville Mixed-Use Development Parking Analysis - REVISED

where affairs of businesses, commercial or industrial organizations, or professional person or firms are conducted." The description of Land Use Code 712 – Small Office Building states, "A small office building typically houses a single tenant and is less than or equal to 3,000 gross square feet in size." The description of Land Use Code 310 – Hotel states, "A place of lodging that provides sleeping accommodation and supporting facilities such as a full-service restaurant, cocktail lounge, meeting rooms, banquet room, and convention facilities."

It is proposed that this new development will include four different land uses in order to meet the needs of the community. Within the land uses in the *Parking Generation Manual*, there are also different settings/locations depending on where the development is located. There are urban/suburban settings to dense multi-use urban settings. Depending if the development is located near rail transit or not, there are also different calculations. For purposes of this mixed-use development, and according to the location of these land uses, the general urban/suburban settings were used to represent the proposed land uses in the area. Refer to the appendix of this statement for the full description and parking generation research from the *ITE Parking Generation Manual*. Table 1 illustrates the number of parking stalls needed for this development using the average rates from the manual.

Table 1 – Parking Generation for Mixed-Use Development

Table 1 - Parking Generation for Mixed-Use Development

ITE Land Use Code	Land Use Description	Size	Weekday Ave. Rate	Parking Stalls	Saturday Ave. Rate	Parking Stalls	Sunday Ave. Rate	Parking Stalls
221	Multifamily Units	160 DU	1.31	210	1.22	196	2.05	328
710	General Office Building	15,000 SF	2.39	36	0.28	5	-	-
712	Small Office Building	3,000 SF	2.56	8	-	-	-	-
310	Hotel	114 ROOMS	0.74	85	1.15	132	-	-
Total				339		333		328

Reference: Kaysville Mixed-Use Development Parking Analysis - REVISED

As can be seen in Table 1, the number of parking stalls needed for this mixed-use development varies from a typical weekday (Monday – Friday) to a typical Saturday and Sunday. The proposed mixed-use development will need 339 parking stalls during a typical weekday, 333 stalls on a typical Saturday and 328 stalls on a typical Sunday. These calculations are assuming full occupancy of all four different land uses for the proposed development. This also assumes all four land uses need their full amount of parking at the same time of day, which in this case will not occur. Office Space will need their maximum number of parking stalls during the middle of a typical week day, where an apartment or hotel will need their maximum number of stalls throughout the night time. Therefore, the majority of the parking can be shared between the different land uses within this proposed development.

The proposed layout of the site plan shows that there is a total of 302 parking stalls planned for this development. This is 37 parking stalls shy of the calculated number of stalls per the *ITE Parking Generation Manual* under the worst-case scenario, which would be on a typical weekday with 339 parking stalls. However, this scenario is unlikely to ever happen due to the difference in operating hours between the four land uses.

The *ITE Parking Generation Manual* also provides the “Percent of Weekday Peak Parking Demand” tables. These tables provide an average percentage of the number of stalls that are used throughout the day based on that land use. These tables present a time-of-day distribution of parking demand and can be found in the appendix of this analysis.

The peak demand for parking for Small Office land use is typically between the 10:00am to 11:00am hours. The peak demand for parking for General Office land use is typically between the 10:00am to 11:00am hours. The peak demand for parking for the Hotel land use is typically between the 9:00am to 10:00am hours. Unlike the other three land uses, Multi-family Housing (Mid-Rise) has a peak parking demand between 12:00am and 4:00am. This shows that many of the parking stalls within the proposed development can be shared between the four different land uses. Tables 2 thru 5 illustrate the parking demand percentages and number of stalls needed at different times of the day based on the parking generation numbers from the *ITE Parking Generation Manual for the four different land uses*. Table 6 illustrates the combined parking demand with all four land uses.

Reference: Kaysville Mixed-Use Development Parking Analysis - REVISED

Table 2 – Land Use 221 Multifamily (Mid-Rise) Weekday Parking Demand Percentages

Hour Beginning	ITE Land use: 221: (%)	Parking Stalls
12:00-4:00 a.m.	100%	210
5:00 a.m.	94%	197
6:00 a.m.	83%	174
7:00 a.m.	71%	149
8:00 a.m.	61%	128
9:00 a.m.	55%	116
10:00 a.m.	54%	113
11:00 a.m.	53%	111
12:00 p.m.	50%	105
1:00 p.m.	49%	103
2:00 p.m.	49%	103
3:00 p.m.	50%	105
4:00 p.m.	58%	122
5:00 p.m.	64%	134
6:00 p.m.	67%	141
7:00 p.m.	70%	147
8:00 p.m.	76%	160
9:00 p.m.	83%	174
10:00 p.m.	90%	189
11:00 p.m.	93%	195

Reference: Kaysville Mixed-Use Development Parking Analysis - REVISED

Table 3 – Land Use 710 General Office Building Weekday Parking Demand Percentages

Hour Beginning	ITE Land Use 710: (%)	Parking Stalls
12:00-4:00 a.m.	0%	0
5:00 a.m.	0%	0
6:00 a.m.	0%	0
7:00 a.m.	13%	5
8:00 a.m.	48%	17
9:00 a.m.	88%	32
10:00 a.m.	100%	36
11:00 a.m.	100%	36
12:00 p.m.	85%	31
1:00 p.m.	84%	30
2:00 p.m.	93%	33
3:00 p.m.	94%	34
4:00 p.m.	85%	31
5:00 p.m.	56%	20
6:00 p.m.	20%	7
7:00 p.m.	11%	4
8:00 p.m.	0%	0
9:00 p.m.	0%	0
10:00 p.m.	0%	0
11:00 p.m.	0%	0

Reference: Kaysville Mixed-Use Development Parking Analysis - REVISED

Table 4 – Land Use 712 Small Office building Weekday Parking Demand Percentages

Hour Beginning	ITE Land Use 712: (%)	Parking Stalls
12:00-4:00 a.m.	0%	0
5:00 a.m.	0%	0
6:00 a.m.	0%	0
7:00 a.m.	0%	0
8:00 a.m.	27%	2
9:00 a.m.	69%	6
10:00 a.m.	88%	7
11:00 a.m.	100%	8
12:00 p.m.	81%	6
1:00 p.m.	81%	6
2:00 p.m.	84%	7
3:00 p.m.	86%	7
4:00 p.m.	92%	7
5:00 p.m.	85%	7
6:00 p.m.	4%	0
7:00 p.m.	0%	0
8:00 p.m.	0%	0
9:00 p.m.	0%	0
10:00 p.m.	0%	0
11:00 p.m.	0%	0

Reference: Kaysville Mixed-Use Development Parking Analysis - REVISED

Table 5 – Land Use 310 Hotel Weekday Parking Demand Percentages

Hour Beginning	ITE Land use: 310: (%)	Parking Stalls
12:00-4:00 a.m.	96%	82
5:00 a.m.	0%	0
6:00 a.m.	91%	77
7:00 a.m.	89%	76
8:00 a.m.	90%	77
9:00 a.m.	100%	85
10:00 a.m.	98%	83
11:00 a.m.	89%	76
12:00 p.m.	85%	72
1:00 p.m.	75%	64
2:00 p.m.	81%	69
3:00 p.m.	70%	60
4:00 p.m.	74%	63
5:00 p.m.	65%	55
6:00 p.m.	73%	62
7:00 p.m.	78%	66
8:00 p.m.	93%	79
9:00 p.m.	96%	82
10:00 p.m.	95%	81
11:00 p.m.	95%	81

Reference: Kaysville Mixed-Use Development Parking Analysis - REVISED

Table 6 – Total Parking Stalls with all Four Land Uses

Hour Beginning	Parking Stalls Land Use (221)	Parking Stalls Land Use (710)	Parking Stalls Land Use (310)	Parking Stalls Land Use (712)	Total Parking Stalls
12:00-4:00 a.m.	210	0	82	0	292
5:00 a.m.	197	0	0	0	197
6:00 a.m.	174	0	77	0	251
7:00 a.m.	149	5	76	0	230
8:00 a.m.	128	17	77	2	224
9:00 a.m.	116	32	85	6	239
10:00 a.m.	113	36	83	7	239
11:00 a.m.	111	36	76	8	231
12:00 p.m.	105	31	72	6	214
1:00 p.m.	103	30	64	6	203
2:00 p.m.	103	33	69	7	212
3:00 p.m.	105	34	60	7	206
4:00 p.m.	122	31	63	7	223
5:00 p.m.	134	20	55	7	216
6:00 p.m.	141	7	62	0	210
7:00 p.m.	147	4	66	0	217
8:00 p.m.	160	0	79	0	239
9:00 p.m.	174	0	82	0	256
10:00 p.m.	189	0	81	0	270
11:00 p.m.	195	0	81	0	276

As illustrated in Table 6, taking all four land uses into account, the maximum number of parking stalls that would be needed is 292 which would be between 12:00am and 4:00am.

CONCLUSION

Based on the provided site plan, the Kaysville Mixed-Use Development consists of two apartment buildings with 160 residential units, a 3,000 square foot small office space/retail, a 15,000 square foot general office space, and a 114-room hotel. The proposed layout of the development will provide a total of 302 parking stalls on site. Using the *ITE Parking Generation Manual*, the calculated number of parking stalls for these land uses will range from 339 parking stalls during a typical weekday, to 333 stalls on a typical

Reference: Kaysville Mixed-Use Development Parking Analysis - REVISED

Saturday, to 328 stalls on a typical Sunday. This is taking the worst-case scenario where all four land uses, Multifamily (Mid-Rise), Hotel, General Office Building and Small Office Building, are using their maximum number of parking stalls at the same time. This will most likely never occur, therefore we also looked at the "Peak Time of Day Percentages" for each land use.

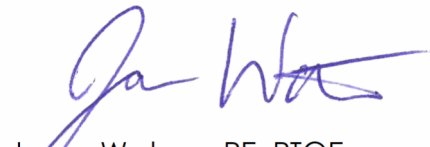
Using the percentage of peak parking demand for each land use, and as illustrated in Table 6, the highest number of parking stalls needed is 292, which would occur between 12:00am and 4:00am. It has been observed that the peak parking demand for a multifamily residential land use occurs between the hours of 12:00am and 4:00am, while the peak demand for parking for the other three land uses occurs during the hours of 9:00am to 11:00am. In this instance, the total number of parking stalls indicates that there was a high demand for parking between 12:00am and 4:00am, however the general office and small office space do not require parking during these hours. With a total of 302 parking stalls provided on site with the proposed layout, this will provide enough parking stalls at any particular hour during the week.

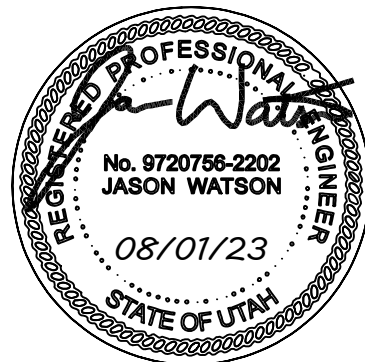
Therefore, it is concluded that the proposed site plan for the Kaysville Mixed-Use Development will provide adequate number of parking stalls, compared to the number of parking stalls calculated per the *ITE Parking Generation Manual*, and the number of parking stalls using the peak parking demand percentages.

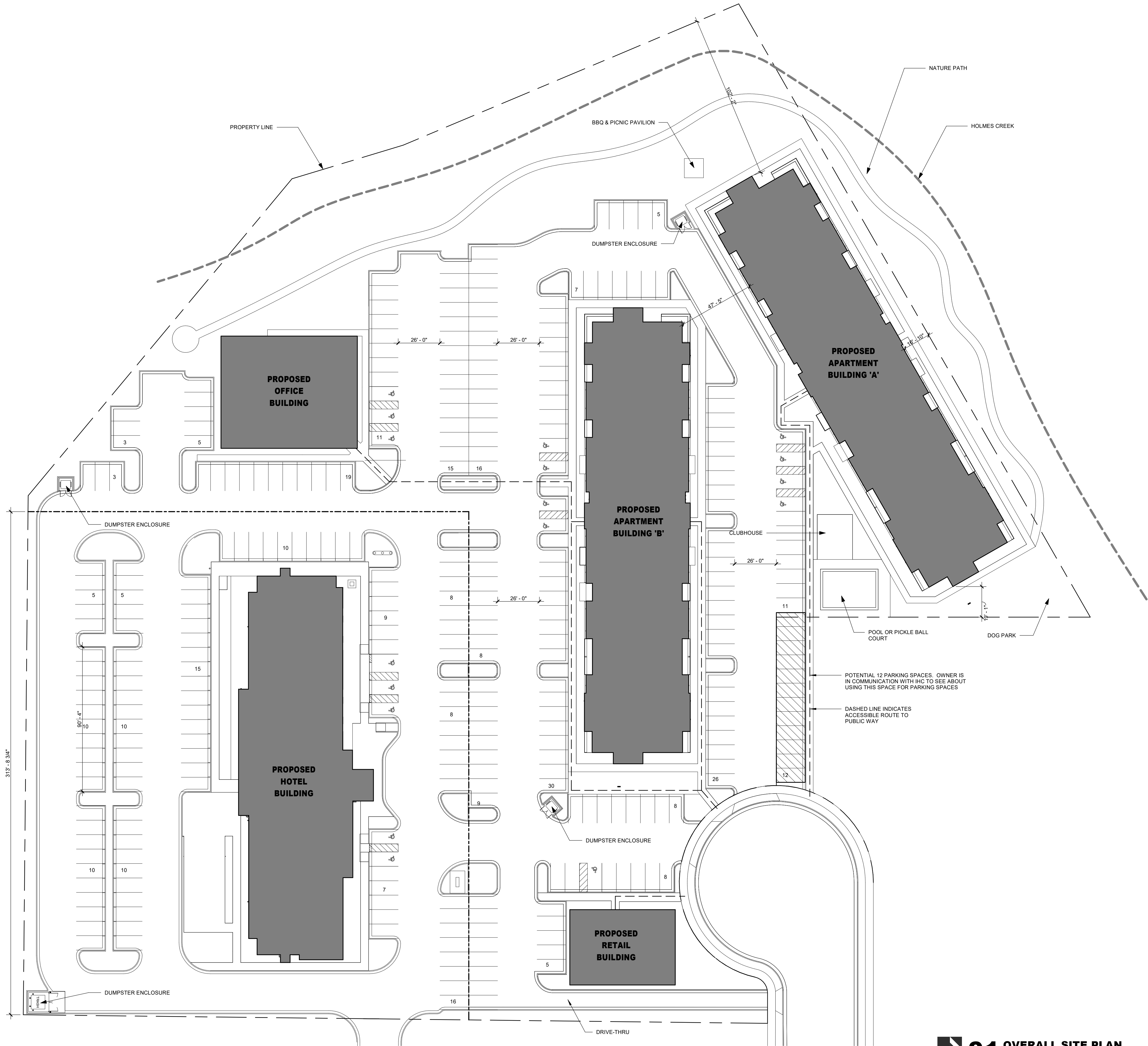
Please feel free to contact me with any questions or comments.

Sincerely,

FOCUS ENGINEERING & SURVEYING, LLC


Jason Watson, PE, PTOE
Transportation Department Manager
801.352.0075
jwatson@focusutah.com





SITE PLAN CALCULATIONS

APARTMENT DATA

BUILDING 'A' FOOTPRINT	16,900 SQ. FT.
BUILDING 'A' SQ. FT.	= 67,600 SQ. FT.
BUILDING 'B' FOOTPRINT	16,900 SQ. FT.
BUILDING 'A' SQ. FT.	= 67,600 SQ. FT.
BUILDING HEIGHT	= 4 STORIES
UNIT COUNT	
BUILDING 'A'	
STUDIO	= 8
1 BED	= 48
2 BED	= 24
TOTAL	= 80
BUILDING 'B'	
STUDIO	= 8
1 BED	= 48
2 BED	= 24
TOTAL	= 80
TOTAL APARTMENTS	= 160 UNITS

HOTEL DATA

BUILDING SQUARE FOOTAGE	= 67,971 S. FT.
BUILDING HEIGHT	= 4 STORIES
UNIT COUNT	= 114

OFFICE DATA

BUILDING SQUARE FOOTAGE	= 15,000 SF
BUILDING HEIGHT	= 3 STORIES

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BUILDING SQUARE FOOTAGE	= 3,000 SF
BUILDING HEIGHT	= 1 STORY

PARKING

REQUIRED		
APARTMENTS	256 STALLS	
OFFICE	63 STALLS	
RETAIL	11 STALLS	
HOTEL	76 STALLS	
STALLS REQ'D	386 STALLS	
10% REDUCTION	386 X 10% = 39.6	
TOTAL REQ'D	356 STALLS	
TOTAL PROVIDED	302 STALLS	

AMENITIES

POOL OR PICKLE BALL COURT	
DOG PARK	
NATURE PATH	
BBQ & PICNIC PAVILION	
CLUBHOUSE	

01 OVERALL SITE PLAN
1" = 30'-0"

STAMP

REVISION NO.	DESCRIPTION	DATE

DATE
07/26/2023
ISSUE

SHEET TITLE
SITE PLAN

SHEET NO.
A1.01

KAYSVILLE MIXED-USE DEVELOPMENT

TRAFFIC IMPACT STUDY

KAYSVILLE, UT



February 21, 2023

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1.0 Executive Summary

1.1 DESCRIPTION OF PROJECT

This report presents the results of a traffic impact analysis for the Kaysville Mixed Use Development, located east of I-15, north of 200 North, south of Main Street and west of 400 West in Kaysville, Utah. The Kaysville Mixed Use Development is planned for both residential and commercial usage with two accesses onto 400 West. The two accesses will use existing roadways that connect to 400 West. The proposed parcel of land for the Kaysville Mixed Use development is currently undeveloped land that surrounds existing commercial and industrial buildings. Figure 1 illustrates the vicinity map and the location of this development in relation to the adjacent roadway network.

The Kaysville Mixed Use Development will consist of 132 apartments, a 15,000 SF general office building, a 5,000 SF small office building/retail space, and a 115-room hotel. For purposes of this study, and following UDOT's guidelines for a Level II traffic impact study, the analysis will consist of the following intersections:

- Main Street & 400 West
- 200 North & 400 West
- Access #1 & 400 West
- Access #2 & 400 West

The proposed development is planned to be built out by the end of 2025. Refer to Figure 2 for the overall site plan of the Kaysville Mixed Use Development and the proposed access locations.

The traffic associated with this development is generated using the Trip Generation Manuals published by the *Institute of Transportation Engineers (ITE)*. On an average weekday, the 132 residential apartment units are expected to generate 49 AM peak hour trips and 51 PM peak hour trips, with 599 trips generated on an average day. The general office building will generate 23 AM peak hour trips and 22 PM peak hour trips with an ADT of 163 trips. The small office space will generate 8 AM peak hour trips and 11 PM peak hour trips on an average day, with an ADT of 72 trips. The hotel will generate 53 AM peak hour trips and 68 PM peak hour trips, with an ADT of 919 trips generated on an average day.

1.2 FINDINGS

Based on the analysis performed in this traffic impact study, the following tables present the findings under the study scenarios for the 2023 Existing, 2025 Opening and 2030 Future Year scenarios and illustrates the Level of Service (LOS) and delay time at each intersection.

Table E1 – Existing, Opening & Future Year Level of Service

INTERSECTION	EXISTING, OPENING & FUTURE LEVEL OF SERVICE					
	2023 EXISTING YEAR		2025 OPENING YEAR		2030 FUTURE YEAR	
	AM	PM	AM	PM	AM	PM
400 West & 200 North	f(375.2)	f(380.4)	f(566.4)	f(976.5)	f(2086.9)	f(**)
400 West & Access #1	a(0.0)	a(0.0)	a(0.0)	a(0.0)	a(0.0)	a(0.0)
400 West & Access #2	b(10.0)	b(10.0)	b(10.1)	b(10.0)	b(10.3)	b(10.1)
400 West & Main Street	d(27.0)	c(17.6)	d(30.6)	c(18.6)	e(40.8)	c(22.0)
Values represent the overall LOS for all signalized intersections (uppercase letters) and the worst movement for all unsignalized intersections (lowercase letters) ** value is not provided in Synchro as the delay exceeds capacity						

Table E2 – Opening & Future Year with Project Level of Service

INTERSECTION	OPENING & FUTURE YEAR W/ PROJECT LEVEL OF SERVICE			
	2025 OPENING w/ PROJ		2030 FUTURE w/ PROJ	
	AM	PM	AM	PM
400 West & 200 North	f(1339.9)	f(**)	f(**)	f(**)
400 West & Access #1	b(10.4)	a(9.9)	b(10.6)	b(10.0)
400 West & Access #2	b(10.6)	b(10.2)	b(10.8)	b(10.4)
400 West & Main Street	d(34.9)	c(20.6)	e(48.8)	d(25.4)
Values represent the overall LOS for all signalized intersections (uppercase letters) and the worst movement for all unsignalized intersections (lowercase letters) ** value is not provided in Synchro as the delay exceeds capacity				

As seen in Table E1 and Table E2, the level of service for the southbound approach at 400 West & 200 North currently fails. The northbound approach at 400 West & Main Street also currently fails. With the growth in this area being minimal as open space is not as available, these approaches will continue to fail in the Opening and Future Years. With heavy traffic volumes along Main Street and 200 North, it is typical for side streets to fail

and have heavy delay to access the major streets as is the case here. With traffic signal located within close proximity to these intersections, the signals will provide gaps in traffic that allow vehicles to make the turning movements on and off of the major streets, which is not necessarily analyzed by Synchro. This was observed while collecting the traffic data.

With the addition of the traffic generated by the Kaysville Mixed Use Development at full build-out, the 400 West & Main Street intersection will continue to experience heavy delay in the northbound direction under the 2030 Future Year scenario. The 400 West & 200 North intersections will also continue to experience heavy delays in the southbound direction under the 2025 Opening Year scenarios.

In order to look at mitigations to improve the flow of traffic at these two intersections, a Peak Hour Traffic Signal Warrant Analysis was performed under the 2025 Opening Year scenario for the 200 North and 400 West intersection. Since the level of service for the northbound approach of the Main Street and 400 West intersection does not fall below acceptable levels of service until 2030 Future Year, the signal warrant analysis for this intersection was performed under the 2030 Future Year scenario. The 200 North and 400 West intersections does meet the warrant for a traffic signal analyzing the Peak Hour traffic volumes under the 2025 Opening Year scenario. Similarly, the Main Street and 400 West intersection will meet traffic signal warrants for peak hour volumes under the 2030 Future Year scenario.

Using the existing and projected traffic volumes at each of the study area intersections, both with and without the Kaysville Mixed Use development traffic, the following are the recommendations to improve the flow of traffic.

400 West and 200 North

2025 Opening Year Scenario

With the projected 2% growth in traffic to the 2025 Opening Year of the Kaysville Mixed Use Development, the northbound and southbound approaches will continue to experience excessive delay and failing levels of service. A traffic signal warrant analysis was performed under this scenario, and the projected traffic volumes do meet the warrant for a traffic signal. Although signalizing this intersection will improve the LOS, the close proximity of this intersection to the northbound on and off ramps to I-15 may increase delay with traffic flow along 200 North. It is recommended this intersection continue to be monitored. Another possible recommendation is to construct a raised median to control access along 200 North as a right-in/right-out. These are all mitigations that will be needed without the proposed Kaysville Mixed Use Development.

2025 Opening Year with Project Scenario

With the full build-out of the Kaysville Mixed-Use Development by 2025, 400 West and 200 North intersection will continue to function with similar levels of service as under the 2025 Opening Year scenario (without the development). No additional mitigations at this intersection are needed.

2030 Future Year Scenario

Similar to the 2025 Opening Year scenario, the northbound and southbound traffic movements will continue to fail. Similar mitigations will be necessary.

2030 Future Year with Project Scenario

With the previously mentioned mitigations of either a signal or right-in/right-out intersection, the traffic movements will function with acceptable levels under the 2030 Future Year with Project scenario.

400 West and Main Street

2025 Opening Year Scenario

All traffic movements will continue to function with acceptable levels of service under the 2025 Opening Year scenario and no mitigations are needed.

2025 Opening Year with Project Scenario

All traffic movements will continue to function with acceptable levels of service with the addition of the traffic from the Kaysville Mixed Use Development. No additional mitigations are needed.

2030 Future Year Scenario

By 2030, the northbound approach at the 400 West and Main Street intersection will fall to a LOS E in the AM Peak Hour. A traffic signal warrant analysis was also performed for this intersection under the 2030 Future Year scenario. The projected traffic volumes do meet the warrant under the Peak Hour analysis. It is recommended this intersection be monitored for when future traffic volumes may meet the warrant.

2030 Future Year with Project Scenario

With the addition of the Kaysville Mixed Use Development traffic, 400 West and Main Street will continue to function with similar unacceptable levels of service as under the 2030 Future Year scenario without the development. If a traffic signal is warranted and constructed to improve this intersection in the future year, this intersection will function acceptably with the addition of the proposed development.

Access 1 and 400 West

Access 1 currently functions with a single receiving lane and one exiting lane onto 400 West. With the addition of the Kaysville Mixed Use Development, it is recommended this intersection continue to function with the existing lane configuration. This intersection will function with acceptable levels of service and very minimal delays along 400 West.

Access 2 and 400 West

Access 2 currently functions with acceptable levels of service. With the addition of the Kaysville Mixed Use Development, this access will continue to function with acceptable levels of service. This intersection currently functions with one receiving lane and one exiting lane and it is recommended this intersection continue to function with this lane configuration. Access to the existing Intermountain Kaysville Creekside Clinic will be maintained.

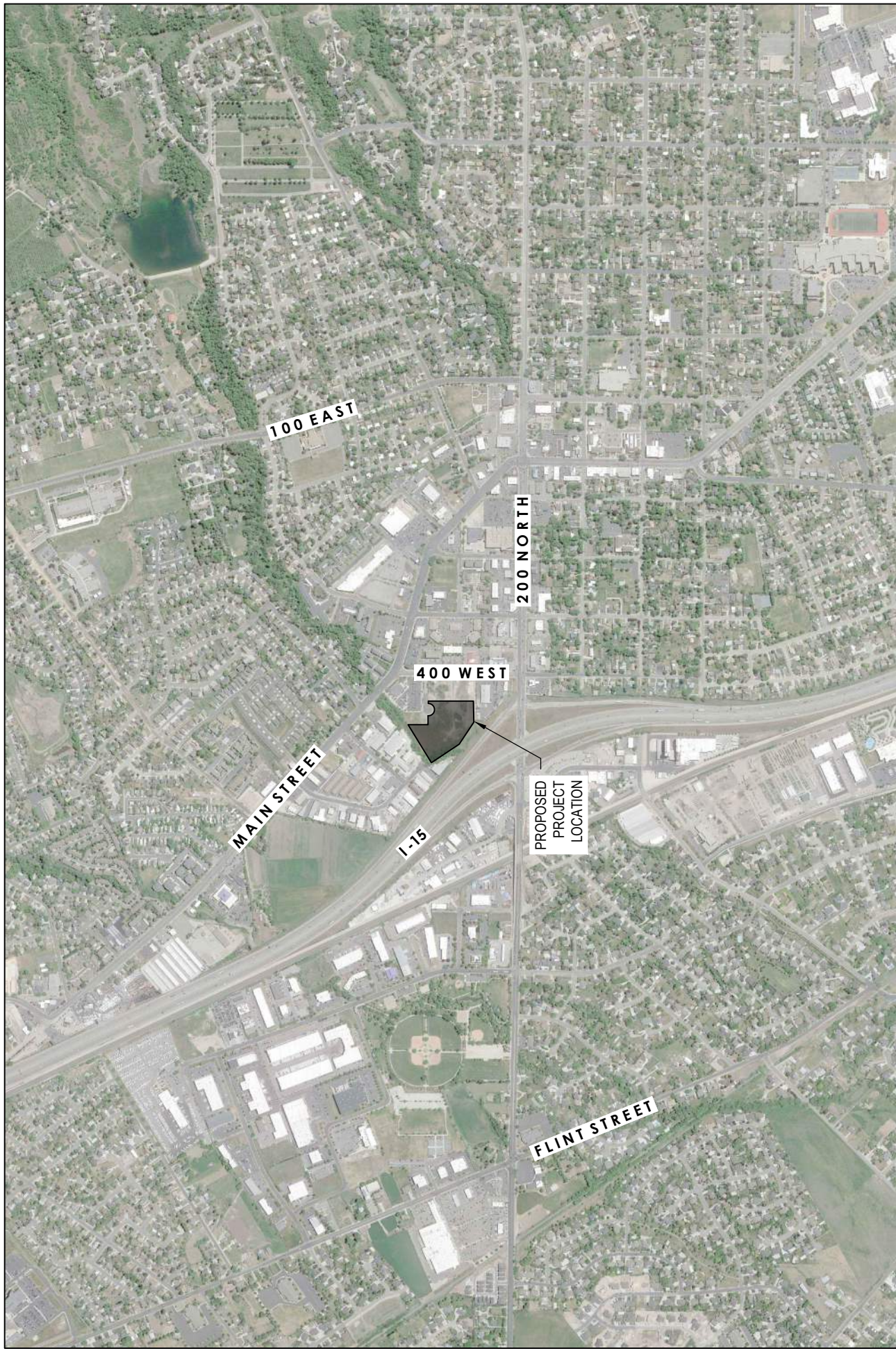
2.0 Introduction

2.1 DEVELOPMENT DESCRIPTION

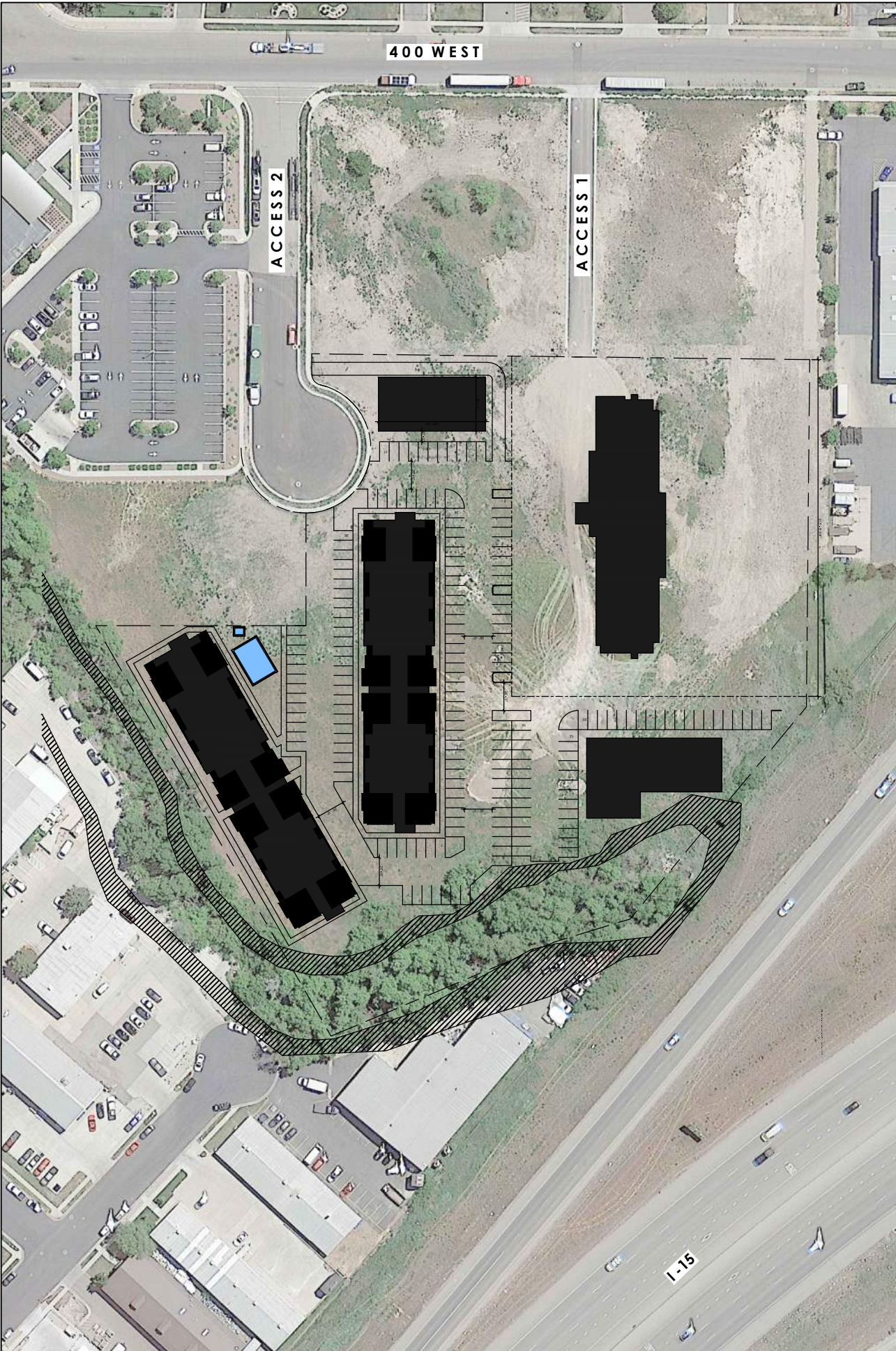
The proposed development is situated on roughly 6 acres of land located east of I-15, south of Main Street, west of 400 West and north of 200 North in Kaysville. The proposed Kaysville Mixed-Use Development will consist of 132 residential apartment units, a 15,000 SF office building, a 5,000 SF office space/retail building, and a 115-room hotel. The buildings will be used for both residential and commercial purposes and are planned to be fully built out by 2025.

The Kaysville Mixed Use Development will use the two existing accesses which connect to 400 West. Access 1 is located along the existing stub road to the property and is located roughly 660 feet to the north of 200 North. Access 2 will connect onto the existing roadway which currently provides access along the south of Intermountain Kaysville Creekside Clinic. Access 2 is located roughly 280 feet to the north of Access 1.

Refer to the Vicinity Map and Site Plan in Figures 1 and 2, respectively, for the location of the new development and the layout of the site and location of the proposed accesses onto 400 West.



KAYSVILLE MIXED-USE DEVELOPMENT
FIGURE 1 - VICINITY MAP



KAYSVILLE MIXED-USE DEVELOPMENT
FIGURE 2 - SITE PLAN

3.0 Existing Conditions

3.1 ROADWAYS

Main Street: Main Street currently consists of two lanes in each direction with bike lanes, curb, and gutter. Currently Main Street consists of a 12-foot two-way left turn lane for vehicles to access the many developments along this roadway. Main Street provided access to Layton Parkway to the north and 200 West to the south. The posted speed limit is 30 mph.

200 North: 200 North currently consists of two lanes in each direction with a center two-way left turn lane. 200 North runs east and west and provides access to I-15 to the west and US 89 to the east. 200 North is located on the south of the proposed development and the posted speed limit is 35 mph.

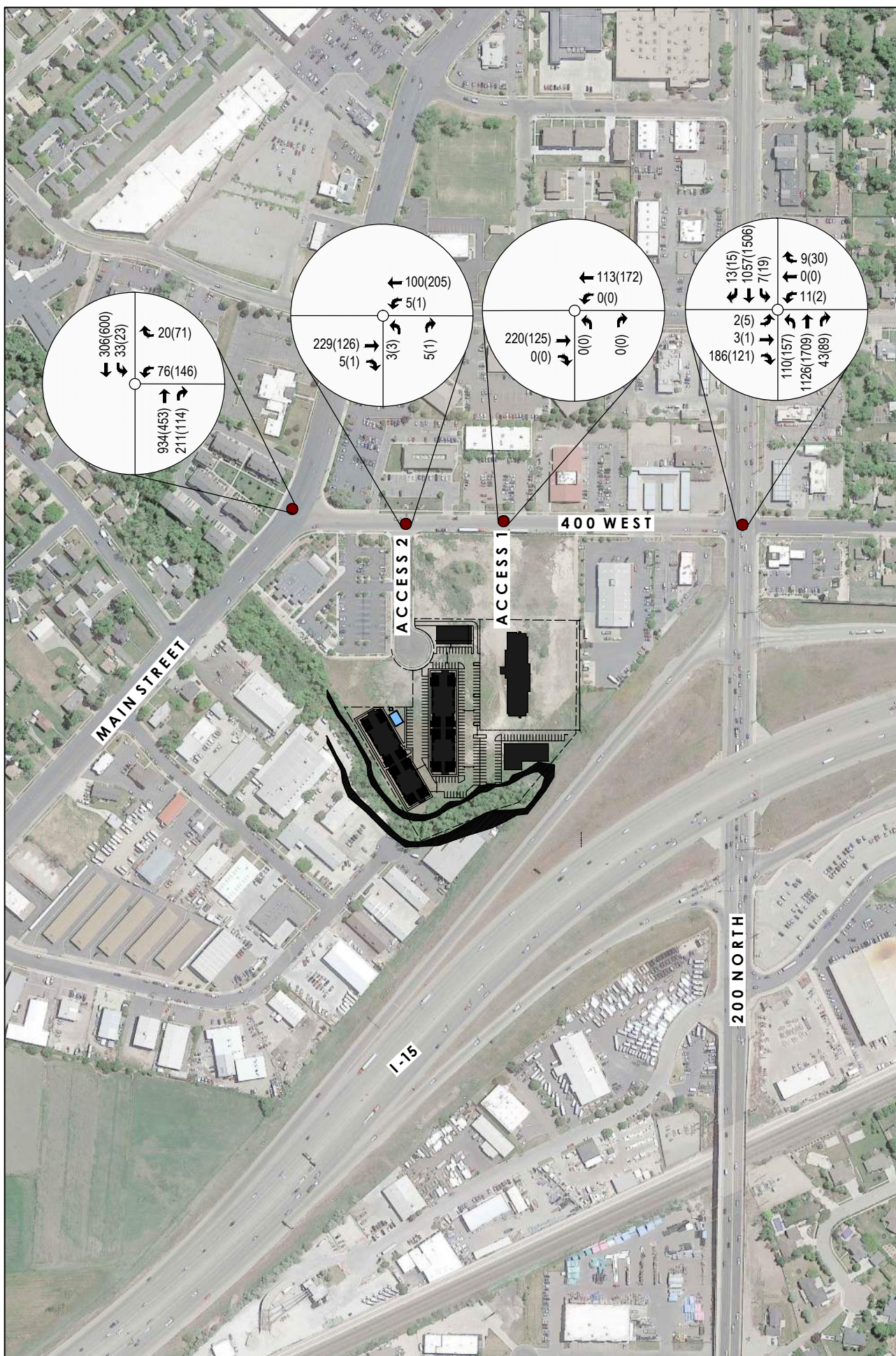
400 West: 400 West is a north/south roadway that provides access to the proposed development. 400 West is a local roadway owned by the Kaysville City and is currently not striped. The pavement width is wide enough to allow for vehicles to turn left into the adjacent development and a vehicle to pass on the right that is traveling north or south. 400 West is posted at 30 mph.

3.2 EXISTING TRAFFIC VOLUMES

Using UDOT's Traffic Study Guidelines for a Level II Traffic Study, it was determined existing traffic counts would be collected at the following intersections which fall within ½ mile of the proposed project boundary:

- 400 West & Main Street
- 400 West & 200 North
- 400 West & South Access to Intermountain Kaysville Creekside Clinic
- 400 West & Existing Road to proposed property.

Existing AM and PM peak hour traffic volumes were collected on February 28, 2023 at these two intersections, between the peak hours of 7 AM to 9 AM and 4 PM to 6 PM. From the existing counts that were collected, it was determined the peak hours at the 400 West and Main Street intersection are from 7:45 AM to 8:45 AM and 4:45 PM to 5:45 PM. The peak hours at the 400 West and 200 North intersection are from 8:00 AM to 9:00 AM and from 4:45 PM to 5:45 PM. These volumes are illustrated in Figure 3.



KAYSVILLE MIXED-USE DEVELOPMENT

XXX(XX) = AM(PM) PEAK HOUR TRAFFIC VOLUMES

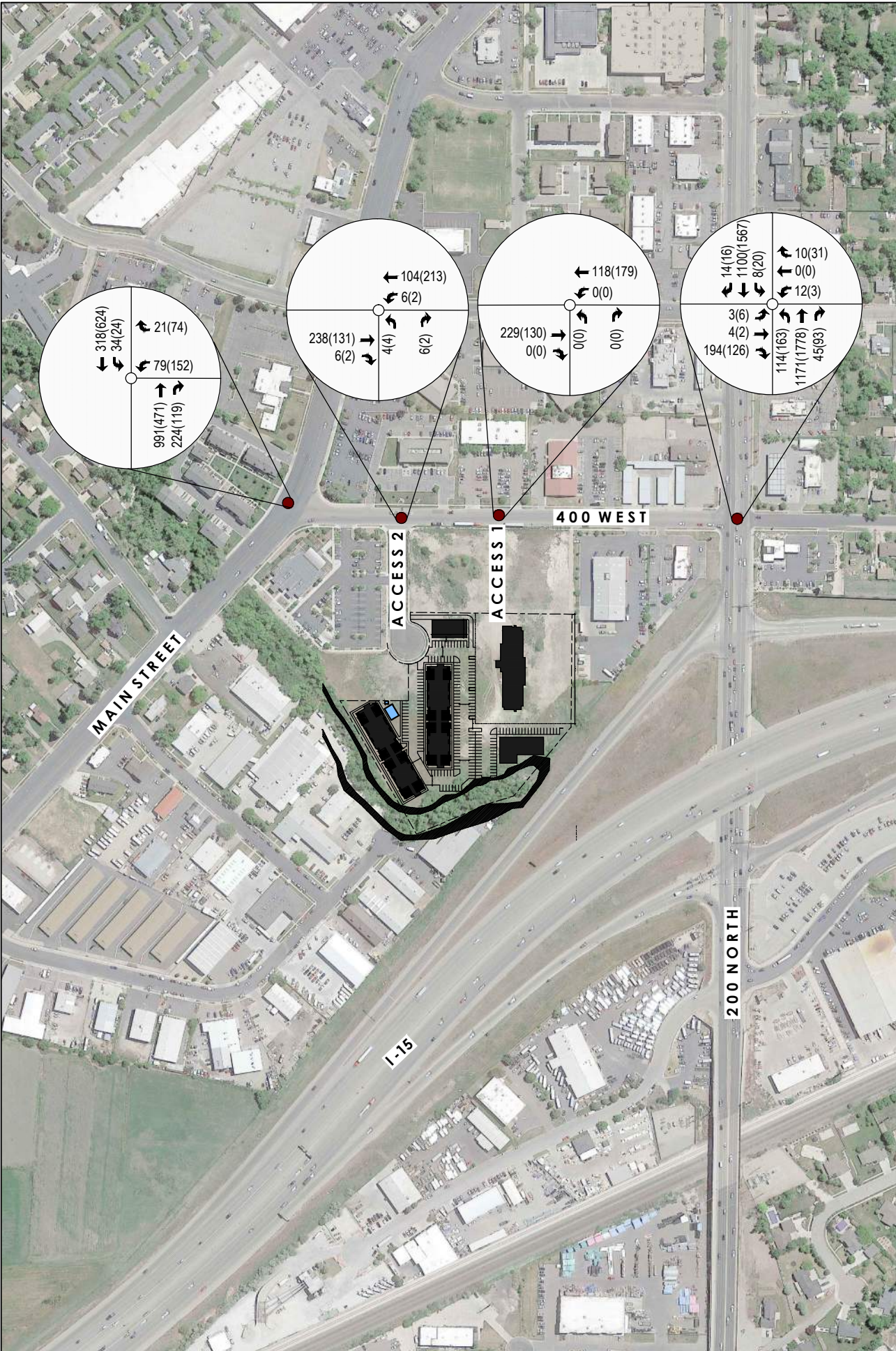


4.0 Opening and Future Year Traffic Conditions

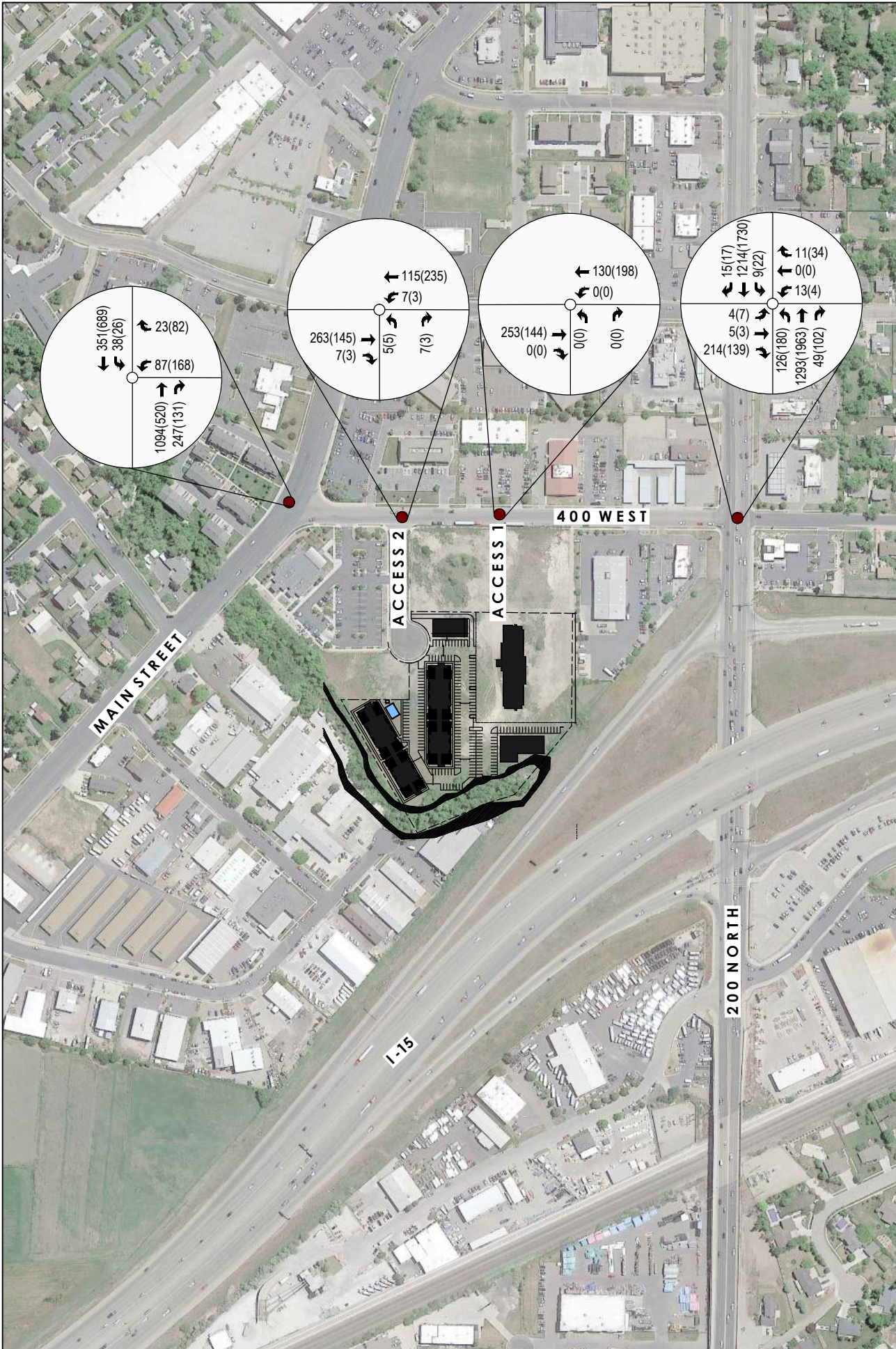
Opening Year traffic, also known as Background traffic, is the traffic that is on the roadways within the study area regardless if the proposed development is constructed or not. These traffic volumes are a projection of growth within the study area based on current land available and opportunities for future development within this area.

It is assumed an average growth of 2% will occur from 2023 to 2030 along the roadways within the study area. 2025 is the planned year for the completion of the Kaysville Mixed Use Development. Applying the assumed growth rate to the existing traffic volumes, the projected traffic volumes for the 2025 Opening Year traffic volumes are illustrated in Figure 4.

Following the UDOT Traffic Impact Study Guidelines, a Level II traffic study will also look at five years after Opening Year. These are recognized as the Future Year conditions. It is assumed after 2025, the growth rate will continue at 2% as vacant land becomes developed and less growth is available. Applying this growth to the Existing and Opening Year traffic volumes, the 2030 Future Year traffic volumes are generated. These volumes can be found in Figure 5.



KAYSVILLE MIXED-USE DEVELOPMENT
FIGURE 4 - 2025 OPENING YEAR TRAFFIC VOLUMES
 XX(XX) = AM(PM) PEAK HOUR TRAFFIC VOLUMES



KAYSVILLE MIXED-USE DEVELOPMENT

FIGURE 5 - 2030 FUTURE YEAR TRAFFIC VOLUMES

XX(XX) = AM(PM) PEAK HOUR TRAFFIC VOLUMES



5.0 Trip Generation and Trip Distribution

The full build-out of the proposed Kaysville Mixed Use Development will consist of 132 apartment units, a 15,000 SF general office building, a 5,000 SF small office building/retail and a 115-room hotel. Using land use codes 221, 710, 712 and 310 for each of these different land uses, the trip generation rates were determined using the 11th Edition of the Trip Generation Manual. This manual is an ITE information report, published by the *Institute of Transportation Engineers*. Trips generated by the proposed development which will occur during the peak hours of the proposed development were used for the analysis. The Peak Hour of Adjacent Street Traffic rates are used to generate the AM and PM peak hour volumes. The trips generated from the Kaysville Mixed Use Development are presented in Table 1.

Table 1 - Trip Generation

ITE Land Use Code	Land Use	Land Use Description	Size	Daily (AADT)	Trip Generation (AM)		Trip Generation (PM)	
					Enter	Exit	Enter	Exit
221	Multifamily Housing (Mid-Rise)	Dwelling Units	132	599	11	38	31	20
710	General Office Building	1000 Sq. Ft. GFA	15	163	20	3	4	18
712	Small Office Building	1000 Sq. Ft. GFA	5	72	7	1	4	7
310	Hotel	ROOMS	115	919	30	23	35	33
Total				1753	68	65	74	78

5.1 PASS-BY TRIP & INTERNAL CAPTURE REDUCTION

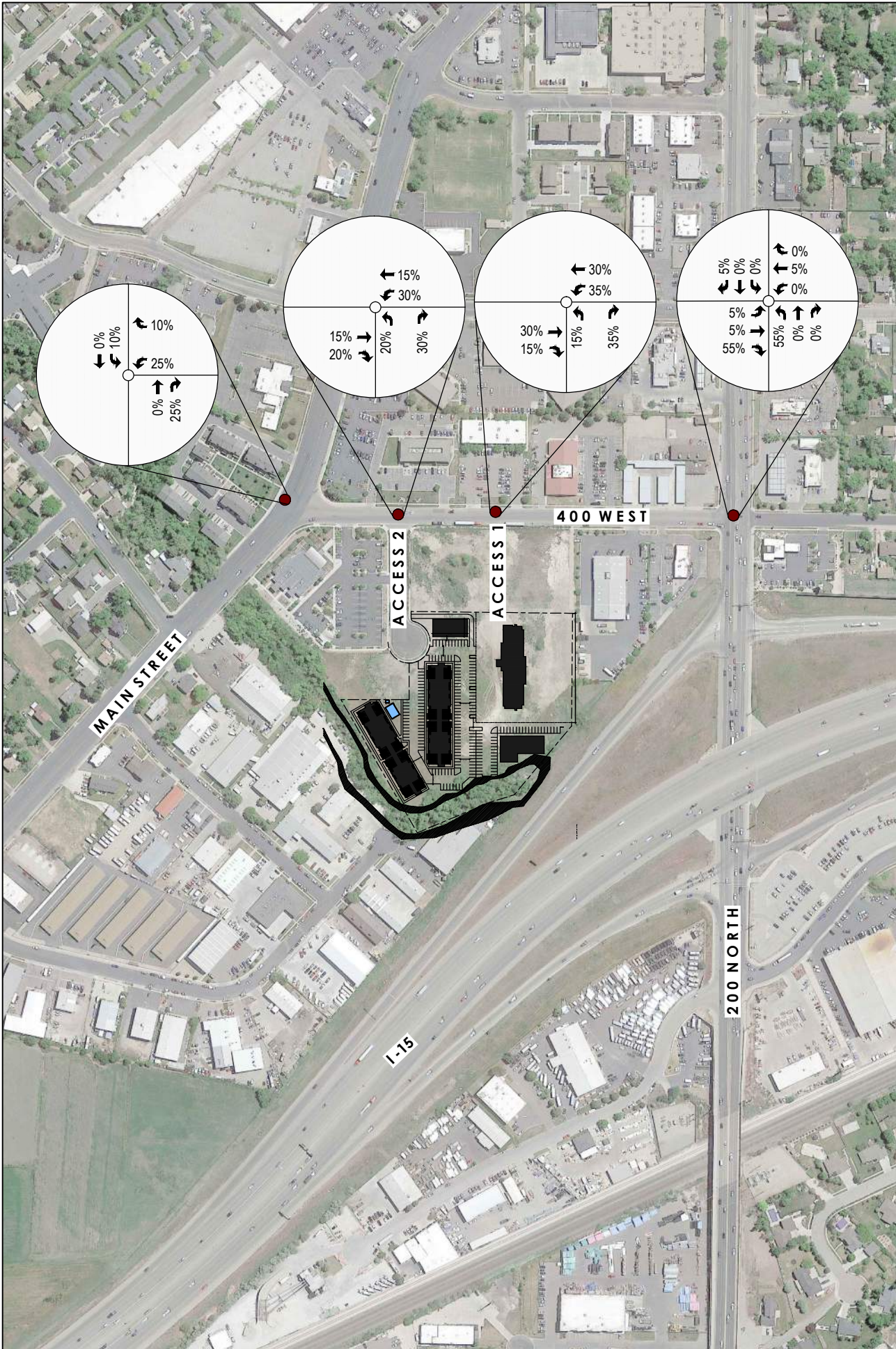
Pass-by trips are represented as traffic already on the surrounding roadways and not a new trip generated by the proposed development. For instance, someone on their way home from work and stops by the gas station, but then continues on to their final destination, i.e., home. Internal Capture trips are vehicles that will enter the site and visit more than one land use in their visit. For instance, someone enters the development to visit a retail store, and also stops at a gas station. The internal capture helps so trips generated by one vehicle that visit multiple land uses, aren't counted multiple times. The land uses proposed with the Kaysville Mixed-Use Development will not likely have pass-

by traffic or internal capture, therefore no reduction in the amount of traffic was accounted for.

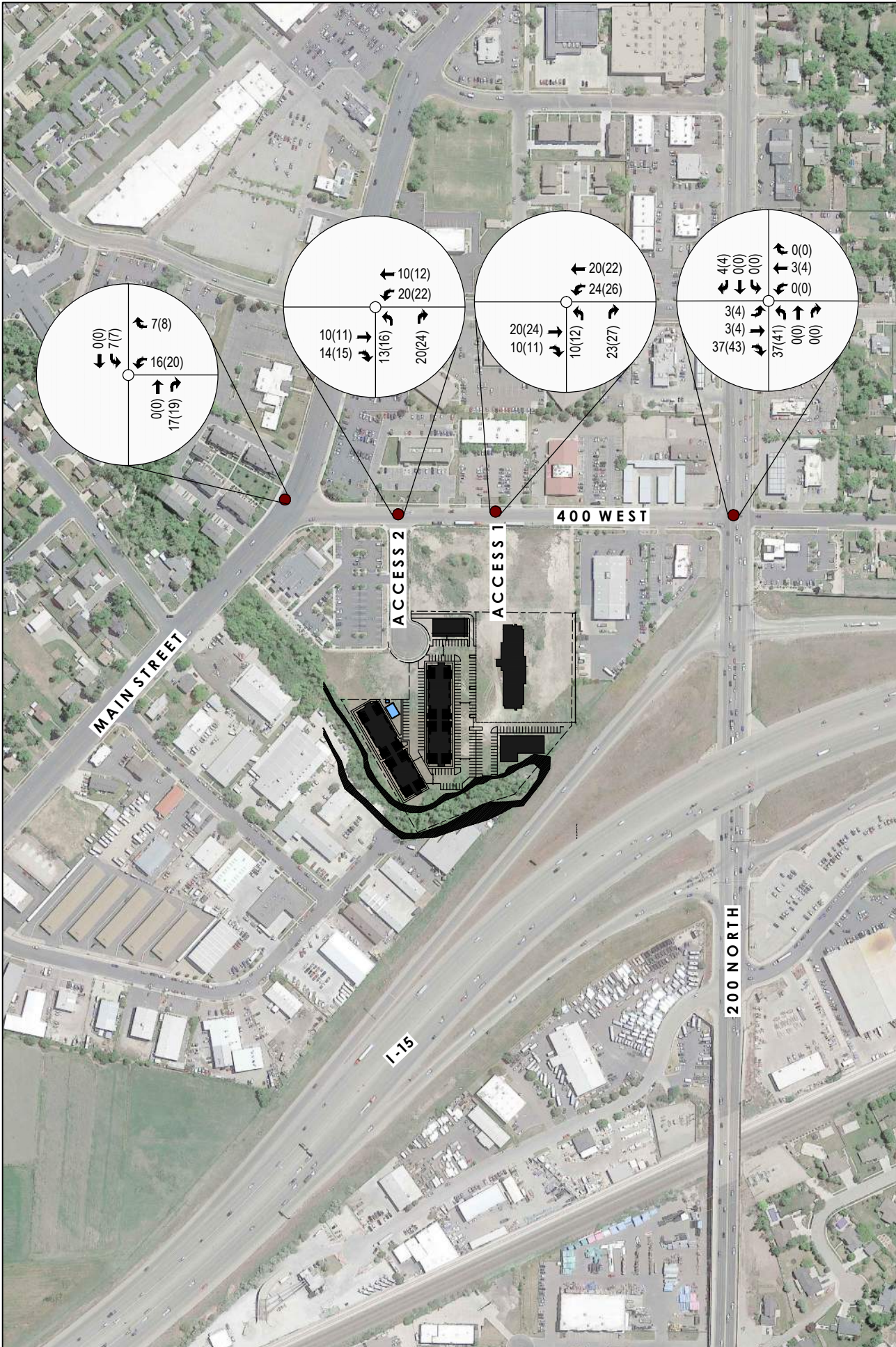
5.2 SITE TRAFFIC DISTRIBUTION

Site ingress/egress traffic at the proposed accesses were distributed based on the anticipated direction vehicles would be coming from or going to. Directional distribution was estimated based on current traffic patterns and also current land uses within the proximity of the proposed development, mainly access to highways, employment districts, shopping area, schools, etc. Figure 6 illustrates the site traffic distribution percentages throughout the study area.

Using the distribution percentages along with the projected traffic volumes outlined in Table 1, Figure 7 illustrates the site traffic volumes anticipated at the study area intersections.



KAYSVILLE MIXED-USE DEVELOPMENT
FIGURE 6 - PROJECT DISTRIBUTION PERCENTAGES
XX% = PROJECT DISTRIBUTION PERCENTAGE

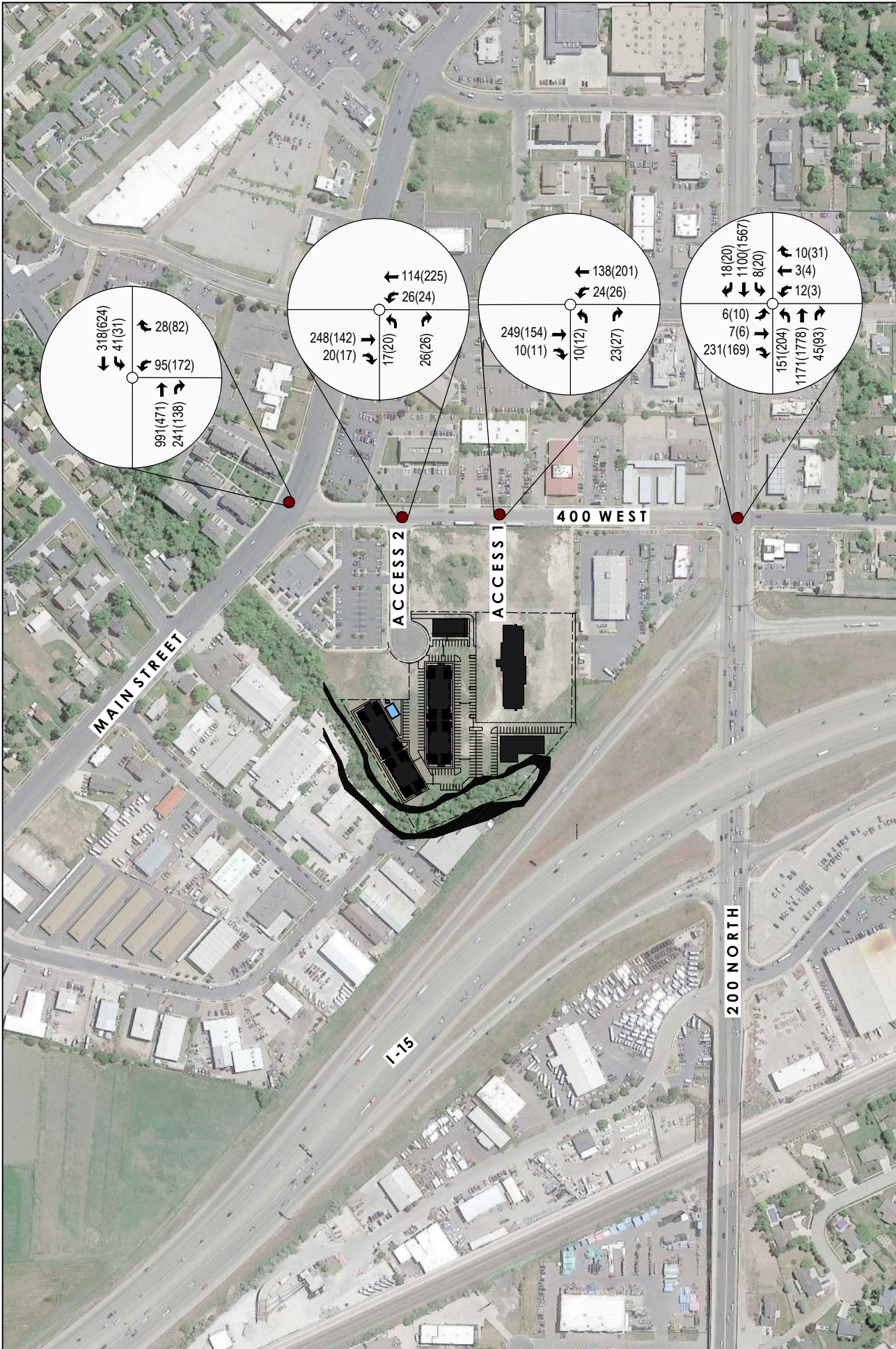


KAYSVILLE MIXED-USE DEVELOPMENT
FIGURE 7 - TRIP DISTRIBUTION VOLUMES
 XX(XX) = AM(PM) PEAK HOUR TRAFFIC VOLUMES

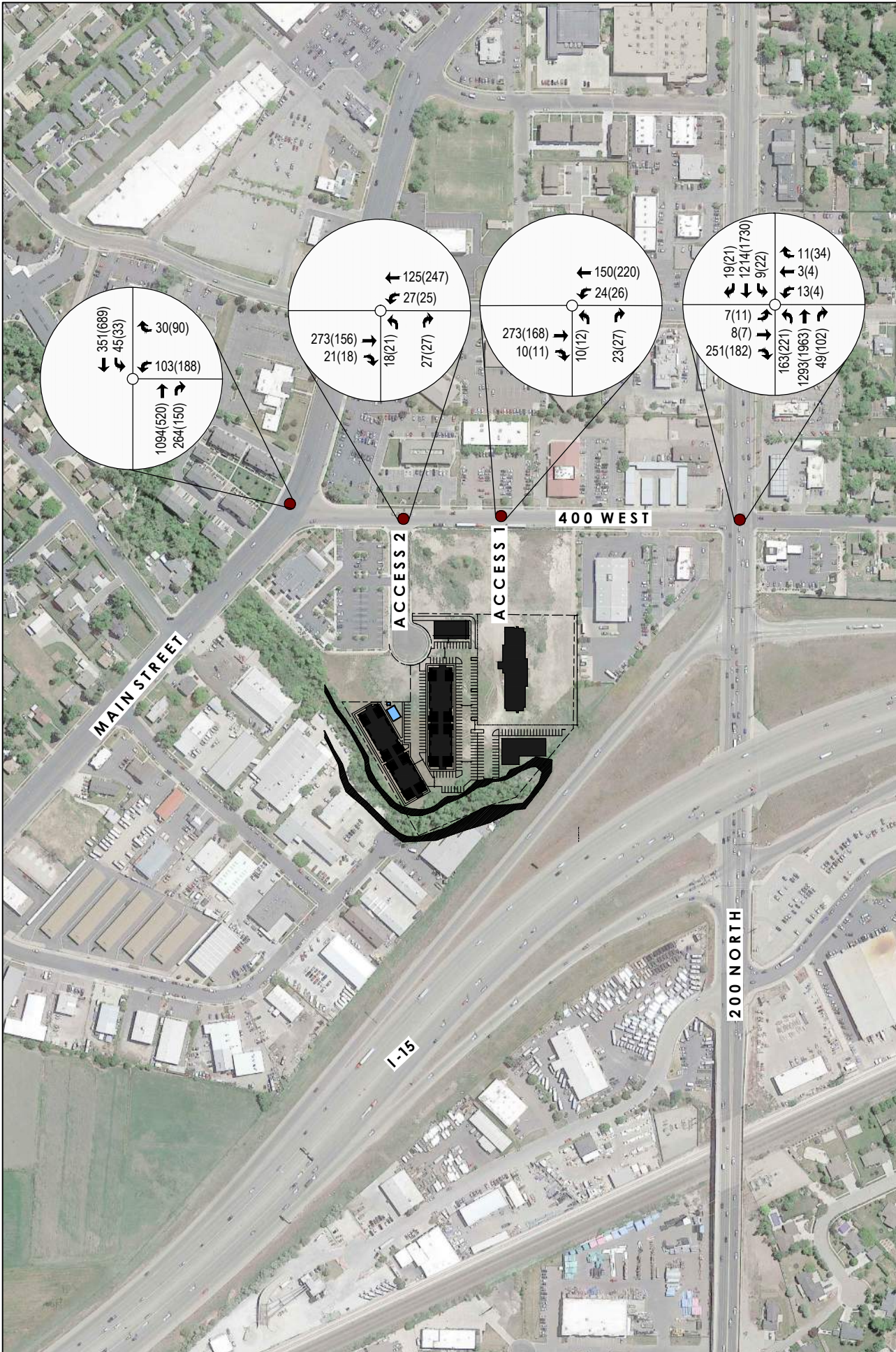
6.0 Opening and Future Year with Project Traffic Conditions

The Opening and Future Year with Project traffic volumes represent the traffic that will be added to the study area with the addition of the Kaysville Mixed Use Development. Using the 2025 Opening Year traffic volumes (Figure 4) and the site generated traffic volumes (Figure 7), the 2025 Opening Year with Project traffic volumes are generated. Per the developer's schedule, it is anticipated the Kaysville Mixed Use Development will be built out in 2025. The 2025 Opening Year with Project traffic volumes, which illustrates the full build-out of the development, are illustrated in Figure 8.

Applying this same approach, using the 2030 Future Year traffic volumes (Figure 5) and the site generated traffic volumes (Figure 7), the 2030 Future Year with Project traffic volumes are generated. These volumes are found in Figure 9.



KAYSVILLE MIXED-USE DEVELOPMENT
FIGURE 8 - 2025 OPENING YEAR W/ PROJECT TRAFFIC VOLUMES
 XX(XX) = AM(PM) PEAK HOUR TRAFFIC VOLUMES



KAYSVILLE MIXED-USE DEVELOPMENT
FIGURE 9 - 2030 FUTURE YEAR W/ PROJECT TRAFFIC VOLUMES
 XX(XX) = AM(PM) PEAK HOUR TRAFFIC VOLUMES

7.0 Capacity Analysis

Intersection capacity analysis was performed at the study area intersections and the proposed accesses to the Kaysville Mixed Use Development. Synchro® Version 11 was used to analyze the study intersections for the proposed trip conditions according to methods put forth by the Transportation Research Board's **Highway Capacity Manual (HCM 6th Edition)**.

The Level of Service (LOS) of an intersection range from A to F, where LOS A has a low vehicular delay indicating smooth free-flowing traffic. LOS F has a high vehicular delay and indicates the worst-case scenario with high congestion and a complete breakdown of traffic flow. Although LOS A through C are the desired levels, LOS D is considered acceptable in urban conditions. Traffic conditions with LOS of E or F are generally deemed unacceptable and represent significant travel delay, increased accident potential, and inefficient motor vehicle operation. Table 2 shows the relation between LOS and vehicular delay for signalized and unsignalized intersections.

Table 2 - Signalized and Unsignalized intersection LOS and Delay Parameters

Level of Service (LOS)	Vehicular Delay (seconds/vehicle)	
	Signalized Intersection	Stop Controlled Approach
A	$0.0 \leq 10.0$	$0.0 < 10.0$
B	$> 10.0 \leq 20.0$	$> 10.0 < 15.0$
C	$> 20.0 \leq 35.0$	$> 15.0 < 25.0$
D	$> 35.0 \leq 55.0$	$> 25.0 < 35.0$
E	$> 55.0 \leq 80.0$	$> 35.0 < 50.0$
F	> 80.0	> 50.0

The 2023 Existing traffic volumes at the study area intersections were analyzed using Synchro. The levels of service at each of the turning movements can be seen in the following table.

Table 3 – 2023 Existing Traffic LOS

Intersection	2023 Existing Year Traffic LOS(Delay)				
	Overall LOS	Northbound	Southbound	Eastbound	Westbound
1: 400 West & 200 North					
AM Peak Hour	-	F(375.2)	D(34.3)	A(1.1)	A(0.1)
PM Peak Hour	-	F(380.4)	F(215.7)	A(1.7)	A(0.2)
2: 400 West & Access 1					
AM Peak Hour	-	A(0.0)	A(0.0)	A(0.0)	-
PM Peak Hour	-	A(0.0)	A(0.0)	A(0.0)	-
3: 400 West & Access 2					
AM Peak Hour	-	A(0.4)	A(0.0)	B(10.0)	-
PM Peak Hour	-	A(0.1)	A(0.0)	B(10.0)	-
4: 400 West & Main Street					
AM Peak Hour	-	D(27.0)	-	A(0.0)	A(1.2)
PM Peak Hour	-	C(17.6)	-	A(0.0)	A(0.3)

As can be seen in Table 3, under the existing traffic conditions, the northbound and southbound traffic movements at 400 West and 200 North currently experience heavy delays and function at unacceptable levels of service (LOS). All other movements at the study area intersection function with acceptable levels of service.

With the projected growth to the Opening Year of 2025 and the Future Year of 2030, the following tables illustrate the LOS for the study area intersections under these scenarios.

Table 4 – 2025 Opening Year Traffic LOS

Intersection	2025 Opening Year Traffic LOS(Delay)				
	Overall LOS	Northbound	Southbound	Eastbound	Westbound
1: 400 West & 200 North					
AM Peak Hour	-	F(566.4)	F(51.4)	A(1.1)	A(0.1)
PM Peak Hour	-	F(*)	F(976.5)	A(1.9)	A(0.2)
2: 400 West & Access 1					
AM Peak Hour	-	A(0.0)	A(0.0)	A(0.0)	-
PM Peak Hour	-	A(0.0)	A(0.0)	A(0.0)	-
3: 400 West & Access 2					
AM Peak Hour	-	A(0.4)	A(0.0)	B(10.1)	-
PM Peak Hour	-	A(0.1)	A(0.0)	B(10.0)	-
4: 400 West & Main Street					
AM Peak Hour	-	D(30.6)	-	A(0.0)	A(1.2)
PM Peak Hour	-	C(18.6)	-	A(0.0)	A(0.3)

* = Synchro analysis provides an "error" as delay time exceed capacity.

As seen in Table 4, the northbound and southbound traffic movements at 200 North and 400 West will continue to fail. The other traffic movements at the other intersection will continue with similar levels of services as under the existing year conditions.

Table 5 – 2030 Future Year Traffic LOS

Intersection	2030 Future Year Traffic LOS(Delay)				
	Overall LOS	Northbound	Southbound	Eastbound	Westbound
1: 400 West & 200 North					
AM Peak Hour	-	F(2086.9)	F(170.9)	A(1.3)	A(0.1)
PM Peak Hour	-	F(*)	F(452.6)	A(2.8)	A(0.3)
2: 400 West & Access 1					
AM Peak Hour	-	A(0.0)	A(0.0)	A(0.0)	-
PM Peak Hour	-	A(0.0)	A(0.0)	A(0.0)	-
3: 400 West & Access 2					
AM Peak Hour	-	A(0.5)	A(0.0)	B(10.3)	-
PM Peak Hour	-	A(0.1)	A(0.0)	B(10.1)	-
4: 400 West & Main Street					
AM Peak Hour	-	E(40.8)	-	A(0.0)	A(1.3)
PM Peak Hour	-	C(22.0)	-	A(0.0)	A(0.3)

* = Synchro analysis provides an "error" as delay time exceed capacity.

Table 5 illustrates similar results at the 200 North and 400 West intersection as the northbound and southbound movements will continue to fail. The northbound movements at the 400 West and Main Street intersection will fall to a LOS E in the AM peak hour.

With the addition of Kaysville Mixed Use Development within this study area, the following tables illustrates the projected levels of service at the study area intersections under the 2025 Opening Year with Project and the 2030 Future Year with Project scenarios.

Table 6 – 2025 Opening Year w/ Project LOS

Intersection	2025 Opening Year w/ Project LOS				
	Overall LOS	Northbound	Southbound	Eastbound	Westbound
1: 400 West & 200 North					
AM Peak Hour	-	F(1339.9)	F(198.5)	A(1.5)	A(0.1)
PM Peak Hour	-	F(*)	F(*)	A(2.9)	A(0.2)
2: 400 West & Access 1					
AM Peak Hour	-	A(1.2)	A(0.0)	B(10.4)	-
PM Peak Hour	-	A(0.9)	A(0.0)	A(9.9)	-
3: 400 West & Access 2					
AM Peak Hour	-	A(1.5)	A(0.0)	B(10.6)	-
PM Peak Hour	-	A(0.7)	A(0.0)	B(10.2)	-
4: 400 West & Main Street					
AM Peak Hour	-	D(34.9)	-	A(0.0)	A(1.5)
PM Peak Hour	-	C(20.6)	-	A(0.0)	A(0.4)

* = Synchro analysis provides an "error" as delay time exceed capacity.

With the addition of the Kaysville Mixed Use Development, traffic movements will continue to function with the same levels of service as under the 2025 Opening Year scenario (without the proposed development).

Table 7 – 2030 Future Year w/ Project LOS

Intersection	2030 Future Year w/ Project LOS				
	Overall LOS	Northbound	Southbound	Eastbound	Westbound
1: 400 West & 200 North					
AM Peak Hour	-	F(*)	F(497.8)	A(1.7)	A(0.1)
PM Peak Hour	-	F(*)	F(661.8)	A(4.6)	A(0.3)
2: 400 West & Access 1					
AM Peak Hour	-	A(1.1)	A(0.0)	B(10.6)	-
PM Peak Hour	-	A(0.8)	A(0.0)	B(10.0)	-
3: 400 West & Access 2					
AM Peak Hour	-	A(1.4)	A(0.0)	B(10.8)	-
PM Peak Hour	-	A(0.7)	A(0.0)	B(10.4)	-
4: 400 West & Main Street					
AM Peak Hour	-	E(48.8)	-	A(0.0)	A(1.6)
PM Peak Hour	-	D(25.4)	-	A(0.0)	A(0.4)

* = Synchro analysis provides an “error” as delay time exceed capacity.

Under the 2030 Future Year with Project analysis, the northbound and southbound traffic movements at 400 West and 200 North will continue to function with unacceptable levels of service. The northbound approach at 400 West and Main Street will also continue to function with unacceptable levels of service.

8.0 Traffic Signal Warrant Analysis

With the unacceptable levels of service at the northbound and southbound approaches at 400 West and 200 North under all of the study scenarios, a peak hour signal warrant analysis was performed to look at a possible mitigation at this intersection. It should be noted that this intersection is only located roughly 300 feet from the northbound on and off ramp to I-15, which is signalized. Having two intersections within this close proximity, may not be viable. In order to analyze the need for a traffic signal, the 2009 Edition of the Manual on Traffic Control Devices (MUTCD), Part 4 is used. As per the MUTCD there are nine signal warrants and even if one warrant is met, a signal may be installed at the study intersection. The warrants are:

Warrant 1 - Eight Hour Vehicular Volume

Warrant 2 - Four Hour Vehicular Volume

Warrant 3 - Peak Hour

Warrant 4 - Pedestrian Volume

Warrant 5 - School Crossing

Warrant 6 - Coordinated Signal System

Warrant 7 - Crash Experience

Warrant 8 - Roadway Network

Warrant 9 - Intersection near a Grade Crossing

Based on the study location, traffic patterns and information we have available at this time, only Warrant 3 - Peak Hour was able to be analyzed with the projected peak hour traffic volumes under the 2025 Opening Year scenario. The following paragraphs provide the details of the signal warrant analysis.

Note that in all scenarios that were analyzed at the 400 West and 200 North intersection for a traffic signal warrant, the Major Street (200 North) total for both directions do not include the vehicles making a right turn from 200 North as these vehicles are not often counted in a traffic signal warrant analysis as they do not impede the Minor Street (400 West) traffic from making their movement.

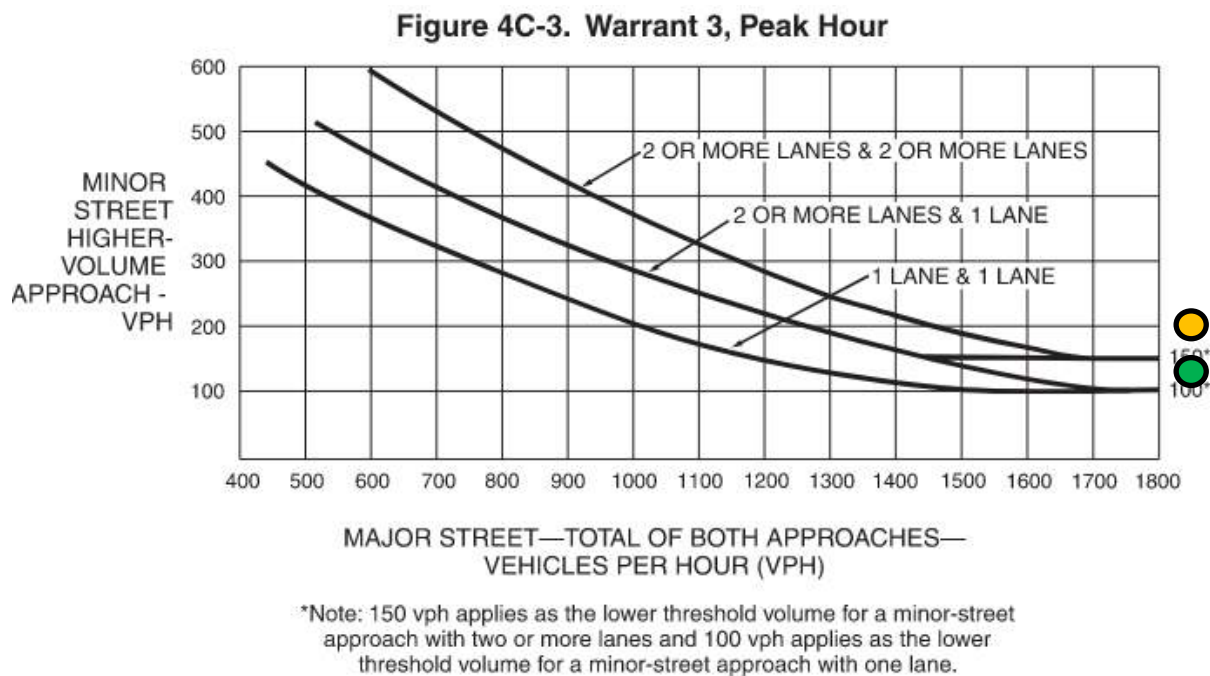
Warrant 3 (Peak Hour)

400 West and 200 North

This traffic signal warrant analysis was performed at 400 West and 200 North intersection. The Major Street is 200 North and the Minor Street is 400 West. It is projected under the 2025 Opening Year traffic volumes, along 200 North, the combined vehicles per hours (vph) of the Major Street in the AM Peak Hour will be 2438 vph and in the PM Peak Hour, 3621 vph. The higher volume of the Minor Street (400 West) under the 2025 Opening Year scenario, will be 201 vph in the AM peak hour and 134 vph in the PM peak hour.

As seen in the figure below, the plotted points of these volumes fall above the applicable curve and therefore warrant a traffic signal under the 2025 Opening Year scenario.

Figure 10 – 400 West & 200 North 2025 Opening Year Scenario Signal Warrant



● = 2025 Opening Year Traffic Volumes at 400 West and 200 North Intersection (AM Peak Hour)

● = 2025 Opening Year Traffic Volumes at 400 West and 200 North Intersection (PM Peak Hour)

With the 400 West and 200 North traffic volumes warranting a traffic signal under the 2025 Opening Year scenario, the other scenarios were not analyzed as they would also meet the warrant.

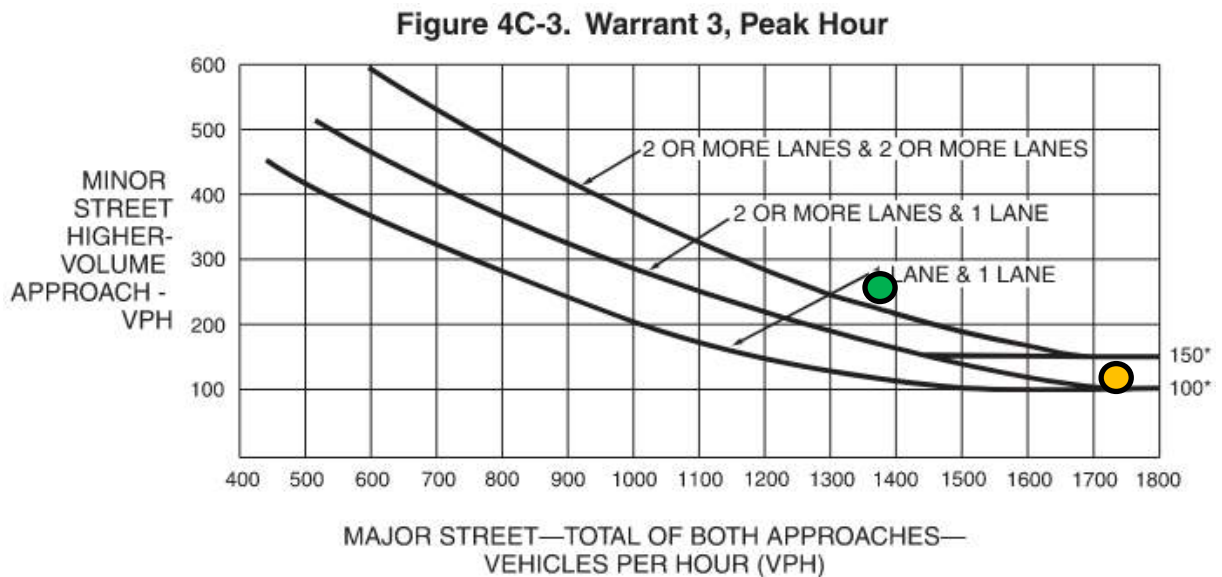
400 West and Main Street

This traffic signal warrant analysis was performed at 400 West and Main Street intersection under the 2030 Future Year scenario as the level of service falls below the acceptable threshold. The Major Street is Main Street and the Minor Street is 400 West. It is anticipated that 2030 Future Years and 2030 Future with Project are used in this analysis.

It is projected under the 2030 Future Year traffic volumes, along Main Street, the combined vehicles per hours (vph) of the Major Street in the AM Peak Hour will be 1730 vph and in the PM Peak Hour, 1366 vph. The higher volume of the Minor Street (400 West) under the 2030 Future Year scenario, will be 110 vph in the AM peak hour and 250 vph in the PM peak hour.

As seen in the figure below, the plotted points of these volumes fall above the applicable curve and therefore warrant a traffic signal under the 2030 Future Year scenario.

Figure 11 – 400 West & Main Street 2030 Future Year Scenario Signal Warrant



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

● = 2030 Future Year Traffic Volumes at 400 West and Main Street Intersection (AM Peak Hour)

● = 2030 Future Year Traffic Volumes at 400 West and Main Street Intersection (PM Peak Hour)

9.0 Recommendations

Based on the information and findings presented in this report, the following recommendations are proposed under the different study scenarios.

2025 Opening Year Scenario

The 200 North and 400 West intersection currently and under the 2025 Opening Year scenario functions with a LOS F in the northbound and southbound movements. The 200 North and 400 West intersection does meet the Peak Hour Warrant for a traffic signal which will improve the LOS. However, with the close proximity to I-15 on and off ramps, it would not make for a viable location with access spacing to signalize this intersection. It is recommended the city look at the entire corridor of 200 North for access control. Possible solution may be right-in/right-out, or continue the existing traffic operations and as delays increase, vehicles will find alternate routes if the delay is too excessive.

2025 Opening Year w/ Project Scenario

With the addition of the Kaysville Mixed Use Development, all intersections will continue to function with similar levels of service as under the scenarios without the development.

It is recommended Access 1 use the existing roadway with one receiving lane and one exiting lane. This access will meet city standards with appropriate driveway approach, signing and striping.

It is recommended Access 2 continue to function with one receiving lane and one exiting lane. This will continue to serve access to the adjacent property.

2030 Future Year Scenario

Similar to the 2025 Opening Year scenario, the 400 West and 200 North intersection will meet signal warrants. It is recommended this intersection be further analyzed to appropriate improvements, such as a signal, right-in/right-out or simply leave as existing functions.

400 West and Main Street will fall to a LOS E in the northbound direction under the 2030 Future Year scenario. It is the 400 West and Main Street intersection be monitored for when traffic volumes warrant a signal. The projected volumes illustrate a signal will meet warrants for the peak hour under the 2030 Future Year scenario.

2030 Future Year with Project Scenario

With the addition of the Kaysville Mixed Use Development and the implementation of a signal as recommended under the 2030 Future Year scenario, this intersection will function with acceptable levels of service. However, if no improvements are implemented under the 2030 Future Year scenario, this intersection will function with the similar levels of service.

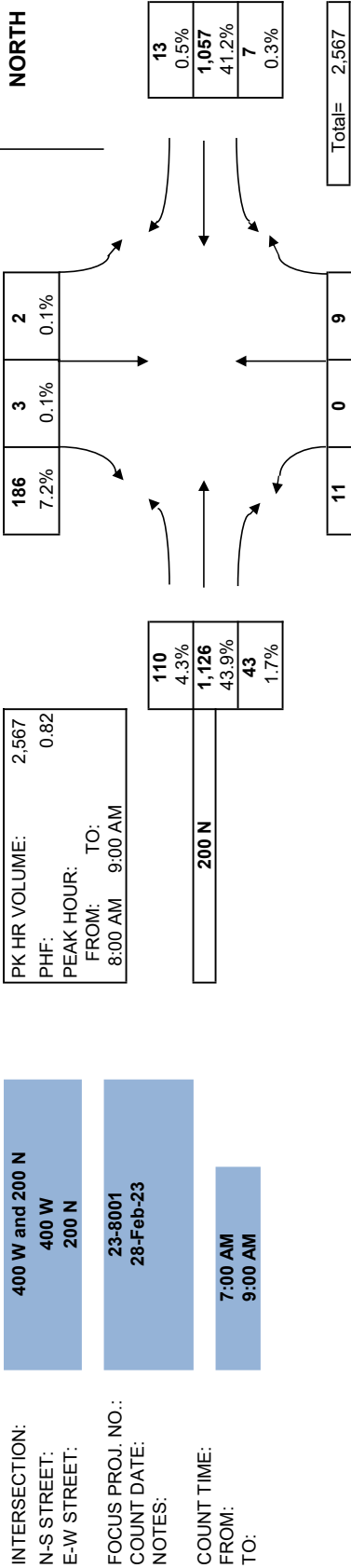
Appendix

Existing Traffic Counts

TURNING MOVEMENT COUNT SUMMARY

FOCUS ENGINEERING & SURVEYING, LLC

AM PEAK HOUR VOLUMES



COUNT DATA INPUT:

TIME PERIOD		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL VOLUMES
FROM:	TO:	L	T	R	L	T	R	L	T	R	L	T	R	
7:00 AM	7:15 AM	5	0	1	20	128	5	1	1	0	29	144	0	333
7:15 AM	7:30 AM	1	0	2	20	181	7	1	1	1	39	180	1	434
7:30 AM	7:45 AM	3	0	1	17	259	6	1	0	0	48	221	0	557
7:45 AM	8:00 AM	3	0	4	35	349	2	0	0	0	30	211	7	644
8:00 AM	8:15 AM	2	0	1	33	290	10	0	0	0	51	226	1	614
8:15 AM	8:30 AM	3	0	3	29	243	13	1	2	42	3	196	1	536
8:30 AM	8:45 AM	6	0	3	12	267	8	1	0	43	1	288	6	635
8:45 AM	9:00 AM	0	0	2	36	326	12	0	1	50	3	347	5	782

HOURLY TOTALS:

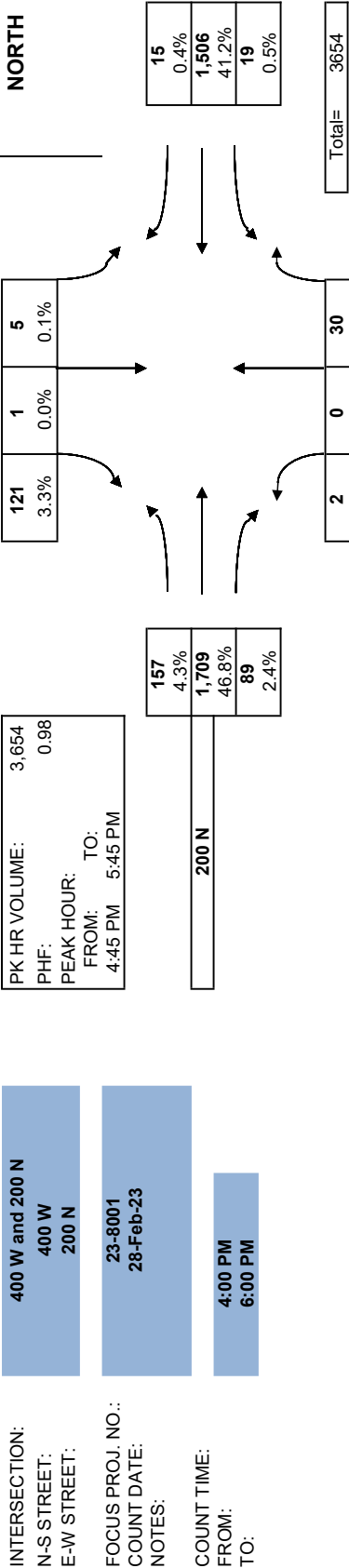
TIME PERIOD		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL VOLUMES
FROM:	TO:	L	T	R	L	T	R	L	T	R	L	T	R	
7:00 AM	8:00 AM	12	0	8	92	917	20	3	1	146	5	756	8	1,968
7:15 AM	8:15 AM	9	0	8	105	1,079	25	2	1	168	5	838	9	2,249
7:30 AM	8:30 AM	11	0	9	114	1,141	31	2	2	171	7	854	9	2,351
7:45 AM	8:45 AM	14	0	11	109	1,149	33	2	2	166	7	921	15	2,429
8:00 AM	9:00 AM	11	0	9	110	1,126	43	2	3	186	7	1,057	13	2,567

NOTE PHF IS BASED ON 15 MIN. PEAK WITHIN THE PEAK HOUR.

TURNING MOVEMENT COUNT SUMMARY

FOCUS ENGINEERING & SURVEYING, LLC

PM PEAK HOUR VOLUMES



COUNT DATA INPUT:

FROM:	NORTHBOUND		EASTBOUND		SOUTHBOUND		WESTBOUND		TOTAL VOLUMES
	L	T	L	T	L	T	L	T	
4:00 PM	0	0	5	38	1	0	31	8	0
4:15 PM	3	0	8	35	2	0	44	4	3
4:30 PM	1	0	5	21	2	0	12	2	1
4:45 PM	1	0	9	43	1	1	15	6	3
5:00 PM	0	0	6	38	2	0	17	4	2
5:15 PM	0	0	7	48	2	0	48	5	7
5:30 PM	1	0	8	28	0	0	41	4	3
5:45 PM	2	0	5	28	2	1	50	5	1
									6,987

HOURLY TOTALS:

FROM:	NORTHBOUND		EASTBOUND		SOUTHBOUND		WESTBOUND		TOTAL VOLUMES
	L	T	L	T	L	T	L	T	
4:00 PM	5	0	137	1,577	6	1	102	7	3,353
4:15 PM	5	0	137	1,623	7	1	88	16	3,420
4:30 PM	2	0	150	1,671	7	1	92	17	3,538
4:45 PM	2	0	157	1,709	5	1	121	19	3,654
5:00 PM	3	0	142	1,715	6	1	156	18	3,634

NOTE PHF IS BASED ON 15 MIN. PEAK WITHIN THE PEAK HOUR.

TURNING MOVEMENT COUNT SUMMARY

FOCUS ENGINEERING & SURVEYING, LLC

AM PEAK HOUR VOLUMES

INTERSECTION:
N-S STREET:
E-W STREET:

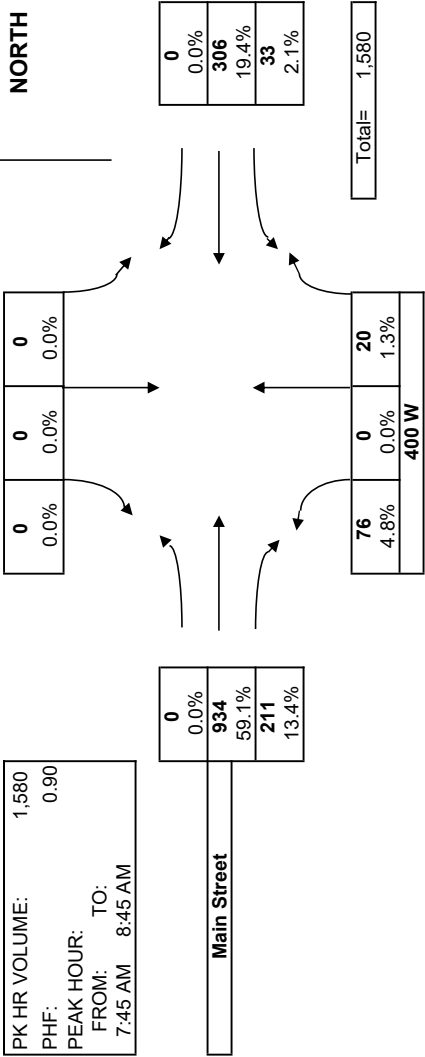
400 W and Main Street
400 W
Main Street

FOCUS PROJ. NO.:
COUNT DATE:

23-8001
28-Feb-23

COUNT TIME:
FROM:
TO:

7:00 AM
9:00 AM



COUNT DATA INPUT:

TIME PERIOD		NORTHBOUND		EASTBOUND		SOUTHBOUND		WESTBOUND		TOTAL VOLUMES
FROM:	TO:	L	T	L	T	L	T	L	T	
7:00 AM	7:15 AM	7	0	0	99	0	0	3	39	179
7:15 AM	7:30 AM	26	0	0	159	0	0	6	36	258
7:30 AM	7:45 AM	16	0	2	189	0	0	2	49	304
7:45 AM	8:00 AM	17	0	7	266	0	0	7	71	426
8:00 AM	8:15 AM	23	0	7	272	0	0	9	68	437
8:15 AM	8:30 AM	19	0	1	203	0	0	6	88	366
8:30 AM	8:45 AM	17	0	5	193	0	0	11	79	351
8:45 AM	9:00 AM	17	0	15	213	0	0	24	76	401

HOURLY TOTALS:

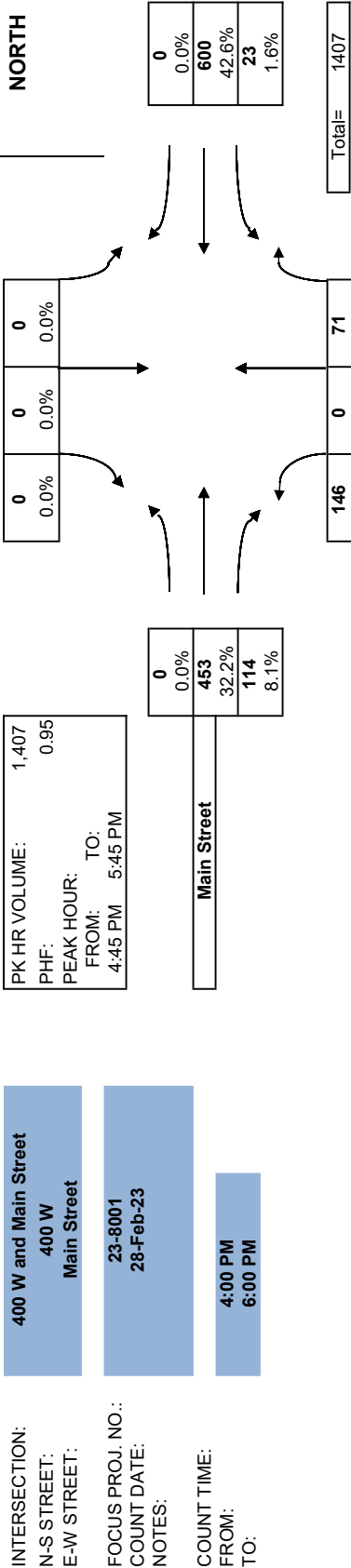
TIME PERIOD		NORTHBOUND		EASTBOUND		SOUTHBOUND		WESTBOUND		TOTAL VOLUMES
FROM:	TO:	L	T	L	T	L	T	L	T	
7:00 AM	8:00 AM	66	0	0	713	0	0	18	195	1,167
7:15 AM	8:15 AM	82	0	0	886	0	0	24	224	1,425
7:30 AM	8:30 AM	75	0	17	930	0	0	24	276	1,533
7:45 AM	8:45 AM	76	0	20	934	0	0	33	306	1,580
8:00 AM	9:00 AM	76	0	28	881	0	0	50	311	1,555

NOTE PHF IS BASED ON 15 MIN. PEAK WITHIN THE PEAK HOUR.

TURNING MOVEMENT COUNT SUMMARY

FOCUS ENGINEERING & SURVEYING, LLC

PM PEAK HOUR VOLUMES



COUNT DATA INPUT:

TIME PERIOD	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL VOLUMES
	L	T	R	L	T	R	L	T	R	L	T	R	
FROM: 4:00 PM TO: 4:15 PM	31	0	12	0	101	26	0	0	13	168	0	0	351
4:15 PM TO: 4:30 PM	29	0	9	0	111	38	0	0	6	123	0	0	316
4:30 PM TO: 4:45 PM	36	0	18	0	109	36	0	0	5	132	0	0	336
4:45 PM TO: 5:00 PM	33	0	21	0	112	24	0	0	8	151	0	0	349
5:00 PM TO: 5:15 PM	23	0	15	0	129	27	0	0	4	172	0	0	370
5:15 PM TO: 5:30 PM	50	0	20	0	106	30	0	0	7	135	0	0	348
5:30 PM TO: 5:45 PM	40	0	15	0	106	33	0	0	4	142	0	0	340
5:45 PM TO: 6:00 PM	20	0	15	0	105	24	0	0	9	133	0	0	306

HOURLY TOTALS:

TIME PERIOD	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL VOLUMES
	L	T	R	L	T	R	L	T	R	L	T	R	
FROM: 4:00 PM TO: 5:00 PM	129	0	60	0	433	124	0	0	32	574	0	0	1,352
4:15 PM TO: 5:15 PM	121	0	63	0	461	125	0	0	23	578	0	0	1,371
4:30 PM TO: 5:30 PM	142	0	74	0	456	117	0	0	24	590	0	0	1,403
4:45 PM TO: 5:45 PM	146	0	71	0	453	114	0	0	23	600	0	0	1,407
5:00 PM TO: 6:00 PM	133	0	65	0	446	114	0	0	24	582	0	0	1,364

NOTE PHF IS BASED ON 15 MIN. PEAK WITHIN THE PEAK HOUR.

TURNING MOVEMENT COUNT SUMMARY

FOCUS ENGINEERING & SURVEYING, LLC

AM PEAK HOUR VOLUMES

INTERSECTION:
N-S STREET:
E-W STREET:

400 W and Access 1
400 W
Access 1

PK HR VOLUME:
PHF:
PEAK HOUR:
FROM:
TO:

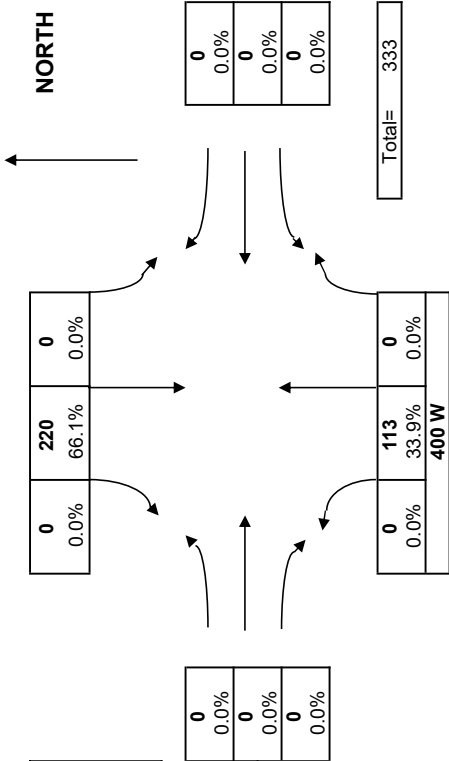
333
0.90
7:45 AM 8:45 AM

FOCUS PROJ. NO.:
COUNT DATE:
NOTES:

23-8001
28-Feb-23

COUNT TIME:
FROM:
TO:

7:00 AM
9:00 AM



COUNT DATA INPUT:

TIME PERIOD		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL VOLUMES
FROM:	TO:	L	T	R	L	T	R	L	T	R	L	T	R	
7:00 AM	7:15 AM	1	13	0	0	0	0	0	39	0	0	0	0	53
7:15 AM	7:30 AM	1	12	0	0	0	0	0	37	0	0	0	0	50
7:30 AM	7:45 AM	1	11	0	0	0	0	0	42	0	0	0	0	54
7:45 AM	8:00 AM	0	38	0	0	0	0	0	43	0	0	0	0	81
8:00 AM	8:15 AM	0	29	0	0	0	0	0	64	0	0	0	0	93
8:15 AM	8:30 AM	0	26	0	0	0	0	0	59	0	0	0	0	85
8:30 AM	8:45 AM	0	20	0	0	0	0	0	54	0	0	0	0	74
8:45 AM	9:00 AM	0	5	0	0	0	0	0	32	0	0	0	0	37

HOURLY TOTALS:

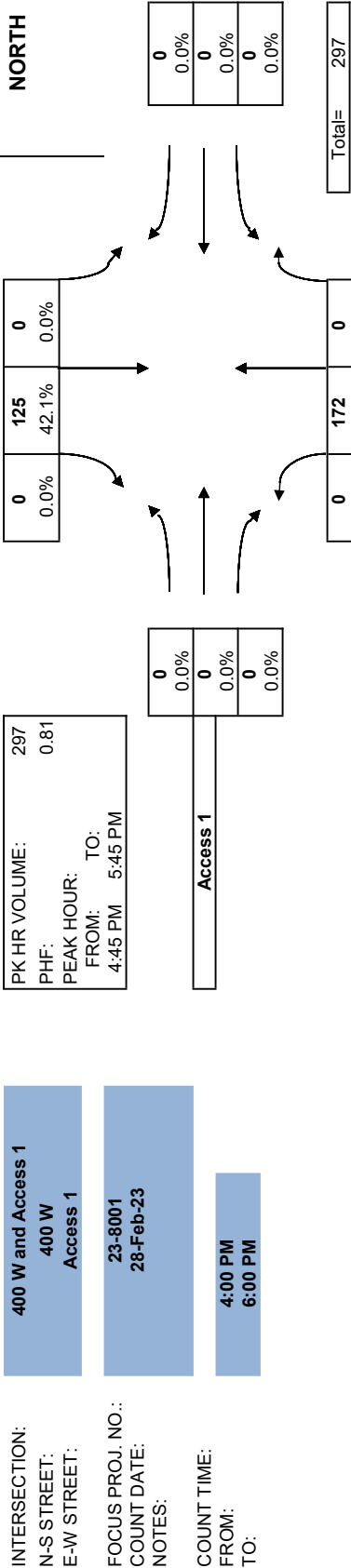
TIME PERIOD		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL VOLUMES
FROM:	TO:	L	T	R	L	T	R	L	T	R	L	T	R	
7:00 AM	8:00 AM	3	74	0	0	0	0	0	161	0	0	0	0	238
7:15 AM	8:15 AM	2	90	0	0	0	0	0	186	0	0	0	0	278
7:30 AM	8:30 AM	1	104	0	0	0	0	0	208	0	0	0	0	313
7:45 AM	8:45 AM	0	113	0	0	0	0	0	220	0	0	0	0	333
8:00 AM	9:00 AM	0	80	0	0	0	0	0	209	0	0	0	0	289

NOTE PHF IS BASED ON 15 MIN. PEAK WITHIN THE PEAK HOUR.

TURNING MOVEMENT COUNT SUMMARY

FOCUS ENGINEERING & SURVEYING, LLC

PM PEAK HOUR VOLUMES



COUNT DATA INPUT:

TIME PERIOD			NORTHBOUND		EASTBOUND		SOUTHBOUND		WESTBOUND		TOTAL VOLUMES
FROM:	TO:		L	T	R	L	T	R	L	T	R
4:00 PM	4:15 PM		0	26	0	1	0	0	1	0	0
4:15 PM	4:30 PM		0	33	0	1	0	0	25	1	0
4:30 PM	4:45 PM		1	34	0	0	0	0	23	0	0
4:45 PM	5:00 PM		0	37	0	0	0	0	21	0	0
5:00 PM	5:15 PM		0	56	0	0	0	0	36	0	0
5:15 PM	5:30 PM		0	41	0	0	0	0	29	0	0
5:30 PM	5:45 PM		0	38	0	0	0	0	39	0	0
5:45 PM	6:00 PM		0	29	0	2	0	0	24	0	0
527											57

HOURLY TOTALS:

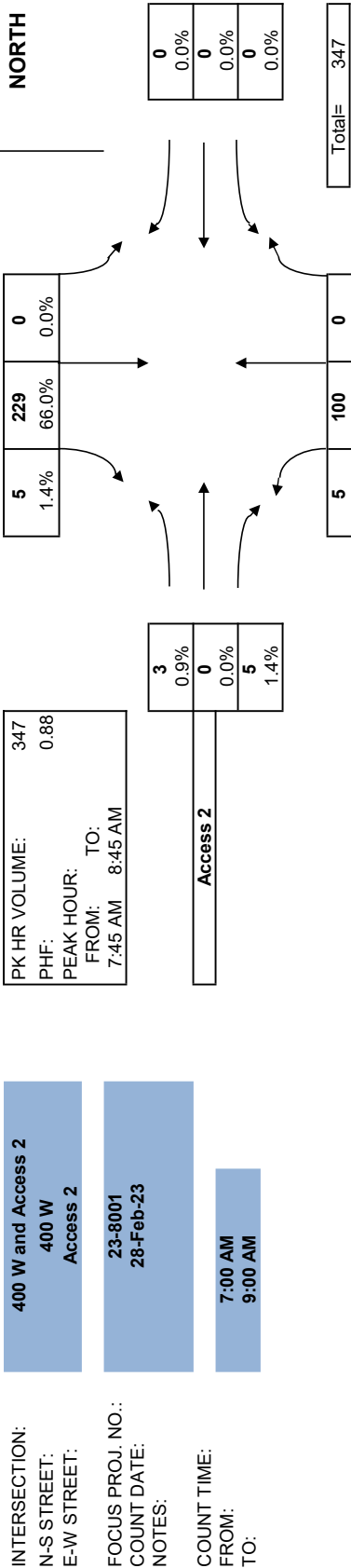
FROM:	TIME PERIOD	TO:	NORTHBOUND		EASTBOUND		SOUTHBOUND		WESTBOUND		TOTAL VOLUMES
			L	T	L	T	L	T	L	T	
4:00 PM		5:00 PM	1	130	0	0	0	98	1	0	233
4:15 PM		5:15 PM	1	160	0	0	0	105	1	0	268
4:30 PM		5:30 PM	1	168	0	0	0	109	0	0	278
4:45 PM		5:45 PM	0	172	0	0	0	125	0	0	297
5:00 PM		6:00 PM	0	164	0	0	0	128	0	0	294

NOTE PHF IS BASED ON 15 MIN. PEAK WITHIN THE PEAK HOUR.

TURNING MOVEMENT COUNT SUMMARY

FOCUS ENGINEERING & SURVEYING, LLC

AM PEAK HOUR VOLUMES



COUNT DATA INPUT:

TIME PERIOD		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL VOLUMES
FROM:	TO:	L	T	R	L	T	R	L	T	R	L	T	R	
7:00 AM	7:15 AM	0	13	0	1	0	0	0	41	3	0	0	0	58
7:15 AM	7:30 AM	0	11	0	0	0	0	0	34	0	0	0	0	45
7:30 AM	7:45 AM	1	12	0	1	0	1	0	39	0	0	0	0	54
7:45 AM	8:00 AM	1	34	0	0	0	0	0	45	2	0	0	0	82
8:00 AM	8:15 AM	1	24	0	0	0	1	0	59	0	0	0	0	85
8:15 AM	8:30 AM	2	23	0	3	0	2	0	67	2	0	0	0	99
8:30 AM	8:45 AM	1	19	0	0	0	2	0	58	1	0	0	0	81
8:45 AM	9:00 AM	0	5	0	0	0	1	0	32	0	0	0	0	38

HOURLY TOTALS:

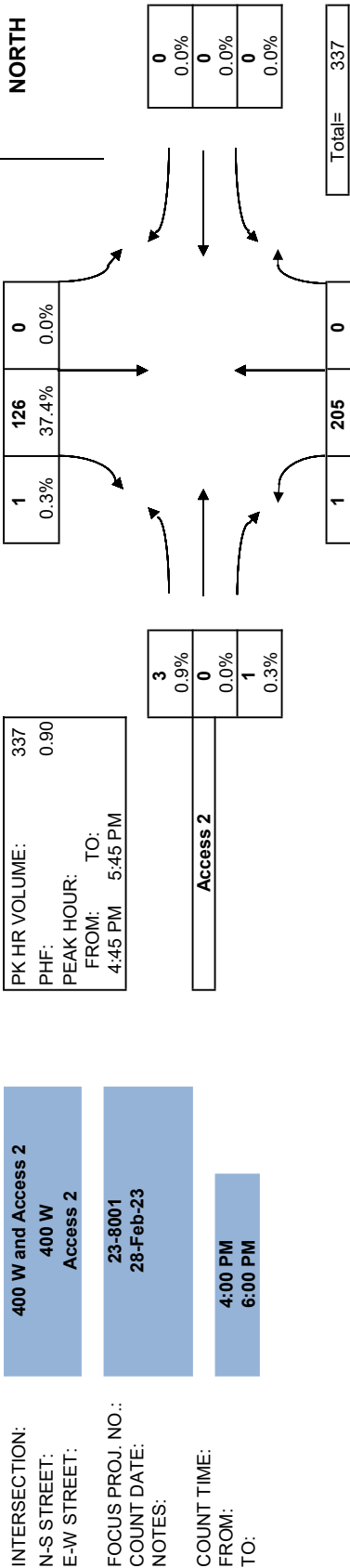
TIME PERIOD		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL VOLUMES
FROM:	TO:	L	T	R	L	T	R	L	T	R	L	T	R	
7:00 AM	8:00 AM	2	70	0	2	0	1	0	159	5	0	0	0	239
7:15 AM	8:15 AM	3	81	0	1	0	2	0	177	2	0	0	0	266
7:30 AM	8:30 AM	5	93	0	4	0	4	0	210	4	0	0	0	320
7:45 AM	8:45 AM	5	100	0	3	0	5	0	229	5	0	0	0	347
8:00 AM	9:00 AM	4	71	0	3	0	6	0	216	3	0	0	0	303

NOTE PHF IS BASED ON 15 MIN. PEAK WITHIN THE PEAK HOUR.

TURNING MOVEMENT COUNT SUMMARY

FOCUS ENGINEERING & SURVEYING, LLC

PM PEAK HOUR VOLUMES



COUNT DATA INPUT:

TIME PERIOD		NORTHBOUND		EASTBOUND		SOUTHBOUND		WESTBOUND		TOTAL VOLUMES	
FROM:	TO:	L	T	R	L	T	R	L	T	R	
4:00 PM	4:15 PM	0	28	0	2	0	1	0	23	0	0
4:15 PM	4:30 PM	0	32	0	1	0	0	0	19	0	0
4:30 PM	4:45 PM	0	39	0	0	0	0	0	21	1	0
4:45 PM	5:00 PM	0	51	0	0	0	0	0	24	0	0
5:00 PM	5:15 PM	0	58	0	1	0	0	0	32	1	0
5:15 PM	5:30 PM	1	44	0	1	0	1	0	29	0	0
5:30 PM	5:45 PM	0	52	0	1	0	0	0	41	0	0
5:45 PM	6:00 PM	0	19	0	0	0	0	0	19	0	0
											542

HOURLY TOTALS:

FROM:	TIME PERIOD	TO:	NORTHBOUND		EASTBOUND		SOUTHBOUND		WESTBOUND		TOTAL VOLUMES
			L	T	L	T	L	T	L	T	
4:00 PM		5:00 PM	0	150	0	3	0	1	0	0	242
4:15 PM		5:15 PM	0	180	0	2	0	0	0	0	280
4:30 PM		5:30 PM	1	192	0	2	0	1	0	0	304
4:45 PM		5:45 PM	1	205	0	3	0	1	0	0	337
5:00 PM		6:00 PM	1	173	0	3	0	1	0	0	300

NOTE PHF IS BASED ON 15 MIN. PEAK WITHIN THE PEAK HOUR.

Trip Generation Reports

Multifamily Housing (Mid-Rise)

Not Close to Rail Transit (221)

Vehicle Trip Ends vs:

Dwelling Units

On a:

Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 7 and 9 a.m.

Setting/Location:

General Urban/Suburban

Number of Studies:

30

Avg. Num. of Dwelling Units:

173

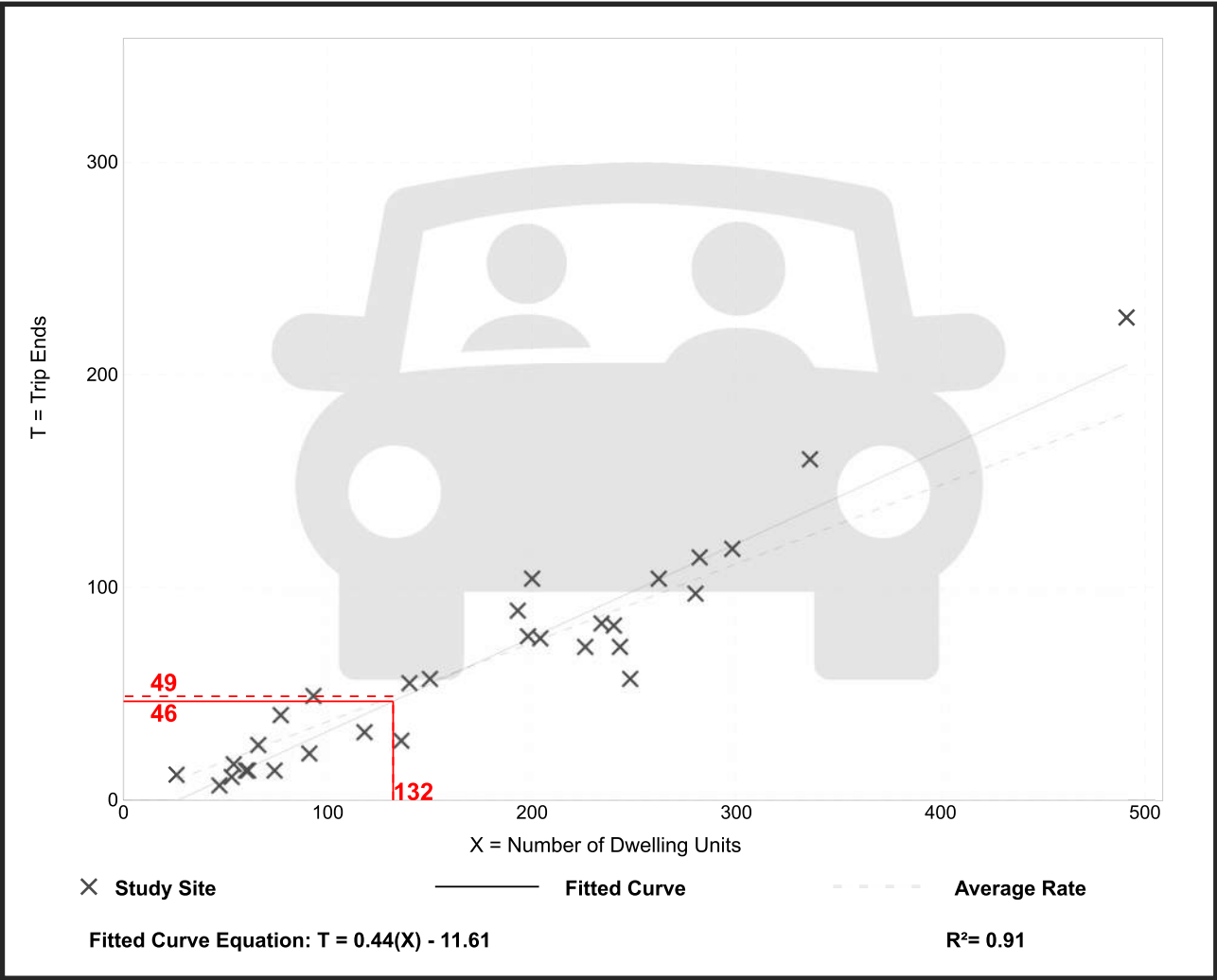
Directional Distribution:

23% entering, 77% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.37	0.15 - 0.53	0.09

Data Plot and Equation



Multifamily Housing (Mid-Rise)

Not Close to Rail Transit (221)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 31

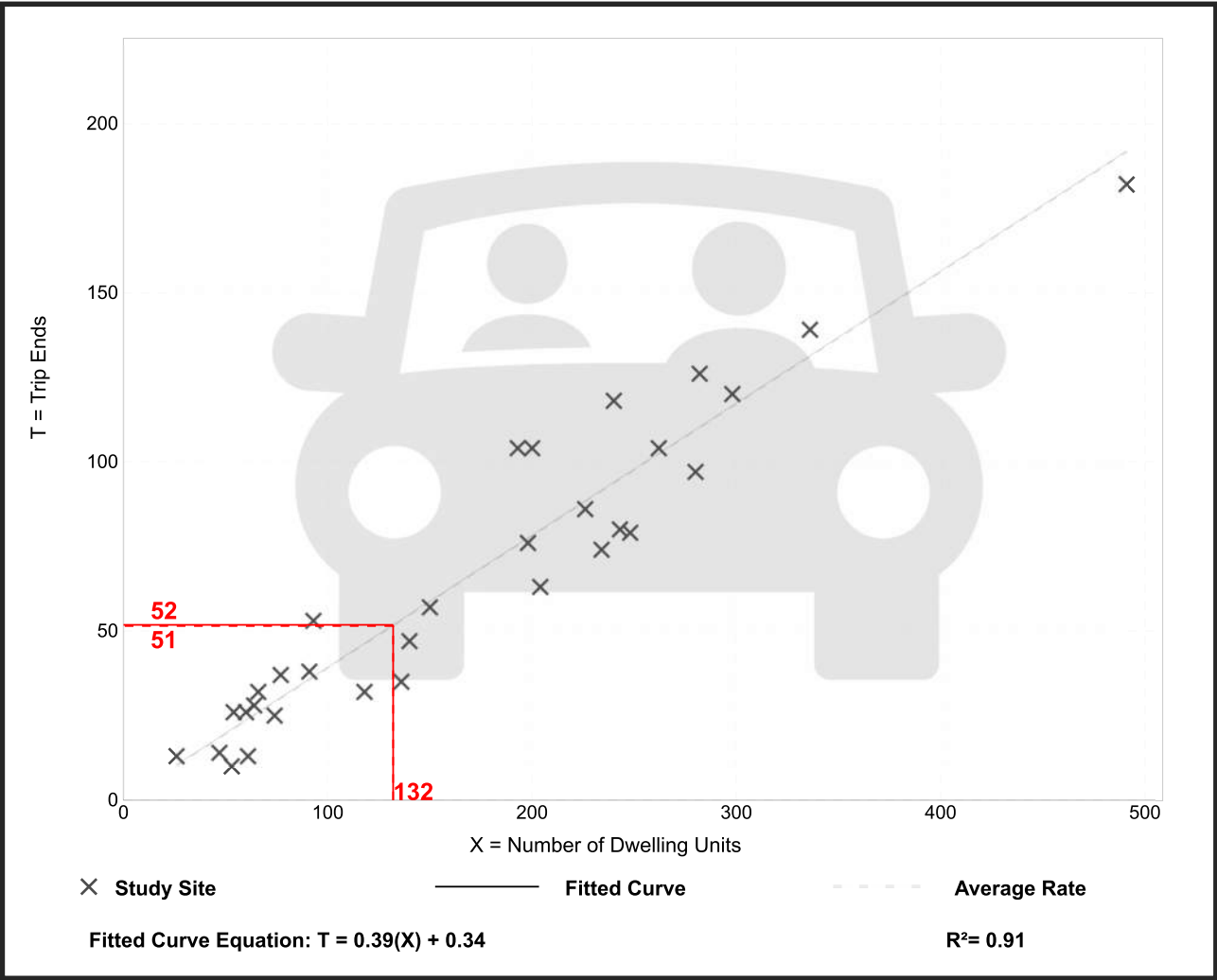
Avg. Num. of Dwelling Units: 169

Directional Distribution: 61% entering, 39% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.39	0.19 - 0.57	0.08

Data Plot and Equation



Hotel (310)

Vehicle Trip Ends vs:

Rooms

On a:

Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Setting/Location:

General Urban/Suburban

Number of Studies:

28

Avg. Num. of Rooms:

182

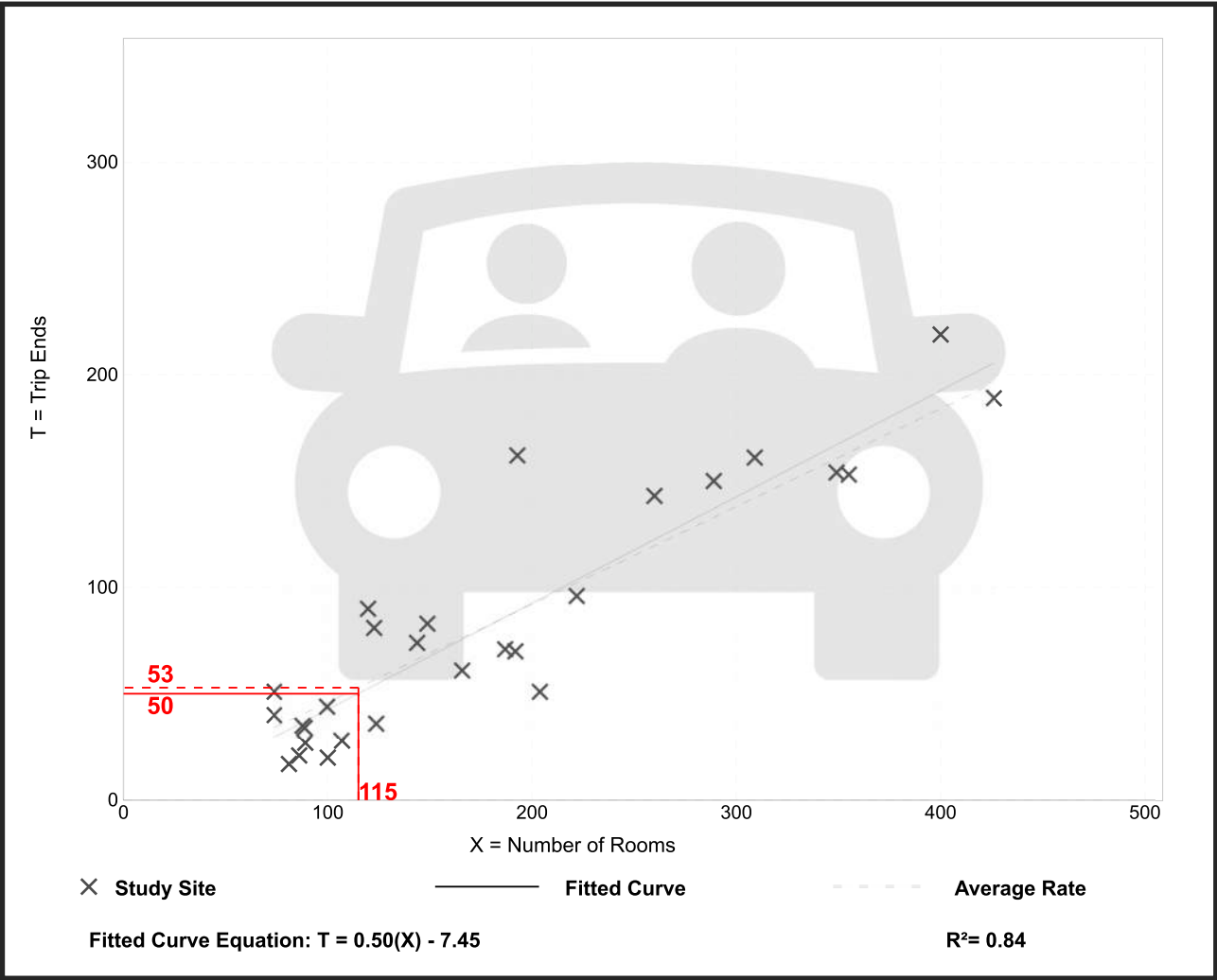
Directional Distribution:

56% entering, 44% exiting

Vehicle Trip Generation per Room

Average Rate	Range of Rates	Standard Deviation
0.46	0.20 - 0.84	0.14

Data Plot and Equation



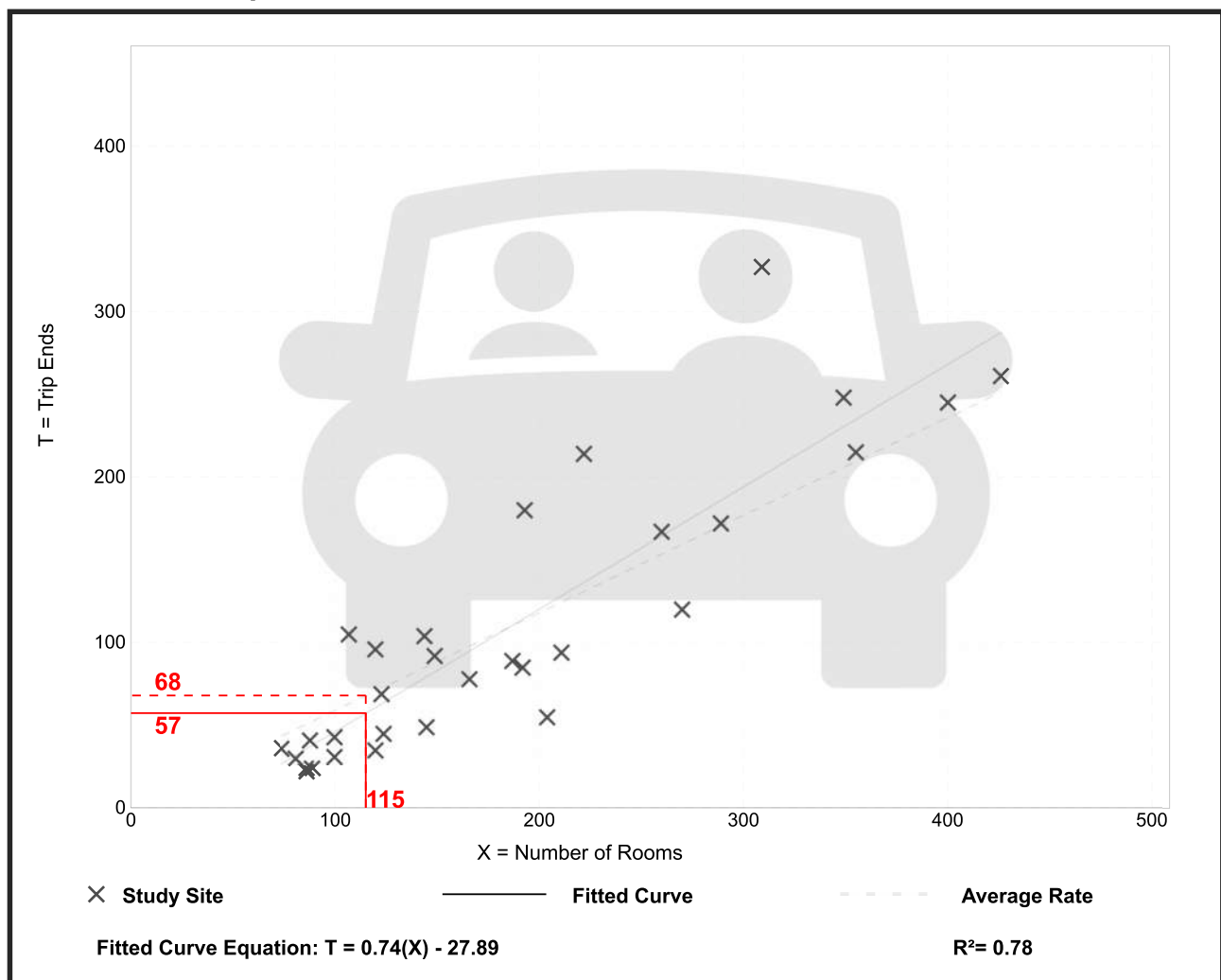
Hotel (310)

Vehicle Trip Ends vs: Rooms
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 31
 Avg. Num. of Rooms: 186
 Directional Distribution: 51% entering, 49% exiting

Vehicle Trip Generation per Room

Average Rate	Range of Rates	Standard Deviation
0.59	0.26 - 1.06	0.22

Data Plot and Equation



General Office Building (710)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

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

Setting/Location: General Urban/Suburban

Number of Studies: 221

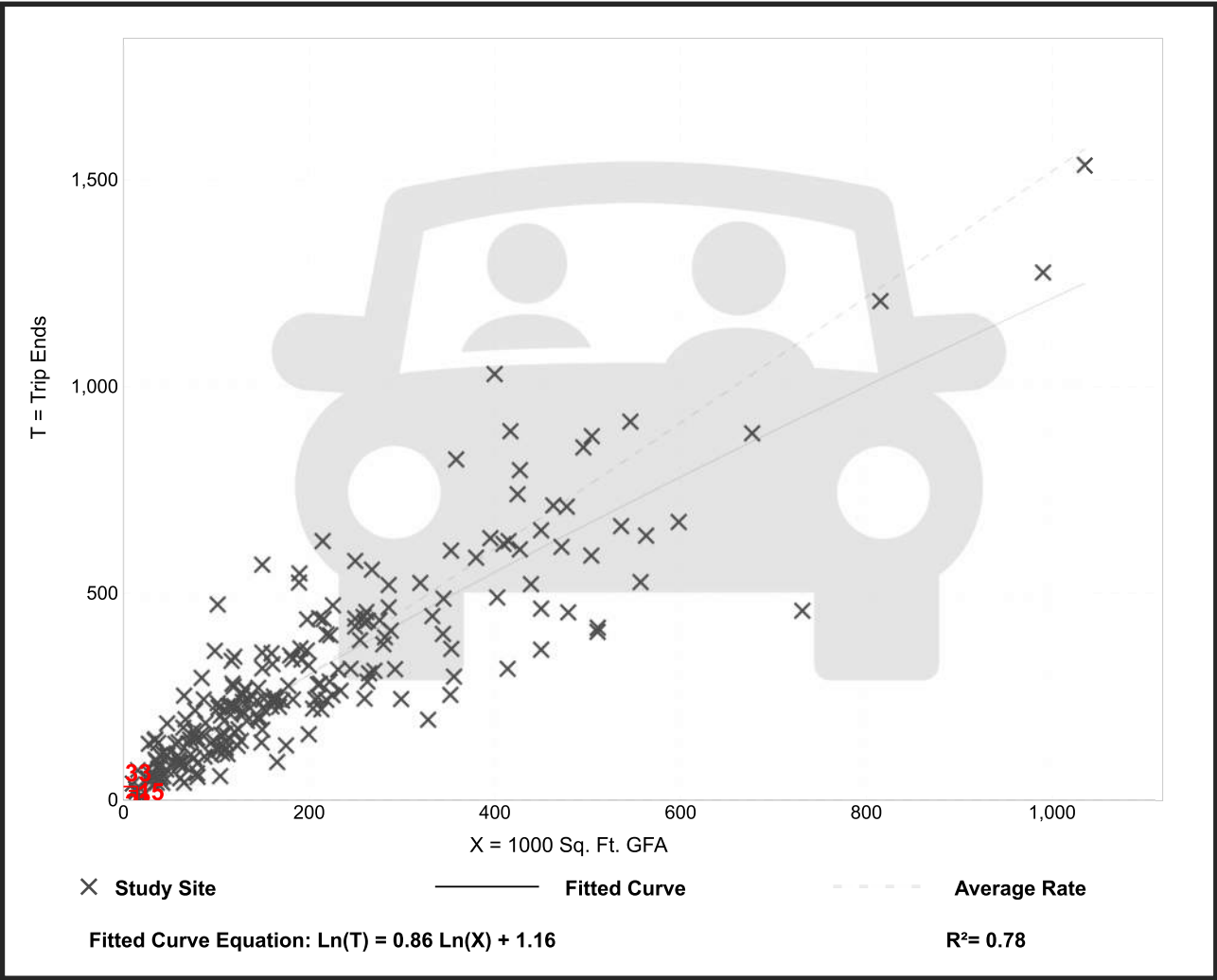
Avg. 1000 Sq. Ft. GFA: 201

Directional Distribution: 88% entering, 12% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.52	0.32 - 4.93	0.58

Data Plot and Equation



General Office Building (710)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 232

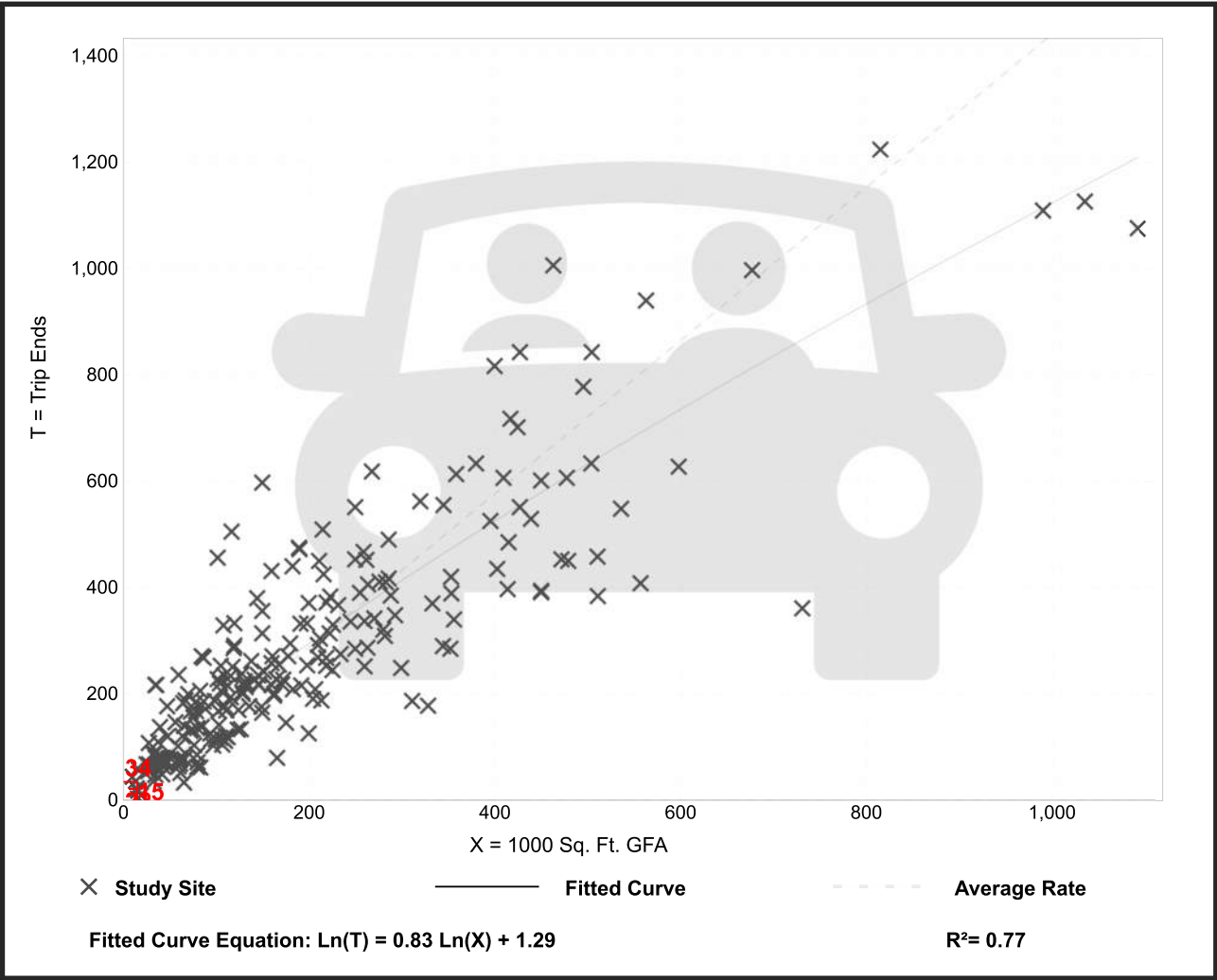
Avg. 1000 Sq. Ft. GFA: 199

Directional Distribution: 17% entering, 83% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.44	0.26 - 6.20	0.60

Data Plot and Equation



Small Office Building (712)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

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

Setting/Location: General Urban/Suburban

Number of Studies: 21

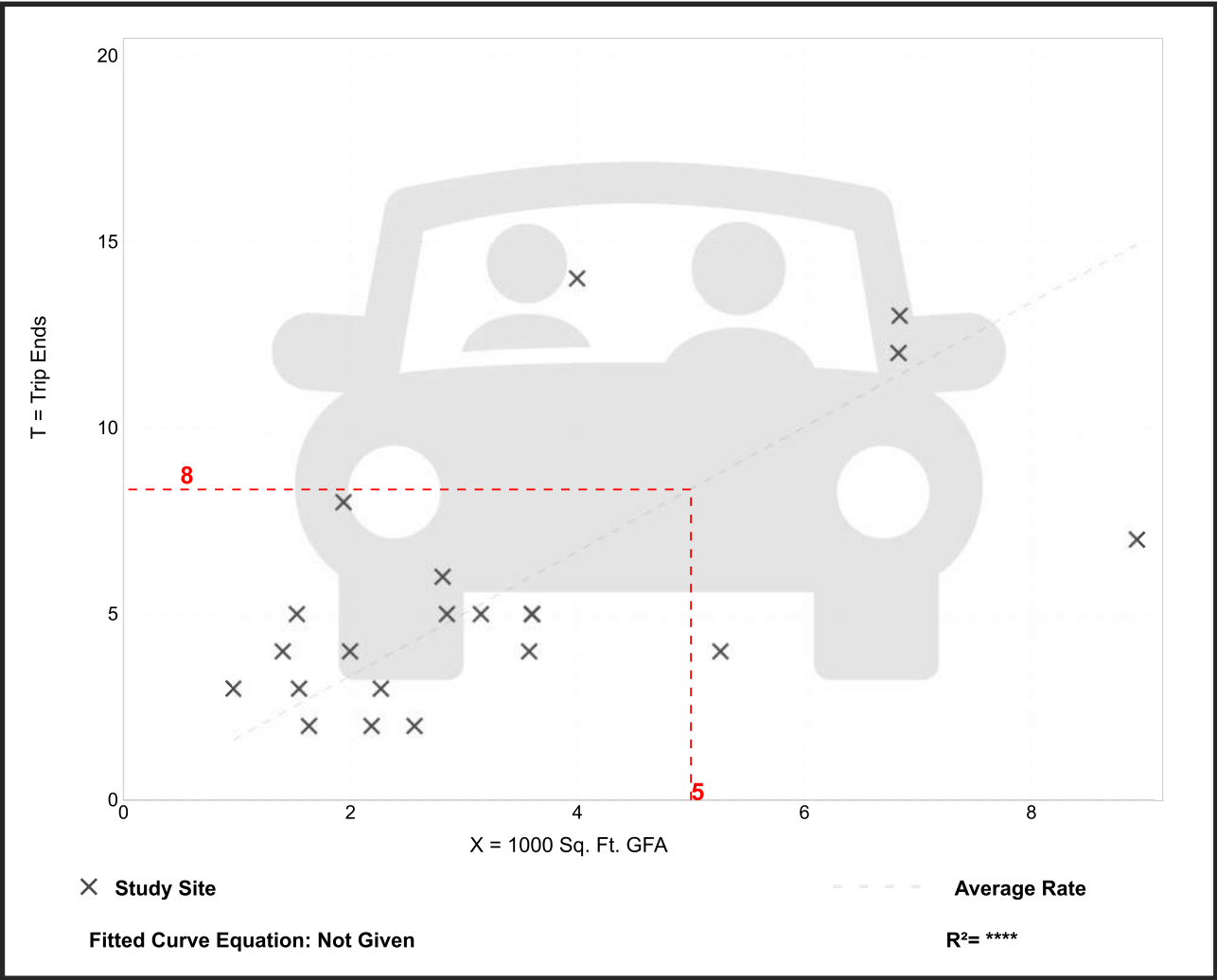
Avg. 1000 Sq. Ft. GFA: 3

Directional Distribution: 82% entering, 18% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.67	0.76 - 4.12	0.88

Data Plot and Equation



Small Office Building

(712)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 21

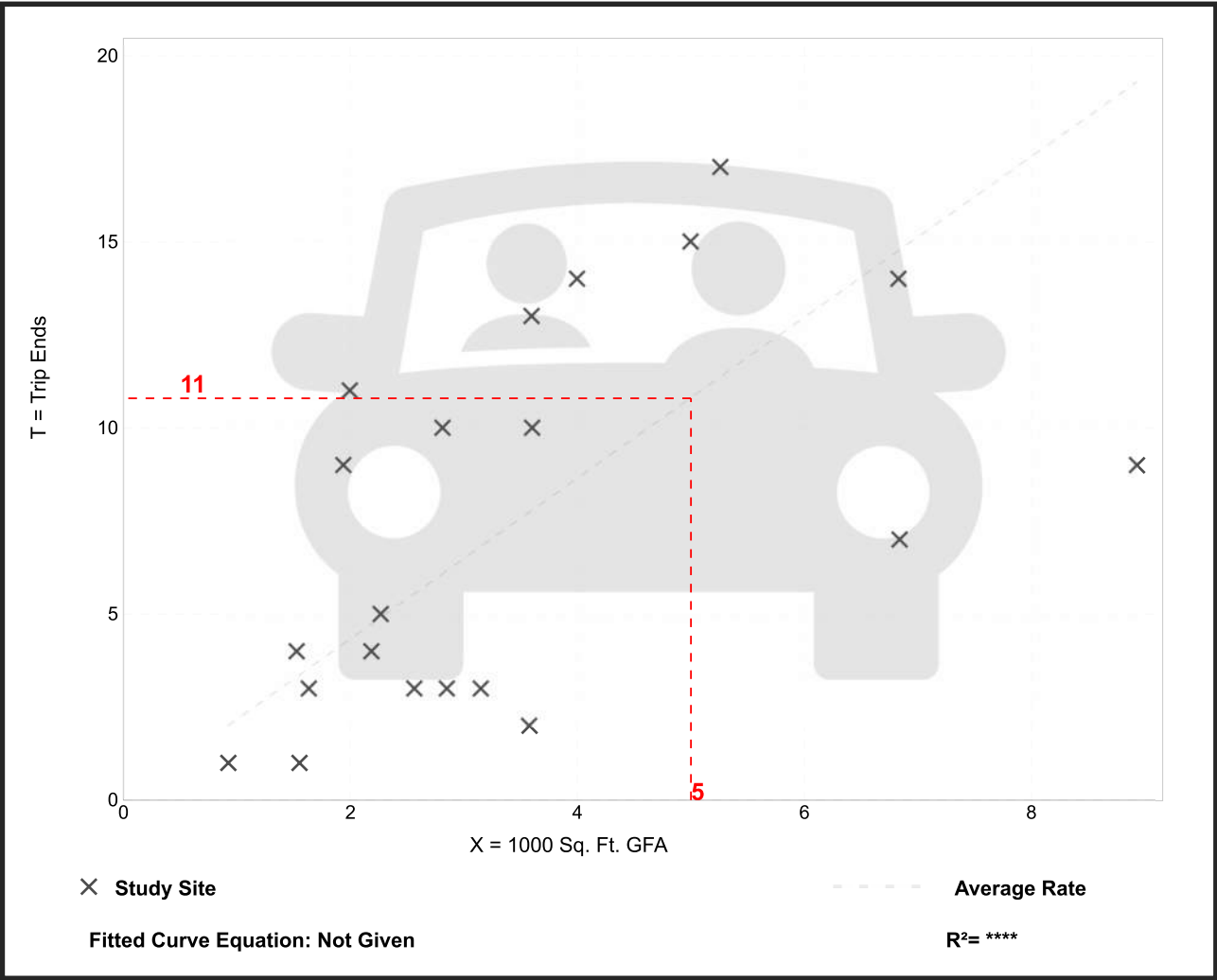
Avg. 1000 Sq. Ft. GFA: 3

Directional Distribution: 34% entering, 66% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
2.16	0.56 - 5.50	1.26

Data Plot and Equation



Traffic Analysis Reports

2023 Existing Traffic Analysis

Intersection												
Int Delay, s/veh	6.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	110	1126	43	7	1057	13	11	0	9	2	3	186
Future Vol, veh/h	110	1126	43	7	1057	13	11	0	9	2	3	186
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	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	120	1224	47	8	1149	14	12	0	10	2	3	202
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1163	0	0	1271	0	0	2080	2667	636	2017	2676	575
Stage 1	-	-	-	-	-	-	1488	1488	-	1165	1165	-
Stage 2	-	-	-	-	-	-	592	1179	-	852	1511	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	596	-	-	542	-	-	31	22	421	34	22	461
Stage 1	-	-	-	-	-	-	130	186	-	206	267	-
Stage 2	-	-	-	-	-	-	460	262	-	321	181	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	596	-	-	542	-	-	12	17	421	28	17	461
Mov Cap-2 Maneuver	-	-	-	-	-	-	12	17	-	28	17	-
Stage 1	-	-	-	-	-	-	104	149	-	165	263	-
Stage 2	-	-	-	-	-	-	251	258	-	250	145	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.1			0.1			\$ 375.2			34.3		
HCM LOS							F			D		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	12	421	596	-	-	542	-	-	28	326		
HCM Lane V/C Ratio	0.996	0.023	0.201	-	-	0.014	-	-	0.078	0.63		
HCM Control Delay (s)	\$ 670.9	13.8	12.6	-	-	11.7	-	-	144.1	33.1		
HCM Lane LOS	F	B	B	-	-	B	-	-	F	D		
HCM 95th %tile Q(veh)	2.1	0.1	0.7	-	-	0	-	-	0.2	4		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s				+: Computation Not Defined				*: All major volume in platoon		

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	113	220	0
Future Vol, veh/h	0	0	0	113	220	0
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	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	123	239	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	362	239	239	0	-	0
Stage 1	239	-	-	-	-	-
Stage 2	123	-	-	-	-	-
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	637	800	1328	-	-	-
Stage 1	801	-	-	-	-	-
Stage 2	902	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	637	800	1328	-	-	-
Mov Cap-2 Maneuver	674	-	-	-	-	-
Stage 1	801	-	-	-	-	-
Stage 2	902	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1328	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	5	5	100	229	5
Future Vol, veh/h	3	5	5	100	229	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	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	3	5	5	109	249	5
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	371	252	254	0	-	0
Stage 1	252	-	-	-	-	-
Stage 2	119	-	-	-	-	-
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	630	787	1311	-	-	-
Stage 1	790	-	-	-	-	-
Stage 2	906	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	627	787	1311	-	-	-
Mov Cap-2 Maneuver	665	-	-	-	-	-
Stage 1	787	-	-	-	-	-
Stage 2	906	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10	0.4		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1311	-	736	-	-	
HCM Lane V/C Ratio	0.004	-	0.012	-	-	
HCM Control Delay (s)	7.8	-	10	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

Intersection						
Int Delay, s/veh	1.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↱		↱	↑↑	↱	↱
Traffic Vol, veh/h	934	211	33	306	76	20
Future Vol, veh/h	934	211	33	306	76	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	100	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1015	229	36	333	83	22
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1244	0	1369	622
Stage 1	-	-	-	-	1130	-
Stage 2	-	-	-	-	239	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	555	-	138	430
Stage 1	-	-	-	-	270	-
Stage 2	-	-	-	-	778	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	555	-	129	430
Mov Cap-2 Maneuver	-	-	-	-	222	-
Stage 1	-	-	-	-	270	-
Stage 2	-	-	-	-	727	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		1.2		27	
HCM LOS					D	
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	222	430	-	-	555	-
HCM Lane V/C Ratio	0.372	0.051	-	-	0.065	-
HCM Control Delay (s)	30.5	13.8	-	-	11.9	-
HCM Lane LOS	D	B	-	-	B	-
HCM 95th %tile Q(veh)	1.6	0.2	-	-	0.2	-

Intersection												
Int Delay, s/veh	11.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	157	1709	89	19	1506	15	2	0	30	5	1	121
Future Vol, veh/h	157	1709	89	19	1506	15	2	0	30	5	1	121
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	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	171	1858	97	21	1637	16	2	0	33	5	1	132
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1653	0	0	1955	0	0	3110	3944	978	2950	3976	819
Stage 1	-	-	-	-	-	-	2249	2249	-	1679	1679	-
Stage 2	-	-	-	-	-	-	861	1695	-	1271	2297	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	386	-	-	295	-	-	5	3	250	6	3	319
Stage 1	-	-	-	-	-	-	43	77	-	99	150	-
Stage 2	-	-	-	-	-	-	317	147	-	178	73	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	386	-	-	295	-	-	~ 1	2	250	~ 3	2	319
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 1	2	-	~ 3	2	-
Stage 1	-	-	-	-	-	-	24	43	-	55	139	-
Stage 2	-	-	-	-	-	-	172	137	-	86	41	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.7			0.2			\$ 380.4			215.7		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	1 250		386	-	-	295	-	-	3	139		
HCM Lane V/C Ratio	2.174 0.13		0.442	-	-	0.07	-	-	1.812	0.954		
HCM Control Delay (s)	\$ 5764.3		21.5	21.5	-	-	18.1	-	\$ 2393.4	126.5		
HCM Lane LOS	F C		C	-	-	C	-	-	F	F		
HCM 95th %tile Q(veh)	1 0.4		2.2	-	-	0.2	-	-	1.6	6.7		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s				+: Computation Not Defined				*: All major volume in platoon		

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	172	125	0
Future Vol, veh/h	0	0	0	172	125	0
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	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	187	136	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	323	136	136	0	-	0
Stage 1	136	-	-	-	-	-
Stage 2	187	-	-	-	-	-
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	671	913	1448	-	-	-
Stage 1	890	-	-	-	-	-
Stage 2	845	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	671	913	1448	-	-	-
Mov Cap-2 Maneuver	701	-	-	-	-	-
Stage 1	890	-	-	-	-	-
Stage 2	845	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1448	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	1	1	205	126	1
Future Vol, veh/h	3	1	1	205	126	1
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	-	-	-
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	3	1	1	223	137	1
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	363	138	138	0	-	0
Stage 1	138	-	-	-	-	-
Stage 2	225	-	-	-	-	-
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	636	910	1446	-	-	-
Stage 1	889	-	-	-	-	-
Stage 2	812	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	635	910	1446	-	-	-
Mov Cap-2 Maneuver	675	-	-	-	-	-
Stage 1	888	-	-	-	-	-
Stage 2	812	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1446	-	722	-	-	
HCM Lane V/C Ratio	0.001	-	0.006	-	-	
HCM Control Delay (s)	7.5	-	10	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

Intersection						
Int Delay, s/veh	2.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↱		↱	↑↑	↱	↱
Traffic Vol, veh/h	453	114	23	600	146	71
Future Vol, veh/h	453	114	23	600	146	71
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	100	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	492	124	25	652	159	77
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	616	0	930	308
Stage 1	-	-	-	-	554	-
Stage 2	-	-	-	-	376	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	960	-	266	688
Stage 1	-	-	-	-	539	-
Stage 2	-	-	-	-	664	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	960	-	259	688
Mov Cap-2 Maneuver	-	-	-	-	385	-
Stage 1	-	-	-	-	539	-
Stage 2	-	-	-	-	647	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.3		17.6	
HCM LOS	C					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	385	688	-	-	960	-
HCM Lane V/C Ratio	0.412	0.112	-	-	0.026	-
HCM Control Delay (s)	20.8	10.9	-	-	8.8	-
HCM Lane LOS	C		B	-	A	-
HCM 95th %tile Q(veh)	2	0.4	-	-	0.1	-

2025 Opening Year Traffic Analysis

Intersection												
Int Delay, s/veh	9.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	114	1171	45	8	1100	14	12	0	10	3	4	194
Future Vol, veh/h	114	1171	45	8	1100	14	12	0	10	3	4	194
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	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	124	1273	49	9	1196	15	13	0	11	3	4	211
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1211	0	0	1322	0	0	2164	2775	661	2099	2784	598
Stage 1	-	-	-	-	-	-	1546	1546	-	1214	1214	-
Stage 2	-	-	-	-	-	-	618	1229	-	885	1570	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	572	-	-	519	-	-	26	19	405	30	19	445
Stage 1	-	-	-	-	-	-	120	174	-	193	253	-
Stage 2	-	-	-	-	-	-	443	248	-	306	170	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	572	-	-	519	-	-	~ 9	15	405	24	15	445
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 9	15	-	24	15	-
Stage 1	-	-	-	-	-	-	94	136	-	151	249	-
Stage 2	-	-	-	-	-	-	225	244	-	233	133	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.1			0.1			\$ 566.4			51.4		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	9 405		572	-	-	519	-	-	24	282		
HCM Lane V/C Ratio	1.449 0.027		0.217	-	-	0.017	-	-	0.136	0.763		
HCM Control Delay (s)	\$ 1026.7 14.1		13	-	-	12.1	-	-	177.3	49.5		
HCM Lane LOS	F B		B	-	-	B	-	-	F	E		
HCM 95th %tile Q(veh)	2.5 0.1		0.8	-	-	0.1	-	-	0.4	5.7		
Notes												
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon												

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	118	229	0
Future Vol, veh/h	0	0	0	118	229	0
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	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	128	249	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	377	249	249	0	-	0
Stage 1	249	-	-	-	-	-
Stage 2	128	-	-	-	-	-
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	625	790	1317	-	-	-
Stage 1	792	-	-	-	-	-
Stage 2	898	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	625	790	1317	-	-	-
Mov Cap-2 Maneuver	665	-	-	-	-	-
Stage 1	792	-	-	-	-	-
Stage 2	898	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1317	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	6	6	104	238	6
Future Vol, veh/h	4	6	6	104	238	6
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	-	-	-
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	4	7	7	113	259	7
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	390	263	266	0	-	0
Stage 1	263	-	-	-	-	-
Stage 2	127	-	-	-	-	-
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	614	776	1298	-	-	-
Stage 1	781	-	-	-	-	-
Stage 2	899	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	611	776	1298	-	-	-
Mov Cap-2 Maneuver	654	-	-	-	-	-
Stage 1	777	-	-	-	-	-
Stage 2	899	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10.1	0.4		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1298	-	722	-	-	
HCM Lane V/C Ratio	0.005	-	0.015	-	-	
HCM Control Delay (s)	7.8	-	10.1	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

Intersection						
Int Delay, s/veh	2.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↱		↱	↑↑	↱	↱
Traffic Vol, veh/h	991	224	34	318	79	21
Future Vol, veh/h	991	224	34	318	79	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	100	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1077	243	37	346	86	23
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1320	0	1446	660
Stage 1	-	-	-	-	1199	-
Stage 2	-	-	-	-	247	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	519	-	122	406
Stage 1	-	-	-	-	248	-
Stage 2	-	-	-	-	771	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	519	-	113	406
Mov Cap-2 Maneuver	-	-	-	-	204	-
Stage 1	-	-	-	-	248	-
Stage 2	-	-	-	-	716	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		1.2		30.6	
HCM LOS	D					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	204	406	-	-	519	-
HCM Lane V/C Ratio	0.421	0.056	-	-	0.071	-
HCM Control Delay (s)	34.9	14.4	-	-	12.5	-
HCM Lane LOS	D	B	-	-	B	-
HCM 95th %tile Q(veh)	1.9	0.2	-	-	0.2	-

Intersection												
Int Delay, s/veh	35.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	163	1778	93	20	1567	16	3	0	31	6	2	126
Future Vol, veh/h	163	1778	93	20	1567	16	3	0	31	6	2	126
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	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	177	1933	101	22	1703	17	3	0	34	7	2	137

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1720	0	0	2034	0	0	3235	4102	1017	3068	4135	852
Stage 1	-	-	-	-	-	-	2338	2338	-	1747	1747	-
Stage 2	-	-	-	-	-	-	897	1764	-	1321	2388	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	364	-	-	274	-	-	4	2	235	~ 5	~ 2	303
Stage 1	-	-	-	-	-	-	37	69	-	89	138	-
Stage 2	-	-	-	-	-	-	301	136	-	165	65	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	364	-	-	274	-	-	-	1	235	~ 3	~ 1	303
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	1	-	~ 3	~ 1	-
Stage 1	-	-	-	-	-	-	19	35	-	46	127	-
Stage 2	-	-	-	-	-	-	149	125	-	73	33	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.9	0.2		\$ 976.5
HCM LOS			-	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	235	364	-	-	274	-	-	3	53
HCM Lane V/C Ratio	-	0.143	0.487	-	-	0.079	-	-	2.174	2.625
HCM Control Delay (s)	-	22.9	23.9	-	-	19.3	-	-	\$ 2584.3	\$ 901.1
HCM Lane LOS	-	C	C	-	-	C	-	-	F	F
HCM 95th %tile Q(veh)	-	0.5	2.6	-	-	0.3	-	-	1.8	14.4

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

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	179	130	0
Future Vol, veh/h	0	0	0	179	130	0
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	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	195	141	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	336	141	141	0	-	0
Stage 1	141	-	-	-	-	-
Stage 2	195	-	-	-	-	-
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	659	907	1442	-	-	-
Stage 1	886	-	-	-	-	-
Stage 2	838	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	659	907	1442	-	-	-
Mov Cap-2 Maneuver	693	-	-	-	-	-
Stage 1	886	-	-	-	-	-
Stage 2	838	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1442	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	2	2	213	131	2
Future Vol, veh/h	4	2	2	213	131	2
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	-	-	-
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	4	2	2	232	142	2
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	379	143	144	0	-	0
Stage 1	143	-	-	-	-	-
Stage 2	236	-	-	-	-	-
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	623	905	1438	-	-	-
Stage 1	884	-	-	-	-	-
Stage 2	803	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	622	905	1438	-	-	-
Mov Cap-2 Maneuver	665	-	-	-	-	-
Stage 1	883	-	-	-	-	-
Stage 2	803	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10	0.1		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1438	-	729	-	-	
HCM Lane V/C Ratio	0.002	-	0.009	-	-	
HCM Control Delay (s)	7.5	-	10	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

Intersection						
Int Delay, s/veh	3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↱		↱	↑↑	↱	↱
Traffic Vol, veh/h	471	119	24	624	152	74
Future Vol, veh/h	471	119	24	624	152	74
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	100	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	512	129	26	678	165	80
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	641	0	968	321
Stage 1	-	-	-	-	577	-
Stage 2	-	-	-	-	391	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	939	-	251	675
Stage 1	-	-	-	-	525	-
Stage 2	-	-	-	-	653	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	939	-	244	675
Mov Cap-2 Maneuver	-	-	-	-	372	-
Stage 1	-	-	-	-	525	-
Stage 2	-	-	-	-	635	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.3		18.6	
HCM LOS	C					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	372	675	-	-	939	-
HCM Lane V/C Ratio	0.444	0.119	-	-	0.028	-
HCM Control Delay (s)	22.2	11.1	-	-	8.9	-
HCM Lane LOS	C	B	-	-	A	-
HCM 95th %tile Q(veh)	2.2	0.4	-	-	0.1	-

2025 Opening Year with Project Traffic Analysis

Intersection												
Int Delay, s/veh	30.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	151	1171	45	8	1100	18	12	3	10	6	7	231
Future Vol, veh/h	151	1171	45	8	1100	18	12	3	10	6	7	231
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	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	164	1273	49	9	1196	20	13	3	11	7	8	251
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1216	0	0	1322	0	0	2246	2860	661	2180	2864	598
Stage 1	-	-	-	-	-	-	1626	1626	-	1214	1214	-
Stage 2	-	-	-	-	-	-	620	1234	-	966	1650	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	569	-	-	519	-	-	23	17	405	26	16	445
Stage 1	-	-	-	-	-	-	106	159	-	193	253	-
Stage 2	-	-	-	-	-	-	442	247	-	273	155	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	569	-	-	519	-	-	~ 4	12	405	16	11	445
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 4	12	-	16	11	-
Stage 1	-	-	-	-	-	-	75	113	-	137	249	-
Stage 2	-	-	-	-	-	-	183	243	-	184	110	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.5			0.1			\$ 1339.9			198.5		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	4 47		569	-	-	519	-	-	16	206		
HCM Lane V/C Ratio	3.261 0.301		0.288	-	-	0.017	-	-	0.408	1.256		
HCM Control Delay (s)	\$ 2670.4 111.7		13.9	-	-	12.1	-	-	\$ 339.7	194.9		
HCM Lane LOS	F F		B	-	-	B	-	-	F F			
HCM 95th %tile Q(veh)	2.8 1		1.2	-	-	0.1	-	-	1.1	13.7		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s				+: Computation Not Defined				*: All major volume in platoon		

Intersection						
Int Delay, s/veh	1.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	23	24	138	249	10
Future Vol, veh/h	10	23	24	138	249	10
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	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	25	26	150	271	11
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	479	277	282	0	-	0
Stage 1	277	-	-	-	-	-
Stage 2	202	-	-	-	-	-
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	545	762	1280	-	-	-
Stage 1	770	-	-	-	-	-
Stage 2	832	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	534	762	1280	-	-	-
Mov Cap-2 Maneuver	603	-	-	-	-	-
Stage 1	755	-	-	-	-	-
Stage 2	832	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10.4	1.2		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1280	-	706	-	-	
HCM Lane V/C Ratio	0.02	-	0.051	-	-	
HCM Control Delay (s)	7.9	-	10.4	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-	

Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	26	26	114	248	20
Future Vol, veh/h	17	26	26	114	248	20
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	-	-	-
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	18	28	28	124	270	22
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	461	281	292	0	-	0
Stage 1	281	-	-	-	-	-
Stage 2	180	-	-	-	-	-
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	559	758	1270	-	-	-
Stage 1	767	-	-	-	-	-
Stage 2	851	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	547	758	1270	-	-	-
Mov Cap-2 Maneuver	610	-	-	-	-	-
Stage 1	750	-	-	-	-	-
Stage 2	851	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10.6	1.5		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1270	-	692	-	-	
HCM Lane V/C Ratio	0.022	-	0.068	-	-	
HCM Control Delay (s)	7.9	-	10.6	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-	

Intersection						
Int Delay, s/veh	2.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↱		↱	↑↑	↱	↱
Traffic Vol, veh/h	991	241	41	318	95	28
Future Vol, veh/h	991	241	41	318	95	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	100	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1077	262	45	346	103	30
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1339	0	1471	670
Stage 1	-	-	-	-	1208	-
Stage 2	-	-	-	-	263	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	511	-	118	399
Stage 1	-	-	-	-	246	-
Stage 2	-	-	-	-	757	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	511	-	108	399
Mov Cap-2 Maneuver	-	-	-	-	200	-
Stage 1	-	-	-	-	246	-
Stage 2	-	-	-	-	690	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		1.5		34.9	
HCM LOS	D					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	200	399	-	-	511	-
HCM Lane V/C Ratio	0.516	0.076	-	-	0.087	-
HCM Control Delay (s)	40.8	14.8	-	-	12.7	-
HCM Lane LOS	E	B	-	-	B	-
HCM 95th %tile Q(veh)	2.6	0.2	-	-	0.3	-

Intersection												
Int Delay, s/veh	1.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	204	1778	93	20	1567	20	3	4	31	10	6	169
Future Vol, veh/h	204	1778	93	20	1567	20	3	4	31	10	6	169
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	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	222	1933	101	22	1703	22	3	4	34	11	7	184
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1725	0	0	2034	0	0	3327	4197	1017	3160	4225	852
Stage 1	-	-	-	-	-	-	2428	2428	-	1747	1747	-
Stage 2	-	-	-	-	-	-	899	1769	-	1413	2478	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	362	-	-	274	-	-	~ 3	~ 2	235	~ 4	~ 2	303
Stage 1	-	-	-	-	-	-	33	62	-	89	138	-
Stage 2	-	-	-	-	-	-	300	135	-	145	58	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	362	-	-	274	-	-	-	~ 1	235	-	~ 1	303
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	~ 1	-	-	~ 1	-
Stage 1	-	-	-	-	-	-	13	24	-	34	127	-
Stage 2	-	-	-	-	-	-	103	124	-	39	22	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	2.9			0.2								
HCM LOS							-			-		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	-		8	362	-	-	274	-	-	-	27	
HCM Lane V/C Ratio	-		4.755	0.613	-	-	0.079	-	-	-	7.045	
HCM Control Delay (s)	\$ 2594.9		29.5	-	-	19.3	-	-	-	\$ 3006		
HCM Lane LOS	-		F	D	-	-	C	-	-	-	F	
HCM 95th %tile Q(veh)	-		6.1	3.9	-	-	0.3	-	-	-	23.4	
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s				+: Computation Not Defined				*: All major volume in platoon		

Intersection						
Int Delay, s/veh	1.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	27	26	201	154	11
Future Vol, veh/h	12	27	26	201	154	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	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	13	29	28	218	167	12
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	447	173	179	0	-	0
Stage 1	173	-	-	-	-	-
Stage 2	274	-	-	-	-	-
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	569	871	1397	-	-	-
Stage 1	857	-	-	-	-	-
Stage 2	772	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	558	871	1397	-	-	-
Mov Cap-2 Maneuver	620	-	-	-	-	-
Stage 1	840	-	-	-	-	-
Stage 2	772	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9.9	0.9		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1397	-	775	-	-	
HCM Lane V/C Ratio	0.02	-	0.055	-	-	
HCM Control Delay (s)	7.6	-	9.9	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-	

Intersection						
Int Delay, s/veh	1.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	26	24	225	142	17
Future Vol, veh/h	20	26	24	225	142	17
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	-	-	-
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	22	28	26	245	154	18
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	460	163	172	0	-	0
Stage 1	163	-	-	-	-	-
Stage 2	297	-	-	-	-	-
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	559	882	1405	-	-	-
Stage 1	866	-	-	-	-	-
Stage 2	754	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	548	882	1405	-	-	-
Mov Cap-2 Maneuver	612	-	-	-	-	-
Stage 1	850	-	-	-	-	-
Stage 2	754	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10.2	0.7		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1405	-	740	-	-	
HCM Lane V/C Ratio	0.019	-	0.068	-	-	
HCM Control Delay (s)	7.6	-	10.2	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-	

Intersection						
Int Delay, s/veh	3.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↱		↱	↑↑	↱	↱
Traffic Vol, veh/h	471	138	31	624	172	82
Future Vol, veh/h	471	138	31	624	172	82
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	100	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	512	150	34	678	187	89
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	662	0	994	331
Stage 1	-	-	-	-	587	-
Stage 2	-	-	-	-	407	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	922	-	242	665
Stage 1	-	-	-	-	519	-
Stage 2	-	-	-	-	641	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	922	-	233	665
Mov Cap-2 Maneuver	-	-	-	-	362	-
Stage 1	-	-	-	-	519	-
Stage 2	-	-	-	-	617	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.4		20.6	
HCM LOS	C					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	362	665	-	-	922	-
HCM Lane V/C Ratio	0.516	0.134	-	-	0.037	-
HCM Control Delay (s)	25.1	11.3	-	-	9.1	-
HCM Lane LOS	D	B	-	-	A	-
HCM 95th %tile Q(veh)	2.8	0.5	-	-	0.1	-

2030 Future Year Traffic Analysis

Intersection												
Int Delay, s/veh	30.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	126	1293	49	9	1214	15	13	0	11	4	5	214
Future Vol, veh/h	126	1293	49	9	1214	15	13	0	11	4	5	214
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	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	137	1405	53	10	1320	16	14	0	12	4	5	233
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1336	0	0	1458	0	0	2389	3062	729	2317	3072	660
Stage 1	-	-	-	-	-	-	1706	1706	-	1340	1340	-
Stage 2	-	-	-	-	-	-	683	1356	-	977	1732	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	512	-	-	460	-	-	18	12	365	20	12	406
Stage 1	-	-	-	-	-	-	95	145	-	161	220	-
Stage 2	-	-	-	-	-	-	405	216	-	269	141	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	512	-	-	460	-	-	~ 3	9	365	15	9	406
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 3	9	-	15	9	-
Stage 1	-	-	-	-	-	-	70	106	-	118	215	-
Stage 2	-	-	-	-	-	-	165	211	-	191	103	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.3			0.1			\$ 2086.9			170.9		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	3 365		512	-	-	460	-	-	15	202		
HCM Lane V/C Ratio	4.71 0.033		0.267	-	-	0.021	-	-	0.29	1.178		
HCM Control Delay (s)	\$ 3839.9		15.2	14.6	-	13	-	-	\$ 323.6	168.1		
HCM Lane LOS	F C		B	-	-	B	-	-	F	F		
HCM 95th %tile Q(veh)	3.1 0.1		1.1	-	-	0.1	-	-	0.8	12		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	130	253	0
Future Vol, veh/h	0	0	0	130	253	0
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	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	141	275	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	416	275	275	0	-	0
Stage 1	275	-	-	-	-	-
Stage 2	141	-	-	-	-	-
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	593	764	1288	-	-	-
Stage 1	771	-	-	-	-	-
Stage 2	886	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	593	764	1288	-	-	-
Mov Cap-2 Maneuver	642	-	-	-	-	-
Stage 1	771	-	-	-	-	-
Stage 2	886	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1288	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	7	7	115	263	7
Future Vol, veh/h	5	7	7	115	263	7
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	-	-	-
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	5	8	8	125	286	8
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	431	290	294	0	-	0
Stage 1	290	-	-	-	-	-
Stage 2	141	-	-	-	-	-
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	581	749	1268	-	-	-
Stage 1	759	-	-	-	-	-
Stage 2	886	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	578	749	1268	-	-	-
Mov Cap-2 Maneuver	630	-	-	-	-	-
Stage 1	754	-	-	-	-	-
Stage 2	886	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10.3	0.5		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1268	-	694	-	-	
HCM Lane V/C Ratio	0.006	-	0.019	-	-	
HCM Control Delay (s)	7.9	-	10.3	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0	-	0.1	-	-	

Intersection						
Int Delay, s/veh	2.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↱		↱	↑↑	↱	↱
Traffic Vol, veh/h	1094	247	38	351	87	23
Future Vol, veh/h	1094	247	38	351	87	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	100	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1189	268	41	382	95	25
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1457	0	1596	729
Stage 1	-	-	-	-	1323	-
Stage 2	-	-	-	-	273	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	460	-	97	365
Stage 1	-	-	-	-	213	-
Stage 2	-	-	-	-	748	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	460	-	~ 88	365
Mov Cap-2 Maneuver	-	-	-	-	175	-
Stage 1	-	-	-	-	213	-
Stage 2	-	-	-	-	681	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		1.3		40.8	
HCM LOS	E					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	175	365	-	-	460	-
HCM Lane V/C Ratio	0.54	0.068	-	-	0.09	-
HCM Control Delay (s)	47.4	15.6	-	-	13.6	-
HCM Lane LOS	E	C	-	-	B	-
HCM 95th %tile Q(veh)	2.8	0.2	-	-	0.3	-
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Intersection												
Int Delay, s/veh	17.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	180	1963	102	22	1730	17	4	0	34	7	3	139
Future Vol, veh/h	180	1963	102	22	1730	17	4	0	34	7	3	139
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	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	196	2134	111	24	1880	18	4	0	37	8	3	151
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1898	0	0	2245	0	0	3572	4528	1123	3387	4565	940
Stage 1	-	-	-	-	-	-	2582	2582	-	1928	1928	-
Stage 2	-	-	-	-	-	-	990	1946	-	1459	2637	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	310	-	-	227	-	-	~ 2	1	200	~ 3	~ 1	265
Stage 1	-	-	-	-	-	-	26	51	-	68	112	-
Stage 2	-	-	-	-	-	-	264	110	-	136	48	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	310	-	-	227	-	-	0	0	200	~ 1	0	265
Mov Cap-2 Maneuver	-	-	-	-	-	-	0	0	-	~ 1	0	-
Stage 1	-	-	-	-	-	-	10	19	-	25	100	-
Stage 2	-	-	-	-	-	-	98	98	-	41	18	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	2.8			0.3						\$ 452.6		
HCM LOS							-			F		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	-	200	310	-	-	227	-	-	-	1	265	
HCM Lane V/C Ratio	-	0.185	0.631	-	-	0.105	-	-	-	7.609	0.582	
HCM Control Delay (s)	-	27	34.5	-	-	22.7	-	-	-	\$ 8904.7	35.9	
HCM Lane LOS	-	D	D	-	-	C	-	-	-	F	E	
HCM 95th %tile Q(veh)	-	0.7	4	-	-	0.3	-	-	-	2.2	3.4	
Notes												
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon												

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	198	144	0
Future Vol, veh/h	0	0	0	198	144	0
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	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	215	157	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	372	157	157	0	-	0
Stage 1	157	-	-	-	-	-
Stage 2	215	-	-	-	-	-
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	629	889	1423	-	-	-
Stage 1	871	-	-	-	-	-
Stage 2	821	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	629	889	1423	-	-	-
Mov Cap-2 Maneuver	672	-	-	-	-	-
Stage 1	871	-	-	-	-	-
Stage 2	821	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1423	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	3	3	235	145	3
Future Vol, veh/h	5	3	3	235	145	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	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	5	3	3	255	158	3
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	421	160	161	0	-	0
Stage 1	160	-	-	-	-	-
Stage 2	261	-	-	-	-	-
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	589	885	1418	-	-	-
Stage 1	869	-	-	-	-	-
Stage 2	783	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	588	885	1418	-	-	-
Mov Cap-2 Maneuver	641	-	-	-	-	-
Stage 1	867	-	-	-	-	-
Stage 2	783	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10.1	0.1		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1418	-	715	-	-	
HCM Lane V/C Ratio	0.002	-	0.012	-	-	
HCM Control Delay (s)	7.5	-	10.1	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

Intersection						
Int Delay, s/veh	3.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↱		↱	↑↑	↱	↱
Traffic Vol, veh/h	520	131	26	689	168	82
Future Vol, veh/h	520	131	26	689	168	82
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	100	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	565	142	28	749	183	89
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	707	0	1067	354
Stage 1	-	-	-	-	636	-
Stage 2	-	-	-	-	431	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	887	-	217	642
Stage 1	-	-	-	-	489	-
Stage 2	-	-	-	-	623	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	887	-	210	642
Mov Cap-2 Maneuver	-	-	-	-	341	-
Stage 1	-	-	-	-	489	-
Stage 2	-	-	-	-	603	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.3		22	
HCM LOS	C					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	341	642	-	-	887	-
HCM Lane V/C Ratio	0.536	0.139	-	-	0.032	-
HCM Control Delay (s)	27.1	11.5	-	-	9.2	-
HCM Lane LOS	D	B	-	-	A	-
HCM 95th %tile Q(veh)	3	0.5	-	-	0.1	-

2030 Future Year with Project Traffic Analysis

Intersection												
Int Delay, s/veh	44.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	163	1293	49	9	1214	19	13	3	11	7	8	251
Future Vol, veh/h	163	1293	49	9	1214	19	13	3	11	7	8	251
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	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	177	1405	53	10	1320	21	14	3	12	8	9	273
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1341	0	0	1458	0	0	2471	3147	729	2398	3152	660
Stage 1	-	-	-	-	-	-	1786	1786	-	1340	1340	-
Stage 2	-	-	-	-	-	-	685	1361	-	1058	1812	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	510	-	-	460	-	-	15	11	365	17	11	406
Stage 1	-	-	-	-	-	-	84	132	-	161	220	-
Stage 2	-	-	-	-	-	-	404	215	-	240	128	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	510	-	-	460	-	-	-	7	365	8	~ 7	406
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	7	-	8	~ 7	-
Stage 1	-	-	-	-	-	-	55	86	-	105	215	-
Stage 2	-	-	-	-	-	-	124	210	-	146	84	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.7			0.1						\$ 497.8		
HCM LOS							-			F		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	-		31	510	-	-	460	-	-	8	147	
HCM Lane V/C Ratio	-		0.491	0.347	-	-	0.021	-	-	0.951	1.915	
HCM Control Delay (s)	-		203.5	15.8	-	-	13	-	-	\$ 883	\$ 487.4	
HCM Lane LOS	-		F	C	-	-	B	-	-	F	F	
HCM 95th %tile Q(veh)	-		1.6	1.5	-	-	0.1	-	-	1.7	21.7	
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s				+: Computation Not Defined				*: All major volume in platoon		

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	23	24	150	273	10
Future Vol, veh/h	10	23	24	150	273	10
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	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	25	26	163	297	11
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	518	303	308	0	-	0
Stage 1	303	-	-	-	-	-
Stage 2	215	-	-	-	-	-
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	518	737	1253	-	-	-
Stage 1	749	-	-	-	-	-
Stage 2	821	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	507	737	1253	-	-	-
Mov Cap-2 Maneuver	583	-	-	-	-	-
Stage 1	733	-	-	-	-	-
Stage 2	821	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10.6	1.1		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1253	-	682	-	-	
HCM Lane V/C Ratio	0.021	-	0.053	-	-	
HCM Control Delay (s)	7.9	-	10.6	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-	

Intersection						
Int Delay, s/veh	1.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	18	27	27	125	273	21
Future Vol, veh/h	18	27	27	125	273	21
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	-	-	-
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	20	29	29	136	297	23
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	503	309	320	0	-	0
Stage 1	309	-	-	-	-	-
Stage 2	194	-	-	-	-	-
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	528	731	1240	-	-	-
Stage 1	745	-	-	-	-	-
Stage 2	839	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	516	731	1240	-	-	-
Mov Cap-2 Maneuver	588	-	-	-	-	-
Stage 1	728	-	-	-	-	-
Stage 2	839	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10.8	1.4		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1240	-	666	-	-	
HCM Lane V/C Ratio	0.024	-	0.073	-	-	
HCM Control Delay (s)	8	-	10.8	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-	

Intersection						
Int Delay, s/veh	3.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↱		↱	↑↑	↱	↱
Traffic Vol, veh/h	1094	264	45	351	103	30
Future Vol, veh/h	1094	264	45	351	103	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	100	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1189	287	49	382	112	33
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1476	0	1622	738
Stage 1	-	-	-	-	1333	-
Stage 2	-	-	-	-	289	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	452	-	~ 94	360
Stage 1	-	-	-	-	211	-
Stage 2	-	-	-	-	735	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	452	-	~ 84	360
Mov Cap-2 Maneuver	-	-	-	-	172	-
Stage 1	-	-	-	-	211	-
Stage 2	-	-	-	-	656	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		1.6		48.8	
HCM LOS	E					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	172	360	-	-	452	-
HCM Lane V/C Ratio	0.651	0.091	-	-	0.108	-
HCM Control Delay (s)	58.3	16	-	-	13.9	-
HCM Lane LOS	F	C	-	-	B	-
HCM 95th %tile Q(veh)	3.7	0.3	-	-	0.4	-
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Intersection												
Int Delay, s/veh	33.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	221	1963	102	22	1730	21	4	4	34	11	7	182
Future Vol, veh/h	221	1963	102	22	1730	21	4	4	34	11	7	182
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	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	240	2134	111	24	1880	23	4	4	37	12	8	198
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1903	0	0	2245	0	0	3662	4621	1123	3477	4653	940
Stage 1	-	-	-	-	-	-	2670	2670	-	1928	1928	-
Stage 2	-	-	-	-	-	-	992	1951	-	1549	2725	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	309	-	-	227	-	-	~ 2	~ 1	200	~ 2	~ 1	265
Stage 1	-	-	-	-	-	-	23	46	-	68	112	-
Stage 2	-	-	-	-	-	-	264	109	-	119	43	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	309	-	-	227	-	-	0	0	200	~ 1	0	265
Mov Cap-2 Maneuver	-	-	-	-	-	-	0	0	-	~ 1	0	-
Stage 1	-	-	-	-	-	-	5	10	-	15	100	-
Stage 2	-	-	-	-	-	-	55	97	-	12	10	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	4.6			0.3						\$ 661.8		
HCM LOS							-			F		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	-	200	309	-	-	227	-	-	1	265		
HCM Lane V/C Ratio	-	0.207	0.777	-	-	0.105	-	-	11.957	0.775		
HCM Control Delay (s)	-	27.6	47.7	-	-	22.7	-	-	\$ 11114.7	53.4		
HCM Lane LOS	-	D	E	-	-	C	-	-	F	F		
HCM 95th %tile Q(veh)	-	0.8	6.1	-	-	0.3	-	-	2.9	5.8		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s				+: Computation Not Defined				*: All major volume in platoon		

Intersection						
Int Delay, s/veh	1.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	27	26	220	168	11
Future Vol, veh/h	12	27	26	220	168	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	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	13	29	28	239	183	12
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	484	189	195	0	-	0
Stage 1	189	-	-	-	-	-
Stage 2	295	-	-	-	-	-
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	542	853	1378	-	-	-
Stage 1	843	-	-	-	-	-
Stage 2	755	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	531	853	1378	-	-	-
Mov Cap-2 Maneuver	601	-	-	-	-	-
Stage 1	826	-	-	-	-	-
Stage 2	755	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10	0.8		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1378	-	756	-	-	
HCM Lane V/C Ratio	0.021	-	0.056	-	-	
HCM Control Delay (s)	7.7	-	10	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-	

Intersection						
Int Delay, s/veh	1.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	21	27	25	247	156	18
Future Vol, veh/h	21	27	25	247	156	18
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	-	-	-
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	23	29	27	268	170	20
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	502	180	190	0	-	0
Stage 1	180	-	-	-	-	-
Stage 2	322	-	-	-	-	-
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	529	863	1384	-	-	-
Stage 1	851	-	-	-	-	-
Stage 2	735	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	518	863	1384	-	-	-
Mov Cap-2 Maneuver	590	-	-	-	-	-
Stage 1	834	-	-	-	-	-
Stage 2	735	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10.4	0.7		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1384	-	718	-	-	
HCM Lane V/C Ratio	0.02	-	0.073	-	-	
HCM Control Delay (s)	7.7	-	10.4	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-	

Intersection						
Int Delay, s/veh	4.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↱		↱	↑↑	↱	↱
Traffic Vol, veh/h	520	150	33	689	188	90
Future Vol, veh/h	520	150	33	689	188	90
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	100	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	565	163	36	749	204	98
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	728	0	1094	364
Stage 1	-	-	-	-	647	-
Stage 2	-	-	-	-	447	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	871	-	208	633
Stage 1	-	-	-	-	483	-
Stage 2	-	-	-	-	611	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	871	- ~	199	633
Mov Cap-2 Maneuver	-	-	-	-	331	-
Stage 1	-	-	-	-	483	-
Stage 2	-	-	-	-	586	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.4		25.4	
HCM LOS	D					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	331	633	-	-	871	-
HCM Lane V/C Ratio	0.617	0.155	-	-	0.041	-
HCM Control Delay (s)	31.9	11.7	-	-	9.3	-
HCM Lane LOS	D	B	-	-	A	-
HCM 95th %tile Q(veh)	3.9	0.5	-	-	0.1	-
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Melinda Greenwood

From: Phil Holland <[REDACTED]>
Sent: Thursday, August 24, 2023 6:13 PM
To: Melinda Greenwood
Subject: Fwd: Kaysville - Hotel

Melinda,

I'm forwarding the email from the Hotel's broker. See below:

Phil

Begin forwarded message:

From: "Juhlin, Patrick @ Salt Lake City" <[REDACTED]>
Date: August 24, 2023 at 5:53:43 PM MDT
To: Phil Holland <[REDACTED]>
Subject: Kaysville - Hotel

Kaysville City,

I can confirm that my client, a hotel developer, is currently under contract with H Group Ventures to develop a hotel. The terms of this contract is confidential however, I can say we are committed to develop a hotel in Kaysville as fast as the city can process this zone change and forthcoming building permits.

Our intention is to immediately submit a building permit application promptly after the zone change and development agreement gets approved. This project has an estimated cost of \$19.0m dollars which will create construction jobs, well-paying permanent jobs at the hotel and increased spending within the city from hotel guests which will support local businesses. This project will also provide great tax revenue to Kaysville City through sales tax receipts and the 1% transient room tax the Kaysville City is entitled to collect.

We are eager and excited to build a hotel in beautiful Kaysville City.

Thanks,

Patrick Juhlin

Patrick Juhlin

First Vice President

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MEMORANDUM

To: Phil Holland, The Holland Group
 From: Rob Sant, Urban & Main Consulting
 Date: July 28, 2023
 RE: Kaysville Creekside Commons Fiscal and Economic Impact

INTRODUCTION

The Creekside Commons is a proposed mixed-use development on 5.64 acres of land within Kaysville, Utah (the “City”) east of I-15, west of 400 West, and north of 200 North. The Holland Group (the “Developer”) has requested Urban & Main conduct an objective, third-party analysis of the economic and fiscal impacts of the proposed Development within the City. Specifically, the analysis aims to understand better the Development’s total economic and fiscal impact on the City over 25 years.

Urban & Main has significant experience in economic development and feasibility of development projects. With over a decade of economic development financial services, Urban & Main fully understands what is needed to provide an independent analysis to determine the costs and benefits of development projects.

KAYSVILLE CREEKSIDE COMMONS

The Development is anticipated to begin infrastructure improvements in 2023, with a completion date of 2026. The Development will include the following:

- 114-room boutique hotel
- 160 studio, 1-bedroom, and 2-bedroom apartment units,
- 15,000 square feet of office space, and
- 3,000 square feet of retail.

If all aspects outlined above are constructed, the Development could produce **\$64.24 million** of new taxable assessed value.

TABLE 1 ABSORPTION SCHEDULE

Residential Type	Total Units/Sq. Ft.	Start Date	End Date	Taxable Value
Boutique Hotel	114 Rooms	2024	2026	\$13,661,801
Apartments	160 Units	2024	2026	\$41,492,219
Office Space	15,000 Sq. Ft.	2024	2026	\$5,516,118
Retail	3,000 Sq. Ft.	2024	2026	\$1,150,852
Land	245,678 Sq. Ft.	-	-	\$2,420,185
Total				\$64,241,175

FISCAL BENEFITS

The proposed Development will generate a **\$5.22 million** fiscal benefit for the City over the 25-year analysis period (2026-2050). The Development will have a positive impact on the following revenues:

- Property tax
- Sales tax
- Botanical & Zoo Sales Tax
- Transient room tax
- Franchise tax

Property Tax Revenue

Assessed values of the proposed real and personal property investments were obtained by collecting current, comparable development values in the City and Davis County (the "County") and data provided by the Developer. Assuming a two and a half percent annual growth rate in property value, the proposed Development will generate **\$1.57 million** of property tax revenue during the 25-year period.

TABLE 2 PROPERTY TAX REVENUES

Taxing Entity	Total – 25 Years
Assessed Value	\$36,599,487
Annual Growth	2.50%
Kaysville City 2023 Certified Tax Rate	0.001281
Average Annual Property Tax	\$62,922
Total Property Tax Revenue	\$1,573,059

After the analysis period, the proposed Development will generate **\$82,293** of annual City property tax revenue. This substantially benefits the City more than the \$2,113 of property tax revenue received from the currently vacant land.

Sales Tax Revenue

The proposed Development will generate sales tax on the 3,000 square feet of retail space, 114-room hotel, and online purchases made by the new full-time residents. The proposed Development will produce **\$1.41 million** in sales tax revenue during the 25-year analysis period.

TABLE 3 SALES TAX REVENUE

Assumptions	Amount
Retail Square Feet	3,000 Sq. Ft.
Average Sales/Sq. Ft.	\$350.00
Hotel Rooms	114
Average Daily Rate (ADR)	\$175.00
Online Taxable Sales per Resident	\$4,500
New Residents	320
Average Gross Taxable Sales	\$9,371,592
City Sales Tax Rate	0.50%
City Botanical & Zoo Sales Tax Rate	0.10%
Annual Growth	2.50%
Average Annual Sales Tax Revenue	\$46,858
Average Annual Botanical & Zoo Sales Tax	\$9,372
Total Sales Tax Revenue	\$1,171,449
Total Botanical & Zoo Sales Tax	\$234,290
Total Sales Tax Revenue	\$1,405,739

The City will likely receive additional sales tax revenues through residents, employees, and hotel occupants shopping and dining within the City. As this is not a direct fiscal benefit of the Development itself, the potential sales tax revenue and overall economic impact are discussed in greater detail in the Tourism and New Residents Per Capita Spending Economic Impact sections.

Transient Tax Revenue¹

The City will receive tourism tax revenue from the transient room tax generated by the hotel. The proposed Development will generate **\$1.49 million** in transient room tax revenue during the 25-year analysis period.

TABLE 4 TRANSIENT ROOM TAX REVENUE

Assumptions	Amount
Number of Hotel Rooms	114
Occupancy Rate	60%
Average Daily Rate	\$175.00
Annual Growth	2.50%
City TRT Rate	1.00%
Average Annual Transient Room Tax Revenue	\$59,695
Total Tourism Tax Revenue	\$1,492,370

Municipal Energy Tax Revenue

The City currently imposes a six percent municipal energy (“Franchise”) tax on all taxable portions of electric and natural gas sales. Rocky Mountain Power and Dominion Energy provided estimates of average usage per year. The proposed Development will produce **\$737,216** in municipal energy tax revenue during the 25-year analysis period.

TABLE 5 MUNICIPAL ENERGY TAX REVENUE

Assumptions	Amount
Residential Electric Usage per Unit per Year	\$1,134.06
Non-Residential Electric Usage per Square Foot per Year	\$1.36
Annual Inflation	2.50%
Electricity Franchise Tax Rate	6.00%
Average Electric Tax Revenue	\$22,982
25-Year Electric Tax Revenue	\$574,557
Residential Natural Gas Usage per Unit per Year	\$430.57
Non-Residential Natural Gas Usage per Square Feet per Year	\$0.16
Annual Inflation	2.50%
Natural Gas Franchise Tax Rate	6.00%
Average Natural Gas Tax Revenue	\$6,506
25-Year Natural Gas Tax Revenue	\$162,659
Total Municipal Energy Tax Revenue	\$737,216

Total Fiscal Benefit

The Development will produce **\$5.22 million** in fiscal benefits over the 25-year analysis period.

TABLE 6 FISCAL BENEFIT

Fiscal Benefits	Average Annual Benefit	Total – 25 Years
Property Tax	\$62,922	\$1,573,059
Sales Tax	\$46,858	\$1,171,449

¹ Kaysville City does not currently impose the 1.00% municipal transient room tax. The analysis assumes the City will elect to impose the tax upon approval of the Development and construction of the hotel.

Fiscal Benefits	Average Annual Benefit	Total – 25 Years
Botanical & Zoo Sales Tax	\$9,372	\$234,290
Transient Room Tax	\$59,695	\$1,492,370
Franchise Tax	\$29,764	\$744,091
Total Fiscal Benefits	\$208,610	\$5,215,259

FISCAL EXPENSES

The proposed Development will also impact the City's fiscal expenses. In evaluating the benefits of development, it is crucial to ensure that costs do not outweigh the benefits. Using the projected new assessed value of the Development, this analysis assumes that the City will see an increase of **\$1.55 million** in expenses over the 25-year analysis period. The proposed Development will create an impact on the following expenses:

- General Government
- Public Safety
- Public Works

These expenses are anticipated to increase proportionally as development occurs. Incremental expenses were calculated by dividing the City's 2022 annual expenditure for each expense category by the City's total 2022 assessed value. This calculation shows how much money the City spends per dollar of assessed value on each expense category.

This figure is then multiplied by the projected assessed value of each planned use in the Development to calculate the Development's incremental expenditure for each expense category.

TABLE 7 FISCAL EXPENSES

Fiscal Expenses	Total – 25 Years
General Government	\$304,687
Public Safety	\$828,378
Public Works	\$420,008
Total Fiscal Expenses	\$1,553,073

COST/BENEFIT ANALYSIS

Based on the development assumptions utilized in the analysis, the Development produces a **\$3.66 million** cumulative net benefit to the City projected over 25 years. The absorption and timing of the Development may impact the current projections. The Development will also likely create additional benefits for the City through new resident and hotel occupant purchases, which are not included in the cost-benefit table below.

TABLE 8 CREEKSIDE COMMONS COST/BENEFIT

Revenue	Year 1	Year 5	Year 10	Year 15	Year 20	Year 25	Total
Property Tax	\$46,884	\$51,429	\$57,780	\$64,965	\$73,095	\$82,293	\$1,573,059
Sales Tax	\$34,295	\$37,856	\$42,830	\$48,458	\$54,826	\$62,031	\$1,171,449
Botanical & Zoo Sales Tax	\$6,859	\$7,571	\$8,566	\$9,692	\$10,965	\$12,406	\$234,290
Transient Room Tax	\$43,691	\$48,226	\$54,563	\$61,734	\$69,846	\$79,024	\$1,429,370
Franchise Tax	\$21,784	\$24,045	\$27,205	\$30,780	\$34,825	\$39,401	\$744,091
Total Revenues	\$153,513	\$169,127	\$190,945	\$215,629	\$243,557	\$275,155	\$5,215,259
Expense							
General Government	(\$6,329)	(\$7,711)	(\$9,871)	(\$12,636)	(\$16,175)	(\$20,706)	(\$304,687)
Public Safety	(\$17,208)	(\$20,966)	(\$26,838)	(\$34,355)	(\$43,977)	(\$56,294)	(\$828,378)
Public Works	(\$8,725)	(\$10,630)	(\$13,607)	(\$17,419)	(\$22,297)	(\$28,543)	(\$420,008)
Total Expenses	(\$32,261)	(\$39,307)	(\$50,317)	(\$64,410)	(\$82,450)	(\$105,543)	(\$1,553,073)
Net Benefit/(Cost)	\$121,251	\$129,820	\$140,628	\$151,220	\$161,107	\$169,613	\$3,662,186

ECONOMIC BENEFITS

The economic benefits of the Development include 1) construction wages and supplies, 2) new job wages, 3) local purchases by tourists, and 4) local purchases by new residents. The proposed Development will create a **\$914.40 million** economic impact on the local economy over 25 years.

The actual economic benefit of the Development is likely much higher due to additional indirect and induced benefits. Positive economic impacts will be felt through business, construction, and leisure supplies purchased by the Developers, new residents, businesses, and hotel occupants. Additional demand for goods and services will also be attracted to the area. This benefit is commonly called the “multiplier effect,” in which only certain elements were considered in this study.

Construction Economic Benefit

The construction of the Development will necessitate construction jobs and wages. Infrastructure construction is anticipated to begin in 2023, with a final build-out date of 2026. This 3-year build-out period will have approximately 750,000 hours of construction labor, generating **\$21.53 million** in construction wages. These wages will be reinvested into the local economy, creating additional induced benefits.

TABLE 9 CONSTRUCTION WAGES

Assumptions	Amount
Average Annual Construction Hours	250,000
Average Hourly Wage	\$28.00
Annual Salary Increase	2.50%
Total Construction Hours	750,000
Average Annual Construction Wages	\$7,176,458
Total Construction Wages	\$21,529,375

Another economic benefit to the construction of the Development will be one-time purchases of construction supplies. Assuming that a portion of the hard-cost construction investment is for supplies purchased within the region and state, approximately **\$25.00 million** will be invested into the regional and state economy.

New Job Wages

It is anticipated that several jobs will be created by the Development. Future employee estimates have been made based on an employee per square foot average collected from CoreNet Global and comparable regional development. This analysis assumes that the development will create 481 jobs.

TABLE 10 NEW JOBS

Assumptions	Amount
Office Jobs per Square Foot	1 per 200 Square Feet
Office Square Feet	15,000
Office Jobs	75
Commercial Jobs per Square Foot	1 per 150 Square Feet
Commercial Square Feet	60,971
Commercial Jobs	406
Total New Jobs	481

The 481 new jobs will produce **\$356.42 million** in cumulative net wages during the 25-year analysis period. This figure was derived from taking average salaries of various office and commercial jobs on the U.S. Bureau of Labor Statistics and local job postings and applying an annual salary increase of two and a half percent. The salaries were then multiplied by the total number of jobs.

TABLE 11 NEW JOB WAGES

Assumptions	Amount
Office Average Salary	\$65,000
Office Jobs	75
Commercial Average Salary	\$27,500
Commercial Jobs	406
Annual Salary Increase	2.50%
Personal Adjusted Income Ratio	65.00%
Average Annual Wages	\$14,256,714
Total Wages	\$356,417,850

At the end of the 25-year analysis period, the Development will generate over **\$30 million** in annual wages. This number will continue to increase on an annual basis.

Tourist Spending Per Travel Party²

The hotel occupants will spend some of their trip expenditures on restaurants and stores within the City. Using a 60% occupancy rate and an average trip length of two days, the 114-room hotel will result in 12,483 annual trips. On average, the total trip expenditure per party is \$836. Excluding the 63% of travel expenses for transportation and lodging equates to the average party spending \$309 on other local expenses.

TABLE 12 HOTEL ASSUMPTIONS

Assumptions	Amount
Hotel Rooms	114
Occupancy Rate	60%
Number of Nightly Annual Stays	24,966
Average Trip Length	2 Days
Number of Annual Trips	12,483
Average Party Size	3
Number of Annual Visitors	37,449
Average Total Trip Expenditure Per Party	\$836
Non-Lodging/Transportation Trip Expenditure %	37%
Total Non-Lodging/Transportation Expenditure Per Person Per Day	\$309

Using the assumptions outlined in Table 12, the Development's hotel occupants will expend **\$131.81 million** in the local economy during the 25-year analysis period. This equates to an average of \$5.27 million annually.

TABLE 13 HOTEL OCCUPANT SPENDING

Assumptions	Amount
Number of Annual Trips	12,483
Total Non-Lodging/Transportation Trip Expenditure	\$309
Annual Growth Rate	2.5%
Average Annual Nightly Rental Occupant Spending	\$5,272,500
Total Nightly Rental Occupant Spending	\$131,812,495

A percentage of the hotel occupant spending will be spent in the City, which will create additional sales tax revenue for the City. The following table shows the potential sales tax revenue impacts on the City if different percentages of total nightly rental occupant spending occur within the City.

² Tourism data was estimated using the State of Utah's 2021 Utah Visitor Profile & Insights Report.

TABLE 14 HOTEL OCCUPANT SPENDING – POTENTIAL SALES TAX REVENUE

Percent Purchased	Average Annual City Sales Tax Revenue	25-Year Total
10%	\$3,164	\$79,087
25%	\$7,909	\$197,719
50%	\$15,818	\$395,437
75%	\$23,726	\$593,156

New Resident Per Household Spending

The approach to estimating per household spending of new residents is based on a potential “typical household” that would likely occupy the various multi-family units in the Development. The U.S. Bureau of Labor Statistics publishes consumer expenditure data for various household types. Three households were used to estimate per household spending of potential residents of the new Development. Using these assumptions, the Development will generate **\$379.64 million** of new resident per household spending during the 25-year analysis period.

TABLE 15 NEW RESIDENT PER HOUSEHOLD SPENDING

Assumptions	Amount
Studio Units	16
Average Annual Studio Per Household Spending	\$893,217
25-Year Total Studio Per Household Spending	\$22,330,433
1-Bedroom Units	96
Average Annual 1-Bedroom Per Household Spending	\$9,100,546
25-Year Total 1-Bedroom Per Household Spending	\$227,513,662
2-Bedroom Units	48
Average Annual 2-Bedroom Per Household Spending	\$5,191,740
25-Year Total 2-Bedroom Per Household Spending	\$129,793,491
Average Annual Per Household Spending	\$15,185,503
Total New Resident Per Household Spending	\$379,637,586

A percentage of the new resident per household spending will be spent in the City. This spending will create additional sales tax revenue for the City. The following table shows the potential sales tax revenue impacts on the City if different percentages of new resident per household spending occur within the City.

TABLE 16 NEW RESIDENT PER HOUSEHOLD SPENDING – SALES TAX REVENUE

Percent Purchased	Average Annual City Sales Tax Revenue	25-Year Total
10%	\$9,111	\$227,783
25%	\$22,778	\$569,456
50%	\$45,557	\$1,138,913
75%	\$68,335	\$1,708,369

Total Economic Impact

The Development will produce **\$914.40 million** in economic benefits over the 25-year analysis period.

TABLE 17 ECONOMIC BENEFIT

Economic Benefit	Total – 25 Years
Construction Wages	\$21,529,375
Construction Supplies	\$25,000,000
Wages	\$356,417,850
Tourist Spending Per Travel Party	\$131,812,495
New Resident Per Household Spending	\$379,637,586
Total Economic Benefit	\$941,397,306

From: noreply@civicplus.com
To: Melinda Greenwood; Mindi Edstrom; Dan Jessop; [REDACTED]
Subject: Online Form Submittal: Contact the Planning Commission
Date: Thursday, August 10, 2023 3:59:47 PM

Contact the Planning Commission

Have a question or comment? Want to contact the Planning Commission about an upcoming item on a meeting? Please fill out the form below and an e-mail will be sent to all of the Planning Commission members. You can also contact the Community Development office at 801-546-1241.

Name	Brett Johnson
Email Address	[REDACTED]
Address	[REDACTED]
City	[REDACTED]
State	[REDACTED]
Zip Code	[REDACTED]
Phone Number	[REDACTED]
[REDACTED]	To Whom It May Concern, I would like to voice my opposition to the zoning change east of I-15 off 200 N that is being discussed this evening. Multiple apartment buildings and a hotel would not be good for the traffic situation. Thank You, Brett Johnson
Upload an Attachment	Field not completed.
Upload an Attachment	Field not completed.
Upload an Attachment	Field not completed.

Email not displaying correctly? [View it in your browser.](#)

From: noreply@civicplus.com
To: Melinda Greenwood; Mindi Edstrom; Dan Jessop; [REDACTED]
Subject: Online Form Submittal: Contact the Planning Commission
Date: Thursday, August 10, 2023 1:15:41 PM

Contact the Planning Commission

Have a question or comment? Want to contact the Planning Commission about an upcoming item on a meeting? Please fill out the form below and an e-mail will be sent to all of the Planning Commission members. You can also contact the Community Development office at 801-546-1241.

Name	Clarissa Parker
Email Address	[REDACTED]
Address	[REDACTED]
City	[REDACTED]
State	[REDACTED]
Zip Code	[REDACTED]
Phone Number	[REDACTED]
Your Message	Please reconsider the location of a proposed hotel and apartment complex to an area that can handle the traffic. 200 N 400 W is so congested and a complete pain to get around no matter the time of day. If we add that many people needing to use those streets it will make the area more of a nightmare than it already is. Please don't ignore the fact that the traffic study failed. As a resident of Kaysville I would like to be able to navigate to businesses and areas of town. If traffic is bad in an area I will go to Layton or Farmington instead just to avoid it. Please don't allow this to be changed to a mixed use zone.
Upload an Attachment	Field not completed.
Upload an Attachment	Field not completed.
Upload an Attachment	Field not completed.

Email not displaying correctly? [View it in your browser.](#)

From: noreply@civicplus.com
To: Melinda Greenwood; Mindi Edstrom; Dan Jessop; [REDACTED]
Subject: Online Form Submittal: Contact the Planning Commission
Date: Thursday, August 10, 2023 12:52:13 PM

Contact the Planning Commission

Have a question or comment? Want to contact the Planning Commission about an upcoming item on a meeting? Please fill out the form below and an e-mail will be sent to all of the Planning Commission members. You can also contact the Community Development office at 801-546-1241.

Name	Hilary Rue
Email Address	[REDACTED]
Address	[REDACTED]
City	[REDACTED]
State	[REDACTED]
Zip Code	[REDACTED]
Phone Number	[REDACTED]
Your Message	Please do not approve zone change to permit apartments & hotel/motel off N 400 W (behind the Taco Bell). Our city infrastructure cannot handle all the extra traffic and schools will also be impacted by apartment renters since they are short-term. I support commercial development but do not support apartments or hotel/motel. Kaysville is an amazing city, let's keep it that way.
Upload an Attachment	Field not completed.
Upload an Attachment	Field not completed.
Upload an Attachment	Field not completed.

Email not displaying correctly? [View it in your browser.](#)

From: noreply@civicplus.com
To: Melinda Greenwood; Mindi Edstrom; Dan Jessop; [REDACTED]
Subject: Online Form Submittal: Contact the Planning Commission
Date: Thursday, August 10, 2023 6:13:22 PM

Contact the Planning Commission

Have a question or comment? Want to contact the Planning Commission about an upcoming item on a meeting? Please fill out the form below and an e-mail will be sent to all of the Planning Commission members. You can also contact the Community Development office at 801-546-1241.

Name	Ronald Tippetts
Email Address	[REDACTED]
Address	[REDACTED]
City	[REDACTED]
State	[REDACTED]
Zip Code	[REDACTED]
Phone Number	[REDACTED]
Your Message	Please do not consider putting a hotel and more high density housing by the Schwab Tire. We And many others moved to Kaysville because we liked the small town atmosphere. We would have moved to Salt Lake if we had wanted more hotels and apartment buildings. The traffic on second N. is already very busy in need of repair.
Upload an Attachment	Field not completed.
Upload an Attachment	Field not completed.
Upload an Attachment	Field not completed.

Email not displaying correctly? [View it in your browser.](#)

From: noreply@civicplus.com
To: Melinda Greenwood; Mindi Edstrom; Dan Jessop; [REDACTED]
Subject: Online Form Submittal: Contact the Planning Commission
Date: Thursday, August 10, 2023 12:14:21 PM

Contact the Planning Commission

Have a question or comment? Want to contact the Planning Commission about an upcoming item on a meeting? Please fill out the form below and an e-mail will be sent to all of the Planning Commission members. You can also contact the Community Development office at 801-546-1241.

Name	Tavan Parker
Email Address	[REDACTED]
Address	[REDACTED]
City	[REDACTED]
State	[REDACTED]
Zip Code	[REDACTED]
Phone Number	[REDACTED]

Your Message

I want to voice my concern about the proposed zoning change and intended development plans at 521 West 350 North. I understand the need for more affordable housing. I appreciate the need for increased tax revenue (and thought the City Council explained that very well in a recent meeting). But this is not the way to do it. Anyone that lives in or near Kaysville knows that 200 N near the freeway is one of the worst traffic locations along the Wasatch Front. The traffic study very clearly confirmed just how terrible it is. Adding this many housing units and hotel beds in the absolute worst intersection in the city will have long-term consequences that are more negative than positive.

It doesn't matter what time of day you drive 200 N. I just did it at 11:30am on a Thursday. It's unsafe. Cars are taking multiple lanes to enter turn lanes because there isn't enough room. This backs up pretty far in both directions. The roads are not adequate to handle the I-15 interchange traffic. Now imagine intentionally adding hundreds of households and individuals needing to make that left-hand turn to access that property each and every day. Such a decision would be untenable in my opinion.

Again, this is not strictly being against a commercial development. I just hope that the city will be more forward thinking rather than reactionary. For instance, adding to the code that no more car washes because we have too many and they don't help with the tax deficit. But only doing that after it was too late and 2 more are being built.

Please consider more carefully just how massive and permanent this impact will be to the city and it's residents, because this might be the only opportunity you get to do that. We can increase our tax revenue and find affordable housing in locations that are more suitable than this. Don't let a need today become an even bigger headache tomorrow.

Upload an Attachment	<i>Field not completed.</i>
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Upload an Attachment	<i>Field not completed.</i>
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Upload an Attachment	<i>Field not completed.</i>
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Email not displaying correctly? [View it in your browser.](#)

From: noreply@civicplus.com
To: Melinda Greenwood; Mindi Edstrom; Dan Jessop; [REDACTED]
Subject: Online Form Submittal: Contact the Planning Commission
Date: Thursday, August 10, 2023 8:49:06 PM

Contact the Planning Commission

Have a question or comment? Want to contact the Planning Commission about an upcoming item on a meeting? Please fill out the form below and an e-mail will be sent to all of the Planning Commission members. You can also contact the Community Development office at 801-546-1241.

Name	Jessica Dixon
Email Address	[REDACTED]
Address	[REDACTED]
City	[REDACTED]
State	[REDACTED]
Zip Code	[REDACTED]
Phone Number	[REDACTED]
Your Message	We have some major concerns about the idea of putting a hotel and apartments behind Taco Bell. The intersection and on ramp there is not adequate for that much traffic. We'd love to see more commercial there instead.
Upload an Attachment	Field not completed.
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Upload an Attachment	Field not completed.

Email not displaying correctly? [View it in your browser.](#)

From: noreply@civicplus.com
To: Melinda Greenwood; Mindi Edstrom; Dan Jessop; [REDACTED]
Subject: Online Form Submittal: Contact the Planning Commission
Date: Thursday, August 10, 2023 3:47:13 PM

Contact the Planning Commission

Have a question or comment? Want to contact the Planning Commission about an upcoming item on a meeting? Please fill out the form below and an e-mail will be sent to all of the Planning Commission members. You can also contact the Community Development office at 801-546-1241.

Name	Mandy Sorenson
Email Address	[REDACTED]
Address	[REDACTED]
City	[REDACTED]
State	[REDACTED]
Zip Code	[REDACTED]
Phone Number	[REDACTED]
Your Message	I have seen something about adding more commercial places behind the Taco Bell in Kaysville across from Annie's. Things such as an apartment complex. While I don't think this is a bad idea, I do think some traffic would need to change. Such as the westbound cars coming down 200N and also the street in front of Arbys cannot not should be able to turn left. I avoid turning left on 200N at all costs because I've witnessed and heard about too many accidents. I was there yesterday when this situation happened. When the sun sets anyone driving on 200N westbound is blinded by the sun making any side street left turners in jeopardy of getting hit. If this happens I would propose closing off the entrance and exit of that street and making people go through the Main Street way. Those businesses would lose revenue but not doing so would honestly just be negligent.
Upload an Attachment	<i>Field not completed.</i>
Upload an Attachment	<i>Field not completed.</i>
Upload an Attachment	<i>Field not completed.</i>

From: noreply@civicplus.com
To: Melinda Greenwood; Mindi Edstrom; Dan Jessop
Subject: Online Form Submittal: Contact the Planning Commission
Date: Thursday, August 10, 2023 1:14:09 PM

Contact the Planning Commission

Have a question or comment? Want to contact the Planning Commission about an upcoming item on a meeting? Please fill out the form below and an e-mail will be sent to all of the Planning Commission members. You can also contact the Community Development office at 801-546-1241.

Name	Jennifer Webb
Email Address	
Address	
City	
State	
Zip Code	
Phone Number	
Your Message	I am writing to comment on the proposed development near Les Schwab/I-15/Taco Bell. I understand the need for more affordable housing and commercial infrastructure, but that area already has serious traffic and access issues. If development is approved, the developers should be made to bear more of the burden of upgrading the infrastructure than they currently do. I feel like the taxpayers end up subsidizing development as we have to pay for road and infrastructure improvements that are necessary as a result of new homes/businesses/ etc. What are the impact fees paid for this type of project? Do they cover these infrastructure issues? The recent flooding issues at the I-15/200 North interchange should be considered in this proposal. This lot is very close to that- is that a consideration?
Upload an Attachment	Field not completed.
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**DEVELOPMENT AGREEMENT
FOR 521 WEST 350 NORTH**

THIS AGREEMENT is made and entered into this ____ day of _____, 2023 by and between Kaysville City, a municipal corporation organized and existing under the laws of the State of Utah (hereinafter the "City") and H Group Ventures LLC (hereinafter the "Developer").

RECITALS

WHEREAS, Developer is desirous of developing a mixed-use project consisting of residential apartments and commercial facilities (the "Project") on certain real property located at 521 West 350 North, in the City of Kaysville, County of Davis, State of Utah and more particularly described as parcel number 11-879-0007 which is .619 acres in size and parcel number 11-879-0002 which is 5.64 acres for a combined total of 6.259 acres; and

WHEREAS, the Property Location Map is attached hereto as Exhibit A and the legal description is attached as Exhibit B; and

WHEREAS, the purpose of this Agreement is to define development standards, conditions and improvements for the Project as well as other terms and conditions pursuant to which the Project proposed by Developer shall be developed within the City; and

WHEREAS the City is willing to grant the Mixed Use Zoning District Overlay (MU) rezone of the property and authorize the development of the Project proposed by Developer in conformance with this Agreement, City Ordinances, and applicable Utah law;

NOW, THEREFORE, in consideration of the mutual covenants and conditions set forth herein, and other good and valuable consideration, the sufficiency of which is hereby acknowledged, the parties agree as follows:

AGREEMENT

1. GENERAL DESCRIPTION.

- A. Area Description. The property upon which the Project shall be developed (the "Property") is located as shown on the Property Location Map, a copy of which is attached as Exhibit A hereto and incorporated by reference herein. The property is further described in Exhibit B as parcel ID 11-879-0007 which is .619 acres in size and parcel number 11-879-0002 which is 5.64 addressed as 521 West 350 North.
- B. Project Description. The Project proposed is a horizontal mixed-use development as shown in Exhibit C (the "Site Plan") and shall include commercial, retail and residential buildings and shall be constructed in substantial conformance to the attached concept Site Plan.

- a. Commercial Space. The Project includes a total of approximately 75,971 square feet of commercial building space, which is ~~4236~~% of the total square footage of the Project. The commercial buildings shall include:
 - i. Hotel. One four-story hotel, which shall not exceed 50 feet in height and will have approximately:
 - 1. 57,971 square feet of space; and
 - 2. 114 rooms.
 - ii. Office. An office building with approximately 15,000 square feet of space.
 - iii. Retail. One single-story retail building with approximately 3,000 square feet of space and possible drive-thru.
- b. Residential Space. Two ~~three~~four-story apartment buildings totaling approximately ~~106,740~~135,200 square feet with each building consisting of:
 - 1. Approximately ~~53,370~~67,600 square feet of space per building, ~~for a total of approximately 106,740 square feet of space.~~
 - 2. Subject to final design, no more than ~~132~~160 residential units shall be constructed.
- c. Substantial Conformance. Substantial Conformance noted in section 1.B shall mean and include minimal fluctuations in overall project square footage, which is subject to final design.
 - i. A reduction in the number of residential units or residential building square footage may be approved by Community Development staff.
 - ii. An increase in the total commercial square footage shall be acceptable and approved by Community Development staff subject to the provision of adequate parking.
 - iii. Reductions in the total commercial square footage provided may not fall below ~~40~~30% without an amendment to this agreement, which shall be approved by the City Council.

2. DEVELOPMENT STANDARDS AND GUIDELINES

- A. Adoption of Development Standards. As allowed by Kaysville City Code 17-27-7, the City hereby adopts, as the development standards, regulations and guidelines for the Project (the "Development Standards"), the following standards in addition to all other applicable City Ordinances, standards and guidelines:
 - i. Compliance with Approved Plans. Developer shall develop the site in general conformance with the concept site plan outlined in section 1B and attached to this Agreement as Exhibit C.
 - ii. Architecture. Developer shall construct the Project in substantial compliance and conformance with the architectural style, ~~and~~ renderings and color and materials board shown in Exhibit D.

- iii. Building Materials. Developer shall construct all buildings in substantial compliance with materials shown in the concept renderings depicted in Exhibit D, which show rock and/or brick, wood, steel, and glass.
- iv. Building Height. Developer shall construct the buildings in compliance with the following:
- a. The four-story hotel shall not exceed fifty feet (50') in height except to allow for flexibility in overall average height for architectural details and variations.
 - ~~a-b.~~ The four-story apartment buildings shall not exceed 45 feet (45') in height except to allow for flexibility in overall average height for architectural details and variations.
 - ~~b-c.~~ All other buildings in the project shall not exceed thirty-five feet (35') as defined by Kaysville City Ordinances except to allow for flexibility in overall average height for architectural details and variations.-
- v. Amenities Plan. Developer agrees to providing the following amenities for residents living in the apartments in the development:
- a. Walking path around the property.
 - i. Developer will attempt to make walking path connections into properties which are adjacent to the Project.
 - b. Dog park.
 - c. Pickleball courts or a swimming pool.
 - d. Clubhouse.
 - e. Pavilion, picnic and barbeque area.
- vi. Parking.
- a. Required Parking. Calculations of required parking based on the adopted Kaysville City Code 17-27 Mixed Use Zoning and 17-32 Off-Street Parking and Loading. Required parking of 344 396 total stalls is demonstrated in the breakdown noted below.
 - i. Apartment Building – 204 256 parking stalls required
 - ii. Office – 53 parking spaces required
 - iii. Hotel – 76 spaces required
 - iv. Retail – 11 units required
 - b. Parking Reduction. Developer submitted a parking study included as Exhibit E along with a request to reduce parking by 12-32 24%. City agrees to reduce required parking by 12.32 24%, reducing the 344 396 required stalls by 43 94 and requiring a minimum of 301 302 parking stalls.
 - c. For parcels that will be owned outside of H Ventures Group, LLC, cross-parking agreements shall be created between property owners and recorded against the property.

vii. Lighting. Developer agrees to provide a detailed photometric plan to the City which shall include efficient lighting materials and shall also include shielded lighting, down lighting and parking lot lighting for security. Lighting shall not penetrate beyond the property in such a manner as to annoy or interfere with the use of adjacent properties.

viii. Signage. A monument sign is to be provided on 350 North. A pole sign up to 45 feet in height is permitted within 300 feet of I-15 as allowed by KCC 17-33 Sign Regulations.

vii-ix. Access.

- a. The Project has access to their site from 350 North. Developer will provide cross-access agreements to be recorded against the properties for any parcels that will not have street frontage.
- b. If a subdivision occurs, Developer shall provide cross-access agreements between all properties created by the subdivision.
- c. Developer will attempt to get access agreements for pedestrian and vehicle traffic through neighboring properties to the east.

viii-x. Density. Developer may construct up to ~~132~~ 160 residential dwelling units within Project. The overall residential unit count shall not exceed ~~132~~ 160 units. Any increase in the count of residential dwelling units shall be approved by the City Council through an amendment to this agreement.

ix-xi. Commercial Uses. Developer agrees to provide a four-story hotel consisting of 114 rooms, a 15,000 square foot office, and 3,000 of retail space. Removal of the hotel from the Project or any substantial changes to the hotel plans shall be approved by the City Council through an amendment to this agreement. Any changes to the commercial spacing for the office and retail space resulting in a substantial reduction of square footage shall only be approved by the City Council through an amendment to this agreement.

x-xii. Traffic Mitigation. Developer agrees to construct any road improvements or traffic mitigation measures on 350 North as necessitated by the Project. Any such improvements shall be built to adopted City standards.

xi-xiii. Landscaping.

- a. Developer agrees to use turf only in active recreation areas for the Project as defined in Kaysville City Code 17-5 Water Efficient Landscape Standards.
- b. Developer shall not install turf or grass in park strip or parking lot areas but will use water wise vegetation and materials.
- c. Developer agrees to use water wise vegetation and materials in other landscaping areas where reasonable.

d. Developer agrees to plant perennial trees throughout the parking lot as indicated in the landscape plan.

- ii.xiv. Subdivision for Mixed-Use Overlay. Development of the Project may require a subdivision of the Property into two or more individual parcels.
- a. Developer shall apply for a subdivision of the Property and shall follow all process and code requirements for the subdivision, including payment of fees, and submission of all outlined documents required for a subdivision.
 - b. This development agreement shall be subject to the entirety of the two parcels outlined in section 1A and will continue to run with the land regardless of subdivisions or how many lots are created in the future.
 - c. This agreement shall be recorded along with any subdivision plat and the plat shall have language placed on it to maintain the integrity of this agreement and Project.
- B. Phasing of Project.
Phasing of the Project and issuance of building permits shall be completed as outlined in either i or ii below.
- i. The hotel shall be permitted prior to the residential apartment buildings or simultaneously with the residential apartment buildings.
 - ii. The office building and the retail building shall be permitted prior to or simultaneously with the residential apartment buildings.
- C. Holmes Creek. Developer will coordinate with Davis County and follow all regulatory requirements for protection of Holmes Creek during construction and after occupancy.
- D. Findings of Compatibility. In adopting the Development Standards identified in Section 2, the City hereby expressly finds that the development of the Project, in conformance with the Development Standards and this Agreement, promotes the creation of a desirable mixed-use Project in an appropriate location and is in harmony with the 2022 General Plan. The City further finds that the development of the Project, in conformance with the Development Standards and this Agreement, will not violate the general purpose, goals and objectives of the City Ordinances and any plans adopted by the Planning Commission and City Council.

Subject to the Developer's performance and compliance with the terms of this Agreement and City Ordinances in effect on the date of this Agreement, Developer's rights to develop the Project in accordance with the approved site plan, construction drawings and building plans are vested.

3. MAINTENANCE AND CARE OF THE PROJECT AND PROPERTY

Developer agrees to keep property, grounds and buildings in good condition, maintaining, repairing, replacing, etc. all commonly owned ground, property, and amenities, including the trail, playground area, pool, dog park, landscaped areas, parking areas, driveways, sidewalks,

park strips, lighting, benches, etc. Developer agrees to remain in compliance with Kaysville City code.

4. APPLICABILITY AND AMENDMENTS

This agreement runs with the land and shall be considered a master plan for all properties outlined in Section 1A and is applicable and enforceable in perpetuity. Any substantial or significant changes to the Project outside of those defined in this agreement shall be approved by the City Council in an amendment to this agreement.

5. ON-SITE PROJECT IMPROVEMENTS

Developer shall construct and install all site improvements, including utilities, required for the Project, at Developer's sole cost and expense, in compliance with approvals, and all applicable ordinances, regulations, standards as approved by the City, the secondary water provider, Central Davis Sewer District, other providers and the State of Utah.

6. OFF-SITE PROJECT IMPROVEMENTS

In accordance with applicable standards and subject to the design approval of the City Engineer, Developer shall construct and install street improvements, sidewalks, utilities, and drainage improvements, on 521 West 350 North with the construction of the on-site improvements.

7. REPRESENTATIONS OF DEVELOPER

- A. Authority. Developer hereby represents that Developer has authority to proceed with the Project.
- B. Ability. Developer represents that it has the ability to timely proceed with the development and construction of the Project. Developer agrees to begin construction of the Project as soon as practicable and complete occupancy approval with at least on commercial building by December 31, 2026.

8. ASSIGNMENT

Developer may assign this Agreement to any other third party provided that the City consents to such assignment, which consent shall not be unreasonably withheld, upon a showing to the satisfaction of the City that such third party has the financial ability to perform Developer's obligations hereunder.

9. BINDING EFFECT

This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns.

10. ATTORNEY'S FEES

In the event that this Agreement or any provision hereof shall be enforced by an attorney retained by a party hereto, whether by suit or otherwise, the fees and costs of such attorney shall be paid by the party who breaches or defaults hereunder, including fees and costs

incurred upon appeal or in bankruptcy court.

11. SEVERABILITY

If any term or provision of this Agreement shall, to any extent, be determined by a court of competent jurisdiction to be void, voidable, or unenforceable, such void, voidable or unenforceable term or provision shall not affect the enforceability of any other term or provision of this Agreement.

12. CAPTIONS

The section and paragraph headings contained in this Agreement are for the purposes of reference only and shall not limit, expand or otherwise affect the construction of any provisions hereof.

13. GOVERNING LAW

This Agreement and all matters relating hereto, shall be governed by, construed and interpreted in accordance with the laws of the State of Utah.

14. ENTIRE AGREEMENT

This Agreement, together with the exhibits attached hereto, constitutes the entire understanding and agreement by and among the parties hereto, and supersedes all prior agreements, representations or understandings by and among them, whether written or oral, pertaining to the subject matter hereof.

15. AUTHORIZATION OF EXECUTION

A. City. The execution of this Agreement by the City has been authorized by the City Council of Kaysville City at a regularly scheduled meeting of that body, pursuant to the notice.

B. Developer. The execution of this Agreement has been duly authorized by the Developer.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day and year first above written.

H Group Ventures, LLC

By: _____

Title

Attest:

Kaysville City

By: _____

Annemarie Plaizier
City Recorder

Tamara Tran
Mayor

On the ____ day of _____, 2023, personally appeared before me TAMARA TRAN, and ANNEMARIE PLAIZIER, who being by me duly sworn did say, each for himself and herself that he, the said TAMARA TRAN, is the Mayor of Kaysville City, Davis County, State of Utah and that she, the said ANNEMARIE PLAIZIER, is the City Recorder of Kaysville City, and that the within and foregoing instrument was signed on behalf of the said Kaysville City by authority of the City Council of Kaysville City and said TAMARA TRAN and ANNEMARIE PLAIZIER, each duly acknowledged to me that the said Kaysville City executed the same and that the seal affixed is the seal of the said Kaysville City.

NOTARY PUBLIC

(SEAL)

STATE OF UTAH)
: ss.
COUNTY OF DAVIS)

On the ____ day of _____, 2023, personally appeared before me, _____, the signer of the foregoing Development Agreement for Phil Holland, who duly acknowledged to me that he executed the same for and on behalf of H Group Ventures LLC.

NOTARY PUBLIC

(SEAL)

STATE OF UTAH

)

: ss.

COUNTY OF DAVIS

)

- Exhibit A – Property Location Map
- Exhibit B – Legal Description of the Project property
- Exhibit C – Site Plans
- Exhibit D – Architectural Renderings
- Exhibit E – Traffic Impact Study
- Exhibit F – Parking study
- Exhibit G – Application materials – Statement of Compliance

DRAFT

THE ECONOMIC IMPACT OF HOTEL DEVELOPMENT BY: ALAN SUZUKI
Presented by: Alan Suzuki, Senior Consultant – Pinnacle Advisory Group

Hotels are considered an important economic component to any community. In some cases, cities and municipalities will offer incentives in order to stimulate hotel development. These incentives can be in the form of tax breaks, favorable land leases, or assistance with financing. Prior to establishing incentives for hotel development, a city or municipality should conduct an economic impact study to estimate the economic benefits that results from the development. This assessment should evaluate the economic benefits of the initial investment both in the short term and over the long-term. The economic impact to local and regional economies from hotel development is typically separated into four categories: direct, fiscal, indirect, and induced.

Direct Impact

Direct impact includes all projected revenues that will be generated from consumers at the new hotel. This will include all rooms revenues, food and beverage revenues from restaurants and banqueting, as well as other potential revenue sources such as spa or parking. Direct impact also includes total payroll paid out to employees hired at the hotel as well as all payroll paid out to temporary construction workers who construct the hotel.

Fiscal Impact

Fiscal impact refers to all federal, state, and local taxes that will be collected from the development and operations of the new hotel. Taxes include all sales taxes collected in association with the hotel generated revenues, as well as all payroll related taxes collected from full-time hotel employees and temporary construction workers. Local governments will also collect new property taxes from the operation of the hotel. Many local governments will also collect revenues through lodging taxes.

Indirect Impact

In addition to local governments and hotel owners/employees, contractors and suppliers to a newly developed hotel will also benefit. Indirect impact includes all jobs and income generated by businesses that supply goods and services to the hotel. Examples of businesses that will indirectly benefit from the development of a hotel include suppliers of rooms related goods (housekeeping supplies, room amenities, etc), telecommunication vendors (internet, cable, etc.), utility companies, food and beverage suppliers, and other hotel related vendors.

Induced Impact

Induced impact refers to economic effects generated when employees (full-time and temporary) and suppliers re-spend their wages on local consumer purchases. For example, an employee may purchase gas for their car on their way home from work.

Calculation of Impact

Pinnacle Advisory Group has conducted several economic impact studies as a result of hotel development. In most cases, direct and fiscal impacts can be calculated with relative confidence and accuracy. A hotel pro-forma will calculate the revenues in direct impact, while full-time and temporary payroll projections can be calculated from the preparation of staffing schedules combined with knowledge of local wages.

Indirect and induced impact, on the other hand involves a certain degree of subjectivity. While expenditures of goods and services can be estimated, it is difficult to accurately calculate how much of those expenditures will be generated from contractors and suppliers from the local area. Induced impact, which results from the re-spending of wages on local consumer products, is also difficult to estimate. Several complex models have been created by various economists that recommend multipliers that can be applied to total direct impact dollars. In general, depending on several factors including the size and economic diversity of the regional economy, multipliers typically range between 1.1 to 2 of total direct impacts.

A hotel's impact to the local community is often more than just job creation and additional tax revenue. When all economic considerations are accounted for, the calculation of total direct, fiscal, indirect, and induced impact can give the public a more universal understanding of a hotel development's impact.

ORDINANCE NO. 23-X-X

AN ORDINANCE REZONING 521 WEST 350 NORTH, A CERTAIN PORTION OF KAYSVILLE CITY, TO THE MIXED USE ZONING DISTRICT OVERLAY, HEREINAFTER FULLY DESCRIBED; PROVIDING FOR REPEALER; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, the City Council of Kaysville City, State of Utah, has determined in an open public meeting to rezone the subject property at 521 West 350 North to a Mixed Use Zoning District Overlay; and

WHEREAS, said meeting was duly and regularly held and the interested parties were given an opportunity to be heard; and

WHEREAS, on August 10, 2023, with a vote of 6-0, the Kaysville City Planning Commission held a public hearing and made a recommendation of approval of the zone change at 521 West 350 North from GC General Commercial District to the Mixed Use Zoning District Overlay; and

WHEREAS, the City Council, after due consideration of said rezone application, has concluded that it is in the best interest of the City and the inhabitants thereof that said Mixed Use Zoning District Overlay be implemented at the property addressed 521 West 350 North and known as Tax ID Numbers 11-879-0002 and 11-879-0007;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF KAYSVILLE CITY, UTAH:

SECTION I: Repealer. If any provisions of the City's Code previously adopted are inconsistent herewith they are hereby repealed.

SECTION II: Rezone. The real properties at 521 West 350 North, and known by Parcel Identification Numbers 11-879-0002 (5.64 acres) and 11-879-0007 (.619 acres), as shown on the attached map which is made a part hereof, containing a combined total of approximately 6.259 acres (272,642 ft²) of land, shall be rezoned and the Zoning Map amended by removing it from the Kaysville City GC General Commercial District as currently delineated and rezoning it to the Mixed Use Zoning District Overlay.

SECTION III: Development Agreement. The Development Agreement (attached) and project approved in conjunction with this rezone ordinance shall become zoning legislation and as specified, will replace, augment or supersede existing regulations and requirements for the project.

ORDINANCE NO. 23-X-X

SECTION IV: Severability. If any section, subsection, sentence, clause or phrase of this ordinance is declared invalid or unconstitutional by a court of competent jurisdiction, said portion shall be severed and such declaration shall not affect the validity of the remainder of this ordinance.

SECTION VI: This Ordinance shall take effect upon execution of the ordinance.

PASSED AND ADOPTED by the City Council of Kaysville City, Utah, this 7th day of September, 2023.

Tamara Tran
Mayor

ATTEST:

Annemarie Plaizier
City Recorder

ORDINANCE NO. 23-X-X

