



N E V A D A

AGENDA

Regular Meeting

Planning Commission

Wednesday, December 11, 2024 • 5:00 PM

Members

Jenni McCullar - Chairwoman
Angela Lewis - Vice Chair
Barry Williams Sr. - Commissioner
Cody Wagner - Commissioner
Jacob VanderHeiden - Commissioner
Robert Flores - Commissioner
Tessa Garvin - Commissioner
Julianne Holt - Alternate

Fernley City Council Chambers, 595 Silver Lace Boulevard, Fernley, NV 89408

Zoom information:

Please click the following link to join the webinar: <https://us02web.zoom.us/j/82966343247>, or one tap/mobile: 12532158782, Dial: 669 900 9128, Webinar ID: 829 6634 3247

Public Notice: This agenda has been physically posted in compliance with 241.020 at Fernley City Hall, 595 Silver Lace Blvd. In addition, this agenda has been electronically posted in compliance with NRS 241.020(3) at www.cityoffernley.org and NRS 232.2175 at <https://notice.nv.gov/>. To obtain further documentation regarding posting, please contact the City Clerk's Office at (775) 784-9830 or cityclerk@cityoffernley.org

Public Comment: Those wishing to address the Planning Commission may submit public comment through the [online public comment form](#), or by sending an email to cityclerk@cityoffernley.org. Comments received prior to 4:00 pm the day of the meeting will be provided to the Planning Commission and added to the record but will not be read during the live meeting. Public comments received after 4 pm the day of the meeting will be included in the record but may not reach commission members before action is taken. Public comment, whether on action items or public comment, is limited to three (3) minutes per person. Unused time may not be reserved by the speaker, nor allocated to another speaker. The public may comment on any matter that is not specifically included on an agenda as an action item or comment on a specific agenda item. Items not included on the agenda cannot be acted upon other than to place them on a future agenda. Additionally, if you wish you can comment in person at the meeting or use the Raise your Hand feature in Zoom (*9 if you are participating via phone).

Accommodations: The Planning Commission and staff will make reasonable efforts to assist and accommodate individuals with disabilities desiring to attend the meeting. Please contact the City Clerk's Office at (775) 784-9830 in advance so that arrangements can be made.

Supporting Material: Staff reports and supporting material for the meeting are available at the City Clerk's Office, and on the City's website at www.cityoffernley.org. Pursuant to NRS 241.020(6), supporting material is made available to the general public at the same time it is provided to the City Council.

Order of Business: The presiding officer shall determine the order of the agenda. The Fernley Planning Commission may combine two or more agenda items for consideration; remove an item from the agenda; or delay discussion relating to an item on the agenda at any time. All items are action items unless otherwise noted. Items scheduled to be heard at a specific time will be heard no earlier than the stated time but may be heard later.

1. INTRODUCTORY ITEMS

- 1.1. Pledge of Allegiance**
- 1.2. Roll Call**
- 1.3. Public Forum**
- 1.4. (For Possible Action) Approval of Agenda**
- 1.5. (Possible Action) Approval of Minutes**

2. PUBLIC HEARINGS

A. DISCUSSION WITH PLANNING COMMISSION & STAFF B. PUBLIC INPUT C. ADDITIONAL DISCUSSION WITH PLANNING COMMISSION & STAFF D. COUNCIL ACTION OR DIRECTION TO STAFF

- 2.1. (For possible action) Discussion and possible action regarding a Zoning Map Amendment (ZMA 24002) and Tentative Subdivision Map (TSM 24002), a request by Phelps Engineering, Inc on behalf of Creekwood Development Group for 1) changing the zoning designation from SF20 (Single-Family Residential; 20,000 square foot minimum) to SF6 (Single-Family Residential; 6,000 square foot minimum; and 2) the division of approximately 39.67 acres into 153 single-family lots. The project is located on the south side of Farm District Road between Browne Lane and Rainbow Lane (APN 021-303-20).**
- 2.2. (For possible action) Discussion and possible action regarding a Zoning Map Amendment (ZMA 24001), Major Deviation (MJD 24001), and Tentative Subdivision Map (TSM 24001), a request by KLS Planning & Design on behalf of The 1903 Trust for 1) changing the zoning designation from RR1/2 to SF6; 2) the reduction of side setback requirements from a combined total of 20 feet to a combined total of 10 feet; and 3) the division of approximately 47.52 acres into 158 single-family lots. The project is located at the northeast corner of Farm District Road and Red Rock Road (APN 021-343-20).**
- 2.3. (For possible action) Discussion and possible action regarding a Master Plan Amendment (MPA 24004) and Zoning Map Amendment (ZMA 24005), a request by Wood Rodgers, Inc on behalf of Douglass Development LLC for 1) changing the Master Plan land use designation from RR (Rural Residential) to C (Commercial); and 2) changing the zoning designation from RR1 (Rural Residential; 1-acre minimum) to C2 (General Commercial) on a +/-0.85 acre lot located at 840 Woodchuck Drive (APN 021-343-20).**
- 2.4. (For possible action) Discussion and possible action regarding Resolution #25-001 associated with a Master Plan Amendment application (MPA24005) submitted by the City of Fernley to adopt the North Fernley Area Plan document and associated design guidelines for approximately 5,400 acres generally located north of Interstate 80 between Exit 46 and Exit 50.**

3. CHAIR AND COMMISSION ITEMS

(SUMMARY OR ACTIVITY REPORTS ON PLANNING ISSUES, ACTIVITIES OR ORGANIZATIONS IN WHICH INDIVIDUAL MEMBERS MAY BE INVOLVED. THIS ITEM IS TO PROVIDE GENERAL INFORMATION TO THE COMMISSION AND PUBLIC. NO DISCUSSION SHALL TAKE PLACE AND NO ACTION WILL BE TAKEN.)

4. PLANNING DIRECTOR ITEMS

(ACTIVITY SUMMARY OR UPDATES ON PROJECTS THAT HAVE BEEN PREVIOUSLY REVIEWED BY THE PLANNING COMMISSION. THIS ITEM IS TO PROVIDE GENERAL INFORMATION TO THE COMMISSION AND PUBLIC. NO DISCUSSION SHALL TAKE PLACE AND NO ACTION WILL BE TAKEN.)

5. ADDRESS REQUEST(S) FOR FUTURE AGENDA ITEMS

6. PUBLIC FORUM

7. ADJOURNMENT

Next Meeting: January 8th @ 5pm

**MINUTES OF THE
FERNLEY PLANNING COMMISSION MEETING
NOVEMBER 13, 2024**

Chairwoman Jenni McCullar called the meeting to order at 5:00 pm.

1. INTRODUCTORY ITEMS

1.1. Pledge of Allegiance

1.2. Roll Call

Present: Chairwoman Jenni McCullar, Vice-Chair Angela Lewis (Zoom), Commissioner Cody Wagner, Commissioner Jacob VanderHeiden, Commissioner Robert Flores, Commissioner Tessa Garvin, Commissioner Julianne Holt, City Attorney Aaron Mouritsen, Deputy City Clerk Brenda Gosser, Administrative Specialist I Sandy Harris, Planning Director Michele Rambo, Assistant Planner Lisa Warner, Public Works Director Barry Williams, Engineering Project Manager Alex Lopez Martinez.
Absent: Commissioner Williams.

1.3. Public Forum

None

1.4. (For Possible Action) Approval of Agenda

Motion: I MOVE TO APPROVE TONIGHT'S AGENDA AS PRESENTED. **Action:** Approved. **Moved by:** Commissioner Cody Wagner, **Seconded by:** Commissioner Jake VanderHeiden. **Vote:** Passed, **Summary:** Yes 7. **Yes:** Chairwoman McCullar, Vice-Chair Lewis, Commissioner Wagner, Commissioner VanderHeiden, Commissioner Flores, Commissioner Garvin, Commissioner Holt.

1.5. (Possible Action) Approval of Minutes

Motion: I MOVE TO APPROVE THE MINUTES FROM THE LAST PLANNING COMMISSION SESSION. **Action:** Approved. **Moved by:** Commissioner VanderHeiden, **Seconded by:** Commissioner Wagner. **Vote:** Passed, **Summary:** Yes. **Yes:** Chairwoman McCullar, Vice-Chair Lewis, Commissioner Wagner, Commissioner VanderHeiden, Commissioner Flores, Commissioner Garvin, Commissioner Holt.

2. STAFF REPORTS

2.1. (For Possible Action) Discussion and possible action regarding a waiver application (WVR24002) request by Battle Born Equity Group, LLC for the waiver of requirements related to curb/gutter/sidewalk, parking, landscaping, and drainage on a 0.5-acre parcel located at 790 E Main Street.

Michele Rambo, Planning Director, took a moment to address some comments and accusations made recently about the planning department and her individually stemming from this and other recent projects. She reminded everybody that Planning's job is to enforce the Master Plan and development code. None of their decisions are based on opinion or preference. Recommendations either way do not indicate that we are for or against a certain group or individual. The process is set up so that very few final decisions rest on our shoulders, but instead rely on review by the Planning Commission and/or City Council. These bodies can, and sometimes do, disagree with us and vote against the recommendation provided in staff reports. The city has a system of checks and balances which does not allow one person or department to make unilateral decisions. If people have questions about why a recommendation was made one way or the other, we encourage them to contact us so they can get a full explanation instead of relying on social media posts that are usually incorrect or skewed to get a certain reaction.

The site and the use have both been abandoned for more than 12 months. There are several ways in which we determine what constitutes abandonment. One of them is a lack of continuation of a business

license. The last business license that was issued for that property expired in September 2015. In that case, the code requires that the use should not be reestablished until the site is brought up to current code requirements. These include landscaping, street improvements, drainage utilities, ADA access, and sometimes building improvements. There's a list of things that we look at for those older buildings that are getting new businesses in them. Our newly adopted waiver process that we're working from was developed specifically to make it easier for small businesses to develop or get a footing into the downtown area. A waiver can be used only for the development standards in the areas of the city identified specifically in the downtown area bordered by the railroad tracks to the north, Cedar Street to the south, Dallas and Miller to the west, and Hardy Lane to the east, and they can ask for a waiver for the curb, gutter, and/or sidewalk, parking for the number of spaces, not for the not necessarily for other incidentals that go in the parking, and landscaping. The boundary that we chose was because the lots inside the area are generally smaller with buildings taking up most of the lot. Requiring improvements, such as additional parking or landscaping would require in some cases that the buildings be torn down, which we're not going to ask anybody to do. Outside the boundary, parcels get larger, and there is more room to add the things that we're looking at, like parking and landscaping. So that's why that boundary was chosen. The applicant is asking to waive all development standards and requirements for street improvements, including curb, gutter, sidewalk, parking and landscaping, which would include the waiver of a trash enclosure. They have the number of parking spaces they need, so it's not an issue of number. They do need to have an ADA parking space per Federal guidelines. Those are what they potentially, if they were within that boundary area, they could ask for. The applicants have asked to waive all the requirements for grading and drainage, which could potentially impact ADA accessibility. If the ADA route from the parking lot to the building does not meet the ADA requirements for slope, there may be an issue. With drainage there's always the possibility of flooding. A finding is a legal determination or conclusion based on the facts and evidence presented and prepared in support of a decision. Section 32.03.090(d)(6) of the Development Code requires that to approve a waiver all the five findings must be met. If any finding cannot be met, the waiver cannot be approved. The findings that have been met are (1) the waiver does not impair the purpose of the zoning district and (2) the waiver does not impact any fire, building or health codes. The findings that are not met (1) There is evidence of circumstances beyond the reasonable control of the property owner such as: unusual size, shape, or topography; circumstances that make complying with the code impractical, or the site is somehow legally nonconforming; (2) the waiver is consistent with the Master Plan; and (3) The waiver is necessary to preserve a substantial property right enjoyed by surrounding properties. The granting of the proposed waiver will not provide any substantial property rights that other surrounding properties have. In fact, granting the waiver will give the applicant an unfair advantage over their neighbors who have already agreed to put in the required street improvements for their projects. In this instance, three of the five findings cannot be met. Under normal circumstances, that fact alone would be enough of a basis to recommend denial. Therefore, Staff must recommend denial of the application. However, the Planning Commission and/or City Council can go against this recommendation if they can reasonably argue that all of the findings can be met as required in the Development Code. The applicant who does not agree with the Planning Commission's decision has the right to appeal it to the City Council. The appeal must be filed with the Planning Department within 11 days of approval, as stated in the code. The recommended motion is to deny the waiver based on the findings. This is not one of those that is cut and dry. There are several different options to consider.

Commissioner Holt asked, in the exemption zone are they automatically granted in that boundary line the exemption, or are they just granted the right to request a waiver.

Director Rambo stated that they would have the ability to apply for the waiver.

Kimberly Barney and Michelle Barney presented. They stated for the record that they have been very adamant about not being on social media themselves. There's a lot that has been going around, but they personally have not done any of that. We support Fernley's Master Plan and Main Street initiatives. It is not our intent to not agree with progress to date. It clearly has not been an abandoned property since we purchased the property in 2016. We went to our first plan review in 2018 and did the scope of work. We did tons of renovations from 2016 to 2020, then Covid hit. We've done hundreds of thousands of dollars of work on the inside, and we did get an extension of that current permit to September 2023. Then, in

July 2024, our intent was to lease the building to All Points Grill. The reason we kicked off this waiver process was not to avoid putting in sidewalks or avoid putting in landscaping. We believe customers here at this place would likely want trees and landscaping. We want a sidewalk on that. We thought it was a faster way to get All Points into the building as we worked with the city to get sidewalks from The Nest to The Nugget.

Commissioner Wagner disclosed that he has known the Barneys for much of his life. He does not have a financial interest in this project whatsoever, he'll still be voting and commenting on it. The options here are to run a business or just sit there and look at the pizza shack building be abandoned for another 5 years. We need to figure out how to work with them.

Commissioner Garvin stated that she is not opposed to agreeing to the waivers but does believe that we can build in some conditions as long as we can have a time frame.

Public Comment:

Tom Howell stated that these gals are trying to do business in Fernley. We need folks like this. We need to improve our town.

Joe Mendoza stated that he also ran into issues being a small business trying to have an establishment on Main Street. Right now, with the waivers not being granted, you're affecting 2 different small businesses in this community and would like the Planning Commission to take that into consideration.

Aaron Wilson, owner of All Points Grill stated that the people that are building new structures and doing land development are held to the standard of new codes, because that's the standard of new buildings. Why is this building being held to the same standard as a brand new build.

Motion: I MOVE TO APPROVE THE WAIVER FOR THE CURB, GUTTER AND SIDEWALK PORTION AS PRESENTED. I ALSO MOVE TO APPROVE THE WAIVER FOR THE STREET IMPROVEMENTS AND ASK THAT AT LEAST ADA ACCESSIBLE PARKING BE TAKEN CARE OF BY THE GROUP AND THAT THE LANDSCAPING PRESENTED IN THEIR PROPOSAL OVER THE NEXT 12 MONTHS IS EXECUTED AS PART OF THIS WAIVER. I MOVE THOSE REASONS BECAUSE FINDING WVR01 EVIDENCE OF CIRCUMSTANCES BEYOND THE REASONABLE CONTROL OF THE PROPERTY OWNER. THE PROPERTY OWNER DOES NOT OWN PROPERTIES SURROUNDING THEM, AND THINGS SUCH AS THE SIDEWALK GOING NOWHERE, DRAINAGE ISSUES COULD BE ISSUES OF NEIGHBORING PROPERTIES AS WELL, AND THAT A COLLABORATIVE PROCESS WITH THAT WHOLE STRETCH IS A BETTER WAY TO APPROACH THIS PROJECT THAN JUST ONE PROPERTY OWNER DOING THOSE IMPROVEMENTS. FINDINGS WV02 AND WV03 HAVE ALREADY BEEN MET. FINDING WVR04 THE WAIVER IS CONSISTENT WITH THE MASTER PLAN. I BELIEVE THAT THE WAIVER WOULD SUPPORT THE NURTURING OF THE UNIQUE CHARACTER OF FERNLEY, RETAIN AND ENHANCE THE AESTHETIC VALUE OF FERNLEY'S NATURAL AND BUILT ENVIRONMENT BY MAKING A USABLE BUILDING RATHER THAN ONE SITTING VACANT, PROMOTE INFILL DEVELOPMENT AND CREATE A GROWTH PLAN THAT ASSURES FLEXIBLE, FEASIBLE, EFFICIENT PROJECTS RATHER THAN MAKING BUSINESS OWNERS JUMP THROUGH TOO MANY HOOPS. FINALLY, FINDING WVR05, THE WAIVER IS NECESSARY TO PRESERVE A SUBSTANTIAL PROPERTY RIGHT ENJOYED BY SURROUNDING PROPERTIES, ALTHOUGH THEY ARE NOT DIRECTLY ADJACENT PROPERTIES. THE PROPERTIES ACROSS THE STREET GOT A SUBSTANTIAL PROPERTY RIGHT GIVEN TO THEM BY NDOT WHEN NDOT INSTALLED CURB GUTTERS AND SIDEWALKS AT NO COST, AND WE ARE ASKING FOR THIS PROPERTY OWNER TO GO ABOVE AND BEYOND WHAT POTENTIAL COMPETITIVE PROPERTY OWNERS ACROSS THE STREET HAD TO DO TO OPEN UP A BUSINESS. **Action:** Approved. **Moved by:** Commissioner Cody Wagner, **Seconded by:** Commissioner Tessa Garvin. **Vote:** Passed, **Summary:** Yes 6, No 1. **Yes:** Chairwoman McCullar, Vice-Chair Lewis, Commissioner Wagner, Commissioner VanderHeiden, Commissioner Garvin, Planning Commissioner Holt, **No:** Commissioner Flores.

3. PUBLIC HEARINGS

3.1. (For possible action) Discussion and possible action regarding a Zoning Map Amendment application (ZMA 24004), a request by Jose Castillo Jr on behalf of Golden Years Castle Home of Fernley, LLC to change the zoning designation from SF20 to PF on two parcels totaling approximately 1.741 acres located at the southwest corner of Farm District Road and Westerlund Lane (APNs 021-111-47 and 021-111-48).

Michele Rambo, Planning Director, turned the presentation over to our new planning consultant, Joshua Valdez.

Joshua Valdez presented via Zoom. The Nevada Aging and Disability Services Division (ADSD) provided the applicant, Golden Years Castle Group Home Care (GYCGHC), with a grant to expand their business operation. However, existing zoning limits the density to 2.2 units per acre. As such, an alternative zoning designation would be required to accommodate any expansions. The existing land use designated as "life care or continuing care services" is an allowable use in the PF zone, whereas it is not allowed in the SF20 zone, furthering the need for a zone amendment to allow for the expansion. GYCGHC would like to rezone both parcels from SF20 to public facilities PF. Both parcels total 1.741 acres. Last year, the City Council approved an amendment to the city's master plan, which changed the zoning designation of the area.

Motion: I MOVE TO RECOMMEND CITY COUNCIL APPROVE THE ZONING MAP AMENDMENT SUBJECT TO THE CONDITIONS SUGGESTED IN THE STAFF PRESENTATION **Action:** Approved. **Moved by:** Commissioner Tessa Garvin, **Seconded by:** Commissioner Robert Flores. **Vote:** Passed, **Summary:** Yes 7. **Yes:** Chairwoman McCullar, Vice-Chair Lewis, Commissioner Wagner, Commissioner VanderHeiden, Commissioner Flores, Commissioner Garvin, Planning Commissioner Holt.

3.2. (For possible action) Discussion and possible action regarding a Zoning Map Amendment (ZMA 24001), Major Deviation (MJD 24001), and Tentative Subdivision Map (TSM 24001), a request by KLS Planning & Design on behalf of The 1903 Trust for 1) changing the zoning designation from RR1/2 to SF6; 2) the reduction of side setback requirements from a combined total of 20 feet to a combined total of 10 feet; and 3) the division of approximately 47.52 acres into 158 single-family lots. The project is located at the northeast corner of Farm District Road and Red Rock Road (APN 021-343-20).

Michele Rambo, Planning Director, stated that there were some last-minute issues with some of the conditions that planning had recommended, and the applicant has asked that this be continued until the December 11th meeting.

Public comment:

Darin Farr, city resident who lives on Red Rock Road in Fernley, stated that he was here to speak today from 2 perspectives on the proposed zoning map amendment. First, as a resident in the area who will be severely impacted by this proposed subdivision. Many utilize this as a bypass between Farm District Road and Highway 50. Traffic has continued to steadily increase on our residential roads. The posted speed limit is 25 miles per hour, but many of these people travel well above the posted speed limit. The residents have asked the city for speed deterrent measures to be put in place, only to be denied, because North Lyon County Fire Department opposes such measures as they don't want their emergency vehicles impeded. He also expressed concern regarding children walking to and from the bus stop. I'm not opposed to progress and growth, but that progress must use common sense. My second perspective is that I am a Lyon County School Board trustee. All this new proposed housing that's going into our area is going to add more children to our already at capacity schools. With this particular proposed subdivision, even at a conservative estimate, will add 50 to 60 more children to East Valley Elementary School.

Cameron Farr, city resident, stated that the multiple curves and blind spots on our Red Rock Road make it nearly impossible to be safe. We should add more obstacle stops to stop speeding shortcuts through

our road. I'm unable to ride my bike down that road because of the frequent use of my road as a shortcut and the speed of traffic.

Les Puliti, city resident, stated that he lives on Red Rock Road. He's seen the speeding and had almost been hit by cars when walking or riding his bicycle. It backs up to the farm behind me and putting 3 houses behind my house isn't right. The SF20 or SF10, you want to put in between 5 feet, they need to be more than that. The houses that are coming there should be equal to our lot size. They need to cut down on some of those houses. I don't think they really need that many in there.

Greg Wargo, city resident, stated that we keep bringing in more and more subdivisions and we're getting denser and more populated. We don't have the services for it. Our sheriffs are spread thin, our emergency services are spread thin. We can argue about water all day. Most of us bought out there because we like rural settings. If these things are going to come in, then they should at least match up the property lines and not be putting like 3 to one.

Farrah Alexander, city resident, stated make it equal to what is there. it needs to be the same lot size as us. There's a whole new subdivision that's right down the road that's currently being built that's going to impact us. Just make it so it's equal to what we have currently there.

Mary Bauer, city resident, stated there's going to be a wall between her and the building area. There's going to be a gated emergency entrance right there by the stop sign. According to what she's been told, there's going to be a sidewalk there where they can go around the emergency gate. That's going to be a major walkthrough for people which goes right along my fence and directly straight to the stop sign.

Motion: I MOVE THAT WE CONTINUE THIS ITEM TO THE PLANNING COMMISSION MEETING ON DECEMBER 11, 2024, AND HOPE THE DEVELOPER DOES SOME WORK BETWEEN NOW AND THEN. **Action:** Approved. **Moved by:** Commissioner Cody Wagner, **Seconded by:** Commissioner Jake VanderHeiden. **Vote:** Passed, **Summary:** Yes 7. **Yes:** Chairwoman McCullar, Vice-Chair Lewis, Commissioner Wagner, Commissioner VanderHeiden, Commissioner Flores, Commissioner Garvin, Planning Commissioner Holt.

3.3. (For Possible Action) Consideration and possible action on TSM20003 EOT Extension of Time, an extension of time request by Hero Land Holdings, LLC for an extension of not more than two (2) years to record a final subdivision map for Wilson Landing, a 37-parcel single-family subdivision generally located north of Scott Drive, south of Crimson Road, west of Ricci Lane, and east of Opal Way (APN: 021-171-24 and 021-171-50) on a site ± 10.92-acres in size.

Lisa Warner, Assistant Planner, stated the purpose of this extension of time is to allow the developer an additional two years to record their final subdivision map. Their original tentative subdivision map was approved by City Council on November 18th, 2020, and this TSM expires on November 18, 2024. NRS 278.3601(c) allows the Planning Commission to grant an extension of not more than two years for the presentation of any final map after the two-year period for presenting a successful final map has expired. If the extension of time request is granted, the applicant must record the final map for Wilson Landing subdivision by November 12, 2026.

Chairwoman Jenni McCullar inquired as to why they are requesting an extension.

Lisa Warner stated there are two primary reasons for the request. There was a change in project leadership and market conditions.

Motion: CONSIDERING THE INFORMATION PROVIDED IN THE APPLICANT'S EXTENSION OF TIME LETTER, I MOVE TO RECOMMEND THE APPROVAL OF THE TENTATIVE SUBDIVISION MAP EXTENSION REQUEST FOR WILSON LANDING ASSOCIATED WITH TSM20003. **Action:** Approved. **Moved by:** Commissioner Cody Wagner, **Seconded by:** Commissioner Julianne Holt. **Vote:** Passed, **Summary:** Yes 7 **Yes:** Chairwoman McCullar, Vice-Chair Lewis, Commissioner Wagner, Commissioner VanderHeiden, Commissioner Flores, Commissioner Garvin, Commissioner Holt.

4. CHAIR AND COMMISSION ITEMS

Commissioner Tessa Garvin just wanted to say how amazing our city clerk and city clerk staff are. She got to participate as a poll worker for the election this time around. She was only working a couple of days, but Kim, Brenda, Sandy, you guys rocked it. She got the privilege of being here on election day just in the afternoon. Even though the line at one point reached the library, everybody that came in when I asked stated they got through pretty quickly. So, my hat's off to you, ladies.

Chairwoman Jenni McCullar stated she also worked that day. She thought that the people who were participating were very respectful. She helped a man vote. He was 80 years old and had never voted before. It was really an amazing environment, and as Commissioner Tessa Garvin said, the city staff did an amazing job. We got a lot of compliments from the people who were voting on how quick it was. They saw the line, but it moved fast, so it was a real pleasure to be involved on that election day.

5. PLANNING DIRECTOR ITEMS

Michele Rambo, Planning Director, reported that we are still recruiting a Senior Planner. We've had quite a few applicants. In the meantime, we have an outside planning group that is helping us out with some of the stuff that's been lagging. Hopefully, we can get caught up in the next few months and get everything out the door. The final draft of the North Area Plan should be ready for staff to review on Monday. If all goes well, we may get the North Area Plan to the Planning Commission to approve at the next meeting. She will give the commission some lead time, so they can read the whole thing.

6. ADDRESS REQUEST(S) FOR FUTURE AGENDA ITEMS

None at this time

7. PUBLIC FORUM

Becki Howlett, city resident, stated that the microphones are working pretty well except for Cody, who is really loud and Tessa is a little quiet.

The next meeting will be December 11, 2024, at 5:00 pm.

8. ADJOURNMENT

There being no further business to come before it, the Fernley Planning Commission meeting adjourned at 6:34 pm.

Approved by the Fernley Planning Commission on December 11, 2024, by a vote of:

AYES _____ NAYS: _____ ABSTENTIONS: _____ ABSENT: _____

Chairwoman Jenni McCullar

ATTEST:



CITY OF FERNLEY

Planning Commission AGENDA REPORT

Meeting Date: December 11, 2024

REPORT TO: Fernley Planning Commission

REPORT FROM: Michele Rambo, Planning Director

FINANCIAL IMPACT:

Yes: No: X

CURRENTLY BUDGETED:

Yes: No: X

FUND/ACCOUNT:

N/A

ACTION REQUESTED: Motion

AGENDA ITEM:

(For possible action) Discussion and possible action regarding a Zoning Map Amendment (ZMA 24002) and Tentative Subdivision Map (TSM 24002), a request by Phelps Engineering, Inc on behalf of Creekwood Development Group for 1) changing the zoning designation from SF20 (Single-Family Residential; 20,000 square foot minimum) to SF6 (Single-Family Residential; 6,000 square foot minimum; and 2) the division of approximately 39.67 acres into 153 single-family lots. The project is located on the south side of Farm District Road between Browne Lane and Rainbow Lane (APN 021-303-20).

AGENDA ITEM BRIEF:

The applicant is proposing 153 single-family unit parcels, as well as a zone change from SF20 to SF6.

RECOMMENDED MOTION:

I move to recommend that the City Council 1) approve Bill #353 and ZMA24002 changing the zoning from SF20 to SF6, and 2) approve TSM24002 to divide 39.67 acres into 153 single-family lots based on the Findings and Conditions of Approval included in the staff report.

BUSINESS IMPACT (per NRS Chapter 237):

A Business Impact Statement is not required because this is not a rule (term excludes vehicles by which legislative powers are exercised under NRS Chapters 271, 278, 278A, or 278B).

See attached report for background, analysis, alternatives.

ALTERNATIVES:

Denial

"Based on information received in written materials and at the public hearings on this matter, I move to recommend City Council deny the tentative subdivision map and zoning map amendment for Creekwood Commons associated with TSM24002 and ZMA24002. I cannot recommend approval of this tentative subdivision map and zoning map amendment because I have determined the proposed changes are detrimental to the public's health, safety, and general welfare and am unable to make the following required findings:"

"I am unable to make finding _____ as it relates to _____."

(Repeat for each applicable finding.)

BACKGROUND:

The applicant is seeking approval for a Zoning Map Amendment (ZMA) and Tentative Subdivision Map (TSM) for the 39.67-acre property from the current Zoning Designation (SF20) to (SF6). The proposed development provides 153 single family units with on-site stormwater detention facilities.

ANALYSIS:

The current zoning designation of SF20, residential single-family (minimum lot size of 20,000 square feet), permits a maximum of 2 detached single-family units per acre. The applicant is requesting a zoning map amendment to change the zoning to SF6, residential single-family (minimum lot size of 6,000 square feet), which permits a maximum of 7 detached single-family units per acre. The zone change would allow up to 3.86 dwelling units per acre to accommodate the proposed 153 dwelling units.

FINDINGS:

a. Consistent with the city's master plan and otherwise consistent with state and federal law.

This finding can be made. The proposed zone (SF6) is an equivalent zoning district of the master plan's Single-Family Residential (SF) designated land use. The applicant suggests that the proposed zone change supports the master plan community goals and action strategies regarding Land Use (LU) listed below and staff concurs.

LU. 1.2 - Encourage new development to be in accordance with the Comprehensive Master Plan land use category.

The proposed SF6 is an equivalent zoning designation of the SF designated land use.

b. Consistent with the surrounding land uses.

The proposed project is consistent with the surrounding land uses, as there are SF-6 zoned single-family residences to the North, RR5 zoned single-family residences and multi-family residences to the West, and SF20 vacant land and SF9 single-family residences to the East.

c. A public notice was given, and a public hearing held, per the requirements of the development code and Nevada Revised Statutes.

Staff will ensure this finding can be made. The applicable provisions of the "Development Code" (FMC, Title 32) and Nevada Revised Statutes (NRS) are FMC §32.03.040(e) regarding "Zoning map amendments (rezoning)" and NRS 278.260 regarding "...amendment of zoning regulations".

This item will have a public hearing at both the Planning Commission and City Council meetings. At least 10 days prior to each public hearing, staff will purchase an ad in the Reno Gazette Journal and mail letters to all parcels within a 300-foot radius, all manufactured homes of any manufactured home park within a 300-foot radius, and the nearest 30 separately owned parcels. Staff will also mail a letter to both the parcel location and the owner's mailing address in cases where those addresses are not the same.

APPROVAL CRITERIA:

Recommendations and decisions on tentative maps shall be based on consideration of all the following criteria:

1. Compliance with environmental and health laws and regulations concerning water and air pollution, solid waste disposal, water supply facilities, community or public sewage disposal, and, where applicable, individual systems for sewage disposal;

Condition of approval 11 is intended to keep dust erosion from polluting the air. No other significant source of air pollution was identified. To ensure compliance with environmental and health laws and regulations concerning solid waste disposal, staff added condition of approval 21, which requires proof that Waste Management intends to provide solid waste disposal for the community.

Water and sewer services will be provided by City of Fernley. To ensure City of Fernley systems maintain compliance with applicable regulations once the project is developed. To ensure this, staff included a number of conditions of approval. Currently there are no sewer mains within the Creekwood Estates development area. The developer proposes new sewer by extending approximately 870 LF of gravity main from the existing manhole located along an existing 8-Inch main running south-north within Rainbow Lane. The main extension will also have portions within NDOT Right of Way along Farm District Road. The developer also plans to install new water lines for the subdivision through two connection points to an 18-inch main within Farm District Road. The developer will grant easements so that City of Fernley may maintain the water and sewer infrastructure once built. Finally, the developer is responsible for constructing all necessary storm water treatment and drainage structures.

2. Availability of water that meets applicable health standards and is sufficient for the reasonably foreseeable needs of the subdivision;

Each of the 153 single-family parcels requires 1.12 acre-feet of surface water to be dedicated to City of Fernley to provide municipal services, for a total of 44.43 acre-feet. Should the applicant instead provide groundwater rights, which is a rare occurrence, the City Engineer will make the appropriate calculation based on lot size and number of lots. The applicant has indicated they have sufficient water rights for the proposed tentative subdivision map.

Additionally, in accordance with Fernley Municipal Code Section 32.09.035, the applicant shall dedicate to the city, as a condition precedent to approval of a final subdivision map, the surface water or groundwater rights reasonably necessary to ensure an adequate water supply to serve all parcels or lots within the project. Staff added condition 18 to make the need for dedication of water rights very clear. If the applicant is unable to dedicate the appropriate amount of water rights, their final subdivision map will not be approved by City of Fernley.

3. Availability and accessibility of utilities;

The land is currently vacant. All water, sewer, and other public utilities are proposed as new and included as part of the development of the subdivision.

4. Availability and accessibility of public services such as schools, police and fire protection, transportation, recreation facilities, and parks;

This tentative map was forwarded to Lyon County School Board in accordance with NRS §278.346; the board did not indicate a school site is needed within the area. This subdivision is vacant land but is located within areas

already served by Lyon County Sheriff's Department and the North Lyon County Fire Protection District.

The question of automobile transportation is addressed through the Development Code which requires the streets to be built out prior to submitting the final map application. The submitted traffic impact study did identify the need for additional improvements to existing public streets and highways, such as the construction of site frontage improvements to NDOT Standards to accommodate the master planned improvements for SR 828, and the construction of dual site accesses, of at least 600 feet apart, with dedicated left turn and right turn lanes. All streets within the subdivision are required to have sidewalks, which will allow pedestrian access.

Condition 29 discusses residential construction tax. Given the current market rate of single-family homes in City of Fernley, the developer will be required to pay \$1,000 per dwelling unit in residential construction tax.

5. Consistency with the zoning district regulations;

This parcel is currently zoned as SF20 (Single-Family Residential, 20,000 square foot minimum lot size); however, the applicant is requesting a zone change to SF6 (Single Family Residential, 6,000 square foot minimum lot size). As mapped, the proposed new parcels meet all requirements of the SF6 zone, to include:

- 6,000 square feet minimum lot size
- 35' minimum lot frontage
- 60' minimum lot width
- 65' minimum corner lot width.

6. Conformity with the master streets and highways plan;

Staff verified that this development complies with the "City of Fernley Transportation Master Plan" of July 2020.

7. Effect of the proposed subdivision on existing public streets and the need for new streets or highways to serve the subdivision;

The proposed subdivision includes developing streets on-site that will not only internally connect the 153 single family homes, but also connect to existing City streets, such as Farm District Road and Iron Court/Rainbow Lane. The proposed new streets to be constructed internally include Shoshone Street, Great Basin Drive, Black Rock Drive, Toiyabe Drive, Pah Rah Drive, and Gold Street.

The proposed subdivision is expected to generate an additional 1,443 daily trips, with 115 occurring during peak AM hours and 151 occurring during peak PM hours. This estimate was prepared by Phelps Engineering and sourced from the Institute of Transportation Engineers (ITE).

8. Physical land characteristics, such as floodplain, slope, soil, and elevation differentials with abutting properties;

As part of their submission, the developer provided a preliminary technical drainage and geotechnical report. Staff screened recommendations from these reports and found no items of concern related to floodplain, slope, soil, or topography.

9. Recommendations and comments of review bodies;

There are no outstanding comments from review bodies. NDOT provided minor access mitigations for SR828, Rainbow Lane, and Great Basin Drive. These mitigations include realignment of the multi-use pedestrian paths and ADA compliant ramps, installing deceleration lanes, and constructing a trail connection from the multi-use path along SR828 to the proposed site trail network.

10. Conformity to the master sewer and water utility plan; This project conforms to both the master sewer and water utility plan. Because it is currently vacant land, new water and sewer connections are proposed during the

development of the subdivision. Internal infrastructure is also proposed as new and needed in order to distribute utilities to each single-family residence.

11. Compliance with this Code and all other applicable regulations.

Planning and Engineering staff actively screened all requirements in Fernley Municipal Code and have determined there are no compliance issues.

RELEVANT LAWS, STATUTES, AND REGULATIONS:

General

[Nevada Revised Statutes \(NRS\), Chapter 278](#) - Planning and Zoning

[Fernley Municipal Code \(FMC\), Title 32](#) - Development Code

[City of Fernley Comprehensive Master Plan](#)

Specific

[NRS §278.330](#)-278.353 - Subdivision of Land: Tentative Maps

[FMC §32.03.060](#)(f)(1) - Tentative subdivision maps

NRS §278.260 - Determination, establishment, enforcement and amendment of zoning regulations...

FMC §32.03.040(e) - Zoning map amendments (rezoning)

[FMC §32.06.070](#) - Residential - Single-family (SF20, SF12, SF9, SF6)

[FMC §32.09](#) - Development Standards

Note: City of Fernley does not guarantee the operation or applicability of the provided links beyond the December 11th, 2024, Planning Commission meeting.

FINANCIAL IMPLICATIONS:

None

ATTACHMENTS:

1. Bill 353
2. Conditions of Approval
3. Proposed Tentative Map
4. Project Narrative
5. Traffic Impact Study

When recorded, mail to:
City Clerk
City of Fernley
595 Silver Lace Boulevard
Fernley, NV 89408

BILL # 353
CITY OF FERNLEY
ORDINANCE # _____

A GENERAL ORDINANCE FOR A ZONING MAP AMENDMENT, ASSOCIATED WITH ZMA24002, TO CHANGE THE ZONING OF ±39.67 -ACRES GENERALLY LOCATED SOUTH OF FARM DISTRICT ROAD BETWEEN BROWN LANE AND RAINBOW LANE (APN: 020-303-20) FROM SF20 (SINGLE-FAMILY MINIMUM LOT SIZE OF 20,000 SQUARE FEET) TO SF6 (SINGLE-FAMILY MINIMUM LOT SIZE OF 6,000 SQUARE FEET) IN ORDER TO DEVELOP A SUBDIVISION CONSISTING OF 153 SINGLE-FAMILY RESIDENCES.

THE CITY COUNCIL OF THE CITY OF FERNLEY, hereinafter “the Council”, DO HEREBY ORDAIN:

Section 1: The zoning of that certain real property totaling 39.67 acres, more or less, situated in the City of Fernley, Nevada, and owned by Creekwood Development Group, being more particularly described on Exhibit “A” attached hereto and depicted on “Exhibit B” attached hereto is hereby reclassified from SF20 to SF6.

SECTION 2: All ordinances or parts of ordinances in conflict herewith are hereby repealed.

SECTION 3: The City Clerk is instructed and authorized to publish the title to this ordinance as provided by law and to record the plan certified herein as provided by law.

SECTION 4: This ordinance shall become effective upon passage, approval, and publication.

SECTION 5: The provisions of this ordinance shall be liberally construed to effectively carry out its purposes in the interest of public health, safety, welfare and convenience.

SECTION 6: If any subsection, phrase, sentence or portion of this section is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision, and such holding shall not affect the validity of the remaining portions.

SECTION 7: The Council finds that this ordinance is not likely to impose a direct and significant economic burden upon a business or directly restrict the formation, operation or expansion of a business, or is otherwise exempt from Nevada Revised Statutes Chapter 237.

BILL # 353 BEING HEREBY PROPOSED this 18th day of December 2024.

BILL # 353 BEING HEREBY PASSED, APPROVED and ADOPTED this 15th day of January 2025, by the following vote of the Council:

Ayes: _____ Nays: _____ Abstentions: _____ Absent: _____

FERNLEY CITY COUNCIL

By:

Neal E. McIntyre, Mayor

Date: _____

Attest By:

Kim Swanson, City Clerk

Date: _____

Exhibit A
Legal Description

THE LAND REFERRED TO HEREIN IS SITUATED IN THE STATE OF NEVADA, COUNTY OF LYON, DESCRIBED AS FOLLOWS:

TOWNSHIP 20 NORTH, RANGE 25 EAST, M.D.M., SECTION 20: ALL THAT PORTION OF THE EAST HALF OF THE SOUTHWEST QUARTER LYING NORTH OF THE T.C.I.D. CANAL.

NOTE: THE ABOVE LEGAL DESCRIPTION IS FOR USE ON ATTACHED PRELIMINARY TITLE REPORT ONLY AND IS NOT FOR USE ON ANY CONVEYANCING OR RECORDING DOCUMENTS.

CAN BE FURTHER DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF SECTION 20, TOWNSHIP 20 NORTH, RANGE 25 EAST, MOUNT DIABLO BASE & MERIDIAN, SITUATE IN LYON COUNTY, NEVADA; THENCE NORTH 01°07'08" EAST ALONG THE WEST LINE OF THE SOUTHWEST QUARTER (SW $\frac{1}{4}$) OF SAID SECTION 20, A DISTANCE OF 2637.56 FEET; THENCE DEPARTING SAID WEST LINE, SOUTH 88°21'03" EAST ALONG THE NORTH LINE OF SAID SOUTHWEST QUARTER (SW $\frac{1}{4}$), A DISTANCE OF 1329.69 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE ALONG SAID NORTH LINE, SOUTH 88°20'35" EAST, A DISTANCE OF 1330.31 FEET TO THE CENTER OF SAID SECTION 20; THENCE DEPARTING SAID NORTH LINE, SOUTH 01°17'49" WEST ALONG THE EAST LINE OF SAID SOUTHWEST QUARTER (SW $\frac{1}{4}$), A DISTANCE OF 1220.18 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY OF THAT CERTAIN 200 FOOT WIDE TRUCKEE CARSON IRRIGATION DISTRICT (TCID) CANAL AS SHOWN ON THE UNITED STATES RECLAMATION SERVICE PROPERTY AND STRUCTURE MAP FOR SAID SECTION 20, DATED 1911, FILED WITH THE TRUCKEE CARSON IRRIGATION DISTRICT; THENCE DEPARTING SAID EAST LINE, SOUTH 88°26'51" WEST ALONG SAID NORTH RIGHT-OF-WAY, A DISTANCE OF 540.51 FEET TO A POINT OF TANGENCY; THENCE CONTINUE ALONG SAID NORTH RIGHT-OF-WAY, BEGINNING AT A CURVE CONCAVE TO THE SOUTHEAST, HAVING A RADIUS OF 1054.92 FEET, A CENTRAL ANGLE OF 14°22'30", AND AN ARC DISTANCE OF 264.67 FEET; THENCE CONTINUE ALONG SAID NORTH RIGHT-OF-WAY, SOUTH 74°04'21" WEST, A DISTANCE OF 552.95 FEET; THENCE DEPARTING SAID NORTH RIGHT-OF-WAY, NORTH 01°12'18" EAST ALONG THE WEST LINE OF THE EAST HALF (E $\frac{1}{2}$) OF THE SOUTHWEST QUARTER (SW $\frac{1}{4}$) OF SAID SECTION 20, A DISTANCE OF 1465.15 FEET TO THE POINT OF BEGINNING.

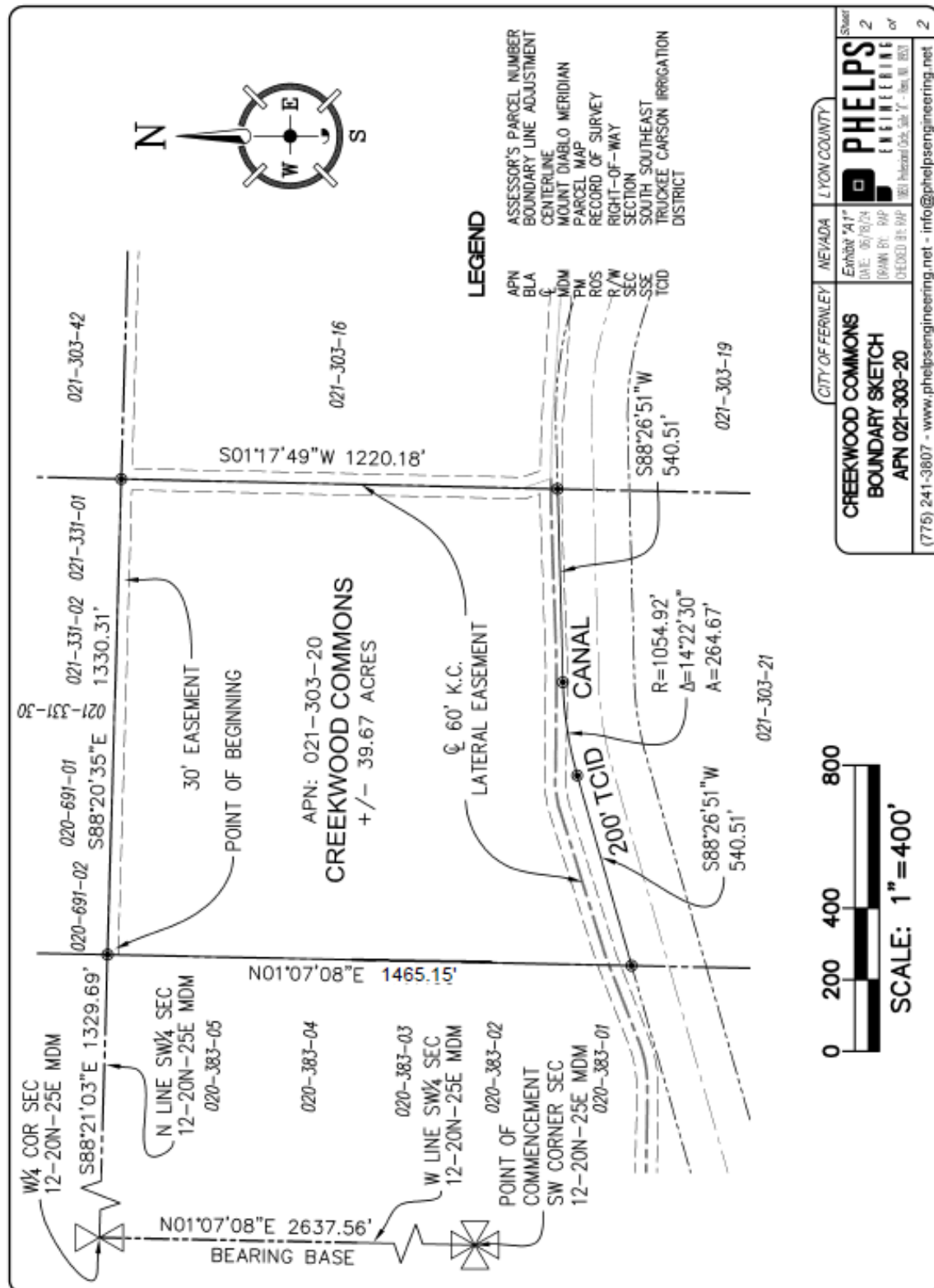
SUBJECT TO EASEMENTS, RESTRICTIONS, RESERVATIONS, AND RIGHTS OF WAY, IF ANY.

CONTAINING 39.67 ACRES, MORE OR LESS.

Prepared By: Richard A. Pedraza, PSM/PLS
In the offices of: Phelps Engineering Services, Inc.
10651 Professional Circle, Suite "A"
Reno, NV 89521



Exhibit B
Plat Map



Conditions of Approval for:
Zoning Map Amendment (ZMA 24002)
Tentative Subdivision Map (TSM 24002)

SCOPE AND DURATION OF APPROVAL

1. APPROVAL:

THE PROJECT IS APPROVED AS CONDITIONED AND DESCRIBED BELOW. ANY SUBSTANTIVE CHANGE SHALL REQUIRE APPROVAL BY THE CITY OF FERNLEY AND BE PROCESSED AS OUTLINED IN THE DEVELOPMENT CODE.

- A. THE ZONING MAP AMENDMENT IS APPROVED CHANGING THE ZONING OF THE PROPERTY FROM SF20 TO SF6.
- B. THE TENTATIVE SUBDIVISION MAP IS APPROVED TO DIVIDE APPROXIMATELY 39.67 ACRES INTO 153 SINGLE-FAMILY LOTS.

2. PROJECT DESCRIPTION:

THE PROJECT APPROVAL IS LIMITED TO SINGLE FAMILY RESIDENTIAL DEVELOPMENT WITH A MAXIMUM OF 153 LOTS ON 39.67 ACRES LOCATED ON THE SOUTH SIDE OF FARM DISTRICT ROAD BETWEEN BROWNE LANE AND RAINBOW LANE (APN 021-303-20).

3. EXPIRATION DATE:

THE TENTATIVE SUBDIVISION MAP APPROVAL SHALL EXPIRE WITHIN FOUR (4) YEARS OF THE DATE OF THE CITY COUNCIL APPROVAL UNLESS THE FINAL MAP HAS BEEN RECORDED IN ACCORDANCE WITH NEVADA REVISED STATUTES (N.R.S.) 278.360. THE ZONING MAP AMENDMENT DOES NOT EXPIRE.

4. GOVERNING DOCUMENTS:

ALL CITY OF FERNLEY MUNICIPAL CODE (FMC) OR DEVELOPMENT CODE REFERENCES HEREIN PERTAIN TO THE VERSION OF THE CODE AS ADOPTED AT THE TIME OF THE PROJECT APPROVAL. THE DEVELOPER MUST COMPLY WITH ALL DESIGN STANDARDS AND REGULATIONS AS SET FORTH IN FMC. THE DEVELOPER MAY SUBSTITUTE REQUIREMENTS ESTABLISHED IN FUTURE FMC UPDATES, IF APPROVED BY THE ADMINISTRATOR.

THE DEVELOPER SHALL ALSO COMPLY WITH ALL STANDARDS FOUND WITHIN "CITY OF FERNLEY DEPARTMENT OF PUBLIC WORKS DESIGN STANDARDS & REVIEW GUIDELINES" AS UPDATED IN MARCH 2024, "CITY OF FERNLEY STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION" AS UPDATED IN JULY 2022, AND THE MOST CURRENT "CITY OF FERNLEY COMPREHENSIVE MASTER PLAN".

REGULATORY AGENCIES

5. NORTH LYON FIRE PROTECTION DISTRICT:

- A. THE DEVELOPER SHALL COMPLY WITH ALL REQUIREMENTS OF THE NORTH LYON COUNTY FIRE PROTECTION DISTRICT TO THE APPROVAL OF THE ADMINISTRATOR AND FIRE CHIEF PRIOR TO THE ISSUANCE OF ANY FINAL MAP FOR THE PROJECT.
- B. NO COMBUSTIBLES SHALL BE BROUGHT ON SITE PRIOR TO THE INSTALLATION AND ACCEPTANCE OF AN ALL-WEATHER SURFACE AND THE INSTALLATION/OPERATION OF FIRE HYDRANTS TO THE APPROVAL OF THE ADMINISTRATOR, PUBLIC WORKS DIRECTOR, AND THE NORTH LYON COUNTY FIRE PROTECTION DISTRICT.

6. TRUCKEE CARSON IRRIGATION DISTRICT (TCID)/BUREAU OF RECLAMATION:

THE DEVELOPER SHALL COMPLY WITH ALL REQUIREMENTS OF THE NEVADA DEPARTMENT OF THE TRUCKEE CARSON IRRIGATION DISTRICT AND/OR THE BUREAU OF RECLAMATION RELATED TO ANY FACILITY OR EASEMENT WITHIN THE PROJECT BOUNDARY TO THE APPROVAL OF THE ADMINISTRATOR PRIOR TO THE APPROVAL AND RECORDATION OF A FINAL MAP.

7. NEVADA DEPARTMENT OF ENVIRONMENTAL PROTECTION:

THE DEVELOPER SHALL COMPLY WITH ALL REQUIREMENTS OF THE NEVADA DEPARTMENT OF ENVIRONMENTAL PROTECTION — BUREAU OF SAFE DRINKING WATER AND BUREAU OF WATER POLLUTION CONTROL FOR THE WATER AND SEWER INFRASTRUCTURE DESIGN AND CONSTRUCTION TO THE APPROVAL OF THE ADMINISTRATOR, CITY ENGINEER, AND PUBLIC WORKS DIRECTOR.

8. FEDERAL, STATE, AND LOCAL AGENCIES:

THE DEVELOPER SHALL COMPLY WITH ALL REQUIREMENTS OF ANY OTHER FEDERAL, STATE, LOCAL AGENCY, DEPARTMENT, OR LICENSED PROFESSIONAL WITH JURISDICTION OVER THE PROJECT INCLUDING, BUT NOT LIMITED TO: NEVADA DEPARTMENT OF TRANSPORTATION (NDOT), NEVADA PUBLIC UTILITIES COMMISSION (PUCN), NEVADA STATE ENVIRONMENTAL COMMISSION, THE CITY OF FERNLEY BUILDING OFFICIAL, THE CITY OF FERNLEY ENGINEER, CITY OF FERNLEY PLANNING DEPARTMENT, CITY OF FERNLEY PUBLIC WORKS DEPARTMENT, AND THE CITY OF FERNLEY PROFESSIONAL LAND SURVEYOR.

9. UNITED STATES POSTAL SERVICE:

THE DEVELOPER SHALL PROVIDE AN EASEMENT FOR ANY NEW CLUSTER MAILBOX LOCATION TO THE APPROVAL OF THE ADMINISTRATOR AND LOCAL POSTAL INSPECTOR PRIOR TO THE APPROVAL AND RECORDATION OF A FINAL MAP.

REQUIREMENTS FOR GRADING AND CIVIL PERMITS

10. WATER AND SEWER SYSTEM MODELING:

ADEQUACY OF SEWAGE COLLECTION AND/OR TREATMENT IS SUBJECT TO THE APPROVAL OF THE PUBLIC WORKS DIRECTOR. FURTHER, THE ADMINISTRATOR SHALL DETERMINE WHETHER ADEQUATE PUBLIC FACILITIES ARE IN PLACE OR CAN BE CONSTRUCTED CONCURRENTLY WITH THE DEVELOPMENT PROJECT PRIOR TO THE APPROVAL OF A DEVELOPMENT PROJECT.

11. GRADING PERMIT:

PRIOR TO ISSUE OF A GRADING PERMIT FOR THE DEVELOPMENT, THE DEVELOPER SHALL POST A SURETY BOND FOR REGRADING AND RECLAMATION OF THE SITE. THE DEVELOPER SHALL COMPLY WITH ALL GRADING REQUIREMENTS SET FORTH IN FMC, AS WELL AS ALL STATE AND FEDERAL REGULATIONS INCLUDING, BUT NOT LIMITED TO, STORM WATER POLLUTION PREVENTION AND AIR QUALITY RELATED TO SURFACE AREA DISTURBANCE.

12. PROJECT CONTACT:

PRIOR TO ISSUE OF A GRADING PERMIT, THE DEVELOPER SHALL DESIGNATE A PROJECT CONTACT PERSON TO THE ADMINISTRATOR. THE CONTACT PERSON SHALL BE AUTHORIZED TO AND RESPONSIBLE FOR CORRECTING ANY PROJECT-RELATED ISSUES ON A 24-HOUR, SEVEN-DAYS-PER-WEEK BASIS.

REQUIREMENTS DURING CONSTRUCTION PHASE

13. CONSTRUCTION DEBRIS:

ALL CONSTRUCTION SITES SHALL HAVE APPROVED TRASH RECEPTACLES OR AN APPROVED TRASH REMOVAL PLAN IN PLACE AT THE TIME OF THE FIRST INSPECTION AND DURING CONSTRUCTION, UNTIL CERTIFICATE OF OCCUPANCY IS ISSUED. THE RECEPTACLES SHALL BE USED APPROPRIATELY TO MAINTAIN A CLEAN WORK SITE.

14. CONSTRUCTION HOURS:

PRIOR TO THE START OF ANY CONSTRUCTION-RELATED ACTIVITY, THE DEVELOPER SHALL INSTALL SIGNS AT ALL ACCESS POINTS TO THE PROJECT THAT CLEARLY INDICATE THE HOURS OF ACTIVITY ON-SITE. THE DEVELOPER SHALL LIMIT ALL CONSTRUCTION-RELATED ACTIVITIES TO BETWEEN THE HOURS OF SEVEN AM AND SEVEN PM, SEVEN DAYS PER WEEK. ONCE CONSTRUCTION IS FINISHED, THE DEVELOPER SHALL REMOVE THESE SIGNS.

REQUIREMENTS FOR FINAL MAP

15. FINAL SUBDIVISION MAP PHASING:

IF THE FINAL SUBDIVISION MAP IS PHASED, EACH MAP PHASE SUBMITTED MUST BE DESIGNED TO MEET THE PUBLIC FACILITIES AND IMPROVEMENT STANDARDS AND BE ABLE TO OPERATE INDEPENDENTLY AND AS PART OF THE OVERALL DESIGN. A PHASING PLAN SHOULD BE SUBMITTED WITH PHASE ONE. CHANGES TO THE PHASING PLAN WILL REQUIRE REVIEW AND APPROVAL BY THE ADMINISTRATOR, CITY ENGINEER, AND PUBLIC WORKS DIRECTOR, PRIOR TO IMPLEMENTATION.

16. IMPROVEMENT PLANS:

- A. WITH SUBMITTAL OF ANY FINAL SUBDIVISION MAP APPLICATION, THE ASSOCIATED CIVIL IMPROVEMENT PLANS SHALL BE SUBMITTED AND APPROVED BY THE CITY ENGINEER. THE UTILITIES AND INFRASTRUCTURE FOR EACH PHASE MUST OPERATE INDEPENDENTLY OF FUTURE PHASES YET TO BE CONSTRUCTED.
- B. FINAL IMPROVEMENT PLANS SHALL PROVIDE 20-FOOT WIDE MINIMUM GRAVEL ACCESS ALONG ONE SIDE AND THE BACK OF THE RETENTION BASINS TO PROVIDE SUFFICIENT ACCESS FOR MAINTENANCE VEHICLES.
- C. FINAL IMPROVEMENT PLANS SHALL PROVIDE RETENTION BASINS WITH A FLAT BOTTOM WHICH CAN BE ACCESSED BY MAINTENANCE VEHICLES TO REMOVE ACCUMULATED SEDIMENT. THE SURFACE FOR THE ACCESS TO THE BOTTOM OF THE BASINS SHALL BE PAVEMENT OR ARTICULATING CONCRETE BLOCKS.
- D. FINAL IMPROVEMENT PLANS SHALL PROVIDE A REINFORCED CONCRETE SWALE ALONG THE BACK OF THE LOTS BACKING UP TO THE CANAL TO INTERCEPT OFF-SITE RUNOFF AND DIRECT IT TO PERIMETER DRAINAGE SWALES OR POND B. THE CONCRETE SWALE SHALL BE MARKED "PRIVATE" ON ALL IMPROVEMENT PLANS AND SHALL BE MAINTAINED BY THE MAINTENANCE ASSOCIATION.
- E. FINAL IMPROVEMENT PLANS SHALL HAVE CROSS SECTIONS SHOWN WHICH INCLUDE THE CANAL EMBANKMENT AND THE HOMES ALONG THE CANAL. THE CROSS SECTIONS SHALL SHOW THE EXCAVATION DEPTHS AND SHALL BE APPROVED BY THE BUREAU OF RECLAMATION AND TCID.
- F. THE EXTERIOR BUFFER AREAS ON THE EAST AND WEST SIDES OF THE SUBDIVISION SHALL HAVE 12' WIDE MINIMUM ACCESS ROADS TO PROVIDE MAINTENANCE. IF THESE AREAS CARRY PRIMARY/DIRECT DRAINAGE FROM THE SUBDIVISION STREETS OR LOTS THEY SHALL ALSO HAVE CONCRETE SWALES TO CARRY THE 25-YEAR, 6-HOUR STORM.

- G. ANY STORM DRAIN BASINS TO BE OFFERED FOR DEDICATION TO THE CITY OF FERNLEY SHALL BE FULLY FENCED WITH 6' HIGH FENCING AND ACCESS GATES.

17. EASEMENTS:

THE DEVELOPER SHALL PROVIDE EASEMENTS TO THE CITY OF FERNLEY FOR MAINTENANCE OF ALL PUBLIC INFRASTRUCTURE INSTALLED ON PRIVATE PROPERTY. THE EASEMENTS SHALL INCLUDE CITY OF FERNLEY'S STANDARD EASEMENT LANGUAGE – SUBJECT TO APPROVAL OF THE CITY ENGINEER AND PUBLIC WORKS DIRECTOR – AND SHALL BE RECORDED ALONG WITH THE FINAL SUBDIVISION MAP. ALL EASEMENTS SHALL BE WIDE ENOUGH TO ALLOW FOR OPERATIONS, MAINTENANCE, AND REPLACEMENT OF UTILITY IN THE FUTURE (20-FT FOR A SINGLE UTILITY AND 30-Feet FOR TWO UTILITIES OR DEEP SEWER).

18. WATER RIGHTS:

PRIOR TO RECORDING A FINAL SUBDIVISION MAP, IN ORDER TO BE SERVED BY THE MUNICIPAL WATER SYSTEM, THE DEVELOPER SHALL DEDICATE THE APPROPRIATE AMOUNT OF WATER RIGHTS, AS CALCULATED BY THE CITY ENGINEER. SHOULD THE PROJECT BE CONSTRUCTED IN PHASES, THESE REQUIREMENTS MAY BE CALCULATED ON A PER-PHASE BASIS. THIS REQUIREMENT IS SUBJECT TO APPROVAL OF THE PUBLIC WORKS DIRECTOR, THE CITY ENGINEER, AND THE ADMINISTRATOR.

19. WATER AND SEWER:

- A. THE DEVELOPER SHALL BE RESPONSIBLE FOR CONSTRUCTING OR SHALL POST SURETY BOND FOR ALL IMPROVEMENTS DEEMED NECESSARY TO SERVE THE PROJECT, AS IDENTIFIED IN THE APPROVED WATER AND SEWER MODELING REPORTS, SUBJECT TO APPROVAL OF THE CITY ENGINEER, PRIOR TO RECORDING A FINAL SUBDIVISION MAP.
- B. THE DEVELOPER SHALL COMPLY WITH FMC STANDARDS REGARDING CONNECTIONS/DEMANDS TO THE SANITARY SEWER AND POTABLE WATER SYSTEMS, INCLUDING ASSOCIATED CONNECTION FEES, DESIGN STANDARDS, DEVELOPMENT CODE REQUIREMENTS, AND STATE REQUIREMENTS PRIOR TO ISSUING A PUBLIC IMPROVEMENT PERMIT.
- C. PRIOR TO APPROVAL OF A FINAL SUBDIVISION MAP FOR THE PROJECT, THE DEVELOPER SHALL PERMIT THE WATER SYSTEM MODIFICATIONS IN CONFORMANCE WITH THE FMC AND PUBLIC WORKS DESIGN MANUAL TO THE APPROVAL OF THE CITY ENGINEER, PUBLIC WORKS DIRECTOR, AND ADMINISTRATOR.
- D. NEVADA DIVISION OF ENVIRONMENTAL PROTECTION BUREAU OF SAFE DRINKING WATER AND BUREAU OF WATER POLLUTION CONTROL SUBMITTAL WILL BE REQUIRED.

20. STREETS AND SIGNAGE:

STREET IDENTIFICATION SIGNS MUST BE IN PLACE AND STREETS WITHIN THE SUBDIVISION MUST BE COMPLETE, TO THE APPROVAL OF THE CITY ENGINEER AND FIRE CHIEF, PRIOR TO SUBMITTING THE FINAL MAP APPLICATION.

21. WASTE MANAGEMENT:

THE DEVELOPER SHALL PROVIDE A WILL-SERVE FROM WASTE MANAGEMENT, SUBJECT TO APPROVAL OF THE ADMINISTRATOR, PRIOR TO RECORDING ANY FINAL SUBDIVISION MAP.

22. HYDROLOGY REPORT:

THE DEVELOPER SHALL PROVIDE A FINAL HYDROLOGICAL REPORT FOR THE PROJECT IN CONFORMANCE WITH THE FMC AND THE PUBLIC WORKS DESIGN MANUAL FOR REVIEW AND

APPROVAL BY THE CITY ENGINEER PRIOR TO APPROVAL OF A FINAL MAP FOR ANY PORTION/PHASE OF THE PROJECT.

23. MAINTENANCE ASSOCIATION:

THE DEVELOPER SHALL ESTABLISH A MAINTENANCE ASSOCIATION FOR THE UPKEEP OF ALL COMMON AREAS, THE LANDSCAPING AND FENCING THROUGHOUT THE DEVELOPMENT, AND ANY DRAINAGE CONVEYANCE FACILITIES NOT DEDICATED TO AND ACCEPTED BY THE CITY OF FERNLEY. DOCUMENTS ESTABLISHING THE MAINTENANCE ASSOCIATION SHALL BE SUBMITTED, APPROVED, AND RECORDED ALONG WITH THE FINAL SUBDIVISION MAP. THIS CONDITION IS SUBJECT TO APPROVAL OF THE ADMINISTRATOR, CITY ATTORNEY, CITY ENGINEER, FINANCE DIRECTOR, AND PUBLIC WORKS DIRECTOR.

24. DRAINAGE REPORT:

- A. THE DEVELOPER SHALL PROVIDE A DRAINAGE REPORT FOR THE PROJECT IN CONFORMANCE WITH THE CITY'S DEVELOPMENT CODE, MUNICIPAL CODE, AND THE PUBLIC WORKS DESIGN MANUAL FOR REVIEW AND APPROVAL BY THE CITY ENGINEER. EACH SUCCESSIVE PHASE OF THE PROJECT SHALL SUBMIT AN UPDATED DRAINAGE REPORT FOR REVIEW AND APPROVAL BY THE CITY ENGINEER SHOWING THE CUMULATIVE EFFECT OF THE DEVELOPED PORTION OF THE PROJECT ALONG WITH THE PROPOSED PHASE'S EFFECT ON THE TOTAL DISCHARGE INTO THE DRAINAGE SYSTEM.
- B. THE DRAINAGE REPORT INDICATES A 100-YEAR STORM EVENT WAS USED TO DETERMINE RETENTION BASIN STORAGE CONCLUSIONS. UPON SUBMITTAL OF THE FINAL DRAINAGE REPORT, CONFIRM THAT THIS IS THE 100-YEAR, 24-HOUR STORM AND NOT A LESSER STORM DURATION.

25. GEOTECHNICAL REPORT:

A FINAL GEOTECHNICAL INVESTIGATION SHALL BE SUBMITTED WITH THE PUBLIC IMPROVEMENT PLAN SUBMITTAL(S) AND SHALL INCLUDE INFORMATION REGARDING PAVEMENT SECTION DESIGN.

26. SUBDIVISION MAP NOTES:

PRIOR TO SUBMITTAL OF THE FIRST FINAL MAP, THE FOLLOWING NOTES SHALL BE ADDED TO THE TENTATIVE SUBDIVISION MAP:

- A. A NOTE WHICH STATES THAT PUBLIC UTILITY EASEMENTS SHALL INCLUDE SOUTHWEST GAS, CABLE TELEVISION, AND CITY WATER, SEWER, AND STORM DRAIN UTILITIES.
- B. A NOTE GRANTING A DRAINAGE EASEMENT 10' IN WIDTH CENTERED ALONG ALL INTERIOR LOT LINES AND 5' IN WIDTH ALONG ALL REAR LOT LINES FOR THE EXCLUSIVE PURPOSE OF PROVIDING DRAINAGE FOR THE MUTUAL BENEFIT OF ADJOINING LOT OWNERS.
- C. A NOTE STATING THAT ACCEPTANCE OF THIS MAP BY THE CITY OF FERNLEY IS NOT A COMMITMENT THAT A BUILDING PERMIT WILL BE ISSUED FOR ANY OR ALL LOTS.
- D. A NOTE STATING THAT OUTLOT B SHALL BE GRANTED TO AND MAINTAINED BY THE MAINTENANCE ASSOCIATION.

27. NDOT RIGHT OF WAY:

PRIOR TO SUBMITTAL OF THE FIRST FINAL MAP, ANY ADDITIONAL RIGHT-OF-WAY DEDICATED ALONG FARM DISTRICT ROAD AS PART OF THIS PROJECT SHALL BE DEDICATED TO THE NEVADA DEPARTMENT OF TRANSPORTATION AND NOT THE CITY OF FERNLEY.

REQUIREMENTS FOR BUILDING PERMIT

28. STORM WATER TREATMENT AND DRAINAGE:

- A. THE DEVELOPER SHALL UTILIZE STRUCTURAL CONTROLS FOR THE TREATMENT OF STORM WATER RUNOFF, IN ACCORDANCE WITH BEST MANAGEMENT PRACTICES. DRAINAGE CONVEYANCE FACILITIES AND OTHER IMPROVEMENTS MUST BE CONSTRUCTED, FUNCTIONAL, AND DEDICATED TO THE CITY OF FERNLEY PRIOR TO SUBMITTAL OF THE FIRST BUILDING PERMIT APPLICATION.
- B. ALL INTERNAL STORM DRAIN INFRASTRUCTURE SHALL BE DESIGNED IN ACCORDANCE WITH PUBLIC WORKS DESIGN STANDARDS. DESIGN AND CONSTRUCTION OF ALL DRAINAGE CONVEYANCE FACILITIES ARE SUBJECT TO APPROVAL OF THE ADMINISTRATOR, CITY ENGINEER, AND PUBLIC WORKS DIRECTOR.

29. RESIDENTIAL CONSTRUCTION TAX:

THE DEVELOPER SHALL PAY ONE PERCENT OF THE VALUATION OF EACH RESIDENTIAL DWELLING UNIT BUILDING PERMIT BASED ON THE CITY'S VALUATION DATA TABLE, OR \$1,000 PER DWELLING UNIT, WHICHEVER IS LESS, PRIOR TO ISSUE OF EACH RESIDENTIAL BUILDING PERMIT.

30. INFRASTRUCTURE CONSTRUCTION:

THE DEVELOPER SHALL COMPLY WITH ALL REQUIREMENTS OF THE FMC AND PUBLIC WORKS DESIGN MANUAL FOR THE CONSTRUCTION OF ANY PUBLIC OR PRIVATE INFRASTRUCTURE TO THE APPROVAL OF THE CITY ENGINEER, PUBLIC WORKS DIRECTOR, AND BUILDING OFFICIAL PRIOR TO THE ISSUANCE OF ANY BUILDING PERMIT FOR THE PROJECT.

31. SUBDIVISION IMPROVEMENT AGREEMENT:

THE DEVELOPER SHALL EXECUTE A SUBDIVISION IMPROVEMENT AGREEMENT WITH THE CITY OF FERNLEY PRIOR TO APPLYING FOR ANY BUILDING PERMITS FOR NEW HOME CONSTRUCTION IF THE PUBLIC IMPROVEMENTS ARE STILL NOT CONSTRUCTED BUT ARE ADEQUATELY SECURED IN ACCORDANCE WITH THE CITY OF FERNLEY DEVELOPMENT CODE. THE AGREEMENT SHALL BE DRAFTED BY THE CITY OF FERNLEY AND PROVIDED TO THE DEVELOPER FOR REVIEW AND EXECUTION. THE AGREEMENT SHALL BE RECORDED PRIOR TO THE ISSUANCE OF A BUILDING PERMIT.

OTHER REQUIREMENTS:

32. ENCROACHMENTS:

THE K1C LATERAL IS PROPOSED TO ENCROACH INTO APPROXIMATELY 9 OF THE PROPOSED SINGLE-FAMILY SUBDIVISION LOTS. THIS AREA OF THESE LOTS SHALL BE FENCED AS PART OF THE OUTLOT A PARCEL AND HOMEOWNERS SHALL BE NOTIFIED OF THE ENCROACHMENT AS PART OF THE SALE DOCUMENTS. DRAINAGE FROM THE ENCROACHMENT AREA SHALL DRAIN BACK TO THE CONCRETE SWALE BEHIND THE LOTS.

33. ROUNDABOUT:

THE APPLICANT MAY PROCEED WITH FINAL MAP RECORDING AND SECURE A SITE IMPROVEMENT PERMIT TO COMPLETE SUBDIVISION IMPROVEMENTS PRIOR TO FUNDING BEING SECURED BY NDOT THAT ADDRESSES THE ROUNDABOUT OPERATIONAL DEFICIENCY, SPECIFICALLY THE LEVEL OF SERVICE OPERATING CONDITION. A CERTIFICATE OF OCCUPANCY SHALL NOT BE ISSUED FOR ANY HOMES UNTIL THE FUNDING IS DETERMINED BY THE CITY OF FERNLEY TO BE ADEQUATE TO ADDRESS THIS OPERATIONAL CONDITION (I.E. MUST ACHIEVE THE LEVEL OF SERVICE REQUIRED BY THE CITY OF FERNLEY COMPREHENSIVE MASTER PLAN) AS PART OF THE INTENDED SCOPE. IF AN ALTERNATE

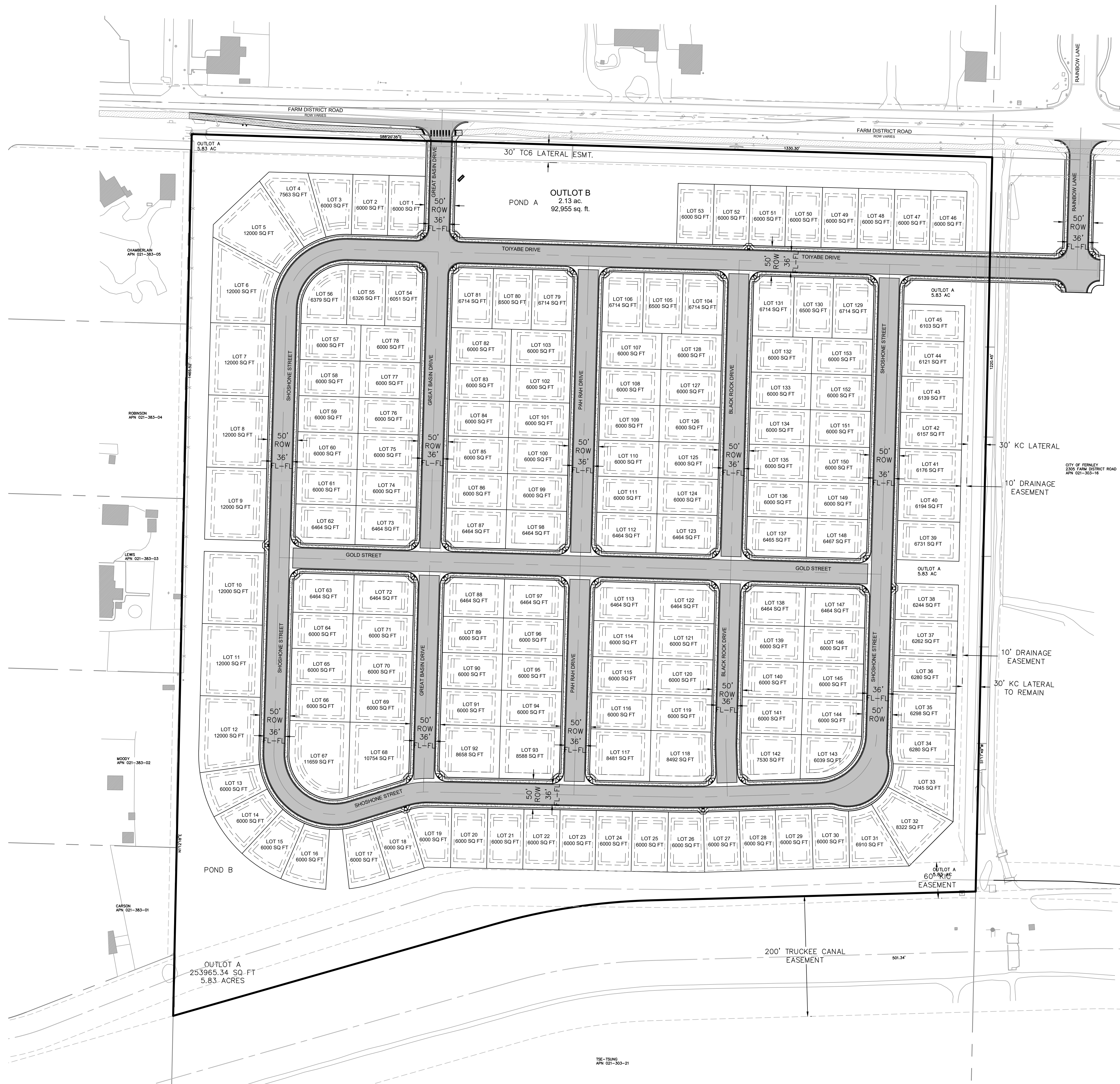
ROADWAY OR CAPACITY RELATED PROJECT (PLANNED OR UNPLANNED) IS CONSTRUCTED SUCH THAT THE ROUNDABOUT LEVEL OF SERVICE IS FOUND TO BE ACCEPTABLE BY THE CITY, THE APPLICANT MAY PROCEED WITH HOME CONSTRUCTION AND ISSUANCE OF CERTIFICATES OF OCCUPANCY WITHOUT FURTHER DELAY OR RESPONSIBILITY TO MITIGATE THIS OPERATIONAL ISSUE. IF AN IMPROVED LEVEL OF SERVICE STANDARD IS ADOPTED BY THE CITY, THE PROJECT WILL BE RESPONSIBLE TO MEET THAT STANDARD.

34. SUBDIVISION ROAD MAINTENANCE:

IN THE EVENT THAT THE APPLICANT PROCEEDS WITH SUBDIVISION IMPROVEMENTS AND COMPLETES THE SUBDIVISION STREETS, THE APPLICANT SHALL BOND FOR THE COSTS TO SLURRY SEAL THE STREETS FOLLOWING ACCEPTANCE OF THE STREETS OFFERED FOR DEDICATION BY THE DEVELOPER. THIS BONDING SHALL BE IN AN AMOUNT AGREED TO BY THE CITY ENGINEER FOR THE COSTS OF SLURRY SEALING NOT PRIOR TO 8 YEARS AFTER ACCEPTANCE OF THE STREETS. THE INTENT IS TO INSURE AGAINST PUBLIC STREETS DEGRADING IN THE EVENT THAT THE DEVELOPER DEDICATES THE STREETS BUT DOES NOT CONSTRUCT HOMES DUE TO LACK OF ROUNDABOUT FUNDING. THIS CONDITION WILL NOT BE APPLICABLE IF THE OPERATIONAL CONDITION OF THE ROUNDABOUT IS LEVEL OF SERVICE D OR BETTER AT THE TIME REGARDLESS OF FUNDING SOURCES, AND NATURE OF OTHER PROJECTS THAT MAY RESULT IN THE ROUNDABOUT OPERATION BEING SATISFACTORY, AT LEAST 8 YEARS AFTER SUBDIVISION STREET ACCEPTANCE.

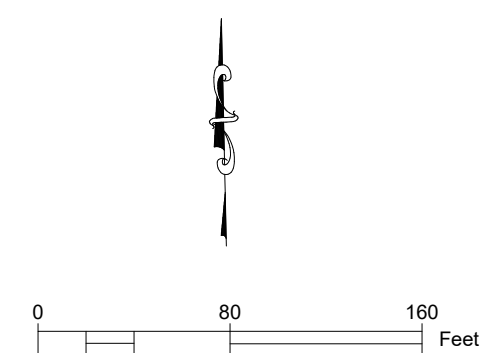
35. COMPLIANCE WITH TRAFFIC STUDY

THE APPLICANT SHALL COMPLY WITH ALL RECOMMENDED MITIGATION MEASURES OUTLINED IN THE TRAFFIC STUDY AND/OR REQUIRED BY THE NEVADA DEPARTMENT OF TRANSPORTATION.



LEGEND:

- | | |
|--|-----------------------------|
| | EXISTING CONTOURS |
| | PROPOSED CONTOURS |
| | LOT LINE |
| | SETBACK LINE |
| | RIGHT-OF-WAY |
| | EXISTING RIGHT-OF-WAY |
| | PROPERTY LINE |
| | EXISTING BOUNDARY LINE |
| | EXISTING SECTION LINE |
| | TRACT |
| | EASEMENT LINE |
| | EXISTING EASEMENT LINE |
| | ALIGNMENT CENTER LINE |
| | EXISTING ROAD CENTER LINE |
| | EDGE OF PAVEMENT |
| | PROPOSED CURB & GUTTER |
| | STORM SEWER W/INLET AND FES |
| | DRAINAGE FLOWLINE |
| | 100-YR FLOOD PLAIN |
| | EXISTING 100-YR FLOOD PLAIN |
| | PROPOSED STREET LIGHT |

TABULAR DATA

RIGHT OF WAY.....	8.51 ACRES
OUTLOTS (COMMON AREAS).....	7.95 ACRES
RESIDENTIAL LOTS	
SINGLE FAMILY.....	23.21 ACRES

SITE TOTAL.....	39.67 ACRES

[illegible]

SCALE:	AS SHOWN
DESIGNED BY:	JJP
DRAWN BY:	ZJD
CHECKED BY:	LEP

OVERALL SITE PLAN

CREEKWOOD COMMONS
TENTATIVE SUBDIVISION MAP
FERNLEY, NV

DATE: 04/08/2024
PROJECT NO. 21203

C8

CREEKWOOD COMMONS PROJECT NARRATIVE ZONE MAP AMENDMENT & TENTATIVE MAP



Conceptual Examples of single family detached homes & entry monument.

Prepared for:

Creekwood Group, LLC
3860 Richards Blvd.
Carson City, NV 89703

Prepared by:

Phelps Engineering Services Inc.
10651 Professional Circle
Suite A
Reno, Nevada 89521

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COVER LETTER

June 18, 2024

Shay League, Senior Planner
City of Fernley
595 Silverlace Blvd.
Fernley, NV. 89408

Subject: Creekwood Commons Zone Map Amendment and Tentative Subdivision Map Application

Dear Shay,

Please accept the attached Zone Map Amendment (ZMA) and Tentative Subdivision Map (TSM) Application for a parcel located on the south side of Farm District Road on behalf of owner Creekwood Group, LLC.

The parcel (property) totals approximately 39.67 acres and is located entirely within the boundary of the City of Fernley, Nevada. The current zoning is SF20 Residential Single-Family – 20,000 square feet, developer maximum density 2 dwelling units (du) per acre, with a Single-Family Residential land use designation. The project proposes 3.86 du/acre.

A narrative is provided as part of this submittal which describes the purpose of the Zone Map Amendment and how the new zoning designation brings the property into compliance with the current City of Fernley Comprehensive Master Plan.

This ZMA intends to re-classify the current SF20 zoning classification to SF6.

The following is a list of materials included with this ZMA submittal:

- ✓ ZMA Application Checklist
- ✓ Land Development Application signed by owner
- ✓ Application Fee
- ✓ NRS Time Waiver Agreement
- ✓ Project Narrative
- ✓ Vicinity Map
- ✓ Legal Description (wet stamped)
- ✓ Tentative Subdivision Map
- ✓ Property Tax Receipt

The following is a list of materials included with this TSM submittal:

- ✓ TSM Application Checklist
- ✓ Land Division Application signed by owner
- ✓ Application Fee

Creekwood Zone Map Ammendment and Tentative Subdivision Map

- ✓ NRS Time Waiver Agreement
- ✓ Project Narrative
- ✓ Tentative Subdivision Map
- ✓ Vicinity Map
- ✓ Title Report
- ✓ Pending Street Name Application
- ✓ Traffic Study
- ✓ Preliminary Drainage Report
- ✓ Sewer/Water Discovery Report Application
- ✓ Geotechnical Report
- ✓ Fiscal Impact Form

If you have any questions concerning this application or the proposed project, please contact me at the contact info listed below.

Sincerely,

Devin Perry
Planning Manager
Phelps Engineering Services Inc.
dperry@phelpsengineering.net
775-462-9919 - mobile

PROJECT DESCRIPTION

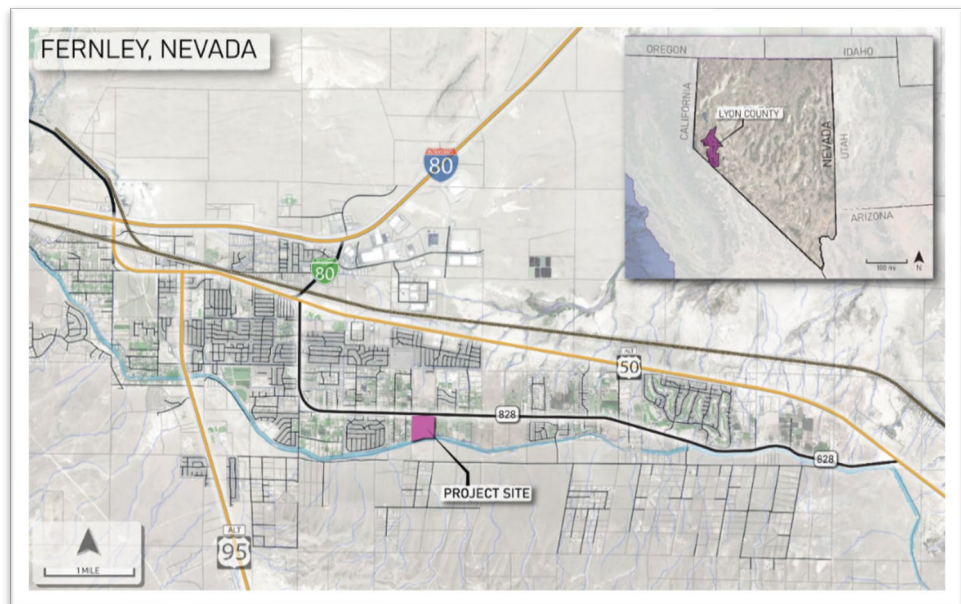
OBJECTIVE

This project is seeking approval for a Zone Map Amendment (ZMA) and Tentative Subdivision Map (TSM) for the 39.67-acre property from the current Zoning designation (SF20) to (SF6). The proposed development provides 153 single family units with on-site stormwater detention facilities. The development also provides a minimum 30' buffer at the perimeter of the property, and over 346,000 sf of Outlots.

Creekwood Commons is a proposed moderately dense residential community consisting of single-family homes. The project will help alleviate the City's need for housing and will help support the Fernley workforce by addressing housing affordability.

PROJECT LOCATION

APN: 021-303-20



Creekwood Commons is in the City of Fernley, in Lyon County Nevada within a portion of the East $\frac{1}{2}$ of SW $\frac{1}{4}$ of Section 20, Township 20 North, Range 25 East. Creekwood Commons consists of ± 41 acres and is located on the south side of Farm District Road (NV 828), between Browne Lane to the west and Rainbow Lane to the east. The Truckee Carson Irrigation District canal forms the southern boundary of the property.

The property currently serves as agricultural land and is undeveloped. Topography is gently sloping down to the north, with an average approximate slope of $\sim 2.7\%$. Aside from the agricultural area in the center, the property is moderately vegetated with low-lying grasses and scattered shrubs. Some large trees are present but are mostly confined to the northern and eastern edges. The property is accessed from Farm District Road.

Recent surrounding development includes Silverland Middle School, built in 2011 (0.5 miles to the north), and several residential subdivisions and small neighborhood parks. Farm District Road, as its name implies, formed the backbone of Fernley's historic agricultural community.

LAND USE

The City of Fernley has a desire to move away from a bedroom community/commuter town and provide a focus as a growing community with opportunities to live, work, and play while maintaining the rural character of the area as defined by the City of Fernley Comprehensive Master Plan dated August 2018 (page 70).

The property's Land Use is currently Single-Family Residential (SFR). No changes to Land Use are proposed as the project complies with the current designation.

ZONING

The City of Fernley updated their Development Code in February 2020. Section 32.06.050 of the Development Code describes the purpose of the applied zoning districts as follows.

SF6, Residential Single-Family – 6,000 square feet

Purpose. This district is intended to preserve areas where the predominant dwelling type is single-family, detached units at seven units per acre. Single-family land uses are considered appropriate adjacent to low density multifamily, SF9 and MDR14 zoning districts. The maximum number of dwelling units that may be located in this district is seven units per one acre.

The following maps illustrate the existing and proposed zoning districts for Creekwood.



CONSISTENCY WITH DEVELOPMENT CODE AND COMPREHENSIVE PLAN

In 2018, the Fernley City Council adopted an update to the City of Fernley Comprehensive Master Plan. The purpose of the City's Master Plan is to guide decision making regarding the physical development of the city. The Master Plan identified a development pattern, which has catered to large lot single-family homes with minimal opportunity for employment because over half of Fernley residents commute to other counties and neighboring cities for work. The larger lot single-family home is no longer affordable for many. In addition, this pattern has created a financial burden for the City due to the lack of employment and folks spending their

money primarily outside of Fernley. The current Comprehensive Master Plan strives to revitalize the town center, add new employment centers, and diversify the historic land use patterns to be more in line with the new goals to support the workforce, first time home buyers, and the aging and lower income populations.

Primary uses within the applied single-family residential land use include detached single-family residences. Other allowed uses include parks, open space, and religious institutions. Density is 2 to 7 du/acre. Characteristics and location features include:

- Primarily single-family detached homes with varied lot sizes
- Residences should be sited as to provide privacy to the occupants while providing connectivity to adjoining commercial or other uses
- New development should provide buffering, lot matching, or transition of density when adjacent to existing residential
- Residences shall be sufficiently buffered from adjacent roadways
- Municipal services are required

The project is compatible with the following Comprehensive Master Plan relevant goals for: 1) Population, Housing, and Employment; 2) Conservation; 3) Land Use; 4) Transportation; 5) and Public Services and Facilities. Where the proposed project deviates from Master Plan goals, an explanation is provided.

Consistency with surrounding land use

Listed below are the City of Fernley Comprehensive Master Plan Goals and Action Strategies for Land Use, Housing Plan and Population, Housing and Employment, followed by an explanation as to how they are supported and upheld in the Creekwood Commons development:

Land Use. Discussion on how the proposed project is compatible with Land Use goals follows the relevant Comprehensive Master Plan Land Use goals listed below:

Goal LU.1.1 Encourage and plan for new development in areas where adequate public services and facilities can be provided efficiently.

Action Strategy LU.1.1.1 Require new development to provide its proportionate share of improvements to avoid a degradation of services for existing residents. This requirement will be applied regardless of project size in order to avoid incremental erosion of services and facilities.

Action Strategy LU.1.1.2 Encourage development of vacant or underutilized lands within the community core where adequate infrastructure and facilities currently exists.

Action Strategy LU.1.1.3 Require new development to provide certified, stamped studies demonstrating the impact proposed development will have on existing

infrastructure and to provide improvements and/or funding in lieu of improvements in proportion to the impacts of the proposed projects on the city's roadway, sewer and water systems.

The Creekwood development is located on Farm District Rd, a major corridor through town, in an area that has close connections to critical infrastructure such as water, sewer, and electricity. The on-site construction will involve improvements that expand this infrastructure.

Sewer service calculations obtained from Shaw Engineering Sewer Discovery dated April 18, 2022 estimates average daily inflow of 250 gpd/ERC. Current ERC count of 153 times 250 gpd/ERC = 38,250 gpd

Water service calculations obtained from Shaw Engineering Water Discovery dated April 18, 2022 with a project demand of 178 ERCs stated "There is deemed to be sufficient system capacity with regards to groundwater and treatment plant capacity for the new development using a multiplying factor of 2.1 to calculate maximum day demand (MDD) from average day demand (ADD) and a multiplying factor of 2 to calculate peak hour demand (PHD) from maximum day demand."

This revised Site Plan decreases the lot count by 14% (153 lots) with an anticipated demand of 55.7 acre-feet/year.

A Fiscal Impact Analysis Form is provided as part of this submittal. The Developer will finance their proportionate share the required public works improvements to avoid a degradation of services for existing residents.

As per the Land Use Map in the City's Comprehensive Master Plan (page 63), the Creekwood Commons parcel is designated as Single Family Residential and allows for SF6 zoning:

RESIDENTIAL LAND USES			
Land Use Category	Uses and Density	Characteristics and Location	Equivalent Zoning Category
SINGLE FAMILY RESIDENTIAL (SFR)	Primary Uses: Single family detached residences Other Uses: Parks and open space, religious institutions. Density: 2-7 du/acre	Primarily single family detached homes with varied lot sizes Residences should be sited as to provide privacy to the occupants while providing connectivity to adjoining commercial or other uses New development should provide buffering, lot matching, or transition of density when adjacent to existing residential Residences shall be sufficiently buffered from adjacent roadways Municipal services are required.	SF6 SF9 SF12 SF20 PD

Goal LU.1.4 Ensure existing and future land uses are compatible.

Action Strategy LU.1.4.2 Projects shall be evaluated with the intent to promote land use compatibility; community design measures can increase compatibility among adjoining land uses.

Action Strategy LU.1.4.5 Require development plans to address conditions unique to the developing area and minimize impacts to adjacent properties.

Action Strategy LU.1.4.6 Review all projects in relation to their geographic location, impacts to adjacent communities, fiscal impact and mitigation measures to protect natural and cultural resources. Apply specific conditions of approval tailored for each development proposal.

The current land use is specified as Single-Family Residential and will not change. This land use is consistent along Farm District Road where new planned medium-density residential communities, parks, and schools are intermingled with low-density residential development.

To provide a buffer to the surrounding low-density single-family residential developments to the west, north, and south, the Creekwood Commons development maintains a 30+ foot buffer.

The development also provides for a future connection to the eastern City-owned property which will allow a more interconnected developed environment.

Population, Housing, and Employment. Discussion on how the proposed project is compatible with Population, Housing, and Employment goals follows relevant Comprehensive Master Plan goals as follows:

Goal HP.1.1 Enhance Fernley's vitality as a community by providing a variety of housing types, density and costs that accommodate the needs, desires and financial abilities of the current and future households.

Action Strategy HP.1.1.2 Encourage large-scale housing development that incorporates efficient land use techniques and creates a distinct sense of place and neighborhood diversity.

Action Strategy HP.1.1.4 Encourage the efficient use of land and existing infrastructure by focusing on achieving good design in new housing or redeveloped housing on either vacant land, infill parcels and/or under-developed parcels.

The proposed project location offers the ability to achieve good design in new housing on underdeveloped parcels, and further provides a variety of housing types, density and costs that accommodate the needs for current and future households looking to live in Fernley.

Chapter 1, page 35 of the Master Plan states:

"Based on the City of Fernley's current land use patterns, the City will likely be unable to attract new firms and new jobs because of the lack of diversity in its current available housing stock. In short, the City of Fernley could find itself left out of the next 20 years of regional economic growth and development and remain as a bedroom community. Remaining a bedroom community will force the City of Fernley to remain dependent on other jurisdictions outside of Lyon County to provide the jobs and income Fernley residents need. As people often shop and recreate where they work but consume services where they live, most bedroom communities tend to eventually find themselves in a position where they can no longer generate the revenue and resources needed to support growing levels of public services."

Chapter 1, page 41 and 42 state the need to diversify current housing stock:

"The City of Fernley is strategically located to become a significant driver of norther Nevada's significantly improved economy expansion and growth. By becoming such a driver, existing and future residents will have improved access to various employment, shopping, entertainment and recreational opportunities. However, this is only conceivable if the City of Fernley takes the appropriate steps today in order to diversify and better balance its land use.... Based on current projections, the City of Fernley is likely to double its current residential population.... This population will demand a multi-generational diversity in housing stock, price and product type

that currently does not exist, but could as the City pursues a new land use and development pattern as part of its larger economic development and diversification strategy.”

The Master plan reveals housing needs for 2018. Chapter 1, page 37 states:

“Total housing demand for the entire three county northern Nevada region of Carson City, Lyon County, and Washoe County is expected to rise to an estimated 9,209 total new units, including demand for both workforce housing and non-workforce housing, in 2018. Total housing demand for Lyon County is 400 total new residential units (4.3 percent of the region-wide total).”

HP.1.2 Encourage housing that supports sustainable development patterns by promoting the efficient use of land, conservation of natural resources, easy access to services and public facilities such as parks, and resource efficient design and construction.

HP.1.2.1 Foster flexibility in the division of land and the siting of buildings and other improvements to reduce new development’s impact on environmentally sensitive areas.

The Creekwood Commons development project is a large-scale housing development that incorporates efficient land use techniques and creates a distinct sense of place through neighborhood and streetscape design. The project also fosters flexibility in the division of land and the siting of buildings away from environmentally sensitive areas by locating the development away from the TCID canal and outside of the existing KIC easement at the south. On-site stormwater detention facilities also help alleviate the impact that the development has on city infrastructure.

Goal HP.1.6 Provide a spectrum of high quality housing to meet the City’s need.

Action Strategy HP.1.6.3 Consider the cumulative impact of regulations on the ability of housing developers to meet current and future housing demand.

Nearby large employment providers include Amazon, Nevada Cement, Nevada Department of Transportation, Sherwin Williams, TREX, and Tahoe Reno Industrial Center (TRIC).

Creekwood Commons creates new housing opportunities that will serve multiple generations.

HP.1.7 Coordinate population growth with the availability of housing, water, sanitary sewer, streets, and other public facilities and services.

HP.1.8 Coordinate population growth with the availability of water, sanitary sewer, streets and highways and other public facilities and services.

Dedication of water rights and facilities or the purchase of Intent-to-serve commitments is required for residential subdivision parcel maps, and commercial buildings by the City of Fernley.

Conservation. The following goals and objectives are provided for Conservation in the Comprehensive Master Plan. Discussion on how the proposed project is compatible with the Conservation goals follow:

C.1.3 Maintain and improve the quality of Fernley's air, water and land resources and protect neighborhoods from detrimental noise pollution.

C.1.3.1 Cooperate with public agencies concerned with the improvement of air quality and implement plans and/or programs to maintain overall state and federal air quality standards.

C.1.3.7 Maintain coordination of land use planning and capital improvements to insure the most efficient use of the city's sanitary and stormwater run-off facilities.

The TSM will be submitted by the developer for review by the Bureau of Water Pollution Control per NRS 278 and Nevada Administrative Code 278. Improvement plans will be reviewed by both the Bureau of Safe Drinking Water and the Bureau of Water Pollution Control for adherence to all state and federal standards.

Before obtaining Civil Improvement Plan approvals from the City of Fernley, a NDEP Dust Control Permit and SWPPP will be obtained by the operator/contractor.

C.1.4 Ensure future growth and development is sensitive to Fernley's natural and scenic resources.

C.1.4.1 Enhance the value and beauty of Fernley's bicycle and pedestrian routes by locating them along significant viewpoints, scenic sites and scenic corridors.

C.1.4.3 Encourage new public and private development to use water conservation landscaping and fixtures.

The site will preserve existing old growth trees along Farm District Rd and the eastern boundary through appropriate buffers. Although the current use of land will be shifting from agricultural to residential, there will be a net gain in the diversity of trees, vegetation and habitat, which will all be selected and maintained through water conservation methods. All proposed irrigation will utilize water-saving technology including drip irrigation and drought-tolerant vegetation.

The site layout is sensitive to preserving scenic resources and character of Fernley and will incorporate pedestrian-oriented design and trails to link open spaces and encourage active lifestyles.

C.1.5 Regulate development in areas that may be subject to earthquakes, erosion and landslides.

C.1.5.1 Ensure new development proposals near known or mapped faults conduct fault studies to determine the specific orientation, location and relative activity of nearby faults. Locate structures a minimum of 50 feet from any identified Holocene fault.

A Geotechnical study was conducted as part of the proposed project. The report stated that the site is geotechnically suitable to host the proposed improvements.

Transportation. Discussion on how the proposed project is compatible with Transportation goals follow the relevant Comprehensive Master Plan goals listed below:

T.1.1 Require that roadway facilities be maintained and constructed as needed to ensure high quality and safe travel on major streets and at major intersections.

T.1.1.6 Require all new development to be consistent with the access right-of-way dedication and improvement standards as specified in the Public Works Design Manual and pursuant to the functional classification as defined in this chapter.

The proposed right of ways within the Creekwood Commons are 50 feet wide and comply with improvement standards as specified in the Public Works Design Manual.

Farm District Road is also Nevada State Route 828. The existing road is 3-lane with a middle turning lane and a speed limit of 45 MPH. A Right-of-way access permit is required for all points of access onto any street that is part of the State highway system (NDOT Access Management Systems & Standards 2017 Edition, Section 2.2 Access Requests and Access Permits).

With the amount of residential development that is expected to occur along Farm District Road, the City prefers that Farm District Road maintain a consistent roadway section and corresponding capacity.

Public Service and Facilities. Discussion on how the proposed project is compatible with Public Service and Facilities goals follow the relevant Comprehensive Master Plan goals listed below:

PSF.1.4 Reduce water demand through xeriscape project landscaping, reclamation and reuse of treated wastewater for golf courses, medians, parkways and other appropriate application uses.

The use of drought-tolerant plant material and low water efficiency irrigation technology is a feature of this Development. The Development will work with the City of Fernley to determine appropriate demand and dedication of water.

EXISTING CONDITIONS

The property was a small farm with a house and outbuildings. Currently, the property is undeveloped, and the house and buildings have been demolished. Topography gently slopes from south to north with the southern portion of the site sitting approximately between 30 to 35 feet above the northern portion of the site with an average slope of ~2.7 percent. Mature poplar

and cottonwood trees line the banks of a small irrigation canal along Farm District Road. Views are pastoral and rural residential, with desert mountains in the distance. The property is currently accessed from Linley Lane at the western boundary and Barker Lane at the eastern boundary.

SURROUNDING LAND USES

Surrounding Land Use and Zoning

Location	Existing Land Use and Zoning	Roadway
Site	Single-Family Residential and Single-Family - 20 dwelling units per acre	
North	Single-Family Residential and Single-Family – 6 dwelling units per acre (SF6)	Farm District Road
South	Truckee Canal and Rural Residential - 1 dwelling units per acre	None
West	Single-Family Residential and Rural Residential - 5 dwelling units per acre	Linley Lane (private road, within project APN)
East	Open Space and Single-Family - 20 dwelling units per acre	Barker Lane

PROPOSED SITE

The project proposes 153 SF6 lots. There will be ~346,000 sf of open space and ~159,000 cubic feet of stormwater detention facilities. Primary access will be served from Farm District Road, with a secondary access running through the North East corner through the adjacent COF parcel, ultimately aligning with Rainbow Ln. Streetscapes include trees, landscaping, sidewalks, and parking.

The development provides important buffer space around all its edges. A buffer of 84 feet from Farm District Road and 50 feet from the northern property line preserves old-growth cottonwood trees and the road's rural character, while enhancing the streetscape through additional landscaping. On the east side is a buffer of 30 feet, which will also preserve old growth trees and create a scenic corridor. The K1C lateral corridor on the south side is maintained. The site borders larger two acre lots on the west side, so to provide a better transition of lot sizes a landscaped 30-foot buffer with no pedestrian access will be provided. This prevents backyard fences from abutting and will allow for adequate privacy.

A concept plan is provided below.



TRAFFIC OVERVIEW

A Traffic Impact Study prepared by Phelps Engineering Traffic Engineer, Dan Eybs determined that traffic generated by the development will have some impact on the adjacent street network. A near-term ("build-out" year, 2026) and long-term (NDOT design year, 2046) analysis was completed as part of the study.

As shown in the table below, not all the studied intersections would operate acceptably with the added traffic volumes from the project in the near-term. Traffic operations at intersection No. 1 are already near failure during the PM peak-hour without the project and are pushed into unacceptable levels of services with the project.

Table 7: Near-Term (2026) Project Impact on Intersection Operations

	Without Project		With Project	
	AM	PM	AM	PM
1: BR 80-SR 828 at Main St – US-50A	A 9.55 (EB) B 10.90 (WB) C 16.61 (NB) A 7.09 (SB)	D 31.61 (EB) B 11.03 (WB) D 33.55 (NB) D 28.09 (SB)	A 9.85 (EB) B 11.65 (WB) C 19.53 (NB) A 7.36 (SB)	E 39.78 (EB) B 11.48 (WB) E 41.14 (NB) E 38.53 (SB)
2: SR 828 at Shadow Lane	C 17.24 (EB) B 14.91 (WB)	D 29.94 (EB) B 14.96 (WB)	C 18.58 (EB) C 15.83 (WB)	E 35.31 (EB) C 16.07 (WB)
3: SR 828 at East Jenny's Lane	C 15.96 (EB) B 12.70 (WB)	C 24.07 (EB) B 14.73 (WB)	C 17.16 (EB) B 13.34 (WB)	D 27.51 (EB) C 15.87 (WB)
4: SR 828 at Cottonwood Lane	C 17.67 (EB)	C 15.55 (EB)	C 20.16 (EB)	C 17.91 (EB)
5: North Jenny's Lane at SR 828	B 14.38 (NB) B 11.86 (SB)	B 14.10 (NB) B 11.84 (SB)	C 15.66 (NB) B 12.57 (SB)	C 15.78 (NB) B 12.83 (SB)
6: Site Access at SR 828	--	--	B 12.64 (NB)	B 12.46 (NB)
7: Rainbow Ln. at SR 828	B 11.81 (SB)	B 11.35 (SB)	B 13.89 (NB) B 12.03 (SB)	B 13.35 (NB) B 11.69 (SB)

However, traffic volume reductions at the roundabout resulting from the implementation of the Wadsworth Bypass to the west and the extension of Nevada Pacific Parkway to the east would elevate operations at the roundabout to acceptable levels in the long-term, as shown in the table below.

Table 9: Long-Term Project Impact on Intersection Operations

	Without Project		With Project	
	AM	PM	AM	PM
1: BR 80-SR 828 at Main St – US-50A	A 8.47 (EB) A 9.53 (WB) B 13.40 (NB) A 6.54 (SB)	C 20.75 (EB) A 9.61 (WB) C 22.65 (NB) C 19.02 (SB)	A 8.55 (EB) A 9.80 (WB) B 14.21 (NB) A 6.60 (SB)	C 22.22 (EB) A 9.78 (WB) C 24.16 (NB) C 20.89 (SB)
2: SR 828 at Shadow Lane	D 28.23 (EB) C 21.17 (WB)	F 94.20 (EB) C 22.10 (WB)	D 29.71 (EB) C 21.99 (WB)	F 106.59 (EB) C 23.10 (WB)
3: SR 828 at East Jenny's Lane	C 24.08 (EB) C 16.07 (WB)	E 49.67 (EB) C 21.43 (WB)	D 25.24 (EB) C 16.55 (WB)	F 54.13 (EB) C 22.44 (WB)
4: SR 828 at Cottonwood Lane	E 47.34 (EB)	D 28.76 (EB)	F 60.14 (EB)	D 34.76 (EB)
5: North Jenny's Lane at SR 828	C 19.41 (NB) B 13.77 (SB)	C 18.14 (NB) B 13.95 (SB)	C 20.82 (NB) B 14.35 (SB)	C 19.57 (NB) B 14.72 (SB)
6: Site Access at SR 828	--	--	B 13.49 (NB)	B 13.14 (NB)
7: Rainbow Ln. at SR 828	B 13.63 (SB)	B 12.93 (SB)	C 16.86 (NB) C 15.17 (SB)	C 15.65 (NB) B 14.86 (SB)

Furthermore, the addition of "roadway capacity and safety" improvements on SR 828 and Cottonwood Ln., as called for in the City of Fernley Transportation Master Plan, are necessary

Creekwood Zone Map Ammendment and Tentative Subdivision Map

to elevate operations to acceptable levels in the long-term at intersections numbers 2,3 and 4. The study recommendations include: 1) construct site frontage improvements on SR828 to NDOT standards with dedicated right-turn and left-turn lanes, and 2) construct ADA accessible connections to regional trail systems.

GEOTECHNICAL OVERVIEW

Black Eagle Consulting performed exploration at the Creekwood property on February 9 – 11, 2022. It was determined that the silty and poorly graded sands (native soils) will provide adequate support for the proposed improvements.

DRAINAGE OVERVIEW

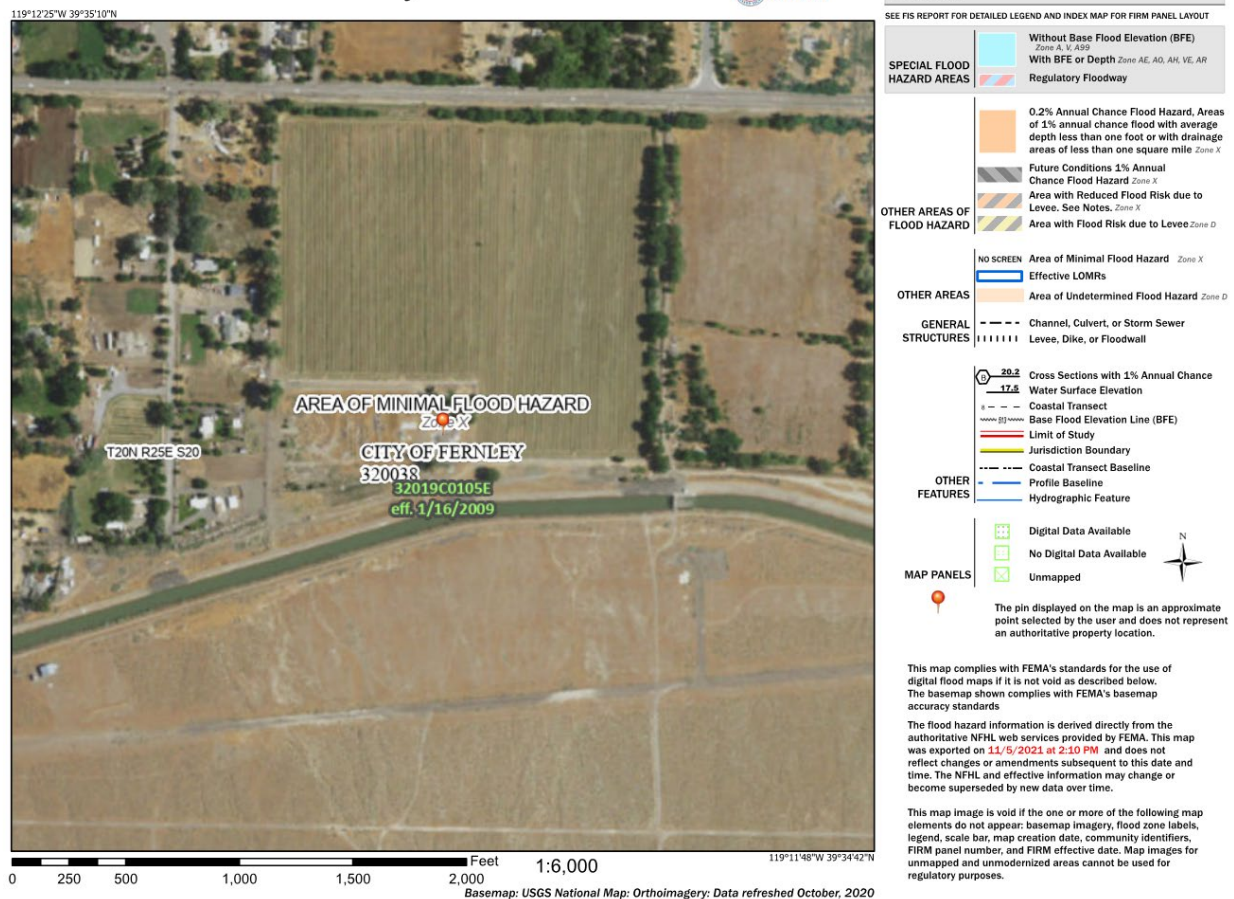
Topography gently slopes from south to north with the southern portion of the site sitting approximately between 30 to 35 feet above the northern portion of the site with an average slope of ~2.7 percent.

The property is currently shown as lying within zone X of the 100-year floodplain according to FEMA FIRM panel 32019-C0105E, Effective October 2020 32001C1732F, 32001C1734F, effective 1/16/2009. See FEMA FIRM panel provided below.

UTILITIES

ELECTRICITY: NV Energy

National Flood Hazard Layer FIRMette



TELEPHONE / CABLE: Multiple providers including AT&T and Charter
INTERNET: AT&T, Charter, and CC Communications

PUBLIC SCHOOLS:

Cottonwood Elementary School	1.5 miles
East Valley Elementary School	3.5 miles
Silverland Middle School	0.4 miles
Fernley High School	4.0 miles

PARKS: Autumn Winds Park is located approximately 1.7 miles east; Ponderosa Park is 0.6 miles to the west from the proposed Creekwood development.

POLICE:

Lyon County Sheriff's Office	3.2 miles
------------------------------	-----------

Creekwood Zone Map Ammendment and Tentative Subdivision Map

FIRE PROTECTION:

North Lyon County Fire Department Station 62 1.9 miles

The NLCFPD has adopted the State amended code standards requiring internal fire suppression devices for all new development that is further than 500 feet from a fire hydrant.

FINDINGS FOR APPROVAL

The Creekwood Commons development project is compliant with the City of Fernley Comprehensive Master Plan dated August 2018. It provides efficient use of land development that will support additional residences looking to move to or stay in Fernley, and provides buffer areas to surrounding rural parcels, thereby fostering the unique character of Fernley.

Development of Creekwood Commons does not impair any natural resources, but instead provides natural resource enhancement to the neighborhood by adding trees, landscaping, a trail, and an open space drainage system. The use of drought tolerant plant material and low water efficiency irrigation technology is a primary feature of this development.

Creekwood Commons promotes land use compatibility and is desirable because it is an infill project which allows for smart growth of public facilities and municipal services. The Development will create and construct new streets, sidewalks, lighting, signage, drainage, sewer, and water infrastructure improvements.

The open space provides recreation amenities for residents, and the trail surrounding the development will provide connectivity to existing and future pedestrian and bicycle City trails.

The development is consistent with the City of Fernley Public Works Design Manual. All local internal streets will be privately maintained by a legal association. A Traffic Study is provided with this document.

Creekwood Commons

...a proposed single-family residential development serving Fernley, Nevada.

Traffic Impact Study

**Prepared by Phelps
Engineering Services Inc.**

10651 Professional Circle, Suite A
Reno, Nevada 89521
Tel: 303-298-1644

June 13, 2023





21203
Creekwood Commons Residential
Development Fernley, NV

Traffic Impact Report
June 13, 2023



6/2/23

PLANNERS

3522 South Emerson Street
Englewood, Colorado 80113
(303) 298-1644 (o)

ENGINEERS

ANALYSTS

10651 Professional Circle, Suite A
Reno, NV 89521

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1.0 Introduction

Creekwood Group, LLC proposes development of the Creekwood Commons Residential Development project on the south side of State Route 828 (Farm District Road) between Brown Lane to the west and Jessica Lane to the east in the City of Fernley, Nevada.

The project consists of a total of 209 housing units including 77 detached single-family units and 132 townhome units. The units are arranged to accommodate open space which includes a central park and on-site pathways. Such an open space arrangement would encourage multi-modal (pedestrian, equestrian, bicycle, transit, vehicle, etc.) trip making, promote healthy lifestyles, preserve the environment, and address the nation's chronic housing shortage. While a combination of single-family detached and single-family attached (townhome) housing would typically have lower trip generating characteristics than an exclusive single-family detached housing land use, the Single-Family Detached Land Use (ITE Land Use Code 210) was used for purposes of projecting the Trip Generation. Therefore, the analysis is conservative. Additionally, the inclusion of pedestrian pathways would not only reduce vehicle trip making, but it would also promote healthy lifestyles.

1.1 Purpose and Scope of this Report

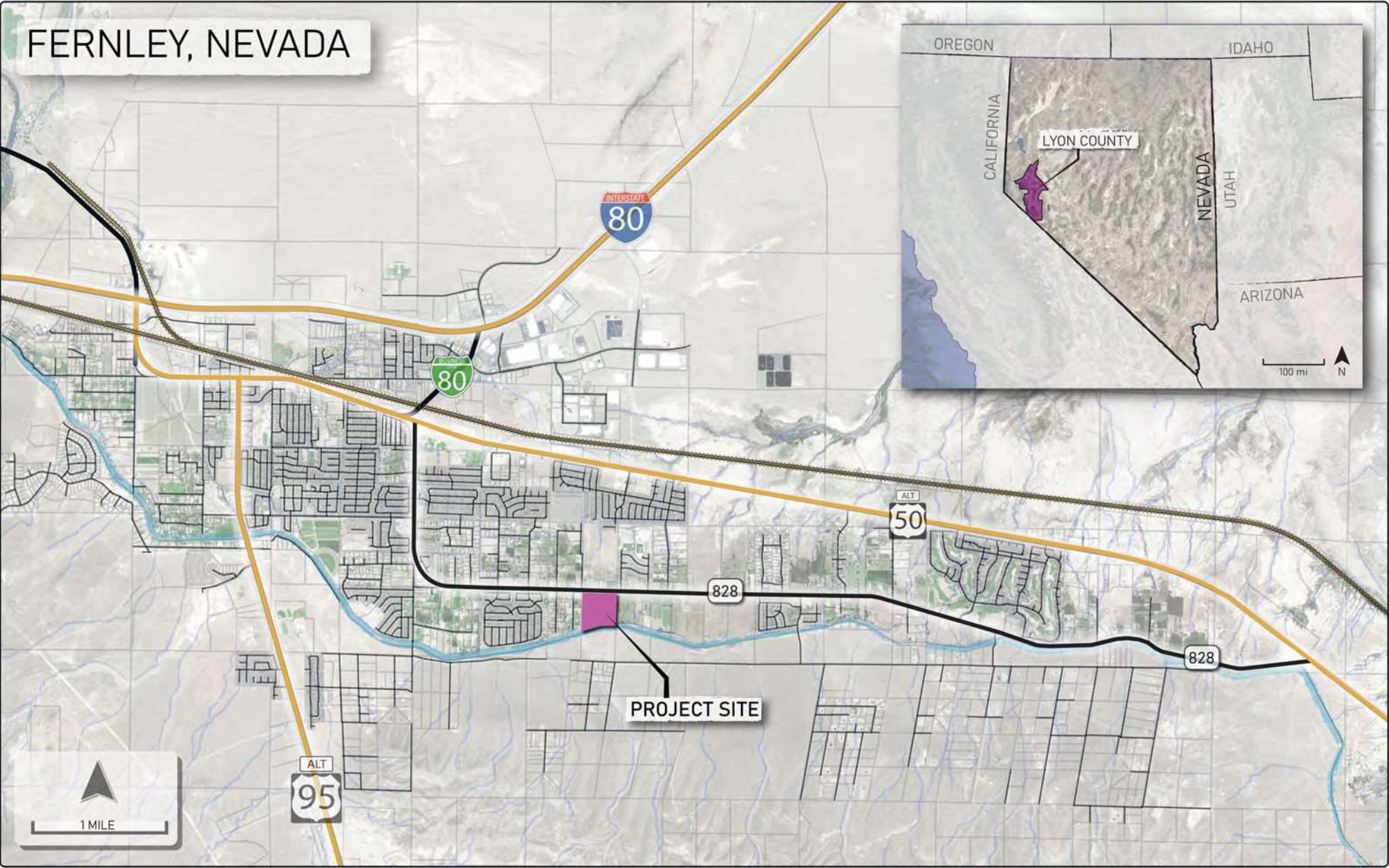
The purpose of this *Traffic Impact Report* is to communicate to the City of Fernley and the Nevada Department of Transportation (NDOT) the near-term and long-term impacts of the project on the six study intersections based on a comparison of the with and without-project operational analysis results. The analysis was conducted using Synchro Version 11 based on *Highway Capacity Manual Sixth Edition (2016)* methodologies. These are the latest software and manual editions available at the time of this study.

The scope of this report includes a discussion of the regional setting, the site plan and land use composition, the existing site and zoning amendment, the traffic study parameters including analysis intersections and study scenarios, the methodology existing setting, the projected trip generation, the near-term impact analysis, the long-term impact analysis, conclusions, and recommendations, and a preliminary Vehicle Miles Traveled (VMT) analysis. Brochures providing photographic representation of some of the key elements of the study are included in Appendix A. The numeric analysis including the progressive traffic volumes at the study intersections; trip generation, distribution, and assignment calculations; and crash, turn lane, and signal warrant analyses are included in Appendix B. The Level of Service (LOS) worksheets are included in Appendix C.

1.2 Regional Setting

Figure 1: Regional and Vicinity Maps identify the project's location within the State of Nevada and the City of Fernley. The project is located approximately 35 miles northeast

FIGURE 1: REGIONAL AND VICINITY MAPS



of Reno within the geographic boundaries of Lyon County. The nearest freeway interchange is Business Route 80 at Interstate 80. Business Route 80 transitions to State Route 828 south of the Roundabout with East Main Street and US Highway 50 (Lincoln Highway).

1.3 Site Plan and Land Use Composition

Figure 2: Site Plan shows the layout of the proposed development including the relative locations of the residential and open space elements. Site access is proposed via two accesses on to State Route 828 to the north and one access to a future extension of Rainbow Lane to the east.

The site encompasses 42.87 acres. The land use breakdown of the 42-acre site is 11.25 acres (26%) of single-family detached housing, 4.96 acres (12%) of single-family attached housing, 7.15 acres (16%) of public right-of-way, 1.65 acres (4%) of alley way, 17.05 acres (40%) of open space and common areas, and 0.84 acres (2%) of parking lots.

An on-site trail network would connect to a proposed trail along Farm District Road to the north and a proposed trail along the Truckee Carson Irrigation District (TCID) Canal to the south. The inclusion of the on-site trail network and its associated connections with the off-site networks would encourage multi-modal activity (walking, bicycling, etc.), thereby promoting healthy lifestyles. On-site roadways would include four-foot-wide sidewalks on both sides of the on-site streets as an additional measure to encourage multi-modal activity and healthy lifestyles, thereby capitalizing on the “complete streets” concept.

The State Route 828 (Farm District Road) streetscape to the north would include a divided roadway with a landscaped median and a landscape greenbelt along the project site frontage to enhance the aesthetic appeal of the roadway while reducing noise. The proposed Creekwood Commons project is designed for a “seamless integration” into the surrounding environment while serving as an “extension to this proposed streetscape”.

1.4 Existing Site and Proposed Zoning Amendment

The existing site within the East Development Area of the City of Fernley is agricultural land on APN 21-303-20. State Route 828 (Farm District Road) borders to the north. The Truckee Carson Irrigation District (TCID) Canal borders the south. Jessica Lane borders to the east. Brown Lane borders to the west.

The *City of Fernley Comprehensive Land Use Map* dated August 2018 identifies the proposed land use designation as Single-Family Residential (SFR) and the current zoning as SF20 (on residential dwelling unit per 20,000 square feet or approximately 0.46 acres, thereby correlating to a maximum density of approximately 2.2 residential dwelling units per acre). This density is insufficient to accommodate the proposed land use configuration, specifically the number of single-family dwelling units. Therefore,

FIGURE 2: SITE PLAN



associated with the development proposal is an amendment to the zoning from SF20 to allow up to 4.88 dwelling units per acre to accommodate the proposed 209 dwelling units.

The land use designation is Single-Family Residential (SFR). This SFR designation is independent of the land use allocation. Although the actual density of 209 dwelling units over just the 31-acre residential and right-of-way portion correlates to a density of 5.8 dwelling units per acre, the overall density including both the residential/right-of-way and open space components (totaling 42 acres) is 4.88 dwelling units per acre. The total site area of 42 acres is used for purposes of zoning. While the introduction of higher-density residential development within a lower-density area can occasionally generate some opposition to residents fearful of change, such an amendment to the zoning to allow for an increase in the density of residential units is essential for addressing the nationwide housing crisis. Specifically, the *Housing Needs Assessment – Churchill County, Nevada* dated September 11, 2021, underscores the severe housing shortage in nearby Churchill County escalated by a lack of new residential construction over the past decade, thereby underscoring the need to aggressively remove the barriers to residential construction. While attached townhome units have a higher relative density than standard residential units, the inclusion of open space increases the political appeal of the neighborhood to surrounding residents. Specifically, such residents perceive the open space as actually reducing the density while preserving more of the environment.

1.5 Scope of the Traffic Impact Study

The proposed scope entails assessing the multi-modal (vehicle, bicycle, pedestrian, equestrian, transit, etc.) transportation impacts of the proposed development on the analysis intersections identified in Table 1 during the study scenarios identified in Table 2 for both the AM (7:00 to 9:00) and PM (4:00 to 6:00) peak hours. The peak hours are defined as the busiest four-consecutive 15-minute intervals during these respective timeframes based on actual turning movement counts conducted in the field.

Table 1: Analysis Intersections

No	North-South Roadway	East-West Roadway
1	BR 80-SR 828	East Main Street/US-50A
2	SR 828	Shadow Lane
3	SR 828	East Jenny's Lane
4	SR 828	Cottonwood Lane
5	North Jenny's Lane	SR 828
6	Site Access	SR 828

Intersection No. 1 (East Main Street/US-50A) is a single-lane yield-controlled roundabout just south of the Union Pacific Railroad (UPRR) Tracks. Yield on Entry and dedicated Right Turn Yield on Entry lanes exist on all approaches. Continental Crosswalks cross the splitter islands on all four approaches. This roundabout is slated for upgrades in the *Draft City of Fernley Transportation Master Plan* that was presented to the Fernley City Council in June 2020. During the Wednesday, November 17, 2021, field investigation,

considerable congestion at the roundabout itself and queuing more than a quarter mile on the southbound and eastbound approaches was noted during the PM peak hour. The future extension of Nevada Pacific Parkway from its current terminus north of the railroad tracks south to US-50A is projected to provide congestion relief at the roundabout by reducing traffic volumes in the vicinity of the roundabout by approximately 30 percent.

The remaining intersections are un-signalized stop controlled.

Intersection No. 2 (Shadow Lane) contains dedicated northbound and southbound left turn lanes and Continental Crosswalks across the north and south legs.

Intersection No. 3 (East Jenny's Lane) contains dedicated northbound and southbound left turn lanes and Continental Crosswalks across the north and south legs.

Intersection No. 4 (Cottonwood Lane) contains a dedicated northbound left turn lane, a dedicated southbound right turn lane, a Continental Crosswalk across the south leg, and a Continental Crosswalk across the west leg at the eastern entrance to Cottonwood Elementary School.

Intersection No. 5 (North Jenny's Lane) contains dedicated southbound left and eastbound left turn lanes and Continental Crosswalks across the north and east legs.

The Level of Service (LOS) analysis explores improvement options for those intersections that fall at or below the Nevada Department of Transportation (NDOT) LOS Standard of D or better.

Table 2: Study Scenarios

No	Description
A	Near-Term
B	Near-Term Plus Project
C	Long-Term
D	Long-Term Plus Project

Appendix A shows the photo brochures including existing conditions, a sample access management strategy, and selected roundabouts.

Appendix B shows the numeric analysis consisting of the generation, distribution, and assignment of development trips; and the calculation of the intersection volumes for each of the four scenarios identified above along with a crash analysis, turn lane warrant analysis, and signal warrant analysis.

Appendix C shows the worksheets from the Synchro analysis that was conducted at each of the six intersections under the four scenarios identified above during the AM and PM peak hours.

2.0 Methodology

The scope entailed conducting capacity evaluations at six study intersections using Level of Service (LOS) based on *Highway Capacity Manual 6th Edition* methodologies. Level of Service is a qualitative measure describing operating conditions at intersections and their perception by intersection users.

Table 3 defines the intersection capacity evaluation criteria at un-signalized intersections by LOS designation as a function of delay along with a narrative description of each designation.

Table 3: Capacity at Un-Signalized Intersections

Designation	Delay (Seconds per Vehicle)	Description
A	0-10	Long, frequent gaps
B	10-15	Shorter, less frequent gaps, no more than 1 vehicle in queue
C	15-25	Less frequent gaps, 2 vehicles in queue
D	25-35	Less frequent gaps, 3 vehicles in queue
E	35-50	Less frequent gaps, 3 or more vehicles in queue
F	50+	Excessive delays waiting for suitable gaps, longer queues

Source: Transportation Research Board, *Highway Capacity Manual 6th Edition*

Table 4 defines the intersection capacity evaluation criteria at signalized intersections by LOS designation as a function of delay along with a narrative description of each designation.

Table 4: Capacity at Signalized Intersections

Designation	Delay (Seconds per Vehicle)	Description
A	0-10	Some slowing on green, but most vehicles do not stop
B	10-20	Some vehicles stop, but most do not
C	20-35	More vehicles stop, but many still pass through without stopping
D	35-55	Most vehicles stop
E	55-80	Almost all vehicles stop, but can clear the intersection within one cycle
F	80+	All vehicles stop, and some may not be able to clear the intersection within one cycle

Source: Transportation Research Board, *Highway Capacity Manual 6th Edition*

According to the City of Fernley and the Nevada Department of Transportation, the Level of Service Standard is “D” or better. When operational analyses were conducted showing results falling below this standard, measures were recommended to elevate operations to acceptable levels.

3.0 Existing Setting

The existing transportation system and topographical conditions were evaluated by studying satellite imagery and conducting a field investigation of the site and the study area on Tuesday, October 19, 2021. This was followed by a low-level field investigation conducted on Wednesday, November 17, 2021.

Figure 3: Existing Setting defines the existing roadways, lane configurations, and intersection geometrics.

Table 5 describes the key roadways within the existing setting.

Table 3: Existing Setting: Key Roadways

Roadway	Divided or Un-Divided	Lanes	Posted Speed	Functional Classification
Alt US-50 East of Business Route 80 (BR 80)	Divided	4	65	Principal Arterial
Business Route 80 (BR 80)	Divided	2	55	Minor Arterial
Main St (SR 427, Alt US-50) West of BR 80 and SR 828	Divided	4	55	Minor Arterial
State Route 828 (West of North Jenny's Lane)	Divided	2	35	Minor Arterial
State Route 828 (East of North Jenny's Lane)	Un-Divided	3	55	Minor Arterial
Shadow Lane	Un-Divided	2	25	Minor Collector
East Jenny's Lane	Un-Divided	2	25	Minor Collector
Cottonwood Lane	Un-Divided	2	25	Minor Collector
North Jenny's Lane	Un-Divided	2	25	Minor Collector
South Jenny's Lane	Divided	2	25	Minor Collector

Source: City of Fernley Comprehensive Master Plan (August 2018)

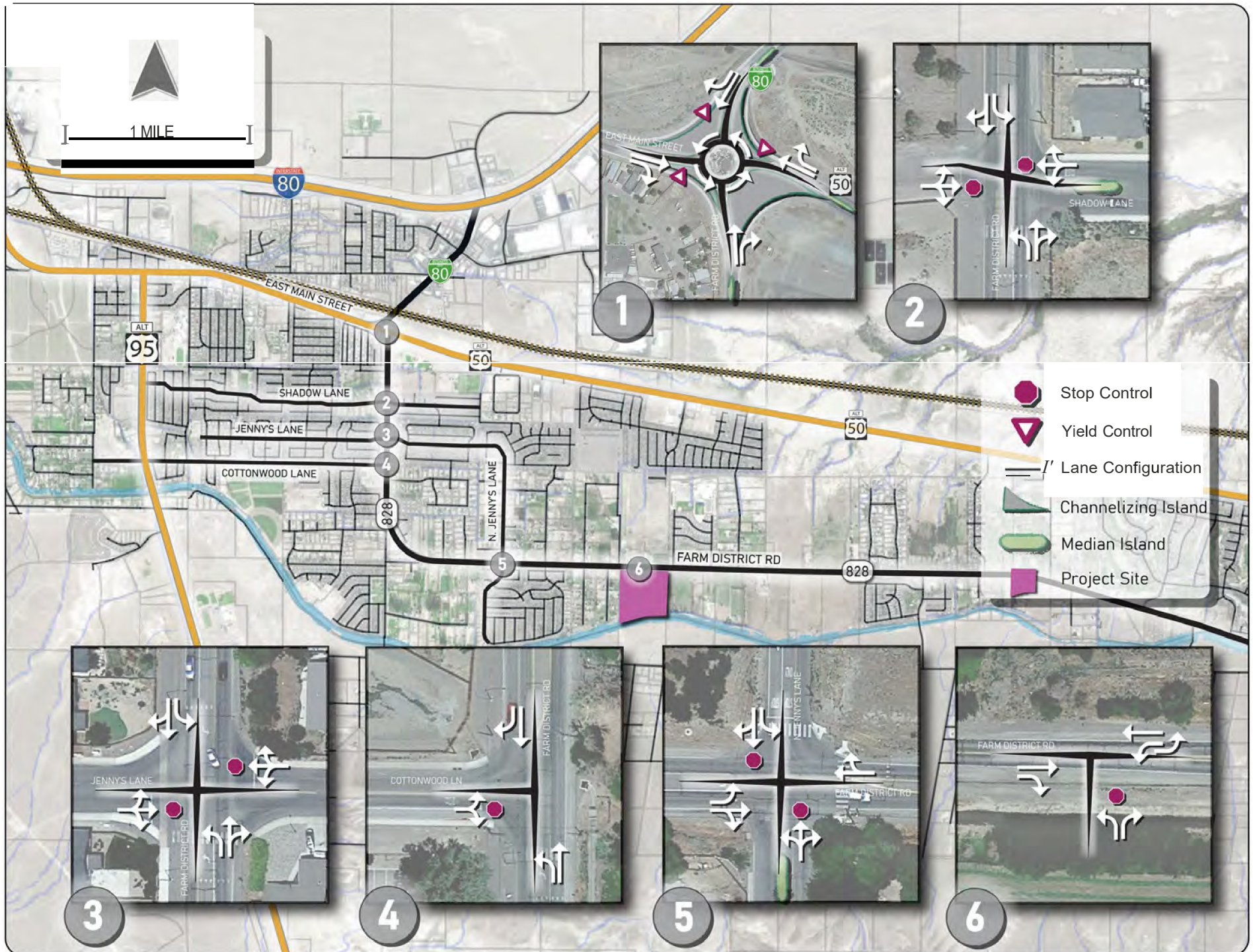
Source: Nevada DOT Roadway Functional Classification, Fernley, Lyon County, Nevada (2017)

State Route 828 west of Farm District Road includes streetlighting and Class I (Trail) Bicycle Facilities on the west side of the street.

State Route 828/Farm District Road includes a wide gravel shoulder on the south side of the street along the site frontage to accommodate future widening which would include a greenbelt to accommodate a network of meandering asphalt trails. A paved pathway currently exists out to Rainbow Lane.

Cottonwood Lane includes Class II (Lane) Bicycle Facilities on both the north and south sides of the street.

FIGURE 3: EXISTING SETTING



4.0 Near-Term Impact Analysis

The Near-Term Impact Analysis was conducted to assess the impact of the project relative to existing conditions by adding the project volumes to the existing volumes (volumes without project) for each of the 6 intersections, calculating the Level of Service (LOS) for with and without-project conditions based on the methodology described in Section 2, and conducting a side-by-side comparison of intersection operations. Calculating the project volumes entailed determining the number of vehicle trips generated by the project (trip generation), evaluating how the trips would disperse throughout the study area (trip distribution), and assigning the trips to individual turning movements at each of the six study intersections (trip assignment).

4.1 Volumes without Project

Figure 4: Near-Term Volumes shows the AM (7:00 to 9:00) and PM (4:00 to 6:00) peak hour traffic volumes based on the busiest four consecutive fifteen-minute intervals during these timeframes. These volumes were obtained on Tuesday, January 4, 2022, from National Data and Surveying, and are shown in tabular form in Appendix B.

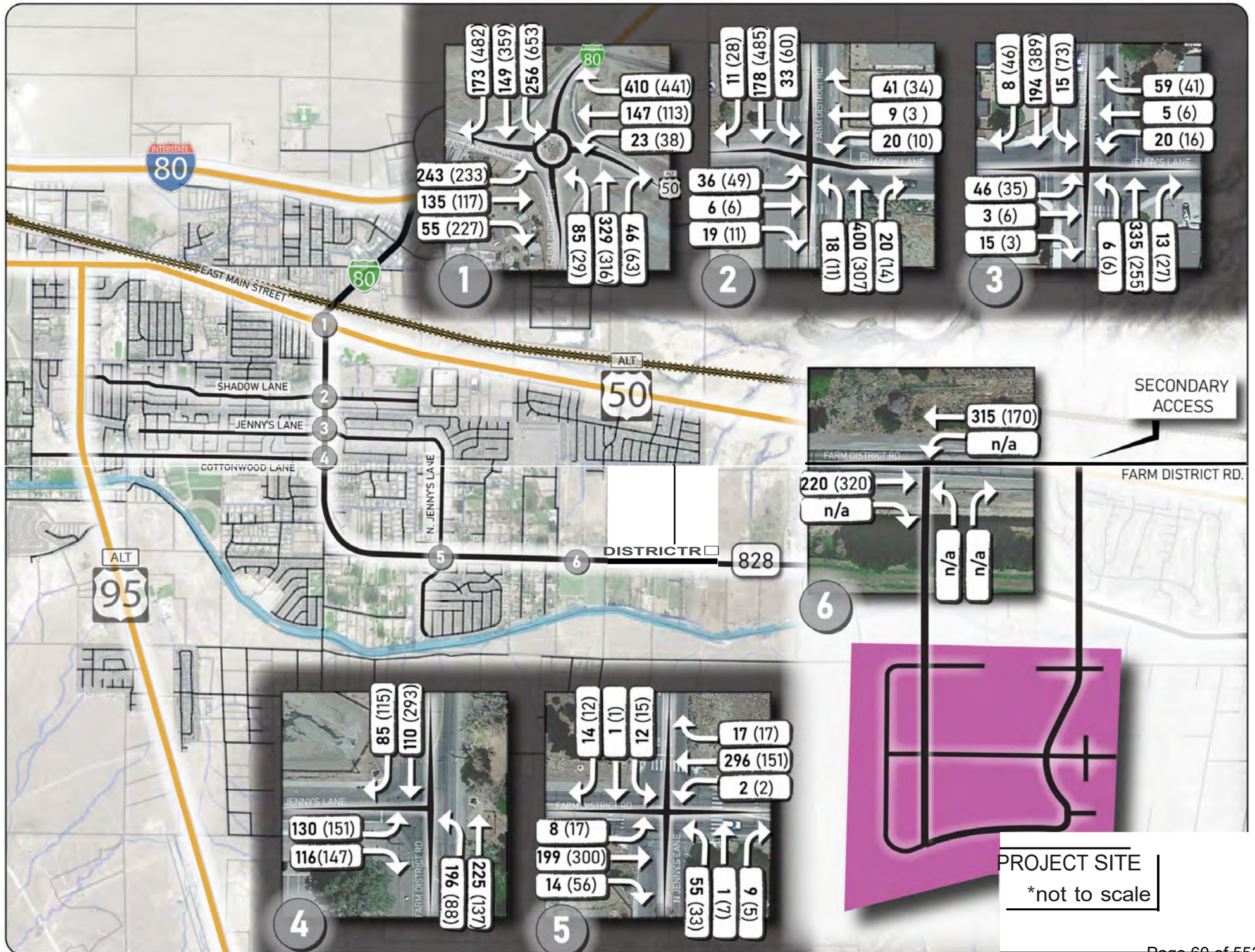
The Nevada Department of Transportation (NDOT) made crash data available for Intersections 1 (Main St-US-50A), 2 (Shadow Lane), 3 (East Jenny's Lane), 4 (Cottonwood Lane), and 5 (North Jenny's Lane) along State Route 828 for Calendar Years 2017, 2018, and 2019. Severity, Type, and Cause Analyses were conducted, and rates were calculated based on Million Entering Vehicles per year (MEV). Injury crashes were reported at Intersections 1, 2, and 5 with the crashes at the remaining intersections being limited to Property Damage Only (PDO). Predominant crash types were Rear-End at Intersection No. 1, and Angle at the remaining intersections. Predominant causes were Following Too Closely at Intersection No. 1 and Failure to Yield the Right of Way at the remaining intersections. Rates ranged from 0.303 per MEV at Intersection No. 3 to 0.535 per MEV at Intersection No. 1. While rates less than 1 indicate satisfactory operations, the City of Fernley and NDOT may want to explore grant funding options for redesigning and reconstructing the roundabout to modern FHWA standards per the brochures in Appendix A to reduce the number of rear-end crashes. For more details on the crash analysis, see Appendix B.

4.2 Trip Generation

A vehicle trip is defined as a trip whose primary purpose is to visit the site. Such trips include resident, guest, service, and delivery, among other types.

Trip generation was calculated based on rates published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition (2021)*. Specifically, the number of trips was projected by multiplying the rates by an individual independent variable quantity. For example, calculating the total weekday trips for the Single-Family Detached Housing Land Use (ITE Land Use Code 210) based on 209 Dwelling Units entails multiplying the independent variable quantity of 209 Dwelling Units by the rate of 9.43 Trips per Dwelling

Figure 4: Near-Term Traffic Volumes



Unit to yield 1,971 Weekday Trips.

Table 6 shows the results of the trip generation analysis based on the Single-Family Detached Housing Land Use. Rates and trips are shown in more detail in **Appendix B**.

Table 6: Trip Generation

Description	Weekday	AM Peak Hour			PM Peak Hour		
	Total	Enter	Exit	Total	Enter	Exit	Total
Single-Family Detached Housing (210) based on 209 Dwelling Units							
Rates	9.43	0.18	0.52	0.70	0.59	0.35	0.94
Trips	1971	38	109	146	123	73	196

Source: Institute of Transportation Engineers (ITE), *Trip Generation Manual*, 11th Edition (2021)

According to Table 6, the project would generate 1,971 vehicle trips during an average weekday, 146 vehicle trips during the AM peak hour, and 196 vehicle trips during the PM peak hour.

4.3 Trip Distribution

Two trip distribution analyses were conducted to evaluate how the trips would disperse throughout the study area between the project and the five gates (points of entry to or exit from the study network). The first was a near-term analysis based on the near-term roadway network as discussed in this section. The second was a long-term analysis, discussed in the next section, based on 5-year, 10-year, and 20-year improvements/additions to the transportation network as indicated in the *Draft Transportation Master Plan* presented to the Fernley City Council on June 3, 2020.

The near-term trip distribution percentages were determined based on the following assumptions:

1. The trips would be characteristic of residential trips in general, namely strong familiarity with the local transportation network and attracted to local services. Such services would include, but are not limited to, shopping centers, grocery stores, schools, employment, parks, and recreation.
2. Primary retail opportunities are located to the north within downtown, along Main Street, and near the interchanges with I-80 with the most preferred routes branching off Farm District Road to the west of the project.
3. Primary educational opportunities are located near SR 828 at Cottonwood to the northwest, US-95A to the southwest, and the junction of Business Route 50 and Farm District Road to the east.
4. Primary employment opportunities are located within downtown, in the hospitality and industrial developments along Main Street and the I-80 corridor through town, and along I-80 to the west including the Greater Reno/Sparks population center.

5. Primary recreation opportunities include the parks to the north and the Pyramid Lake Recreation Area to the northwest.

Appendix B provides further elaboration on the trip distribution analysis including the gate (points of entry to or from the study network) percentages for each of the three distinct analyses.

4.4 Trip Assignment

Trip assignment is calculated by multiplying the trip generation values from Table 6 by the trip distribution percentages described above. The resulting trip assignment values are proportioned among each of the gates and assigned to individual turning movements at each of the study intersections.

Figure 5: Near-Term Trip Distribution shows the near-term trip distribution percentages for each of the gates (points of entry to or exit from the study network).

Figure 6: Near-Term Trip Assignment shows the trip assignment values for individual turning movements at each of the analysis intersections.

These percentages and values are shown in tabular form in **Appendix B**.

4.5 Volumes with Project

Figure 7: Near-Term Plus Project Volumes shows the with-project traffic volumes at each of the study intersections by adding the Figure 6 trip assignment volumes to the Figure 4 existing traffic volumes.

The need for turn lanes was evaluated at the two site access intersections at SR 828 to the north under near-term conditions. These two site accesses would be located approximately 600 feet apart to balance the needs for complying with NDOT Access Management requirements and providing redundancy within the on-site transportation network. The need for left-turn (Table 4-12) and right-turn (Table 4-16) lanes was evaluated based on the respective tables in the NDOT Access Management System and Standards dated 2017. According to analysis, left turn and right turn lanes are warranted at both accesses under near-term conditions, and are therefore recommended. For more information on the turn lane warrant analysis, see Appendix B.

The need for signalization was evaluated at the two site access intersections at SR 828 to the north under near-term conditions based on the Peak Hour Warrant in the Manual on Uniform Traffic Control Devices (MUTCD) Figure 4C-4. According to the analysis, signals are not warranted at either intersection; Therefore, signalization is not projected to be needed under near-term conditions. For more information on the signal warrant analysis, see Appendix B.

FIGURE 5: NEAR-TERM TRIP DISTRIBUTION

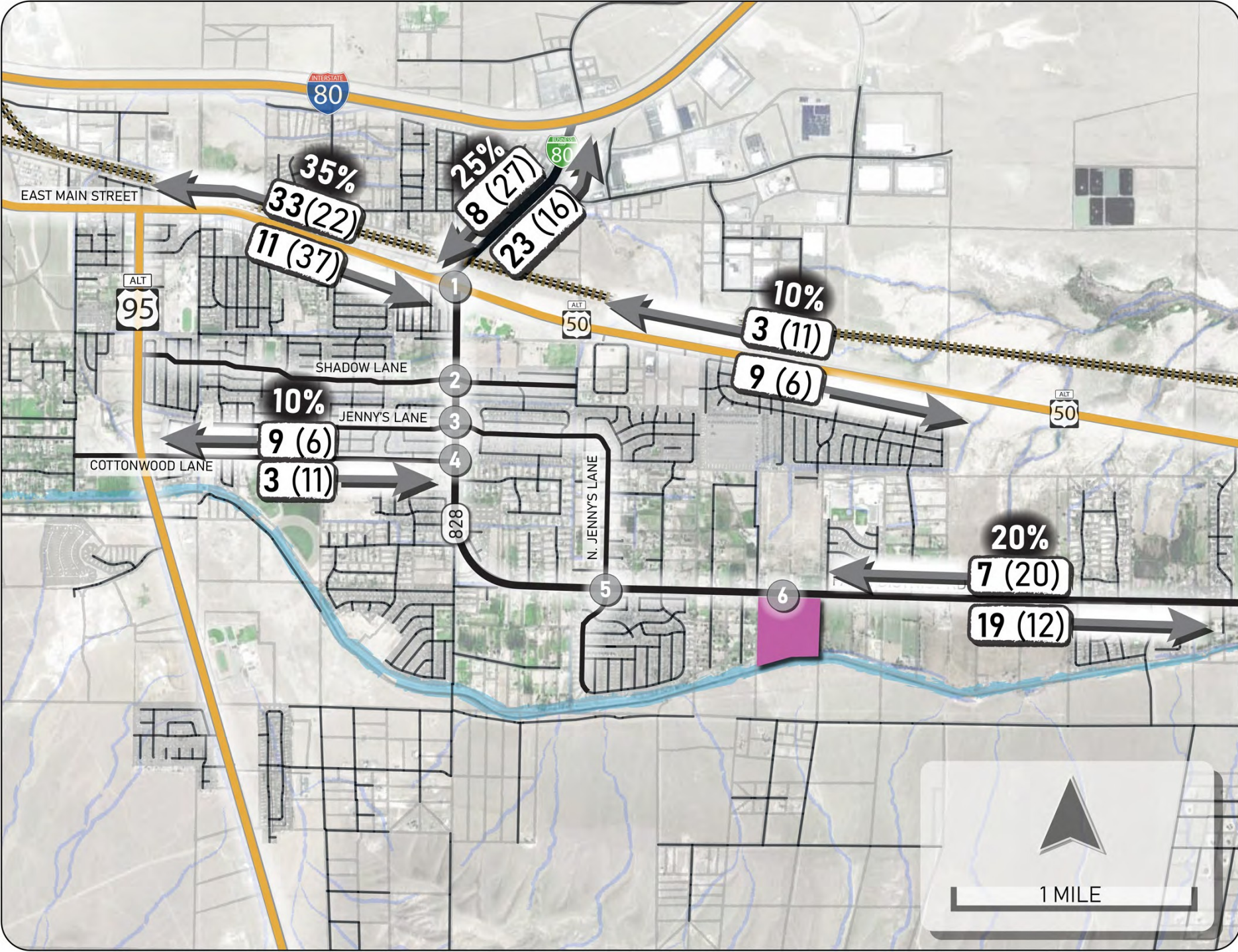


FIGURE 6: NEAR-TERM TRIP ASSIGNMENT

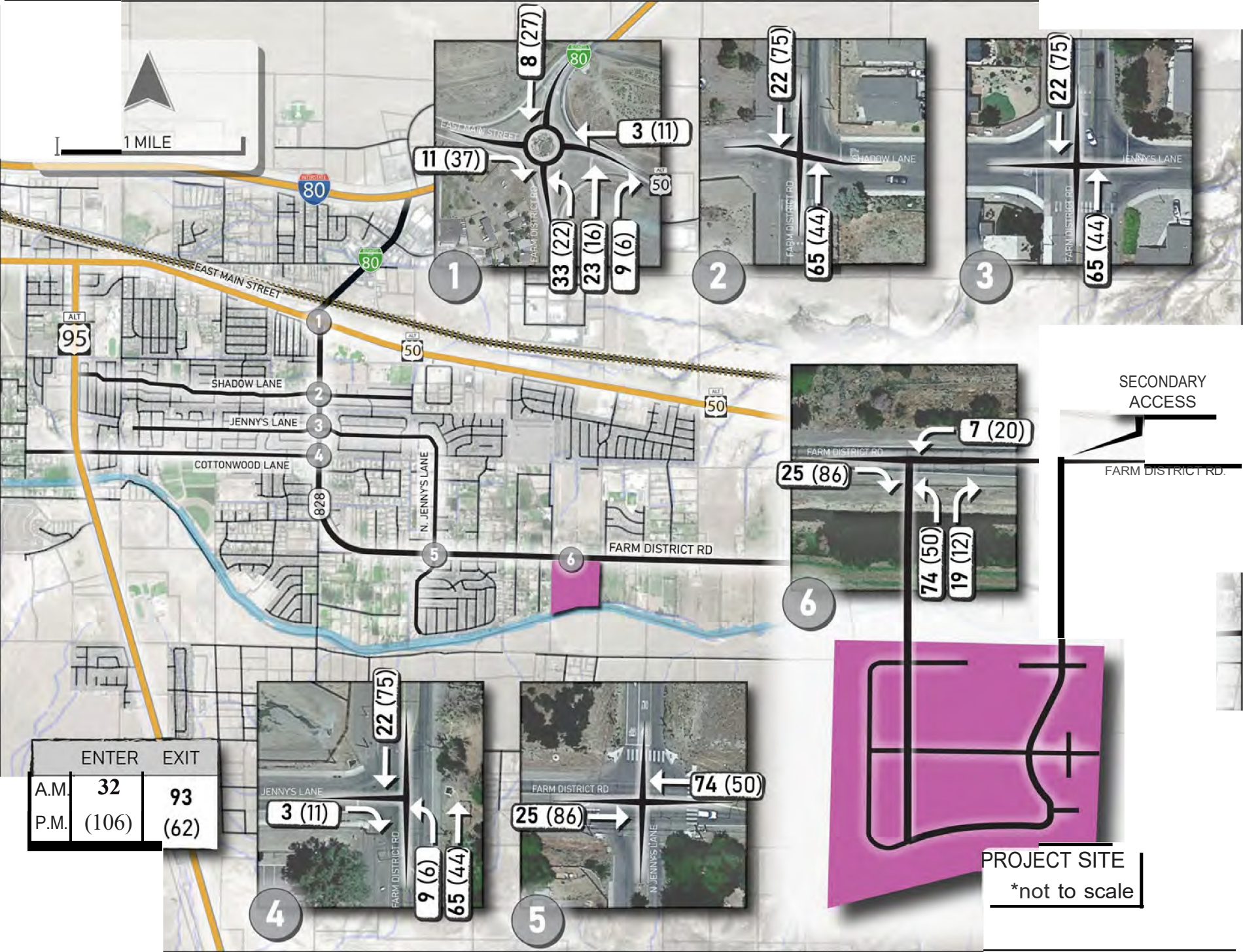
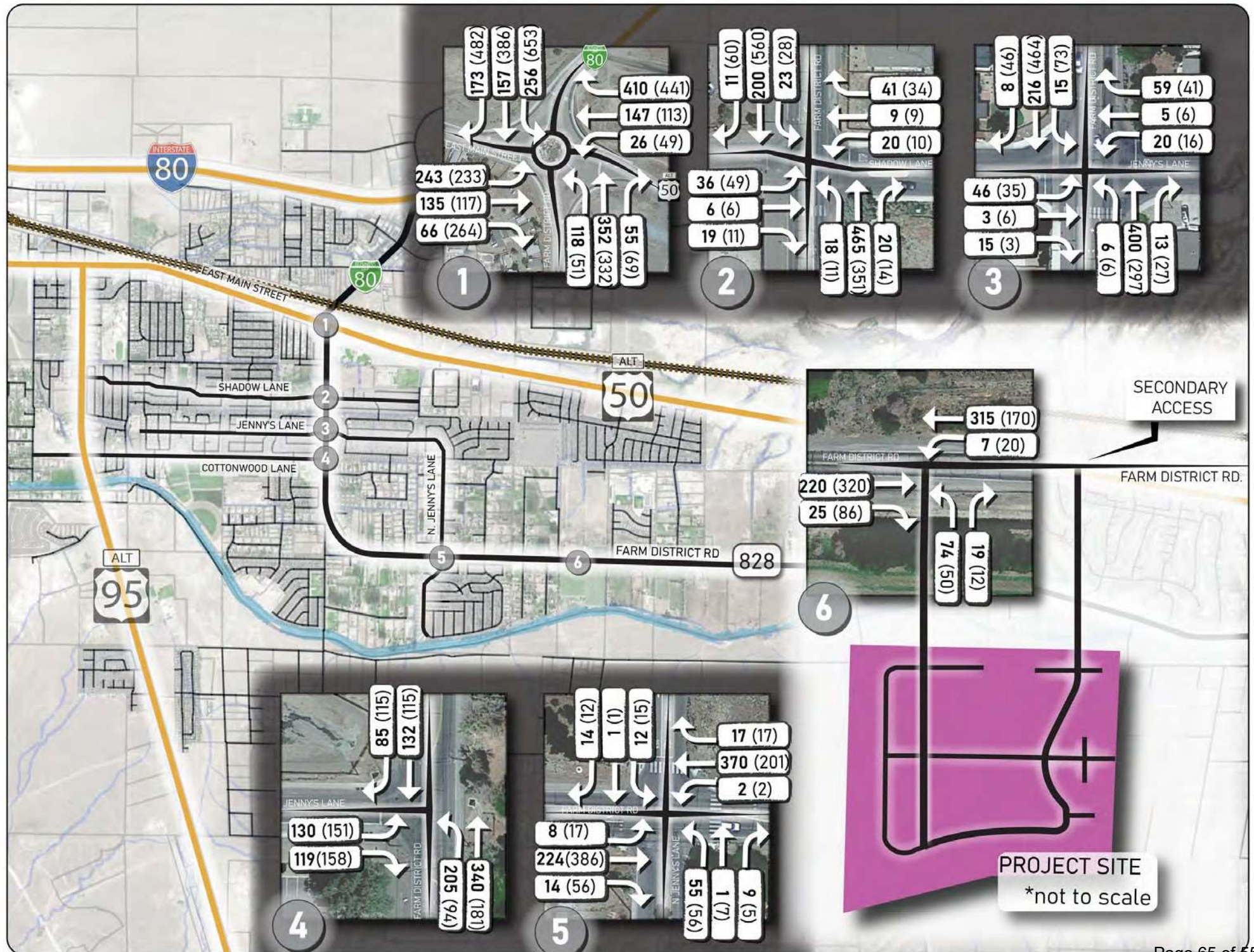


Figure 7: Near-Term Plus Project Traffic Volumes



4.6 Impact on Existing Intersection Operations

Appendices C-1 (AM) and **C-2 (PM)** contain the calculation reports for near-term intersection operations without the project. **Appendices C-3 (AM)** and **C-4 (PM)** contain the calculation reports for near-term intersection operations with the project. These calculations are based on the *Highway Capacity Manual* methodology described in Section 2.

Peak Hour Factors are based on the actual intersection counts.

Table 7 shows the near-term impact of the project on the study intersections.

Table 7: Near-Term Project Impact on Intersection Operations

	Without Project		With Project	
	AM	PM	AM	PM
1: BR 80-SR 828 at Main St – US-50A	A 8.7 (EB)	C 24.4 (EB)	A 8.7 (EB)	D 25.9 (EB)
	A 2.5 (WB)	A 1.9 (WB)	A 2.8 (WB)	A 2.1 (WB)
	C 15.0 (NB)	D 28.4 (NB)	C 18.3 (NB)	E 36.7 (NB)
	A 5.5 (SB)	C 22.2 (SB)	A 6.0 (SB)	D 30.3 (SB)
2: SR 828 at Shadow Lane	C 19.7 (EB)	D 28.5 (EB)	C 23.2 (EB)	D 33.0 (EB)
	C 16.5 (WB)	B 14.6 (WB)	C 18.7 (WB)	C 17.0 (WB)
3: SR 828 at East Jenny's Lane	C 19.3 (EB)	C 23.5 (EB)	C 22.8 (EB)	D 28.8 (EB)
	B 14.2 (WB)	B 14.6 (WB)	C 15.9 (WB)	C 16.4 (WB)
4: SR 828 at Cottonwood Lane	D 34.4 (EB)	C 24.7 (EB)	F 52.6 (EB)	C 17.7 (EB)
5: North Jenny's Lane at SR 828	C 18.3 (NB)	B 14.1 (NB)	C 22.4 (NB)	C 17.9 (NB)
	B 13.4 (SB)	B 11.9 (SB)	C 15.1 (SB)	B 13.4 (SB)
6: Site Access at SR 828	--	--	B 12.4 (NB)	B 12.0 (NB)

Source: Trafficware, *Synchro 11*

Source: Transportation Research Board, *Highway Capacity Manual, 6th Edition*

According to Table 7, all intersections would operate acceptably under both without and with project conditions except the northbound approach to Intersection No. 1 during the PM peak hour and the eastbound approach at Intersection No. 4 during the AM peak hour. Traffic volume reductions at the roundabout from the implementation of the Wadsworth Bypass to the west and the southward extension of Nevada Pacific Parkway to US-50A to the south would elevate operations to an acceptable level for this approach. The addition of a dedicated eastbound right turn lane at Intersection No. 4 and associated roadway improvements as called for in the City of Fernley Transportation Master Plan would elevate operations to acceptable levels.

5.0 Long-Term Impact Analysis

The Long-Term Impact Analysis was conducted to assess the project's impact on the 6 study intersections during calendar year 2041 using the same methodology as described in Section 4 for the Near-Term Impact Analysis, except that a compounded annual growth rate was applied to the near-term without-project traffic volumes to obtain the long-term without project volumes.

5.1 Volumes without Project Volumes

Figure 8: Long-Term Volumes shows the future without project traffic volumes obtained by applying a compounded annual growth rate of 1.2 percent to the near-term without project volumes from the Nevada DOT Annual Traffic Report for Count Station 019033 on State Route 828 for Intersections 3 to 6. A 30 percent reduction was applied to Intersections 1 and 2 to account for the addition of the Wadsworth Bypass to the southwest and the extension of the Nevada Pacific Parkway southward to US-50A.

5.2 Trip Generation

For analysis purposes, the same trip generation values calculated in Section 4 were applied to the future impact analysis to assess the impact of the project during calendar year 2041.

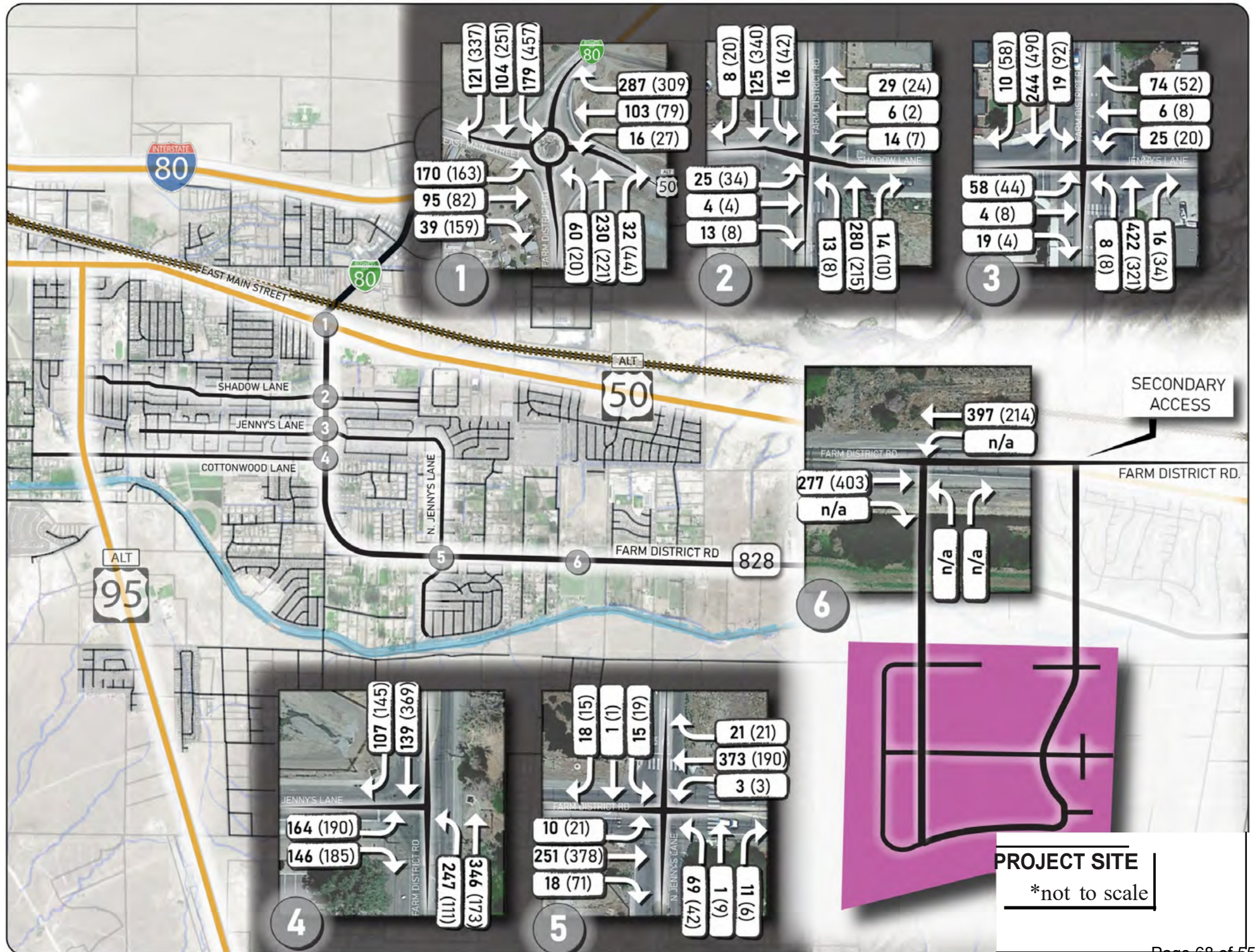
5.3 Distribution

The long-term trip distribution percentages for calendar year 2041 are based on the same assumptions as in the near-term analysis except with the inclusion of 5-year, 10-year, and 20-year improvements and additions the transportation network thereby more evenly dispersing the trips over a broader area. Such improvements are indicated in the *Draft Transportation Master Plan* presented to the Fernley City Council on June 3, 2020.

Five-year improvements/additions are as follows:

1. Spot improvement at the Main/I-80 Interchange
2. Spot improvements in the vicinity of US-95A at Cottonwood
3. Corridor improvements along Business Route 80 between Main and I-80
4. Spot improvement at the Roundabout at Business Route 80 and East Main Street
5. Spot improvements at US-95A and US-50A
6. Corridor improvements at Nevada Pacific Parkway, specifically the extension south across the railroad tracks to intersect US-50A

Figure 8: Long-Term Traffic Volumes



7. Corridor improvements to SR 828 west of US-50A to the east

Ten-year improvements/additions are as follows:

1. Bridges across the Truckee-Carson Irrigation Canal including between SR 828 and Desert Shadows Lane just east of Jessica Lane
2. Corridor improvements to US-95A between Sage Street and Main Street across the Truckee-Carson Irrigation Canal
3. The addition of Desert Shadows Lane between US-95A and US-50A
4. Corridor improvements to SR 427 between the Washoe/Lyon County Line and US-95A

Twenty-year improvements/additions are as follows:

1. The addition of the North Fernley Roadway between SR 427 and the Nevada Pacific Parkway/I-80 Interchange
2. The addition of the Western Bypass between I-80 and US-95A/Desert Shadows Lane
3. Corridor improvements to Cottonwood Lane between US-95A and SR 828
4. Corridor improvements to SR 828 between the Roundabout at East Main Street/US-50A and Red Rock Road (connecting north to US-50A)
5. The addition of the I-11 Interchange with I-80 to the east
6. Spot Improvement at Vine St/I-80

Appendix B provides further elaboration on the trip distribution analysis including the gate percentages for the long-term analysis.

5.4 Trip Assignment

Trip assignment is calculated by multiplying the trip generation values from Table 4 by the trip distribution percentages described above.

Figure 9: Long-Term Trip Distribution shows the long-term trip distribution percentages for each of the gates.

Figure 10: Long-Term Trip Assignment shows the long-term trip assignment values for individual turning movements at each of the analysis intersections.

FIGURE 9: LONG-TERM TRIP DISTRIBUTION

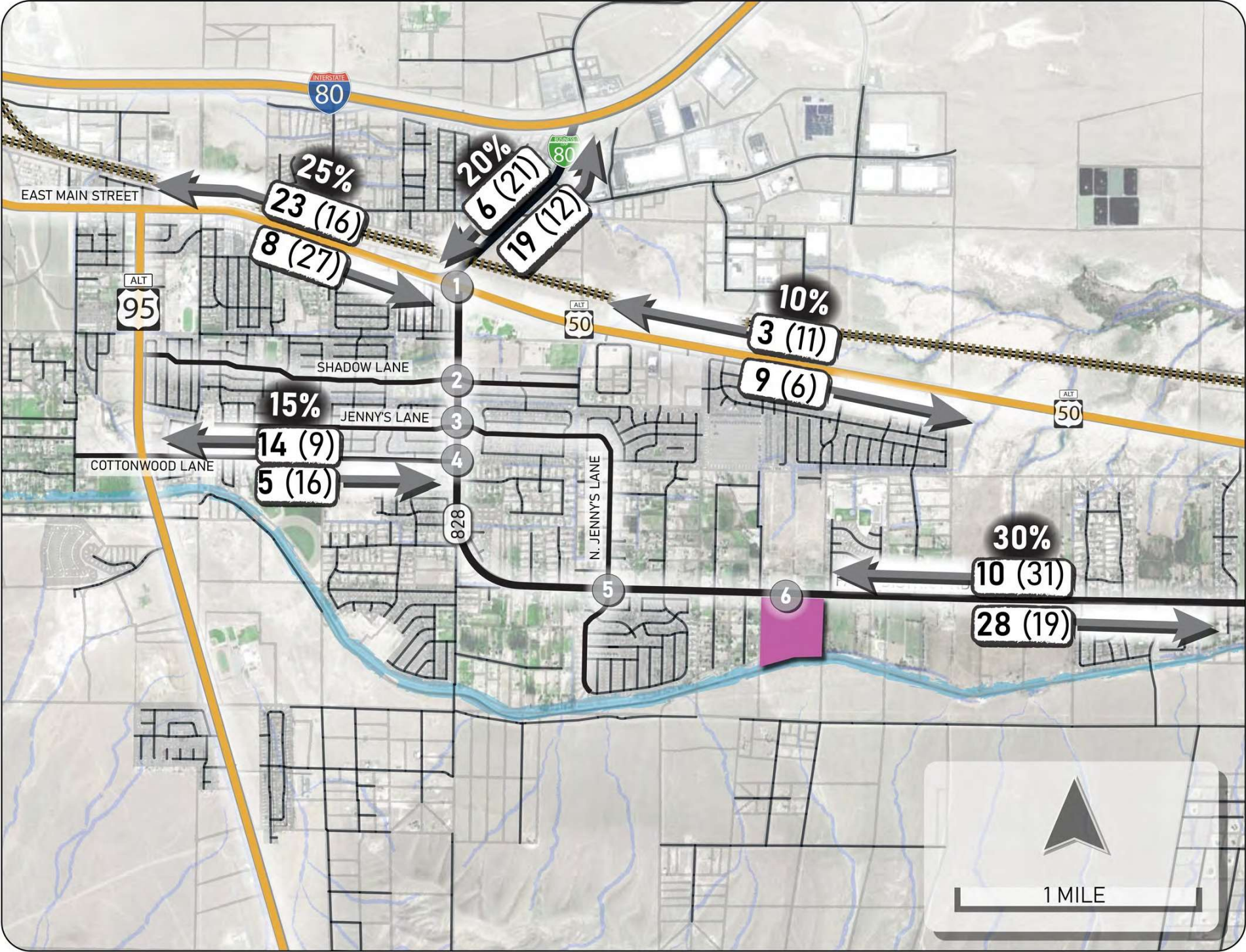
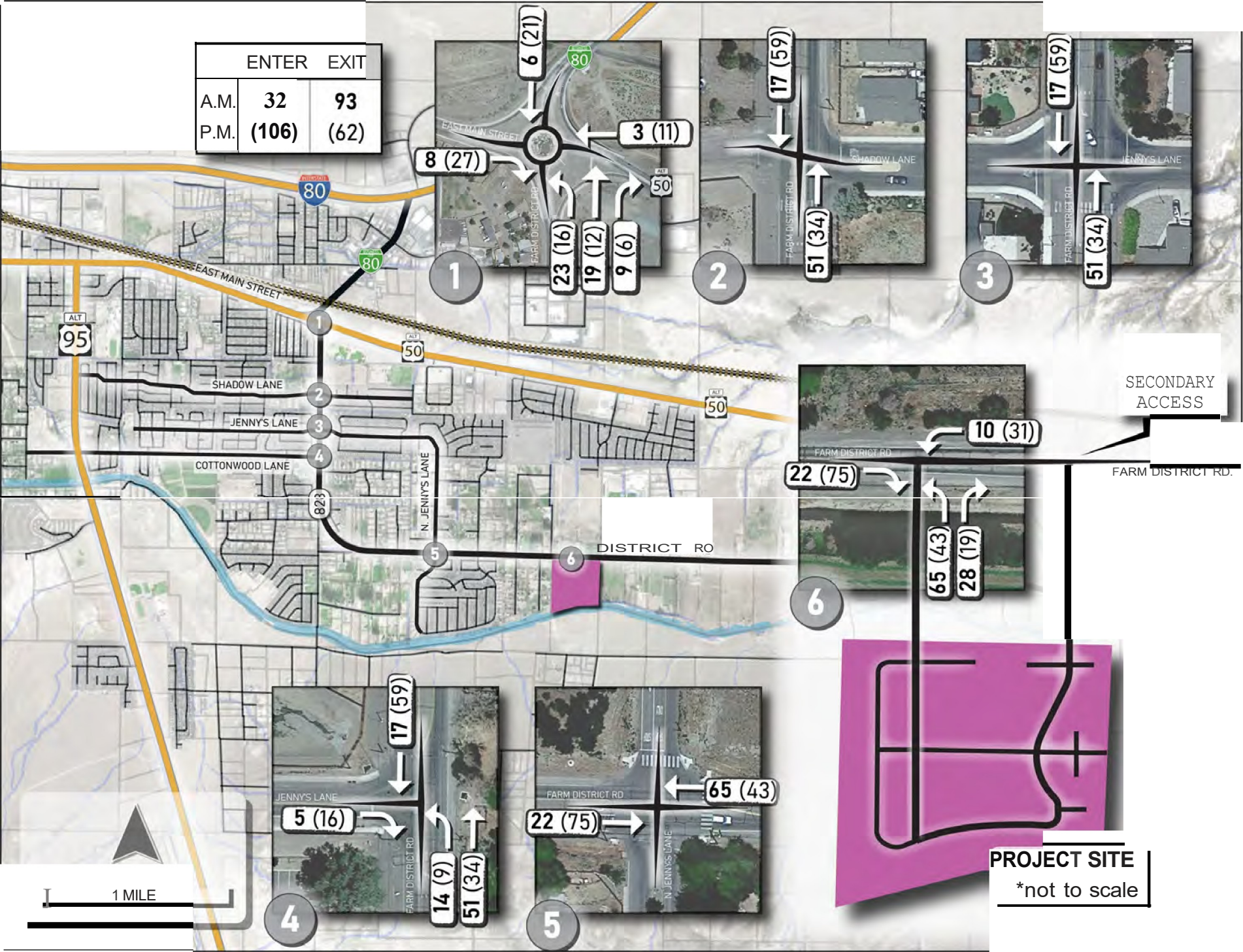


FIGURE 10: LONG-TERM TRIP ASSIGNMENT



These percentages and values are shown in tabular form in **Appendix B**.

5.5 Volumes with Project

Figure 11: Long-Term Plus Project Traffic Volumes shows the with-project traffic volumes obtained by adding the project-generated traffic volumes to the long-term without-project traffic volumes.

The need for turn lanes was evaluated at the two site access intersections at SR 828 to the north under long-term conditions. These two site accesses would be located approximately 600 feet apart to balance the needs for complying with NDOT Access Management requirements and providing redundancy within the on-site transportation network. The need for left-turn (Table 4-12) and right-turn (Table 4-16) lanes was evaluated based on the respective tables in the NDOT Access Management System and Standards dated 2017. According to analysis, left turn and right turn lanes are warranted at both accesses under long-term conditions, and are therefore recommended. For more information on the turn lane warrant analysis, see Appendix B.

The need for signalization was evaluated at the two site access intersections at SR 828 to the north under long-term conditions based on the Peak Hour Warrant in the Manual on Uniform Traffic Control Devices (MUTCD) Figure 4C-4. According to the analysis, signals are not warranted at either intersection. Therefore, signalization is not projected to be needed under long-term conditions. For more information on the signal warrant analysis, see Appendix B.

5.6 Impacts on Future Intersection Operations

Appendices C-5 (AM) and **C-6 (PM)** contain the calculation reports for long-term intersection operations without the project. **Appendices C-7 (AM)** and **C-8 (PM)** contain the calculation reports for long-term intersection operations with the project. These calculations are based on the Highway Capacity Manual methodology described in Section 2 just like in the existing impact analysis, except that the Peak Hour Factor is the default value of 0.92.

Figure 11: Long-Term Plus Project Traffic Volumes

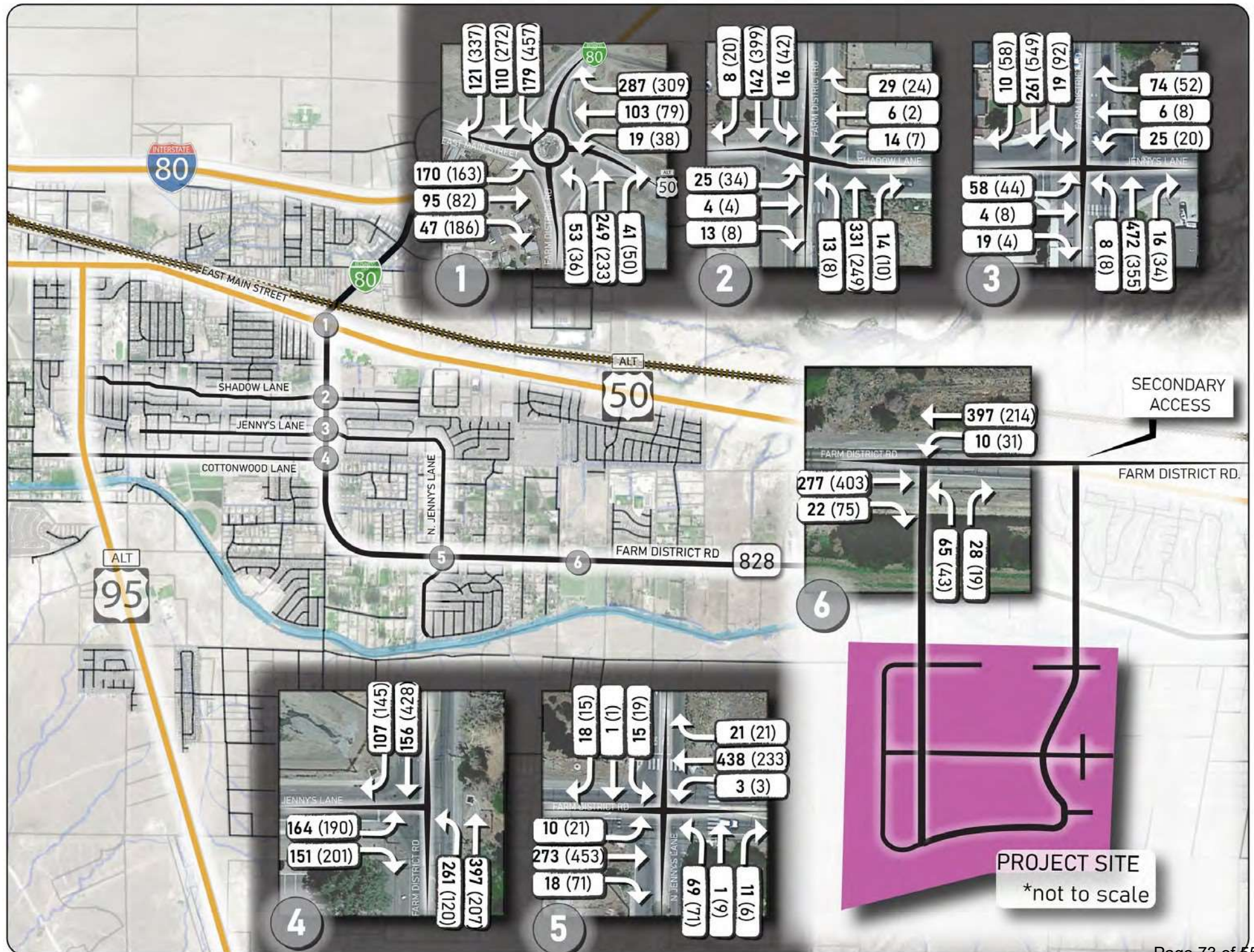


Table 8 shows the long-term impact of the project on the study intersections.

Table 8: Long-Term Project Impact on Intersection Operations

	Without Project		With Project	
	AM	PM	AM	PM
1: BR 80-SR 828 at Main St – US-50A	A 5.9 (EB) A 1.8 (WB) A 8.1 (NB) A 4.1 (SB)	A 8.1 (EB) A 1.4 (WB) B 10.4 (NB) A 8.1 (SB)	A 5.9 (EB) A 1.9 (WB) A 8.9 (NB) A 4.4 (SB)	A 8.1 (EB) A 1.6 (WB) B 11.4 (NB) A 9.3 (SB)
2: SR 828 at Shadow Lane	B 12.7 (EB) B 11.8 (WB)	C 17.4 (EB) B 11.8 (WB)	B 13.6 (EB) B 12.6 (WB)	C 17.8 (EB) B 12.2 (WB)
3: SR 828 at East Jenny’s Lane	C 23.0 (EB) C 15.7 (WB)	E 44.9 (EB) C 20.7 (WB)	D 26.5 (EB) C 17.1 (WB)	E 46.4 (EB) C 22.1 (WB)
4: SR 828 at Cottonwood Lane	F 114.0 (EB)	F 77.3 (EB)	F 178.9 (EB)	F 79.2 (EB)
5: North Jenny’s Lane at SR 828	C 18.9 (NB) B 13.5 (SB)	C 17.8 (NB) B 13.7 (SB)	C 21.8 (NB) B 14.8 (SB)	C 20.8 (NB) B 15.1 (SB)
6: Site Access at SR 828	--	--	B 13.3 (NB)	B 14.1 (NB)

Source: Trafficware, *Synchro 11*

Source: Transportation Research Board, *Highway Capacity Manual, 6th Edition*

According to Table 8, all intersections would continue to operate acceptably under without and with project conditions except for the eastbound approach to Intersection No. 3 during the PM peak hour and the eastbound approach to Intersection No. 4 during both peak hours. A Dedicated Eastbound Right Turn Lane at Intersection No. 4 and improvements to Cottonwood Lane as called for in the City of Fernley Transportation Master Plan would elevate operations to acceptable levels.

6.0 Findings and Recommendations

6.1 Findings

Findings from the near-term impact analysis are as follows:

1. All approaches to the study intersections would operate acceptably except the northbound approach to SR 828/BR 80 at East Main St/US-50A during the PM peak hour and the eastbound approach to SR 828 at Cottonwood Lane during the AM peak hour.
2. Volume reductions at SR 828/BR 80 at East Main St/US-50A associated with the construction of the Wadsworth Bypass to the west and the southward extension of Nevada Pacific Parkway to US-50A would elevate operations to acceptable levels.
3. The addition of a Dedicated Right Turn Lane at SR 828 and Cottonwood Lane and the implementation of improvements along Cottonwood Lane associated with the implementation of the City of Fernley Master Plan would elevate operations to acceptable levels.
4. The project would not have a significant adverse impact on the surrounding transportation network.

Findings from the long-term impact analysis are as follows:

1. All approaches to the study intersections would continue to operate acceptably except the eastbound approach to SR 828 at East Jenny's Lane during the PM peak hour and the eastbound approach to SR 828 at Cottonwood Lane during the AM peak hour.
2. The addition of a Dedicated Right Turn Lane at SR 828 and Cottonwood Lane and the implementation of improvements along Cottonwood Lane associated with the implementation of the City of Fernley Master Plan would elevate operations to acceptable levels.
3. The project would not have a significant adverse impact on the surrounding transportation network.

6.2 Recommendations

Recommendations are as follows:

1. Construct Site Frontage Improvements to NDOT Standards to accommodate the master planned improvements for SR 828.
2. Construct dual site accesses at least 600 feet apart with dedicated left turn and

right turn lanes to balance the need for meeting NDOT requirements while providing access redundancy to enhance on-site circulation while expediting emergency vehicle response.

7.0 Preliminary Vehicle Miles Traveled Analysis

7.1 Regulatory Context

On July 1, 2020, the new Vehicle Miles Traveled (VMT) metric took effect in California and replaced the traditional Level of Service (LOS) metric that had been in effect the past half century. Many additional states are incorporating elements of the new VMT metric to encourage urban infill, reduce vehicle trip lengths, encourage active transportation (walking, bicycling, transit riding, etc.), encourage more compact development, and boost the sustainability of mitigation measures. Specifically, this new VMT metric is intended to address these nine limitations associated with the traditional LOS metric:

1. “Punishing” last-in development projects, discouraging infill development, and encouraging a “sprawling” development pattern;
2. Creating regional congestion at the expense of solving local congestion issues;
3. Discouraging transit use;
4. Discouraging active transportation (walking, bicycling, transit riding, etc.);
5. Poorly measuring access to developments within the network;
6. Posing limitations on optimizing roadway networks;
7. Creating more roadway construction than jurisdictions can afford to maintain;
8. Posing calculation challenges and inaccuracies; and
9. Creating costly unhelpful solutions.

Specifically, the traditional LOS metric has served as a barrier to residential development through the imposition of costly transportation impact mitigation measures when the objective is to encourage residential development to address the housing crisis while boosting the sustainability of such measures.

Therefore, a preliminary VMT analysis was conducted in connection with this report. VMT is generally calculated by multiplying the trip generation by the trip length on a per capita basis. A VMT impact is typically considered significant when it exceeds 85 percent of the average per capita VMT for a given area.

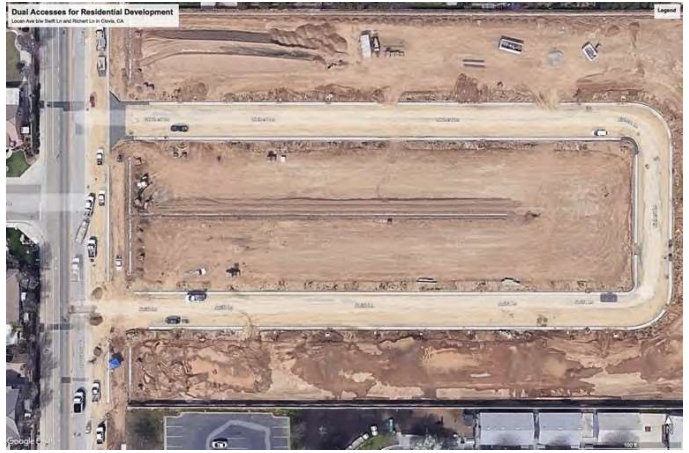
7.2 Potential VMT Reduction Measures

The Creekwood Commons study area was examined through a VMT context. VMT reduction measures to be incorporated into the project are as follows:

1. Pedestrian pathways to SR 828 to the north and the Truckee Carson Irrigation District (TCID) Canal to the south to encourage increased pedestrian activity; and
2. Inclusion of additional bicycle paths and lanes along SR 828 to encourage increased bicycle use in addition to the pathway that is now paved to Rainbow Lane.

Appendix A: Brochures

Access Management Concept for Creekwood Commons



Dual Lanes onto an Arterial with a Two-Way-Left-Turn Lane

Creekwood Commons proposes dual accesses onto SR 828 (Farm District Road). The access and circulation system was studied for a recently opened residential development on Locan Ave between Swift Ln and Richert Ln in Clovis, CA with a 200-foot centerline to centerline separation between accesses (Upper Right). The dual access connections utilize a two-way-left-turn-lane. (Lower Left: North of Richert Looking South with Access on Left; Lower Right: South of Swift Looking North with Access on Right)

Exit and Complete Street Concepts



Richert Egress (Top Left)

The Richert (North) Egress is stop-sign controlled with a shared left-right lane.

Swift Egress (Middle Right)

The Swift (South) Egress is stop-sign controlled with a shared left-right lane.



Complete Street Concept for SR 828 (Bottom Left)

The complete street concept includes single through lanes in each direction, a two-way-left-turn lane, a bike lane, a paved shoulder, a landscape strip, and a shaded sidewalk such as what is shown here at Locan Ave and Richert Ln looking north on Locan Ave.



Existing Roadway and Geometric Conditions



Site Frontage and North Intersections

- Upper Right: Site Frontage along SR 828 (Looking East): Center Turn Lane and Gravel Shoulder (Site South of Gravel Shoulder)
- Lower Left: Roundabout: SR 828 at US-50A: Inner Radius = 145 ft; Outer Radius = 180 ft; EBLT = 500 ft; EBRT = 725 ft; WBLT = 450 ft; WBRT = 600 ft; NBLT = 325 ft; NBRT = 350 ft; SBLT = 375 ft; SBRT = 375 ft
- Lower Right: SR 828 at Shadow Lane: NBLT = 125 ft; SBLT = 175 ft + Center Turn Lane

(Photo Credits: Google Earth)

South Intersections



SR 828 at East Jenny's Lane
(Top Left)
NBLT = 85 ft
SBLT = 325 ft + Center Turn Lane
(Photo Credit: Google Earth)

SR 828 at Cottonwood Lane (Middle Right)

EB: Crosswalk to Stop Bar = 195 ft
NBLT = 85 ft + Center Turn Lane
SBRT = 185 ft
(Photo Credit: Google Earth)



North Jenny's Lane at SR 828 (Bottom Left)

EBLT = 250 ft
NBLTR: South End of Island to Stop Bar = 135 ft
SBLT = 65 ft + Center Turn Lane
SBTR = 65 ft
(Photo Credit: Google Earth)

Roundabout Analysis and Design



Roundabouts: Operations & Aesthetics

State Route 28 between Bear and Coons Streets near Kings Beach on the north shore of Lake Tahoe (upper right) includes two closely spaced roundabouts. Roundabouts are desirable in both emerging Transit Oriented Development (TOD) communities such as Downtown Roseville (lower left), and more traditional suburban communities such as within the Herndon/Clovis Community Medical Center vicinity. Pictured in the lower right is North Temperance Avenue at Alluvial Avenue-Owens Mountain Parkway in Clovis.

North Temperance Avenue/Alluvial. Avenue- Owens Mountain Parkway in Clovis



Roundabouts for Vehicles, Bicyclists, and Pedestrians (Upper Left)

The latest roundabouts such as this one that opened in 2021 often feature innovative bicycle treatments such as painting the bicycle pathways green with broken stripes to delineate merging vehicles.

Clear Striping and Pavement Legends (Middle Right)

One of the keys for effectively accommodating multiple types of users is carefully designing the curb returns to the appropriate radii to accommodate a diversity of vehicle types, and clear pavement legends (stripes and arrows) to delineate the lane uses and flow pathways of vehicle traffic.



Accommodating Pedestrians within the Inner Circle (Lower Left)

This roundabout within the raised circular island in the middle of the intersection features a wide recessed pathway to give pedestrians a greater sense of being shielded from the surrounding circulating vehicle traffic. The City of Clovis (near Fresno) now requires that all new residential neighborhoods include pedestrian pathways. Pathways within the inner circle in areas with a mix of commercial and residential uses enhance the overall connectivity of the pedestrian network, thereby encouraging healthy lifestyles.

Improvement Considerations for BR-80/SR 828 at Main St/US-50A



Existing Conditions and Improvement Considerations

BR-80/SR 828 at Main St/US-50A includes unusually large splitter islands for right turns onto the next roadway to right and sharp right turns for entering the circle (Upper Right). Consider a dual-lane roundabout with smaller splitter islands for the right turns onto the next roadway to the right and more gentle right turns for entering the circle. Also consider dual approach and circulating lanes for higher volume movements such as what is currently in place at Ranchharah Pkwy-Kietzke Ln at Neil Rd in Reno (Lower Left and Right).

Additional Roundabout Concepts



SR 431 at SR 28 in Incline Village (Upper Left)

This modern roundabout features a single circular lane and single-lane approaches at the intersection of two state highways.

Dual Roundabouts at SR 89 and I-80 in Truckee (Middle Right)

As Fernley expands to the north and interchanges get upgraded and added, modern single-lane and dual-lane roundabouts could be considered at the freeway ramps.



SR 89 and Truckee Road (Lower Left)

Innovative pedestrian treatments could also be considered at roundabouts in an era with an ever-growing emphasis on active transportation.

Appendix B: Numeric Analysis

Creekwood Commons

A1_Trip_Generation

Table A1.1: Inputs

Code	Land Use	Units	Quantity	Weekday			AM Peak Hour			PM Peak Hour		
				Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
210	Single-Family Detached Housing	Dwelling Units	209	4.72	4.71	9.43	0.18	0.52	0.70	0.59	0.35	0.94

Table A1.2: Values

Code	Land Use	Units	Quantity	Weekday			AM Peak Hour			PM Peak Hour		
				Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
210	Single-Family Detached Housing	Dwelling Units	209	986	984	1971	38	109	146	123	73	196
Total				986	984	1971	38	109	146	123	73	196

Creekwood Commons

A2_Trip Distribution

Table A2.1: Near-Term Analysis

No	Description	Percent	Weekday			AM Peak Hour			PM Peak Hour		
			Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
1	BR 80 NO Main St	25.00%	247	246	493	9	27	37	31	18	49
2	Main St WO SR 828	35.00%	345	345	690	13	38	51	43	26	69
3	Main St EO SR 828	10.00%	99	98	197	4	11	15	12	7	20
4	Cottonwood Lane	10.00%	99	98	197	4	11	15	12	7	20
5	Farm District Rd E	20.00%	197	197	394	8	22	29	25	15	39
	Total	100.00%	986	984	1971	38	109	146	123	73	196

Table A2.2: Long-Term Analysis

No	Description	Percent	Weekday			AM Peak Hour			PM Peak Hour		
			Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
1	BR 80 NO Main St	20.00%	197	197	394	8	22	29	25	15	39
2	Main St WO SR 828	25.00%	247	246	493	9	27	37	31	18	49
3	Main St EO SR 828	10.00%	99	98	197	4	11	15	12	7	20
4	Cottonwood Lane	15.00%	148	148	296	6	16	22	18	11	29
5	Farm District Rd E	30.00%	296	295	591	11	33	44	37	22	59
	Total	100.00%	986	984	1971	38	109	146	123	73	196

Creekwood Commons

A3_Trip Assignment

Table A3.1: Intersection AM: Near-Term

No	Description	Eastbound			Westbound			Northbound			Southbound		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
1	BR 80-SR 828/Main			13	4			39	27	11		9	
2	SR 828/Shadow								76			26	
3	SR 828/E Jenny's								76			26	
4	SR 828/Cottonwood			4				11	76			26	
5	N Jenny's/SR 828		29			86							
6	Site Access/SR 828			29	8			86		22			

Table A3.2: Intersection PM: Near-Term

No	Description	Eastbound			Westbound			Northbound			Southbound		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
1	BR 80-SR 828/Main			43	13			26	19	7		32	
2	SR 828/Shadow								51			88	
3	SR 828/E Jenny's								51			88	
4	SR 828/Cottonwood				13			7	51			88	
5	N Jenny's/SR 828		100				58						
6	Site Access/SR 828			100	23			58		14			

Table A3.3: Intersection AM: Long-Term

No	Description	Eastbound			Westbound			Northbound			Southbound		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
1	BR 80-SR 828/Main			9	4			27	22	11		7	
2	SR 828/Shadow								60			20	
3	SR 828/E Jenny's								60			20	
4	SR 828/Cottonwood			6				16	60			20	
5	N Jenny's/SR 828		26			76							
6	Site Access/SR 828			26	12			76		33			

Table A3.4: Intersection PM: Long-Term

No	Description	Eastbound			Westbound			Northbound			Southbound		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
1	BR 80-SR 828/Main			32	13			19	14	7		25	
2	SR 828/Shadow								40			69	
3	SR 828/E Jenny's								40			69	
4	SR 828/Cottonwood			19				11	40			69	
5	N Jenny's/SR 828		88			50							
6	Site Access/SR 828			88	36			50		22			

Creekwood Commons

Table B.1: BR 80-SR 828 at Main St - US-50A

	Eastbound			Westbound			Northbound			Southbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Near-Term AM												
Near-Term	243	135	55	23	147	410	85	329	46	256	149	173
Project			13	4			39	27	11		9	
NT w/Project	243	135	68	27	147	410	124	356	57	256	158	173
Near-Term PM												
Near-Term	233	117	227	38	113	441	29	316	63	653	359	482
Project			43	13			26	19	7		32	
NT w/Project	233	117	270	51	113	441	55	335	70	653	391	482
Long-Term AM												
Long-Term	170	95	39	16	103	287	60	230	32	179	104	121
Project			9	4			27	22	11		7	
LT w/Project	170	95	48	20	103	287	87	252	43	179	111	121
Long-Term PM												
Long-Term	163	82	159	27	79	309	20	221	44	457	251	337
Project			32	13			19	14	7		25	
LT w/Project	163	82	191	40	79	309	39	235	51	457	276	337

Reduction

Factor 0.7

Wadsworth Bypass

Nevada Pacific Parkway

Creekwood Commons

Table B.2: SR 828 at Shadow Lane

	Eastbound			Westbound			Northbound			Southbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Near-Term AM												
Near-Term	36	6	19	20	9	41	18	400	20	23	178	11
Project								76			26	
NT w/Project	36	6	19	20	9	41	18	476	20	23	204	11
Near-Term PM												
Near-Term	49	6	11	10	3	34	11	307	14	60	485	28
Project								51			88	
NT w/Project	49	6	11	10	3	34	11	358	14	60	573	28
Long-Term AM												
Long-Term	25	4	13	14	6	29	13	280	14	16	125	8
Project								60			20	
LT w/Project	25	4	13	14	6	29	13	340	14	16	145	8
Long-Term PM												
Long-Term	34	4	8	7	2	24	8	215	10	42	340	20
Project								40			69	
LT w/Project	34	4	8	7	2	24	8	255	10	42	409	20

Reduction

Factor 0.7

Wadsworth Bypass

Nevada Pacific Parkway

Creekwood Commons

Table B.3: SR 828 at East Jenny's Lane

	Eastbound			Westbound			Northbound			Southbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Near-Term AM												
Near-Term	46	3	15	20	5	59	6	335	13	15	194	8
Project								76			26	
NT w/Project	46	3	15	20	5	59	6	411	13	15	220	8
Near-Term PM												
Near-Term	35	6	3	16	6	41	6	255	27	73	389	46
Project								51			88	
NT w/Project	35	6	3	16	6	41	6	306	27	73	477	46
Long-Term AM												
Long-Term	58	4	19	25	6	74	8	422	16	19	244	10
Project								60			20	
LT w/Project	58	4	19	25	6	74	8	482	16	19	264	10
Long-Term PM												
Long-Term	44	8	4	20	8	52	8	321	34	92	490	58
Project								40			69	
LT w/Project	44	8	4	20	8	52	8	361	34	92	559	58

Projection

Near-Term	9500
Long-Term	10300
Growth Rate	1.2%

Source: Nevada DOT Annual Traffic Report for Count Station 019033

AADT = 9500 (2011) and 10300 (2018)

Creekwood Commons

Table B.4: SR 828 at Cottonwood Lane

	Eastbound			Westbound			Northbound			Southbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Near-Term AM												
Near-Term	130		116				196	275			110	85
Project			4				11	76			26	
NT w/Project	130		120				207	351			136	85
Near-Term PM												
Near-Term	151		147				88	137			293	115
Project			13				7	51			88	
NT w/Project	151		160				95	188			381	115
Long-Term AM												
Long-Term	164		146				247	346			139	107
Project			6				16	60			20	
LT w/Project	164		152				263	406			159	107
Long-Term PM												
Long-Term	190		185				111	173			369	145
Project			19				11	40			69	
LT w/Project	190		204				122	213			438	145

Projection

Near-Term	9500
Long-Term	10300
Growth Rate	1.2%

Source: Nevada DOT Annual Traffic Report for Count Station 019033

AADT = 9500 (2011) and 10300 (2018)

Creekwood Commons

Table B.5: North Jenny's Lane at SR 828

	Eastbound			Westbound			Northbound			Southbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Near-Term AM												
Near-Term	8	199	14	2	296	17	55	1	9	12	1	14
Project		29			86							
NT w/Project	8	228	14	2	382	17	55	1	9	12	1	14
Near-Term PM												
Near-Term	17	300	56	2	151	17	33	7	5	15	1	12
Project		100			58							
NT w/Project	17	400	56	2	209	17	33	7	5	15	1	12
Long-Term AM												
Long-Term	10	251	18	3	373	21	69	1	11	15	1	18
Project		26			76							
LT w/Project	10	277	18	3	449	21	69	1	11	15	1	18
Long-Term PM												
Long-Term	21	378	71	3	190	21	42	9	6	19	1	15
Project		88			50							
LT w/Project	21	466	71	3	240	21	42	9	6	19	1	15

Projection

Near-Term	9500
Long-Term	10300
Growth Rate	1.2%

Source: Nevada DOT Annual Traffic Report for Count Station 019033

AADT = 9500 (2011) and 10300 (2018)

Creekwood Commons

Table B.6: Site Access at SR 828

Eastbound				Westbound			Northbound			Southbound		
Left	Thru	Right		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Near-Term AM												
Near-Term		220			315							
Project			29	8			86		22			
NT w/Project		220	29	8	315		86		22			
Near-Term PM												
Near-Term		320			170							
Project			100	23			58		14			
NT w/Project		320	100	23	170		58		14			
Long-Term AM												
Long-Term		277			397							
Project			26	12			76		33			
LT w/Project		277	26	12	397		76		33			
Long-Term PM												
Long-Term		403			214							
Project			88	36			50		22			
LT w/Project		403	88	36	214		50		22			

Projection

Near-Term	9500
Long-Term	10300
Growth Rate	1.2%

Source: Nevada DOT Annual Traffic Report for Count Station 019033

AADT = 9500 (2011) and 10300 (2018)

Creekwood Commons Traffic Study:

Table C.1: PM Peak Hour Turning Movements

Intersection	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Vol
1: SR 828 at Main St-US-50A	233	117	227	38	113	441	29	316	63	653	359	482	3071
2: SR 828 at Shadow Lane	49	6	11	10	3	34	11	307	114	60	485	28	1118
3: SR 828 at East Jenny's Lane	35	6	3	16	6	41	6	255	27	73	389	46	903
4: SR 828 at Cottonwood Lane	151	0	147	0	0	0	88	137	0	0	293	115	931
5: North Jenny's Lane at SR 828	17	300	56	2	151	17	33	7	5	15	1	12	616

Remarks

Per Data Collected by National Data and Surveying Services on Tuesday, January 4, 2022

Table C.2: Severity Analysis

Intersection	FAT		INJ		PDO		TOT
	No	%	No	%	No	%	
1: SR 828 at Main St-US-50A	0	0%	3	17%	15	83%	18
2: SR 828 at Shadow Lane	0	0%	2	40%	3	60%	5
3: SR 828 at East Jenny's Lane	0	0%	0	0%	3	100%	3
4: SR 828 at Cottonwood Lane	0	0%	0	0%	5	100%	5
5: North Jenny's Lane at SR 828	0	0%	1	67%	2	33%	3

Remarks

FAT: Fatalities

INJ: Injuries

PDO: Property Damage Only

TOT: Total

Creekwood Commons Traffic Study:

Table C.3: Type Analysis

Intersection	Type 1		Type 2		Type 3		Other		TOT
	No	%	No	%	No	%	No	%	
1: SR 828 at Main St-US-50A	12	67%	3	17%	1	6%	2	11%	18
2: SR 828 at Shadow Lane	1	20%	4	80%	0	0%	0	0%	5
3: SR 828 at East Jenny's Lane	0	0%	2	67%	0	0%	1	33%	3
4: SR 828 at Cottonwood Lane	1	20%	4	80%	0	0%	0	0%	5
5: North Jenny's Lane at SR 828	1	33%	2	67%	0	0%	0	0%	3

Remarks

Type 1: Most Common Type: Rear-End

Type 2: Second Most Common Type: Angle

Type 3: Third Most Common Type: Unknown

Other: Other Types not within the Top 3 Ranks: Non Collision

TOT: Total

Table C.4: Cause Analysis

Intersection	Cause 1		Cause 2		Cause 3		Other		TOT
	No	%	No	%	No	%	No	%	
1: SR 828 at Main St-US-50A	5	33%	3	20%	2	13%	5	33%	15
2: SR 828 at Shadow Lane	0	0%	0	0%	4	80%	1	20%	5
3: SR 828 at East Jenny's Lane	0	0%	1	33%	2	67%	0	0%	3
4: SR 828 at Cottonwood Lane	0	0%	0	0%	5	100%	0	0%	5
5: North Jenny's Lane at SR 828	1	33%	0	0%	2	67%	0	0%	3

Remarks

Cause 1: Follow Too Closely

Cause 2: Driving Too Fast

Cause 3: Fail to Yield ROW

Other:

TOT: Total

Creekwood Commons Traffic Study:

Table C.5: Rate Analysis

Intersection	TOT	YR	Vol	K	Days	Rate
1: SR 828 at Main St-US-50A	18	3	3071	10	365	0.535
2: SR 828 at Shadow Lane	5	3	1118	10	365	0.408
3: SR 828 at East Jenny's Lane	3	3	903	10	365	0.303
4: SR 828 at Cottonwood Lane	5	3	931	10	365	0.490
5: North Jenny's Lane at SR 828	3	3	616	10	365	0.445

Remarks

TOT: Total Collisions

YR: Number of Years of Data

Vol: Volume Entering Intersection during PM Peak Hour

K: K-Factor: (Weekday Volume)/(PM Peak Hour Volume)

Days: Number of Days in Year

Rate: Per Million Entering Vehicles Per Year = $((TOT) * (1E6)) / ((YR) * (Vol) * (K) * (Days))$

Creekwood Commons Traffic Study: Turn Lane

Table D.1: Peak Hour Turning Movements at West Driveway

Scenario	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBTL	EBR	EBTR
NT+P AM	0	220	13	4	315	0	37	0	10	0	0	0	4	319	13	233
NT+P PM	0	320	43	10	315	0	25	0	6	0	0	0	10	325	43	363
LT+P AM	0	277	11	5	397	0	33	0	14	0	0	0	5	402	11	288
LT+P PM	0	403	38	15	214	0	22	0	9	0	0	0	15	229	38	441

Table D.2: Peak Hour Turning Movements at East Driveway

Scenario	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBTL	EBR	EBTR
NT+P AM	0	220	13	4	315	0	37	0	10	0	0	0	4	319	13	233
NT+P PM	0	320	43	10	315	0	25	0	6	0	0	0	10	325	43	363
LT+P AM	0	277	11	5	397	0	33	0	14	0	0	0	5	402	11	288
LT+P PM	0	403	38	15	214	0	22	0	9	0	0	0	15	229	38	441

Remarks for Parts 1 and 2

Source: Nevada DOT Access Management System and Standards (2017 Edition)

NT+P: Near-Term Plus Project per Figure 7 of the Creekwood Commons Traffic Study

LT+P: Long-Term Plus Project per Figure 11 of the Creekwood Commons Traffic Study

AM: AM Peak Hour (4 Highest Consecutive 15-minute intervals between 7:00 and 9:00)

PM: PM Peak Hour (4 Highest Consecutive 15-minute intervals between 4:00 and 6:00)

WBL: Turning Volume per Table 4-12 (Two-Lane Roadways in Urban Areas)

WBTL: Directional Volume in Through Lane (Left + Through) per Table 4-12 (Two-Lane Roadways in Urban Areas)

EBR: Turning Volume per Table 4-16 (Two-Lane Roadways in Urban Areas)

EBTR: Directional Volume in Through Lane (Right + Through) per Table 4-16 (Two-Lane Roadways in Urban Areas)

Creekwood Commons Traffic Study: Turn Lane

Table D.3: Turn Lane Warrant Analysis at West Driveway

	West Driveway (Left and Right)									
	EBR		EBTR		Right	WBL		WBTL		Left
Scenario	Act	Min	Act	Min	Lane?	Act	Min	Act	Min	Lane?
NT+P	43	40	363	0	Yes	10	10	325	210	Yes
LT+P	38	35	441	100	Yes	15	15	229	150	Yes

Table D.4: Turn Lane Warrant Analysis at East Driveway

	East Driveway (Left and Right)									
	EBR		EBTR		Right	WBL		WBTL		Left
Scenario	Act	Min	Act	Min	Lane?	Act	Min	Act	Min	Lane?
NT+P	43	40	363	0	Yes	10	10	325	210	Yes
LT+P	38	35	441	100	Yes	15	15	229	150	Yes

Remarks for Parts 3 and 4

Act: Actual from Parts 1 and 2 and Higher of AM or PM

Min: Minimum to Trigger Satisfaction of Turn Lane Warrant

Right Lane?: Right Turn Lane Warrant Satisfied? Yes or No per Table 4-16

Left Lane?: Left Turn Lane Warrant Satisfied? Yes or No per Table 4-12

SR 828 Posted Speed Limit: 45 MPH

SR 828 Functional Classification: Minor Arterial

Creekwood Commons Traffic Study: Progressive Peak Hour Signal Warrant Analysis at Site

Accesses Table E.1: Peak Hour Turning Movements

Scenario	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	Major St	Minor St
NT+P AM	0	220	25	7	315	0	74	0	19	0	0	0	567	93
NT+P PM	0	320	86	20	170	0	50	0	12	0	0	0	596	62
LT+P AM	0	277	20	10	397	0	65	0	28	0	0	0	704	93
LT+P PM	0	403	75	31	214	0	43	0	19	0	0	0	723	62

Remarks

NT+P: Near-Term Plus Project per Figure 7 of the Creekwood Commons Traffic

Study LT+P: Long-Term Plus Project per Figure 11 of the Creekwood Commons

Traffic Study

AM: AM Peak Hour (4 Highest Consecutive 15-minute intervals between 7:00 and 9:00)

PM: PM Peak Hour (4 Highest Consecutive 15-minute intervals between 4:00 and 6:00)

Major St: Total of both major street (eastbound and westbound) approaches per MUTCD Figure 4C-4

Minor St: Higher minor street (northbound or southbound) approach per MUTCD Figure 4C-4

MUTCD: Manual on Uniform Traffic Control Devices

Table E.2: Peak Hour Signal Warrant Analysis

	Major St		Minor St		Sig?	NB
Scenario	Act	Min	Act	Min		Deficient?
NT+P	567	920	93	190	No	97
LT+P	704	920	93	150	No	57

Remarks

Act: Actual from Part 1 and Higher of AM or PM

Min: Minimum to Trigger Satisfaction of Signal Warrant

Sig?: Peak Hour Signal Warrant Satisfied? Yes or No (Based on 1 Thru Lane Major and 1 Thru Lane Minor)

NB Deficient? Amount of Additional Northbound Traffic to Satisfy Peak Hour Warrant

Appendix C: Level of Service Analysis

Appendix C-1: Near-Term AM

Intersection									
Intersection Delay, s/veh	7.5								
Intersection LOS	A								
Approach	EB		WB		NB		SB		
Entry Lanes	1		1		1		1		
Conflicting Circle Lanes	1		1		1		1		
Adj Approach Flow, veh/h	447		599		474		596		
Demand Flow Rate, veh/h	456		610		484		608		
Vehicles Circulating, veh/h	450		692		667		269		
Vehicles Exiting, veh/h	245		411		181		602		
Ped Vol Crossing Leg, #/h	0		0		0		0		
Ped Cap Adj	1.000		1.000		1.000		1.000		
Approach Delay, s/veh	8.7		2.5		15.0		5.5		
Approach LOS	A		A		C		A		
Lane	Left	Bypass	Left	Bypass	Left	Bypass	Left	Bypass	
Designated Moves	L	R	L	R	L	R	L	R	
Assumed Moves	L	R	L	R	L	R	L	R	
RT Channelized	Free		Free		Free		Free		
Lane Util	1.000		1.000		1.000		1.000		
Follow-Up Headway, s	2.609		2.609		2.609		2.609		
Critical Headway, s	4.976		58		4.976		48		
Entry Flow, veh/h	398		1938		179		1938		
Cap Entry Lane, veh/h	872		0.980		681		0.980		
Entry HV Adj Factor	0.980		57		0.983		47		
Flow Entry, veh/h	390		1900		176		1900		
Cap Entry, veh/h	855		0.030		670		0.025		
V/C Ratio	0.456		0.0		0.263		0.0		
Control Delay, s/veh	10.0		A		8.6		A		
LOS	A		0		A		1		
95th %tile Queue, veh	2		1		4		2		

Intersection												
Int Delay, s/veh	3.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↘		↗	↘	
Traffic Vol, veh/h	36	6	19	20	9	41	18	400	20	23	178	11
Future Vol, veh/h	36	6	19	20	9	41	18	400	20	23	178	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	175	-	-	300	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	43	7	23	24	11	49	22	482	24	28	214	13
Major/Minor	Minor2		Minor1		Major1		Major2		Major2		Major2	
Conflicting Flow All	845	827	221	830	821	494	227	0	0	506	0	0
Stage 1	277	277	-	538	538	-	-	-	-	-	-	-
Stage 2	568	550	-	292	283	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	283	307	819	289	309	575	1341	-	-	1059	-	-
Stage 1	729	681	-	527	522	-	-	-	-	-	-	-
Stage 2	508	516	-	716	677	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	243	294	819	267	296	575	1341	-	-	1059	-	-
Mov Cap-2 Maneuver	243	294	-	267	296	-	-	-	-	-	-	-
Stage 1	717	663	-	519	514	-	-	-	-	-	-	-
Stage 2	447	508	-	670	659	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB		SB		SB	
HCM Control Delay, s	19.7		16.5		0.3		0.9		0.9		0.9	
HCM LOS	C		C									
Minor Lane/Major Mvmt	NBL		NBT		NBR		EBLn1WBLn1		SBL		SBT	
Capacity (veh/h)	1341		-		-		318		396		1059	
HCM Lane V/C Ratio	0.016		-		-		0.231		0.213		0.026	
HCM Control Delay (s)	7.7		-		-		19.7		16.5		8.5	
HCM Lane LOS	A		-		-		C		C		A	
HCM 95th %tile Q(veh)	0		-		-		0.9		0.8		0.1	

Intersection												
Int Delay, s/veh	3.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	46	3	15	20	5	59	6	335	13	15	194	8
Future Vol, veh/h	46	3	15	20	5	59	6	335	13	15	194	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	85	-	-	325	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	57	4	19	25	6	73	7	414	16	19	240	10
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	759	727	245	731	724	422	250	0	0	430	0	0
Stage 1	283	283	-	436	436	-	-	-	-	-	-	-
Stage 2	476	444	-	295	288	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	323	351	794	337	352	632	1316	-	-	1129	-	-
Stage 1	724	677	-	599	580	-	-	-	-	-	-	-
Stage 2	570	575	-	713	674	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	277	343	794	321	344	632	1316	-	-	1129	-	-
Mov Cap-2 Maneuver	277	343	-	321	344	-	-	-	-	-	-	-
Stage 1	720	665	-	596	577	-	-	-	-	-	-	-
Stage 2	496	572	-	681	663	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	19.3		14.2		0.1		0.6					
HCM LOS	C		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1316	-	-	330	494	1129	-	-				
HCM Lane V/C Ratio	0.006	-	-	0.239	0.21	0.016	-	-				
HCM Control Delay (s)	7.8	-	-	19.3	14.2	8.2	-	-				
HCM Lane LOS	A	-	-	C	B	A	-	-				
HCM 95th %tile Q(veh)	0	-	-	0.9	0.8	0.1	-	-				

Intersection						
Int Delay, s/veh	11					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	130	116	196	275	110	85
Future Vol, veh/h	130	116	196	275	110	85
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	-	185	-	-	185
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	149	133	225	316	126	98
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	892	126	224	0	-	0
Stage 1	126	-	-	-	-	-
Stage 2	766	-	-	-	-	-
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	312	924	1345	-	-	-
Stage 1	900	-	-	-	-	-
Stage 2	459	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	260	924	1345	-	-	-
Mov Cap-2 Maneuver	260	-	-	-	-	-
Stage 1	750	-	-	-	-	-
Stage 2	459	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	34.4	3.4		0		
HCM LOS	D					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1345	-	393	-	-	
HCM Lane V/C Ratio	0.167	-	0.719	-	-	
HCM Control Delay (s)	8.2	-	34.4	-	-	
HCM Lane LOS	A	-	D	-	-	
HCM 95th %tile Q(veh)	0.6	-	5.5	-	-	

Intersection												
Int Delay, s/veh	2.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	199	14	2	296	17	55	1	9	12	1	14
Future Vol, veh/h	8	199	14	2	296	17	55	1	9	12	1	14
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	250	-	-	-	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	265	19	3	395	23	73	1	12	16	1	19

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	418	0	0	284	0	0	720	721	275	716	719	407
Stage 1	-	-	-	-	-	-	297	297	-	413	413	-
Stage 2	-	-	-	-	-	-	423	424	-	303	306	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1141	-	-	1278	-	-	343	353	764	345	354	644
Stage 1	-	-	-	-	-	-	712	668	-	616	594	-
Stage 2	-	-	-	-	-	-	609	587	-	706	662	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1141	-	-	1278	-	-	329	348	764	335	349	644
Mov Cap-2 Maneuver	-	-	-	-	-	-	329	348	-	335	349	-
Stage 1	-	-	-	-	-	-	705	661	-	610	592	-
Stage 2	-	-	-	-	-	-	588	585	-	687	655	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0	18.3	13.4
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	357	1141	-	-	1278	-	-	335	610
HCM Lane V/C Ratio	0.243	0.009	-	-	0.002	-	-	0.048	0.033
HCM Control Delay (s)	18.3	8.2	-	-	7.8	0	-	16.3	11.1
HCM Lane LOS	C	A	-	-	A	A	-	C	B
HCM 95th %tile Q(veh)	0.9	0	-	-	0	-	-	0.1	0.1

Appendix C-2: Near-Term PM

HCM 6th Roundabout
1: SR 828 /BR 80 & East Main St/US-50A

02/09/2022

Intersection									
Intersection Delay, s/veh	19.5								
Intersection LOS	C								
Approach	EB		WB		NB		SB		
Entry Lanes	1		1		1		1		
Conflicting Circle Lanes	1		1		1		1		
Adj Approach Flow, veh/h	595		610		421		1540		
Demand Flow Rate, veh/h	607		622		430		1570		
Vehicles Circulating, veh/h	1103		609		1054		189		
Vehicles Exiting, veh/h	149		809		417		578		
Ped Vol Crossing Leg, #/h	0		0		0		0		
Ped Cap Adj	1.000		1.000		1.000		1.000		
Approach Delay, s/veh	24.4		1.9		28.4		22.2		
Approach LOS	C		A		D		C		
Lane	Left	Bypass	Left	Bypass	Left	Bypass	Left	Bypass	
Designated Moves	L	R	L	R	L	R	L	R	
Assumed Moves	L	R	L	R	L	R	L	R	
RT Channelized	Free		Free		Free		Free		
Lane Util	1.000		1.000		1.000		1.000		
Follow-Up Headway, s	2.609		2.609		2.609		2.609		
Critical Headway, s	4.976	239	4.976	464	4.976	66	4.976	507	
Entry Flow, veh/h	368	1938	158	1938	364	1938	1063	1938	
Cap Entry Lane, veh/h	448	0.980	741	0.980	471	0.980	1138	0.980	
Entry HV Adj Factor	0.980	234	0.979	455	0.979	65	0.981	497	
Flow Entry, veh/h	361	1900	155	1900	356	1900	1043	1900	
Cap Entry, veh/h	439	0.123	726	0.239	461	0.034	1116	0.262	
V/C Ratio	0.821	0.0	0.213	0.0	0.773	0.0	0.934	0.0	
Control Delay, s/veh	40.3	A	7.4	A	33.5	A	32.8	A	
LOS	E	0	A	1	D	0	D	1	
95th %tile Queue, veh	8		1		7		16		

Intersection												
Int Delay, s/veh	3.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	49	6	11	10	3	34	11	307	14	60	485	28
Future Vol, veh/h	49	6	11	10	3	34	11	307	14	60	485	28
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	175	-	-	300	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	51	6	11	10	3	35	11	320	15	63	505	29
Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1015	1003	520	1004	1010	328	534	0	0	335	0	0
Stage 1	646	646	-	350	350	-	-	-	-	-	-	-
Stage 2	369	357	-	654	660	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	217	242	556	220	240	713	1034	-	-	1224	-	-
Stage 1	460	467	-	666	633	-	-	-	-	-	-	-
Stage 2	651	628	-	456	460	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	194	227	556	201	225	713	1034	-	-	1224	-	-
Mov Cap-2 Maneuver	194	227	-	201	225	-	-	-	-	-	-	-
Stage 1	455	443	-	659	626	-	-	-	-	-	-	-
Stage 2	609	621	-	418	437	-	-	-	-	-	-	-
Approach	EB		WB		NB			SB				
HCM Control Delay, s	28.5		14.6		0.3			0.8				
HCM LOS	D		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1034	-	-	221	424	1224	-	-				
HCM Lane V/C Ratio	0.011	-	-	0.311	0.115	0.051	-	-				
HCM Control Delay (s)	8.5	-	-	28.5	14.6	8.1	-	-				
HCM Lane LOS	A	-	-	D	B	A	-	-				
HCM 95th %tile Q(veh)	0	-	-	1.3	0.4	0.2	-	-				

Intersection												
Int Delay, s/veh	2.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	6	3	16	6	41	6	255	27	73	389	46
Future Vol, veh/h	35	6	3	16	6	41	6	255	27	73	389	46
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	85	-	-	325	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	37	6	3	17	6	43	6	268	28	77	409	48
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	906	895	433	886	905	282	457	0	0	296	0	0
Stage 1	587	587	-	294	294	-	-	-	-	-	-	-
Stage 2	319	308	-	592	611	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	257	280	623	265	276	757	1104	-	-	1265	-	-
Stage 1	496	497	-	714	670	-	-	-	-	-	-	-
Stage 2	693	660	-	493	484	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	226	262	623	246	258	757	1104	-	-	1265	-	-
Mov Cap-2 Maneuver	226	262	-	246	258	-	-	-	-	-	-	-
Stage 1	494	467	-	710	667	-	-	-	-	-	-	-
Stage 2	644	657	-	454	454	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	23.5		14.6		0.2		1.2					
HCM LOS	C		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1104	-	-	241	442	1265	-	-				
HCM Lane V/C Ratio	0.006	-	-	0.192	0.15	0.061	-	-				
HCM Control Delay (s)	8.3	-	-	23.5	14.6	8	-	-				
HCM Lane LOS	A	-	-	C	B	A	-	-				
HCM 95th %tile Q(veh)	0	-	-	0.7	0.5	0.2	-	-				

Intersection						
Int Delay, s/veh	8.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	151	147	88	137	293	115
Future Vol, veh/h	151	147	88	137	293	115
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	-	185	-	-	185
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	166	162	97	151	322	126
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	667	322	448	0	-	0
Stage 1	322	-	-	-	-	-
Stage 2	345	-	-	-	-	-
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	424	719	1112	-	-	-
Stage 1	735	-	-	-	-	-
Stage 2	717	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	387	719	1112	-	-	-
Mov Cap-2 Maneuver	387	-	-	-	-	-
Stage 1	671	-	-	-	-	-
Stage 2	717	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s	24.7		3.3		0	
HCM LOS	C					
Minor Lane/Major Mvmt	NBL		NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1112		-	501	-	-
HCM Lane V/C Ratio	0.087		-	0.654	-	-
HCM Control Delay (s)	8.5		-	24.7	-	-
HCM Lane LOS	A		-	C	-	-
HCM 95th %tile Q(veh)	0.3		-	4.7	-	-

Intersection												
Int Delay, s/veh	1.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	300	56	2	151	17	33	7	5	15	1	12
Future Vol, veh/h	17	300	56	2	151	17	33	7	5	15	1	12
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	250	-	-	-	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	319	60	2	161	18	35	7	5	16	1	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	179	0	0	379	0	0	566	568	349	565	589	170
Stage 1	-	-	-	-	-	-	385	385	-	174	174	-
Stage 2	-	-	-	-	-	-	181	183	-	391	415	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1397	-	-	1179	-	-	435	432	694	436	421	874
Stage 1	-	-	-	-	-	-	638	611	-	828	755	-
Stage 2	-	-	-	-	-	-	821	748	-	633	592	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1397	-	-	1179	-	-	423	426	694	422	415	874
Mov Cap-2 Maneuver	-	-	-	-	-	-	423	426	-	422	415	-
Stage 1	-	-	-	-	-	-	630	603	-	817	753	-
Stage 2	-	-	-	-	-	-	806	747	-	612	584	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.1	14.1	11.9
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	443	1397	-	-	1179	-	-	422	805
HCM Lane V/C Ratio	0.108	0.013	-	-	0.002	-	-	0.038	0.017
HCM Control Delay (s)	14.1	7.6	-	-	8.1	0	-	13.9	9.6
HCM Lane LOS	B	A	-	-	A	A	-	B	A
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	0.1	0.1

Appendix C-3: Near-Term Plus Project AM

HCM 6th Roundabout
1: SR 828 /BR 80 & East Main St/US-50A

02/09/2022

Intersection									
Intersection Delay, s/veh	8.7								
Intersection LOS	A								
Approach	EB		WB		NB		SB		
Entry Lanes	1		1		1		1		
Conflicting Circle Lanes	1		1		1		1		
Adj Approach Flow, veh/h	458		602		542		604		
Demand Flow Rate, veh/h	467		614		552		616		
Vehicles Circulating, veh/h	462		750		667		307		
Vehicles Exiting, veh/h	279		411		193		626		
Ped Vol Crossing Leg, #/h	0		0		0		0		
Ped Cap Adj	1.000		1.000		1.000		1.000		
Approach Delay, s/veh	8.7		2.8		18.3		6.0		
Approach LOS	A		A		C		A		
Lane	Left	Bypass	Left	Bypass	Left	Bypass	Left	Bypass	
Designated Moves	L	R	L	R	L	R	L	R	
Assumed Moves	L	R	L	R	L	R	L	R	
RT Channelized	Free		Free		Free		Free		
Lane Util	1.000		1.000		1.000		1.000		
Follow-Up Headway, s	2.609		2.609		2.609		2.609		
Critical Headway, s	4.976	69	4.976	431	4.976	58	4.976	182	
Entry Flow, veh/h	398	1938	183	1938	494	1938	434	1938	
Cap Entry Lane, veh/h	861	0.980	642	0.980	699	0.980	1009	0.980	
Entry HV Adj Factor	0.980	68	0.978	423	0.981	57	0.981	178	
Flow Entry, veh/h	390	1900	179	1900	485	1900	426	1900	
Cap Entry, veh/h	845	0.036	628	0.223	686	0.030	990	0.094	
V/C Ratio	0.462	0.0	0.285	0.0	0.707	0.0	0.430	0.0	
Control Delay, s/veh	10.2	A	9.4	A	20.4	A	8.5	A	
LOS	B	0	A	1	C	0	A	0	
95th %tile Queue, veh	2		1		6		2		

Intersection												
Int Delay, s/veh	3.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	36	6	19	20	9	41	18	465	20	23	200	11
Future Vol, veh/h	36	6	19	20	9	41	18	465	20	23	200	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	175	-	-	300	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	43	7	23	24	11	49	22	560	24	28	241	13
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	950	932	248	935	926	572	254	0	0	584	0	0
Stage 1	304	304	-	616	616	-	-	-	-	-	-	-
Stage 2	646	628	-	319	310	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	240	266	791	246	269	520	1311	-	-	991	-	-
Stage 1	705	663	-	478	482	-	-	-	-	-	-	-
Stage 2	460	476	-	693	659	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	203	254	791	226	257	520	1311	-	-	991	-	-
Mov Cap-2 Maneuver	203	254	-	226	257	-	-	-	-	-	-	-
Stage 1	693	644	-	470	474	-	-	-	-	-	-	-
Stage 2	400	468	-	647	641	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	23.2		18.7		0.3		0.9					
HCM LOS	C		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1311	-	-	271	346	991	-	-				
HCM Lane V/C Ratio	0.017	-	-	0.271	0.244	0.028	-	-				
HCM Control Delay (s)	7.8	-	-	23.2	18.7	8.7	-	-				
HCM Lane LOS	A	-	-	C	C	A	-	-				
HCM 95th %tile Q(veh)	0.1	-	-	1.1	0.9	0.1	-	-				

Intersection												
Int Delay, s/veh	3.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	46	3	15	20	5	59	6	400	13	15	216	8
Future Vol, veh/h	46	3	15	20	5	59	6	400	13	15	216	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	85	-	-	325	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	57	4	19	25	6	73	7	494	16	19	267	10
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	866	834	272	838	831	502	277	0	0	510	0	0
Stage 1	310	310	-	516	516	-	-	-	-	-	-	-
Stage 2	556	524	-	322	315	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	274	304	767	286	305	569	1286	-	-	1055	-	-
Stage 1	700	659	-	542	534	-	-	-	-	-	-	-
Stage 2	515	530	-	690	656	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	231	297	767	271	298	569	1286	-	-	1055	-	-
Mov Cap-2 Maneuver	231	297	-	271	298	-	-	-	-	-	-	-
Stage 1	697	647	-	539	531	-	-	-	-	-	-	-
Stage 2	441	527	-	657	644	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	22.8		15.9		0.1		0.5					
HCM LOS	C		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1286	-	-	280	432	1055	-	-				
HCM Lane V/C Ratio	0.006	-	-	0.282	0.24	0.018	-	-				
HCM Control Delay (s)	7.8	-	-	22.8	15.9	8.5	-	-				
HCM Lane LOS	A	-	-	C	C	A	-	-				
HCM 95th %tile Q(veh)	0	-	-	1.1	0.9	0.1	-	-				

Intersection						
Int Delay, s/veh	14.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	130	119	205	340	132	85
Future Vol, veh/h	130	119	205	340	132	85
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	-	185	-	-	185
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	149	137	236	391	152	98
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1015	152	250	0	-	0
Stage 1	152	-	-	-	-	-
Stage 2	863	-	-	-	-	-
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	264	894	1316	-	-	-
Stage 1	876	-	-	-	-	-
Stage 2	413	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	217	894	1316	-	-	-
Mov Cap-2 Maneuver	217	-	-	-	-	-
Stage 1	719	-	-	-	-	-
Stage 2	413	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	52.6	3.1		0		
HCM LOS	F					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1316	-	340	-	-	
HCM Lane V/C Ratio	0.179	-	0.842	-	-	
HCM Control Delay (s)	8.3	-	52.6	-	-	
HCM Lane LOS	A	-	F	-	-	
HCM 95th %tile Q(veh)	0.7	-	7.5	-	-	

Intersection												
Int Delay, s/veh	2.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	224	14	2	370	17	55	1	9	12	1	14
Future Vol, veh/h	8	224	14	2	370	17	55	1	9	12	1	14
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	250	-	-	-	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	299	19	3	493	23	73	1	12	16	1	19

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	516	0	0	318	0	0	852	853	309	848	851	505
Stage 1	-	-	-	-	-	-	331	331	-	511	511	-
Stage 2	-	-	-	-	-	-	521	522	-	337	340	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1050	-	-	1242	-	-	280	296	731	281	297	567
Stage 1	-	-	-	-	-	-	682	645	-	545	537	-
Stage 2	-	-	-	-	-	-	539	531	-	677	639	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1050	-	-	1242	-	-	267	292	731	273	293	567
Mov Cap-2 Maneuver	-	-	-	-	-	-	267	292	-	273	293	-
Stage 1	-	-	-	-	-	-	675	639	-	540	535	-
Stage 2	-	-	-	-	-	-	518	529	-	658	633	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0	22.4	15.1
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	293	1050	-	-	1242	-	-	273	534
HCM Lane V/C Ratio	0.296	0.01	-	-	0.002	-	-	0.059	0.037
HCM Control Delay (s)	22.4	8.5	-	-	7.9	0	-	19	12
HCM Lane LOS	C	A	-	-	A	A	-	C	B
HCM 95th %tile Q(veh)	1.2	0	-	-	0	-	-	0.2	0.1

Intersection						
Int Delay, s/veh	1.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	220	25	7	315	74	19
Future Vol, veh/h	220	25	7	315	74	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	0	-	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	239	27	8	342	80	21
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	266	0	597	239
Stage 1	-	-	-	-	239	-
Stage 2	-	-	-	-	358	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1298	-	466	800
Stage 1	-	-	-	-	801	-
Stage 2	-	-	-	-	707	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1298	-	463	800
Mov Cap-2 Maneuver	-	-	-	-	551	-
Stage 1	-	-	-	-	801	-
Stage 2	-	-	-	-	703	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.2		12.4	
HCM LOS	B					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	588	-	-	1298	-	
HCM Lane V/C Ratio	0.172	-	-	0.006	-	
HCM Control Delay (s)	12.4	-	-	7.8	-	
HCM Lane LOS	B	-	-	A	-	
HCM 95th %tile Q(veh)	0.6	-	-	0	-	

Appendix C-4: Near-Term Plus Project PM

HCM 6th Roundabout
1: SR 828 /BR 80 & East Main St/US-50A

02/09/2022

Intersection									
Intersection Delay, s/veh	25.0								
Intersection LOS	D								
Approach	EB		WB		NB		SB		
Entry Lanes	1		1		1		1		
Conflicting Circle Lanes	1		1		1		1		
Adj Approach Flow, veh/h	633		622		466		1562		
Demand Flow Rate, veh/h	645		634		475		1593		
Vehicles Circulating, veh/h	1138		648		1054		224		
Vehicles Exiting, veh/h	172		809		452		594		
Ped Vol Crossing Leg, #/h	0		0		0		0		
Ped Cap Adj	1.000		1.000		1.000		1.000		
Approach Delay, s/veh	25.9		2.1		36.7		30.3		
Approach LOS	D		A		E		D		
Lane	Left	Bypass	Left	Bypass	Left	Bypass	Left	Bypass	
Designated Moves	L	R	L	R	L	R	L	R	
Assumed Moves	L	R	L	R	L	R	L	R	
RT Channelized	Free		Free		Free		Free		
Lane Util	1.000		1.000		1.000		1.000		
Follow-Up Headway, s	2.609		2.609		2.609		2.609		
Critical Headway, s	4.976	277	4.976	464	4.976	72	4.976	507	
Entry Flow, veh/h	368	1938	170	1938	403	1938	1086	1938	
Cap Entry Lane, veh/h	432	0.980	713	0.980	471	0.980	1098	0.980	
Entry HV Adj Factor	0.980	272	0.981	455	0.981	71	0.981	497	
Flow Entry, veh/h	361	1900	167	1900	395	1900	1065	1900	
Cap Entry, veh/h	424	0.143	699	0.239	462	0.037	1077	0.262	
V/C Ratio	0.851	0.0	0.239	0.0	0.856	0.0	0.989	0.0	
Control Delay, s/veh	45.4	A	8.0	A	43.3	A	44.5	A	
LOS	E	0	A	1	E	0	E	1	
95th %tile Queue, veh	8		1		9		19		

Intersection												
Int Delay, s/veh	3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	49	6	11	10	9	34	11	351	14	28	560	60
Future Vol, veh/h	49	6	11	10	9	34	11	351	14	28	560	60
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	175	-	-	300	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	51	6	11	10	9	35	11	366	15	29	583	63
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1091	1076	615	1077	1100	374	646	0	0	381	0	0
Stage 1	673	673	-	396	396	-	-	-	-	-	-	-
Stage 2	418	403	-	681	704	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	192	219	491	197	212	672	939	-	-	1177	-	-
Stage 1	445	454	-	629	604	-	-	-	-	-	-	-
Stage 2	612	600	-	440	440	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	171	211	491	183	204	672	939	-	-	1177	-	-
Mov Cap-2 Maneuver	171	211	-	183	204	-	-	-	-	-	-	-
Stage 1	440	443	-	621	597	-	-	-	-	-	-	-
Stage 2	564	593	-	413	429	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	33		17		0.3		0.4					
HCM LOS	D		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	939	-	-	196	355	1177	-	-				
HCM Lane V/C Ratio	0.012	-	-	0.351	0.156	0.025	-	-				
HCM Control Delay (s)	8.9	-	-	33	17	8.1	-	-				
HCM Lane LOS	A	-	-	D	C	A	-	-				
HCM 95th %tile Q(veh)	0	-	-	1.5	0.5	0.1	-	-				

Intersection												
Int Delay, s/veh	2.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	6	3	16	6	41	6	299	27	73	464	46
Future Vol, veh/h	35	6	3	16	6	41	6	299	27	73	464	46
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	85	-	-	325	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	37	6	3	17	6	43	6	315	28	77	488	48
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1032	1021	512	1012	1031	329	536	0	0	343	0	0
Stage 1	666	666	-	341	341	-	-	-	-	-	-	-
Stage 2	366	355	-	671	690	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	211	236	562	218	233	712	1032	-	-	1216	-	-
Stage 1	449	457	-	674	639	-	-	-	-	-	-	-
Stage 2	653	630	-	446	446	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	184	220	562	201	217	712	1032	-	-	1216	-	-
Mov Cap-2 Maneuver	184	220	-	201	217	-	-	-	-	-	-	-
Stage 1	446	428	-	670	635	-	-	-	-	-	-	-
Stage 2	604	626	-	409	418	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	28.8		16.4		0.2		1					
HCM LOS	D		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1032	-	-	197	382	1216	-	-				
HCM Lane V/C Ratio	0.006	-	-	0.235	0.174	0.063	-	-				
HCM Control Delay (s)	8.5	-	-	28.8	16.4	8.2	-	-				
HCM Lane LOS	A	-	-	D	C	A	-	-				
HCM 95th %tile Q(veh)	0	-	-	0.9	0.6	0.2	-	-				

Intersection						
Int Delay, s/veh	5.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	151	158	94	181	115	368
Future Vol, veh/h	151	158	94	181	115	368
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	-	185	-	-	185
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	166	174	103	199	126	404
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	531	126	530	0	-	0
Stage 1	126	-	-	-	-	-
Stage 2	405	-	-	-	-	-
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	509	924	1037	-	-	-
Stage 1	900	-	-	-	-	-
Stage 2	673	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	459	924	1037	-	-	-
Mov Cap-2 Maneuver	459	-	-	-	-	-
Stage 1	811	-	-	-	-	-
Stage 2	673	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s	17.7		3		0	
HCM LOS	C					
Minor Lane/Major Mvmt	NBL		NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1037		-	618	-	-
HCM Lane V/C Ratio	0.1		-	0.549	-	-
HCM Control Delay (s)	8.9		-	17.7	-	-
HCM Lane LOS	A		-	C	-	-
HCM 95th %tile Q(veh)	0.3		-	3.3	-	-

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	386	56	2	201	17	56	7	5	15	1	12
Future Vol, veh/h	17	386	56	2	201	17	56	7	5	15	1	12
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	250	-	-	-	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	411	60	2	214	18	60	7	5	16	1	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	232	0	0	471	0	0	711	713	441	710	734	223
Stage 1	-	-	-	-	-	-	477	477	-	227	227	-
Stage 2	-	-	-	-	-	-	234	236	-	483	507	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1336	-	-	1091	-	-	348	357	616	348	347	817
Stage 1	-	-	-	-	-	-	569	556	-	776	716	-
Stage 2	-	-	-	-	-	-	769	710	-	565	539	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1336	-	-	1091	-	-	338	352	616	335	342	817
Mov Cap-2 Maneuver	-	-	-	-	-	-	338	352	-	335	342	-
Stage 1	-	-	-	-	-	-	562	549	-	766	715	-
Stage 2	-	-	-	-	-	-	754	709	-	545	532	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			0.1			17.9			13.4		
HCM LOS							C			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	351	1336	-	-	1091	-	-	335	738
HCM Lane V/C Ratio	0.206	0.014	-	-	0.002	-	-	0.048	0.019
HCM Control Delay (s)	17.9	7.7	-	-	8.3	0	-	16.3	10
HCM Lane LOS	C	A	-	-	A	A	-	C	B
HCM 95th %tile Q(veh)	0.8	0	-	-	0	-	-	0.1	0.1

Intersection						
Int Delay, s/veh	1.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↘	↑	↘	↗
Traffic Vol, veh/h	320	86	20	170	50	12
Future Vol, veh/h	320	86	20	170	50	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	0	-	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	348	93	22	185	54	13
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	441	0	577	348
Stage 1	-	-	-	-	348	-
Stage 2	-	-	-	-	229	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1119	-	478	695
Stage 1	-	-	-	-	715	-
Stage 2	-	-	-	-	809	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1119	-	468	695
Mov Cap-2 Maneuver	-	-	-	-	555	-
Stage 1	-	-	-	-	715	-
Stage 2	-	-	-	-	793	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.9		12	
HCM LOS	B					
Minor Lane/Major Mvmt	NBLn1		EBT	EBR	WBL	WBT
Capacity (veh/h)	578		-	-	1119	-
HCM Lane V/C Ratio	0.117		-	-	0.019	-
HCM Control Delay (s)	12		-	-	8.3	-
HCM Lane LOS	B		-	-	A	-
HCM 95th %tile Q(veh)	0.4		-	-	0.1	-

Appendix C-5: Long-Term AM

HCM 6th Roundabout
1: SR 828 /BR 80 & East Main St/US-50A

02/09/2022

Intersection									
Intersection Delay, s/veh	4.7								
Intersection LOS	A								
Approach	EB		WB		NB		SB		
Entry Lanes	1		1		1		1		
Conflicting Circle Lanes	1		1		1		1		
Adj Approach Flow, veh/h	330		441		350		440		
Demand Flow Rate, veh/h	337		449		357		449		
Vehicles Circulating, veh/h	331		510		493		197		
Vehicles Exiting, veh/h	180		304		132		444		
Ped Vol Crossing Leg, #/h	0		0		0		0		
Ped Cap Adj	1.000		1.000		1.000		1.000		
Approach Delay, s/veh	5.9		1.8		8.1		4.1		
Approach LOS	A		A		A		A		
Lane	Left	Bypass	Left	Bypass	Left	Bypass	Left	Bypass	
Designated Moves	L	R	L	R	L	R	L	R	
Assumed Moves	L	R	L	R	L	R	L	R	
RT Channelized	Free		Free		Free		Free		
Lane Util	1.000		1.000		1.000		1.000		
Follow-Up Headway, s	2.609		2.609		2.609		2.609		
Critical Headway, s	4.976		4.976		4.976		4.976		
Entry Flow, veh/h	294		1938		321		1938		
Cap Entry Lane, veh/h	985		0.980		835		0.980		
Entry HV Adj Factor	0.979		0.983		0.981		0.980		
Flow Entry, veh/h	288		1900		315		1900		
Cap Entry, veh/h	964		0.022		819		0.018		
V/C Ratio	0.299		0.160		0.385		0.278		
Control Delay, s/veh	6.8		6.1		9.0		5.9		
LOS	A		A		A		A		
95th %tile Queue, veh	1		1		2		1		

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	4	13	14	6	29	13	280	14	16	125	8
Future Vol, veh/h	25	4	13	14	6	29	13	280	14	16	125	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	175	-	-	300	-	-
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	27	4	14	15	7	32	14	304	15	17	136	9
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	534	522	141	524	519	312	145	0	0	319	0	0
Stage 1	175	175	-	340	340	-	-	-	-	-	-	-
Stage 2	359	347	-	184	179	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	457	459	907	464	461	728	1437	-	-	1241	-	-
Stage 1	827	754	-	675	639	-	-	-	-	-	-	-
Stage 2	659	635	-	818	751	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	425	448	907	445	450	728	1437	-	-	1241	-	-
Mov Cap-2 Maneuver	425	448	-	445	450	-	-	-	-	-	-	-
Stage 1	819	743	-	668	633	-	-	-	-	-	-	-
Stage 2	618	629	-	790	740	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	12.7		11.8		0.3		0.9					
HCM LOS	B		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1437	-	-	512	579	1241	-	-				
HCM Lane V/C Ratio	0.01	-	-	0.089	0.092	0.014	-	-				
HCM Control Delay (s)	7.5	-	-	12.7	11.8	7.9	-	-				
HCM Lane LOS	A	-	-	B	B	A	-	-				
HCM 95th %tile Q(veh)	0	-	-	0.3	0.3	0	-	-				

Intersection												
Int Delay, s/veh	4.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	58	4	19	25	6	74	8	422	16	19	244	10
Future Vol, veh/h	58	4	19	25	6	74	8	422	16	19	244	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	85	-	-	325	-	-
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	63	4	21	27	7	80	9	459	17	21	265	11
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	842	807	271	811	804	468	276	0	0	476	0	0
Stage 1	313	313	-	486	486	-	-	-	-	-	-	-
Stage 2	529	494	-	325	318	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	284	315	768	298	316	595	1287	-	-	1086	-	-
Stage 1	698	657	-	563	551	-	-	-	-	-	-	-
Stage 2	533	546	-	687	654	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	237	307	768	281	308	595	1287	-	-	1086	-	-
Mov Cap-2 Maneuver	237	307	-	281	308	-	-	-	-	-	-	-
Stage 1	693	645	-	559	547	-	-	-	-	-	-	-
Stage 2	452	542	-	651	642	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	23		15.7		0.1		0.6					
HCM LOS	C		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1287	-	-	287	451	1086	-	-				
HCM Lane V/C Ratio	0.007	-	-	0.307	0.253	0.019	-	-				
HCM Control Delay (s)	7.8	-	-	23	15.7	8.4	-	-				
HCM Lane LOS	A	-	-	C	C	A	-	-				
HCM 95th %tile Q(veh)	0	-	-	1.3	1	0.1	-	-				

Intersection						
Int Delay, s/veh	32.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	164	146	247	346	139	107
Future Vol, veh/h	164	146	247	346	139	107
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	-	185	-	-	185
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	178	159	268	376	151	116
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1063	151	267	0	-	0
Stage 1	151	-	-	-	-	-
Stage 2	912	-	-	-	-	-
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	247	895	1297	-	-	-
Stage 1	877	-	-	-	-	-
Stage 2	392	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	196	895	1297	-	-	-
Mov Cap-2 Maneuver	196	-	-	-	-	-
Stage 1	695	-	-	-	-	-
Stage 2	392	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s	114		3.5		0	
HCM LOS	F					
Minor Lane/Major Mvmt	NBL		NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1297		-	310	-	-
HCM Lane V/C Ratio	0.207		-	1.087	-	-
HCM Control Delay (s)	8.5		-	114	-	-
HCM Lane LOS	A		-	F	-	-
HCM 95th %tile Q(veh)	0.8		-	13.1	-	-

Intersection												
Int Delay, s/veh	2.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	251	18	3	373	21	69	1	11	15	1	18
Future Vol, veh/h	10	251	18	3	373	21	69	1	11	15	1	18
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	250	-	-	-	-	-	-	-	-	0	-	-
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	11	273	20	3	405	23	75	1	12	16	1	20
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	428	0	0	293	0	0	738	739	283	735	738	417
Stage 1	-	-	-	-	-	-	305	305	-	423	423	-
Stage 2	-	-	-	-	-	-	433	434	-	312	315	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1131	-	-	1269	-	-	334	345	756	335	346	636
Stage 1	-	-	-	-	-	-	705	662	-	609	588	-
Stage 2	-	-	-	-	-	-	601	581	-	699	656	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1131	-	-	1269	-	-	320	341	756	326	342	636
Mov Cap-2 Maneuver	-	-	-	-	-	-	320	341	-	326	342	-
Stage 1	-	-	-	-	-	-	698	655	-	603	586	-
Stage 2	-	-	-	-	-	-	580	579	-	680	649	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			0.1			18.9			13.5		
HCM LOS							C			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2			
Capacity (veh/h)	347	1131	-	-	1269	-	-	326	608			
HCM Lane V/C Ratio	0.254	0.01	-	-	0.003	-	-	0.05	0.034			
HCM Control Delay (s)	18.9	8.2	-	-	7.8	0	-	16.6	11.1			
HCM Lane LOS	C	A	-	-	A	A	-	C	B			
HCM 95th %tile Q(veh)	1	0	-	-	0	-	-	0.2	0.1			

Appendix C-6: Long-Term PM

Intersection									
Intersection Delay, s/veh	7.1								
Intersection LOS	A								
Approach	EB		WB		NB		SB		
Entry Lanes	1		1		1		1		
Conflicting Circle Lanes	1		1		1		1		
Adj Approach Flow, veh/h	439		451		310		1136		
Demand Flow Rate, veh/h	448		461		316		1158		
Vehicles Circulating, veh/h	815		448		779		140		
Vehicles Exiting, veh/h	110		598		308		426		
Ped Vol Crossing Leg, #/h	0		0		0		0		
Ped Cap Adj	1.000		1.000		1.000		1.000		
Approach Delay, s/veh	8.1		1.4		10.4		8.1		
Approach LOS	A		A		B		A		
Lane	Left	Bypass	Left	Bypass	Left	Bypass	Left	Bypass	
Designated Moves	L	R	L	R	L	R	L	R	
Assumed Moves	L	R	L	R	L	R	L	R	
RT Channelized	Free		Free		Free		Free		
Lane Util	1.000		1.000		1.000		1.000		
Follow-Up Headway, s	2.609		2.609		2.609		2.609		
Critical Headway, s	4.976		176		4.976		49		
Entry Flow, veh/h	272		1938		118		1938		
Cap Entry Lane, veh/h	601		0.980		874		0.980		
Entry HV Adj Factor	0.979		173		0.977		48		
Flow Entry, veh/h	266		1900		115		1900		
Cap Entry, veh/h	588		0.091		854		0.025		
V/C Ratio	0.453		0.0		0.135		0.0		
Control Delay, s/veh	13.3		A		5.6		A		
LOS	B		0		A		1		
95th %tile Queue, veh	2		0		2		5		

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	34	4	8	7	2	24	8	215	10	42	340	20
Future Vol, veh/h	34	4	8	7	2	24	8	215	10	42	340	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	175	-	-	300	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	37	4	9	8	2	26	9	234	11	46	370	22
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	745	736	381	738	742	240	392	0	0	245	0	0
Stage 1	473	473	-	258	258	-	-	-	-	-	-	-
Stage 2	272	263	-	480	484	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	330	346	666	334	344	799	1167	-	-	1321	-	-
Stage 1	572	558	-	747	694	-	-	-	-	-	-	-
Stage 2	734	691	-	567	552	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	307	331	666	316	329	799	1167	-	-	1321	-	-
Mov Cap-2 Maneuver	307	331	-	316	329	-	-	-	-	-	-	-
Stage 1	567	538	-	741	688	-	-	-	-	-	-	-
Stage 2	702	685	-	536	533	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	17.4		11.8		0.3		0.8					
HCM LOS	C		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1167	-	-	341	566	1321	-	-				
HCM Lane V/C Ratio	0.007	-	-	0.147	0.063	0.035	-	-				
HCM Control Delay (s)	8.1	-	-	17.4	11.8	7.8	-	-				
HCM Lane LOS	A	-	-	C	B	A	-	-				
HCM 95th %tile Q(veh)	0	-	-	0.5	0.2	0.1	-	-				

Intersection												
Int Delay, s/veh	4.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↘		↗	↘	
Traffic Vol, veh/h	44	8	4	20	8	52	8	321	34	92	490	58
Future Vol, veh/h	44	8	4	20	8	52	8	321	34	92	490	58
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	85	-	-	325	-	-
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	48	9	4	22	9	57	9	349	37	100	533	63

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1184	1169	565	1157	1182	368	596	0	0	386	0	0
Stage 1	765	765	-	386	386	-	-	-	-	-	-	-
Stage 2	419	404	-	771	796	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	166	193	524	173	190	677	980	-	-	1172	-	-
Stage 1	396	412	-	637	610	-	-	-	-	-	-	-
Stage 2	612	599	-	393	399	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	136	175	524	153	172	677	980	-	-	1172	-	-
Mov Cap-2 Maneuver	136	175	-	153	172	-	-	-	-	-	-	-
Stage 1	392	377	-	631	605	-	-	-	-	-	-	-
Stage 2	548	594	-	348	365	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	44.9		20.7		0.2		1.2	
HCM LOS	E		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	980	-	-	149	315	1172	-
HCM Lane V/C Ratio	0.009	-	-	0.409	0.276	0.085	-
HCM Control Delay (s)	8.7	-	-	44.9	20.7	8.4	-
HCM Lane LOS	A	-	-	E	C	A	-
HCM 95th %tile Q(veh)	0	-	-	1.8	1.1	0.3	-

Intersection						
Int Delay, s/veh	25.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	190	185	111	173	369	145
Future Vol, veh/h	190	185	111	173	369	145
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	-	185	-	-	185
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	207	201	121	188	401	158

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	831	401	559	0	-	0
Stage 1	401	-	-	-	-	-
Stage 2	430	-	-	-	-	-
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	340	649	1012	-	-	-
Stage 1	676	-	-	-	-	-
Stage 2	656	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	299	649	1012	-	-	-
Mov Cap-2 Maneuver	299	-	-	-	-	-
Stage 1	595	-	-	-	-	-
Stage 2	656	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	77.3	3.5	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1012	-	407	-	-
HCM Lane V/C Ratio	0.119	-	1.001	-	-
HCM Control Delay (s)	9	-	77.3	-	-
HCM Lane LOS	A	-	F	-	-
HCM 95th %tile Q(veh)	0.4	-	12.4	-	-

Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	378	71	3	190	21	42	9	6	19	1	15
Future Vol, veh/h	21	378	71	3	190	21	42	9	6	19	1	15
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	250	-	-	-	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	411	77	3	207	23	46	10	7	21	1	16
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	230	0	0	488	0	0	729	732	450	729	759	219
Stage 1	-	-	-	-	-	-	496	496	-	225	225	-
Stage 2	-	-	-	-	-	-	233	236	-	504	534	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1338	-	-	1075	-	-	338	348	609	338	336	821
Stage 1	-	-	-	-	-	-	556	545	-	778	718	-
Stage 2	-	-	-	-	-	-	770	710	-	550	524	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1338	-	-	1075	-	-	325	341	609	322	329	821
Mov Cap-2 Maneuver	-	-	-	-	-	-	325	341	-	322	329	-
Stage 1	-	-	-	-	-	-	547	536	-	765	716	-
Stage 2	-	-	-	-	-	-	751	708	-	525	515	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			0.1			17.8			13.7		
HCM LOS							C			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2			
Capacity (veh/h)	344	1338	-	-	1075	-	-	322	751			
HCM Lane V/C Ratio	0.18	0.017	-	-	0.003	-	-	0.064	0.023			
HCM Control Delay (s)	17.8	7.7	-	-	8.4	0	-	16.9	9.9			
HCM Lane LOS	C	A	-	-	A	A	-	C	A			
HCM 95th %tile Q(veh)	0.6	0.1	-	-	0	-	-	0.2	0.1			

Appendix C-7: Long-Term Plus Project AM

HCM 6th Roundabout
1: SR 828 /BR 80 & East Main St/US-50A

02/09/2022

Intersection									
Intersection Delay, s/veh	5.2								
Intersection LOS	A								
Approach	EB		WB		NB		SB		
Entry Lanes	1		1		1		1		
Conflicting Circle Lanes	1		1		1		1		
Adj Approach Flow, veh/h	339		445		406		447		
Demand Flow Rate, veh/h	346		453		414		456		
Vehicles Circulating, veh/h	342		557		493		227		
Vehicles Exiting, veh/h	206		304		143		465		
Ped Vol Crossing Leg, #/h	0		0		0		0		
Ped Cap Adj	1.000		1.000		1.000		1.000		
Approach Delay, s/veh	5.9		1.9		8.9		4.4		
Approach LOS	A		A		A		A		
Lane	Left	Bypass	Left	Bypass	Left	Bypass	Left	Bypass	
Designated Moves	L	R	L	R	L	R	L	R	
Assumed Moves	L	R	L	R	L	R	L	R	
RT Channelized	Free		Free		Free		Free		
Lane Util	1.000		1.000		1.000		1.000		
Follow-Up Headway, s	2.609		2.609		2.609		2.609		
Critical Headway, s	4.976	52	4.976	318	4.976	46	4.976	135	
Entry Flow, veh/h	294	1938	135	1938	368	1938	321	1938	
Cap Entry Lane, veh/h	974	0.980	782	0.980	835	0.980	1095	0.980	
Entry HV Adj Factor	0.979	51	0.983	312	0.980	45	0.980	132	
Flow Entry, veh/h	288	1900	133	1900	361	1900	315	1900	
Cap Entry, veh/h	953	0.027	769	0.164	818	0.024	1073	0.069	
V/C Ratio	0.302	0.0	0.173	0.0	0.441	0.0	0.293	0.0	
Control Delay, s/veh	6.9	A	6.5	A	10.0	A	6.2	A	
LOS	A	0	A	1	B	0	A	0	
95th %tile Queue, veh	1		1		2		1		

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	4	13	14	6	29	13	331	14	16	142	8
Future Vol, veh/h	25	4	13	14	6	29	13	331	14	16	142	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	175	-	-	300	-	-
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	27	4	14	15	7	32	14	360	15	17	154	9
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	608	596	159	598	593	368	163	0	0	375	0	0
Stage 1	193	193	-	396	396	-	-	-	-	-	-	-
Stage 2	415	403	-	202	197	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	408	417	886	414	418	677	1416	-	-	1183	-	-
Stage 1	809	741	-	629	604	-	-	-	-	-	-	-
Stage 2	615	600	-	800	738	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	377	407	886	397	408	677	1416	-	-	1183	-	-
Mov Cap-2 Maneuver	377	407	-	397	408	-	-	-	-	-	-	-
Stage 1	801	731	-	623	598	-	-	-	-	-	-	-
Stage 2	574	594	-	771	728	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	13.6		12.6		0.3		0.8					
HCM LOS	B		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1416	-	-	462	528	1183	-	-				
HCM Lane V/C Ratio	0.01	-	-	0.099	0.101	0.015	-	-				
HCM Control Delay (s)	7.6	-	-	13.6	12.6	8.1	-	-				
HCM Lane LOS	A	-	-	B	B	A	-	-				
HCM 95th %tile Q(veh)	0	-	-	0.3	0.3	0	-	-				

Intersection												
Int Delay, s/veh	4.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	58	4	19	25	6	74	8	473	16	19	261	10
Future Vol, veh/h	58	4	19	25	6	74	8	473	16	19	261	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	85	-	-	325	-	-
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	63	4	21	27	7	80	9	514	17	21	284	11
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	916	881	290	885	878	523	295	0	0	531	0	0
Stage 1	332	332	-	541	541	-	-	-	-	-	-	-
Stage 2	584	549	-	344	337	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	253	285	749	266	287	554	1266	-	-	1036	-	-
Stage 1	681	644	-	525	521	-	-	-	-	-	-	-
Stage 2	498	516	-	671	641	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	208	277	749	250	279	554	1266	-	-	1036	-	-
Mov Cap-2 Maneuver	208	277	-	250	279	-	-	-	-	-	-	-
Stage 1	676	631	-	521	517	-	-	-	-	-	-	-
Stage 2	417	512	-	635	628	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	26.5		17.1		0.1		0.6					
HCM LOS	D		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1266	-	-	254	412	1036	-	-				
HCM Lane V/C Ratio	0.007	-	-	0.347	0.277	0.02	-	-				
HCM Control Delay (s)	7.9	-	-	26.5	17.1	8.5	-	-				
HCM Lane LOS	A	-	-	D	C	A	-	-				
HCM 95th %tile Q(veh)	0	-	-	1.5	1.1	0.1	-	-				

Intersection						
Int Delay, s/veh	47.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	164	151	261	392	156	107
Future Vol, veh/h	164	151	261	392	156	107
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	-	185	-	-	185
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	178	164	284	426	170	116
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1164	170	286	0	-	0
Stage 1	170	-	-	-	-	-
Stage 2	994	-	-	-	-	-
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	215	874	1276	-	-	-
Stage 1	860	-	-	-	-	-
Stage 2	358	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 167	874	1276	-	-	-
Mov Cap-2 Maneuver	~ 167	-	-	-	-	-
Stage 1	668	-	-	-	-	-
Stage 2	358	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	178.9	3.4		0		
HCM LOS	F					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1276	-	273	-	-	
HCM Lane V/C Ratio	0.222	-	1.254	-	-	
HCM Control Delay (s)	8.6	-	178.9	-	-	
HCM Lane LOS	A	-	F	-	-	
HCM 95th %tile Q(veh)	0.9	-	16.5	-	-	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Intersection												
Int Delay, s/veh	2.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	273	18	3	438	21	69	1	11	15	1	18
Future Vol, veh/h	10	273	18	3	438	21	69	1	11	15	1	18
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	250	-	-	-	-	-	-	-	-	0	-	-
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	11	297	20	3	476	23	75	1	12	16	1	20
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	499	0	0	317	0	0	833	834	307	830	833	488
Stage 1	-	-	-	-	-	-	329	329	-	494	494	-
Stage 2	-	-	-	-	-	-	504	505	-	336	339	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1065	-	-	1243	-	-	288	304	733	289	304	580
Stage 1	-	-	-	-	-	-	684	646	-	557	546	-
Stage 2	-	-	-	-	-	-	550	540	-	678	640	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1065	-	-	1243	-	-	275	300	733	281	300	580
Mov Cap-2 Maneuver	-	-	-	-	-	-	275	300	-	281	300	-
Stage 1	-	-	-	-	-	-	677	640	-	551	544	-
Stage 2	-	-	-	-	-	-	529	538	-	659	634	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			0.1			21.8			14.8		
HCM LOS							C			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2			
Capacity (veh/h)	301	1065	-	-	1243	-	-	281	553			
HCM Lane V/C Ratio	0.293	0.01	-	-	0.003	-	-	0.058	0.037			
HCM Control Delay (s)	21.8	8.4	-	-	7.9	0	-	18.6	11.8			
HCM Lane LOS	C	A	-	-	A	A	-	C	B			
HCM 95th %tile Q(veh)	1.2	0	-	-	0	-	-	0.2	0.1			

Intersection						
Int Delay, s/veh	1.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↖	↑	↘↗	
Traffic Vol, veh/h	277	22	10	397	65	28
Future Vol, veh/h	277	22	10	397	65	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	0	-	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	301	24	11	432	71	30
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	325	0	755	301
Stage 1	-	-	-	-	301	-
Stage 2	-	-	-	-	454	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1235	-	376	739
Stage 1	-	-	-	-	751	-
Stage 2	-	-	-	-	640	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1235	-	373	739
Mov Cap-2 Maneuver	-	-	-	-	481	-
Stage 1	-	-	-	-	751	-
Stage 2	-	-	-	-	634	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.2		13.3	
HCM LOS	B					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	537	-	-	1235	-	
HCM Lane V/C Ratio	0.188	-	-	0.009	-	
HCM Control Delay (s)	13.3	-	-	7.9	-	
HCM Lane LOS	B	-	-	A	-	
HCM 95th %tile Q(veh)	0.7	-	-	0	-	

Appendix C-8: Long-Term Plus Project PM

HCM 6th Roundabout
1: SR 828 /BR 80 & East Main St/US-50A

02/09/2022

Intersection									
Intersection Delay, s/veh	7.9								
Intersection LOS	A								
Approach	EB		WB		NB		SB		
Entry Lanes	1		1		1		1		
Conflicting Circle Lanes	1		1		1		1		
Adj Approach Flow, veh/h	468		463		346		1159		
Demand Flow Rate, veh/h	478		473		353		1182		
Vehicles Circulating, veh/h	851		479		779		170		
Vehicles Exiting, veh/h	128		598		344		439		
Ped Vol Crossing Leg, #/h	0		0		0		0		
Ped Cap Adj	1.000		1.000		1.000		1.000		
Approach Delay, s/veh	8.1		1.6		11.4		9.3		
Approach LOS	A		A		B		A		
Lane	Left	Bypass	Left	Bypass	Left	Bypass	Left	Bypass	
Designated Moves	L	R	L	R	L	R	L	R	
Assumed Moves	L	R	L	R	L	R	L	R	
RT Channelized		Free		Free		Free		Free	
Lane Util	1.000		1.000		1.000		1.000		
Follow-Up Headway, s	2.609		2.609		2.609		2.609		
Critical Headway, s	4.976	206	4.976	343	4.976	55	4.976	373	
Entry Flow, veh/h	272	1938	130	1938	298	1938	809	1938	
Cap Entry Lane, veh/h	579	0.980	847	0.980	623	0.980	1160	0.980	
Entry HV Adj Factor	0.979	202	0.979	336	0.980	54	0.980	366	
Flow Entry, veh/h	266	1900	127	1900	292	1900	793	1900	
Cap Entry, veh/h	567	0.106	829	0.177	611	0.028	1137	0.193	
V/C Ratio	0.470	0.0	0.154	0.0	0.478	0.0	0.697	0.0	
Control Delay, s/veh	14.2	A	5.9	A	13.6	A	13.6	A	
LOS	B	0	A	1	B	0	B	1	
95th %tile Queue, veh	2		1		3		6		

Approach

Approach Direction	NB
Median Present?	No
Approach Delay(s)	70.5
Level of Service	F

Crosswalk

Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	648
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No

Critical Headway (s)	15.57
Prob of Delayed X-ing	0.94
Prob of Blocked Lane	0.75
Delay for adq Gap	75.04
Avg Ped Delay (s)	70.49

Approach

Approach Direction	SB
Median Present?	No
Approach Delay(s)	70.5
Level of Service	F

Crosswalk

Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	648
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No

Critical Headway (s)	15.57
Prob of Delayed X-ing	0.94
Prob of Blocked Lane	0.75
Delay for adq Gap	75.04
Avg Ped Delay (s)	70.49

Approach

Approach Direction	NB
Median Present?	No
Approach Delay(s)	179.2
Level of Service	F

Crosswalk

Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	904
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No

Critical Headway (s)	15.57
Prob of Delayed X-ing	0.98
Prob of Blocked Lane	0.86
Delay for adq Gap	182.85
Avg Ped Delay (s)	179.19

Approach

Approach Direction	SB
Median Present?	No
Approach Delay(s)	179.2
Level of Service	F

Crosswalk

Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	904
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No

Critical Headway (s)	15.57
Prob of Delayed X-ing	0.98
Prob of Blocked Lane	0.86
Delay for adq Gap	182.85
Avg Ped Delay (s)	179.19

Approach

Approach Direction	NB
Median Present?	No
Approach Delay(s)	67.1
Level of Service	F

Crosswalk

Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	635
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No

Critical Headway (s)	15.57
Prob of Delayed X-ing	0.94
Prob of Blocked Lane	0.75
Delay for adq Gap	71.75
Avg Ped Delay (s)	67.14

Approach

Approach Direction	SB
Median Present?	Yes
Approach Delay(s)	5.3
Level of Service	B

Crosswalk

Length (ft)	12	17
Lanes Crossed	1	1
Veh Vol Crossed	428	207
Ped Vol Crossed	0	0
Yield Rate(%)	0	0
Ped Platooning	No	No

Critical Headway (s)	6.43	7.86
Prob of Delayed X-ing	0.53	0.36
Prob of Blocked Lane	0.53	0.36
Delay for adq Gap	6.03	5.71
Avg Ped Delay (s)	3.22	2.08

Approach

Approach Direction	EB
Median Present?	No
Approach Delay(s)	81.2
Level of Service	F

Crosswalk

Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	686
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No

Critical Headway (s)	15.57
Prob of Delayed X-ing	0.95
Prob of Blocked Lane	0.77
Delay for adq Gap	85.59
Avg Ped Delay (s)	81.19

Approach

Approach Direction	WB
Median Present?	No
Approach Delay(s)	81.2
Level of Service	F

Crosswalk

Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	686
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No

Critical Headway (s)	15.57
Prob of Delayed X-ing	0.95
Prob of Blocked Lane	0.77
Delay for adq Gap	85.59
Avg Ped Delay (s)	81.19

Approach

Approach Direction	EB
Median Present?	No
Approach Delay(s)	126.6
Level of Service	F

Crosswalk

Length (ft)	56
Lanes Crossed	2
Veh Vol Crossed	617
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No

Critical Headway (s)	19.00
Prob of Delayed X-ing	0.96
Prob of Blocked Lane	0.80
Delay for adq Gap	131.68
Avg Ped Delay (s)	126.61

Approach

Approach Direction	WB
Median Present?	No
Approach Delay(s)	62.7
Level of Service	F

Crosswalk

Length (ft)	44
Lanes Crossed	2
Veh Vol Crossed	617
Ped Vol Crossed	0
Yield Rate(%)	0
Ped Platooning	No

Critical Headway (s)	15.57
Prob of Delayed X-ing	0.93
Prob of Blocked Lane	0.74
Delay for adq Gap	67.42
Avg Ped Delay (s)	62.74



CITY OF FERNLEY

Planning Commission AGENDA REPORT

Meeting Date: December 11, 2024

REPORT TO: Fernley Planning Commission

REPORT FROM: Michele Rambo, Planning Director

FINANCIAL IMPACT:

Yes: No: X

CURRENTLY BUDGETED:

Yes: No: X

FUND/ACCOUNT:

N/A

ACTION REQUESTED: Motion

AGENDA ITEM:

(For possible action) Discussion and possible action regarding a Zoning Map Amendment (ZMA 24001), Major Deviation (MJD 24001), and Tentative Subdivision Map (TSM 24001), a request by KLS Planning & Design on behalf of The 1903 Trust for 1) changing the zoning designation from RR1/2 to SF6; 2) the reduction of side setback requirements from a combined total of 20 feet to a combined total of 10 feet; and 3) the division of approximately 47.52 acres into 158 single-family lots. The project is located at the northeast corner of Farm District Road and Red Rock Road (APN 021-343-20).

AGENDA ITEM BRIEF:

There are 3 applications being considered on this one agenda item: a Zoning Map Amendment, a Major Deviation, and a Tentative Subdivision Map. The result of approving these applications will be the construction of 158 single-family homes east of Red Rock Road.

This item was continued from the November 13, 2024 Planning Commission so the applicant and the City could further discuss conditions of approval.

RECOMMENDED MOTION:

I move to

1. Approve the Major Deviation application as presented based on the findings as set forth in the staff report; and

2. Recommend City Council approve Zoning Map Amendment (ZMA 24001) and Tentative Subdivision Map (TSM 24001) as presented based on the findings as set forth in the staff report.

BUSINESS IMPACT (per NRS Chapter 237):

A Business Impact Statement is not required because this is not a rule (term excludes vehicles by which legislative powers are exercised under NRS Chapters 271, 278, 278A, or 278B).

See attached report for background, analysis, alternatives.

ALTERNATIVES:Denial

"Based on information received in written materials and at the public hearings on this matter, I move to recommend City Council deny the tentative subdivision map, and zoning map amendment for Yori Single-Family Development associated with TSM24001, and ZMA24001. I cannot recommend approval of this tentative subdivision map and zoning map amendment because I have determined the proposed changes are detrimental to the public's health, safety, and general welfare and am unable to make the following required findings:"

"I am unable to make finding _____ as it relates to _____. "*(Repeat for each applicable finding.)*

Note

Though no further language has been provided, all motions consistent with City of Fernley Planning Commission bylaws and rules of procedure are appropriate.

BACKGROUND:

The subject property is currently classified under the Lyon County Assessor's office as use code 698: Agricultural Deferred with Multiple Residences. The site is mostly vacant and comprised of one regularly shaped parcel (APN: 021-343-20) totaling 47.53 acres. The applicant is proposing to demolish all existing structures and redevelop the site into 158 single family dwelling units.

The scope of work requires the approval of the following entitlements as described in Fernley Municipal Code Sec. 32.03.020. "Review and decision-making bodies." Individual findings are included below.

(TSM) Tentative Subdivision Map – Recommended by Planning Commission, Approved by Council

(FSM) Final Subdivision Map - Approved by Council

(ZMA) Zoning Map Amendment - Recommended by Planning Commission, Approved by Council

(MJD) Major Deviation – Approved by Planning Commission

APPROVAL CRITERIA:

Recommendations and decisions on the subject applications shall be based on consideration of all the following criteria:

Compliance with environmental and health laws and regulations concerning water and air pollution, solid waste disposal, water supply facilities, community or public sewage disposal, and, where applicable, individual systems for sewage disposal;

Condition of approval 8 is intended to keep dust erosion from polluting the air. No other significant source of air pollution was identified. To ensure compliance with environmental and health laws and regulations concerning solid waste disposal, staff added condition of approval 18, which requires proof that Waste Management

intends to provide solid waste disposal for the community.

Water and sewer services will be provided by City of Fernley. To ensure City of Fernley systems maintain compliance with applicable regulations once the project is developed, staff included conditions of approval 7, 13, 15-16, & 24. The developer must conduct water and sewer modeling to determine if adequate public facilities are in place. If adequate facilities are not in place, the developer will construct them in addition to all infrastructure within the development itself. The developer will grant easements so that City of Fernley may maintain the water and sewer infrastructure once built. Finally, the developer is responsible for constructing all necessary storm water treatment and drainage structures.

Availability of water that meets applicable health standards and is sufficient for the reasonably foreseeable needs of the subdivision;

Fernley Municipal Code Section 32.09.035 states, the applicant shall dedicate to the city, as a condition precedent to approval of a final subdivision map, the surface water or groundwater rights reasonably necessary to ensure an adequate water supply to serve all parcels or lots within the project. Staff added condition 14 to make the need for dedication of water rights very clear. If the applicant is unable to dedicate the appropriate amount of water rights, their final subdivision map will not be approved by City of Fernley.

Availability and accessibility of utilities;

All water, sewer, and other public utilities are known to be available to the site; the developer shall comply with FMC regarding the sanitary sewer and water systems, including associated connection fees, and shall be responsible for constructing all improvements deemed necessary to serve the project

Availability and accessibility of public services such as schools, police and fire protection, transportation, recreation facilities, and parks;

This tentative map was forwarded to Lyon County School Board in accordance with NRS §278.346; the board did not indicate a school site is needed within the area. This subdivision is an infill development located within areas already served by Lyon County Sheriff's Department and the North Lyon County Fire Protection District.

The question of automobile transportation is addressed through condition 17 which requires the streets to be built out prior to submitting the final map application. Additional improvements to existing public streets and highways have been identified and conditioned as part of the project approval, including but not limited to:

- All streets within the subdivision are required to have sidewalks, which will allow pedestrian access.
- Paved pedestrian access shall be provided along the north side of Red Rock Road between the east side of Yori Way and Red Rock Road.
- The developer shall coordinate with the City regarding payment in lieu of installation of a cross walk and rapid flashing beacon at the intersection of Red Rock Road and Farm District Road.
- Directional pedestrian ramps shall be installed at the northeast corner of the intersection for a future Red Rock Road and Farm District Road cross walk.
- A minimum of three pedestrian ramps shall be provided at all t-intersections, including bulbs.
- Sidewalks shall be increased to 5-feet wide or passing spaces shall be incorporated every 200-feet in accordance with Americans with Disabilities Act and Accessible Guidelines for Pedestrian Facilities in Public Right-of-Way requirements.
- Pedestrian ramps shall be provided at both corners of the west end of proposed Cattle Road and the north end of Yori Way.
- Directional pedestrian ramps shall be provided across Yori at Farm District Road.

The need for recreation facilities and parks is specifically addressed through condition 25 regarding residential construction tax. Given the current market rate of single-family homes in City of Fernley, the developer will be required to pay \$1,000 per dwelling unit in residential construction tax. This residential construction tax is to be

reserved solely for providing recreation facilities and parks to the citizens of this neighborhood.

Consistency with the zoning district regulations:

The tentative map conforms with the proposed zoning district regulations, contingent on the approval of Major Deviation Permit application No. MJD24001. While the project complies with the individual 5' side setback requirement, the code requires a combined minimum of 20' where the applicant is proposing 10'. The tentative map has been analyzed for consistency with the zone change indicated in companion application ZMA24001 from RR1/2 to SF6.

TABLE 32.06.060-1 - General Rural RR½ and Residential Rural Density/Intensity Standards	
Lot Dimensions	
Lot size (min)	½ acre
Lot coverage (max)	25%
Lot frontage (min)	120'
Lot width (min)	120'
Setbacks (principal buildings)	
Front/exterior side	30'
Side	10'
Rear	20'
Height (structures)	
Residential	35'
Nonresidential	35'

TABLE 32.06.070-1 - Residential - Single-Family Density/Intensity Standards		SF6
Lot		
Lot size (min) (square feet) (.14 acres)	6,000	
Lot coverage (max)	50%	
Lot frontage (min)	35'	
Lot width (min)	60'	
Lot width - corner	65'	
Setbacks (principal buildings)		
Front (livable space or side load garage)	15'	
- garage/carport	20'	
Side	5'	
side combined	20'	
MJD2024001	*10	
Exterior Side	10'	
Rear	10'	
Alley loaded garage ¹		
Density (maximum)		
Residential (du/ac)	7.2	
Height (structures)		
Residential	35'	
Nonresidential	35'	

Conformity with the master streets and highways plan;

Staff verified that this development complies with the "City of Fernley Transportation Master Plan" of July 2020.

Effect of the proposed subdivision on existing public streets and the need for new streets or highways to serve the subdivision;

The City of Fernley currently intends to build the extension of Red Rock Road. Should Yori Subdivision move forward prior to City of Fernley completing their slated Red Rock Road improvements, the developer shall complete the improvements on behalf of the City in accordance with the City's preferred design. The east side of Red Rock Road along the proposed development shall be developed to a half-street section with curb, gutter and sidewalk.

Pavement patching for utilities along Red Rock Road will require a grind and overlay of half or all of Red Rock Road depending on the extent of utility patches. Red Rock shall be repaired due to construction traffic, including pavement replacement for damaged areas and slurry sealing to

correct construction traffic impacts as required. The existing drainage along the east side of Red Rock Road shall be attenuated (piped) across the new roadway connection to Red Rock Road. Improvement plans shall identify all improvements as “public” (to be dedicated) or “private,” and street identification signs must be in place and streets within the subdivision must be complete, to the approval of the City Engineer and Fire Chief, prior to recording the final map.

Farm District Road Turn Lane: The developer shall provide improvements to Farm District Road as required by NDOT. Farm District Road shall be widened along the entire frontage of the project regardless of whether NDOT restricts turning movements at the Yori/Farm District Road Intersection.

Physical land characteristics, such as floodplain, slope, soil, and elevation differentials with abutting properties;
As part of their submission, the developer provided a preliminary technical drainage and geotechnical report. Staff screened recommendations from these reports and found no items of concern.

Recommendations and comments of review bodies;

The City circulated the proposed development plans and received comments from the following agencies:

NDEP: This project will require the submittal of a tentative subdivision map to the Nevada Division of Environmental Protection (Division) pursuant to NRS 278. The developer will need to follow the Division’s guidelines for submittal of the tentative map, including the submittal of the proper fees for agency review. This guidance can be found on the Division’s website. Next, the submittal of civil improvement plans and a final map for agency review are required. A will-serve for water and sewer are required as part of the final map review. The Division advises all local planning authorities and building departments that any construction on a subdivision (including grading) cannot begin unless civil improvement plans have been reviewed and approved by the Division

NDWR: The subject property lies within the City of Fernley service area. Municipal water service is subject to City of Fernley rules and regulations and approval by the Office of the State Engineer regarding water quantity and availability. A Will Serve from City of Fernley and a mylar map of the proposed project must be presented to the State Engineer for approval and signed through his office prior to development. No estimate of demand is available.

NDOT: Specific requirements include: a) construct a type 5, ¾ project access (right-in, right-out, left-in) on SR 828 as described in the traffic study. A deviation letter will be required with the permit application. b) construct a left-turn deceleration lane at the project access per NDOT’s access management system and standards. c) construct signing and striping for improvements per MUTCD and NDOT standards.

Engineering: Staff received an initial comment letter with a list of recommended items to be conveyed as conditions of approval of TSM24001, including: drainage, improvement plans, pedestrian access, traffic impact, hydrological and geotechnical reports. Many of these have been incorporated by reference in other sections of the staff report, and can also be found in the Conditions of Approval.

Conformity to the master sewer and water utility plan;

This project conforms to both the master sewer and water utility plan. Because it is infill development, it will be connected to existing water and sewer lines. Aside from internal infrastructure needed to distribute utilities to each parcel, no additional city utility infrastructure has been identified as needed at this time.

Compliance with this Code and all other applicable regulations.

Planning and Engineering staff actively screened all requirements in Fernley Municipal Code and have determined there are no compliance issues.

The request is consistent with the stated purposes of the Development Code.

The request is consistent with the stated purpose which is to allow relief and flexibility in the development review process. Generally, it is the intent of the City to allow significant reductions or deviations from the minimum standards of this Code only in exchange for a higher level of quality development and compensating benefits. Further, it meets the required applicability criteria which are: a) Special exceptions greater than ten percent and less than 50 percent from requirements for land use in this title; or b) Special exceptions from development standards that are quantified and, c) It does not authorize a use variance, or a deviation based on hardship or difficulty.

Granting the major deviation will not be materially detrimental to the public health, safety or welfare, or injurious to property or improvements in the vicinity;

It is not conceivable to imagine any detriment to public health, safety or welfare to property or improvements in the vicinity. The code in fact already establishes a 5' side yard setback as a standard. It is a home buyer's choice to buy into this design change that implements 5' on both sides of each house (at a point) because of the pie shaped lots that flare out to make the average combined setback much larger.

Granting the major deviation is necessary for the preservation and enjoyment of a property right possessed by other property owners in the same vicinity and land use district and is denied to the property for which the major deviation is sought; and

It appears the standard is not applicable to other properties in the area. This change brings the SF6 zoning standards more in alignment with all zoning standards working in harmony, i.e. lot size, width, setback, coverage, etc., as all must relate to the specified density which cannot be achieved with this standard. Proposed density with the proposed deviation is only 46% of the maximum allowed in the district. That is, 3.3 dwelling units per acre achieved versus 7.2 dwelling units per acre allowed.

Granting of the major deviation does not constitute a special privilege inconsistent with the limitations upon other properties in the vicinity and land use district in which the property is located.

This is a design change and a design preference that the code does not consider and does not grant a special privilege. Other properties in the area could seek the same relief from the code and standards if such a design concept was considered. It appears that it does not apply to other properties.

Consistent with the city's master plan and otherwise consistent with state and federal law.

The existing master plan designation of the subject property is Single Family Residential (SFR), with equivalent zoning categories of SF6/9/12/20 and PD. The existing zoning designation, however, is RR1/2, which corresponds with the land use category Rural Residential (RR) in the master plan. As such, the approval of the proposed zoning map amendment would bring the property into compliance by ensuring consistency across planning documents and minimizing the potential of conflicting development standards.

The main difference between the two categories in the master plan being:

Density (.2-2 du/ac) vs (2-7 du/ac) and
Minimum Lot Size (min 1 acre) vs (N/A).

The project proposes 158 lots across a total lot area of 35.06 acres (excluding common areas/ROW), with one unit per lot, and has an overall residential density of 4.5 du/ac. This falls within the appropriate range for the SFR designation. The maximum amount of residences allowed under the Residential Rural density standards would be limited to 2 dwelling units/acre capping the project at 70 individual lots.

The average lot size is .22 acres and the smallest proposed is .14 acres, which does not meet the minimum 1 acre lot size for rural subdivisions, but does meet the SF6 development standard minimum (.13 acre lots or

6,000SF). There is no minimum lot size requirement Single Family Residential in the master plan.

A condition of approval has been included that the applicant comply with all Local/State/Federal laws.

Furthermore, a full Master Plan Policy Analysis can be found in the attached "Submittal Materials."

Consistent with the surrounding land uses.

Surrounding land uses include a mix of single family and rural residential zoning, with a large range of lot sizes and property development. The site is directly adjacent to a similarly sized subdivision on Red Rock Road and abuts vacant Commercial property along US Highway 50.

Public notice was given, and a public hearing held per the requirements of the development code and Nevada revised statutes.

This item was noticed on 10/23/2024 and considered at a public hearing in accordance with all local and state guidelines.

RELEVANT LAWS, STATUTES, AND REGULATIONS:

General

[Nevada Revised Statutes \(NRS\), Chapter 278](#) - Planning and Zoning

[Fernley Municipal Code \(FMC\), Title 32](#) - Development Code

[City of Fernley Comprehensive Master Plan](#)

Specific

[NRS §278.330](#)-278.353 - Subdivision of Land: Tentative Maps

[NRS §278.260](#) - Determination, establishment, enforcement and amendment of zoning regulations

[NRS 278.315](#) - Granting of variances.

[FMC §32.03.060\(f\)\(1\)](#) - Tentative subdivision maps

[FMC §32.03.040\(e\)](#) - Zoning map amendments (rezoning)

[FMC §32.03.090\(a\)](#) - Major deviations

[FMC §32.06.070](#) - Residential - Single-family (SF20, SF12, SF9, SF6)

[FMC §32.06.060](#) - General rural (GR20) and residential rural (RR5, RR1, and RR½).

[FMC §32.09](#) - Development Standards

FINANCIAL IMPLICATIONS:

None

ATTACHMENTS:

1. Bill #355
2. Conditions of Approval
3. Submittal Materials
4. Plan sets
5. Traffic Study minus Appendix

When recorded, mail to:
City Clerk
City of Fernley
595 Silver Lace Boulevard
Fernley, NV 89408

**BILL #355
CITY OF FERNLEY
ORDINANCE # _____**

A GENERAL ORDINANCE FOR A ZONING MAP AMENDMENT, ASSOCIATED WITH ZMA24001, TO CHANGE THE ZONING OF ±47.52 ACRES LOCATED AT THE NORTHEAST CORNER OF FARM DISTRICT ROAD AND RED ROCK ROAD (APN: 021-343-20) FROM RR1/2 (RURAL RESIDENTIAL, ½ ACRE MINIMUM) TO SF6 (SINGLE-FAMILY RESIDENTIAL, 6,000 SQUARE FEET MINIMUM).

THE CITY COUNCIL OF THE CITY OF FERNLEY, hereinafter “the Council”, DO HEREBY ORDAIN:

Section 1: The zoning of that certain real property totaling ±47.52 acres, more or less, situated in the City of Fernley, Nevada, and owned by The 1903 Trust, being more particularly described on Exhibit “A” attached hereto and depicted on “Exhibit A-1” attached hereto is hereby reclassified from RR1/2 (Rural Residential, ½ acre minimum) to SF6 (Single-Family Residential, 6,000 square foot minimum).

Section 2: All ordinances or parts of ordinances in conflict herewith are hereby repealed.

Section 3: The City Clerk is instructed and authorized to publish the title to this ordinance as provided by law and to record the same as provided by law.

Section 4: This ordinance shall become effective upon passage, approval, and publication.

Section 5: The provisions of this ordinance shall be liberally construed to effectively carry out its purposes in the interest of public health, safety, welfare, and convenience.

Section 6: If any subsection, phrase, sentence, or portion of this section is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct, and independent provision, and such holding shall not affect the validity of the remaining portions.

Section 7: The Council finds that this ordinance is not likely to impose a direct and significant economic burden upon a business or directly restrict the formation, operation, or expansion of a business, or is otherwise exempt from Nevada Revised Statutes Chapter 237.

BILL #355 BEING HEREBY PROPOSED this 18th day of December 2024.

BILL #355 BEING HEREBY PASSED, APPROVED, AND ADOPTED this 15th day of January 2025, by the following vote of the Council:

Ayes: _____ Nays: _____ Abstentions: _____ Absent: _____

FERNLEY CITY COUNCIL

By: _____ Date: _____
Neal E. McIntyre, Mayor

Attest By: _____ Date: _____
Kimberly Swanson, City Clerk

LEGAL DESCRIPTION

PARCEL 2(ADJUSTED)

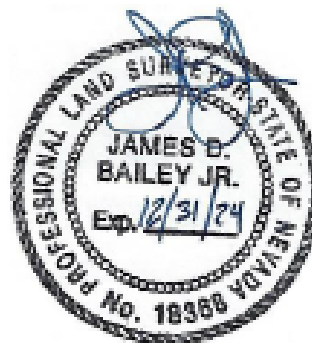
ALL THAT CERTAIN REAL PROPERTY BEING ALL OF THE YORI PARCEL AS SHOWN ON THE RECORD OF SURVEY FOR BOUNDARY LINE ADJUSTMENT FILE No. 90732 AND A PORTION OF THE GALLAWAY PARCEL AS SHOWN ON PARCEL MAP FILE No. 31048 OF LYON COUNTY RECORDS, LYING IN A PORTION OF THE NORTHWEST ¼ OF SECTION 22, TOWNSHIP 20 NORTH, RANGE 25 EAST, MOUNT DIABLO MERIDIAN, BEING DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHEAST CORNER OF SAID YORI PARCEL , THENCE FROM SAID POINT OF BEGINNING AND ALONG THE EASTERLY LINE OF SAID YORI PARCEL , SOUTH 0°02'41" WEST A DISTANCE OF 2630.77 FEET TO A POINT OF INTERSECTION WITH THE NORTHERLY RIGHT OF WAY OF FARM DISTRICT ROAD; THENCE ALONG SAID NORTHERLY RIGHT OF WAY NORTH 89°38'59" WEST A DISTANCE OF 759.64 FEET ; THENCE LEAVING SAID NORTHERLY RIGHT OF WAY NORTH 0°07'03" WEST A DISTANCE OF 338.06 FEET TO BEGINNING OF A NON-TANGENT CURVE TO THE LEFT FROM WHICH THE RADIUS POINT BEARS, SOUTH 89°52'57" WEST, HAVING A RADIUS OF 180.00 FEET , SUBTENDED BY A CENTRAL ANGLE OF 31°47'18" THENCE ALONG THE ARC OF SAID CURVE A DISTANCE OF 99.87 FEET, HAVING A CHORD OF NORTH 16°00'42" WEST AND A DISTANCE OF 98.59 FEET; THENCE LEAVING SAID CURVE NORTH 0°07'03" WEST A DISTANCE OF 2203.35 FEET TO A POINT OF INTERSECTION WITH THE NORTH LINE OF THE AFORMENTIONED SECTION 22; THENCE ALONG SAID NORTH LINE SOUTH 89°16'32" EAST A DISTANCE OF 794.15 FEET TO THE POINT OF BEGINNING.

CONTAINING 47.53 ACRES MORE OR LESS.

Per NRS 111.312, this legal description was previously recorded at Document No.315965, on March 17, 2004, Official Records of Lyon County, Nevada.

James D. Bailey, Jr.
P.L.S. 18368
MERIDIAN SURVEYING & MAPPING, INC.
8725 TECHNOLOGY WAY, STE. C2
RENO, NV. 89521



5/14/2024

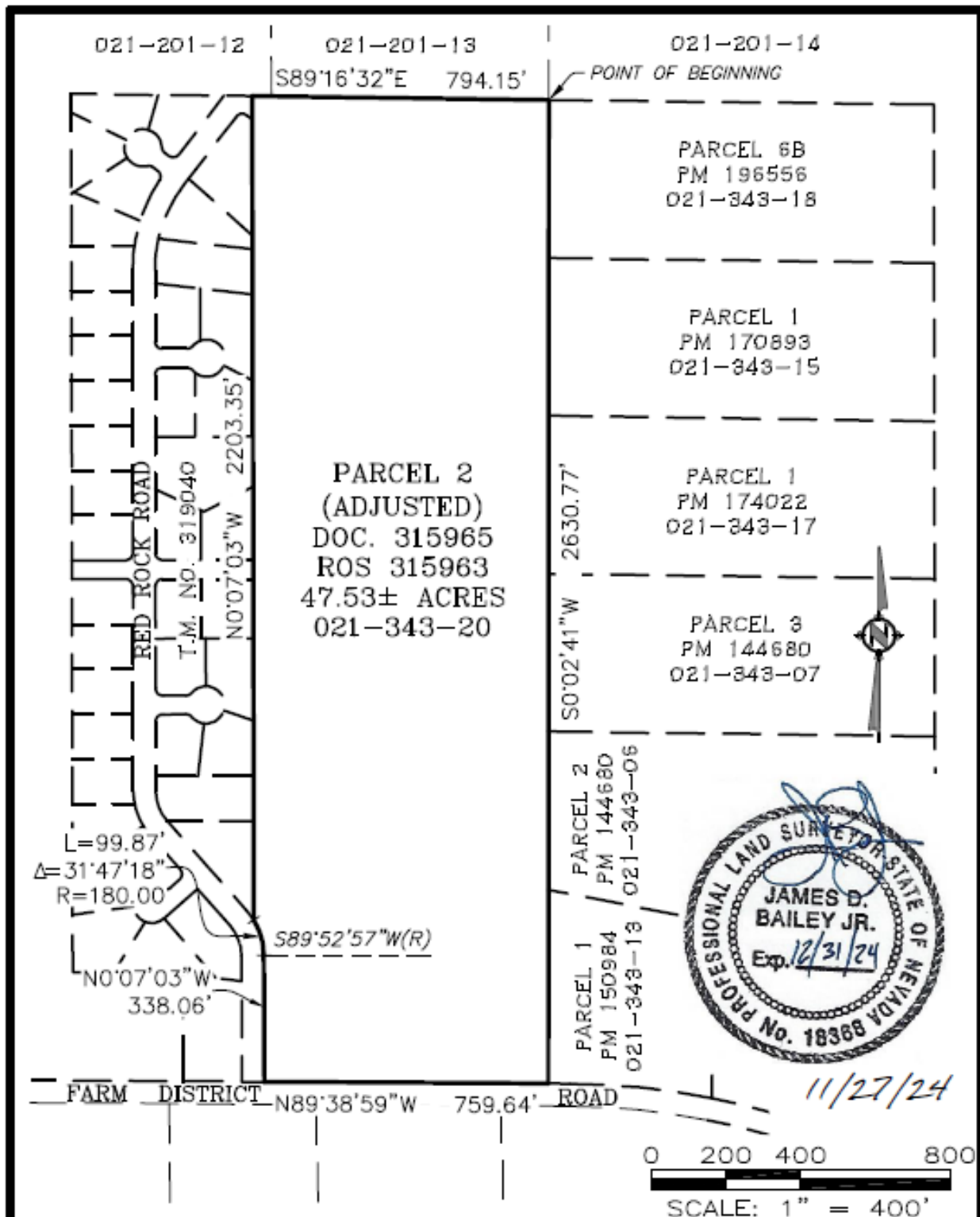
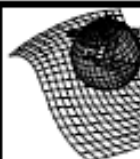


EXHIBIT
PARCEL 2 (ADJUSTED)
ROS MAP FILE NO. 315963
APN: 021-343-20

DRAWN BY: JDB

DATE: NOV. 2024



Meridian Surveying & Mapping, Inc.
Land, Construction and Boundary Surveys

8725 Technology Way, Reno, NV 89521
(775) 690-4194

Conditions of Approval for:
Zoning Map Amendment (ZMA 24001)
Major Deviation (MJD 24001)
Tentative Subdivision Map (TSM 24001)

SCOPE AND DURATION OF APPROVAL

1. APPROVAL:

THE PROJECT IS APPROVED AS CONDITIONED AND DESCRIBED BELOW. ANY SUBSTANTIVE CHANGE WILL REQUIRE APPROVAL FROM THE CITY OF FERNLEY AND SHALL BE PROCESSED AS OUTLINED IN THE DEVELOPMENT CODE.

- A. THE ZONING MAP AMENDMENT IS APPROVED CHANGING THE ZONING OF THE PROPERTY FROM RR1/2 TO SF6.
- B. THE MAJOR DEVIATION IS APPROVED REDUCING THE SIDE SETBACK REQUIREMENTS FROM A COMBINED TOTAL OF 20 FEET TO A COMBINED TOTAL OF 10 FEET.
- C. THE TENTATIVE SUBDIVISION MAP IS APPROVED TO DIVIDE APPROXIMATELY 47.52 ACRES INTO 158 SINGLE-FAMILY LOTS.

2. PROJECT DESCRIPTION:

THE PROJECT APPROVAL IS LIMITED TO RESIDENTIAL SINGLE-FAMILY DEVELOPMENT WITH A MAXIMUM OF 158 LOTS ON AN APPROXIMATELY 47.52-ACRE PARCEL LOCATED AT THE NORTHEAST CORNER OF FARM DISTRICT ROAD AND RED ROCK ROAD (APN 021-343-20).

3. EXPIRATION DATE:

THE TENTATIVE SUBDIVISION MAP APPROVAL SHALL EXPIRE WITHIN FOUR YEARS OF THE DATE OF CITY COUNCIL APPROVAL UNLESS THE FINAL PARCEL MAP(S) HAS BEEN RECORDED IN ACCORDANCE WITH NEVADA REVISED STATUTES (NRS 278.360). BECAUSE THE MAJOR DEVIATION IS TIED TO THE SPECIFIC DESIGN OF THE TENTATIVE SUBDIVISION MAP, THE EXPIRATION OF THE MAJOR DEVIATION WILL FOLLOW THAT OF THE TENTATIVE SUBDIVISION MAP. THE ZONING MAP AMENDMENT DOES NOT EXPIRE.

4. GOVERNING DOCUMENTS:

ALL CITY OF FERNLEY MUNICIPAL CODE (FMC) OR DEVELOPMENT CODE REFERENCES HEREIN PERTAIN TO THE VERSION OF THE CODE ESTABLISHED BY ORDINANCE NUMBER 2023-008, UNLESS OTHERWISE NOTED. THE DEVELOPER MUST COMPLY WITH ALL DESIGN STANDARDS AND REGULATIONS AS SET FORTH IN FMC. THE DEVELOPER MAY SUBSTITUTE REQUIREMENTS ESTABLISHED IN FUTURE FMC UPDATES, IF APPROVED BY THE ADMINISTRATOR.

THE DEVELOPER SHALL ALSO COMPLY WITH ALL STANDARDS FOUND WITHIN "CITY OF FERNLEY DEPARTMENT OF PUBLIC WORKS DESIGN STANDARDS & REVIEW GUIDELINES" AS UPDATED MARCH 2024, "CITY OF FERNLEY STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION" AS UPDATED JULY 2022, AND THE MOST CURRENT "CITY OF FERNLEY COMPREHENSIVE MASTER PLAN".

REGULATORY AGENCIES

5. NORTH LYON COUNTY FIRE PROTECTION DISTRICT:

THE DEVELOPER SHALL COMPLY WITH ALL REQUIREMENTS OF THE MOST RECENT FIRE CODE ADOPTED BY THE NORTH LYON COUNTY FIRE PROTECTION DISTRICT, TO THE APPROVAL OF THE FIRE CHIEF, FIRE MARSHAL, OR DESIGNEE.

6. FEDERAL, STATE, AND LOCAL AGENCIES:

THE DEVELOPER SHALL COMPLY WITH ALL REQUIREMENTS OF ANY FEDERAL, STATE, LOCAL AGENCY, DEPARTMENT, OR LICENSED PROFESSIONAL WITH JURISDICTION OVER THE PROJECT INCLUDING, BUT NOT LIMITED TO: NEVADA

DEPARTMENT OF TRANSPORTATION (NDOT), NEVADA DIVISION OF ENVIRONMENTAL PROTECTION (NDEP), NEVADA DIVISION OF WATER RESOURCES (NDWR), NEVADA BUREAU OF WATER POLLUTION CONTROL, NEVADA BUREAU OF SAFE DRINKING WATER, NEVADA PUBLIC UTILITIES COMMISSION (PUCN), NEVADA STATE ENVIRONMENTAL COMMISSION, THE CITY OF FERNLEY BUILDING OFFICIAL, THE CITY OF FERNLEY ENGINEER, CITY OF FERNLEY PLANNING DEPARTMENT, CITY OF FERNLEY PUBLIC WORKS DEPARTMENT, AND THE CITY OF FERNLEY PROFESSIONAL LAND SURVEYOR.

REQUIREMENTS FOR GRADING AND CIVIL PERMITS

7. WATER AND SEWER SYSTEM MODELING:

ADEQUACY OF SEWAGE COLLECTION AND/OR TREATMENT IS SUBJECT TO THE APPROVAL OF THE PUBLIC WORKS DIRECTOR. FURTHER, THE ADMINISTRATOR SHALL DETERMINE WHETHER ADEQUATE PUBLIC FACILITIES ARE IN PLACE OR CAN BE CONSTRUCTED CONCURRENTLY WITH THE DEVELOPMENT PROJECT PRIOR TO THE APPROVAL OF A DEVELOPMENT PROJECT.

TO ENSURE THE PUBLIC WORKS DIRECTOR, ADMINISTRATOR, AND OTHER RELEVANT PARTIES HAVE THE INFORMATION REQUIRED FOR THESE APPROVALS, THE DEVELOPER SHALL COMPLETE WATER AND SEWER MODELING FOR THE PROJECT PRIOR TO ISSUE OF A PUBLIC INFRASTRUCTURE PERMIT.

8. GRADING PERMIT:

THE DEVELOPER SHALL COMPLY WITH ALL GRADING REQUIREMENTS SET FORTH IN FMC, AS WELL AS ALL STATE AND FEDERAL REGULATIONS. PRIOR TO THE ISSUE OF A GRADING PERMIT, THE DEVELOPER SHALL POST A SURETY BOND FOR REGRADING AND RECLAMATION OF THE SITE, PROVIDE A STORMWATER POLLUTION PREVENTION PERMIT, AND SURFACE AREA DISTURBANCE PERMIT.

REQUIREMENTS DURING CONSTRUCTION PHASE

9. CONSTRUCTION DEBRIS:

ALL CONSTRUCTION SITES SHALL HAVE APPROVED TRASH RECEPTACLES OR AN APPROVED TRASH REMOVAL PLAN IN PLACE AT THE TIME OF THE FIRST INSPECTION AND DURING CONSTRUCTION, UNTIL CERTIFICATE OF OCCUPANCY IS ISSUED. THE RECEPTACLES SHALL BE USED APPROPRIATELY TO MAINTAIN A CLEAN WORK SITE.

10. CONSTRUCTION HOURS:

PRIOR TO THE START OF ANY CONSTRUCTION-RELATED ACTIVITY, THE DEVELOPER SHALL INSTALL SIGNS AT ALL ACCESS POINTS TO THE PROJECT THAT CLEARLY INDICATE THE HOURS OF ACTIVITY ON-SITE. THE DEVELOPER SHALL LIMIT ALL CONSTRUCTION-RELATED ACTIVITIES TO BETWEEN THE HOURS OF SEVEN AM AND SEVEN PM, SEVEN DAYS PER WEEK. ONCE CONSTRUCTION IS FINISHED, THE DEVELOPER SHALL REMOVE THESE SIGNS.

11. PROJECT CONTACT:

PRIOR TO ISSUE OF A PERMIT, THE DEVELOPER SHALL DESIGNATE A PROJECT CONTACT PERSON TO THE ADMINISTRATOR. THE CONTACT PERSON SHALL BE AUTHORIZED TO AND RESPONSIBLE FOR CORRECTING ANY PROJECT-RELATED ISSUES ON A 24-HOUR, SEVEN-DAYS-PER-WEEK BASIS.

REQUIREMENTS FOR FINAL MAP

12. FINAL SUBDIVISION MAP PHASING:

IF THE FINAL SUBDIVISION MAP IS PHASED, EACH MAP PHASE SUBMITTED MUST BE DESIGNED TO MEET THE PUBLIC FACILITIES AND IMPROVEMENT STANDARDS AND BE ABLE TO OPERATE INDEPENDENTLY AND AS PART OF THE OVERALL DESIGN. A PHASING PLAN SHOULD BE SUBMITTED WITH PHASE ONE. CHANGES TO THE PHASING PLAN

WILL REQUIRE REVIEW AND APPROVAL BY THE ADMINISTRATOR, CITY ENGINEER, AND PUBLIC WORKS DIRECTOR, PRIOR TO IMPLEMENTATION.

13. IMPROVEMENT PLANS:

PRIOR TO SUBMITTAL OF ANY FINAL SUBDIVISION MAP APPLICATION, THE ASSOCIATED PUBLIC IMPROVEMENT PLANS SHALL BE SUBMITTED TO THE CITY ENGINEER OR DESIGNEE FOR APPROVAL. THE UTILITIES AND INFRASTRUCTURE FOR EACH PHASE MUST OPERATE INDEPENDENTLY OF FUTURE PHASES YET TO BE CONSTRUCTED.

IMPROVEMENT PLANS SHALL REQUIRE REMOVAL AND REPLACEMENT OF EXISTING PAVEMENT, SIDEWALKS, AND CURB AND GUTTER WHERE NEW ROADS TIE INTO EXISTING TO ENSURE A SMOOTH TRANSITION BETWEEN ALL ROADS.

IMPROVEMENT PLANS SHALL PROVIDE 20-FOOT WIDE MINIMUM GRAVEL ACCESS ROADS AROUND ALL SIDES OF THE DETENTION BASIN TO PROVIDE SUFFICIENT ACCESS FOR MAINTENANCE VEHICLES. THE ACCESS ROAD SHALL BE GRADED WITH A 5% MAXIMUM CROSS SLOPE TO ENSURE IT IS MANEUVERABLE BY MAINTENANCE VEHICLES.

IMPROVEMENT PLANS SHALL PROVIDE RETENTION BASINS WITH A FLAT BOTTOM WHICH CAN BE ACCESSED BY MAINTENANCE VEHICLES TO REMOVE ACCUMULATED SEDIMENT. THE SURFACE FOR THE ACCESS TO THE BOTTOM OF THE BASINS SHALL BE PAVEMENT OR ARTICULATING CONCRETE BLOCKS. THE PERIMETER OF THE BASIN SHALL BE ENCLOSED WITH A CHAIN-LINK FENCE AND PRIVACY SLATS.

IMPROVEMENT PLANS SHALL IDENTIFY ALL IMPROVEMENTS AS “PUBLIC” (TO BE DEDICATED) OR “PRIVATE”.

PEDESTRIAN RAMPS SHALL BE PROVIDED AT BOTH CORNERS OF THE WEST END OF PROPOSED CATTLE ROAD, AS WELL AS THE NORTH AND SOUTH ENDS OF YORI WAY.

WATER MAINS SHALL BE LOOPED AT THE END OF CUL DE SACS OR THE LAYOUT OF THE SUBDIVISION SHALL BE ADJUSTED TO ELIMINATE CUL DE SACS.

IMPROVEMENT PLANS SHALL ELIMINATE VALLEY GUTTERS AT PUBLIC ROAD INTERSECTIONS TO THE EXTENT POSSIBLE.

CONCRETE LINED CHANNELS SHALL BE PROVIDED FOR OPEN SPACE DRAINAGE AREAS.

ALL SIDEWALKS SHALL BE 5 FEET WIDE OR PASSING SPACES SHALL BE INCORPORATED EVERY 200-FEET IN ACCORDANCE WITH AMERICANS WITH DISABILITIES ACT AND ACCESSIBLE GUIDELINES FOR PEDESTRIAN FACILITIES IN PUBLIC RIGHT-OF-WAY REQUIREMENTS.

IMPROVEMENT PLANS SHALL INCLUDE PEDESTRIAN RAMPS AT ALL CORNERS OF ALL INTERSECTIONS OF YORI WAY AND ZIGGY COURT, AS WELL AS QUICK CAL WAY AND YORI WAY.

14. WATER RIGHTS:

THE DEVELOPER SHALL DEDICATE THE APPROPRIATE AMOUNT OF WATER RIGHTS – AS CALCULATED BY THE CITY ENGINEER. APPROVAL FROM THE CITY COUNCIL OF THE WILL-SERVE SHALL BE OBTAINED PRIOR TO RECORDING OF FINAL SUBDIVISION MAP. SHOULD THE PROJECT BE CONSTRUCTED IN PHASES, THESE REQUIREMENTS MAY BE CALCULATED ON A PER-PHASE BASIS. THIS REQUIREMENT IS SUBJECT TO APPROVAL OF THE ADMINISTRATOR, THE CITY ENGINEER, AND THE PUBLIC WORKS DIRECTOR.

15. EASEMENTS:

THE DEVELOPER SHALL PROVIDE EASEMENTS TO THE CITY OF FERNLEY FOR MAINTENANCE OF ALL PUBLIC INFRASTRUCTURE INSTALLED ON PRIVATE PROPERTY. THE EASEMENTS SHALL INCLUDE CITY OF FERNLEY’S STANDARD

EASEMENT LANGUAGE – SUBJECT TO APPROVAL OF THE CITY ENGINEER AND PUBLIC WORKS DIRECTOR – AND SHALL BE RECORDED ALONG WITH THE FINAL SUBDIVISION MAP. ALL EASEMENTS SHALL BE WIDE ENOUGH TO ALLOW FOR OPERATIONS, MAINTENANCE, AND REPLACEMENT OF UTILITY IN THE FUTURE (20-FT FOR A SINGLE UTILITY AND 30- FEET FOR TWO UTILITIES OR DEEP SEWER).

SLOPE EASEMENTS TO THE BENEFIT OF THE CITY PER CITY EASEMENT LANGUAGE REQUIREMENTS SHALL BE PROVIDED FOR THE NORTH END OF YORI WAY (GRADING NEAR THE INTERSECTION OF RED ROCK ROAD).

16. WATER AND SEWER:

THE DEVELOPER SHALL BE RESPONSIBLE FOR CONSTRUCTING OR SHALL POST SURETY BOND FOR ALL IMPROVEMENTS DEEMED NECESSARY TO SERVE THE PROJECT, AS IDENTIFIED IN THE APPROVED WATER AND SEWER MODELING REPORTS, SUBJECT TO APPROVAL OF THE CITY ENGINEER, PRIOR TO RECORDING A FINAL SUBDIVISION MAP.

THE DEVELOPER SHALL COMPLY WITH FMC STANDARDS REGARDNG CONNECTIONS/DEMANDS TO THE SANITARY SEWER AND POTABLE WATER SYSTEMS, INCLUDING ASSOCIATED CONNECTION FEES, DESIGN STANDARDS, DEVELOPMENT CODE REQUIREMENTS, AND STATE REQUIREMENTS PRIOR TO ISSUING A PUBLIC IMPROVEMENT PERMIT.

PRIOR TO APPROVAL OF A FINAL SUBDIVISION MAP FOR THE PROJECT, THE DEVELOPER SHALL PERMIT THE WATER SYSTEM MODIFICATIONS IN CONFORMANCE WITH THE FMC AND PUBLIC WORKS DESIGN MANUAL TO THE APPROVAL OF THE CITY ENGINEER, PUBLIC WORKS DIRECTOR, AND ADMINISTRATOR.

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION BUREAU OF SAFE DRINKING WATER AND BUREAU OF WATER POLLUTION CONTROL SUBMITTAL WILL BE REQUIRED.

17. STREETS AND SIGNAGE:

STREET IDENTIFICATION SIGNS MUST BE IN PLACE AND STREETS WITHIN THE SUBDIVISION MUST BE COMPLETE, TO THE APPROVAL OF THE CITY ENGINEER AND FIRE CHIEF, PRIOR TO SUBMITTING THE FINAL MAP APPLICATION.

18. WASTE MANAGEMENT:

THE DEVELOPER SHALL PROVIDE A WILL-SERVE FROM WASTE MANAGEMENT, SUBJECT TO APPROVAL OF THE ADMINISTRATOR, PRIOR TO RECORDING ANY FINAL SUBDIVISION MAP.

19. HYDROLOGY REPORT:

THE DEVELOPER SHALL PROVIDE A FINAL HYDROLOGICAL REPORT FOR THE PROJECT IN CONFORMANCE WITH THE FMC AND THE PUBLIC WORKS DESIGN MANUAL FOR REVIEW AND APPROVAL BY THE CITY ENGINEER PRIOR TO APPROVAL OF A FINAL MAP FOR ANY PORTION/PHASE OF THE PROJECT.

20. MAINTENANCE ASSOCIATION:

THE DEVELOPER SHALL ESTABLISH A MAINTENANCE ASSOCIATION FOR THE UPKEEP OF ALL COMMON AREAS, THE LANDSCAPING AND FENCING ALONG THE EASTERN BOUNDARY OF THE DEVELOPMENT, AND ANY DRAINAGE CONVEYANCE FACILITIES NOT DEDICATED TO AND ACCEPTED BY THE CITY OF FERNLEY. DOCUMENTS ESTABLISHING THE MAINTENANCE ASSOCIATION SHALL BE SUBMITTED, APPROVED, AND RECORDED ALONG WITH THE FINAL SUBDIVISION MAP. THIS CONDITION IS SUBJECT TO APPROVAL OF THE ADMINISTRATOR, CITY ATTORNEY, CITY ENGINEER, FINANCE DIRECTOR, AND PUBLIC WORKS DIRECTOR.

21. DRAINAGE REPORT:

THE DRAINAGE STUDY IDENTIFIES DETENTION IS BASED ON THE 25-YEAR, 6-HOUR STORM. AS PART OF THE FINAL IMPROVEMENT PLANS, THE DEVELOPMENT SHALL COMPLY WITH SECTION 10.1.4 OF THE DESIGN STANDARDS WHICH REQUIRE THE ENGINEER-OF-RECORD TO PROVIDE CONCLUSIVE PROOF IN THE DRAINAGE REPORT THAT ANY

INCREASE IN PEAK FLOW WILL NOT ADVERSELY EFFECT OR CAUSE DAMAGE TO PROPERTY ALONG THE DOWNSTREAM MAJOR DRAINAGE FACILITY OR NATURAL WATER COURSE. THE NATURAL WATER COURSE DOWNSTREAM OF THE DEVELOPMENT ARE THE CULVERS UNDER HIGHWAY 50A. THE CULVERTS SHALL BE ANALYZED BASED ON THE 100-YEAR STORM OR PROVIDE ADDITIONAL STORM WATER DETENTION TO PREVENT THE 100-YEAR FLOWS FROM IMPACTING DOWNSTREAM PROPERTIES. THE 100-YEAR, 24-HOUR STORM SHALL BE UTILIZED FOR THE SIZING OF THE DETENTION BASIN TO AVOID ANALYSIS OF THE DOWNSTREAM INFRASTRUCTURE.

ALL PROPOSED PUBLIC STORM DRAIN MAINS NOT LOCATED WITHIN STREETS SHALL HAVE A PAVED ACCESS ROAD.

ALL OPEN CHANNELS LOCATED IN COMMON AREAS SHALL BE OWNED AND MAINTAINED BY THE MAINTENANCE ASSOCIATION.

ALL OPEN CHANNELS SHALL HAVE ACCESS ROADS TO PROVIDE MAINTENANCE VEHICLE ACCESS AND THE CHANNELS SHALL BE CONCRETE LINED TO THE EXTENT REQUIRED TO CONVEY THE 25-YEAR STORM.

THE DETENTION POND INLET PIPE SHALL BE MODELED WITH BACKWATER EFFECTS TO ENSURE THE PIPE HGL DOES NOT BACK UP INTO THE SYSTEM DUE TO THE BASIN BEING FULL, OTHERWISE THE BASIN SHALL BE DEEPEMED OR THE INLET PIPE RAISED TO PROVIDE REQUIRED STORAGE BELOW THE INLET PIPE INVERT.

22. GEOTECHNICAL REPORT:

A FINAL GEOTECHNICAL INVESTIGATION SHALL BE SUBMITTED WITH THE PUBLIC IMPROVEMENT PLAN SUBMITTAL(S).

THE FINAL GEOTECHNICAL INVESTIGATION SHALL INCLUDE INFORMATION REGARDING PAVEMENT SECTION DESIGN.

23. RED ROCK ROAD:

THE EAST SIDE OF RED ROCK ROAD ALONG THE PROPOSED DEVELOPMENT SHALL BE DEVELOPED TO A HALF-STREET SECTION WITH CURB, GUTTER, AND SIDEWALK. PAVEMENT PATCHING FOR UTILITIES ALONG RED ROCK ROAD WILL REQUIRE A GRIND AND OVERLAY OF HALF OR ALL OF RED ROCK ROAD DEPENDING ON THE EXTENT OF UTILITY PATCHES. RED ROCK ROAD SHALL BE REPAIRED DUE TO CONSTRUCTION TRAFFIC, INCLUDING PAVEMENT REPLACEMENT FOR DAMAGED AREAS AND SLURRY SEALING TO CORRECT CONSTRUCTION TRAFFIC IMPACTS AS REQUIRED.

THE EXISTING DRAINAGE ALONG THE EAST SIDE OF RED ROCK ROAD SHALL BE ATTENUATED (PIPED) ACROSS THE NEW ROADWAY CONNECTION TO RED ROCK ROAD.

REQUIREMENTS FOR BUILDING PERMIT

24. STORM WATER TREATMENT AND DRAINAGE:

THE DEVELOPER SHALL UTILIZE STRUCTURAL CONTROLS FOR THE TREATMENT OF STORM WATER RUNOFF, IN ACCORDANCE WITH BEST MANAGEMENT PRACTICES. DRAINAGE CONVEYANCE FACILITIES AND OTHER IMPROVEMENTS MUST BE CONSTRUCTED, FUNCTIONAL, AND DEDICATED TO THE CITY OF FERNLEY PRIOR TO SUBMITTAL OF THE FIRST BUILDING PERMIT APPLICATION.

ALL INTERNAL STORM DRAIN INFRASTRUCTURE SHALL BE DESIGNED IN ACCORDANCE WITH PUBLIC WORKS DESIGN STANDARDS. DESIGN AND CONSTRUCTION OF ALL DRAINAGE CONVEYANCE FACILITIES ARE SUBJECT TO APPROVAL OF THE ADMINISTRATOR, CITY ENGINEER, AND PUBLIC WORKS DIRECTOR.

25. RESIDENTIAL CONSTRUCTION TAX:

THE DEVELOPER SHALL PAY ONE PERCENT OF THE VALUATION OF EACH RESIDENTIAL DWELLING UNIT BUILDING PERMIT BASED ON THE CITY'S VALUATION DATA TABLE, OR \$1,000 PER DWELLING UNIT, WHICHEVER IS LESS, PRIOR TO ISSUE OF EACH RESIDENTIAL BUILDING PERMIT.

26. INFRASTRUCTURE CONSTRUCTION:

THE DEVELOPER SHALL COMPLY WITH ALL REQUIREMENTS OF THE FMC AND PUBLIC WORKS DESIGN MANUAL FOR THE CONSTRUCTION OF ANY PUBLIC OR PRIVATE INFRASTRUCTURE TO THE APPROVAL OF THE CITY ENGINEER, PUBLIC WORKS DIRECTOR, AND BUILDING OFFICIAL PRIOR TO THE ISSUANCE OF ANY BUILDING PERMIT FOR THE PROJECT.

OFFSITE REQUIREMENTS

27. RED ROCK ROAD EXTENSION:

THE CITY OF FERNLEY INTENDS TO BUILD THE EXTENSION OF RED ROCK ROAD TO HIGHWAY 50A. IN THE EVENT THAT RED ROCK ROAD HAS NOT BEEN COMPLETED BEFORE THE CONSTRUCTION OF THIS SUBDIVISION, THE DEVELOPER SHALL COMPLETE THE IMPROVEMENTS IN ACCORDANCE WITH THE CITY OF FERNLEY PREFERRED DESIGN PRIOR TO ISSUANCE OF THE CERTIFICATE OF OCCUPANCY FOR THE 81ST HOME. PRIOR TO CONSTRUCTING RED ROCK ROAD IMPROVEMENTS, THE DEVELOPER SHALL EXECUTE A REIMBURSEMENT AGREEMENT TO THE APPROVAL OF THE ADMINISTRATOR, CITY ATTORNEY, CITY ENGINEER, FINANCE DIRECTOR, AND PUBLIC WORKS DIRECTOR FOR THE EXTENSION OF RED ROCK ROAD. THIS SCOPE OF IMPROVEMENTS SHALL BE DONE ON A PRO-RATA BASIS FOR ANY APPROVED OR FUTURE PROJECTS USING RED ROCK ROAD ON A FIRST-COME/FIRST-SERVE BASIS.

28. TRAFFIC STUDY:

IN TABLE 4, THE 2046 BACKGROUND PLUS PROJECT IDENTIFIES THE ROUNDABOUT TO HAVE LOS F WITH NO MITIGATION PROPOSED AS REQUIRED BY THE DESIGN STANDARDS. THIS SHALL BE ADDRESSED TO THE SATISFACTION OF THE ADMINISTRATOR, CITY ATTORNEY, CITY ENGINEER, AND THE PUBLIC WORKS DIRECTOR AS PART OF THE SUBDIVISION IMPROVEMENT PLAN SUBMITTAL. SEE CONDITION OF APPROVAL #30.

IN TABLE 4, THE US-50A AND RED ROCK ROAD NORTHBOUND LEFT IS IDENTIFIED AS HAVING A LEVEL OF SERVICE D WITH NO MITIGATION PROPOSED AS REQUIRED BY THE DESIGN STANDARDS. THIS SHALL BE ADDRESSED TO THE SATISFACTION OF THE ADMINISTRATOR, CITY ATTORNEY, CITY ENGINEER, AND THE PUBLIC WORKS DIRECTOR AS PART OF THE SUBDIVISION IMPROVEMENT PLAN SUBMITTAL. THIS CONDITION WORKS IN CONJUNCTION WITH CONDITION #26.

THE 2046 TRAFFIC VOLUMES SHALL INCLUDE ESTIMATED TRAFFIC VOLUMES FOR OTHER ENTITLEMENTS IN THE AREA THAT IMPACT THE SUBJECT INTERSECTIONS. THIS SHALL BE ADDRESSED TO THE SATISFACTION OF THE ADMINISTRATOR, CITY ATTORNEY, CITY ENGINEER, AND THE PUBLIC WORKS DIRECTOR AS PART OF THE SUBDIVISION IMPROVEMENT PLAN SUBMITTAL.

29. COMPLIANCE WITH TRAFFIC STUDY:

THE DEVELOPER SHALL COMPLY WITH ALL NDOT STANDARDS AND SPECIFIC RECOMMENDED IMPROVEMENTS OUTLINED IN THE TRAFFIC STUDY APPROVED BY NDOT. THESE IMPROVEMENTS INCLUDE:

- A. CONSTRUCT A TYPE 5, $\frac{3}{4}$ PROJECT ACCESS (RIGHT-IN/RIGHT-OUT/LEFT-IN) ON FARM DISTRICT ROAD.
- B. CONSTRUCT A LEFT-TURN DECELERATION LANE AT THE FARM DISTRICT ROAD AND YORI WAY PROJECT ACCESS PER NDOT'S ACCESS MANAGEMENT SYSTEM AND STANDARDS (AMSS).
- C. CONSTRUCT SIGNAGE AND STRIPING FOR IMPROVEMENTS PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND NDOT STANDARDS.

30. FARM DISTRICT ROAD:

FARM DISTRICT ROAD SHALL BE WIDENED ALONG THE ENTIRE FRONTAGE OF THE PROJECT REGARDLESS OF WHETHER NDOT RESTRICTS TURNING MOVEMENTS AT THE YORI/FARM DISTRICT ROAD INTERSECTION.

THE DEVELOPER SHALL COORDINATE WITH THE CITY REGARDING PAYMENT IN LIEU OF INSTALLATION OF A CROSS WALK AND RAPID FLASHING BEACON AT THE INTERSECTION OF RED ROCK ROAD AND FARM DISTRICT ROAD.

DIRECTIONAL PEDESTRIAN RAMPS SHALL BE INSTALLED AT THE NORTHEAST CORNER OF THE INTERSECTION FOR A FUTURE RED ROCK ROAD AND FARM DISTRICT ROAD CROSSWALK.

A MINIMUM OF THREE PEDESTRIAN RAMPS SHALL BE PROVIDED AT ALL "T" INTERSECTIONS, INCLUDING BULBS.

DIRECTIONAL PEDESTRIAN RAMPS SHALL BE PROVIDED ACROSS YORI AT FARM DISTRICT ROAD.

31. ROUNDABOUT:

THE APPLICANT MAY PROCEED WITH FINAL MAP RECORDING AND SECURE A SITE IMPROVEMENT PERMIT TO COMPLETE SUBDIVISION IMPROVEMENTS PRIOR TO FUNDING BEING SECURED BY NDOT THAT ADDRESSES THE ROUNDABOUT OPERATIONAL DEFICIENCY, SPECIFICALLY THE LEVEL OF SERVICE OPERATING CONDITION. A CERTIFICATE OF OCCUPANCY SHALL NOT BE ISSUED FOR ANY HOMES UNTIL THE FUNDING IS DETERMINED BY THE CITY OF FERNLEY TO BE ADEQUATE TO ADDRESS THIS OPERATIONAL CONDITION (I.E. MUST ACHIEVE THE LEVEL OF SERVICE REQUIRED BY THE CITY OF FERNLEY COMPREHENSIVE MASTER PLAN) AS PART OF THE INTENDED SCOPE. IF AN ALTERNATE ROADWAY OR CAPACITY RELATED PROJECT (PLANNED OR UNPLANNED) IS CONSTRUCTED SUCH THAT THE ROUNDABOUT LEVEL OF SERVICE IS FOUND TO BE ACCEPTABLE BY THE CITY, THE APPLICANT MAY PROCEED WITH HOME CONSTRUCTION AND ISSUANCE OF CERTIFICATES OF OCCUPANCY WITHOUT FURTHER DELAY OR RESPONSIBILITY TO MITIGATE THIS OPERATIONAL ISSUE. IF AN IMPROVED LEVEL OF SERVICE STANDARD IS ADOPTED BY THE CITY, THE PROJECT WILL BE RESPONSIBLE TO MEET THAT STANDARD.

32. SUBDIVISION ROAD MAINTENANCE:

IN THE EVENT THAT THE APPLICANT PROCEEDS WITH SUBDIVISION IMPROVEMENTS AND COMPLETES THE SUBDIVISION STREETS, THE APPLICANT SHALL BOND FOR THE COSTS TO SLURRY SEAL THE STREETS FOLLOWING ACCEPTANCE OF THE STREETS OFFERED FOR DEDICATION BY THE DEVELOPER. THIS BONDING SHALL BE IN AN AMOUNT AGREED TO BY THE CITY ENGINEER FOR THE COSTS OF SLURRY SEALING NOT PRIOR TO 8 YEARS AFTER ACCEPTANCE OF THE STREETS. THE INTENT IS TO INSURE AGAINST PUBLIC STREETS DEGRADING IN THE EVENT THAT THE DEVELOPER DEDICATES THE STREETS BUT DOES NOT CONSTRUCT HOMES DUE TO LACK OF ROUNDABOUT FUNDING. THIS CONDITION WILL NOT BE APPLICABLE IF THE OPERATIONAL CONDITION OF THE ROUNDABOUT IS LEVEL OF SERVICE D OR BETTER AT THE TIME REGARDLESS OF FUNDING SOURCES, AND NATURE OF OTHER PROJECTS THAT MAY RESULT IN THE ROUNDABOUT OPERATION BEING SATISFACTORY, AT LEAST 8 YEARS AFTER SUBDIVISION STREET ACCEPTANCE.

Yori Single Family

Application to City of Fernley for a:

***Tentative Subdivision Map,
Zoning Map Amendment,
and Major Deviation***

Prepared by:



John F. Krmpotic, AICP
KLS Planning & Design Group
201 W. Liberty Street, Suite 300
Reno, NV 89501



Michael Vicks, P.E.
Monte Vista Consulting
575 E. Plumb Lane, Suite 101
Reno, NV 89502

Prepared for:

1903 Trust - Lawrence G. Yori, Trustee
3240 Farm District Rd
Fernley, NV 89408

June 18, 2024

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Appendix A

Application Materials

Tentative Subdivision Map Application Checklist
Major Deviation Application Checklist
Zoning Map Amendment Application Checklist
Land Division Application
Development Application
Letter of Authorization
Ownership Affidavit
Residential Data Sheet
NRS Time Waiver Agreement
Fee Schedule
Street Name Reservation Form
Legal Description
Preliminary Title Report
Property Tax Receipt
Fiscal Impact Analysis

Appendix B

Civil Reports/Studies

Traffic Study

Preliminary Drainage Report
Preliminary Sanitary Sewer Report
Geotechnical Investigation
Water and Sewer Modelling Application

Civil & Landscape Plan Set (full size sheets – 24" x 36")

C-1 Cover Sheet
C-2 Existing Conditions & Demo Plan
C-3.1 Geometric Site Plan
C-3.2 Geometric Site Plan
C-4.1 Site & Utility Plan
C-4.2 Site & Utility Plan
C-5.1 Grading Plan
C-5.2 Grading Plan
C-5.3 Cross Sections
C-6.0 Drainage Plan

Project Request

This application is for:

- 1) a **Tentative Subdivision Map** for the creation of 158 single-family lots, and
- 2) a **Zoning Map Amendment** from RR-½ to SF-6, and
- 3) a **Major Deviation** to reduce combined side yard setback from 20' to 10'.

Project Location

The site is located on Farm District Road near the intersection with Red Rock Road. The site is on one parcel (APN: 021-343-20) totaling 47.53 acres. The site is currently irrigated alfalfa fields with one single-family residence.

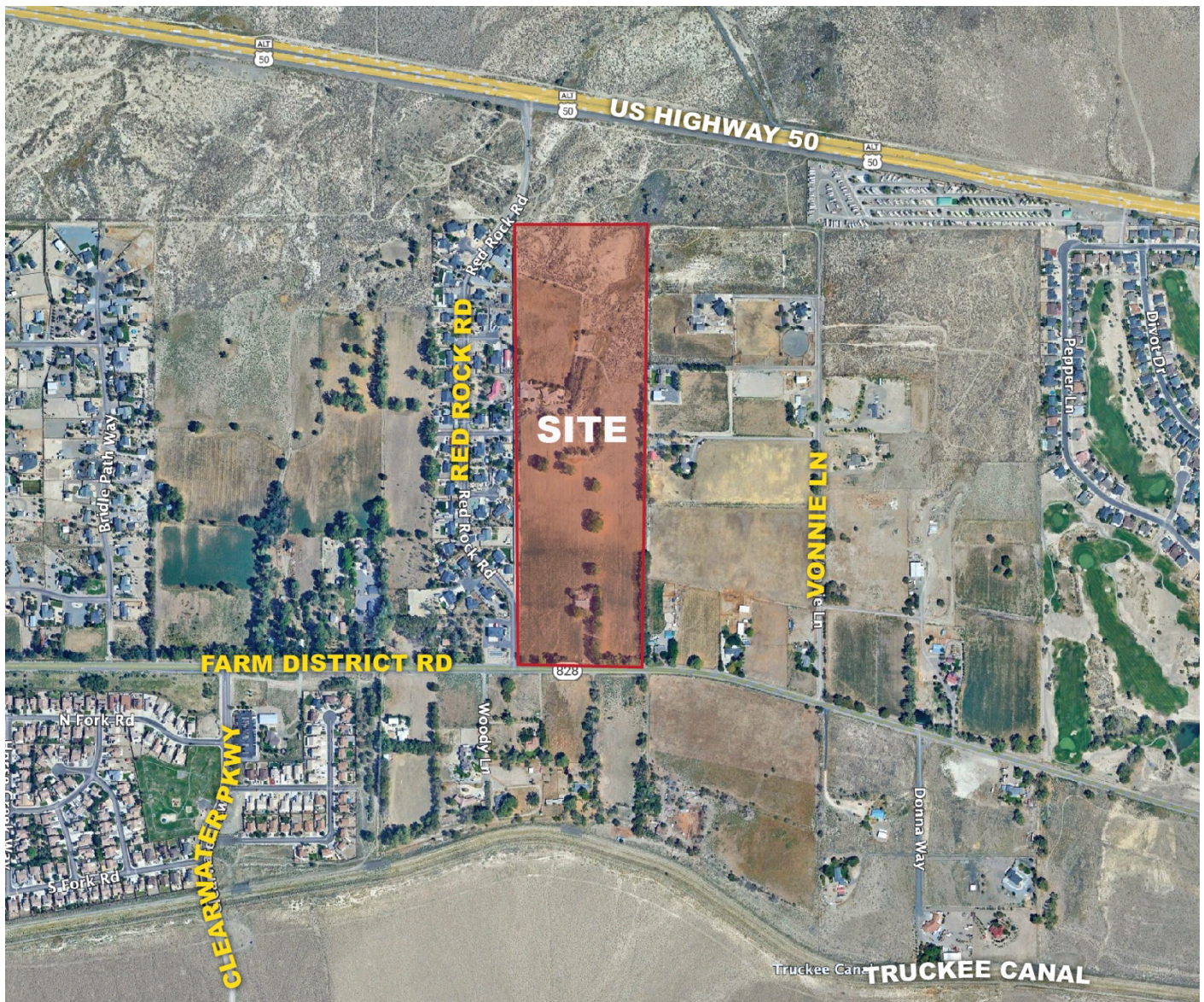


Figure 1 – Vicinity Map

Land Use and Zoning

The site land use is Single Family Residential (SFR). The zoning is currently Rural Residential (RR-½) and proposed Single Family (SF-6), which will guide the development standards of the proposed subdivision. Land use is to remain as existing. (See *Figures 2-4 below*).



Figure 2 – Fernley Master Plan Land Use

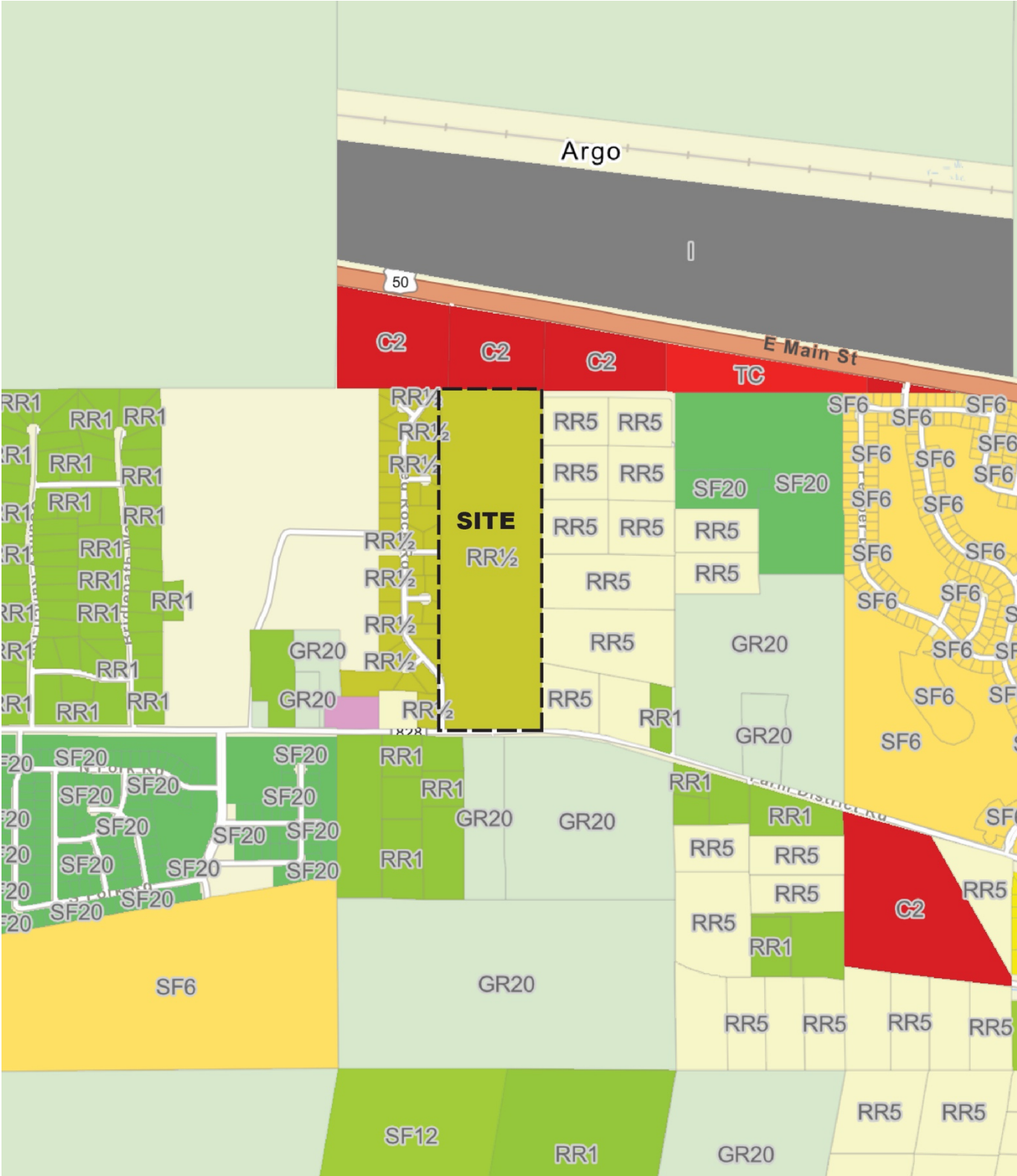


Figure 3 – Existing Zoning Map

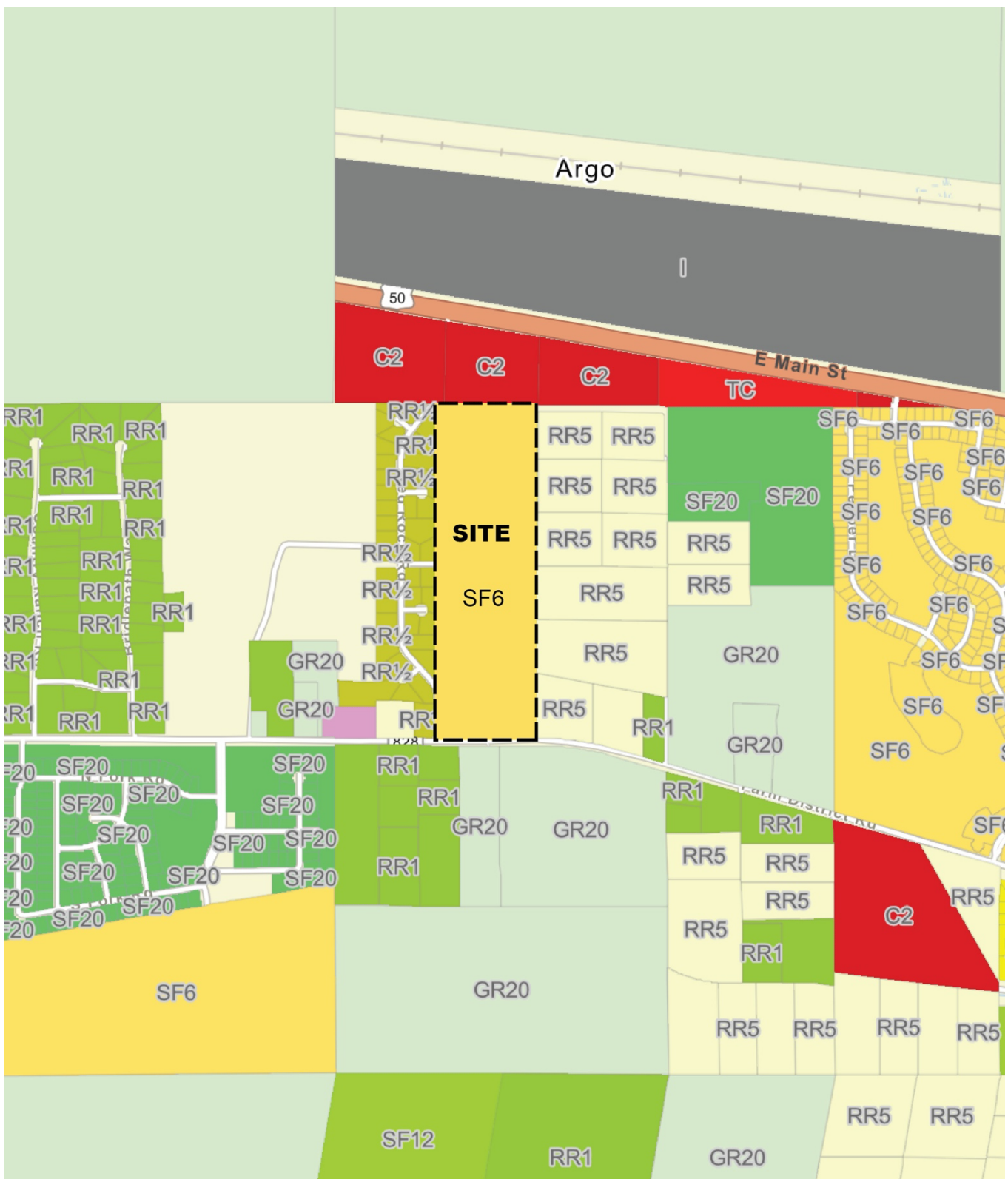


Figure 4 – Proposed Zoning Map

Project Description

The 47.53-acre project area will contain 158 single family lots. See Project Data and Development Standards below.

Project Data

Total Project Area	47.53 ac
Total Lot Area	35.06 ac
Total Common Area	4.05 ac
Total ROW Area	8.41 ac
Total Lots	158
Density	3.3 lots/ac
Zoning (Proposed)	SF-6
Largest Lot Size	0.80 ac
Smallest Lot Size	0.14 ac
Average Lot Size	0.22 ac

Fernley SF-6 Development Standards

Minimum Setbacks	<i>Existing</i>	<i>Proposed</i>
Front (Livable Space or Side Load Garage)	15 Ft	15 Ft
Front (Garage/Carport)	20 Ft	20 Ft
Side	5 Ft	5 Ft
Side Combined	20 Ft	10 Ft
Exterior Side	10 Ft	10 Ft
Rear	10 Ft	10 Ft
Minimum Lot Size	6,000 SF	6,000 SF
Maximum Lot Coverage	50%	50%
Minimum Lot Frontage	35 Ft	35 Ft
Minimum Width	60 Ft	60 Ft
Minimum Lot Width (Corner Lot)	65 Ft	65 Ft
Maximum Density	7.2 DU/Acre	7.2 DU/Acre
Maximum Height (Residential)	35 Ft	35 Ft

Legal Access

There is legal access provided to the property at 4 locations. These locations include a private property connection to adjacent public streets/ right-of-way at the following streets:

- a) Farm District Road (south end)
- b) Red Rock Road (south end near Farm District Road)
- c) Red Rock Road (north end at NW corner of the project)
- d) Quick Cal Way (a stub street on the west side of the project)

The proposed subdivision streets include Yori Way, Quick Cal Way, Cattle Road, and Ziggy Road are all 50' R-O-W public streets that meet the city standard for a local public street. These two streets provide physical street stubs to this phase of the project. These 4 public streets provide proven legal access to this project.

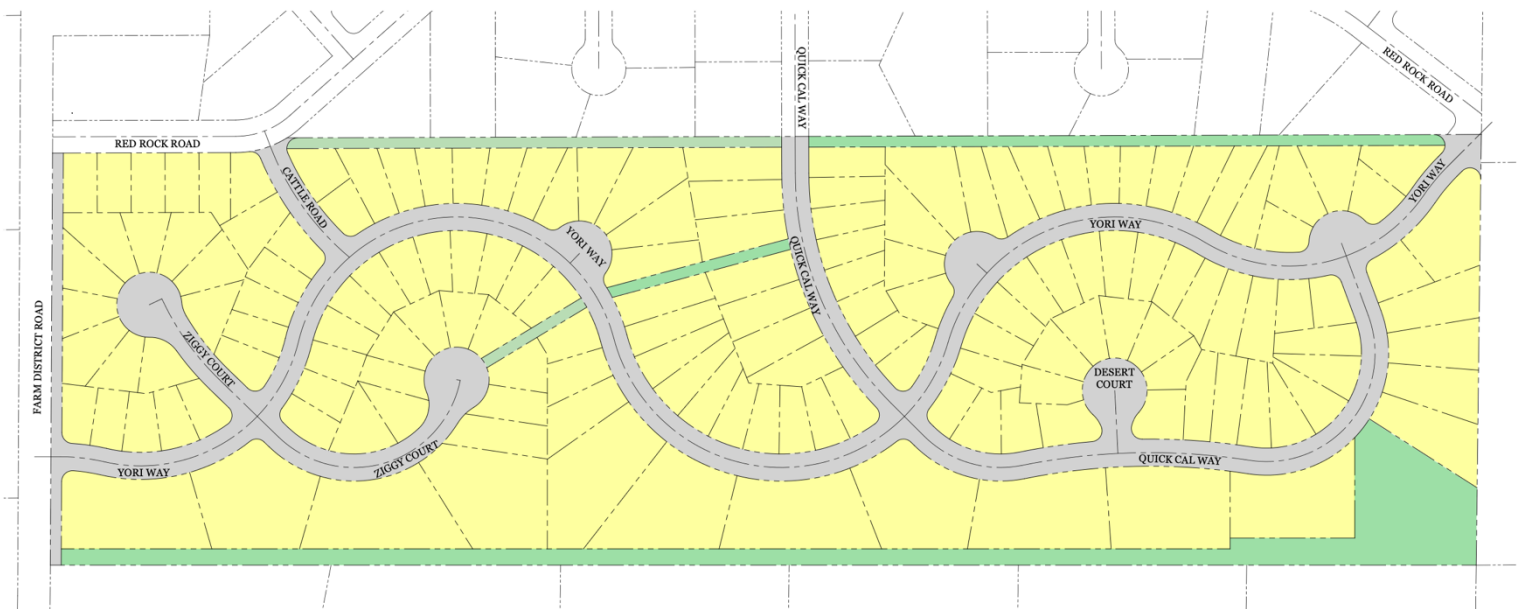


Figure 5 – Site Plan

Master Plan Policy Analysis

Following are the goals and policies from the City of Fernley Master Plan which support the proposed Zoning Map Amendment (per Zoning Map Amendment checklist item 3.d.)

City of Fernley – Comprehensive Master Plan

1. Population & Housing

HP.1.1 GOALS AND ACTION STRATEGIES Enhance Fernley's vitality as a community by providing a variety of housing types, density and costs that accommodate the needs, desires and financial abilities of the current and future households.\

HP.1.1.2 Encourage large-scale housing development that incorporates efficient land use techniques and creates a distinct sense of place and neighborhood diversity.

HP.1.1.4 Encourage the efficient use of land and existing infrastructure by focusing on achieving good design in new housing or redeveloped housing on either vacant land, infill parcels and/or under-developed parcels.

HP.1.2 Encourage housing that supports sustainable development patterns by promoting the efficient use of land, conservation of natural resources, easy access to services and public facilities such as parks, and resource efficient design and construction.

HP.1.3 Strive for viable mixed income neighborhoods throughout Fernley that collectively reflect the diversity of housing types and tenure (rental and ownership).

2. Conservation

C.1.3.7 Maintain coordination of land use planning and capital improvements to insure the most efficient use of the city's sanitary and stormwater run-off facilities.

C.1.4.3 Encourage new public and private development to use water conservation landscaping and fixtures.

3. Land Use

LU.1.1 Encourage and plan for new development in areas where adequate public services and facilities can be provided efficiently.

LU.1.1.1 Require new development to provide its proportionate share of improvements to avoid a degradation of services for existing residents. This requirement will be applied regardless of project size in order to avoid incremental erosion of services and facilities.

LU.1.1.3 Require new development to provide certified, stamped studies demonstrating the impact proposed development will have on existing infrastructure and to provide improvements and/or funding in lieu of improvements in proportion to the impacts of the proposed projects on the city's roadway, sewer and water systems.

LU.1.4.2 Projects shall be evaluated with the intent to promote land use compatibility; community design measures can increase compatibility among adjoining land uses.

LU.1.4.5 Require development plans to address conditions unique to the developing area and minimize impacts to adjacent properties.

LU.1.5.3 Development on the perimeter of Fernley is appropriate only where orderly extension of existing public services and facilities can occur.

LU.1.6.1 Support for developmental approval of projects that provide an appropriate balance of population.

LU.1.6.2 The land use designations include minimum service standards that shall apply to proposed developments and land use changes.

LU.1.8.1 Encourage flexibility in development proposals in the Farm District Road to vary lot sizes, cluster dwelling units and use innovative approaches to site planning.

LU.1.12.1 Subdivision or intensification of land without adequate public facilities available to serve the new development as it occurs shall not be allowed.

4. Transportation

T.1.2.2 The financial responsibility for providing local internal subdivision roads and collector roads connecting new development to the regional roadway network shall be borne by the development(s).

T.1.3.1 Assure that access to all new individual residential lots and/or units is provided only from collectors or local streets.

T.1.3.4 Require proposed new development that intends to connect with an NDOT roadway to incorporate the NDOT Access Management System and Standards into the project design. These standards regulate access onto the roadway network in order to protect health, safety and welfare of the public, maintain the rights-of-way, and to preserve the functional classification level of the roadway network while meeting the needs of the motoring public.

5. Public Services & facilities

PSF.1.1.4 Areas planned for urban or suburban development (residential densities of one or more dwelling units per acre or comparable non-residential development will be served by a community water supply system consistent with adopted policies in the Land Use Chapter of the Fernley Comprehensive Master Plan.

PSF.2.1.3 Sewer costs directly attributable to new development shall be paid for by the new development. The cost of providing service shall include the cost of extending service lines or other necessary facilities to the individual project site.

PSF.3.3.1 Coordinate the provision of public services with growth and development in Fernley.

PSF.3.9.1 Increase security through project planning requirements.

PSF.3.10.4 Require streets to be of high structural quality, sufficient width, and keep maintained to insure access of emergency and service equipment.

PSF.3.11.2 All development in the City (except for residential densities less than one residence per acre) shall be within a 4-7-minute response time of an existing or planned fire station.

Major Deviation Request

Request: We are requesting a Major Deviation for the combined side setback from 20' to 10' which results in 5' minimum setback on each side yard.

Rationale for setback deviation:

We have prepared a “coved” design to enhance the neighborhood and community design as supported by the Fernley Master Plan. This type of design essentially makes every lot a “pie-shaped” lot which creates a pinch-point with a reduced setback (5' minimum per code at a given point) that flares out for every single lot. It appears the code was written for a linear lot and block design with uniform side yard setbacks. The average setback between homes is quite generous and not easily measured with his type of design because of the flares in the lot shape. The only constant for this side yard setback in this design is that it is always changing.

The example in Figure 6 results in a 17.4' average combined side yard setback which is only a 13% deviation of the 20' standard.

There is a common provision in zoning practice to suggest the side combined at 20' is for boat and/or RV storage which is not proposed and not designed and will not be allowed in this community.

Major Deviation Findings

Below is the City of Fernley Municipal Code Section 32.03.090(a)(6) applicable to this Major Deviation request. Comments addressing the code regarding applicability, standards, and findings are written in *italics* below each section.

- a. The request is consistent with the stated purposes of title 32, zoning;

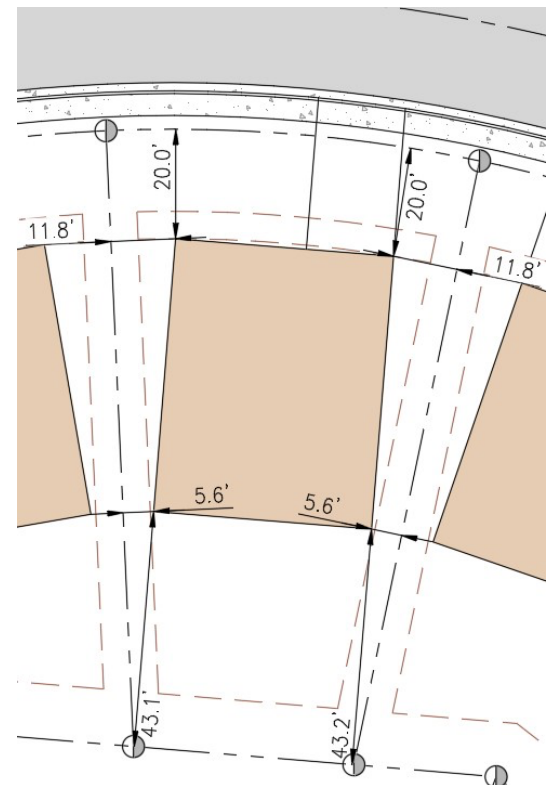


Figure 6 – Setback Diagram

The request is consistent with the stated purpose which is to allow relief and flexibility in the development review process. Generally, it is the intent of the City to allow significant reductions or deviations from the minimum standards of this Code only in exchange for a higher level of quality development and compensating benefits. Further, it meets the required applicability criteria which are: a) Special exceptions greater than ten percent and less than 50 percent from requirements for land use in this title; or b) Special exceptions from development standards that are quantified and, c) It does not authorize a use variance, or a deviation based on hardship or difficulty.

- b. Granting the major deviation will not be materially detrimental to the public health, safety or welfare, or injurious to property or improvements in the vicinity;

It is not conceivable to imagine any detriment to public health, safety or welfare to property or improvements in the vicinity. The code in fact already establishes a 5' side yard setback as a standard. It is a home buyer's choice to buy into this design change that implements 5' on both sides of each house (at a point) because of the pie shaped lots that flare out to make the average combined setback much larger.

- c. Granting the major deviation is necessary for the preservation and enjoyment of a property right possessed by other property owners in the same vicinity and land use district and is denied to the property for which the major deviation is sought; and

It appears the standard is not applicable to other properties in the area. This change brings the SF6 zoning standards more in alignment with all zoning standards working in harmony, i.e. lot size, width, setback, coverage, etc., as all must relate to the specified density which cannot be achieved with this standard. Proposed density with the proposed deviation is only 46% of the maximum allowed in the district. That is, 3.3 du per acre achieved versus 7.2 du per acre allowed.

- d. Granting of the major deviation does not constitute a special privilege inconsistent with the limitations upon other properties in the vicinity and land use district in which the property is located.

This is a design change and a design preference that the code does not consider and does not grant a special privilege. Other properties in the area could seek the same relief from the code and standards if such a design concept was considered. It appears that it does not apply to other properties.



Facing east on Farm District Rd



Access from Quick Cal Way



Northern Red Rock Access



Site facing north



Facing west on Farm District Rd



East side facing north

Figure 7 – Site Photos



North end facing south



Red Rock Road

Figure 7 – Site Photos (cont.)

Appendix A

Application Materials

Tentative Subdivision Map Application Checklist
Major Deviation Application Checklist
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Residential Data Sheet
NRS Time Waiver Agreement
Fee Schedule
Street Name Reservation Form
Legal Description
Preliminary Title Report
Property Tax Receipt
Fiscal Impact Analysis

TENTATIVE SUBDIVISION MAP

APPLICATION CHECKLIST

City of Fernley, Nevada

The following items shall be submitted as a part of the Tentative Subdivision Map application:

- ☒ 1. **Application Fee:** The application fee is due at the time of the application submittal. See **FEE SCHEDULE** for correct amount. Application fee may be made in the form of a check or money order payable to “City of Fernley” or by e-check (no fee) or by Visa/Mastercard/Discover (4% fee) either remotely or in person.
- ☒ 2. **Proof of Ownership: Must be original signatures or the application may be rejected.** If the person signing the owner’s affidavit is not listed as the property owner in the most recent records of the Lyon County Assessor, proof of ownership acceptable to the administrator must be submitted with the application. If the signer is an agent of the owner, written documentation of that fact acceptable to the administrator must be submitted. If in Corporate ownership, a list of all Corporate Officers must be provided.
- ☒ 3. **Review Packet: 1 (one) digital copy containing the following:**
 - ☒ a. Completed LAND DIVISION APPLICATION form
 - ☒ b. Completed Residential or Non-Residential Project Data Sheet
 - ☒ c. A Tentative Subdivision Map prepared to the attached specifications and in accordance with Development Code Section 32.03.060.
 - ☒ d. Vicinity Map depicting the respective site and including surrounding roadways
 - ☒ e. A copy of a preliminary Title Report, prepared within 30 days of application submittal, which includes the names and addresses of all property owners: a legal description of the property, and a description of all liens, easements, and deed restrictions.
 - ☒ f. Legal Access
 - ☐ g. A letter of approval from the City of Fernley listing all street names shown on the Tentative Subdivision Map
 - ☒ h. Demonstrate that city services can be provided at an acceptable service level.
- ☒ 4. **Technical Analyses (One (1) copy of each):** Items outlined in Appendix A-5 of the City of Fernley’s Development Code in a form consistent with the adopted policies and design manuals.
 - ☒ a. Traffic Study: A complete traffic study as required by the City Engineer.
 - ☒ b. A preliminary hydrology and drainage report prepared by a Nevada registered Civil Engineer addressing the 5-year and 100-year return frequency storms and the 5-year and 100-year flows entering and leaving the site.
 - ☒ c. A preliminary sewer report prepared by a Nevada registered Civil Engineer.
 - ☒ d. A preliminary geotechnical report prepared by an Engineer licensed in the State of Nevada.
 - ☒ e. All projects over 20 acres in size shall demonstrate the project is fiscally positive to the city for a period of at least 20 years.
 - N/A ☐ f. Any other report as may be necessary to enable the approving agency to determine that the application complies with the standards for approval
- ☒ 5. **Original PDF documents of the application, broken down into individual sections, including all documents, maps, plans, and technical analyses, shall be provided on a USB flash drive or alternative method as determined by the Administrator.**

NOTE: Applications filed under Chapter 32.03 of the City of Fernley’s Development Code must include the information required by Appendix A of the development code and is not complete until all required items are submitted. The Planning Department or other reviewing departments or agencies may request that additional application materials be submitted depending on the specific project request. The application materials required above shall serve as the minimum requirements necessary to make application submittal to the City of Fernley Planning Department.

MAJOR DEVIATION

APPLICATION CHECKLIST

City of Fernley, Nevada

The following items shall be submitted as a part of the Major Deviation application:

- ☒ 1. **Application Fee:** The application fee is due at the time of the application submittal. See **FEE SCHEDULE** for correct amount. Application fee may be made in the form of a check or money order payable to “City of Fernley”, by e-check (no fee) or by Visa/Mastercard/Discover (4% fee).
- ☒ 2. **Proof of Ownership:** Must be original signatures or the application may be rejected. If the person signing the owner’s affidavit is not listed as the property owner in the most recent records of the Lyon County Assessor, proof of ownership acceptable to the administrator must be submitted with the application. If the signer is an agent of the owner, written documentation of that fact acceptable to the administrator must be submitted. If in Corporate ownership, a list of all Corporate Officers must be provided.
- ☒ 3. **Review Packet: One (1) digital copy containing the following:**
 - ☒ a. Completed DEVELOPMENT APPLICATION form.
 - ☒ b. NRS Time Waiver Agreement.
 - ☒ c. Completed Residential or Non-Residential Project Data Sheet.
 - ☒ d. A written narrative of:
 - The request of the Major Deviation
 - Explain why the Major Deviation is necessary
 - Explain why other solutions would not work
 - ☒ e. A written narrative addressing the following findings:
 - The request is consistent with the stated purposes of Title 20, Zoning Code;
 - Granting the major deviation will not be materially detrimental to the public health, safety or welfare or injurious to property or improvements in the vicinity;
 - Granting the major deviation is necessary for the preservation and enjoyment of a property right possessed by other property owners in the same vicinity and land use district and is denied to the property for which the major deviation is sought; and
 - Granting of the major deviation does not constitute a special privilege inconsistent with the limitations upon other properties in the vicinity and land use districts in which the property is located.
 - ☒ f. Site Plan.
 - ☒ g. Landscape Plans (color preferred) and Parking Plans, if applicable.
 - N/A ☐ h. Full Size Building Elevations, if applicable.
 - N/A ☐ i. Floor Plan, if applicable.
 - ☒ j. Vicinity Map depicting the respective site including surrounding roadways.
 - ☒ k. Property Tax Receipt.
 - ☒ l. Miscellaneous, as requested, and all required items as outlined in Appendix A of the City of Fernley’s Development Code.
- ☒ 4. **Original PDF documents of the application, broken down into individual sections, including all documents, maps, plans, and technical analyses, shall be provided on a USB flash drive or alternative method as determined by the Administrator.**

NOTE: Applications filed under Chapter 32.03 of the City of Fernley’s Development Code must include the information required by Appendix A of the same code and is not complete until all required items are submitted. The Planning Department or other reviewing departments or agencies may request that additional application materials be submitted depending on the specific project request. The application materials required above shall serve as the minimum requirements necessary to make application submittal to the City of Fernley Planning Department.

ZONING MAP AMENDMENT

APPLICATION CHECKLIST

City of Fernley, Nevada

The following items shall be submitted as a part of the Zoning Map Amendment application:

- ☒ 1. **Application Fee:** The application fee is due at the time of the application submittal. See **FEE SCHEDULE** for correct amount. Application fee may be made in the form of a check or money order payable to “City of Fernley”, by e-check (no fee) or by Visa/Mastercard/Discover (4% fee).
- ☒ 2. **Proof of Ownership:** Must be original signatures or the application may be rejected. If the person signing the owner’s affidavit is not listed as the property owner in the most recent records of the Lyon County Assessor, proof of ownership acceptable to the administrator must be submitted with the application. If the signer is an agent of the owner, written documentation of that fact acceptable to the administrator must be submitted. If in Corporate ownership, a list of all Corporate Officers must be provided.
- ☒ 3. **Review Packet: One (1) digital copy containing the following:**
 - ☒ a. Completed DEVELOPMENT APPLICATION form.
 - ☒ b. NRS Time Waiver Agreement.
 - ☒ c. A written description of the Zoning Map Amendment request.
 - ☒ d. A list of the goals and policies from the City of Fernley Master Plan which support the proposed Zoning Map Amendment.
 - ☒ e. Vicinity Map depicting the existing and proposed zoning designation of the respective site including surrounding roadways and the zoning designations of the surrounding properties the respective site and including surrounding roadways.
 - ☒ f. A wet stamped legal description and boundary map of the subject property (8½” x 11” with 1” margins).
 - ☒ g. Please include a dimensioned site plan, pictures of existing buildings, and any additional information that would be helpful to illustrate the existing use of the site. All plans shall be drawn to standard architectural or engineering scale and shall include a north arrow.
 - ☒ h. Property Tax Receipt.
 - ☒ i. Miscellaneous, as requested, and all required items as outlined in Appendix A of the City of Fernley’s Development Code.
- ☒ 4. **Original PDF documents of the application, broken down into individual sections, including all documents, maps, plans, and technical analyses, shall be provided on a USB flash drive or alternative method as determined by the Administrator.**

NOTE: Applications filed under Chapter 32.03 of the City of Fernley’s Development Code must include the information required by Appendix A of the same code and is not complete until all required items are submitted. The Planning Department or other reviewing departments or agencies may request that additional application materials be submitted depending on the specific project request. The application materials required above shall serve as the minimum requirements necessary to make application submittal to the City of Fernley Planning Department.

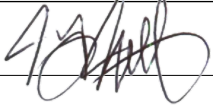


Planning Department
595 Silver Lace Blvd, Fernley, NV 89408
Land Division Application

APPLICATIONS, PLANS, AND/OR SUPPORTING DOCUMENTATION THAT ARE INCOMPLETE OR ILLEGIBLE WILL NOT BE ACCEPTED.

Please complete all sections that apply to you and/or your project. Various applications are only accepted on the application deadline dates. Please call before you submit to verify that someone will be available to assist you at (775) 784-9810.

☒ TENTATIVE PARCEL MAP(TPM)	☐ REVERSION TO ACREAGE(RTA)
☐ FINAL PARCEL MAP(FPM)	☐ TYPE I VACATIONS(T1V)
☐ TENTATIVE SUBDIVISION MAP(TSM)	☐ TYPE II VACATIONS(T2V)
☐ FINAL SUBDIVISION MAP(FSM)	☐ TENTATIVE DIVISION OF LAND INTO LARGE PARCELS (TDLLP)
☐ BOUNDARY LINE ADJUSTMENT(BLA)	☐ FINAL DIVISION OF LAND INTO LARGE PARCELS (FDLLP)

John Krmpotic		Signature 		Yes
Applicant's Name				
Company Name: KLS Planning & Design				
Address: 201 W Liberty Street, Suite 300				
City: Reno	State: NV	Zip Code: 89501	Email: Johnk@Klsdesigngroup.com	
Phone No.: 775-857-7710	Cell No.: 775-857-7710	Fax No.: None		

1903 Trust - Lawrence G Yori, Trustee				yes
Property Owners Name				Primary Contact?
Company Name: None				
Address: 3240 Farm District Road				
City: Fernley	State: NV	Zip Code 89408	Email: lyori@att.net	
Phone No.: 775-575-4094	Cell No.: 775- 750-9339	Fax No.: None		

Engineer / Representative				Primary Contact?
Company Name: Monte Vista Consulting- Mike Vicks				
Address: 575 E. Plumb Lane, Suite 101				
City: Reno	State: NV	Zip Code 89502	Email: mike@montevistaconsulting.com	
Phone No.: 775-636-7905	Cell No.: 775-848-5787	Fax No.: N/A		

Brief Project Type/Description (Attach Detailed Project Type / Description):

This is a 158 Lot SF project located on Farm District road with a proposed density of 3.3 du per acre and an average lot size of 9,660 SF

Subdivision/Project Name And/Or Phase: Yori Single Family			
Project Location (Street Address): 3240 Farm District Road			
Assessor's Parcel Number(s): 021-343-20			
Current Zoning: RR .5 acre	Comprehensive Plan Land Use Designation		Single Family Res
Total Project Acreage: 47.53	% Commercial: 0.00	CITY UTILITIES	
Number of Parcels Proposed: 158	% Open Space: 8.5 percent	Water:	Sewer
		☐ Currently Served ☒ Proposed	☐ Currently Served ☒ Proposed
Previous Applications For This Site? ☐ Yes ☒ No			
List Previous Application No(s) And Names: None that we are aware of			

1998 Flood Zone Designation: ☐ A ☐ AE ☐ AH ☐ AO ☐ A99 ☐ X ☐ D	FEMA Map No.: Incl. Photocopy
--	-------------------------------

Office Use Only			
Application Filing Date:	Development Review:	Application Fee:	
Application No.:	☐ Yes ☐ No	Outsource Fee:	
Application Intake By:	Date:	Noticing Fee:	
Planner:	Time:	Total Due:	



Planning Department
595 Silver Lace Blvd, Fernley, NV 89408
Development Application

APPLICATIONS, PLANS, AND/OR SUPPORTING DOCUMENTATION THAT ARE INCOMPLETE OR ILLEGIBLE WILL NOT BE ACCEPTED.

Please complete all sections that apply to you and/or your project. Various applications are only accepted on the application deadline dates. Please call before you submit to verify that someone will be available to assist you at (775) 784-9810.

☐ ADMINISTRATIVE REVIEW(AR)		☐ APPEAL (APP)	
☐ ANNEXATION(ANX)		☐ PLANNED DEVELOPMENT (PD)	
☐ CONDITIONAL USE PERMIT(CUP)		☐ DEVELOPMENT AGREEMENT (DA)	
☒ MAJOR DEVIATION(MJD)		☐ TEMPORARY USE PERMIT(TUP)	
☐ MASTER PLAN AMENDMENT.....(MPA)		☐ VARIANCE(VAR)	
☐ MINOR DEVIATION(MND)		☐ REASONABLE ACCOMMODATION(RAD)	
☒ ZONING MAP AMENDMENT.....(ZMA)		☐ OTHER: _____	

John Krmpotic			yes
Applicant's Name		Signature	Primary Contact?
Company Name: KLS Planning & Design			
Address: 201 W Liberty Street, Suite 300			
City: Reno	State: Nv	Zip Code: 89501	Email: johnk@klsdesigngroup.com
Phone No.: 775-857-7710	Cell No.: 775-857-7710	Fax No.: N/A	

The 1903 Trust - Lawrence G Yori, Trustee		yes
Property Owners Name		Primary Contact?
Company Name: None		
Address: 3240 Farm District Road		
City: Fernley	State: Nv	Zip Code 89408
Phone No.: 775-575-4094	Cell No.: 775-750-9339	Email: Lyori@att.net
		Fax No.: None

Mike Vicks		yes
Engineer / Representative		Primary Contact?
Company Name: Monte Vista Consulting		
Address: 575 E Plumb Lane, Suite 101		
City: Reno	State: NV	Zip Code 89502
Phone No.: 775-636-7905	Cell No.: 775-848-5787	Email: mike@montevistaconsulting.com
		Fax No.: N/A

Brief Project Type/Description (Attach Detailed Project Type / Description):
158 lot single family project on Farm District Road with proposed zoning of SF-6 and a proposed density of 3.3 du per acre and an average lot size of 9,660 s.f.

Subdivision/Project Name And/Or Phase: Yori Single Family

Project Location (Street Address): 3240 Farm District Road

Assessor's Parcel Number(s): 021-343-20

Current Zoning: RR .5 acre	Comprehensive Plan Land Use Designation	Single Family Res
Total Project Acreage: 47.52	% Commercial: 0.00	CITY UTILITIES
Number of Parcels Proposed: 158	% Open Space: 8.5	Water: ☐ Currently Served ☒ Proposed
		Sewer ☐ Currently Served ☒ Proposed

Previous Applications For This Site? ☐ Yes ☒ No
List Previous Application No(s) And Names: None known

2009 Flood Zone Designation: ☐ A ☐ AE ☐ AH ☐ AO	FEMA Map No.:
Application Filing Date:	Office Use Only
Application No.:	Application Fee:
Application Intake By:	Development Review Meeting
Planner:	Date:
	Time:
	Outsource Fee:
	Noticing Fee:
	Total Due:

LETTER OF AUTHORIZATION

This letter shall serve to notify and verify the I/we am/are the legal owner(s) of the property being considered under this application and do hereby authorize the above representative to file and represent my/our interest in this application.

I/we am/are the legal owner(s) of said property; have read the foregoing "Letter of Authorization" and know the contents thereof; and so hereby certify (or declare) under penalty of perjury under the laws of the State of Nevada that the information contained in this application is true and correct.

OWNER(S) OF RECORD: *(Include all signatures-provide extra sheets if necessary)*

1903 Trust- Lawrence G Yori, Trustee

(Print Name)

(Signature)

5-14-24

(Date)

(Print Name)

(Signature)

(Date)

I certify under penalty of perjury that I am the applicant and that the foregoing statements and answers contained herein and the information herein submitted, are in all respects true and correct. I grant permission to City staff and officials to enter the property to conduct inspections/site visits necessary for the review of the project. I also certify that all plans and submittal requirements are in accordance with the Nevada Revised Statutes and City Code, have been drawn to a standard engineering scale (e.g. 1"=20', 1"=50', 1"=100') or architectural scale (e.g. 1/4"=1', 1/8"=1') that is appropriate to the project size, and clearly define and identify all of the required information.

APPLICANT:

1903 Trust - Lawrence G Yori, Trustee

(Print Name)

(Signature)

5-14-24

(Date)

APPLICANT'S ENGINEER/REPRESENTATIVE:

KLS Planning & Design, John Krmpotic

(Print Name)

(Signature)

5-14-24

(Date)

City of Fernley Development Code, Section 32.03.030, Common Review Procedures: The City will not process incomplete applications. Review for completeness of application forms is solely to determine whether preliminary information required for submission with the application is sufficient to allow further processing. A determination of completeness shall not constitute a decision as to whether an application complies with the City's Development Code.

Note: Development review meetings are preliminary nature and comments expressed by staff should not be construed as being Conditions of Approval for any project application.

STATE OF Nevada

: SS

COUNTY OF Lyon

AFFIDAVIT OF OWNERSHIP

I, Lawrence G Yori, being duly sworn, depose and say:

1. That I am (a) the owner of record, or (b) an authorized agent acting in my capacity as Trustee of The 1903 Trust, the owner of record, (hereinafter "Owner") of that certain real property identified as Lyon County Assessor's Parcel No. 021-343-20 (hereinafter "Property");

2. That Owner intends to develop the Property or is currently investigating the Property for potential development;

3. That Owner hereby authorizes and appoints Monte Vista Consulting, Ltd. (hereinafter "Representative:") to assist Owner in its investigation and/or development of the Property;

4. That Owner hereby authorizes City of Fernley (hereinafter "COF") to discuss water service relating to the Property with Representative, to accept information relating to Owner and the Property with Representative, and to treat Representative as the Owner of the Property for all purposes relating to the application for water service for the Property; and

5. That Owner acknowledges that any and all contractual agreements for water service and/or necessary grants of easements must be executed by Owner and not Representative, unless COF is provided with an acceptable Special Power of Attorney.

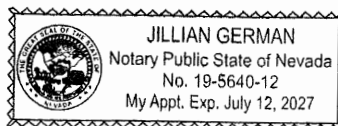
Dated this 14th day of May, 2024.

OWNER:

By: 

Subscribed and Sworn to this 14 day
Of May, 2024.


Notary Public



RESIDENTIAL PROJECT DATA SHEET

City of Fernley, Nevada

1. Number of Dwelling Units

Single Family Detached 158
Duplexes 0
Multi-Family Attached 0
Single Family Attached 0
TOTAL 47.53 Ac. 100 %

3. Gross Density

158 / 47.53 = 3.3

Total # of Total Area Gross Density
Dwellings in Acres (DU/AC)

5. Estimated Sewage to be Generated

163,530 GPD
(Attach Calculations)

7. Flood Hazard

Portion of site subject to inundation
By 100 year flood:

0 Ac. 0 %

9. Lot Sizes

6,000 Sq. Ft. minimum (corner)
6,000 Sq. Ft. minimum (interior)
34,670 Sq. Ft. maximum
9,667 Sq. Ft. average

11. Portion of Site within the Following Slope Categories:

0% - 10% 38.5 Ac. 81 %
10% + 9.03 Ac. 19 %

13. Maximum Building Height

35 Feet 2 Stories

15. Single Family & Two-Family Parking

Garage 2 Spaces/Unit
Carport 0 Spaces/Unit
Open 0 Spaces/Unit
Total 2 Spaces/Unit

2. Site Area Breakdown

Lots or Buildings 35.06 Ac. 73.8 %
Public Right-of-Way 8.41 Ac. 17.7 %
Common Area 4.05 Ac. 8.5 %

4. Schools Serving Project

Elementary School East Valley Elementary
Middle School Silverland Middle School
High School Fernley High

6. Traffic

Average Daily Trips 0 Trips
Peak Hour Trips 0 Trips
(Attach Calculations)

8. Estimated Water Demand (Attach Calculations)

Domestic TBD AFY
Irrigation TBD AFY
TOTAL TBD AFY
Source of water supply: City of Fernley

10. Minimum Building Setbacks

15 Feet (Front Property Line to Dwelling)
20 Feet (Front Property Line to Garage)
10 Feet (Exterior Side Property Line to Dwelling)
5 Feet (Interior Side Property Line to Dwelling)
10 Feet (Rear Property Line to Dwelling)

12. Unit Sizes

TBD Sq. Ft. 0 Bedrooms
0 Sq. Ft. 0 Bedrooms
0 Sq. Ft. 0 Bedrooms
0 Sq. Ft. 0 Bedrooms
0 Sq. Ft. 0 Bedrooms

14. Coverage of Lot by Structure

Maximum 50 %

16. Multi-Family Parking

Units 0 x 2.0 = 0 Spaces
Covered Spaces 0 Units x 1.0 = 0 Spaces
Guest Parking 0 Units x 0.25 = 0 Spaces
Total Required = 0 Spaces
Total Provided = 0 Spaces



Planning Department

Permits
Planning
Development Review
Sustainability

NRS 278 TIME WAIVER AGREEMENT

Please choose one of the options below.

Option 1:

I, the property owner or representative for the application(s) referenced below, **agree** to waive any mandatory timelines outlined in Chapter 278 of the NRS. In exchange, the City of Fernley agrees to process the application(s) as quickly as is possible with limited staff, outside consultant delays, and a large number of projects.

John Krmpotic, agent for owner

Owner/Representative Printed Name

Owner/Representative Signature

5-14-24

Date

Option 2:

I, the property owner or representative for the application(s) referenced below, **do not agree** to waive any mandatory timelines outlined in Chapter 278 of the NRS. I understand that this may result in a negative outcome due to the inability to fully review the project due to limited staff, outside consultant delays, and a large number of projects.

Owner/Representative Printed Name

Owner/Representative Signature

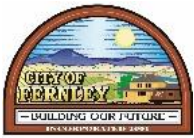
Date

Application #(s) _____

Date of Submittal _____

CITY OF FERNLEY
DEVELOPMENT SERVICES FEE SCHEDULE
 Fee Schedule - Effective December 1, 2023
 Planning Land Division Mapping Fees

Fee Description	Application Fee	Surveyor Fee	Noticing Fee	Total (due at time of application)
Planning Fees				
Administrative Review	\$2,350			\$2,350
Annexation	\$4,000	\$1,600	\$300	\$5,900
Appeal	\$750			\$750
Area Plan (deposit credited toward actual staff time)	\$5,000		\$300	\$5,300
Building Permit Plan Check - Planning	40% of Permit Fee			40% of Permit Fee
Residential Repeats	\$100			\$100
Sign Permit Review	\$75			\$75
Conditional Use Permit	\$3,600		\$300	\$3,900
Continuance	50% of filing fee			50% of filing fee
Development Agreement	\$3,500		\$300	\$3,800
Major Deviation	\$1,750		\$300	\$2,050
Master Plan Amendment (map or text)	\$3,500		\$300	\$3,800
Minor Deviation	\$150			\$150
Planned Development (deposit credited toward actual staff time)	\$5,000		\$300	\$5,300
Temporary Sign Permit	\$35			\$35
Temporary Use Permit	\$100			\$100
Variance	\$1,750		\$300	\$2,050
Zoning Map Amendment	\$600		\$300	\$900
Zoning Verification Letter	\$150			\$150
Land Division/Mapping Fees				
Abandonment (Vacations)	\$1,500	\$1,450		\$2,950
Amended Map		\$1,450		\$1,450
Boundary Line Adjustment	\$700	\$2,100		\$2,800
Certificate of Amendment	\$250	\$850		\$1,100
Division of Land into Large Parcels, Final	\$600	\$2,100		\$2,700
Division of Land into Large Parcels, Tentative	\$800			\$800
Extension of Time	\$775			\$775
Parcel Map, Final	\$1,000	\$2,100		\$3,100
Parcel Map, Tentative	\$2,050 + \$200/lot			\$2,050 + \$200/lot
Reversion to Acreage	\$1,400	\$1,300		\$2,700
Roadway Dedication	\$1,500	\$1,450		\$2,950
Subdivision Map, Tentative	\$8,000 + \$60/lot for > 100 lots			\$8,000 + \$60/lot for > 100 lots
Subdivision Map, Final (Does not include final improvement plan review)	\$1,650	\$2,600 + \$20/lot		\$4,250 + \$20/lot



Street Name Reservation Form

Request to Reserve New Street Name/Change Existing Street Name

Project Information		
Project Name: Yori Single Family		
Project Street Address: 3940 Farm District Road		
Community:		Section(s)/Township/Range:
Assessor's Parcel Number(s)	Assessor's Parcel Number(s)	Assessor's Parcel Number(s)
021-343-20		
Street Name Request		
☒ Request to Reserve New Street Name(s)		☐ Request to Change a Street Name(s)
Current Street/Road Name(s):		
Requested Street/Road Name(s) <i>(List in alphabetical order and attach additional sheets if needed)</i>		
Cattle Road		
Desert Court		
Quick Cal Wav		
Yori Wav		
Ziaqv Court		
<i>If final recordation has not occurred within four (4) years, it is necessary to submit a written request for extension of the street name reservation(s) prior to the expiration date of the original approval request.</i>		
Required Attachment: Applicants must provide & attach a 11" x 17" detailed drawing of the placement of the requested proposed street names and show how it will connect into the City of Fernley transportation network. The drawings must include truth north, street names as well as cross streets, locations of stop signs & proposed dimension sizes for commercial or residential lots.		
Applicant's Information		
Applicant/Developer		Professional Consultant/Representative
Name: John Krmpotic		Name: Monte Vista Consulting - Michael Vicks
Address: 201 W Liberty Street, Suite 300		Address: 575 E Plumb Ln, Suite 101
City: Reno	State: NV Zip: 890501	City: Reno State: NV Zip: 890502
Phone: 775-857-7710		Phone: 775-636-7905
Cell: 775-857-7710	Contact:	Cell: 775-848-5787 Contact:
Email: johnk@klsdesignngroup.com		Email: johnk@klsdesignngroup.com

By signature below, I hereby acknowledge the above terms and conditions.

Signature:

Signature:

Date:

Date:

For Official Use Only

City Department Review

						Initials	Date
☐	Approved	☐	Approved except where noted	☐	Denied	GIS	
☐	Approved	☐	Approved except where noted	☐	Denied	Engineering Department	
☐	Approved	☐	Approved except where noted	☐	Denied	Planning Department	
☐	Approved	☐	Approved except where noted	☐	Denied	Lyon County Sheriff's Dispatch	
☐	Approved	☐	Approved except where noted	☐	Denied	North Lyon County Fire District	
☐	Approved	☐	Approved except where notes	☐	Denied	Fernley Post Office - Postmaster	

Street Name Requirements

Street names and suffixes shall be designated by the developer, subject to the approval of the City of Fernley, in accordance with the following general policy and shall:

- a. Be short (under twelve letters, if possible) and preferably in one word.
- b. Have a simple spelling and easy pronunciation.
- c. Avoid prefixes such as north and south, east, and west, upper, and lower, etc.
- d. Be related to the type and importance of the street. (The suffix boulevard should not be attached to the name of a minor residential street.)
- e. Avoid the use of numbers or letters as street names.
- f. Not be incongruous, offensive, or geographically misleading.
- g. Not be repetitive or similar in sound and character to streets already in existence in the City of Fernley.
- h. Have a single name for a street having a continuous alignment.
- i. When to be connected in the future into a continuous alignment or extended, bear the same name as the existing street.
- j. Have a metal street sign to be erected as specified in the "Standard Details for Public Works Construction, detail # 156 and 160" on at least one corner of every intersection and shall identify each street name.

LEGAL DESCRIPTION

PARCEL 2(ADJUSTED)

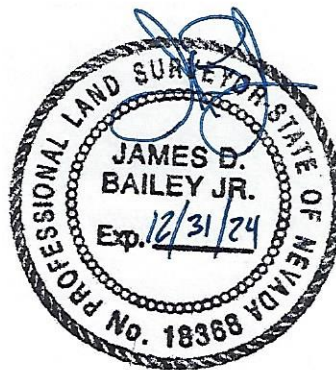
ALL THAT CERTAIN REAL PROPERTY BEING ALL OF THE YORI PARCEL AS SHOWN ON THE RECORD OF SURVEY FOR BOUNDARY LINE ADJUSTMENT FILE No. 90732 AND A PORTION OF THE GALLAWAY PARCEL AS SHOWN ON PARCEL MAP FILE No. 31048 OF LYON COUNTY RECORDS, LYING IN A PORTION OF THE NORTHWEST $\frac{1}{4}$ OF SECTION 22, TOWNSHIP 20 NORTH, RANGE 25 EAST, MOUNT DIABLO MERIDIAN, BEING DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHEAST CORNER OF SAID YORI PARCEL , THENCE FROM SAID POINT OF BEGINNING AND ALONG THE EASTERLY LINE OF SAID YORI PARCEL , SOUTH $0^{\circ}02'41''$ WEST A DISTANCE OF 2630.77 FEET TO A POINT OF INTERSECTION WITH THE NORTHERLY RIGHT OF WAY OF FARM DISTRICT ROAD; THENCE ALONG SAID NORTHERLY RIGHT OF WAY NORTH $89^{\circ}38'59''$ WEST A DISTANCE OF 759.64 FEET ; THENCE LEAVING SAID NORTHERLY RIGHT OF WAY NORTH $0^{\circ}07'03''$ WEST A DISTANCE OF 338.06 FEET TO BEGINNING OF A NON-TANGENT CURVE TO THE LEFT FROM WHICH THE RADIUS POINT BEARS, SOUTH $89^{\circ}52'57''$ WEST, HAVING A RADIUS OF 180.00 FEET , SUBTENDED BY A CENTRAL ANGLE OF $31^{\circ}47'18''$ THENCE ALONG THE ARC OF SAID CURVE A DISTANCE OF 99.87 FEET, HAVING A CHORD OF NORTH $16^{\circ}00'42''$ WEST AND A DISTANCE OF 98.59 FEET; THENCE LEAVING SAID CURVE NORTH $0^{\circ}07'03''$ WEST A DISTANCE OF 2203.35 FEET TO A POINT OF INTERSECTION WITH THE NORTH LINE OF THE AFORMENTIONED SECTION 22; THENCE ALONG SAID NORTH LINE SOUTH $89^{\circ}16'32''$ EAST A DISTANCE OF 794.15 FEET TO THE POINT OF BEGINNING.

CONTAINING 47.53 ACRES MORE OR LESS.

Per NRS 111.312, this legal description was previously recorded at Document No.315965, on March 17, 2004, Official Records of Lyon County, Nevada.

James D. Bailey, Jr.
P.L.S. 18368
MERIDIAN SURVEYING & MAPPING, INC.
8725 TECHNOLOGY WAY, STE. C2
RENO, NV. 89521



5/14/2024

PRELIMINARY REPORT FORM

Issued By:



Prelim Number:

TTR2401199-CD
Update First

In response to the application for a policy of title insurance referenced herein, **Chicago Title Insurance Company** hereby reports that it is prepared to issue, or cause to be issued, as of the date hereof, a policy or policies of title insurance describing the land and the estate or interest therein hereinafter set forth, insuring against loss which may be sustained by reason of any defect, lien or encumbrance not shown or referred to as an exception herein or not excluded from coverage pursuant to the printed Schedules, Conditions and Stipulations or Conditions of said policy forms.

The printed Exceptions and Exclusions from the coverage and Limitations on Covered Risks of said policy or policies are set forth in Attachment One. The policy to be issued may contain an arbitration clause. When the Amount of Insurance is less than that set forth in the arbitration clause, all arbitrable matters shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties. Limitations on Covered Risks applicable to the CLTA and ALTA Homeowner's Policies of Title Insurance which establish a Deductible Amount and a Maximum Dollar Limit of Liability for certain coverages are also set forth in Attachment One. Copies of the policy forms should be read. They are available from the office which issued this report.

This report (and any supplements or amendments hereto) is issued solely for the purpose of facilitating the issuance of a policy of title insurance and no liability is assumed hereby. If it is desired that liability be assumed prior to the issuance of a policy of title insurance, a Binder or Commitment should be requested.

The policy(ies) of title insurance to be issued hereunder will be policy(ies) of Chicago Title Insurance Company, a Florida corporation.

Please read the exceptions shown or referred to herein and the exceptions and exclusions set forth in Attachment One of this report carefully. The exceptions and exclusions are meant to provide you with notice of matters which are not covered under the terms of the title insurance policy and should be carefully considered.

It is important to note that this preliminary report is not a written representation as to the condition of title and may not list all liens, defects and encumbrances affecting title to the land.

Chicago Title Insurance Company

By:

A handwritten signature in black ink, appearing to read 'Michael J. Nolan'.

Michael J. Nolan, President

Attest:

A handwritten signature in black ink, appearing to read 'Marjorie Nemzura'.

Marjorie Nemzura, Secretary

Countersigned By:

A handwritten signature in black ink, appearing to read 'Shelly Saltz'.

Shelly Saltz, Title Officer
Authorized Officer or Agent



SCHEDULE A

Proposed Buyer:

Proposed Lender: **CASH SALE**

Proposed Loan Amount: \$0.00

Property Address: 3240 Farm District Road, Fernley, NV 89408-8607

Order No.: TTR2401199

Effective date: June 10, 2024 at 7:30AM

Short Term Rate: No

ISSUING OFFICE:	FOR SETTLEMENT INQUIRIES, CONTACT:
Title Officer: Shelly Saltz Ticor Title of Nevada, Inc. 5441 Kietzke Lane, Suite 100 Reno , NV 89511 Phone: 775-824-3240 Fax: 775-324-7402 Main Phone: 775-324-7400 Email: ssaltz@ticortitle.com	Escrow Officer: Luann Barnes Ticor Title of Nevada, Inc. 5441 Kietzke Lane, Suite 100 Reno, NV 89511 Phone: 775-842-2483 Fax: 775-824-3233 Main Phone: 775-324-7400 Email: Luann.Barnes@ticortitle.com

1. The estate or interest in the Land hereinafter described or referred to covered by this Report is:

FEE

2. Title to said estate or interest at the date hereof is vested in:

Lawrence G. Yori, as Trustee of the 1903 Trust (u/d/t: October 19, 2011)

3. The Land referred to in this Report is described as follows:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

EXHIBIT "A"
Legal Description

Order No.: TTR2401199

For APN/Parcel ID(s): 021-343-20

All that certain real property situate in the County of Lyon, State of Nevada, described as follows:

All that certain real property being all of the Yori parcel as shown on the record of survey for boundary line adjustment File No. 90732 and a portion of the Gallaway parcel as shown on Parcel Map File No. 31048 of Lyon County records, lying in a portion of the Northwest 1/4 of Section 22, Township 20 North, Range 25 East, Mount Diablo Meridian, being described as follows:

Beginning at the Northeast corner of said Yori parcel thence from said point of beginning and along the easterly line of said Yori parcel, South 0°02'41" West a distance of 2630.77 feet to a point of intersection with the Northerly right of way of Farm District Road; thence along said Northerly right of way North 89°38'59" West a distance of 759.64 feet; thence leaving said Northerly right of way North 0°07'03" West a distance of 338.06 feet to beginning of a non-tangent curve to the left from which the radius point bears, South 89°52'57" West, having a radius of 180.00 feet, subtended by a central angle of 31°47'18"; thence along the arc of said curve a distance of 99.87 feet, having a chord of North 16°00'42" West and a distance of 98.59 feet; thence leaving said curve North 0°07'03" West a distance of 2203.35 feet to a point of intersection with the North line of the aforementioned Section 22; thence along said North line South 89°16'32" East a distance of 794.15 feet to the point of beginning.

APN: 021-343-20

Document No. 483679 is provided pursuant to the requirements of Section 6.NRS 111.312.

SCHEDULE B – Section A

The following exceptions will appear in policies when providing standard coverage as outlined below:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records at Date of Policy but that could be (a) ascertained by an inspection of the Land, or (b) asserted by persons or parties in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records at Date of Policy.
4. Any encroachment, encumbrance, violation, variation or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records at Date of Policy.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor, material or equipment unless such lien is shown by the Public Records at Date of Policy.
7. Any claim to (a) ownership of or rights to minerals and similar substances, including but not limited to ores, metals, coal, lignite, oil, gas, uranium, clay, rock, sand, and gravel located in, on, or under the Land or produced from the Land, whether such ownership or rights arise by lease, grant, exception, conveyance, reservation, or otherwise; and (b) any rights, privileges, immunities, rights of way, and easements associated therewith or appurtenant thereto, whether or not the interests or rights excepted in (a) or (b) appear in the Public Records or are shown in Schedule B.

SCHEDULE B – Section B

At the date hereof, exceptions to coverage in addition to the printed exceptions and exclusions in said policy form would be as follows:

8. Property taxes, which are a lien not yet due and payable, including any assessments collected with taxes to be levied for the fiscal year 2024-2025.
Tax Identification No.: 021-343-20
9. The lien of supplemental taxes, if any, assessed pursuant to the provisions of Nevada Revised Statutes.
10. Any liens, charges or assessments levied by the Carson-Truckee Water Conservancy District and Carson Water Subconservancy District, by reason that the Land is located within said district.
11. Any unpaid charges for Waste Management, plus any interest and/or penalties, which would create a lien and attach to said Land, pursuant to Nevada Revised Statutes.
12. The Land lies within the boundaries of an Agricultural or Open Space Use Assessment District and is potentially subject to deferred real property taxes, the amount is undetermined until the time of conversion.
13. Water rights, claims or title to water, whether or not disclosed by the Public Records.
14. Rights of way for any existing roads and alleys, trails, canals, ditches, flumes, conduits, pipes, poles or transmission lines on, under, over, through or across the Land.
15. Rights of the public to any portion of the Land lying within the area commonly known as Farm District Road.
16. Reservations, exceptions and provisions contained in the patent from the United States of America, and in the acts authorizing the issuance thereof.
Recording Date: April 25, 1935
Recording No: Book 28, Page 250, Land Patent Records
17. Reservations contained in Deed
Grantor: J.A. Baker, Treasurer and ex officio Tax Receiver and Trustee for
and on behalf of Lyon County, State of Nevada, and as Trustee for
and on behalf of the Truckee-Carson Irrigation District
Grantee: Amien M. Perry
Recording Date: December 13, 1951
Recording No.: Book 37, Page 59, as Document No. 59700, Official Records
18. Reservations contained in Deed
Grantor: Robert W. Browne and Muriel L. Browne, husband and wife
Grantee: Devere E. Barker and Marion A. Barker, husband and wife, as joint tenants
Recording Date: March 15, 1968
Recording No.: Book 51, Page 268, as Document No. 100935, Official Records
19. Easement(s) and rights incidental thereto as delineated or as offered for dedication on Parcel Map
Recording Date: January 13, 1977
Recording No.: 31048, Official Records

A portion of the easements granted on the above map were relinquished by Easement Abandonment
Recording Date: April 5, 2004
Recording No.: 317560, Official Records

**SCHEDULE B – Section B
(continued)**

20. Easement(s) and rights incidental thereto as delineated or as offered for dedication on Record of Survey Map
Recording Date: January 16, 1985
Recording No.: 90732, Official Records
21. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:
Granted to: C & D Development Company, a Nevada corporation
Purpose: access and utility easement
Recording Date: April 5, 2004
Recording No.: 317561, Official Records
22. Easement(s) and rights incidental thereto as delineated or as offered for dedication on Record of Survey for Boundary Line Adjustment for C & D Development Company, a Nevada Corporation and Larry G. Yori
Recording Date: March 17, 2004
Recording No.: 315963, Official Records
23. A homestead declaration
Executed by: Lawrence G. Yori, as Trustee of the 1903 Trust
Recording Date: November 2, 2011
Recording No.: 483680, Official Records
24. The Land was approved for agricultural use assessment for taxation purposes by the county assessor and is subject to a potential lien for any deferred taxes which may be levied against said Land by reason of a change in use of said Land for purposes other than agricultural, as evidenced by document:
Recording Date: January 27, 2023
Recording No.: 666366, Official Records
25. An unrecorded Option Agreement effective June 30, 2023, with certain terms, covenants, conditions and provisions set forth therein as disclosed by the document
Entitled: Memorandum of Option
Optionor: Lawrence G. Yori, as Trustee of the 1903 Trust, established under written declaration of trust on October 19, 2011
Optionee: Robertson, Johnson, Miller & Williamson, as authorized agent
Recording Date: September 1, 2023
Recording No.: 673608, Official Records
26. Rights and claims of parties in possession by reason of unrecorded leases, if any, that would be disclosed by an inquiry of the parties or by an inspection of said Land.

END OF EXCEPTIONS**THE FOLLOWING REQUIREMENTS MUST BE MET PRIOR TO CLOSE OF ESCROW:**

REQUIREMENTS

1. The search did not disclose any open mortgages or deeds of trust of record, therefore the Company reserves the right to require further evidence to confirm that the property is unencumbered, and further reserves the right to make additional requirements or add additional items or exceptions upon receipt of the requested evidence.
2. Furnish to the Company for review:
 - a) Certification of Trust in accordance with Nevada Revised Statutes.

END OF REQUIREMENTS

INFORMATIONAL NOTES

- 1 Notice: Please be aware that due to the conflict between federal and state laws concerning the cultivation, distribution, manufacture or sale of marijuana, the Company is not able to close or insure any transaction involving Land that is associated with these activities.
- 2 Property taxes for the fiscal year shown below are PAID. For proration purposes the amounts are:
Assessor's Parcel No.: 021-343-20
Fiscal Year: 2023-2024
Total Taxes: \$5,970.82
- 3 Note: The charge for a policy of title insurance, when issued through this title order, will be based on the Basic Title Insurance Rate.
- 4 Note: There are NO conveyances affecting said Land recorded within 24 months of the date of this report.
- 5 Note: The following information is provided strictly as an accommodation. According to the Assessor, the address of the Land is as follows:
Type of Dwelling: Agricultural Land with Multiple Structures
Address: 3240 Farm District Road, Fernley, Nevada

END OF INFORMATIONAL NOTES

Note: Notice of Available Title Insurance and Escrow Discounts

Your transaction may qualify for one of the discounts shown below. In order to receive these discounts, you will need to contact your escrow officer or a company representative to determine if you qualify and to request the discount. Your escrow officer or company representative will provide a full description of the terms, conditions and requirements associated with each discount.

Available Title Insurance Discounts (These discounts will apply to all transactions where the company is issuing a policy of title insurance, including such transactions where the company is not providing escrow closing services.)

CREDIT FOR PRELIMINARY TITLE REPORTS AND/OR COMMITMENT CANCELLATION CHARGES ON SUBSEQUENT POLICIES

Where an order was cancelled and no major change in the title has occurred since the issuance of the original report or commitment, and the order is reopened within twenty-four (24) – thirty-six (36) months, all or a portion of the charge previously paid upon the cancellation of the report or commitment may be credited on a subsequent policy charge.

SHORT TERM RATE

The Short Term Rate is a reduction of the applicable insurance rate which is allowable only when the current order is placed within (sixty) 60 months from the date of issuance of a prior policy of title insurance to the vested owner or an assignee of the interest insured. The short term rate is 80% of the Basic Rate. Unless otherwise stated, the reduction only applies to policies priced at Eighty Percent (80%) or greater of the basic rate. This reduction does not apply to Short Sale transactions or to any surcharge calculated on the basic rate.

PRIOR POLICY DISCOUNT (APPLICABLE TO ZONE 2, DIRECT OPERATIONS ONLY)

The Prior Policy Discount will apply when a seller or borrower provides a copy of their owner's policy upon opening escrow. The prior policy rate is Seventy Percent (70%) of the applicable owner's title premium. This discount may not be used in combination with any other discount and can only be used in transactions involving property located in Zone 2 (Zone 2 includes all Nevada counties except Clark, Lincoln and Nye) that are handled by a direct operation of the FNF Family of Companies.

CHURCHES OR CHARITABLE NON-PROFIT ORGANIZATIONS

On properties used as a church or for charitable purposes within the scope of the normal activities of such entities the charge for a policy shall be Fifty Percent (50%) to Seventy Percent (70%) of the appropriate title insurance rate, depending on the type of coverage selected. This discount shall not apply to charges for loan policies issued concurrently with an owner's policy.

EMPLOYEE RATE

No charge shall be made to employees of the Company, its subsidiary or affiliated companies (including employees on approved retirement) for policies issued in connection with financing, refinancing, sale or purchase of the employee's bonafide home property. Waiver of such charges is authorized only in connection with those costs which the employee would be obligated to pay, by established custom, as a party to the transaction.

INVESTOR RATE

This rate is available for individuals, groups of individuals or entities customarily engaged in real estate investments. The parties must provide reasonable proof that they currently hold title to or have transferred title to three (3) or more investment properties in the State of Nevada within the past twelve (12) months to qualify for this rate. On a sale transaction, the investor rate is Seventy Percent (70%) of the basic rate. This reduction does not apply to any surcharge calculated on the basic rate. On a refinance transaction or where the investor is obtaining a loan subsequent to a purchase, the rate shall be Eighty-Five Percent (85%) of the applicable rate with a minimum charge of Three Hundred Eighty-Five and No/100 Dollars (\$385.00). The loan discount shall only apply to transactions priced under Section 5.1 B (1b) of the title insurance rate manual. This rate is available upon request only.

Available Escrow Discounts These discounts will apply only to the escrow fee portion of your settlement charges, and the discounts will apply only if the company is issuing a policy of title insurance in conjunction with providing escrow services.

SENIOR CITIZEN RATE

If a valid identification is provided, principals to a given transaction who qualify as Senior Citizens (55 year of age and over) shall be Seventy-Five Percent (75%) of their portion of the escrow fee wherein a valid identification is provided. This discount shall only apply on residential resale transactions wherein the principal resides in the subject property. This discount may not be used in combination with any other escrow rate discount. This rate is available upon request only.

MILITARY DISCOUNT

Any person on active military duty or a Veteran of the U.S. Armed Forces shall be charged Seventy-Five Percent (75%) of their portion of the escrow fee. A copy of a current military identification card or a copy of the DD-214 (Certificate of Release or Discharge from Active Duty) must be provided. This discount may not be used in combination with any other discount. This rate is for sale transaction and it is available upon request only.

FIRST RESPONDER RATE

Any person in a given transaction who is a First Responder shall be charged Seventy-Five Percent (75%) of their portion of the escrow fee, wherein the principle provides a signed statement that indicates he or she is currently employed as one of the following emergency professionals:

- Firefighter
- Law enforcement officer who is sworn to uphold and make arrests for violations of federal, state, county or municipal laws.
- EMT
- Paramedic
- Search & Rescue team member

The discount shall be applicable on residential resale transactions wherein the principal resides in, or plans to reside in, the subject property. This discount may not be used with any other discount and is available upon request only.

EMPLOYEE RATES

An employee will not be charged an escrow fee for the purchase, sale or refinance of the employee's primary residence. The employee must be a principal to the transaction and the request for waiver of fees must be submitted to Management prior to approval.

INVESTOR RATE

This rate is available for individuals, groups of individuals or entities customarily engaged in real estate transactions. The parties must provide reasonable proof that they currently hold title to or have transferred title to three (3) or more investment properties within the State of Nevada within the past twelve (12) months to qualify for this rate. The charge is 70% of their portion of the escrow fee. This discount may not be used in combination with any other discount. This rate is for sale transactions and it is available upon request, only.



Inquire before you wire!

WIRE FRAUD ALERT

This Notice is not intended to provide legal or professional advice.
If you have any questions, please consult with a lawyer.

All parties to a real estate transaction are targets for wire fraud and many have lost hundreds of thousands of dollars because they simply relied on the wire instructions received via email, without further verification. **If funds are to be wired in conjunction with this real estate transaction, we strongly recommend verbal verification of wire instructions through a known, trusted phone number prior to sending funds.**

In addition, the following non-exclusive self-protection strategies are recommended to minimize exposure to possible wire fraud.

- **NEVER RELY** on emails purporting to change wire instructions. Parties to a transaction rarely change wire instructions in the course of a transaction.
- **ALWAYS VERIFY** wire instructions, specifically the ABA routing number and account number, by calling the party who sent the instructions to you. DO NOT use the phone number provided in the email containing the instructions, use phone numbers you have called before or can otherwise verify. **Obtain the number of relevant parties to the transaction as soon as an escrow account is opened.** DO NOT send an email to verify as the email address may be incorrect or the email may be intercepted by the fraudster.
- **USE COMPLEX EMAIL PASSWORDS** that employ a combination of mixed case, numbers, and symbols. Make your passwords greater than eight (8) characters. Also, change your password often and do NOT reuse the same password for other online accounts.
- **USE MULTI-FACTOR AUTHENTICATION** for email accounts. Your email provider or IT staff may have specific instructions on how to implement this feature.

For more information on wire-fraud scams or to report an incident, please refer to the following links:

Federal Bureau of Investigation:
<http://www.fbi.gov>

Internet Crime Complaint Center:
<http://www.ic3.gov>

FIDELITY NATIONAL FINANCIAL PRIVACY NOTICE

Effective December 1, 2023

Fidelity National Financial, Inc. and its majority-owned subsidiary companies (collectively, "FNF," "our," or "we") respect and are committed to protecting your privacy. This Privacy Notice explains how we collect, use, and protect personal information, when and to whom we disclose such information, and the choices you have about the use and disclosure of that information.

A limited number of FNF subsidiaries have their own privacy notices. If a subsidiary has its own privacy notice, the privacy notice will be available on the subsidiary's website and this Privacy Notice does not apply.

Collection of Personal Information

FNF may collect the following categories of Personal Information:

- contact information (e.g., name, address, phone number, email address);
- demographic information (e.g., date of birth, gender, marital status);
- identity information (e.g. Social Security Number, driver's license, passport, or other government ID number);
- financial account information (e.g. loan or bank account information); and
- other personal information necessary to provide products or services to you.

We may collect Personal Information about you from:

- information we receive from you or your agent;
- information about your transactions with FNF, our affiliates, or others; and
- information we receive from consumer reporting agencies and/or governmental entities, either directly from these entities or through others.

Collection of Browsing Information

FNF automatically collects the following types of Browsing Information when you access an FNF website, online service, or application (each an "FNF Website") from your Internet browser, computer, and/or device:

- Internet Protocol (IP) address and operating system;
- browser version, language, and type;
- domain name system requests; and
- browsing history on the FNF Website, such as date and time of your visit to the FNF Website and visits to the pages within the FNF Website.

Like most websites, our servers automatically log each visitor to the FNF Website and may collect the Browsing Information described above. We use Browsing Information for system administration, troubleshooting, fraud investigation, and to improve our websites. Browsing Information generally does not reveal anything personal about you, though if you have created a user account for an FNF Website and are logged into that account, the FNF Website may be able to link certain browsing activity to your user account.

Other Online Specifics

Cookies. When you visit an FNF Website, a "cookie" may be sent to your computer. A cookie is a small piece of data that is sent to your Internet browser from a web server and stored on your computer's hard drive. Information gathered using cookies helps us improve your user experience. For example, a cookie can help the website load properly or can customize the display page based on your browser type and user preferences. You can choose whether or not to accept cookies by changing your Internet browser settings. Be aware that doing so may impair or limit some functionality of the FNF Website.

Web Beacons. We use web beacons to determine when and how many times a page has been viewed. This information is used to improve our websites.

Do Not Track. Currently our FNF Websites do not respond to "Do Not Track" features enabled through your browser.

Links to Other Sites. FNF Websites may contain links to unaffiliated third-party websites. FNF is not responsible for the privacy practices or content of those websites. We recommend that you read the privacy policy of every website you visit.

Use of Personal Information

FNF uses Personal Information for these main purposes:

- To provide products and services to you or in connection with a transaction involving you.

- To improve our products and services.
- To communicate with you about our, our affiliates', and others' products and services, jointly or independently.
- To provide reviews and testimonials about our services, with your consent.

When Information Is Disclosed

We may disclose your Personal Information and Browsing Information in the following circumstances:

- to enable us to detect or prevent criminal activity, fraud, material misrepresentation, or nondisclosure;
- to affiliated or nonaffiliated service providers who provide or perform services or functions on our behalf and who agree to use the information only to provide such services or functions;
- to affiliated or nonaffiliated third parties with whom we perform joint marketing, pursuant to an agreement with them to jointly market financial products or services to you;
- to law enforcement or authorities in connection with an investigation, or in response to a subpoena or court order; or
- in the good-faith belief that such disclosure is necessary to comply with legal process or applicable laws, or to protect the rights, property, or safety of FNF, its customers, or the public.

The law does not require your prior authorization and does not allow you to restrict the disclosures described above. Additionally, we may disclose your information to third parties for whom you have given us authorization or consent to make such disclosure. We do not otherwise share your Personal Information or Browsing Information with nonaffiliated third parties, except as required or permitted by law.

We reserve the right to transfer your Personal Information, Browsing Information, and any other information, in connection with the sale or other disposition of all or part of the FNF business and/or assets, or in the event of bankruptcy, reorganization, insolvency, receivership, or an assignment for the benefit of creditors. By submitting Personal Information and/or Browsing Information to FNF, you expressly agree and consent to the use and/or transfer of the foregoing information in connection with any of the above described proceedings.

Security of Your Information

We maintain physical, electronic, and procedural safeguards to protect your Personal Information.

Choices With Your Information

Whether you submit Personal Information or Browsing Information to FNF is entirely up to you. If you decide not to submit Personal Information or Browsing Information, FNF may not be able to provide certain services or products to you.

For California Residents: We will not share your Personal Information or Browsing Information with nonaffiliated third parties, except as permitted by California law. For additional information about your California privacy rights, please visit the "California Privacy" link on our website (<https://fnf.com/pages/californiaprivacy.aspx>) or call (888) 413-1748.

For Connecticut Residents: For additional information about your Connecticut consumer privacy rights, or to make a consumer privacy request, or to appeal a previous privacy request, please email privacy@fnf.com or call (888) 714-2710.

For Colorado Residents: For additional information about your Colorado consumer privacy rights, or to make a consumer privacy request, or appeal a previous privacy request, please email privacy@fnf.com or call (888) 714-2710.

For Nevada Residents: We are providing this notice pursuant to state law. You may be placed on our internal Do Not Call List by calling FNF Privacy at (888) 714-2710 or by contacting us via the information set forth at the end of this Privacy Notice. For further information concerning Nevada's telephone solicitation law, you may contact: Bureau of Consumer Protection, Office of the Nevada Attorney General, 555 E. Washington St., Suite 3900, Las Vegas, NV 89101; Phone number: (702) 486-3132; email: aginqueries@ag.state.nv.us.

For Oregon Residents: We will not share your Personal Information or Browsing Information with nonaffiliated third parties for marketing purposes, except after you have been informed by us of such sharing and had an opportunity to indicate that you do not want a disclosure made for marketing purposes.

For Utah Residents: For additional information about your Utah consumer privacy rights, or to make a consumer privacy request, please call (888) 714-2710.

For Vermont Residents: We will not disclose information about your creditworthiness to our affiliates and will not disclose your personal information, financial information, credit report, or health information to nonaffiliated third parties to market to you, other than as permitted by Vermont law, unless you authorize us to make those disclosures.

For Virginia Residents: For additional information about your Virginia consumer privacy rights, or to make a consumer privacy request, or appeal a previous privacy request, please email privacy@fnf.com or call (888) 714-2710.

Information From Children

The FNF Websites are not intended or designed to attract persons under the age of eighteen (18). We do not collect Personal Information from any person that we know to be under the age of thirteen (13) without permission from a parent or guardian.

International Users

FNF's headquarters is located within the United States. If you reside outside the United States and choose to provide Personal Information or Browsing Information to us, please note that we may transfer that information outside of your country of residence. By providing FNF with your Personal Information and/or Browsing Information, you consent to our collection, transfer, and use of such information in accordance with this Privacy Notice.

FNF Website Services for Mortgage Loans

Certain FNF companies provide services to mortgage loan servicers, including hosting websites that collect customer information on behalf of mortgage loan servicers (the "Service Websites"). The Service Websites may contain links to both this Privacy Notice and the mortgage loan servicer or lender's privacy notice. The sections of this Privacy Notice titled When Information is Disclosed, Choices with Your Information, and Accessing and Correcting Information do not apply to the Service Websites. The mortgage loan servicer or lender's privacy notice governs use, disclosure, and access to your Personal Information. FNF does not share Personal Information collected through the Service Websites, except as required or authorized by contract with the mortgage loan servicer or lender, or as required by law or in the good-faith belief that such disclosure is necessary: to comply with a legal process or applicable law, to enforce this Privacy Notice, or to protect the rights, property, or safety of FNF or the public.

Your Consent To This Privacy Notice; Notice Changes

By submitting Personal Information and/or Browsing Information to FNF, you consent to the collection and use of the information in accordance with this Privacy Notice. We may change this Privacy Notice at any time. The Privacy Notice's effective date will show the last date changes were made. If you provide information to us following any change of the Privacy Notice, that signifies your assent to and acceptance of the changes to the Privacy Notice.

Accessing and Correcting Information; Contact Us

If you have questions or would like to correct your Personal Information, visit FNF's [Privacy Inquiry Website](#) or contact us by phone at (888) 714-2710, by email at privacy@fnf.com, or by mail to:

Fidelity National Financial, Inc.
601 Riverside Avenue,
Jacksonville, Florida 32204
Attn: Chief Privacy Officer

ALTA HOMEOWNER'S POLICY OF TITLE INSURANCE (7-01-21)

EXCLUSIONS FROM COVERAGE

The following matters are excluded from the coverage of this policy and We will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. a. any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) that restricts, regulates, prohibits, or relates to:
 - i. the occupancy, use, or enjoyment of the Land;
 - ii. the character, dimensions, or location of any improvement on the Land;
 - iii. the subdivision of land; or
 - iv. environmental remediation or protection.
 - b. any governmental forfeiture, police, or regulatory, or national security power.
 - c. the effect of a violation or enforcement of any matter excluded under Exclusion 1.a. or 1.b.
- Exclusion 1 does not modify or limit the coverage provided under Covered Risk 8.a., 14, 15, 16, 18, 19, 20, 23, or 27.
2. Any power to take the Land by condemnation. Exclusion 2 does not modify or limit the coverage provided under Covered Risk 17.
 3. Any defect, lien, encumbrance, adverse claim, or other matter:
 - a. created, suffered, assumed, or agreed to by You;
 - b. not Known to Us, not recorded in the Public Records at the Date of Policy, but Known to You and not disclosed in writing to Us by You prior to the date You became an Insured under this policy;
 - c. resulting in no loss or damage to You;
 - d. attaching or created subsequent to the Date of Policy (Exclusion 3.d. does not modify or limit the coverage provided under Covered Risk 5, 8.f., 25, 26, 27, 28, or 32); or
 - e. resulting in loss or damage that would not have been sustained if You paid consideration sufficient to qualify You as a bona fide purchaser of the Title at the Date of Policy.
 4. Lack of a right:
 - a. to any land outside the area specifically described and referred to in Item 3 of Schedule A; and
 - b. in any street, road, avenue, alley, lane, right-of-way, body of water, or waterway that abut the Land.

Exclusion 4 does not modify or limit the coverage provided under Covered Risk 11 or 21.
 5. The failure of Your existing structures, or any portion of Your existing structures, to have been constructed before, on, or after the Date of Policy in accordance with applicable building codes. Exclusion 5 does not modify or limit the coverage provided under Covered Risk 14 or 15.
 6. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights law, that the transfer of the Title to You is a:
 - a. fraudulent conveyance or fraudulent transfer;
 - b. voidable transfer under the Uniform Voidable Transactions Act; or
 - c. preferential transfer:
 - i. to the extent the instrument of transfer vesting the Title as shown in Schedule A is not a transfer made as a contemporaneous exchange for new value; or
 - ii. for any other reason not stated in Covered Risk 30.
 7. Contamination, explosion, fire, flooding, vibration, fracturing, earthquake, or subsidence.
 8. Negligence by a person or an entity exercising a right to extract or develop oil, gas, minerals, groundwater, or any other subsurface substance.
 9. Any lien on Your Title for real estate taxes or assessments, imposed or collected by a governmental authority that becomes due and payable after the Date of Policy. Exclusion 9 does not modify or limit the coverage provided under Covered Risk 8.a or 27.
 10. Any discrepancy in the quantity of the area, square footage, or acreage of the Land or of any improvement to the Land.

LIMITATIONS ON COVERED RISKS

Your insurance for the following Covered Risks is limited on the Owner's Coverage Statement as follows:

- For Covered Risk 16, 18, 19 and 21 Your Deductible Amount and Our Maximum Dollar Limit of Liability shown in Schedule A.

The deductible amounts and maximum dollar limits shown on Schedule A are as follows:

	<u>Your Deductible Amount</u>	<u>Our Maximum Dollar Limit of Liability</u>
Covered Risk 16:	1.00% of Policy Amount Shown in Schedule A or \$2,500.00 (whichever is less)	\$ 10,000.00
Covered Risk 18:	1.00% of Policy Amount Shown in Schedule A or \$5,000.00 (whichever is less)	\$ 25,000.00
Covered Risk 19:	1.00% of Policy Amount Shown in Schedule A or \$5,000.00 (whichever is less)	\$ 25,000.00
Covered Risk 21:	1.00% of Policy Amount Shown in Schedule A or \$2,500.00 (whichever is less)	\$ 5,000.00

ATTACHMENT ONE (CONTINUED)

ALTA HOMEOWNER'S POLICY OF TITLE INSURANCE (12-02-13) EXCLUSIONS

In addition to the Exceptions in Schedule B, You are not insured against loss, costs, attorneys' fees, and expenses resulting from:

1. Governmental police power, and the existence or violation of those portions of any law or government regulation concerning:
 - a. building;
 - b. zoning;
 - c. land use;
 - d. improvements on the Land;
 - e. land division; and
 - f. environmental protection.This Exclusion does not limit the coverage described in Covered Risk 8.a., 14, 15, 16, 18, 19, 20, 23 or 27.
2. The failure of Your existing structures, or any part of them, to be constructed in accordance with applicable building codes. This Exclusion does not limit the coverage described in Covered Risk 14 or 15.
3. The right to take the Land by condemning it. This Exclusion does not limit the coverage described in Covered Risk 17.
4. Risks:
 - a. that are created, allowed, or agreed to by You, whether or not they are recorded in the Public Records;
 - b. that are Known to You at the Policy Date, but not to Us, unless they are recorded in the Public Records at the Policy Date;
 - c. that result in no loss to You; or
 - d. that first occur after the Policy Date - this does not limit the coverage described in Covered Risk 7, 8.e., 25, 26, 27 or 28.
5. Failure to pay value for Your Title.
6. Lack of a right:
 - a. to any land outside the area specifically described and referred to in paragraph 3 of Schedule A; and
 - b. in streets, alleys, or waterways that touch the Land.This Exclusion does not limit the coverage described in Covered Risk 11 or 21.
7. The transfer of the Title to You is invalid as a preferential transfer or as a fraudulent transfer or conveyance under federal bankruptcy, state insolvency, or similar creditors' rights laws.
8. Contamination, explosion, fire, flooding, vibration, fracturing, earthquake or subsidence.
9. Negligence by a person or an Entity exercising a right to extract or develop minerals, water, or any other substances.

LIMITATIONS ON COVERED RISKS

Your insurance for the following Covered Risks is limited on the Owner's Coverage Statement as follows:

- For Covered Risk 16, 18, 19 and 21, Your Deductible Amount and Our Maximum Dollar Limit of Liability shown in Schedule A.

The deductible amounts and maximum dollar limits shown on Schedule A are as follows:

	<u>Your Deductible Amount</u>	<u>Our Maximum Dollar Limit of Liability</u>
Covered Risk 16:	1.00% of Policy Amount Shown in Schedule A or \$2,500.00 (whichever is less)	\$ 10,000.00
Covered Risk 18:	1.00% of Policy Amount Shown in Schedule A or \$5,000.00 (whichever is less)	\$ 25,000.00
Covered Risk 19:	1.00% of Policy Amount Shown in Schedule A or \$5,000.00 (whichever is less)	\$ 25,000.00
Covered Risk 21:	1.00% of Policy Amount Shown in Schedule A or \$2,500.00 (whichever is less)	\$ 5,000.00

ATTACHMENT ONE (CONTINUED)

ALTA OWNER'S POLICY (07-01-2021)

EXCLUSIONS FROM COVERAGE

The following matters are excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. a. any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) that restricts, regulates, prohibits, or relates to:
 - i. the occupancy, use, or enjoyment of the Land;
 - ii. the character, dimensions, or location of any improvement on the Land;
 - iii. the subdivision of land; or
 - iv. environmental remediation or protection.
 - b. any governmental forfeiture, police, regulatory, or national security power.
 - c. the effect of a violation or enforcement of any matter excluded under Exclusion 1.a. or 1.b.
- Exclusion 1 does not modify or limit the coverage provided under Covered Risk 5 or 6.
2. Any power of eminent domain. Exclusion 2 does not modify or limit the coverage provided under Covered Risk 7.
 3. Any defect, lien, encumbrance, adverse claim, or other matter:
 - a. created, suffered, assumed, or agreed to by the Insured Claimant;
 - b. not Known to the Company, not recorded in the Public Records at the Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
 - c. resulting in no loss or damage to the Insured Claimant;
 - d. attaching or created subsequent to the Date of Policy (Exclusion 3.d. does not modify or limit the coverage provided under Covered Risk 9 or 10); or
 - e. resulting in loss or damage that would not have been sustained if consideration sufficient to qualify the Insured named in Schedule A as a bona fide purchaser had been given for the Title at the Date of Policy.
 4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights law, that the transaction vesting the Title as shown in Schedule A is a:
 - a. fraudulent conveyance or fraudulent transfer;
 - b. voidable transfer under the Uniform Voidable Transactions Act; or
 - c. preferential transfer:
 - i. to the extent the instrument of transfer vesting the Title as shown in Schedule A is not a transfer made as a contemporaneous exchange for new value; or
 - ii. for any other reason not stated in Covered Risk 9.b.
 5. Any claim of a PACA-PSA Trust. Exclusion 5 does not modify or limit the coverage provided under Covered Risk 8.
 6. Any lien on the Title for real estate taxes or assessments, imposed or collected by a governmental authority that becomes due and payable after the Date of Policy. Exclusion 6 does not modify or limit the coverage provided under Covered Risk 2.b.
 7. Any discrepancy in the quantity of the area, square footage, or acreage of the Land or of any improvement to the Land.

EXCEPTIONS FROM COVERAGE

Some historical land records contain Discriminatory Covenants that are illegal and unenforceable by law. This policy treats any Discriminatory Covenant in a document referenced in Schedule B as if each Discriminatory Covenant is redacted, repudiated, removed, and not republished or recirculated. Only the remaining provisions of the document are excepted from coverage.

This policy does not insure against loss or damage and the Company will not pay costs, attorneys' fees, or expenses resulting from the terms and conditions of any lease or easement identified in Schedule A, and the following matters:

NOTE: The 2021 ALTA Owner's Policy may be issued to afford either Standard Coverage or Extended Coverage. In addition to variable exceptions such as taxes, easements, CC&R's, etc., the Exceptions from Coverage in a Standard Coverage policy will also include the Western Regional Standard Coverage Exceptions listed as 1 through 7 below:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records at Date of Policy but that could be (a) ascertained by an inspection of the Land or (b) asserted by persons or parties in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records at Date of Policy.
4. Any encroachment, encumbrance, violation, variation, easement, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records at Date of Policy.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor, material or equipment unless such lien is shown by the Public Records at Date of Policy.
7. Any claim to (a) ownership of or rights to minerals and similar substances, including but not limited to ores, metals, coal, lignite, oil, gas, uranium, clay, rock, sand, and gravel located in, on, or under the Land or produced from the Land, whether such ownership or rights arise by lease, grant, exception, conveyance, reservation, or otherwise; and (b) any rights, privileges, immunities, rights of way, and easements associated therewith or appurtenant thereto, whether or not the interests or rights excepted in (a) or (b) appear in the Public Records or are shown in Schedule B.

ATTACHMENT ONE (CONTINUED)

2006 ALTA OWNER'S POLICY (06-17-06)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
 - (i) the occupancy, use, or enjoyment of the Land;
 - (ii) the character, dimensions, or location of any improvement erected on the Land;
 - (iii) the subdivision of land; or
 - (iv) environmental protection;or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
- (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
 - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
 - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
 - (c) resulting in no loss or damage to the Insured Claimant;
 - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 9 and 10); or
 - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Title.
4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction vesting the Title as shown in Schedule A, is
 - (a) a fraudulent conveyance or fraudulent transfer; or
 - (b) a preferential transfer for any reason not stated in Covered Risk 9 of this policy.
5. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the deed or other instrument of transfer in the Public Records that vests Title as shown in Schedule A.

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage, and the Company will not pay costs, attorneys' fees, or expenses that arise by reason of:

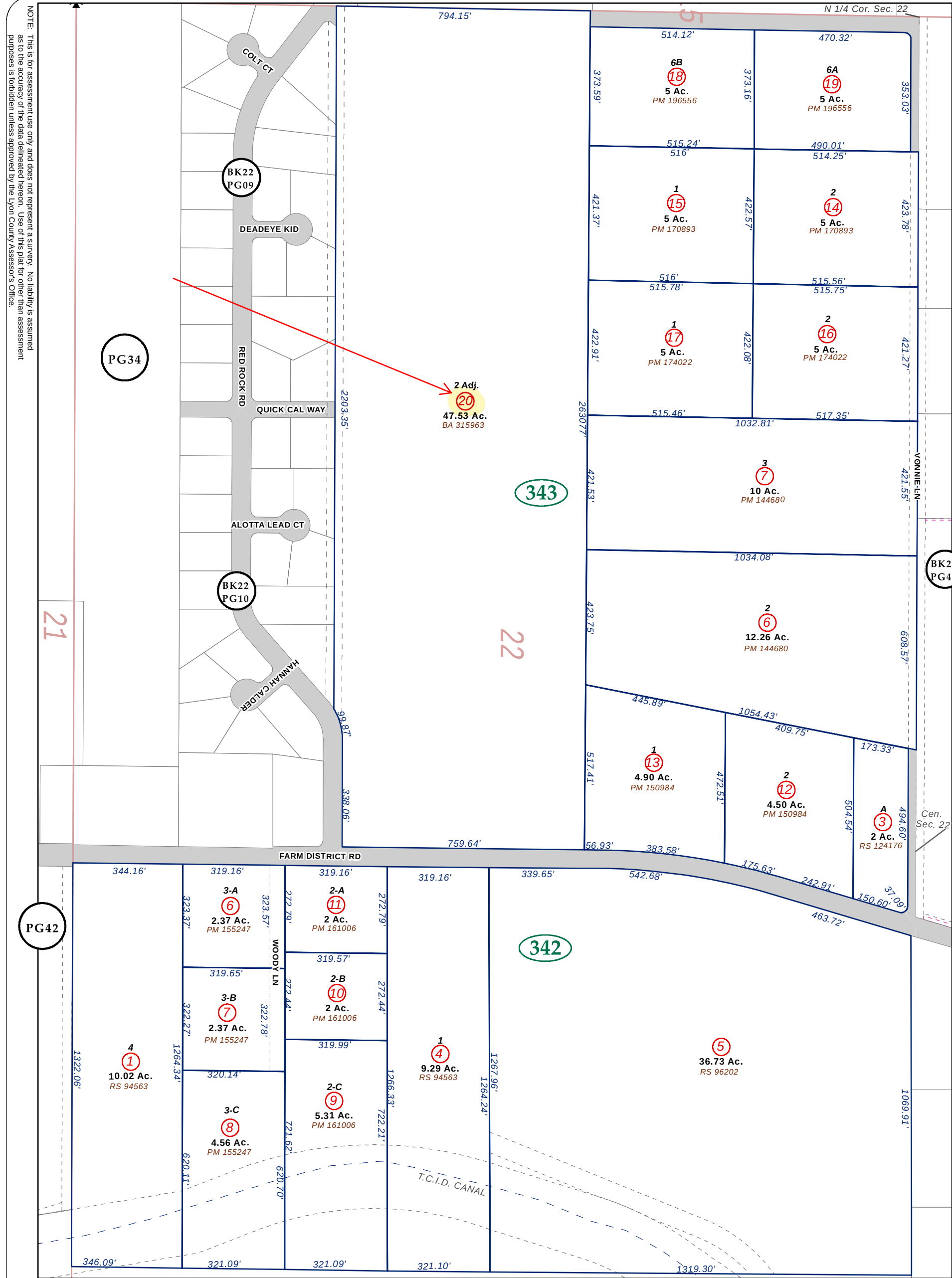
NOTE: The 2006 ALTA Owner's Policy may be issued to afford either Standard Coverage or Extended Coverage. In addition to variable exceptions such as taxes, easements, CC&R's, etc., the Exceptions from Coverage in a Standard Coverage policy will also include the Western Regional Standard Coverage Exceptions listed below as 1 through 7 below:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records at Date of Policy but that could be (a) ascertained by an inspection of the Land, or (b) asserted by persons or parties in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records at Date of Policy.
4. Any encroachment, encumbrance, violation, variation, easement, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records at Date of Policy.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor, material or equipment unless such lien is shown by the Public Records at Date of Policy.]
7. Any claim to (a) ownership of or rights to minerals and similar substances, including but not limited to ores, metals, coal, lignite, oil, gas, uranium, clay, rock, sand, and gravel located in, on, or under the Land or produced from the Land, whether such ownership or rights arise by lease, grant, exception, conveyance, reservation, or otherwise; and (b) any rights, privileges, immunities, rights of way, and easements associated therewith or appurtenant thereto, whether or not the interests or rights excepted in (a) or (b) appear in the Public Records or are shown in Schedule B.

This map/plat is being furnished as an aid in locating the herein described Land in relation to adjoining streets, natural boundaries and other land, and is not a survey of the land depicted. Except to the extent a policy of title insurance is expressly modified by endorsement, if any, the Company does not insure dimensions, distances, location of easements, acreage or other matters shown thereon.

Portion NW 1/4 & N 1/2 SW 1/4 Section 22, T20N - R25E, MD&M

21-342



NOTE: This is for assessment use only and does not represent a survey. No liability is assumed as to the accuracy of the data delineated hereon. Use of this plat for other than assessment purposes is forbidden unless approved by the Lyon County Assessors Office.



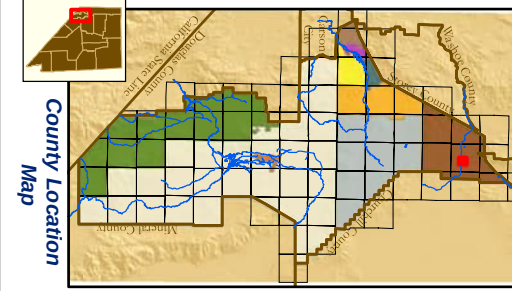
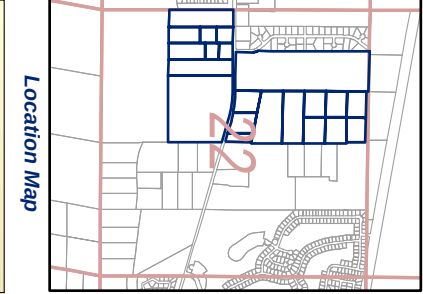
Revised: September 28, 2015

Scale: 1" = 300'

- Cities & Townships**
- Dayton
 - Dayton Valley
 - Ferley
 - Mark Twain
 - Mason Valley
 - Mound House
 - Silver City
 - Silver Springs
 - Smith Valley
 - Stagecoach
 - Yerington

- Map Elements**
- 1/4 Corner Section
 - Section Ties
 - 300' Dimensions
 - Parcel Lot
 - Parcel Number
 - 0.13 Ac. Acreage of Parcel
 - PM 136149 Recorded Map Image
 - Parcel Boundaries
 - Block Number
 - Parcel Book & Page Number
 - Page Number

- Location Map**
- 1/4 Corner Section
 - Section Ties
 - 300' Dimensions
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Tax Account 021-343-20

Owners

YORI, LAWRENCE G TR
3240 FARM DISTRICT RD
FERNLEY, NV 89408-0000

Account Summary

Account ID	021-343-20
Account Type	Real Estate
Location	3240 FARM DISTRICT RD FERNLEY
Balance	\$0.00
Currently Due	\$0.00

No payment currently due.

This account has a balance of \$0.00.
No payment can be made.

Current Year

Description	2023/2024 REAL ESTATE TAXES
Original	\$5,970.82
Total	\$5,970.82
Paid	\$5,970.82
Balance	\$0.00
Due	\$0.00
Ad Valorem Tax Rate	3.6551
Tax District	6.0 (City of Fernley)
Tax Cap	7% High 8.0%, 93% Low 3%

Delinquent Installments

#	Due Date	Penalty Date	Status	Original Total	Penalty	Total	Paid	Total Due
1	08/21/2023	09/01/2023	Paid	\$1,494.82	\$0.00	\$1,494.82	\$1,494.82	\$0.00
2	10/02/2023	10/13/2023	Paid	\$1,492.00	\$0.00	\$1,492.00	\$1,492.00	\$0.00
3	01/02/2024	01/13/2024	Paid	\$1,492.00	\$0.00	\$1,492.00	\$1,492.00	\$0.00
4	03/04/2024	03/15/2024	Paid	\$1,492.00	\$0.00	\$1,492.00	\$1,492.00	\$0.00

Past Years

Description	Original	Penalty	Paid	Balance	Due	Tax Rate	Tax District
2022/2023 REAL ESTATE TAXES	\$5,676.28	\$0.00	\$5,676.28	\$0.00	\$0.00	3.6127	6.0
2021/2022 REAL ESTATE TAXES	\$5,539.37	\$0.00	\$5,539.37	\$0.00	\$0.00	3.6160	6.0
2020/2021 SECURED TAXES	\$5,407.40	\$0.00	\$5,407.40	\$0.00	\$0.00	3.6131	6.0
2019/2020 SECURED TAXES	\$5,199.48	\$0.00	\$5,199.48	\$0.00	\$0.00	3.6131	6.0
2018/2019 SECURED TAXES	\$5,077.46	\$0.00	\$5,077.46	\$0.00	\$0.00	3.6131	6.0
2017/2018 SECURED TAXES	\$4,941.26	\$0.00	\$4,941.26	\$0.00	\$0.00	3.6131	6.0
2016/2017 SECURED TAXES	\$4,857.35	\$0.00	\$4,857.35	\$0.00	\$0.00	3.6131	6.0

Special Assessments and Other Fees

Year	Code	Description	Amount	Paid	Balance	Due
2023-2024	S23	TCID Operatn & Maint	1452.18	1452.18	.00	.00
2023-2024	S24	TCID Administrative	120.00	120.00	.00	.00
2023-2024	S25	TCID District Gen.	314.88	314.88	.00	.00
2023-2024	S33	Fernley Groundwater	1.99	1.99	.00	.00
2022-2023	S23	TCID Operatn & Maint	1366.59	1366.59	.00	.00
2022-2023	S24	TCID Administrative	120.00	120.00	.00	.00
2022-2023	S25	TCID District Gen.	301.92	301.92	.00	.00
2022-2023	S33	Fernley Groundwater	2.04	2.04	.00	.00
2021-2022	S23	TCID Operatn & Maint	1366.59	1366.59	.00	.00
2021-2022	S24	TCID Administrative	120.00	120.00	.00	.00
2021-2022	S25	TCID District Gen.	292.80	292.80	.00	.00
2021-2022	S33	Fernley Groundwater	2.03	2.03	.00	.00
2020-2021	S23	TCID Operatn & Maint	1366.59	1366.59	.00	.00
2020-2021	S24	TCID Administrative	120.00	120.00	.00	.00
2020-2021	S25	TCID District Gen.	286.08	286.08	.00	.00
2020-2021	S33	Fernley Groundwater	.32	.32	.00	.00
2019-2020	S23	TCID Operatn & Maint	1281.00	1281.00	.00	.00
2019-2020	S24	TCID Administrative	120.00	120.00	.00	.00
2019-2020	S25	TCID District Gen.	279.84	279.84	.00	.00
2019-2020	S33	Fernley Groundwater	.32	.32	.00	.00
2018-2019	S23	TCID Operatn & Maint	1281.00	1281.00	.00	.00
2018-2019	S24	TCID Administrative	110.00	110.00	.00	.00
2018-2019	S25	TCID District Gen.	273.60	273.60	.00	.00
2018-2019	S33	Fernley Groundwater	.32	.32	.00	.00
2017-2018	S23	TCID Operatn & Maint	1281.00	1281.00	.00	.00
2017-2018	S24	TCID Administrative	110.00	110.00	.00	.00

Year	Code	Description	Amount	Paid	Balance	Due
2017-2018	S25	TCID District Gen.	240.00	240.00	.00	.00
2017-2018	S33	Fernley Groundwater	.33	.33	.00	.00
2016-2017	S23	TCID Operatn & Maint	1281.00	1281.00	.00	.00
2016-2017	S24	TCID Administrative	110.00	110.00	.00	.00
2016-2017	S25	TCID District Gen.	240.00	240.00	.00	.00
2016-2017	S33	Fernley Groundwater	.32	.32	.00	.00

Tax Bill and Payment History

Date	Type	Billed to / Payer Name / Note	Amount	Balance
03/01/2024	PAYMENT	YORI LARRY EC WF - 024030123043064	\$-1,492.00	\$0.00
12/28/2023	PAYMENT	YORI LARRY EC WF - 023122823034045	\$-1,492.00	\$1,492.00
09/28/2023	PAYMENT	YORI LARRY EC WF - 023092823027942	\$-1,492.00	\$2,984.00
09/12/2023	PAYMENT	YORI LARRY SYS WF - 023081623030250 ORIG: EC	\$-1,494.82	\$4,476.00
09/12/2023	ADJUST	YORI LARRY EC WF - 023081623030250 VOIDED PAYMENT: 851739. REASON: COLLECTION FEE FIX	\$1,494.82	\$5,970.82
09/12/2023	PAYMENT	YORI LARRY SYS WF - 023030223046764 ORIG: EC	\$-1,419.00	\$4,476.00
09/12/2023	ADJUST	YORI LARRY EC WF - 023030223046764 VOIDED PAYMENT: 773884. REASON: COLLECTION FEE FIX	\$1,419.00	\$5,895.00
09/12/2023	PAYMENT	YORI LARRY SYS WF - 022122923030619 ORIG: EC	\$-1,419.00	\$4,476.00
09/12/2023	ADJUST	YORI LARRY EC WF - 022122923030619 VOIDED PAYMENT: 736244. REASON: COLLECTION FEE FIX	\$1,419.00	\$5,895.00
09/12/2023	PAYMENT	YORI LARRY SYS WF - 022092923031655 ORIG: EC	\$-1,419.00	\$4,476.00
09/12/2023	ADJUST	YORI LARRY EC WF - 022092923031655 VOIDED PAYMENT: 712848. REASON: COLLECTION FEE FIX	\$1,419.00	\$5,895.00
09/12/2023	PAYMENT	YORI LARRY SYS WF - 022081223030303 ORIG: EC	\$-1,419.28	\$4,476.00
09/12/2023	ADJUST	YORI LARRY EC WF - 022081223030303 VOIDED PAYMENT: 694948. REASON: COLLECTION FEE FIX	\$1,419.28	\$5,895.28
09/12/2023	PAYMENT	YORI LARRY SYS WF - 022030323035160 ORIG: EC	\$-1,384.81	\$4,476.00
09/12/2023	ADJUST	YORI LARRY EC WF - 022030323035160 VOIDED PAYMENT: 651725. REASON: COLLECTION FEE FIX	\$1,384.81	\$5,860.81
09/12/2023	PAYMENT	YORI LARRY SYS WF - 021123023028889 ORIG: EC	\$-1,384.81	\$4,476.00
09/12/2023	ADJUST	YORI LARRY EC WF - 021123023028889 VOIDED PAYMENT: 620487. REASON: COLLECTION FEE FIX	\$1,384.81	\$5,860.81
09/12/2023	PAYMENT	YORI LARRY SYS WF - 021100123043881 ORIG: EC	\$-1,384.81	\$4,476.00
09/12/2023	ADJUST	YORI LARRY EC WF - 021100123043881 VOIDED PAYMENT: 607802. REASON: COLLECTION FEE FIX	\$1,384.81	\$5,860.81
09/12/2023	PAYMENT	YORI LARRY SYS WF - 021081323033024 ORIG: EC	\$-1,384.94	\$4,476.00
09/12/2023	ADJUST	YORI LARRY EC WF - 021081323033024 VOIDED PAYMENT: 534794. REASON: COLLECTION FEE FIX	\$1,384.94	\$5,860.94

Date	Type	Billed to / Payer Name / Note	Amount	Balance
08/16/2023	PAYMENT	YORI LARRY EC WF - 023081623030250	\$-1,494.82	\$4,476.00
07/17/2023	BILL	YORI, LAWRENCE G TR	\$5,970.82	\$5,970.82
03/03/2023	PAYMENT	YORI LARRY EC WF - 023030223046764	\$-1,419.00	\$0.00
12/30/2022	PAYMENT	YORI LARRY EC WF - 022122923030619	\$-1,419.00	\$1,419.00
09/30/2022	PAYMENT	YORI LARRY EC WF - 022092923031655	\$-1,419.00	\$2,838.00
08/15/2022	PAYMENT	YORI LARRY EC WF - 022081223030303	\$-1,419.28	\$4,257.00
08/04/2022	AMENDMENT	AMENDMENT TO RE 2023	\$0.00	\$5,676.28
07/15/2022	BILL	YORI, LAWRENCE G TR	\$5,676.28	\$5,676.28
03/04/2022	PAYMENT	YORI LARRY EC WF - 022030323035160	\$-1,384.81	\$0.00
12/30/2021	PAYMENT	YORI LARRY EC WF - 021123023028889	\$-1,384.81	\$1,384.81
10/04/2021	PAYMENT	YORI LARRY EC WF - 021100123043881	\$-1,384.81	\$2,769.62
08/14/2021	PAYMENT	YORI LARRY EC WF - 021081323033024	\$-1,384.94	\$4,154.43
07/14/2021	BILL	YORI, LAWRENCE G TR	\$5,539.37	\$5,539.37
02/26/2021	PAYMENT	YORI LARRY EC WF - 021022523038685	\$-1,351.00	\$0.00
12/31/2020	PAYMENT	YORI LARRY EC WF - 020123023039012	\$-1,351.00	\$1,351.00
10/15/2020	PAYMENT	YORI, LARRY CHECK BANK: WF INTERNET NUM: 020100223076474	\$-1,351.00	\$2,702.00
08/17/2020	PAYMENT	YORI, LARRY CHECK BANK: WF INTERNET NUM: 020081323038497	\$-1,354.40	\$4,053.00
07/09/2020	BILL	YORI, LAWRENCE G TR	\$5,407.40	\$5,407.40
02/26/2020	PAYMENT	YORI, LARRY CHECK BANK: WF INTERNET NUM: 020022623037109	\$-1,299.00	\$0.00
01/03/2020	PAYMENT	YORI, LARRY CHECK BANK: WF INTERNET NUM: 020010223032509	\$-1,299.00	\$1,299.00
10/04/2019	PAYMENT	YORI, LARRY CHECK BANK: WF INTERNET NUM: 019100323052072	\$-1,299.00	\$2,598.00
08/19/2019	PAYMENT	YORI, LARRY CHECK BANK: WF INTERNET NUM: 019081523043320	\$-1,302.48	\$3,897.00
07/10/2019	BILL	YORI, LAWRENCE G TR	\$5,199.48	\$5,199.48
03/01/2019	PAYMENT	YORI, LARRY CHECK BANK: WF INTERNET NUM: 019022823051648	\$-1,269.00	\$0.00
01/07/2019	PAYMENT	YORI, LARRY CHECK BANK: WF INTERNET NUM: 019010423062460	\$-1,269.00	\$1,269.00
09/26/2018	PAYMENT	YORI, LARRY CHECK BANK: WF INTERNET NUM: 018092623041658	\$-1,269.00	\$2,538.00
08/16/2018	PAYMENT	YORI, LARRY CHECK BANK: WF INTERNET NUM: 018081623058462	\$-1,270.46	\$3,807.00
07/10/2018	BILL	YORI, LAWRENCE G TR	\$5,077.46	\$5,077.46
03/06/2018	PAYMENT	YORI, LAWRENCE & MARY CHECK NUM: 9487	\$-1,235.00	\$0.00
12/28/2017	PAYMENT	YORI, LARY & MARY CHECK NUM: 9467	\$-1,235.00	\$1,235.00

Date	Type	Billed to / Payer Name / Note	Amount	Balance
09/26/2017	PAYMENT	YORI, LARRY OR MARY CHECK NUM: 9451	\$-1,235.00	\$2,470.00
08/22/2017	PAYMENT	YORI, LAWRENCE & MARY CHECK NUM: 9442	\$-1,236.26	\$3,705.00
07/10/2017	BILL	YORI, LAWRENCE G TR	\$4,941.26	\$4,941.26
02/28/2017	PAYMENT	YORI, LARRY & MARY CHECK NUM: 9409	\$-1,214.00	\$0.00
12/29/2016	PAYMENT	YORI, LARRY OR MARY CHECK NUM: 9394	\$-1,214.00	\$1,214.00
09/15/2016	PAYMENT	YORI, LARRY OR MARY CHECK NUM: 9371	\$-1,214.00	\$2,428.00
08/16/2016	PAYMENT	YORI, LAWRENCE G TR CHECK NUM: 9363	\$-1,215.35	\$3,642.00
07/11/2016	BILL	YORI, LAWRENCE G TR	\$4,857.35	\$4,857.35
03/01/2016	PAYMENT	YORI, LARRY OR MARY CHECK NUM: 9324	\$-1,212.00	\$0.00
01/06/2016	PAYMENT	YORI, LARRY & MARY CHECK NUM: 9309	\$-1,212.00	\$1,212.00
10/08/2015	PAYMENT	YORI, LARRY G OR MARY B CHECK NUM: 9287	\$-1,212.00	\$2,424.00
08/20/2015	PAYMENT	YORI, LARRY OR MARY CHECK NUM: 9272	\$-1,214.91	\$3,636.00
07/07/2015	BILL	YORI, LAWRENCE G TR	\$4,850.91	\$4,850.91
02/27/2015	PAYMENT	YORI, LARRY G OR MARY B CHECK NUM: 9230	\$-1,188.00	\$0.00
01/07/2015	PAYMENT	YORI, LAWRENCE G TR CHECK NUM: 9216	\$-1,188.00	\$1,188.00
10/08/2014	PAYMENT	YORI, LARRY OR MARY CHECK NUM: 9193	\$-1,188.00	\$2,376.00
08/21/2014	PAYMENT	YORI, LARRY G/MARY B CHECK NUM: 9182	\$-1,190.79	\$3,564.00
07/08/2014	BILL	YORI, LAWRENCE G TR	\$4,754.79	\$4,754.79
03/07/2014	PAYMENT	YORI, LAWRENCE G TR CHECK NUM: 9145	\$-1,153.00	\$0.00
01/15/2014	PAYMENT	YORI, LARRY G/MARY B CHECK NUM: 9130	\$-1,153.00	\$1,153.00
10/10/2013	PAYMENT	YORI, LAWRENCE G TR CHECK NUM: 9106	\$-1,153.00	\$2,306.00
08/13/2013	PAYMENT	YORI, LARRY OR MARY CHECK NUM: 9096	\$-1,153.96	\$3,459.00
07/08/2013	BILL	YORI, LAWRENCE G TR	\$4,612.96	\$4,612.96
02/26/2013	PAYMENT	YORI, LARRY OR MARY CHECK NUM: 9056	\$-1,130.00	\$0.00
01/02/2013	PAYMENT	YORI, LARRY G OR MARY B CHECK NUM: 9037	\$-1,130.00	\$1,130.00
10/01/2012	PAYMENT	YORI, LAWRENCE G TR CHECK NUM: 541	\$-1,130.00	\$2,260.00
08/23/2012	PAYMENT	YORI, LAWRENCE G TR CHECK NUM: 9016	\$-1,131.67	\$3,390.00
07/10/2012	BILL	YORI, LAWRENCE G TR	\$4,521.67	\$4,521.67
02/29/2012	PAYMENT	YORI, LARRY G CHECK NUM: 8971	\$-1,107.00	\$0.00
12/30/2011	PAYMENT	YORI, LARRY G OR MARY CHECK NUM: 8956	\$-1,107.00	\$1,107.00
09/30/2011	PAYMENT	YORI, LARRY G OR MARY B CHECK NUM: 8930	\$-1,107.00	\$2,214.00
08/19/2011	PAYMENT	YORI, LARRY G CHECK NUM: 8917	\$-1,109.48	\$3,321.00
07/08/2011	BILL	YORI, LARRY G	\$4,430.48	\$4,430.48
03/07/2011	PAYMENT	YORI EXEMPTION TRUST CHECK NUM: 2020	\$-1,084.00	\$0.00
01/06/2011	PAYMENT	YORI EXEMPTION TRUST CHECK NUM: 2016	\$-1,084.00	\$1,084.00
10/11/2010	PAYMENT	YORI, GEORGE & GENEVIEVE CHECK BANK: 94-77 NUM: 1661	\$-1,084.00	\$2,168.00

Date	Type	Billed to / Payer Name / Note	Amount	Balance
08/17/2010	PAYMENT	YORI, LARRY OR GEORGE CHECK BANK: 94-7074 NUM: 2013	\$-1,087.58	\$3,252.00
07/08/2010	BILL	YORI, LARRY G	\$4,339.58	\$4,339.58
02/23/2010	PAYMENT	YORI, LARRY G CHECK BANK: 94-7074 NUM: 2010	\$-1,457.00	\$0.00
01/05/2010	PAYMENT	YORI, LARRY G CHECK BANK: 94-7074 NUM: 8777	\$-1,457.00	\$1,457.00
10/06/2009	PAYMENT	YORI, LARRY G CHECK BANK: 94-7074 NUM: 8750	\$-1,457.00	\$2,914.00
08/19/2009	PAYMENT	YORI, LARRY G/MARY B CHECK BANK: 94-7074 NUM: 8735	\$-1,459.01	\$4,371.00
07/06/2009	BILL	YORI, LARRY G	\$5,830.01	\$5,830.01
03/04/2009	PAYMENT	YORI, LARRY G OR MARY B CHECK BANK: 94-7074 NUM: 8699	\$-1,474.00	\$0.00
01/06/2009	PAYMENT	YORI, LARRY OR MARY CHECK BANK: 94-7074 NUM: 8689	\$-1,474.00	\$1,474.00
10/07/2008	PAYMENT	YORI, LARRY G/MARY B CHECK BANK: 94-7074 NUM: 8668	\$-1,474.00	\$2,948.00
08/25/2008	PAYMENT	YORI, LARRY G CHECK BANK: 94-7074 NUM: 8657	\$-1,477.07	\$4,422.00
07/15/2008	BILL	YORI, LARRY G	\$5,899.07	\$5,899.07
02/27/2008	PAYMENT	YORI, LARRY G CHECK BANK: 94-7074 NUM: 94-7074	\$-1,353.00	\$0.00
01/04/2008	PAYMENT	YORI, LARRY G CHECK BANK: 94-7074 NUM: 8600	\$-1,353.00	\$1,353.00
10/02/2007	PAYMENT	YORI, LARRY G CHECK BANK: 94-7074 NUM: 8577	\$-1,353.00	\$2,706.00
08/22/2007	PAYMENT	YORI, LARRY G CHECK BANK: 94-7074 NUM: 8564	\$-1,355.81	\$4,059.00
07/12/2007	BILL	YORI, LARRY G	\$5,414.81	\$5,414.81
03/07/2007	PAYMENT	YORI, LARRY G CHECK BANK: 94-7074 NUM: 8520	\$-1,322.00	\$0.00
01/09/2007	PAYMENT	YORI, LARRY G CHECK BANK: 94-7074 NUM: 8508	\$-1,322.00	\$1,322.00
10/02/2006	PAYMENT	YORI, LARRY G CHECK BANK: 94-7074 NUM: 8483	\$-1,322.00	\$2,644.00
08/27/2006	PAYMENT	YORI, LARRY G CHECK BANK: 94-7074 NUM: 8470	\$-1,324.08	\$3,966.00
07/12/2006	BILL	YORI, LARRY G	\$5,290.08	\$5,290.08
03/07/2006	PAYMENT	YORI, LARRY G CHECK BANK: 94-7074 NUM: 8423	\$-1,281.00	\$0.00
01/05/2006	PAYMENT	YORI, LARRY G CHECK BANK: 94-7074 NUM: 8382	\$-1,281.00	\$1,281.00
10/07/2005	PAYMENT	YORI, LARRY OR MARY CHECK BANK: 94-7074 NUM: 8326	\$-1,281.00	\$2,562.00
08/22/2005	PAYMENT	YORI, LARRY G OR MARY CHECK BANK: 94-7074 NUM: 8289	\$-1,281.23	\$3,843.00
07/15/2005	BILL	YORI, LARRY G	\$5,124.23	\$5,124.23
03/14/2005	PAYMENT	YORI, LARRY G CHECK BANK: 94-7074 NUM: 8188	\$-1,276.00	\$0.00
01/10/2005	PAYMENT	YORI, LARRY G CHECK BANK: 94-7074 NUM: 8144	\$-1,276.00	\$1,276.00
10/11/2004	PAYMENT	YORI, LARRY G CHECK BANK: 94-7074 NUM: 8087	\$-1,276.00	\$2,552.00
08/20/2004	PAYMENT	YORI, LARRY G CHECK BANK: 94-7074 NUM: 8051	\$-1,276.28	\$3,828.00
07/08/2004	BILL	YORI, LARRY G	\$5,104.28	\$5,104.28

Date	Type	Billed to / Payer Name / Note	Amount	Balance
03/05/2004	PAYMENT	YORI, LARRY G CHECK BANK: 94-7074 NUM: 7950	\$-1,252.24	\$0.00
01/09/2004	PAYMENT	YORI, LARRY G & MARY B CHECK BANK: 94-7074 NUM: 7913	\$-1,252.24	\$1,252.24
10/02/2003	PAYMENT	YORI, LARRY G CHECK BANK: 94-7074 NUM: 7845	\$-1,252.24	\$2,504.48
08/12/2003	PAYMENT	YORI, LARRY G CHECK BANK: 94-7074 NUM: 7807	\$-1,252.27	\$3,756.72
07/18/2003	BILL	YORI, LARRY G	\$5,008.99	\$5,008.99
03/10/2003	PAYMENT	YORI, LARRY G CHECK BANK: 94-7074 NUM: 7687	\$-1,209.00	\$0.00
12/31/2002	PAYMENT	YORI, LARRY G CHECK BANK: 94-7074 NUM: 7634	\$-1,209.00	\$1,209.00
10/09/2002	PAYMENT	YORI, LARRY G & MARY B CHECK BANK: 94-7074 NUM: 7568	\$-1,209.00	\$2,418.00
08/21/2002	PAYMENT	YORI, LARRY G & MARY B CHECK BANK: 94-7074 NUM: 7520	\$-1,210.74	\$3,627.00
07/12/2002	BILL	YORI, LARRY G	\$4,837.74	\$4,837.74
03/11/2002	PAYMENT	YORI, LARRY G CHECK BANK: 94-7074 NUM: 7376	\$-1,190.75	\$0.00
01/09/2002	PAYMENT	YORI, LARRY G CHECK BANK: 94-7074 NUM: 7325	\$-1,190.75	\$1,190.75
10/05/2001	PAYMENT	YORI, LARRY G CHECK BANK: 94-7074 NUM: 7261	\$-1,190.75	\$2,381.50
08/15/2001	PAYMENT	YORI, LARRY G OR MARY CHECK BANK: 94-7074 NUM: 7227	\$-1,191.04	\$3,572.25
07/12/2001	BILL	YORI, LARRY G	\$4,763.29	\$4,763.29
03/08/2001	PAYMENT	YORI, LARRY G CHECK BANK: 94-204 NUM: 7092	\$-897.96	\$0.00
01/02/2001	PAYMENT	YORI, LARRY G & MARY B CHECK BANK: 94-204 NUM: 7042	\$-897.96	\$897.96
10/11/2000	PAYMENT	YORI, LARRY G CHECK BANK: 94-204 NUM: 6984	\$-897.96	\$1,795.92
08/09/2000	PAYMENT	YORI, LARRY G CHECK BANK: 94-204 NUM: 6931	\$-898.22	\$2,693.88
07/17/2000	BILL	YORI, LARRY G	\$3,592.10	\$3,592.10
03/09/2000	PAYMENT	YORI, LARRY G OR MARY B CHECK BANK: 94-204 NUM: 6798	\$-934.37	\$0.00
01/14/2000	PAYMENT	YORI, LARRY G CHECK BANK: 94-204 NUM: 6742	\$-934.37	\$934.37
10/08/1999	PAYMENT	YORI, LARRY G CHECK BANK: 91-119 NUM: 6665	\$-934.37	\$1,868.74
08/24/1999	PAYMENT	YORI, LARRY G CHECK BANK: 91-119 NUM: 6613	\$-934.61	\$2,803.11
07/17/1999	BILL	YORI, LARRY G	\$3,737.72	\$3,737.72
02/23/1999	PAYMENT	YORI, LARRY G CHECK	\$-926.99	\$0.00
12/29/1998	PAYMENT	YORI, LARRY G CHECK	\$-926.99	\$926.99
10/09/1998	PAYMENT	YORI, LARRY G CHECK	\$-926.99	\$1,853.98
08/20/1998	PAYMENT	YORI, LARRY G CHECK	\$-927.22	\$2,780.97
07/13/1998	BILL	YORI, LARRY G	\$3,708.19	\$3,708.19
01/07/1998	PAYMENT	YORI, LARRY G CHECK	\$-1,762.04	\$0.00
10/07/1997	PAYMENT	YORI, LARRY G CHECK	\$-881.02	\$1,762.04
08/20/1997	PAYMENT	YORI, LARRY G CHECK	\$-881.27	\$2,643.06

Date	Type	Billed to / Payer Name / Note	Amount	Balance
07/14/1997	BILL	YORI, LARRY G	\$3,524.33	\$3,524.33
12/27/1996	PAYMENT	YORI, LARRY G	\$-1,703.96	\$0.00
10/11/1996	PAYMENT	YORI, LARRY G	\$-851.98	\$1,703.96
08/27/1996	PAYMENT	YORI, LARRY G	\$-852.13	\$2,555.94
07/18/1996	BILL	YORI, LARRY G	\$3,408.07	\$3,408.07

YORI SINGLE FAMILY

City of Fernley Fiscal Impact Analysis

MAY 21, 2024

Prepared by:



EKAY Economic Consultants, Inc.
Economics for the changing world

550 West Plumb Lane
Suite B459
Reno, NV 89509
(775) 232-7203
www.ekayconsultants.com

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EXECUTIVE SUMMARY

Ekey Economic Consultants, Inc. (EEC) of Reno, Nevada was retained to conduct a fiscal impact analysis of the 47.53-acre Yori Single Family Development located in City of Fernley, Nevada. Project details and findings of the fiscal impact analysis are summarized below.

Project Overview

- The project is requesting a zone change and is proposing to construct 158 single family units over a two-year period.
- The project is expected to add 243,626 square feet of roads to the City of Fernley's inventory upon completion.

Fiscal Impact Findings

- The project is estimated to generate a **\$535,000 surplus** (net fiscal impact) over the 20-year period and **\$622,000** over the 40-year analysis period for the City of Fernley's General Fund.
 - The project is estimated to generate \$4.8 million in revenue for the General Fund over the 20-year and \$10.6 million over the 40-year analysis periods. This includes all revenue sources within the General Fund.
 - The project is estimated to generate \$2.8 million in operating expenditures for the City's General Fund over the 20-year period and \$7.1 million over the 40-year analysis periods. This includes expenditures for all sources within the General Fund.
 - The project is also estimated to generate \$1.5 million in infrastructure (street) replacement costs over the 20-year period and \$2.9 million over the 40-year analysis periods.
- The project will have a **positive** fiscal impact on the City of Fernley.

DEVELOPMENT DESCRIPTION

The project will be constructed on 47.53 acres of land located in the City of Fernley, Nevada, parcel number 021-343-20. Upon completion, the project will deliver approximately 158 single family units, with construction expected to be completed over a two-year period. The fiscal impact analysis includes estimates of the impact of the project over this period, plus an additional thirty-eight years for a total analysis period of 40 years.

Detailed project information, including units developed by year, is shown in Appendix 1 at the end of this report.

METHODOLOGY

City of Fernley contracted with a consulting company, Verdunity, to arrive at a methodology for estimating fiscal impacts of future projects on the City. A tool has been created for City staff to estimate fiscal impacts of projects based on project-related information provided by developers.

EEC was provided a copy of the “Development Fiscal Impact Analysis Tool Methodology and Instructions” report by Verdunity, dated July 2021. The report outlined much of the methodology and assumptions behind the City of Fernley’s fiscal impact tool. EEC provided a number of questions to the City regarding this methodology, answers to which were not received prior to the due date of this report. As a result, findings of the fiscal impact analysis contained in this report, which are based on our understanding of Verdunity’s methodology, may need to be updated as additional information becomes available.

The following assumptions were made in this analysis:

1. Residential land and improvement values for the project are unavailable at this early stage in the planning process. As a result, the analysis uses average taxable land and improvement values for nearby single family homes in City of Fernley, as these

Findings

Yori Single Family-Fiscal Impact Analysis

provide the latest market information for similar products in the City. Detailed information for this assumption is shown in Appendix 1.

2. The Verdunity methodology covers all General Fund revenues and expenditures. With the exception of property tax (Appendix 4) and building permit fee revenues (Appendix 5), these revenues and expenditures are estimated on a per capita basis, adjusted for impact ratios, and applied to the population of the project, as estimated in Appendix 2.

The Verdunity report provides ratios of the residential project's impact (impact ratios) on each revenue source and methodology for estimating this ratio for expenditures. These ratios are applied to the City's estimated FY 2022-23 costs as reported in the City's FY 2023-24 budget document. See Appendix 3 for detailed impact ratios and calculation methodology.

3. Additionally, the Verdunity methodology includes a discussion of the long-term impact of a project on infrastructure costs to replace and repair city streets. However, no actual cost for this estimate is provided in the Verdunity report. EEC uses average street replacement costs for the City of Sparks and City of Reno of \$0.30 per square foot per year. This includes costs for slurry/seal, overlay, and road rehabilitation.
4. The Verdunity report provides no discussion of inflation, the analysis includes a 2% expected future inflation adjustment for all revenue and expenditure sources, except real property values, these are conservatively increased by 1.5% per year to account for depreciation.
5. Additional information for revenue and cost estimate methodology, sources of data, calculations, and findings is provided in the appendices attached to this report.

FINDINGS

Findings of the fiscal impact analysis are presented below using table and figure templates from the Verdunity report. Appendices 1-5 attached to this narrative include a

Findings

Yori Single Family-Fiscal Impact Analysis

detailed calculation of these revenues and expenditures by year, as well as a detailed discussion of all methodology, data, and assumptions.

The project is estimated to generate a \$535,000 revenue surplus (net fiscal impact) over the 20-year period and \$622,000 over the 40-year analysis period for the City of Fernley's General Fund. This includes \$4.8 million in revenue for the General Fund over the 20-year period and \$10.6 million over the 40-year analysis period generated through all revenue sources within the General Fund.

Table 1. Fiscal Impact Analysis Results

Non-Inflated Values	Buildout	10 Years	20 Years	30 Years	40 Years
Taxes	\$ 378,220	\$ 1,639,866	\$ 3,448,485	\$ 5,553,673	\$ 8,004,061
Licenses and Permits	574,606	837,811	1,231,236	1,710,819	2,295,427
Intergovernmental	4,919	33,815	77,008	129,660	193,842
Fines and Forfeitures	2,825	19,420	44,225	74,462	111,321
Miscellaneous	1,052	7,230	16,465	27,723	41,446
Total Revenue	\$ 961,621	\$ 2,538,142	\$ 4,817,419	\$ 7,496,337	\$10,646,097
General Government	\$ 29,915	\$ 205,662	\$ 468,358	\$ 788,583	\$ 1,178,936
Judicial	6,678	45,909	104,550	176,033	263,171
Public Works	103,206	709,524	1,615,814	2,720,577	4,067,277
Health	3,506	24,105	54,894	92,426	138,178
Culture and Recreation	23,281	160,053	364,493	613,703	917,489
Community Dev.	13,599	93,490	212,906	358,473	535,920
Total Costs	\$ 180,186	\$ 1,238,743	\$ 2,821,015	\$ 4,749,796	\$ 7,100,970
Savings for Streets	146,176	730,878	1,461,756	2,192,634	2,923,512
Net Fiscal Impact	\$ 635,260	\$ 568,521	\$ 534,648	\$ 553,906	\$ 621,616
<i>Per Capita-Revenue</i>	\$ 2,464	\$ 6,504	\$ 12,344	\$ 19,209	\$ 27,279
<i>Per Capita-Costs</i>	462	3,174	7,229	12,171	18,195
<i>Per Capita-Streets</i>	375	1,873	3,746	5,618	7,491
<i>Per Capita-Net Impact</i>	\$ 1,628	\$ 1,457	\$ 1,370	\$ 1,419	\$ 1,593

The project is estimated to generate \$2.8 million in operating expenditures for the General Fund over the 20-year period and \$7.1 million over the 40-year analysis period. This includes expenditures for all General Fund sources. The project is also estimated to contribute funds towards \$1.5 million in infrastructure replacement costs over the 20-year and \$2.9 million over the 40-year analysis periods.

The project will have a **positive** fiscal impact on the City of Fernley as project-related revenues exceed project costs, including long-term infrastructure replacement costs.

Findings

Yori Single Family-Fiscal Impact Analysis

Figure 1. Budget Impact

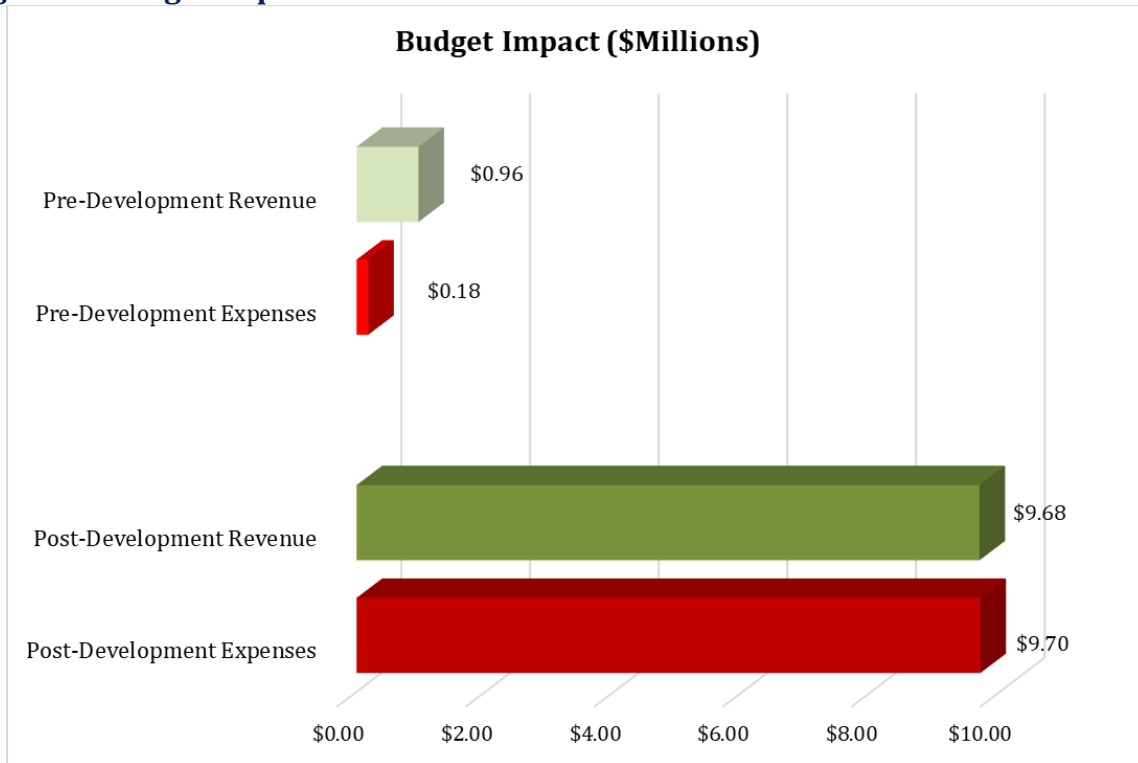
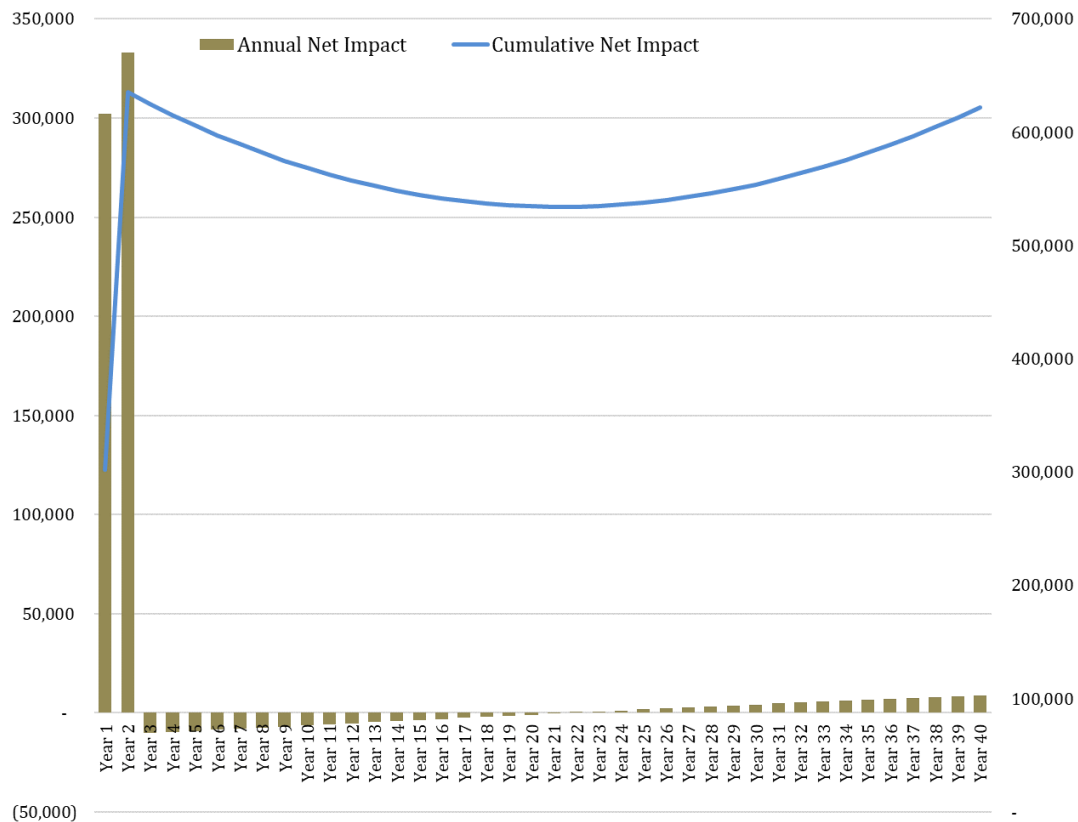


Figure 2. Fiscal Impact Analysis Results



LIMITING CONDITIONS & DISCLOSURES

In the preparation of this report, EEC asserts:

- The report is to be used in its entirety, and no part is to be used without the whole.
- In preparing this report, EEC relied on information provided by other individuals or found in previously existing records and/or documents. This information is assumed to be reliable. However, no warranty, either expressed or implied, is given by EEC for the accuracy of such information and EEC assumes no responsibility for information relied upon later found to have been inaccurate.
- EEC may amend this report in the event additional documents and/or other material discovered subsequent to the submission of this report and pertinent to the report and/or the conclusions contained herein are made available.
- EEC assumes no responsibility for economic, physical, or demographic factors, which may affect or alter the opinions of this report if said economic, physical, or demographic factors were not present or known as of the date of this report.
- Possession of this report, or a copy of this report, does not carry with it the right of publication. Without the consent of EEC, this report may not be used for any purpose by any person other than the party for whom this report was prepared.

APPENDICES

APPENDIX 1 BUILDOUT ASSUMPTIONS					
<u>YEAR</u>	<u>USE TYPE</u>	<u># OF UNITS</u>		<u>LAND VALUE</u>	<u>IMPROV. VALUE</u>
Year 1	Single Family	79	\$	9,085,000	\$ 21,850,847
Year 2	Single Family	79		9,085,000	21,850,847
TOTAL		158	\$	18,170,000	\$ 43,701,693

APPENDIX 1, ASSUMPTIONS:

1. Project information is summarized as follows:

	<u># of Units</u>	<u># of Acres</u>		<u>Land Value/ Unit</u>		<u>Improvement Value/Unit</u>
Single Family	158	47.53	\$	115,000	\$	276,593

Source: Development acreage, buildout schedule, and residential units from Developer.
Unit taxable land and improvement values from similar nearby developments, FY 2024. Source: Lyon County Assessor's Office website.

**APPENDIX 2
CITY OF FERNLEY
ESTIMATED NUMBER OF RESIDENTS**

<u>YEAR</u>	<u>USE TYPE</u>	<u># OF UNITS BUILT</u>	<u># OF RESIDENTS</u>	<u>CUMULATIVE # OF RESIDENTS</u>
Year 1	Single Family	79	195	195
Year 2	Single Family	79	195	390

APPENDIX 2, ASSUMPTIONS:

- Residents of the development are estimated using **2.47** persons per household.
Source: "Development Fiscal Impact Analysis Tool Methodology and Instructions." Verdunity,
July 19, 2021.

**APPENDIX 3
CITY OF FERNLEY
COMPARISON OF ESTIMATED REVENUE TO ESTIMATED COSTS**

GENERAL FUND	Estimated FY 2022-23	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	10-YEAR TOTAL
<u>REVENUE</u>												
<u>Taxes</u>												
Ad Valorem ¹	Appendix 4	\$ 73,019	\$ 147,201	\$ 149,453	\$ 151,740	\$ 154,061	\$ 156,418	\$ 158,811	\$ 161,241	\$ 163,708	\$ 166,213	\$ 1,481,866
Resid. Construction Tax	\$1,000/Unit	79,000	79,000	-	-	-	-	-	-	-	-	158,000
Subtotal		\$ 152,019	\$ 226,201	\$ 149,453	\$ 151,740	\$ 154,061	\$ 156,418	\$ 158,811	\$ 161,241	\$ 163,708	\$ 166,213	\$ 1,639,866
<u>Licenses and Permits</u>												
Business License Fees ^{2,3}	\$ 825,000	\$ 3,814	\$ 7,780	\$ 7,936	\$ 8,095	\$ 8,256	\$ 8,422	\$ 8,590	\$ 8,762	\$ 8,937	\$ 9,116	\$ 79,707
Franchise Fees ^{2,3}	1,540,000	10,679	21,785	22,220	22,665	23,118	23,580	24,052	24,533	25,024	25,524	223,180
Liquor License Fees ^{2,3}	38,000	-	-	-	-	-	-	-	-	-	-	-
Gaming License Fees ^{2,3}	120,000	-	-	-	-	-	-	-	-	-	-	-
Animal Licenses ^{2,3}	4,500	42	85	87	88	90	92	94	96	97	99	870
Passport Fees ^{2,3}	22,000	203	415	423	432	440	449	458	467	477	486	4,251
Building/Civil Permit Fees ⁴	Appendix 5	264,902	264,902	-	-	-	-	-	-	-	-	529,803
Planning and Zoning Fees ⁵	310,000	-	-	-	-	-	-	-	-	-	-	-
Public Works/Civil Fees ^{2,3}	100,000	-	-	-	-	-	-	-	-	-	-	-
Public Works/Civil Inspect. ^{2,3}	200,000	-	-	-	-	-	-	-	-	-	-	-
Other Fees ⁵	400	-	-	-	-	-	-	-	-	-	-	-
Subtotal		\$ 279,639	\$ 294,966	\$ 30,666	\$ 31,279	\$ 31,905	\$ 32,543	\$ 33,194	\$ 33,858	\$ 34,535	\$ 35,226	\$ 837,811
<u>Intergovernmental Revenue</u>												
Consolidated Tax ^{2,3}	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Motor Vehicle Fuel Tax ^{2,3}	350,000	1,618	3,301	3,367	3,434	3,503	3,573	3,644	3,717	3,791	3,867	33,815
RTC Shared Revenue ⁵	4,160,000	-	-	-	-	-	-	-	-	-	-	-
County Parks Agreement ⁵	60,000	-	-	-	-	-	-	-	-	-	-	-
County Roads Contribution ⁵	180,000	-	-	-	-	-	-	-	-	-	-	-
Other ⁵	21,739	-	-	-	-	-	-	-	-	-	-	-
Subtotal		\$ 1,618	\$ 3,301	\$ 3,367	\$ 3,434	\$ 3,503	\$ 3,573	\$ 3,644	\$ 3,717	\$ 3,791	\$ 3,867	\$ 33,815
<u>Fines and Forfeits</u>												
Municipal Court Revenue ^{2,3}	\$ 201,000	\$ 929	\$ 1,896	\$ 1,933	\$ 1,972	\$ 2,012	\$ 2,052	\$ 2,093	\$ 2,135	\$ 2,177	\$ 2,221	\$ 19,420
Miscellaneous Fees ⁵	600	-	-	-	-	-	-	-	-	-	-	-
Subtotal		\$ 201,600	929	1,896	1,933	1,972	2,012	2,052	2,093	2,135	2,177	19,420
<u>Miscellaneous</u>												
Interest Income ⁵	\$ (255,662)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cemetery Plot Fees ^{2,3}	4,000	18	38	38	39	40	41	42	42	43	44	386
Facility Rental Fees ^{2,3}	8,500	39	80	82	83	85	87	89	90	92	94	821
Donations ^{2,3}	2,590	12	24	25	25	26	26	27	28	28	29	250
Miscellaneous ^{2,3}	59,745	276	563	575	586	598	610	622	635	647	660	5,772
Subtotal		\$ 346	\$ 706	\$ 720	\$ 734	\$ 749	\$ 764	\$ 779	\$ 795	\$ 811	\$ 827	\$ 7,230
REVENUE TOTAL		\$ 434,552	\$ 527,069	\$ 186,139	\$ 189,159	\$ 192,229	\$ 195,350	\$ 198,522	\$ 201,746	\$ 205,023	\$ 208,354	\$ 2,538,142
<u>EXPENDITURES</u>												
General Government ^{6,7}	\$ 2,688,391	\$ 9,841	\$ 20,075	\$ 20,476	\$ 20,886	\$ 21,303	\$ 21,730	\$ 22,164	\$ 22,607	\$ 23,060	\$ 23,521	\$ 205,662
Judicial ^{6,7}	600,122	2,197	4,481	4,571	4,662	4,756	4,851	4,948	5,047	5,148	5,250	45,909
Public Works ^{6,7}	9,274,829	33,949	69,257	70,642	72,055	73,496	74,966	76,465	77,994	79,554	81,145	709,524
Health ^{6,7}	315,094	1,153	2,353	2,400	2,448	2,497	2,547	2,598	2,650	2,703	2,757	24,105
Culture and Recreation ^{6,7}	2,092,200	7,658	15,623	15,935	16,254	16,579	16,911	17,249	17,594	17,946	18,305	160,053
Community Development ^{6,7}	1,222,086	4,473	9,126	9,308	9,494	9,684	9,878	10,075	10,277	10,482	10,692	93,490
EXPENDITURES TOTAL		\$ 59,272	\$ 120,914	\$ 123,332	\$ 125,799	\$ 128,315	\$ 130,881	\$ 133,499	\$ 136,169	\$ 138,892	\$ 141,670	\$ 1,238,743
GENERAL FUND SURPLUS/DEFICIT		\$ 375,280	\$ 406,155	\$ 62,807	\$ 63,360	\$ 63,914	\$ 64,469	\$ 65,023	\$ 65,577	\$ 66,131	\$ 66,684	\$ 1,299,399
<u>SAVINGS FOR STREETS</u>												
Street Replacement ⁸		\$ 73,088	\$ 73,088	\$ 73,088	\$ 73,088	\$ 73,088	\$ 73,088	\$ 73,088	\$ 73,088	\$ 73,088	\$ 73,088	\$ 730,878

**APPENDIX 3
CITY OF FERNLEY
COMPARISON OF ESTIMATED REVENUE TO ESTIMATED COSTS**

	<u>Year 11</u>	<u>Year 12</u>	<u>Year 13</u>	<u>Year 14</u>	<u>Year 15</u>	<u>Year 16</u>	<u>Year 17</u>	<u>Year 18</u>	<u>Year 19</u>	<u>Year 20</u>	<u>20-YEAR TOTAL</u>
GENERAL FUND											
<u>REVENUE</u>											
<u>Taxes</u>											
Ad Valorem ¹	\$ 168,756	\$ 171,338	\$ 173,960	\$ 176,621	\$ 179,323	\$ 182,067	\$ 184,853	\$ 187,681	\$ 190,552	\$ 193,468	\$ 3,290,485
Resid. Construction Tax	-	-	-	-	-	-	-	-	-	-	158,000
Subtotal	\$ 168,756	\$ 171,338	\$ 173,960	\$ 176,621	\$ 179,323	\$ 182,067	\$ 184,853	\$ 187,681	\$ 190,552	\$ 193,468	\$ 3,448,485
<u>Licenses and Permits</u>											
Business License Fees ^{2,3}	\$ 9,298	\$ 9,484	\$ 9,674	\$ 9,867	\$ 10,065	\$ 10,266	\$ 10,471	\$ 10,681	\$ 10,894	\$ 11,112	\$ 181,519
Franchise Fees ^{2,3}	26,035	26,555	27,086	27,628	28,181	28,744	29,319	29,906	30,504	31,114	508,253
Liquor License Fees ^{2,3}	-	-	-	-	-	-	-	-	-	-	-
Gaming License Fees ^{2,3}	-	-	-	-	-	-	-	-	-	-	-
Animal Licenses ^{2,3}	101	103	106	108	110	112	114	117	119	121	1,980
Passport Fees ^{2,3}	496	506	516	526	537	548	558	570	581	593	9,681
Building/Civil Permit Fees ⁴	-	-	-	-	-	-	-	-	-	-	529,803
Planning and Zoning Fees ⁵	-	-	-	-	-	-	-	-	-	-	-
Public Works/Civil Fees ^{2,3}	-	-	-	-	-	-	-	-	-	-	-
Public Works/Civil Inspect. ^{2,3}	-	-	-	-	-	-	-	-	-	-	-
Other Fees ⁵	-	-	-	-	-	-	-	-	-	-	-
Subtotal	\$ 35,930	\$ 36,649	\$ 37,382	\$ 38,129	\$ 38,892	\$ 39,670	\$ 40,463	\$ 41,272	\$ 42,098	\$ 42,940	\$ 1,231,236
<u>Intergovernmental Revenue</u>											
Consolidated Tax ^{2,3}	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Motor Vehicle Fuel Tax ^{2,3}	3,945	4,024	4,104	4,186	4,270	4,355	4,442	4,531	4,622	4,714	77,008
RTC Shared Revenue ⁵	-	-	-	-	-	-	-	-	-	-	-
County Parks Agreement ⁵	-	-	-	-	-	-	-	-	-	-	-
County Roads Contribution ⁵	-	-	-	-	-	-	-	-	-	-	-
Other ⁵	-	-	-	-	-	-	-	-	-	-	-
Subtotal	\$ 3,945	\$ 4,024	\$ 4,104	\$ 4,186	\$ 4,270	\$ 4,355	\$ 4,442	\$ 4,531	\$ 4,622	\$ 4,714	\$ 77,008
<u>Fines and Forfeits</u>											
Municipal Court Revenue ^{2,3}	\$ 2,265	\$ 2,311	\$ 2,357	\$ 2,404	\$ 2,452	\$ 2,501	\$ 2,551	\$ 2,602	\$ 2,654	\$ 2,707	\$ 44,225
Miscellaneous Fees ⁵	-	-	-	-	-	-	-	-	-	-	-
Subtotal	\$ 2,265	\$ 2,311	\$ 2,357	\$ 2,404	\$ 2,452	\$ 2,501	\$ 2,551	\$ 2,602	\$ 2,654	\$ 2,707	\$ 44,225
<u>Miscellaneous</u>											
Interest Income ⁵	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cemetery Plot Fees ^{2,3}	45	46	47	48	49	50	51	52	53	54	880
Facility Rental Fees ^{2,3}	96	98	100	102	104	106	108	110	112	114	1,870
Donations ^{2,3}	29	30	30	31	32	32	33	34	34	35	570
Miscellaneous ^{2,3}	673	687	701	715	729	743	758	773	789	805	13,145
Subtotal	\$ 843	\$ 860	\$ 877	\$ 895	\$ 913	\$ 931	\$ 950	\$ 969	\$ 988	\$ 1,008	\$ 16,465
REVENUE TOTAL	\$ 211,740	\$ 215,181	\$ 218,680	\$ 222,236	\$ 225,850	\$ 229,524	\$ 233,259	\$ 237,056	\$ 240,915	\$ 244,837	\$ 4,817,419
<u>EXPENDITURES</u>											
General Government ^{6,7}	\$ 23,991	\$ 24,471	\$ 24,960	\$ 25,460	\$ 25,969	\$ 26,488	\$ 27,018	\$ 27,558	\$ 28,109	\$ 28,672	\$ 468,358
Judicial ^{6,7}	5,355	5,463	5,572	5,683	5,797	5,913	6,031	6,152	6,275	6,400	104,550
Public Works ^{6,7}	82,768	84,424	86,112	87,834	89,591	91,383	93,211	95,075	96,976	98,916	1,615,814
Health ^{6,7}	2,812	2,868	2,925	2,984	3,044	3,105	3,167	3,230	3,295	3,360	54,894
Culture and Recreation ^{6,7}	18,671	19,044	19,425	19,814	20,210	20,614	21,026	21,447	21,876	22,313	364,493
Community Development ^{6,7}	10,906	11,124	11,346	11,573	11,805	12,041	12,282	12,527	12,778	13,034	212,906
EXPENDITURES TOTAL	\$ 144,503	\$ 147,394	\$ 150,341	\$ 153,348	\$ 156,415	\$ 159,543	\$ 162,734	\$ 165,989	\$ 169,309	\$ 172,695	\$ 2,821,015
GF SURPLUS/DEFICIT	\$ 67,236	\$ 67,788	\$ 68,338	\$ 68,887	\$ 69,435	\$ 69,981	\$ 70,525	\$ 71,066	\$ 71,606	\$ 72,142	\$ 1,996,404
<u>SAVINGS FOR STREETS</u>											
Street Replacement ⁸	\$ 73,088	\$ 73,088	\$ 73,088	\$ 73,088	\$ 73,088	\$ 73,088	\$ 73,088	\$ 73,088	\$ 73,088	\$ 73,088	\$ 1,461,756

**APPENDIX 3
CITY OF FERNLEY
COMPARISON OF ESTIMATED REVENUE TO ESTIMATED COSTS**

	<u>Year 21</u>	<u>Year 22</u>	<u>Year 23</u>	<u>Year 24</u>	<u>Year 25</u>	<u>Year 26</u>	<u>Year 27</u>	<u>Year 28</u>	<u>Year 29</u>	<u>Year 30</u>	<u>30-YEAR TOTAL</u>
GENERAL FUND											
<u>REVENUE</u>											
<u>Taxes</u>											
Ad Valorem ¹	\$ 196,428	\$ 199,433	\$ 202,485	\$ 205,583	\$ 208,728	\$ 211,922	\$ 215,164	\$ 218,456	\$ 221,798	\$ 225,192	\$ 5,395,673
Resid. Construction Tax	-	-	-	-	-	-	-	-	-	-	158,000
Subtotal	\$ 196,428	\$ 199,433	\$ 202,485	\$ 205,583	\$ 208,728	\$ 211,922	\$ 215,164	\$ 218,456	\$ 221,798	\$ 225,192	\$ 5,553,673
<u>Licenses and Permits</u>											
Business License Fees ^{2,3}	\$ 11,334	\$ 11,561	\$ 11,792	\$ 12,028	\$ 12,269	\$ 12,514	\$ 12,764	\$ 13,020	\$ 13,280	\$ 13,546	\$ 305,627
Franchise Fees ^{2,3}	31,736	32,371	33,018	33,679	34,352	35,039	35,740	36,455	37,184	37,928	855,754
Liquor License Fees ^{2,3}	-	-	-	-	-	-	-	-	-	-	-
Gaming License Fees ^{2,3}	-	-	-	-	-	-	-	-	-	-	-
Animal Licenses ^{2,3}	124	126	129	131	134	137	139	142	145	148	3,334
Passport Fees ^{2,3}	604	617	629	641	654	667	681	694	708	722	16,300
Building/Civil Permit Fees ⁴	-	-	-	-	-	-	-	-	-	-	529,803
Planning and Zoning Fees ⁵	-	-	-	-	-	-	-	-	-	-	-
Public Works/Civil Fees ^{2,3}	-	-	-	-	-	-	-	-	-	-	-
Public Works/Civil Inspect. ^{2,3}	-	-	-	-	-	-	-	-	-	-	-
Other Fees ⁵	-	-	-	-	-	-	-	-	-	-	-
Subtotal	\$ 43,799	\$ 44,675	\$ 45,568	\$ 46,479	\$ 47,409	\$ 48,357	\$ 49,324	\$ 50,311	\$ 51,317	\$ 52,343	\$ 1,710,819
<u>Intergovernmental Revenue</u>											
Consolidated Tax ^{2,3}	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Motor Vehicle Fuel Tax ^{2,3}	4,809	4,905	5,003	5,103	5,205	5,309	5,415	5,523	5,634	5,747	129,660
RTC Shared Revenue ⁵	-	-	-	-	-	-	-	-	-	-	-
County Parks Agreement ⁵	-	-	-	-	-	-	-	-	-	-	-
County Roads Contribution ⁵	-	-	-	-	-	-	-	-	-	-	-
Other ⁵	-	-	-	-	-	-	-	-	-	-	-
Subtotal	\$ 4,809	\$ 4,905	\$ 5,003	\$ 5,103	\$ 5,205	\$ 5,309	\$ 5,415	\$ 5,523	\$ 5,634	\$ 5,747	\$ 129,660
<u>Fines and Forfeits</u>											
Municipal Court Revenue ^{2,3}	\$ 2,761	\$ 2,817	\$ 2,873	\$ 2,930	\$ 2,989	\$ 3,049	\$ 3,110	\$ 3,172	\$ 3,235	\$ 3,300	\$ 74,462
Miscellaneous Fees ⁵	-	-	-	-	-	-	-	-	-	-	-
Subtotal	\$ 2,761	\$ 2,817	\$ 2,873	\$ 2,930	\$ 2,989	\$ 3,049	\$ 3,110	\$ 3,172	\$ 3,235	\$ 3,300	\$ 74,462
<u>Miscellaneous</u>											
Interest Income ⁵	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cemetery Plot Fees ^{2,3}	55	56	57	58	59	61	62	63	64	66	1,482
Facility Rental Fees ^{2,3}	117	119	121	124	126	129	132	134	137	140	3,149
Donations ^{2,3}	36	36	37	38	39	39	40	41	42	43	959
Miscellaneous ^{2,3}	821	837	854	871	888	906	924	943	962	981	22,133
Subtotal	\$ 1,028	\$ 1,049	\$ 1,070	\$ 1,091	\$ 1,113	\$ 1,135	\$ 1,158	\$ 1,181	\$ 1,205	\$ 1,229	\$ 27,723
REVENUE TOTAL	\$ 248,825	\$ 252,878	\$ 256,998	\$ 261,186	\$ 265,444	\$ 269,772	\$ 274,171	\$ 278,643	\$ 283,189	\$ 287,811	\$ 7,496,337
<u>EXPENDITURES</u>											
General Government ^{6,7}	\$ 29,245	\$ 29,830	\$ 30,427	\$ 31,035	\$ 31,656	\$ 32,289	\$ 32,935	\$ 33,593	\$ 34,265	\$ 34,951	\$ 788,583
Judicial ^{6,7}	6,528	6,659	6,792	6,928	7,066	7,208	7,352	7,499	7,649	7,802	176,033
Public Works ^{6,7}	100,894	102,912	104,970	107,070	109,211	111,395	113,623	115,896	118,214	120,578	2,720,577
Health ^{6,7}	3,428	3,496	3,566	3,637	3,710	3,784	3,860	3,937	4,016	4,096	92,426
Culture and Recreation ^{6,7}	22,760	23,215	23,679	24,153	24,636	25,128	25,631	26,144	26,666	27,200	613,703
Community Development ^{6,7}	13,294	13,560	13,831	14,108	14,390	14,678	14,971	15,271	15,576	15,888	358,473
EXPENDITURES TOTAL	\$ 176,149	\$ 179,672	\$ 183,265	\$ 186,931	\$ 190,669	\$ 194,483	\$ 198,372	\$ 202,340	\$ 206,386	\$ 210,514	\$ 4,749,796
GF SURPLUS/DEFICIT	\$ 72,676	\$ 73,206	\$ 73,733	\$ 74,256	\$ 74,775	\$ 75,289	\$ 75,799	\$ 76,304	\$ 76,803	\$ 77,297	\$ 2,746,540
<u>SAVINGS FOR STREETS</u>											
Street Replacement ⁸	\$ 73,088	\$ 73,088	\$ 73,088	\$ 73,088	\$ 73,088	\$ 73,088	\$ 73,088	\$ 73,088	\$ 73,088	\$ 73,088	\$ 2,192,634

**APPENDIX 3
CITY OF FERNLEY
COMPARISON OF ESTIMATED REVENUE TO ESTIMATED COSTS**

	<u>Year 31</u>	<u>Year 32</u>	<u>Year 33</u>	<u>Year 34</u>	<u>Year 35</u>	<u>Year 36</u>	<u>Year 37</u>	<u>Year 38</u>	<u>Year 39</u>	<u>Year 40</u>	<u>40-YEAR TOTAL</u>
GENERAL FUND											
<u>REVENUE</u>											
<u>Taxes</u>											
Ad Valorem ¹	\$ 228,637	\$ 232,135	\$ 235,687	\$ 239,293	\$ 242,954	\$ 246,672	\$ 250,446	\$ 254,277	\$ 258,168	\$ 262,118	\$ 7,846,061
Resid. Construction Tax	-	-	-	-	-	-	-	-	-	-	158,000
Subtotal	\$ 228,637	\$ 232,135	\$ 235,687	\$ 239,293	\$ 242,954	\$ 246,672	\$ 250,446	\$ 254,277	\$ 258,168	\$ 262,118	\$ 8,004,061
<u>Licenses and Permits</u>											
Business License Fees ^{2,3}	\$ 13,816	\$ 14,093	\$ 14,375	\$ 14,662	\$ 14,955	\$ 15,255	\$ 15,560	\$ 15,871	\$ 16,188	\$ 16,512	\$ 456,913
Franchise Fees ^{2,3}	38,686	39,460	40,249	41,054	41,875	42,713	43,567	44,438	45,327	46,234	1,279,357
Liquor License Fees ^{2,3}	-	-	-	-	-	-	-	-	-	-	-
Gaming License Fees ^{2,3}	-	-	-	-	-	-	-	-	-	-	-
Animal Licenses ^{2,3}	151	154	157	160	163	166	170	173	177	180	4,985
Passport Fees ^{2,3}	737	752	767	782	798	814	830	846	863	881	24,369
Building/Civil Permit Fees ⁴	-	-	-	-	-	-	-	-	-	-	529,803
Planning and Zoning Fees ⁵	-	-	-	-	-	-	-	-	-	-	-
Public Works/Civil Fees ^{2,3}	-	-	-	-	-	-	-	-	-	-	-
Public Works/Civil Inspect. ^{2,3}	-	-	-	-	-	-	-	-	-	-	-
Other Fees ⁵	-	-	-	-	-	-	-	-	-	-	-
Subtotal	\$ 53,390	\$ 54,458	\$ 55,547	\$ 56,658	\$ 57,791	\$ 58,947	\$ 60,126	\$ 61,329	\$ 62,555	\$ 63,806	\$ 2,295,427
<u>Intergovernmental Revenue</u>											
Consolidated Tax ^{2,3}	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Motor Vehicle Fuel Tax ^{2,3}	5,862	5,979	6,098	6,220	6,345	6,472	6,601	6,733	6,868	7,005	193,842
RTC Shared Revenue ⁵	-	-	-	-	-	-	-	-	-	-	-
County Parks Agreement ⁵	-	-	-	-	-	-	-	-	-	-	-
County Roads Contribution ⁵	-	-	-	-	-	-	-	-	-	-	-
Other ⁵	-	-	-	-	-	-	-	-	-	-	-
Subtotal	\$ 5,862	\$ 5,979	\$ 6,098	\$ 6,220	\$ 6,345	\$ 6,472	\$ 6,601	\$ 6,733	\$ 6,868	\$ 7,005	\$ 193,842
<u>Fines and Forfeits</u>											
Municipal Court Revenue ^{2,3}	\$ 3,366	\$ 3,434	\$ 3,502	\$ 3,572	\$ 3,644	\$ 3,717	\$ 3,791	\$ 3,867	\$ 3,944	\$ 4,023	\$ 111,321
Miscellaneous Fees ⁵	-	-	-	-	-	-	-	-	-	-	-
Subtotal	\$ 3,366	\$ 3,434	\$ 3,502	\$ 3,572	\$ 3,644	\$ 3,717	\$ 3,791	\$ 3,867	\$ 3,944	\$ 4,023	\$ 111,321
<u>Miscellaneous</u>											
Interest Income ⁵	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cemetery Plot Fees ^{2,3}	67	68	70	71	73	74	75	77	78	80	2,215
Facility Rental Fees ^{2,3}	142	145	148	151	154	157	160	164	167	170	4,708
Donations ^{2,3}	43	44	45	46	47	48	49	50	51	52	1,434
Miscellaneous ^{2,3}	1,001	1,021	1,041	1,062	1,083	1,105	1,127	1,149	1,172	1,196	33,089
Subtotal	\$ 1,253	\$ 1,278	\$ 1,304	\$ 1,330	\$ 1,357	\$ 1,384	\$ 1,411	\$ 1,440	\$ 1,468	\$ 1,498	\$ 41,446
REVENUE TOTAL	\$ 292,509	\$ 297,284	\$ 302,139	\$ 307,074	\$ 312,091	\$ 317,191	\$ 322,375	\$ 327,645	\$ 333,003	\$ 338,450	\$ 10,646,097
<u>EXPENDITURES</u>											
General Government ^{6,7}	\$ 35,650	\$ 36,363	\$ 37,090	\$ 37,832	\$ 38,588	\$ 39,360	\$ 40,147	\$ 40,950	\$ 41,769	\$ 42,605	\$ 1,178,936
Judicial ^{6,7}	7,958	8,117	8,279	8,445	8,614	8,786	8,962	9,141	9,324	9,510	263,171
Public Works ^{6,7}	122,989	125,449	127,958	130,517	133,128	135,790	138,506	141,276	144,102	146,984	4,067,277
Health ^{6,7}	4,178	4,262	4,347	4,434	4,523	4,613	4,705	4,800	4,896	4,993	138,178
Culture and Recreation ^{6,7}	27,744	28,299	28,865	29,442	30,031	30,631	31,244	31,869	32,506	33,156	917,489
Community Development ^{6,7}	16,206	16,530	16,860	17,197	17,541	17,892	18,250	18,615	18,987	19,367	535,920
EXPENDITURES TOTAL	\$ 214,725	\$ 219,019	\$ 223,399	\$ 227,867	\$ 232,425	\$ 237,073	\$ 241,815	\$ 246,651	\$ 251,584	\$ 256,616	\$ 7,100,970
GF SURPLUS/DEFICIT	\$ 77,784	\$ 78,265	\$ 78,739	\$ 79,207	\$ 79,666	\$ 80,117	\$ 80,560	\$ 80,995	\$ 81,419	\$ 81,834	\$ 3,545,128
<u>SAVINGS FOR STREETS</u>											
Street Replacement ⁸	\$ 73,088	\$ 73,088	\$ 73,088	\$ 73,088	\$ 73,088	\$ 73,088	\$ 73,088	\$ 73,088	\$ 73,088	\$ 73,088	\$ 2,923,512

APPENDIX 3
CITY OF FERNLEY
COMPARISON OF ESTIMATED REVENUE TO ESTIMATED COSTS

APPENDIX 3, ASSUMPTIONS:**REVENUES**

- 1 See Appendix 4 for real property tax revenue estimates.
- 2 Average Cost Method (ACM): Revenues are calculated based on estimated FY 2022-23 City of Fernley per capita revenue, inflated by **2%** annually and applied to estimated annual residential population generated by the development (Appendix 2). Per capita revenue is calculated by dividing estimated FY 2022-23 revenues for each source by City of Fernley FY 2022-23 population of **21,105**
 Source: City of Fernley Budget FY 2023-24.
- 3 Analysis assumes a portion of revenue is generated by City residents and will be impacted by the project.

Business Licenses and Other Fees	50%	
Franchise Fees	75%	
Liquor Licenses, Gaming Licenses, Public Works/Civil Fees	0%	
Gas Taxes	50%	
Other Intergovernmental*	0%	
Fines and Forfeitures/Miscellaneous	50%	
Animal Licenses/Passport Fees	100%	not included in Verdunity report, assumption by EEC

 Source: "Development Fiscal Impact Analysis Tool Methodology and Instructions." Verdunity, July 19, 2021.
 Though Lyon County has removed its "guaranteed" sales tax status since the Verdunity report, additional sales tax and other CTax revenue generated by the project for the City is not expected to be significant due to the low ratio of CTax revenue received by the City.
- 4 See Appendix 5 for building permit and plan review fee revenue calculations and assumptions.
- 5 The project may have an impact on this revenue source, but the impact is difficult to estimate or is expected to be minimal.

EXPENDITURES

- 6 Average Cost Method (ACM): Some direct costs are calculated based on estimated FY 2022-23 City of Fernley per capita costs, inflated by **2.0%** annually and applied to estimated annual residential population generated by the development. Per capita costs are calculated by dividing estimated FY 2022-23 costs for each source by City of Fernley FY 2022-23 population of **21,105**
 Source: City of Fernley Budget FY 2023-24.
- 7 The portion of each General Fund department's cost associated with the residential development is estimated at **39.6%** of total FY 2022-23 cost, based on the City's residential acres (5,747) to total cost-producing acres (14,517), excluding vacant land, mining, parks, and special purpose space.
 Source: Methodology from "Development Fiscal Impact Analysis Tool Methodology and Instructions." Verdunity, July 19, 2021.
 Acreage from Lyon County Assessor's Office website, FY2024.
- 8 The project is estimated to add **243,626** square feet of roadways to the City's inventory.
 Road maintenance costs, according to the Verdunity report, are included in above General Fund cost estimates. Costs for road replacement are not provided in Verdunity report and are estimated using average annualized City of Sparks and Reno costs of **\$0.30** per square foot. Over the 40-year analysis period, infrastructure replacement costs are estimated at **\$ 2,923,512**
 Street Replacement Costs show total replacement cost divided by 40 years of analysis and shown in every year of the analysis.

**APPENDIX 4
CITY OF FERNLEY
ESTIMATED PROPERTY TAX REVENUE**

<u>YEAR</u>	<u>LAND USE</u>	<u>ANNUAL INCREMENTAL TAXABLE VALUE OF</u>		<u>CUMULATIVE TAXABLE VALUE</u>	<u>PROPERTY TAX REVENUE</u>
		<u>LAND</u>	<u>IMPROVS.</u>		
Year 1	Single Family	\$ 9,030,486	\$ 21,420,394	\$ 30,916,778	\$ 73,019
Year 2	Single Family	9,085,000	21,850,847	62,325,651	147,201
Year 3	Single Family	-	-	63,279,234	149,453
Year 4	Single Family	-	-	64,247,406	151,740
Year 5	Single Family	-	-	65,230,391	154,061
Year 6	Single Family	-	-	66,228,416	156,418
Year 7	Single Family	-	-	67,241,711	158,811
Year 8	Single Family	-	-	68,270,509	161,241
Year 9	Single Family	-	-	69,315,048	163,708
Year 10	Single Family	-	-	70,375,568	166,213
10-Year Subtotal		\$ 18,115,486	\$ 43,271,240	\$	1,481,866
Year 11	Single Family	-	-	71,452,315	168,756
Year 12	Single Family	-	-	72,545,535	171,338
Year 13	Single Family	-	-	73,655,482	173,960
Year 14	Single Family	-	-	74,782,411	176,621
Year 15	Single Family	-	-	75,926,581	179,323
Year 16	Single Family	-	-	77,088,258	182,067
Year 17	Single Family	-	-	78,267,709	184,853
Year 18	Single Family	-	-	79,465,204	187,681
Year 19	Single Family	-	-	80,681,022	190,552
Year 20	Single Family	-	-	81,915,442	193,468
20-Year Subtotal		\$ 18,115,486	\$ 43,271,240	\$	3,290,485
Year 21	Single Family	-	-	83,168,748	196,428
Year 22	Single Family	-	-	84,441,230	199,433
Year 23	Single Family	-	-	85,733,181	202,485
Year 24	Single Family	-	-	87,044,898	205,583
Year 25	Single Family	-	-	88,376,685	208,728
Year 26	Single Family	-	-	89,728,849	211,922
Year 27	Single Family	-	-	91,101,700	215,164
Year 28	Single Family	-	-	92,495,556	218,456
Year 29	Single Family	-	-	93,910,738	221,798
Year 30	Single Family	-	-	95,347,572	225,192

**APPENDIX 4
CITY OF FERNLEY
ESTIMATED PROPERTY TAX REVENUE**

<u>YEAR</u>	<u>LAND USE</u>	<u>ANNUAL INCREMENTAL TAXABLE VALUE OF</u>		<u>CUMULATIVE TAXABLE VALUE</u>	<u>PROPERTY TAX REVENUE</u>
		<u>LAND</u>	<u>IMPROVS.</u>		
Year 31	Single Family	-	-	96,806,390	228,637
Year 32	Single Family	-	-	98,287,528	232,135
Year 33	Single Family	-	-	99,791,327	235,687
Year 34	Single Family	-	-	101,318,134	239,293
Year 35	Single Family	-	-	102,868,302	242,954
Year 36	Single Family	-	-	104,442,187	246,672
Year 37	Single Family	-	-	106,040,152	250,446
Year 38	Single Family	-	-	107,662,567	254,277
Year 39	Single Family	-	-	109,309,804	258,168
Year 40	Single Family	-	-	110,982,244	262,118
40-Year Subtotal		\$ 18,115,486	\$ 43,271,240	\$	7,846,061

APPENDIX 4, ASSUMPTIONS:

1. City of Fernley FY 2023-24 property tax rate of \$ **0.6748** is assumed to remain unchanged over the analysis period.
2. Project's taxable value of land and improvements prior to development of \$ **484,967** is deducted from Land Value estimated in Appendix 1 in Year 1 to arrive at incremental land value resulting from development of the project.
Source: Lyon County Assessor's website.
3. Property tax calculation: Taxable X 35% = Assessed Value; Assessed Value/100 X Tax Rate = Property Tax Revenue.
4. Residential land and improvement values are estimated to increase **1.5%** per year.

**APPENDIX 5
CITY OF FERNLEY
ESTIMATED BUILDING PERMIT AND IMPACT FEE REVENUE**

<u>YEAR</u>	<u>LAND USE</u>	<u># OF UNITS BUILT</u>	<u>CONSTR. VALUE PER UNIT</u>	<u>BUILDING PERMIT FEE</u>	<u>PLAN CHECK FEE</u>
Year 1	Single Family	79	\$ 276,593	\$ 160,546	\$ 104,355
Year 2	Single Family	79	276,593	160,546	104,355
TOTAL		158		\$ 321,093	\$ 208,710

APPENDIX 5, ASSUMPTIONS:

1. Construction Valuation is calculated in Appendix 1 as Improvement Value.

2. Building permit fee calculation:

\$ **1,018.59** per first \$ **100,000** plus \$ **5.74**
for each additional \$**1,000** up to \$500,000.

Source: Building Permit Fee Schedule (BPFS), City of Fernley, June 2020.

3. Plan Check fee revenue calculated at **65.0%** of building permit revenue.

Source: Building Permit Fee Schedule (BPFS), City of Fernley, June 2020.

TENTATIVE MAP FOR Yori Single Family

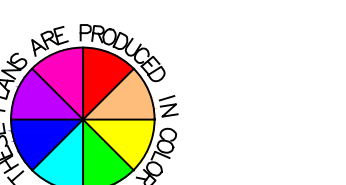


Yori Single Family

Cover Sheet

3240 Farm District Road
APN: 021-343-20
City of Fernley, Nevada

Project # 23-052
Drawn HBA
Checked MWV
Date 6.12.2024
Revisions



C1.0

1 of 10

LEGEND

A.C. PAVEMENT AREA

CONCRETE AREA

PROPOSED UTILITY LINE W. DESCRIPTION

EXISTING UTILITY LINE W. DESCRIPTION

FIRE HYDRANT ASSEMBLY (EXISTING/PROPOSED)

FLUSH VALVE ASSEMBLY (EXISTING/PROPOSED)

DUAL/SINGLE WATER SERVICE (EXISTING/PROPOSED)

AIR RELEASE VALVE ASSEMBLY (EXISTING/PROPOSED)

WATER MAIN TEE W. GATE VALVES & THRUST BLOCK

BACKFLOW PREVENTION ASSEMBLY

ELBOW W. THRUST BLOCK

MANHOLE W. DESCRIPTION (EXISTING/PROPOSED)

CLEANOUT (EXISTING/PROPOSED)

SANITARY SEWER LATERAL

CATCH BASIN/DROP INLET

YARD DRAIN

DIRECTIONAL FLOW LINE

GRADE BREAK

PROPOSED CONTOUR LINE

EXISTING CONTOUR LINE

ACCESSIBLE PARKING SPACE W. SIGN & PAVEMENT MARKINGS

PEDESTRIAN ACCESS RAMP

ACCESSIBLE ROUTE

INLET PROTECTION

FIBER ROLL (SC-1)

SILT FENCE (SC-5)

CONSTRUCTION ENTRANCE (SC-8)

REVEGETATION (EC-8)

RIPRAP (EC-7)

SOLID WASTE MANAGEMENT (GM-3)

STREET SURFACE CLEANING (GM-5)

VEHICLE & EQUIPMENT CLEANING (GM-7)

VEHICLE & EQUIPMENT FUELING (GM-8)

CONCRETE WASHOUT (GM-9)

MATERIAL DELIVERY & STORAGE (GM-10)

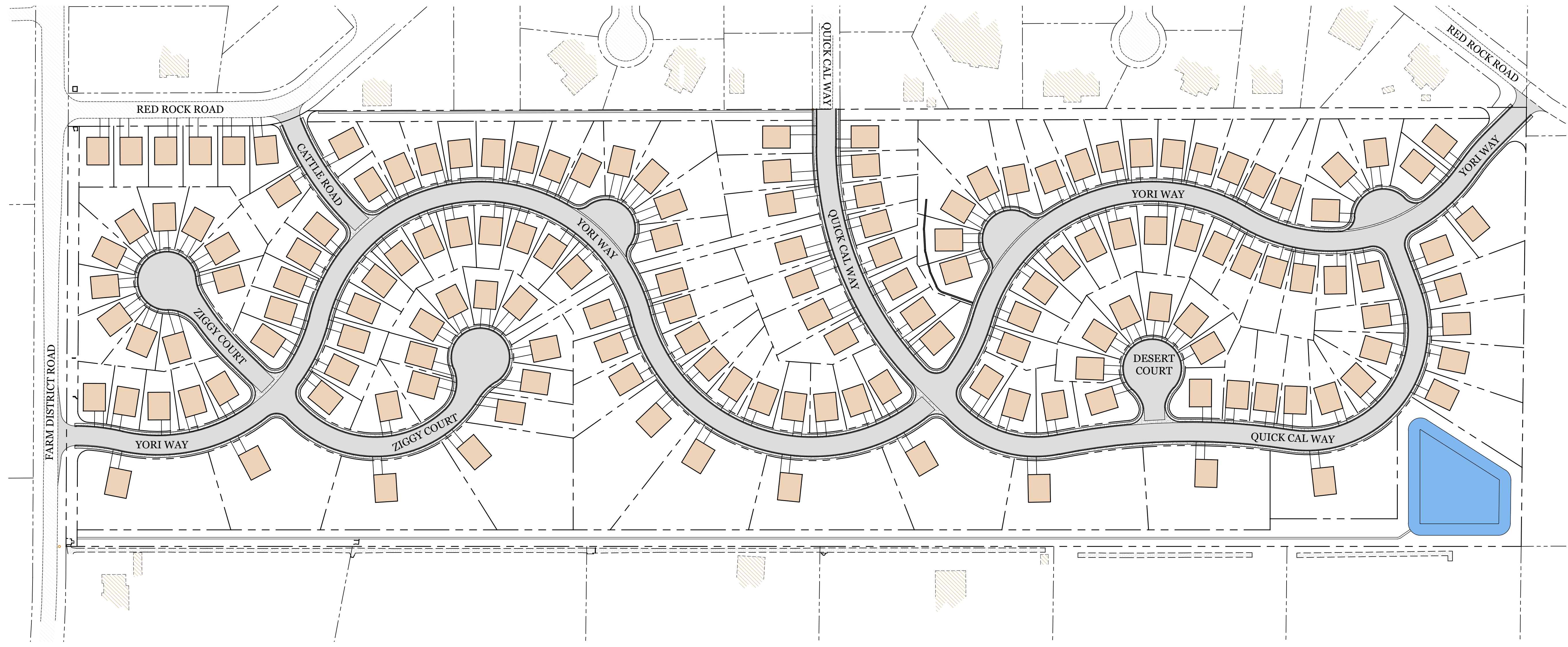
SANITARY WASTE MANAGEMENT (GM-14)

KEYNOTE (REF. CORRESPONDING LEGEND)

SPOT ELEVATION (EXISTING) ~ PROPOSED

FLOW DIRECTION ARROW

DRAINAGE BASIN CHARACTERISTICS



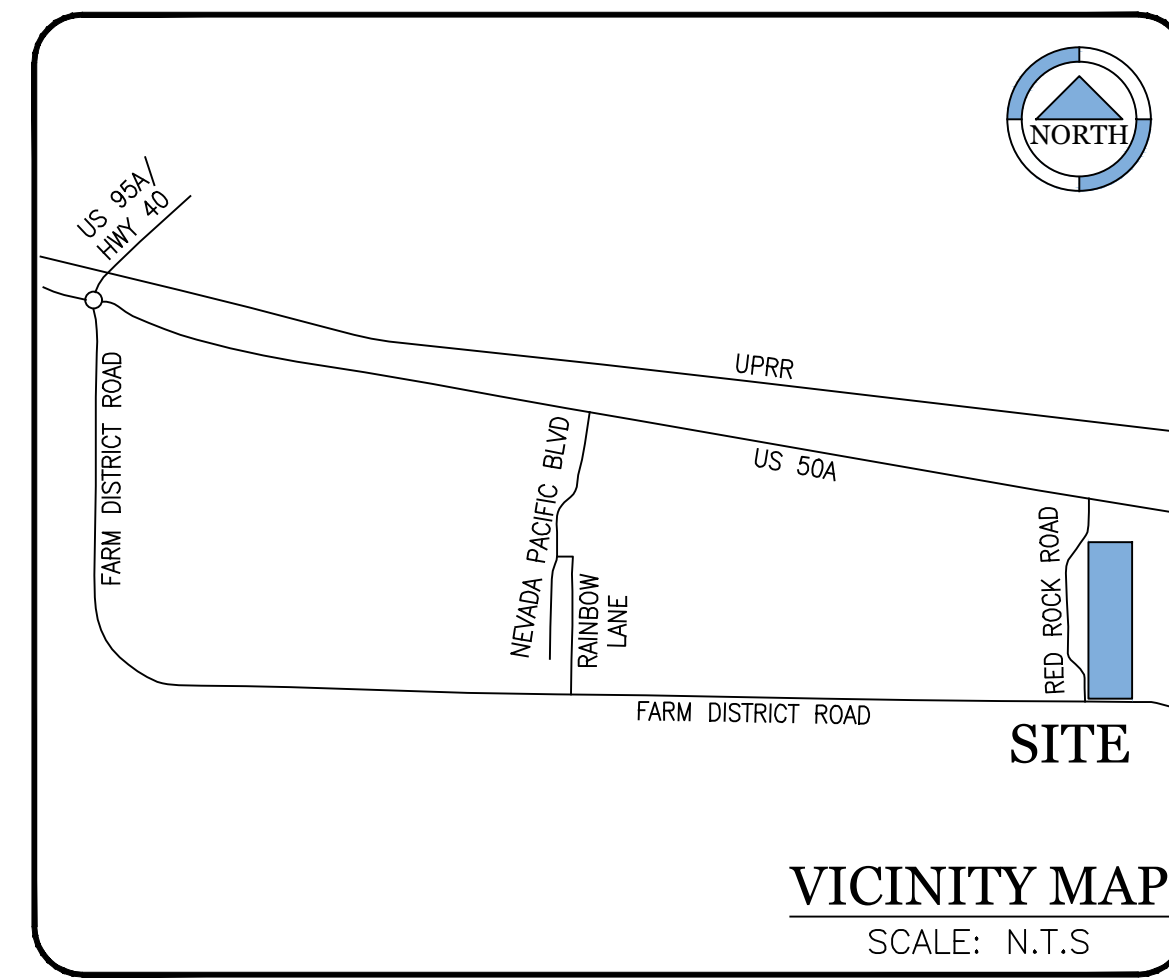
OVERALL SITE PLAN
SCALE: 1"=100'

GENERAL NOTES

- THESE PLANS ARE FOR TENTATIVE MAP PURPOSES ONLY AND ARE NOT FOR CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL REQUIRED PERMITTING IS OBTAINED PRIOR TO COMMENCEMENT OF CONSTRUCTION, INCLUDING, BUT NOT LIMITED TO, DEMOLITION, ENCROACHMENT, BUILDING, GRADING, AND TRAFFIC CONTROL PERMITS.
- UNLESS SPECIFICALLY PERMITTED OTHERWISE, CONSTRUCTION HOURS SHALL BE LIMITED TO BETWEEN THE HOURS OF 7:00 AM AND 6:00 PM MONDAY THROUGH FRIDAY AND BETWEEN THE HOURS OF 8:00 AM AND 6:00 PM ON SATURDAY. THERE SHALL BE NO CONSTRUCTION ON SUNDAY EXCLUDING DUST CONTROL AND STORM WATER POLLUTION PREVENTION PLAN MEASURES.
- ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPWC) AND THE STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION (SDPWC), AS ADOPTED BY THE CITY OF FERNLEY, AND SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER. ALL SPECIFICATIONS REFERENCED HEREIN REFER TO THE SSPWC UNLESS INDICATED OTHERWISE.
- ALL QUANTITIES INDICATED IN THESE PLANS ARE APPROXIMATE AND INTENDED FOR PERMITTING & BONDING PURPOSES ONLY. THE CONTRACTOR SHALL PREPARE AN INDEPENDENT ESTIMATE FOR BIDDING & CONSTRUCTION PURPOSES.

ABBREVIATIONS

- | | | | | | |
|-------|----------------------------|------|----------------------------|------------------|--------------------------------|
| AC | ASPHALT CONCRETE | GB | GRADE BREAK | PUE | PUBLIC UTILITY EASEMENT |
| AGG | AGGREGATE | GF | GARAGE FLOOR ELEVATION | PVC | POLYVINYL CHLORIDE |
| BC | BEGIN CURVE | GV | GATE VALVE | PVI | POINT OF VERTICAL INTERSECTION |
| BFC | BACK FACE OF CURB | HC | HANDICAPPED | Q ₅ | FIVE YEAR FLOW RATE |
| BVC | BEGIN VERTICAL CURVE | HP | HIGH POINT | Q ₁₀₀ | ONE HUNDRED YEAR FLOW RATE |
| BW | BOTTOM OF WALL | IE | INVERT ELEVATION | Q _{cap} | CAPACITY FLOW RATE |
| CL | CENTERLINE | IN | INCH | R | RADIUS |
| CB | CATCH BASIN | INT | INTERSECTION | REF | REFERENCE |
| CFS | CUBIC FEET PER SECOND | IRR | IRRIGATION | RJ | RESTRAINED JOINT |
| CO | CLEAN OUT | L | LENGTH | RP | RADIUS POINT |
| CONC | CONCRETE | LAT | LATERAL | RT | RIGHT |
| CONST | CONSTRUCT | LF | LINEAR FEET | RW | RIGHT-OF-WAY |
| COORD | COORDINATE | LP | LOW POINT | S | SLOPE |
| DET | DETAIL | LT | LEFT | SCH | SCHEDULE |
| DI | DROP INLET | MAX | MAXIMUM | SD | STORM DRAIN |
| DIP | DUCTILE IRON PIPE | MD | MAXIMUM DRY DENSITY | SF | SQUARE FOOT |
| DOM | DOMESTIC | MH | MANHOLE | SS | SANITARY SEWER |
| E | EXISTING | MIS | MISCELLANEOUS | STA | STATION |
| EC | EXISTING GRADE | STD | STANDARD | T | TANGENT |
| ELEV | ELEVATION | NPWL | NON POTABLE WATER LINE | TC | TOP OF CURB |
| END | END CURVE | NTS | NOT TO SCALE | TOE | TOE OF SLOPE |
| FDC | FIRE DEPARTMENT CONNECTION | OD | OUTSIDE DIAMETER | TOP | TOP OF SLOPE |
| FF | FINISHED FLOOR ELEVATION | P | PROPOSED | TW | TOP OF WALL |
| FFC | FRONT FACE OF CURB | PAD | PAD GRADE | TOE | TOE OF SLOPE |
| FG | FINISHED GRADE | PC | PORTLAND CEMENT CONCRETE | TOP | TOP OF SLOPE |
| FH | FIRE HYDRANT | PI | POINT OF INTERSECTION | TY | TYPICAL |
| FL | FLOW LINE | PL | POST INDICATOR VALVE | V | VELOCITY |
| FLC | FLANGE | PL | PROPERTY LINE | W | WATER |
| FT | FOOT | PO | PUSH ON | YD | YARD DRAIN |
| | | PRC | POINT OF REVERSE CURVATURE | | |



VICINITY MAP
SCALE: N.T.S.

BASIS OF BEARINGS

NEVADA STATE PLANE COORDINATE SYSTEM, WEST ZONE GRID, NAD 83/94 HARN, PER SURVEY MONUMENTS AS SHOWN. ALL COORDINATES AND DISTANCES ARE GROUND VALUES. TO OBTAIN GRID COORDINATES, DIVIDE THE GROUND COORDINATES SHOWN HEREON BY THE NEVADA DEPARTMENT OF TRANSPORTATION CONTROL POINT NO. 1367009. ESTABLISHED COMBINED FACTOR OF 1.000045. BEARINGS ARE ROTATED 0°5'35" CLOCKWISE.

BASIS OF ELEVATION

BENCHMARK: NDOT CONTROL POINT NO. 1367009 FND NDOT STANDARD FENO AND PLYOCRIC WITH 2" ALUMINUM CAP STAMPED "1367009M 2014" PUBLISHED ELEVATION OF 4159.00' NAVD 1988

SERVICE PROVIDERS	
DOMESTIC WATER	CITY OF FERNLEY
IRRIGATION WATER	CITY OF FERNLEY
SANITARY SEWER	CITY OF FERNLEY
STORM DRAIN	CITY OF FERNLEY
NATURAL GAS	SOUTHWEST GAS
ELECTRICITY	NV ENERGY
TELECOMMUNICATIONS	CHARTER COMMUNICATIONS
FIRE	NORTH LYON COUNTY FIRE PROTECTION DISTRICT
POLICE	LYON COUNTY SHERIFF'S OFFICE

DESIGN TEAM	
OWNER	1903 TRUST, LAWRENCE G YORI, TRUSTEE 3240 FARM DISTRICT ROAD FERNLEY, NV 89408
PLANNER	KLS PLANNING & DESIGN GROUP ATTN: JOHN KIMPOTIC 201 W. LIBERTY STREET, SUITE 30 RENO, NV 89501
SURVEYOR	MERIDIAN SURVEYING & MAPPING, INC. 8725 TECHNOLOGY WAY RENO, NV 89521 775.680.4194
CIVIL ENGINEER	MONTE VISTA CONSULTING, LTD. 575 E. PLUMB LANE, SUITE 101 RENO, NV 89502 775.636.7905
LANDSCAPE ARCHITECT	TREEHUGGER STUDIO, LLC 140 WEST GUFFEY DRIVE WASHOE VALLEY, NV 89704 775.530.0665

CIVIL SHEET INDEX	
C1.0	COVER SHEET
C2.0	EXISTING CONDITIONS & DEMOLITION PLAN
C3.0	GEOMETRIC SITE PLAN
C3.1	GEOMETRIC SITE PLAN
C4.1	SITE & UTILITY PLAN
C4.2	SITE & UTILITY PLAN
C5.1	GRADING PLAN
C5.2	GRADING PLAN
C5.3	CROSS SECTIONS
C6.0	DRAINAGE PLAN

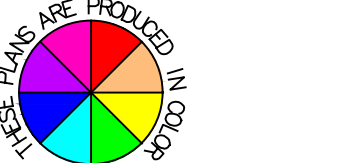
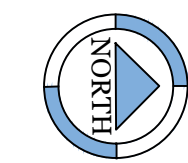
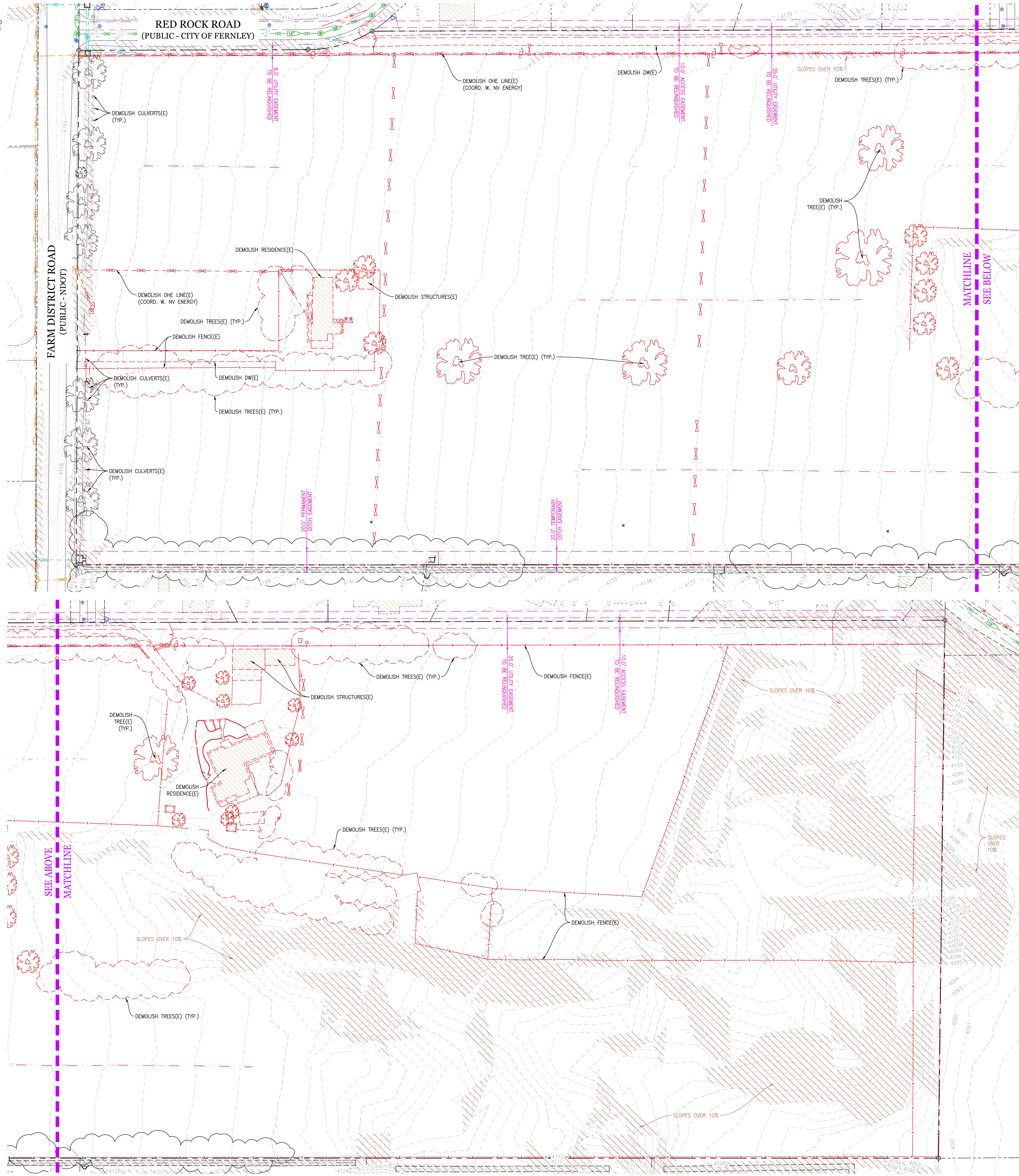
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DEMOLITION LEGEND

- (UTILITY)-- EXISTING UTILITY LINE W. DESCRIPTION
- FIRE HYDRANT ASSEMBLY
- FLUSH VALVE ASSEMBLY
- DUAL/SINGLE WATER SERVICE
- AIR RELEASE VALVE ASSEMBLY
- WATER MAIN TEE W. GATE VALVES
- BACKFLOW PREVENTION ASSEMBLY
- ELBOW
- MANHOLE W. DESCRIPTION
- CLEANOUT
- CATCH BASIN/DROP INLET
- 4900 EXISTING CONTOUR LINE

EXISTING CONDITION NOTES

1. UTILITIES MAY EXIST THAT ARE NOT SHOWN ON THE PLANS. THE LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE ONLY AND ARE BASED ON THE BEST AVAILABLE INFORMATION AT THE TIME OF DESIGN. THIS INFORMATION IS NOT TO BE RELIED UPON AS EXACT OR COMPLETE. THE CONTRACTOR SHALL VERIFY ACTUAL LOCATIONS OF EXISTING UTILITIES PRIOR TO CONSTRUCTION. SHOULD THE CONTRACTOR DISCOVER ANY DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND THE INFORMATION SHOWN ON THESE DRAWINGS, THEY SHALL NOTIFY MVC BEFORE PROCEEDING WITH CONSTRUCTION.
2. ALL EXISTING ON-SITE STRUCTURES AND ASSOCIATED SITE IMPROVEMENTS INCLUDING BUT NOT LIMITED TO CONCRETE FLATWORK, DRIVEWAY APRONS, WALKWAYS, LANDSCAPING AND UTILITY SERVICES SHALL BE DEMOLISHED. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH ALL UTILITY SERVICE PROVIDERS.
3. ANY DEMOLITION RESULTING IN GRADES STEEPER THAN 3:1 SHALL BE TEMPORARILY GRADED TO A 3:1 MAX SLOPE & COMPACTED TO 85% M.D.D UNTIL FINAL GRADING ACTIVITIES COMMENCE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER REMOVAL AND DISPOSAL OF ALL ON-SITE DEBRIS AND MATERIALS WITHIN THE LIMITS OF CONSTRUCTION.



Parcel Table		
Parcel #	Area	Description
1	6889	Residential
2	6889	Residential
3	6889	Residential
4	6889	Residential
5	6962	Residential
6	7107	Residential
7	8588	Residential
8	6687	Residential
9	6159	Residential
10	6159	Residential
11	6159	Residential
12	6749	Residential
13	7891	Residential
14	8768	Residential
15	8837	Residential
16	7067	Residential
17	10153	Residential

Parcel Table		
Parcel #	Area	Description
18	7939	Residential
19	6446	Residential
20	9152	Residential
21	6996	Residential
22	7246	Residential
23	6428	Residential
24	6525	Residential
25	6455	Residential
26	6404	Residential
27	6324	Residential
28	6341	Residential
29	6125	Residential
30	6051	Residential
31	6005	Residential
32	6022	Residential
33	6014	Residential
34	6135	Residential

Parcel Table		
Parcel #	Area	Description
35	6115	Residential
36	6192	Residential
37	6120	Residential
38	6221	Residential
39	6733	Residential
40	6965	Residential
41	7683	Residential
42	10971	Residential
43	10468	Residential
44	7531	Residential
45	7562	Residential
46	6564	Residential
47	6399	Residential
48	6536	Residential
49	6730	Residential
50	6833	Residential
51	7216	Residential

Parcel Table		
Parcel #	Area	Description
52	8894	Residential
53	7153	Residential
54	6141	Residential
55	8417	Residential
56	6782	Residential
57	6300	Residential
58	6300	Residential
59	6565	Residential
60	8003	Residential
61	7565	Residential
62	9206	Residential
63	14272	Residential
64	11940	Residential
65	9445	Residential
66	9542	Residential
67	8833	Residential
68	8416	Residential

Parcel Table		
Parcel #	Area	Description
69	8205	Residential
70	7690	Residential
71	6760	Residential
72	6736	Residential
73	6651	Residential
74	6613	Residential
75	7052	Residential
76	8419	Residential
77	10047	Residential
78	9868	Residential
79	9222	Residential
80	10840	Residential
81	10719	Residential
82	10778	Residential
83	7748	Residential
84	7094	Residential
85	6851	Residential

Parcel Table		
Parcel #	Area	Description
86	6389	Residential
87	6092	Residential
88	6092	Residential
89	6092	Residential
90	6977	Residential
91	7698	Residential
92	7283	Residential
93	10606	Residential
94	15554	Residential
95	9378	Residential
96	9012	Residential
97	7818	Residential
98	6586	Residential
99	6278	Residential
100	6278	Residential
101	6916	Residential
102	8436	Residential

Parcel Table		
Parcel #	Area	Description
103	8879	Residential
104	8401	Residential
105	6742	Residential
106	9785	Residential
107	9509	Residential
108	7123	Residential
109	8555	Residential
110	18933	Residential
111	8154	Residential
112	13901	Residential
113	12714	Residential
114	13349	Residential
115	16705	Residential
116	6169	Residential
117	6150	Residential
118	8861	Residential
119	8943	Residential

Parcel Table		
Parcel #	Area	Description
120	7704	Residential
121	6785	Residential
122	6941	Residential
123	6993	Residential
124	6869	Residential
125	7023	Residential
126	6860	Residential
127	7007	Residential
128	6864	Residential
129	6685	Residential
130	6299	Residential
131	7721	Residential
132	7292	Residential
133	7823	Residential
134	6472	Residential
135	7425	Residential
136	7425	Residential

Parcel Table		
Parcel #	Area	Description
137	7425	Residential
138	7425	Residential
139	6129	Residential
140	7715	Residential
141	8080	Residential
142	8591	Residential
143	7985	Residential
144	7518	Residential
145	7531	Residential
146	7562	Residential
147	7857	Residential
148	30340	Residential
149	33776	Residential
150	33776	Residential
151	33683	Residential
152	33870	Residential
153	33776	Residential

Parcel Table		
Parcel #	Area	Description
154	33776	Residential
155	34670	Residential
156	34670	Residential
157	34670	Residential
158	34670	Residential
159	123810	Buffer/Common Area
160	4304	Utilities
161	6868	Utilities
162	23392	Buffer
163	18175	Buffer
164	366550	ROW

SITE ANALYSIS		
AREA	2,070,442 S.F. (47.53 AC)	
ZONING	RR1/2 (SFE PROPOSED)	
MASTER PLAN	SINGLE FAMILY RESIDENTIAL	
RIGHT-OF-WAY	366,550 S.F. (8.41 AC)	
COMMON AREA	176,549 S.F. (4.05 AC)	
LOT AREA	1,327,343 S.F. (30.06 AC)	
RESIDENTIAL LOTS	158	
DENSITY	3.3 LOTS/AC	
SMALLEST	6,009 S.F. (0.14 AC)	
LARGEST	34,670 S.F. (0.80 AC)	
AVERAGE	9,867 S.F. (0.22 AC)	



MONTE VISTA CONSULTING
575 E. Plumb Lane #101
Reno, NV 89502
775-636-7905
montevistaconsulting.com



Yori Single Family

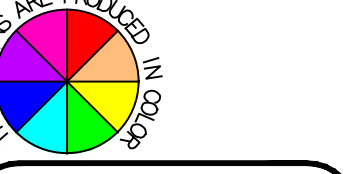
Geometric Plan

3240 Farm District Road
APN: 021-343-20
City of Fernley, Nevada

Project # 23-052
Drawn HBA
Checked MWV
Date 6.12.2024
Revisions

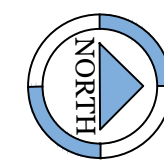


June 12, 2024



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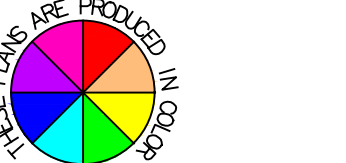
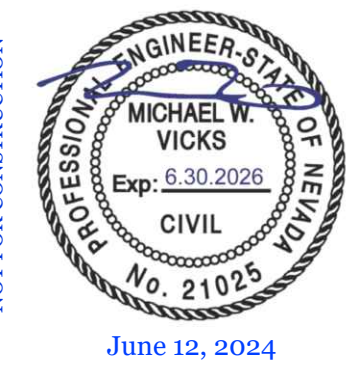


Yori Single Family

Geometric Plan

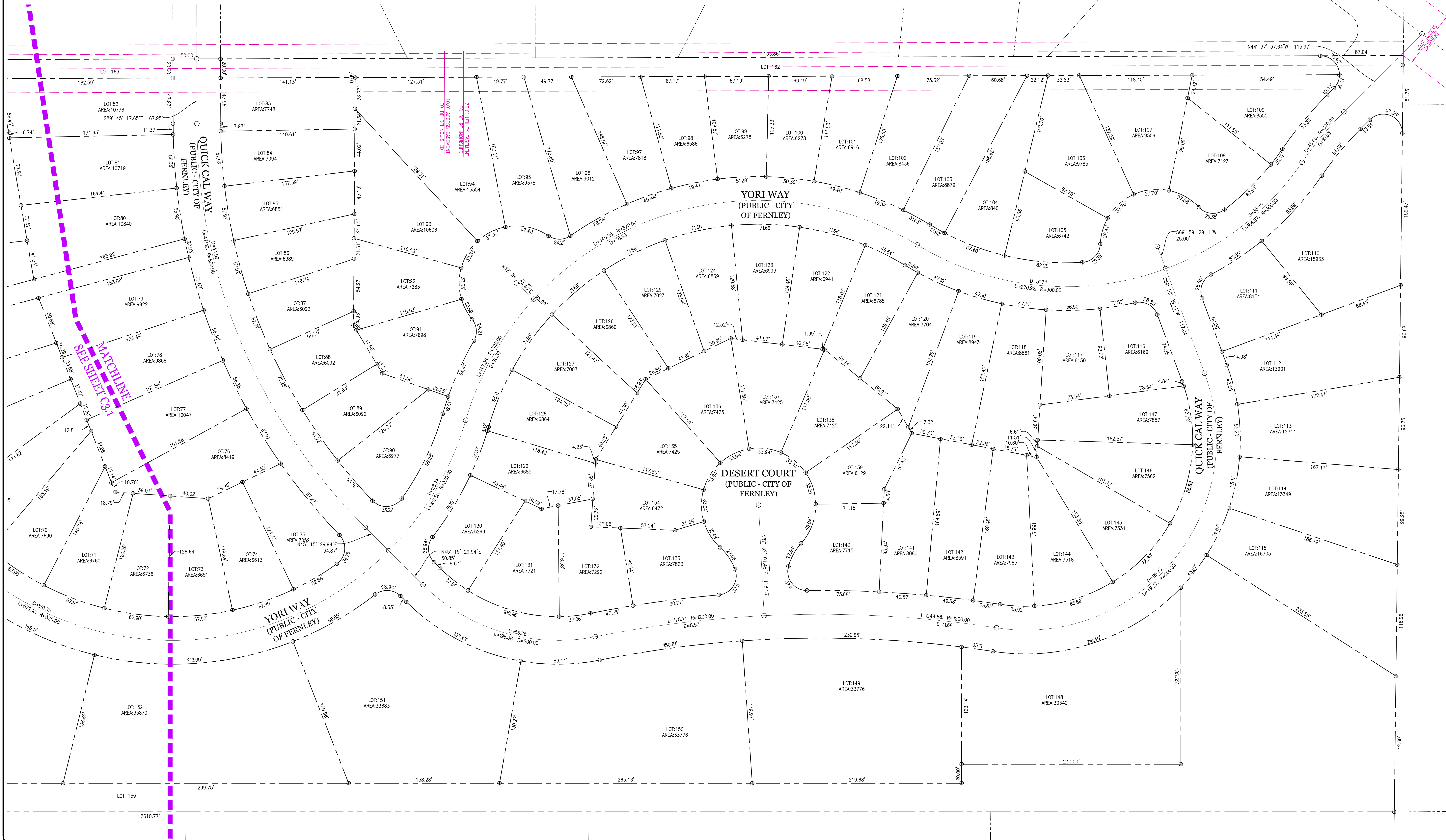
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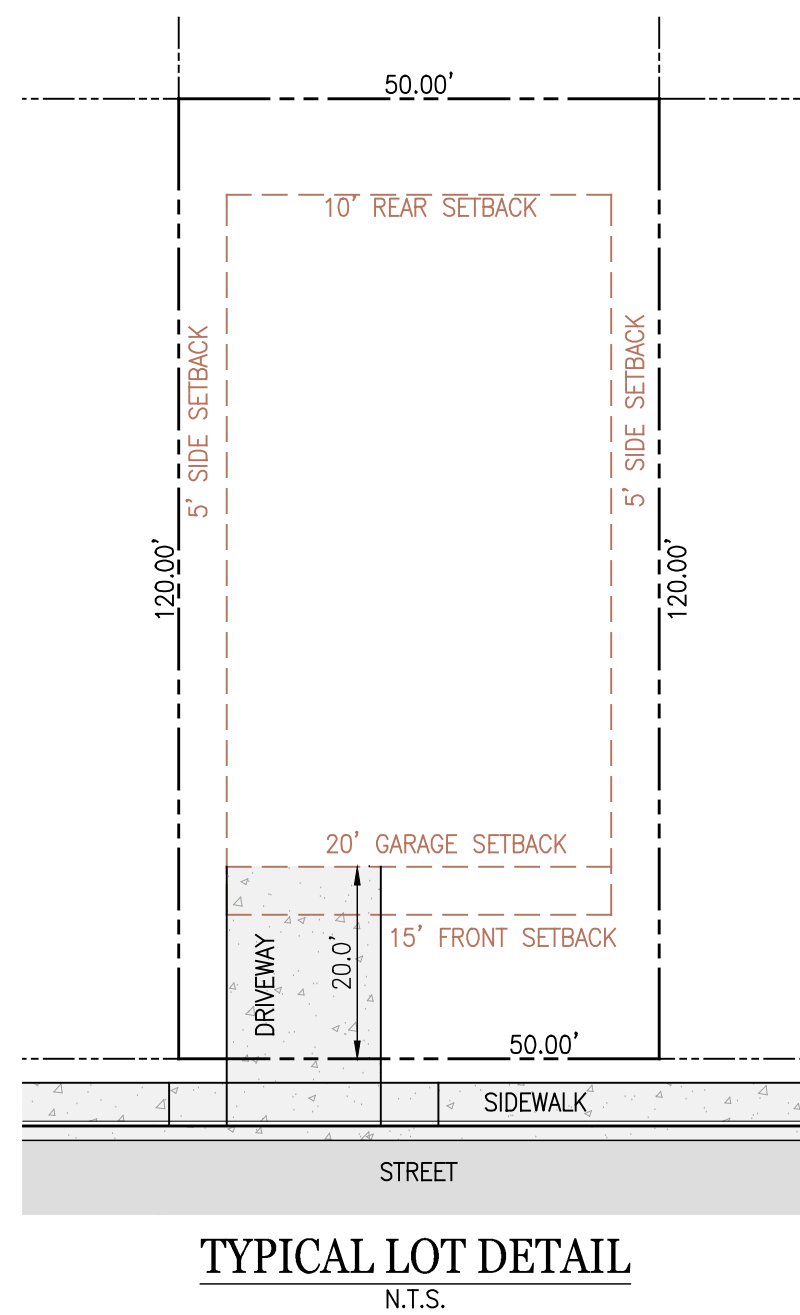
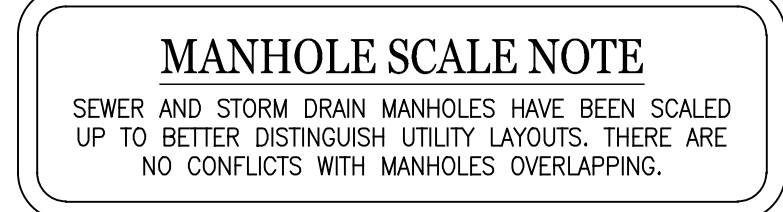
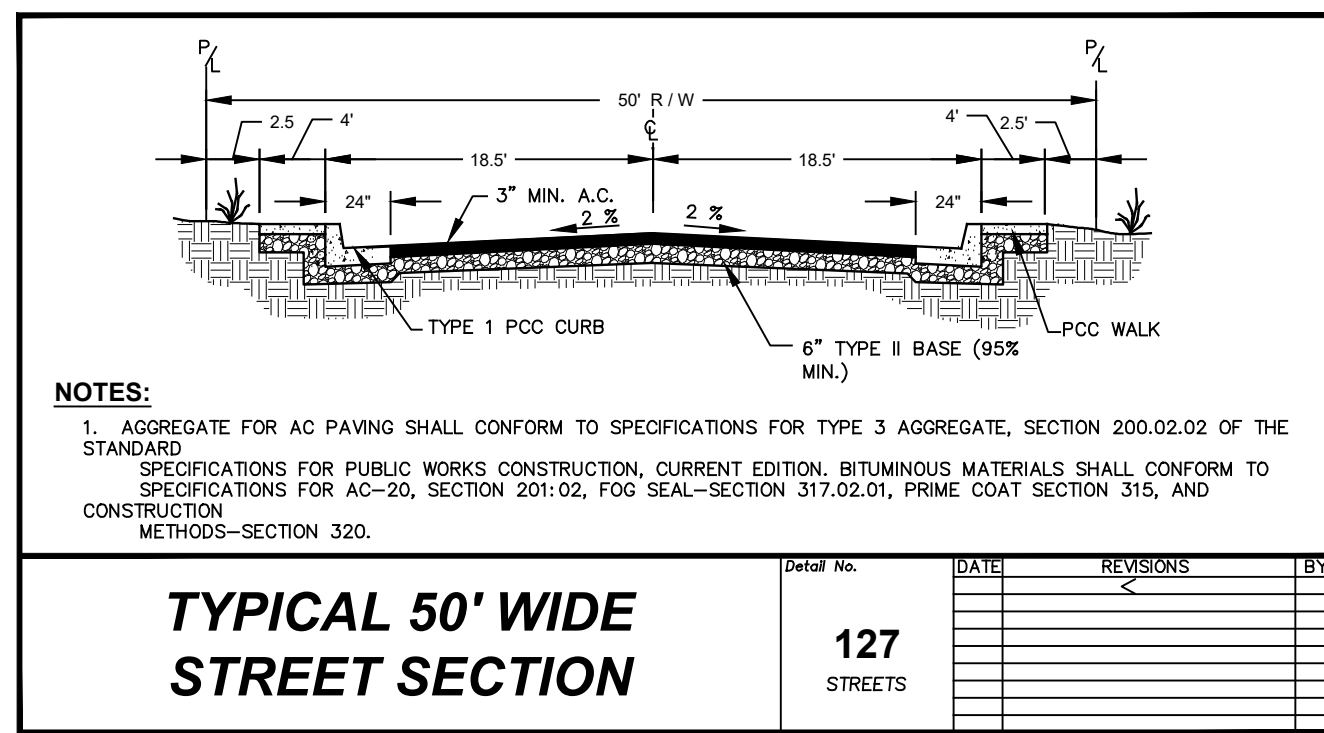
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4 of 10

1"=40'



SITE & UTILITY NOTES

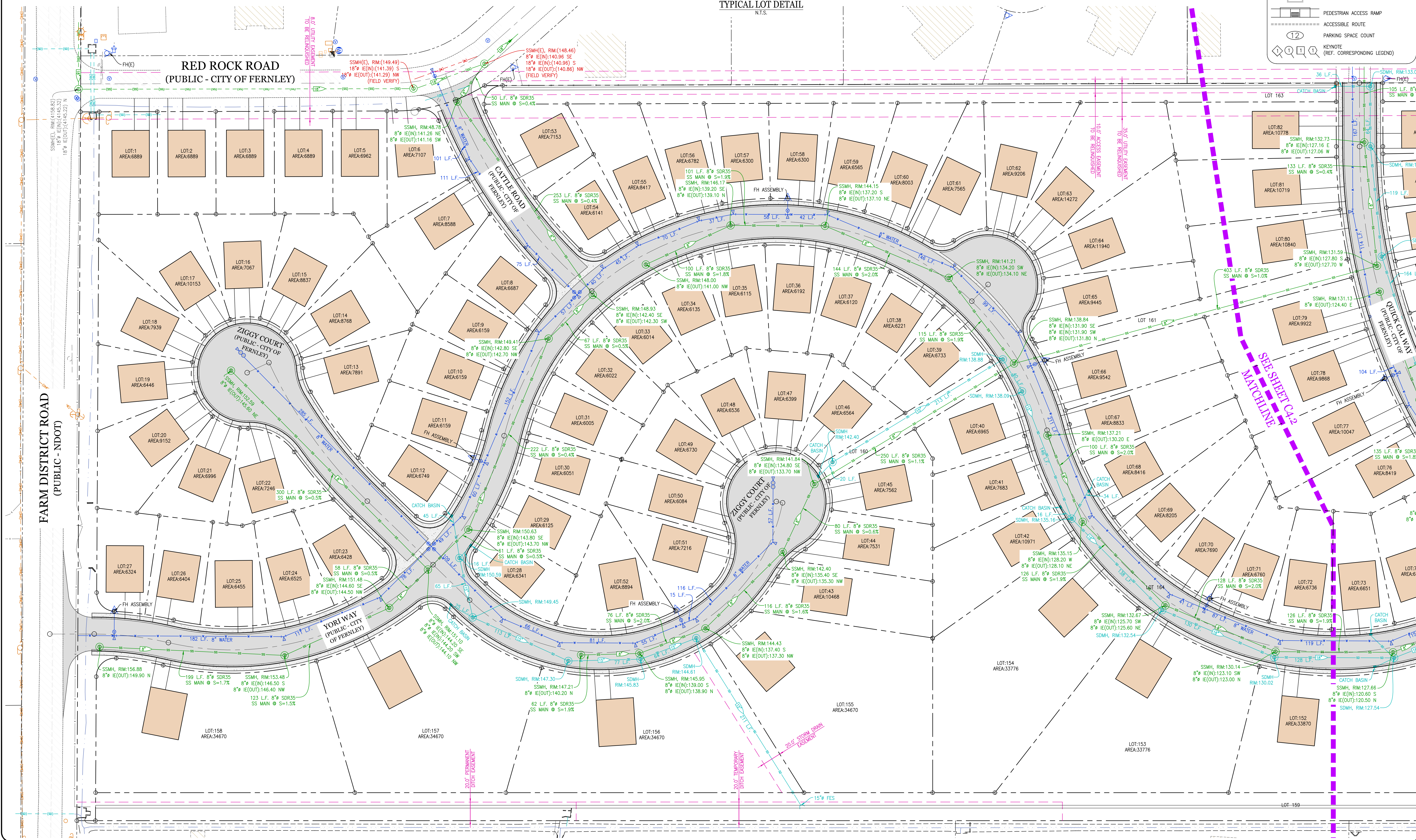
1. THE FIELD SURVEY PREPARED BY MERIDIAN SURVEYING & MAPPING, INC. IS THE BASIS OF THIS DESIGN. MNC TAKES NO RESPONSIBILITY FOR THE ACCURACY OF THE SURVEY.
2. AN ENCROACHMENT & EXCAVATION PERMIT IS REQUIRED FOR ALL WORK WITHIN THE CITY OF FERNLEY RIGHT-OF-WAY.
3. ALL WORK WITHIN THE CITY OF FERNLEY RIGHT-OF-WAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST CODES, STANDARD SPECIFICATIONS & DETAILS.
4. REFERENCE ARCHITECTURAL PLANS FOR ALL BUILDING DIMENSIONS.
5. ALL DIMENSIONS ARE TO FRONT FACE OF CURB, FACE OF BUILDING, FACE OF WALL, CENTER OF PIPE, CENTER OF MANHOLE OR PROPERTY LINE UNLESS OTHERWISE NOTED.
6. ALL PERMANENT STRIPING, SIGNAGE & TRAFFIC CONTROL IMPROVEMENTS SHALL BE INSTALLED IN ACCORDANCE WITH CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) REQUIREMENTS.
7. UTILITIES MAY EXIST THAT ARE NOT SHOWN ON THE PLANS. THE LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE ONLY AND ARE BASED ON THE BEST AVAILABLE INFORMATION AT THE TIME OF DESIGN. THE INFORMATION IS NOT TO BE RELIED UPON AS EXACT OR COMPLETE. SPECIFICALLY, THE CONTRACTOR SHALL NOT HOLE TO EXPOSE ANY UTILITY IN PRIOR TO CONSTRUCTION TO VERIFY ACTUAL LOCATIONS AND ELEVATIONS OF UTILITIES PRIOR TO CONSTRUCTION. SHOULD THE CONTRACTOR DISCOVER ANY DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND THE INFORMATION SHOWN ON THESE DRAWINGS, THEY SHALL NOTIFY THE ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION.
8. UTILITY CONNECTIONS MAY REQUIRE REMOVAL, RELOCATION, REPAIR AND/OR REPLACEMENT OF EXISTING IMPROVEMENTS. THIS INCLUDES THE ADJUSTMENT/RELOCATION OF ALL EXISTING UTILITY MAINS, MANHOLE LIDS & VALVE LIDS AS REQUIRED TO ACCOMMODATE THE PROPOSED FINISHED GRADES. THE CONTRACTOR SHALL OBTAIN ANY NECESSARY UTILITY COMPANY APPROVAL AND ENCROACHMENT OR EXCAVATION PERMIT PRIOR TO ANY CONSTRUCTION WITHIN THE CITY OF FERNLEY RIGHT-OF-WAY.
9. THE PROPOSED SANITARY SEWER AND STORM DRAIN MAINS ARE PUBLIC AND TO BE MAINTAINED BY THE CITY OF FERNLEY. THE PROPOSED DETENTION POND IS PRIVATE AND SHALL BE MAINTAINED BY THE OWNER.
10. ALL SANITARY SEWER FACILITIES ARE INTENDED TO GRAVITY FLOW. SANITARY SEWER LATERALS SHALL MAINTAIN 3.0' MINIMUM COVER WITHIN THE RIGHT-OF-WAY, BE 4" PVC SDR 35 AND HAVE A MINIMUM SLOPE OF 2% UNLESS OTHERWISE NOTED.
11. MAINTAIN 3.5' MINIMUM COVER OVER ALL WATER MAINS AND SERVICE LINES.
12. MAINTAIN 5.0' MINIMUM HORIZONTAL CLEARANCE AROUND ALL FIRE HYDRANTS.
13. MAINTAIN 10' HORIZONTAL CLEARANCE BETWEEN DOMESTIC WATER AND SANITARY SEWER LINES. WHERE CROSSINGS ARE REQUIRED, DOMESTIC WATER SHALL MAINTAIN 18" MINIMUM CLEARANCE OVER SANITARY SEWER. FULL STOCKS OF PIPE SHALL BE CENTERED ON THE CROSSING WHERE POSSIBLE. IF THESE CLEARANCES ARE NOT POSSIBLE, SPECIAL CONSTRUCTION IS REQUIRED (IF NOT SPECIFIED, CONTRACTOR SHALL NOTIFY MNC PRIOR TO PROCEEDING WITH CONSTRUCTION).
14. ALL PIPE SHALL BE CONSTRUCTED IN ACCORDANCE WITH PERTINENT REGULATIONS AND MANUFACTURERS RECOMMENDATIONS.
15. ANY LOCATION FOR GAS, ELECTRICAL, TELEPHONE, CABLE TV, COMMUNICATION OR ANY OTHER LOW VOLTAGE IMPROVEMENT SHOWN IS SCHEMATIC ONLY (REF. DESIGN & DETAIL BY OTHERS).
16. ALL NEW PEDESTRIAN INSTALLATIONS TO MEET CURRENT ADA REQUIREMENTS (ICC A117.1-2009 & PROWAG GUIDELINES).
17. ADD 4000' TO ALL SPOT ELEVATIONS.



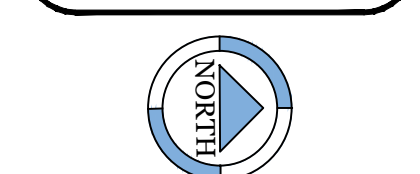
1"=40'



SITE & UTILITY LEGEND	
	A.C. PAVEMENT AREA
	CONCRETE AREA
	UTILITY
	EXISTING UTILITY LINE W. DESCRIPTION
	FIRE HYDRANT ASSEMBLY (EXISTING/PROPOSED)
	FLUSH VALVE ASSEMBLY (EXISTING/PROPOSED)
	DUAL/SINGLE WATER SERVICE (EXISTING/PROPOSED)
	AIR RELEASE VALVE ASSEMBLY (EXISTING/PROPOSED)
	WATER MAIN TEE W. GATE VALVES & THRUST BLOCK
	BACKFLOW PREVENTION ASSEMBLY
	ELBOW W. THRUST BLOCK
	MANHOLE W. DESCRIPTION (EXISTING/PROPOSED)
	CLEANOUT (EXISTING/PROPOSED)
	SANITARY SEWER LATERAL
	CATCH BASIN/DROP INLET
	YARD DRAIN
	ACCESSIBLE PARKING SPACE W. SIGN & PAVEMENT MARKINGS
	PEDESTRIAN ACCESS RAMP
	ACCESSIBLE ROUTE
	PARKING SPACE COUNT
KEYNOTE (REF. CORRESPONDING LEGEND)	



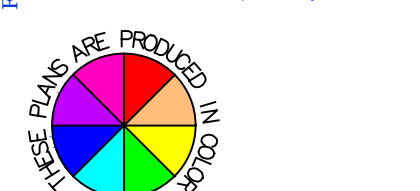
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Reno, NV 89502
775-636-7905
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Yori Single Family
Site & Utility Plan

3240 Farm District Road
APN: 021-343-20
City of Fernley, Nevada

Project # 23-052
Drawn HBA
Checked MWV
Date 6.12.2024
Revisions



C4.1
5 of 10

SITE & UTILITY LEGEND

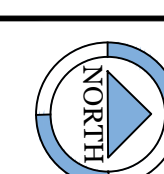
- A.C. PAVEMENT AREA
CONCRETE AREA
PROPOSED UTILITY LINE W. DESCRIPTION
EXISTING UTILITY LINE W. DESCRIPTION
FIRE HYDRANT ASSEMBLY (EXISTING/PROPOSED)
FLUSH VALVE ASSEMBLY (EXISTING/PROPOSED)
DUAL/SINGLE WATER SERVICE (EXISTING/PROPOSED)
AIR RELEASE VALVE ASSEMBLY (EXISTING/PROPOSED)
WATER MAIN TEE W. GATE VALVES & THRUST BLOCK
BACKFLOW PREVENTION ASSEMBLY
ELBOW W. THRUST BLOCK
MAHOLE W. DESCRIPTION (EXISTING/PROPOSED)
CLEANOUT (EXISTING/PROPOSED)
SANITARY SEWER LATERAL
CATCH BASIN/DROP INLET
YARD DRAIN
ACCESSIBLE PARKING SPACE W. SIGN & PAVEMENT MARKINGS
PEDESTRIAN ACCESS RAMP
ACCESSIBLE ROUTE
PARKING SPACE COUNT
KEYNOTE (REF. CORRESPONDING LEGEND)

ADD 4000' TO ALL SPOT ELEVATIONS

REFERENCE SHEET C4.1 FOR ADDITIONAL NOTES PERTAINING TO THE DESIGN

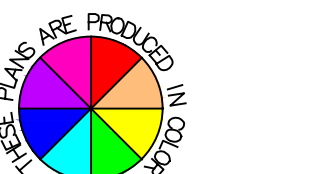


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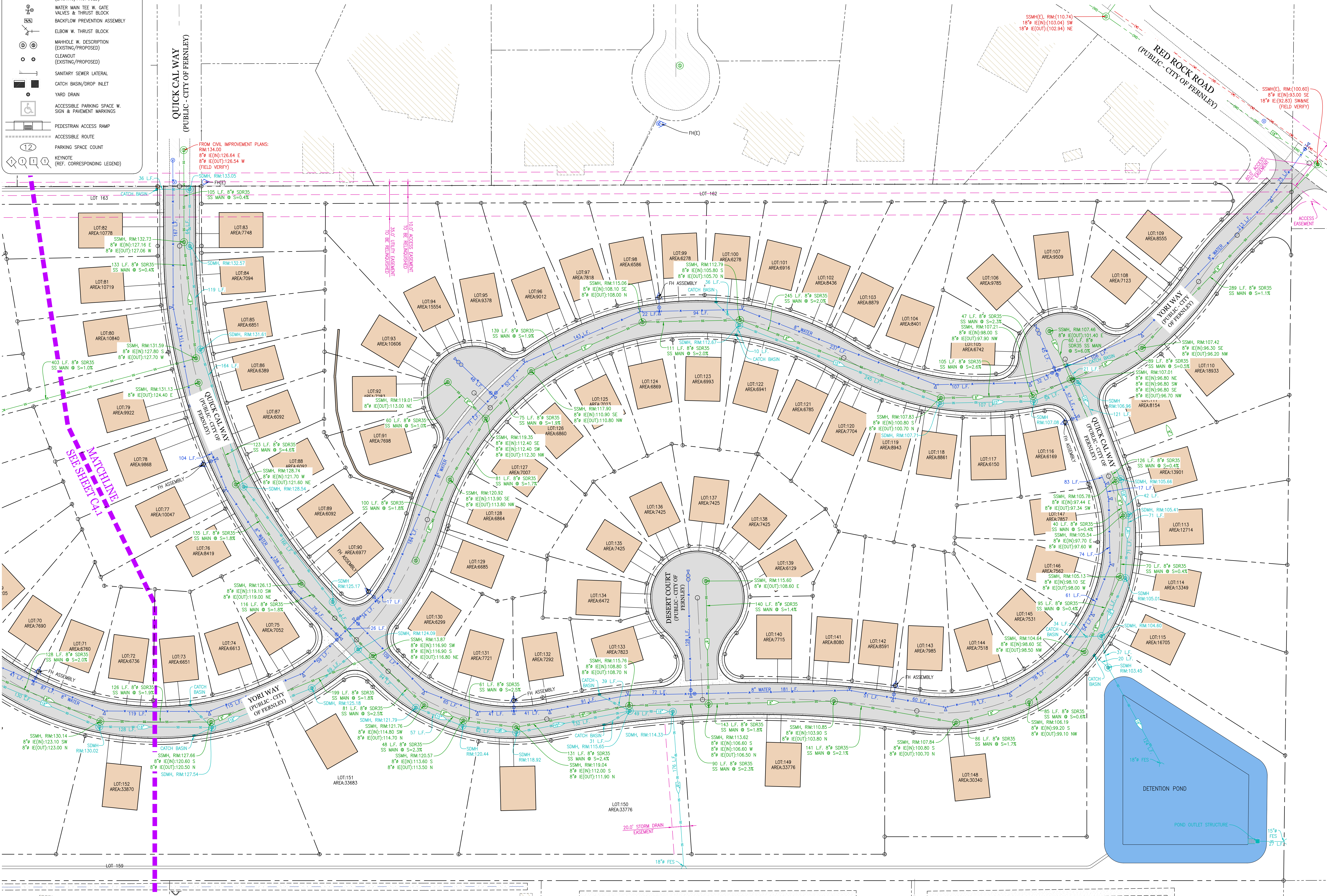


Yori Single Family
Site & Utility Plan

3240 Farm District Road
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City of Fernley, Nevada
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C4.2
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GRADING LEGEND

A.C. PAVEMENT AREA
CONCRETE AREA
UTILITY
EXISTING UTILITY LINE W. DESCRIPTION
MAHOLE W. DESCRIPTION (EXISTING/PROPOSED)
CLEANOUT (EXISTING/PROPOSED)
CATCH BASIN/DROP INLET
YARD DRAIN
DIRECTIONAL FLOW LINE
GRADE BREAK
PROPOSED CONTOUR LINE
EXISTING CONTOUR LINE
SPOT ELEVATION (EXISTING) ~ PROPOSED

GRADING & DRAINAGE NOTES

1. ALL GRADING SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT PREPARED BY 222.
2. ALL ELEVATIONS IDENTIFIED ARE TO FINAL SURFACE FINISH GRADE UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL ADJUST GRADING TO ACCOMMODATE THE DEPTH OF ANY RIP-RAP PROTECTION, LANDSCAPE SURFACE TREATMENTS OR THE LIKE TO ENSURE THE IDENTIFIED GRADES ARE ESTABLISHED WITH COMPLETE SITE STABILIZATION.
3. ANY RETAINED HEIGHTS INDICATED ARE FROM SURFACE TO SURFACE UNLESS OTHERWISE NOTED. MVC IS NOT RESPONSIBLE FOR ANY STRUCTURAL DESIGN OF SITE RETAINING WALLS OR FEATURES. REFERENCE APPLICABLE STRUCTURAL/ARCHITECTURAL DESIGN BY OTHERS FOR DESIGN AND DETAIL.
4. BACKFILL ESTABLISHING SEPARATION AS REQUIRED BY ARCHITECTURAL AND STRUCTURAL DESIGN BETWEEN FINISH GRADE AND SIDING (8" MIN SEPARATION TYP.).
5. ADD 400' TO ALL ELEVATIONS.

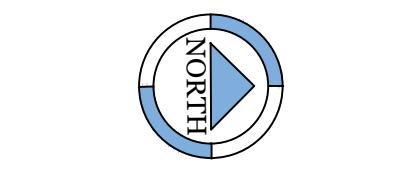
FLOOD ZONE
THIS SITE LIES IN FEMA FLOOD ZONE X (UNSHADED) (32019C0110E). ZONE X (UNSHADED) IS DEFINED AS AN AREA OF MINIMAL FLOOD HAZARD, WHICH ARE THE AREAS OUTSIDE THE 0.2-PERCENT-ANNUAL-CHANCE FLOODPLAIN.

EARTHWORK ANALYSIS

SITE AREA	47.5 AC
SITE DISTURBANCE	47.5 AC
PROPOSED CUT	130,000 YD ³
PROPOSED FILL	158,000 YD ³
NET EARTHWORK	28,000 YD ³ FILL

THIS ANALYSIS COMPARES THE EXISTING FINISH GRADE SURFACE TO THE PROPOSED FINISH GRADE SURFACE AND IS INTENDED FOR PERMITTING PURPOSES ONLY. THE CONTRACTOR SHALL PREPARE AN INDEPENDENT EARTHWORK ANALYSIS INCORPORATING ANY OVER EXCAVATION, SHRINKAGE, EXPANSION AND/OR STRUCTURAL SECTIONS, ETC.

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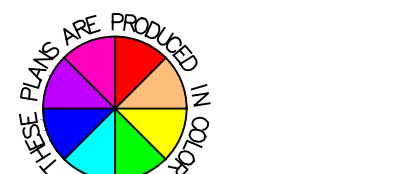
Yori Single Family
Grading Plan

3240 Farm District Road
APN: 021-343-20
City of Fernley, Nevada

Project # 23-052
Drawn HBA
Checked MWV
Date 6.12.2024
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PROFESSIONAL ENGINEER
MICHAEL W. VICKS
Exp. 6.30.2026
CIVIL
No. 21025
June 12, 2024



C5.1

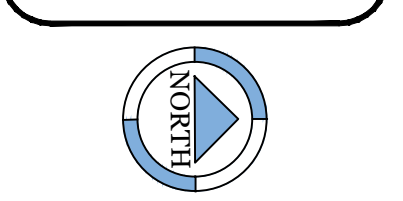
GRADING LEGEND

- A.C. PAVEMENT AREA
- CONCRETE AREA
- UTILITY
- PROPOSED UTILITY LINE W. DESCRIPTION
- EXISTING UTILITY LINE W. DESCRIPTION
- MAHOLE W. DESCRIPTION (EXISTING/PROPOSED)
- CLEANOUT (EXISTING/PROPOSED)
- CATCH BASIN/DROP INLET
- YARD DRAIN
- DIRECTIONAL FLOW LINE
- GRADE BREAK
- PROPOSED CONTOUR LINE
- EXISTING CONTOUR LINE
- SPOT ELEVATION (EXISTING) ~ PROPOSED

ADD 4000' TO ALL SPOT ELEVATIONS

REFERENCE SHEET C5.1 FOR ADDITIONAL NOTES PERTAINING TO THE DESIGN

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Grading Plan

3240 Farm District Road
APN: 021-343-20
City of Fernley, Nevada

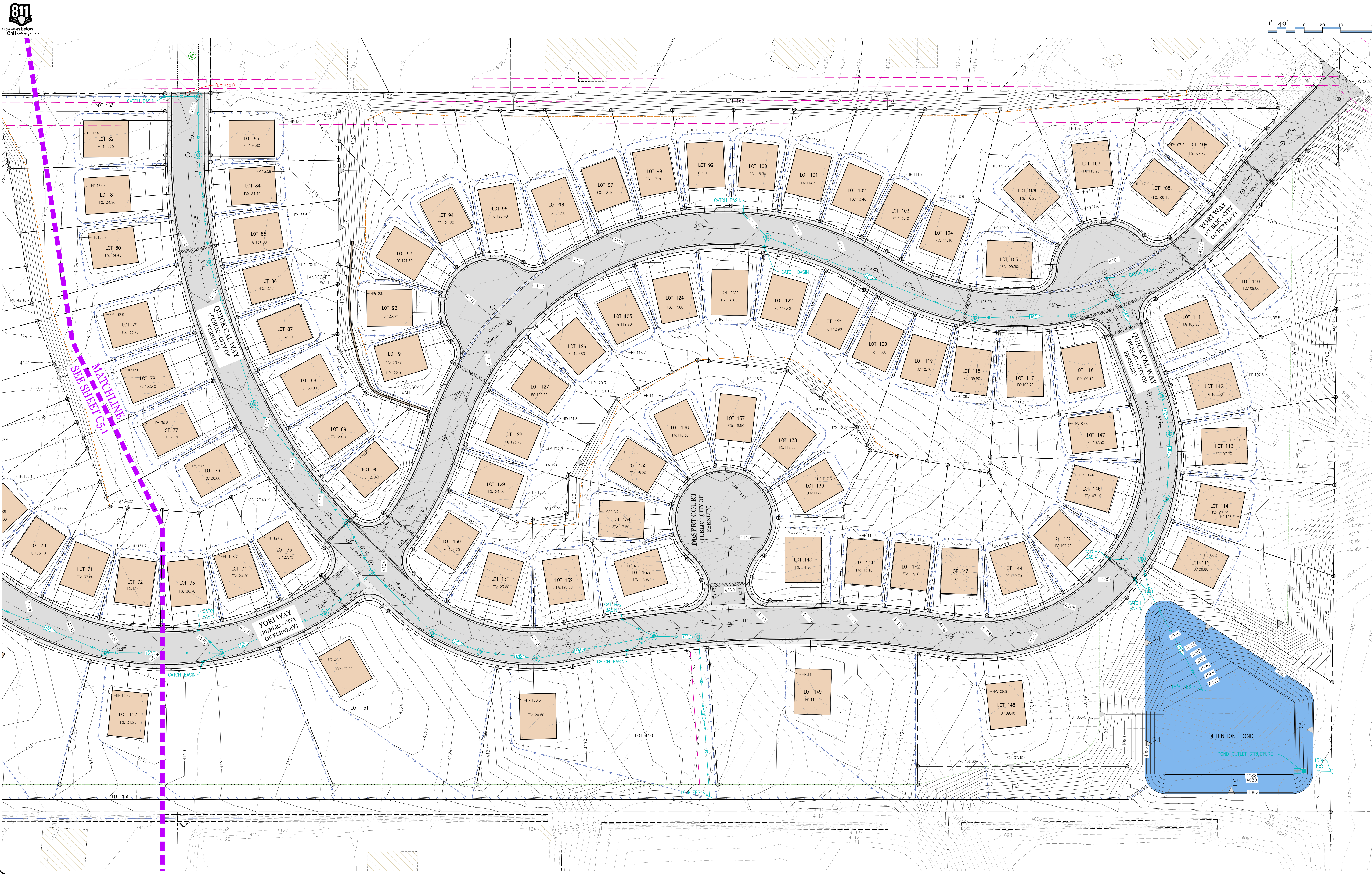
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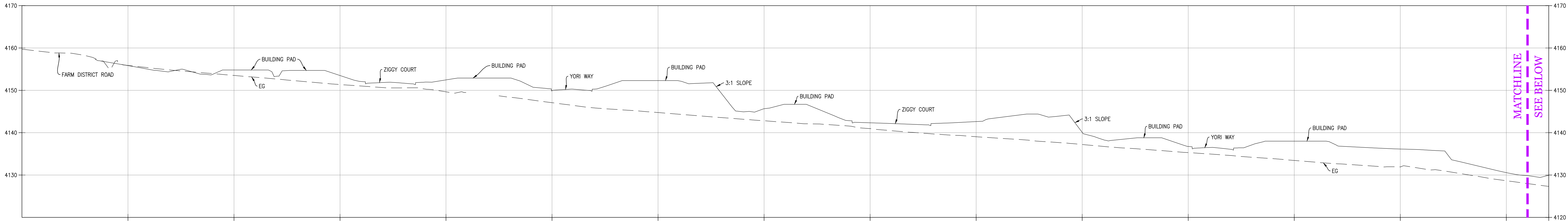
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PROFESSIONAL ENGINEER - STATE OF NEVADA
MICHAEL W. VICKS
Exp. 6/30/2026
CIVIL
No. 21025
June 12, 2024

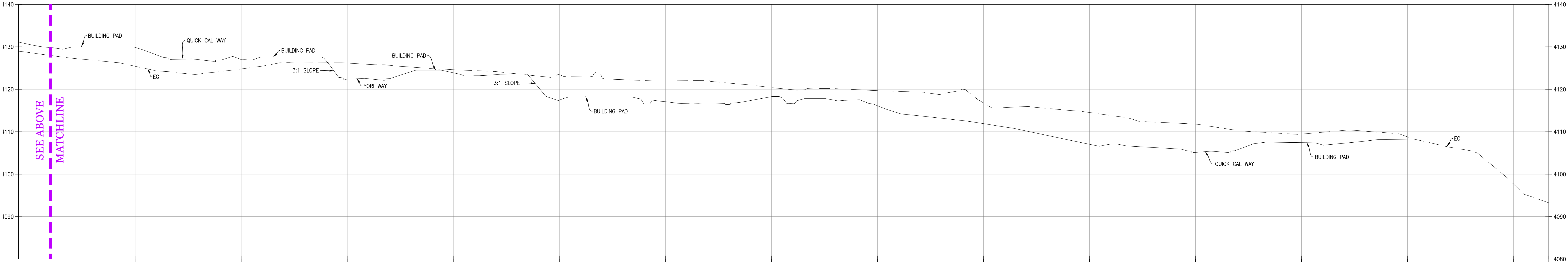
8 of 10

C5.2

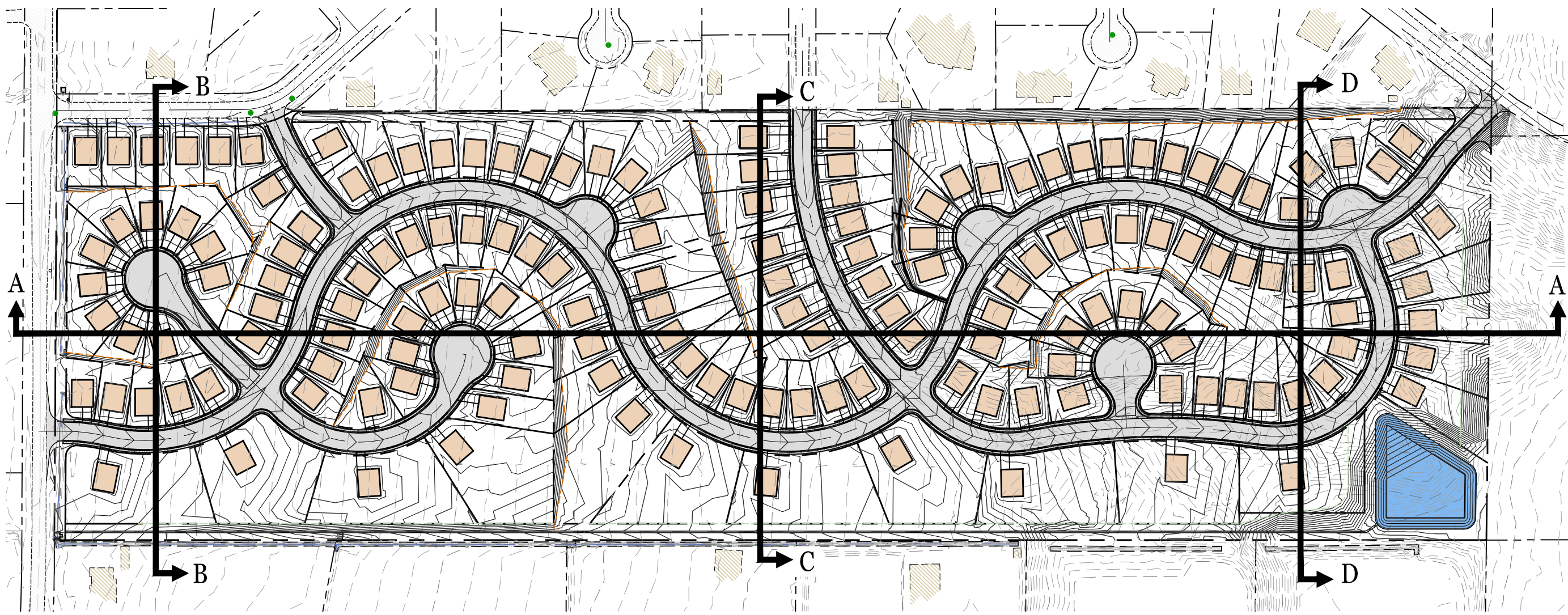




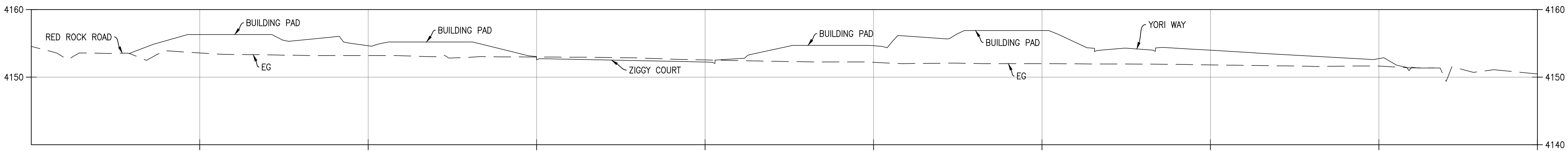
A-A
HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: 1"=10'



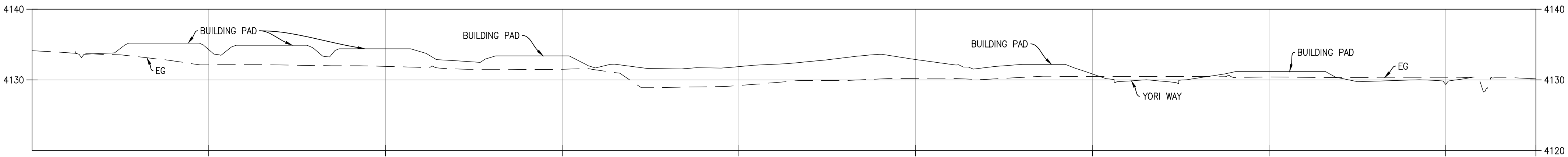
A-A
HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: 1"=10'



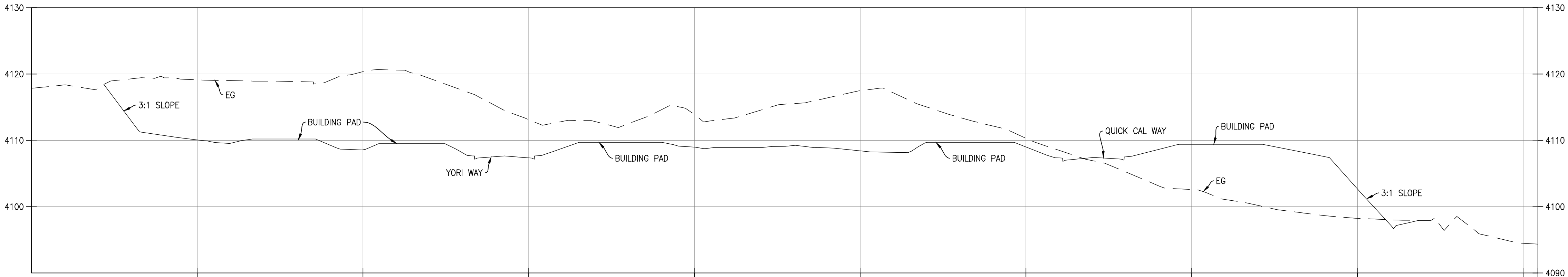
OVERALL SITE PLAN
SCALE: 1"=200'



B-B
HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: 1"=10'



C-C
HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: 1"=10'



D-D
HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: 1"=10'

1"=40'
1"=10'



Yori Single Family

Cross Sections

3240 Farm District Road
APN: 021-343-20
City of Fernley, Nevada
Project # 23-052
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C5.3

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YORI SUBDIVISION SINGLE-FAMILY RESIDENTIAL DEVELOPMENT

LYON COUNTY, NEVADA

APN: 021-343-20

Prepared for:
KLS Planning and Design
John Krmpotic
201 W. Liberty Street, Suite 300
Reno, NV 89501

Prepared by:
Kimley»Horn

May 2024
192466000
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TRAFFIC IMPACT STUDY

FOR

**YORI SUBDIVISION SINGLE-FAMILY
RESIDENTIAL DEVELOPMENT**

Prepared for:

KLS Planning and Design

John Krmpotic

201 W. Liberty Street, Suite 300

Reno, NV 89501



Prepared by:

Kimley-Horn and Associates, Inc.

7900 Rancharrah Parkway

Suite 100

Reno, Nevada 89511

(775) 787-7552

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192466000

EXECUTIVE SUMMARY

The purpose of this traffic study is to identify traffic generation characteristics of a proposed single-family residential development, identify potential traffic related impacts on the surrounding street network, and develop mitigation measures required for identified impacts.

The proposed Yori Subdivision Single-Family Residential Development is to be generally located east of Red Rock Road between US Highway 50 Alternate (US-50 Alt.) and Farm District Road (SR 828) on approximately 47.53 acres within APN 021-343-20 in Lyon County, Nevada. Upon completion, the buildout of the proposed development is anticipated to consist of 160 single-family residential lots.

Regional access to the single-family residential development is expected to be provided via US-50 Alt. and Interstate 80 (I-80). Primary access to the project site is anticipated to be from Red Rock Road and Farm District Road (SR 828). Direct access to the single-family residential development is planned to be provided by one (1) existing intersection (Red Rock Road and Quick Cal Way), two (2) full access drives (Project Access A and Project Access B) located on Red Rock Road, one (1) left-in/right-in/right-out only access drive (Project Access C) located on Farm District Road (SR 828).

As a part of this study the following seven (7) intersections were analyzed:

1. US-95 Alt./US-50 Alt./Farm District Road (SR 828)
2. US-50 Alt. and Red Rock Road
3. Red Rock Road and Project Access A (Full Access)
4. Red Rock Road and Quick Cal Way
5. Red Rock Road and Project Access B (Full Access)
6. Farm District Road (SR 828) and Red Rock Road
7. Farm District Road (SR 828) and Project Access C (Left-in/Right-in/Right-Out Only)

The scope of services is included in **Appendix A**. The study area intersections and project access drive are shown in **Figure E-1**.

Full buildout of the development is expected to generate approximately 1,510 daily weekday driveway trips, with 112 of these trips occurring during the morning peak hour and 150 trips occurring during the evening peak hour.

The proposed development traffic is anticipated to generate traffic volumes resulting in the following recommendations:

- The following modifications should be made to Farm District Road (SR 828) and Project Access C (#7):
 - The developer is recommended to space Project Access C at least 606 feet from Red Rock Road to stay within minor deviation standards as defined in the NDOT [Access Management System and Standards](#).
 - The eastbound left turn lane should be designed to accommodate a maximum 95th percentile queue length of 25 feet (in addition to deceleration length per NDOT standards). To preserve access to existing properties located along the south side of Farm District Road (SR 828), it is recommended that the developer install a Two-Way Left Turn Lane (TWLTL) between Project Access C and Red Rock Road.

- The developer is recommended to install an R1-1 “STOP” sign with appropriate pavement markings for the egressing access drives onto Red Rock Road (two drives) and Farm District Road (SR 828).
- The NDOT should perform an Intersection Control Evaluation (ICE) on the intersection of US-95 Alt./US-50 Alt./Farm District Road (SR 828) (#1). Based on Table 4, the LOS at the intersection does not fall below acceptable LOS as a result of this project. The ICE may recommend signalization or a multi-lane roundabout which could improve LOS at this intersection for 2046 Background conditions.
- All on-site and off-site signing and striping improvements should be incorporated into the Civil Drawings and conform to the current Manual on Uniform Traffic Control Devices (MUTCD), as applicable.
- The project is not anticipated to have significant impacts to the key study intersections and the surrounding street network.

Study Area Intersections

1. US-95 Alt/US-50 Alt/Farm District Road
2. US-50 Alternate and Red Rock Road
3. Red Rock Road and Project Access A
4. Red Rock Road and Quick Cal Way
5. Red Rock Road and Project Access B
6. Farm District Road and Red Rock Road
7. Farm District Road and Project Access C



Legend

- # Study Area K
- X Project Access

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1. INTRODUCTION

Kimley-Horn and Associates, Inc. has been retained by KLS Planning and Design to prepare a traffic impact study for a single-family residential development. The purpose of this traffic impact study is to identify traffic generation characteristics of the proposed development, identify potential traffic related impacts on the local street system, and develop mitigation measures required for the identified impacts.

The proposed Yori Subdivision Single-Family Residential Development is to be generally located east of Red Rock Road between US Highway 50 Alternate (US-50 Alt.) and Farm District Road (SR 828) on approximately 47.53 acres within APN 021-343-20 in Lyon County, Nevada. Upon completion, the buildout of the proposed development is anticipated to consist of 160 single-family residential houses. A site plan for the proposed development is included in **Appendix B**. The location of the project site with respect to the City of Fernley is shown on **Figure 1**.

Regional access to the single-family residential development is expected to be provided via US-50 Alt. and Interstate 80 (I-80). Primary access to the project site is anticipated to be from Red Rock Road and Farm District Road (SR 828). Direct access to the single-family residential development is planned to be provided by one (1) existing intersection (Red Rock Road and Quick Cal Way), two (2) full access drives (Project Access A and Project Access B) located on Red Rock Road, one (1) left-in/right-in/right-out only access drive (Project Access C) located on Farm District Road (SR 828).



Figure 1

2. EXISTING CONDITIONS

This section of the report details existing conditions near the project site.

2.1. Study Area Intersections

As a part of this study the following seven (7) intersections were analyzed:

1. US-95 Alt./US-50 Alt./Farm District Road (SR 828)
2. US-50 Alt. and Red Rock Road
3. Red Rock Road and Project Access A (Full Access)
4. Red Rock Road and Quick Cal Way
5. Red Rock Road and Project Access B (Full Access)
6. Farm District Road (SR 828) and Red Rock Road
7. Farm District Road (SR 828) and Project Access C (Left-in/Right-in/Right-Out Only)

2.2. Existing Land Uses

The location for the proposed single-family residential development is currently undeveloped. The area surrounding the project site is composed primarily of residential land uses and undeveloped land zoned for commercial use. The location of the project site and study area intersections are shown on **Figure 2**.

2.3. Existing Lane Configurations and Control

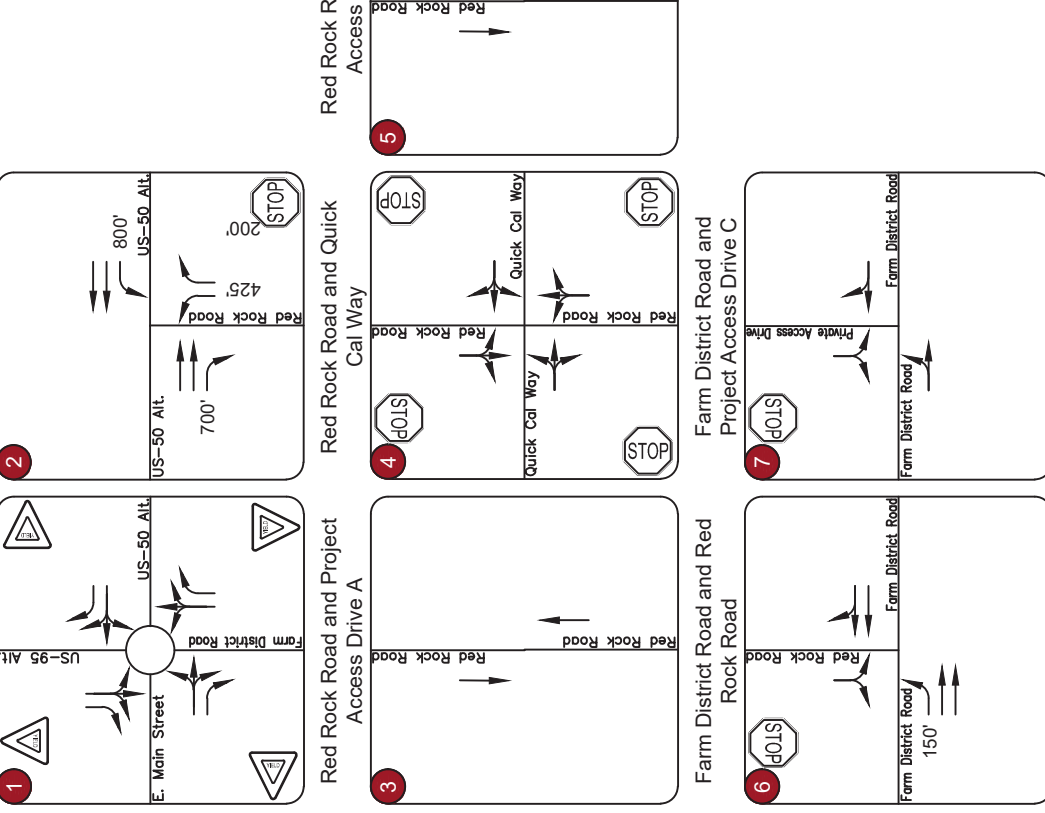
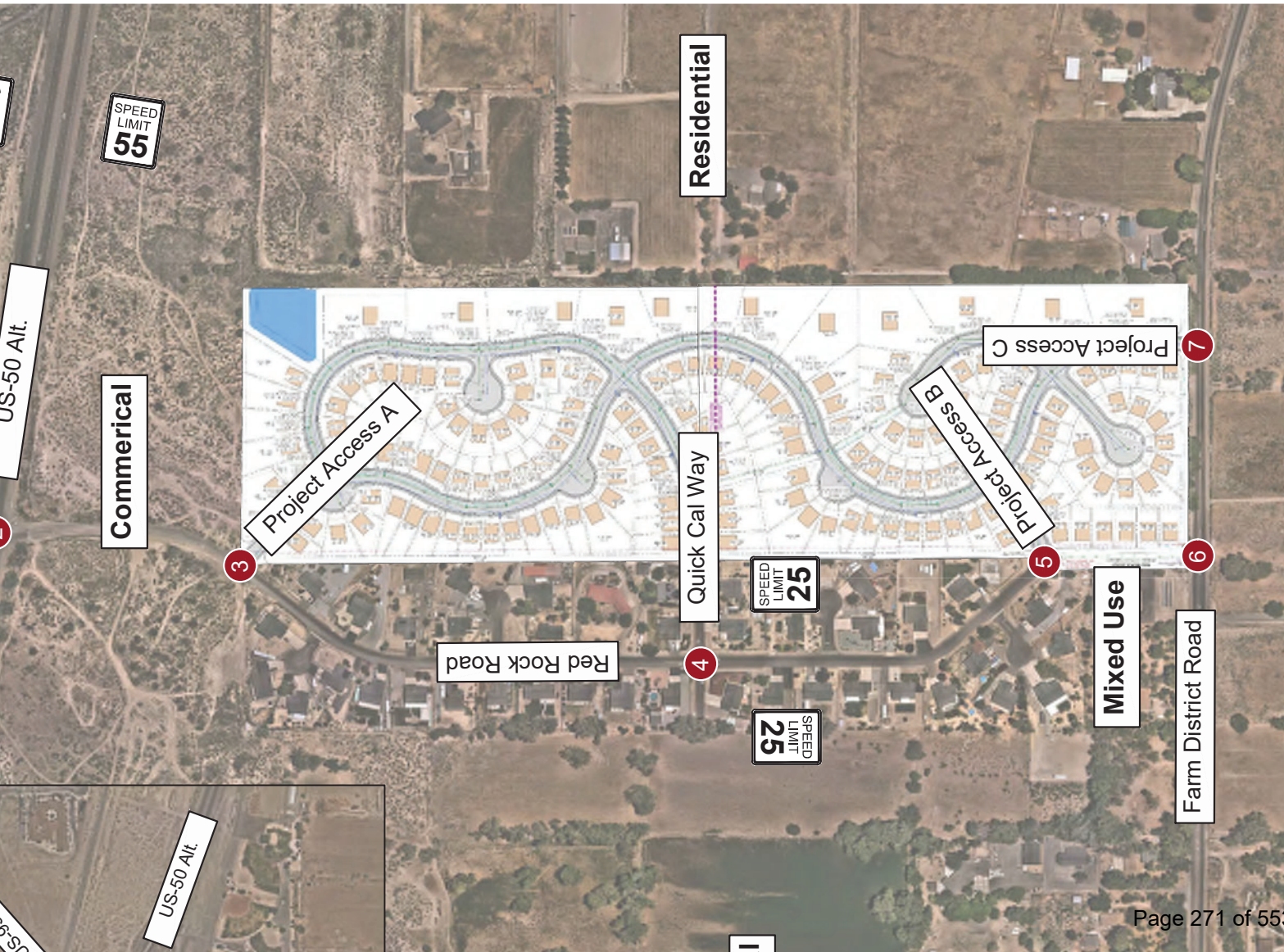
Regional access to the single-family residential development is expected to be provided via US-50 Alt. and I-80. Primary access to the project site is anticipated to be from Red Rock Road and Farm District Road (SR 828). Direct access to the single-family residential development is planned to be provided by one (1) existing intersection (Red Rock Road and Quick Cal Way), two (2) full access drives (Project Access A and Project Access B) located on Red Rock Road, and one (1) left-in/right-in/right-out only access drive (Project Access C) located on Farm District Road (SR 828). Existing lane configuration and traffic control at the time of this study are illustrated in **Figure 2**.

2.4. Existing Turning Movements

Existing AM and PM peak hour turning movement data was field counted, as summarized in **Table 1** for the study area intersections identified in **Section 2.1**. Count data sheets are provided in **Appendix C**. Turning movement volumes at Red Rock Road and Project Access A (#3) and Farm District Road and Project Access C (#7) were estimated using data collected at adjacent intersections. **Figure 3** illustrates the 2023 existing peak hour traffic volumes.

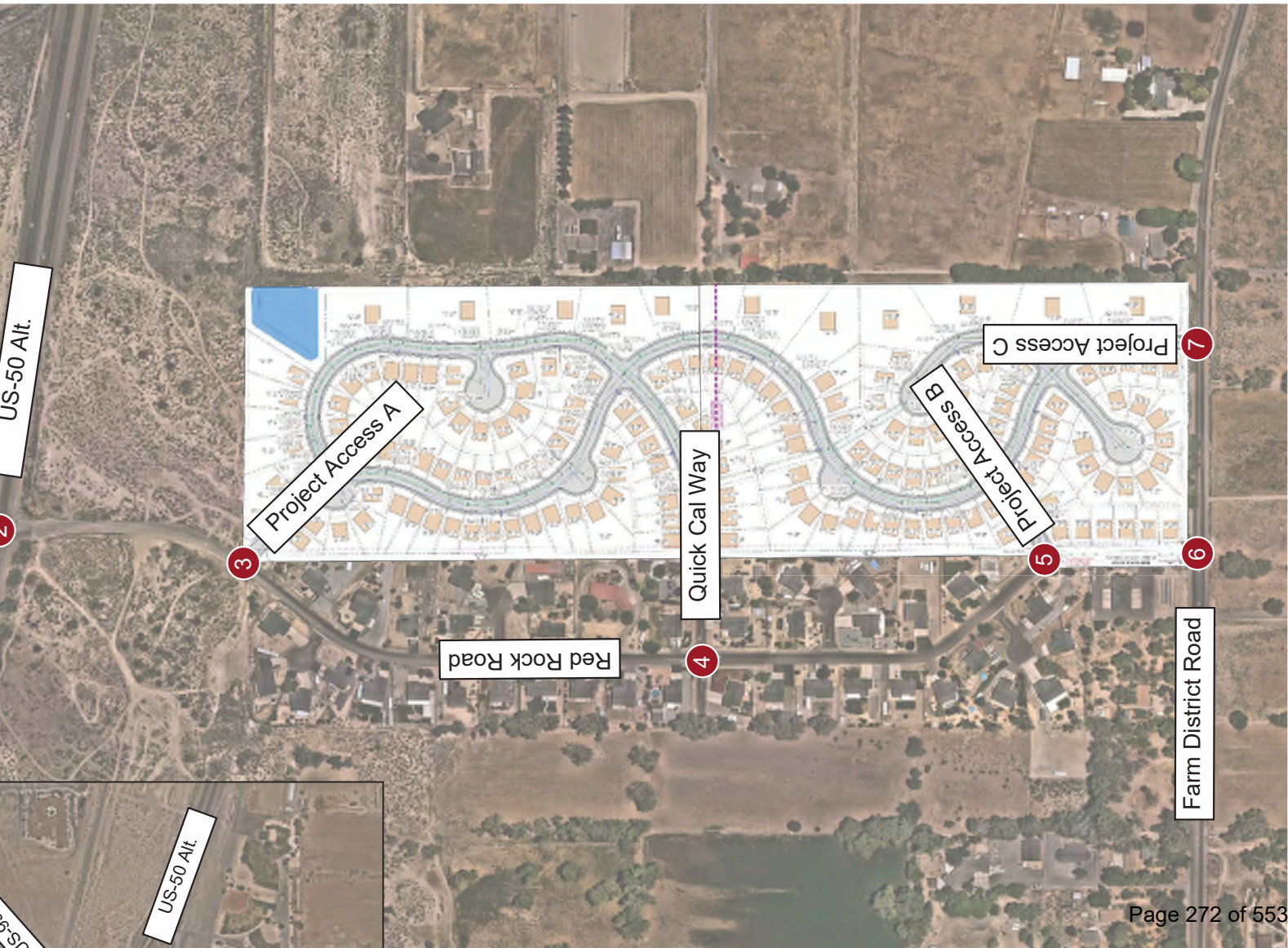
Table 1 – Peak Hour Turning Movement Count Data

Intersection	Count Date
US-95 Alt./US-50 Alt./Farm District Road (SR 828) (#1)	Thursday, April 25, 2024
US-50 Alt. and Red Rock Road (#2)	Wednesday, April 24, 2024
Red Rock Road and Quick Cal Way (#4)	Wednesday, April 24, 2024
Red Rock Road and Project Access B (#5)	Thursday, April 25, 2024
Farm District Road (SR 828) and Red Rock Road (#6)	Wednesday, April 24, 2024



Legend

- # Study Area
- X Project Access
- SPEED LIMIT 25 Roadway
- STOP Stop Control
- Yield Control
- Existing Roadway



1 199(525) 133(216) 240(599) 533(515) 240(213) 31(28) 188(190) 142(128) 54(302) 97(45) 344(304) 62(87) US-95 Alt./US-50 Alt./Farm District Road Peak Hours 7:00 AM - 8:00 AM (4:30 PM - 5:30 PM)	2 487(529) 0(3) 381(639) 11(19) 41(18) 2(2) US-50 Alt. and Red Rock Road Peak Hours 7:00 AM - 8:00 AM (4:15 PM - 5:15 PM)	3 11(22) 43(20) 43(20) Red Rock Road and Project Access A Peak Hours 8:00 AM - 9:00 AM (4:15 PM - 5:15 PM)	4 14(23) 1(0) 38(18) Red Rock Road and Quick Cal Way Peak Hours 8:00 AM - 9:00 AM (4:15 PM - 5:15 PM)	5 19(24) Red Rock Road and Peak Hours 7:00 AM - 8:00 AM (4:15 PM - 5:15 PM)	6 6(9) 8(6) 20(9) 114(96) 9(15) 126(128) Farm District Road and Red Rock Road Peak Hours 8:00 AM - 9:00 AM (4:15 PM - 5:15 PM)	7 134(105) 134(134) Farm District Road and Project Access C Peak Hours 8:00 AM - 9:00 AM (4:15 PM - 5:15 PM)
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Legend

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Study Area

X

Project Area

← xx (xx)

AM(PM)

3. FUTURE CONDITIONS

This section of the report details the conditions that are expected in the future at the time the proposed project is anticipated to be completed.

3.1. Background Lane Configuration and Control

Expected speed limits, lane configuration, and traffic control for background conditions in 2026 and 2046 are expected to remain the same as existing speed limits, lane configuration, and traffic control as illustrated in **Figure 2**.

3.2. Buildout Background Traffic

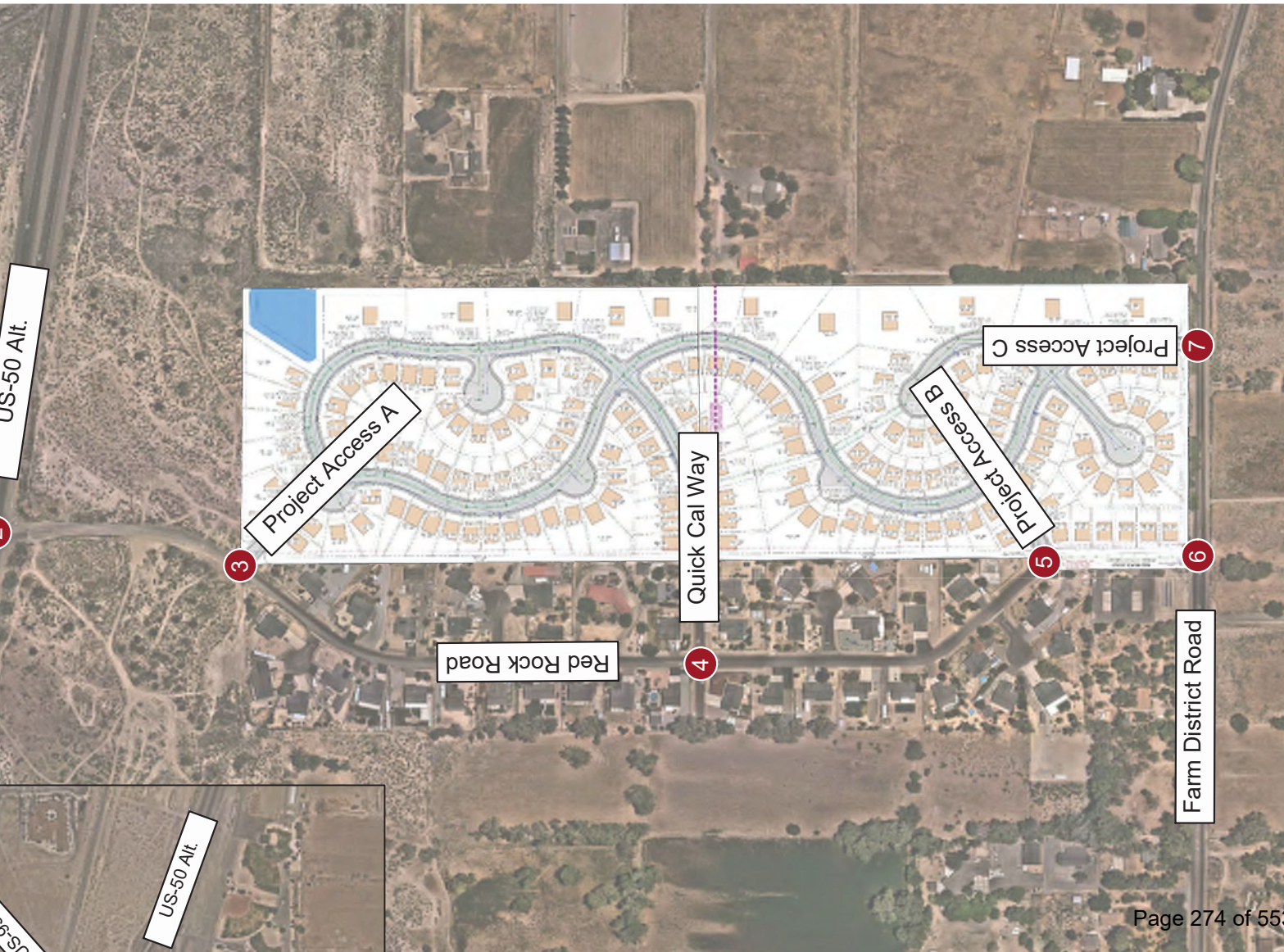
To accurately determine the impact of project traffic, it is necessary to establish future baseline traffic volumes along roadways in the vicinity of the proposed development. An annual growth rate of approximately two percent (2%) was obtained from the evaluation of six (6) Nevada Department of Transportation (NDOT) count stations (0190034, 0190057, 0190035, 0190033, 0190032, and 0190036). Three (3) count stations were located at the intersection of US-95 Alt./US-50 Alt./Farm District Road (SR 828) (0190033, 0190032, and 0190036), one (1) count station was located on US-50 Alt. 0.80 miles west of Red Rock Road (0190034), one (1) count station was located on Red Rock Road (0190057), and one (1) count station was located on Farm District Road (SR 828) 560 feet west of US-50 Alt. (0190035). Growth rate calculations are provided in **Appendix D**.

Existing 2024 peak hour traffic volumes were grown for ten years at two percent (2%) to obtain future background peak hour traffic volumes in 2026 when the project is anticipated to be fully completed. The 2026 and 2046 background peak hour traffic volumes at the key intersections are illustrated in **Figure 4** and **Figure 5**, respectively.

3.3. Background Plus Project Lane Configuration and Control

Regional access to the single-family residential development is expected to be provided via US-50 Alt. and I-80. Primary access to the project site is anticipated to be from Red Rock Road and Farm District Road (SR 828). Direct access to the single-family residential development is planned to be provided by one (1) existing intersection (Red Rock Road and Quick Cal Way), two (2) full access drives (Project Access A and Project Access B) located on Red Rock Road, and one (1) left-in/right-in/right-out only access drive (Project Access C) located on Farm District Road (SR 828).

The 2026 and 2046 background plus project speed limits, lane configuration, and traffic control in 2026 are illustrated in **Figure 4**.



1 Peak Hours 7:00 AM - 8:00 AM (4:30 PM - 5:30 PM) 207(546) → 138(225) → 250(623) → 196(198) → 148(133) → 56(314) →	1 Peak Hours 7:00 AM - 8:00 AM (4:30 PM - 5:30 PM) 101(47) → 358(316) → 65(91) → 196(198) → 148(133) → 56(314) →	2 Peak Hours 7:00 AM - 8:00 AM (4:15 PM - 5:15 PM) 43(19) → 396(665) → 11(20) →	3 Peak Hours 7:00 AM - 8:00 AM (4:15 PM - 5:15 PM) 11(23) → 45(21) →	4 Peak Hours 7:00 AM - 8:00 AM (4:15 PM - 5:15 PM) 15(24) → 1(0) →	5 Peak 7:00 AM - (4:15 PM - 20(25) →
1 Peak Hours 8:00 AM - 9:00 AM (4:15 PM - 5:15 PM) 207(546) → 138(225) → 250(623) → 196(198) → 148(133) → 56(314) →	1 Peak Hours 8:00 AM - 9:00 AM (4:15 PM - 5:15 PM) 101(47) → 358(316) → 65(91) → 196(198) → 148(133) → 56(314) →	2 Peak Hours 8:00 AM - 9:00 AM (4:15 PM - 5:15 PM) 43(19) → 396(665) → 11(20) →	3 Peak Hours 8:00 AM - 9:00 AM (4:15 PM - 5:15 PM) 11(23) → 45(21) →	4 Peak Hours 8:00 AM - 9:00 AM (4:15 PM - 5:15 PM) 15(24) → 1(0) →	5 Peak 8:00 AM - (4:15 PM - 20(25) →
1 Peak Hours 8:00 AM - 9:00 AM (4:15 PM - 5:15 PM) 207(546) → 138(225) → 250(623) → 196(198) → 148(133) → 56(314) →	1 Peak Hours 8:00 AM - 9:00 AM (4:15 PM - 5:15 PM) 101(47) → 358(316) → 65(91) → 196(198) → 148(133) → 56(314) →	2 Peak Hours 8:00 AM - 9:00 AM (4:15 PM - 5:15 PM) 43(19) → 396(665) → 11(20) →	3 Peak Hours 8:00 AM - 9:00 AM (4:15 PM - 5:15 PM) 11(23) → 45(21) →	4 Peak Hours 8:00 AM - 9:00 AM (4:15 PM - 5:15 PM) 15(24) → 1(0) →	5 Peak 8:00 AM - (4:15 PM - 20(25) →
1 Peak Hours 8:00 AM - 9:00 AM (4:15 PM - 5:15 PM) 207(546) → 138(225) → 250(623) → 196(198) → 148(133) → 56(314) →	1 Peak Hours 8:00 AM - 9:00 AM (4:15 PM - 5:15 PM) 101(47) → 358(316) → 65(91) → 196(198) → 148(133) → 56(314) →	2 Peak Hours 8:00 AM - 9:00 AM (4:15 PM - 5:15 PM) 43(19) → 396(665) → 11(20) →	3 Peak Hours 8:00 AM - 9:00 AM (4:15 PM - 5:15 PM) 11(23) → 45(21) →	4 Peak Hours 8:00 AM - 9:00 AM (4:15 PM - 5:15 PM) 15(24) → 1(0) →	5 Peak 8:00 AM - (4:15 PM - 20(25) →
1 Peak Hours 8:00 AM - 9:00 AM (4:15 PM - 5:15 PM) 207(546) → 138(225) → 250(623) → 196(198) → 148(133) → 56(314) →	1 Peak Hours 8:00 AM - 9:00 AM (4:15 PM - 5:15 PM) 101(47) → 358(316) → 65(91) → 196(198) → 148(133) → 56(314) →	2 Peak Hours 8:00 AM - 9:00 AM (4:15 PM - 5:15 PM) 43(19) → 396(665) → 11(20) →	3 Peak Hours 8:00 AM - 9:00 AM (4:15 PM - 5:15 PM) 11(23) → 45(21) →	4 Peak Hours 8:00 AM - 9:00 AM (4:15 PM - 5:15 PM) 15(24) → 1(0) →	5 Peak 8:00 AM - (4:15 PM - 20(25) →

Study A

Project

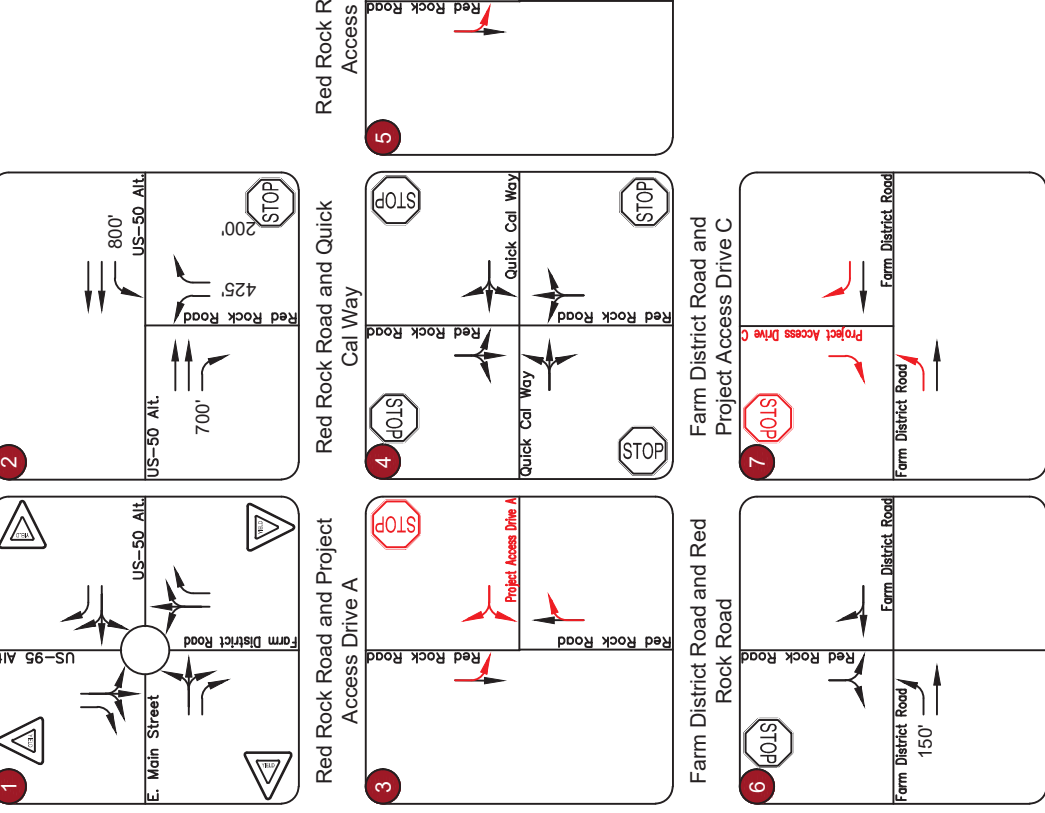
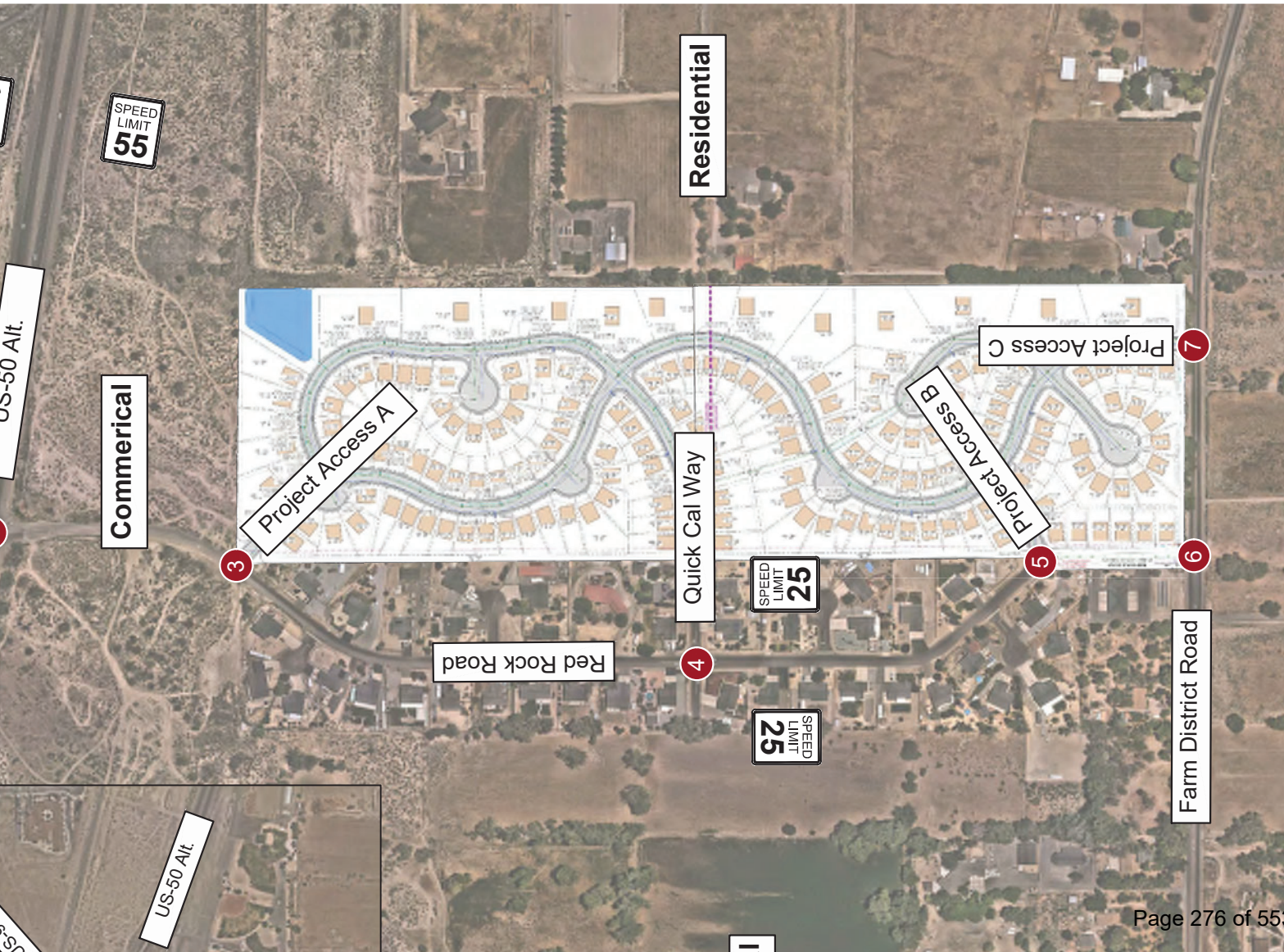
AM(PM

#

X

← xx (xx)

Legend



3.4. Project Trip Generation

For purposes of estimating the number of new trips that are anticipated to be generated by the proposed residential development, the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition (ITE Land Use Codes 210 – Single-Family Detached Housing) was used. The ITE Trip Generation Manual informational report is a standard reference used by jurisdictions throughout the country and is based on actual trip generation studies performed at numerous locations in areas of various populations.

The project is expected to consist of 160 single-family residential lots. **Table 2** summarizes the estimated project trips. The proposed development is anticipated to generate 112 AM and 150 PM peak hour trips. Calculations are provided in **Appendix E**.

Table 2 – Trip Generation

ITE Code	Description	Dwelling Units	AM Peak Hour			PM Peak Hour			Total Daily Trips
			In	Out	Total	In	Out	Total	
210	Single-Family Detached Housing	160	29	83	112	95	55	150	1,510

Source: ITE Trip Generation Manual, 11th Edition

3.5. Project Trip Distribution

The study area street network characteristics, including the existing traffic patterns, expected street network, and access to regional facilities (US-50 Alt. and I-80) were used to determine the distribution of site generated traffic. The directional distribution of traffic is a means to quantify the percentage of site-generated traffic that approaches the site from a given direction and departs the site in the same or different direction. **Figure 7** shows the trip distribution at the study area intersections and the project access drives.

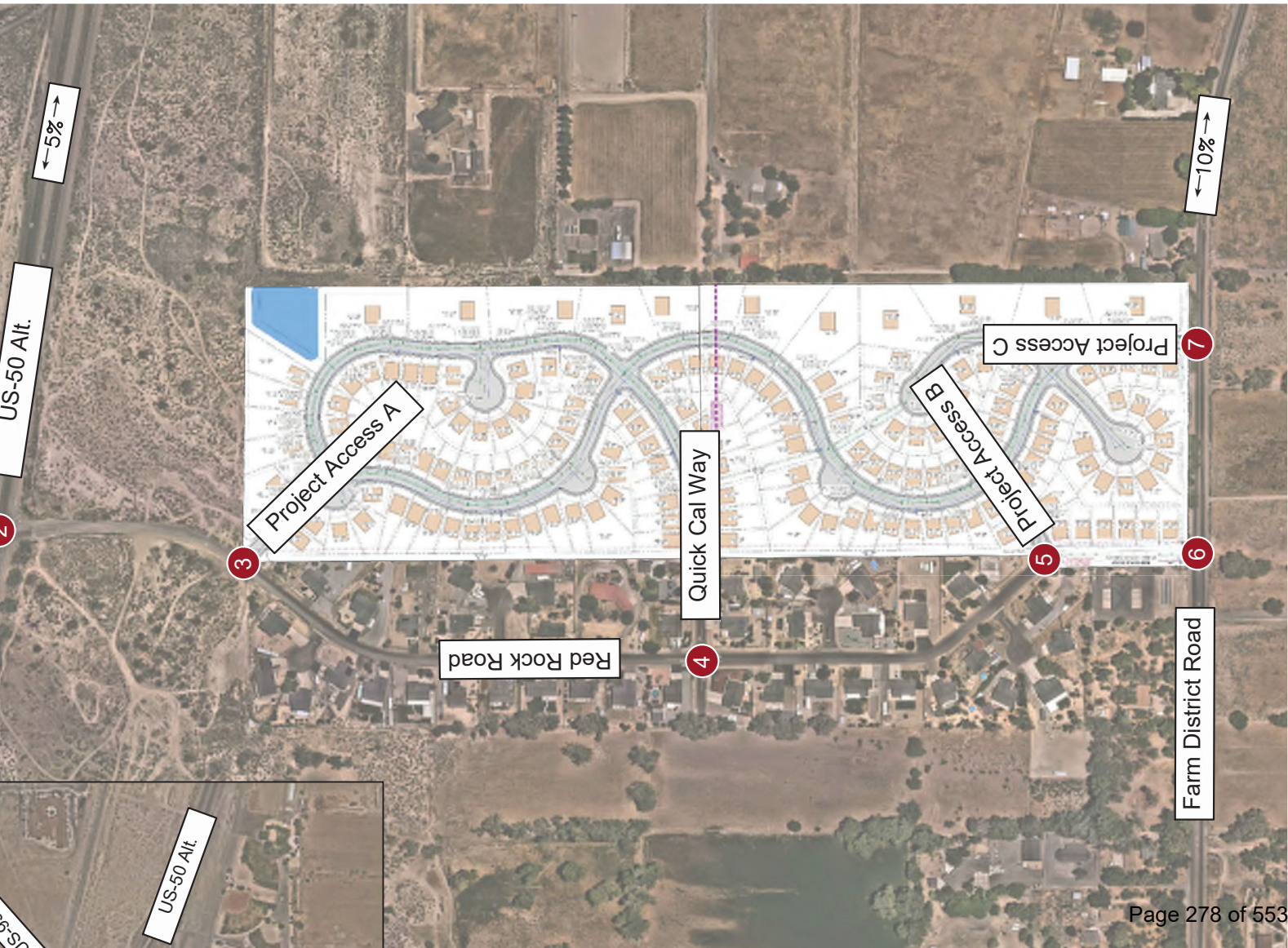
3.6. Traffic Assignment

Project traffic assignment was obtained by applying the project trip distribution to the estimated traffic generation of the development shown in **Table 2**. Project traffic assignment for the proposed development is shown in **Figure 8**.

The entering and exiting trips at the project access drive are rounded to the nearest whole number when assigned. Therefore, the number of trips assigned to the project driveway may differ slightly from the total trip generation.

3.7. Background Plus Project Traffic Volumes

The project generated traffic volumes in **Figure 8** were added to the background traffic volumes in **Figure 4** and **Figure 5** to represent estimated traffic conditions for full project development in 2026. The 2026 background plus project peak hour traffic volumes for the study area intersections and the project access drive are illustrated in **Figure 9** and **Figure 10**.



1 US-95 Alt./US-50 Alt./Farm District Road Peak Hours 7:00 AM - 8:00 AM (4:30 PM - 5:30 PM) ← 10%(0%) → ← 40%(0%) → ← 0%(10%) → ← 0%(10%) → ← 0%(40%) → ← 0%(10%) →	2 US-50 Alt. and Red Rock Road Peak Hours 7:00 AM - 8:00 AM (4:15 PM - 5:15 PM) ← 55%(0%) → ← 0%(5%) → ← 0%(5%) →	3 Red Rock Road and Project Access A Peak Hours 8:00 AM - 9:00 AM (4:15 PM - 5:15 PM) ← 55%(0%) → ← 5%(0%) → ← 0%(55%) → ← 0%(5%) →	4 Red Rock Road and Quick Cal Way Peak Hours 8:00 AM - 9:00 AM (4:15 PM - 5:15 PM) ← 5%(0%) → ← 0%(5%) → ← 0%(5%) →
5 Red Rock Road and Farm District Road Peak Hours 7:00 AM - 8:00 AM (4:15 PM - 5:15 PM) ← 15%(0%) → ← 15%(0%) → ← 0%(15%) → ← 10%(0%) →	6 Farm District Road and Red Rock Road Peak Hours 8:00 AM - 9:00 AM (4:15 PM - 5:15 PM) ← 15%(0%) → ← 15%(0%) → ← 0%(15%) → ← 0%(15%) →	7 Farm District Road and Project Access C Peak Hours 8:00 AM - 9:00 AM (4:15 PM - 5:15 PM) ← 15%(0%) → ← 15%(0%) → ← 0%(15%) → ← 10%(0%) →	8 Red Rock Road and Farm District Road Peak Hours 7:00 AM - 8:00 AM (4:15 PM - 5:15 PM) ← 0%(5%) → ← 0%(5%) → ← 55%(0%) →

Legend

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Study Area Key

X

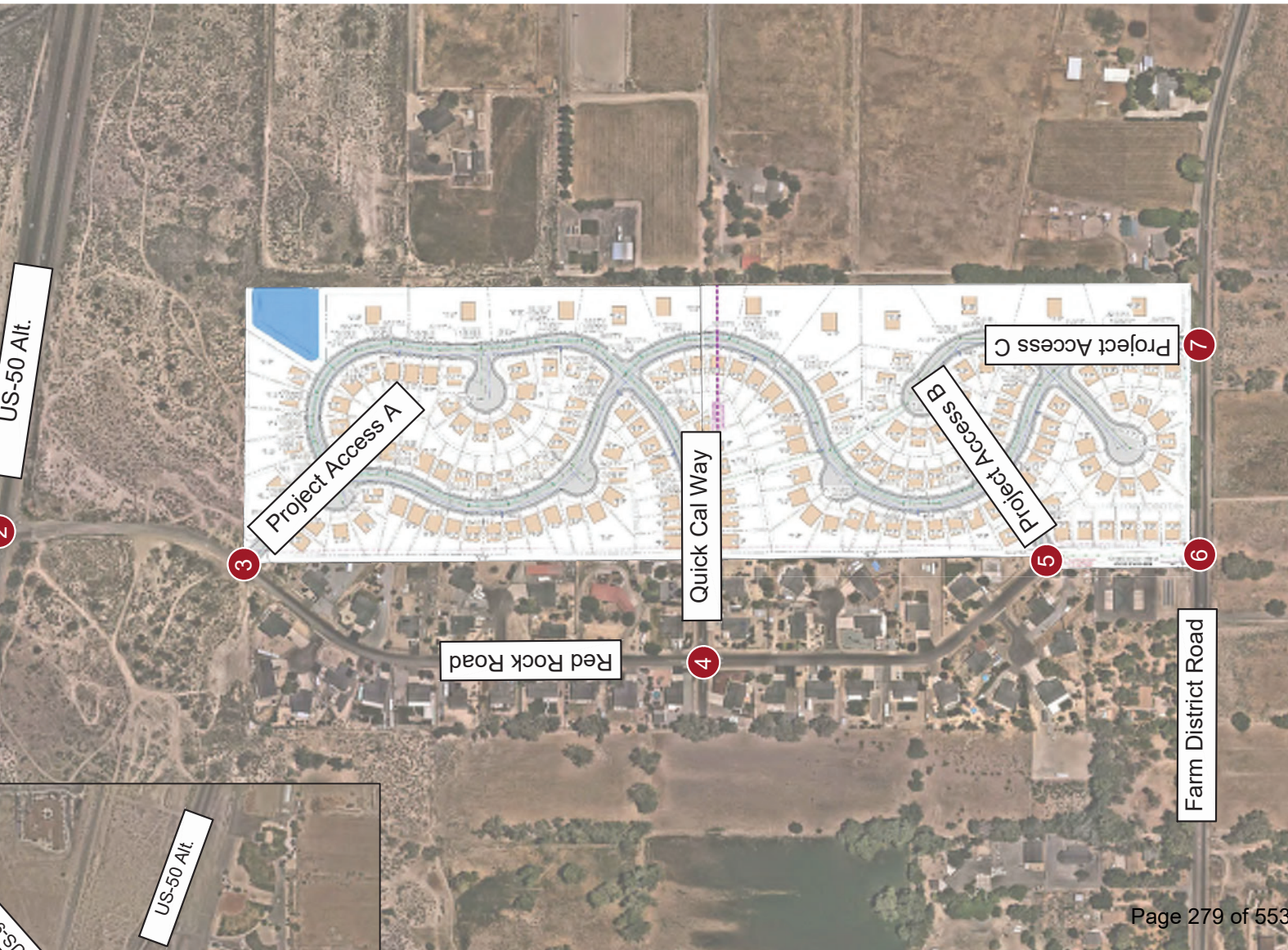
Project Access

← XX%(XX%) →

IN(OUT) Global

← XXX%(XX%) →

IN(OUT) Peak



1 ← 34(22) ← 8(6) ↗ 11(38) ↗ 3(10) ↖ 3(10) ↖ 3(10) ↖ 8(6) ↖ 8(6)	US-50 Alt./US-50 Alt./Farm District Road
2 ↖ 1(5) ↖ 46(30) ↖ 4(3)	US-50 Alt. and Red Rock Road
3 ↖ 1(5) ↖ 15(52) ↖ 46(30) ↖ 4(3)	Peak Hours 7:00 AM - 8:00 AM (4:30 PM - 5:30 PM) Red Rock Road and Project Access A
4 ↖ 1(5) ↖ 4(3) ↖ 4(3) ↖ 1(5)	Peak Hours 7:00 AM - 8:00 AM (4:15 PM - 5:15 PM) Red Rock Road and Quick Cal Way
6 ↖ 13(8) ↖ 8(6) ↖ 4(14) ↖ 4(14)	Peak Hours 8:00 AM - 9:00 AM (4:15 PM - 5:15 PM) Farm District Road and Red Rock Road
7 ↖ 13(8) ↖ 3(10) ↖ 4(14)	Peak Hours 8:00 AM - 9:00 AM (4:15 PM - 5:15 PM) Farm District Road and Project Access C

5 ↖ 4(3)	Peak 7:005 AM (4:15 PM - Red Rock Road and
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Legend

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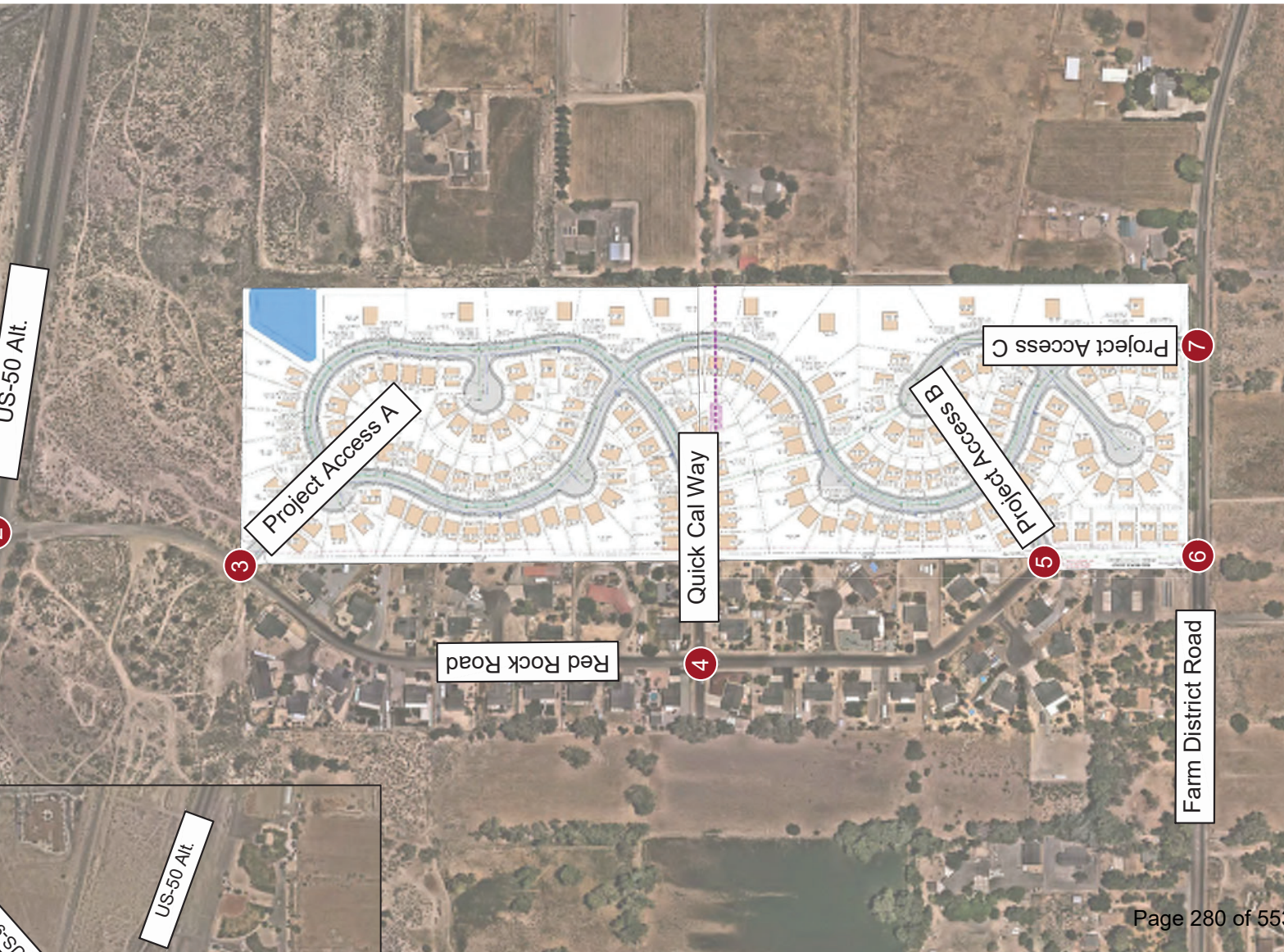
Study Area

X

Project

← xx (xx)

AM(PM)



1 US-95 Alt./US-50 Alt./Farm District Road Peak Hours 7:00 AM - 8:00 AM (4:30 PM - 5:30 PM) ← 589(558) ← 258(228) ← 32(29) → 109(53) → 366(322) → 65(91) ↔ 196(198) ↔ 151(143) ↔ 59(324) 207(546) ↔ 141(235) ↔ 261(661)	2 US-50 Alt. and Red Rock Road Peak Hours 7:00 AM - 8:00 AM (4:15 PM - 5:15 PM) ← 507(550) ← 1(8) → 89(49) → 396(665) → 26(72) ↔ 6(5)
3 Red Rock Road and Project Access A Peak Hours 7:00 AM - 8:00 AM (4:15 PM - 5:15 PM) ← 46(30) ↔ 49(24) ↔ 15(52) ↔ 12(28)	4 Red Rock Road and Quick Cal Way Peak Hours 7:00 AM - 8:00 AM (4:15 PM - 5:15 PM) ← 5(3) ↔ 1(5) ↔ 15(24) ↔ 40(19) ↔ 1(5)
6 Farm District Road and Red Rock Road Peak Hours 8:00 AM - 9:00 AM (4:15 PM - 5:15 PM) ← 21(9) ← 132(108) ↔ 13(30) ↔ 135(147) ↔ 16(12) ↔ 19(17)	7 Farm District Road and Project Access C Peak Hours 8:00 AM - 9:00 AM (4:15 PM - 5:15 PM) ← 3(10) ← 139(109) ↔ 4(14) ↔ 139(139) ↔ 13(8)
5 Red Rock Road and Peak 7:005 AM (4:15 PM - ↔ 24(28)	

Legend

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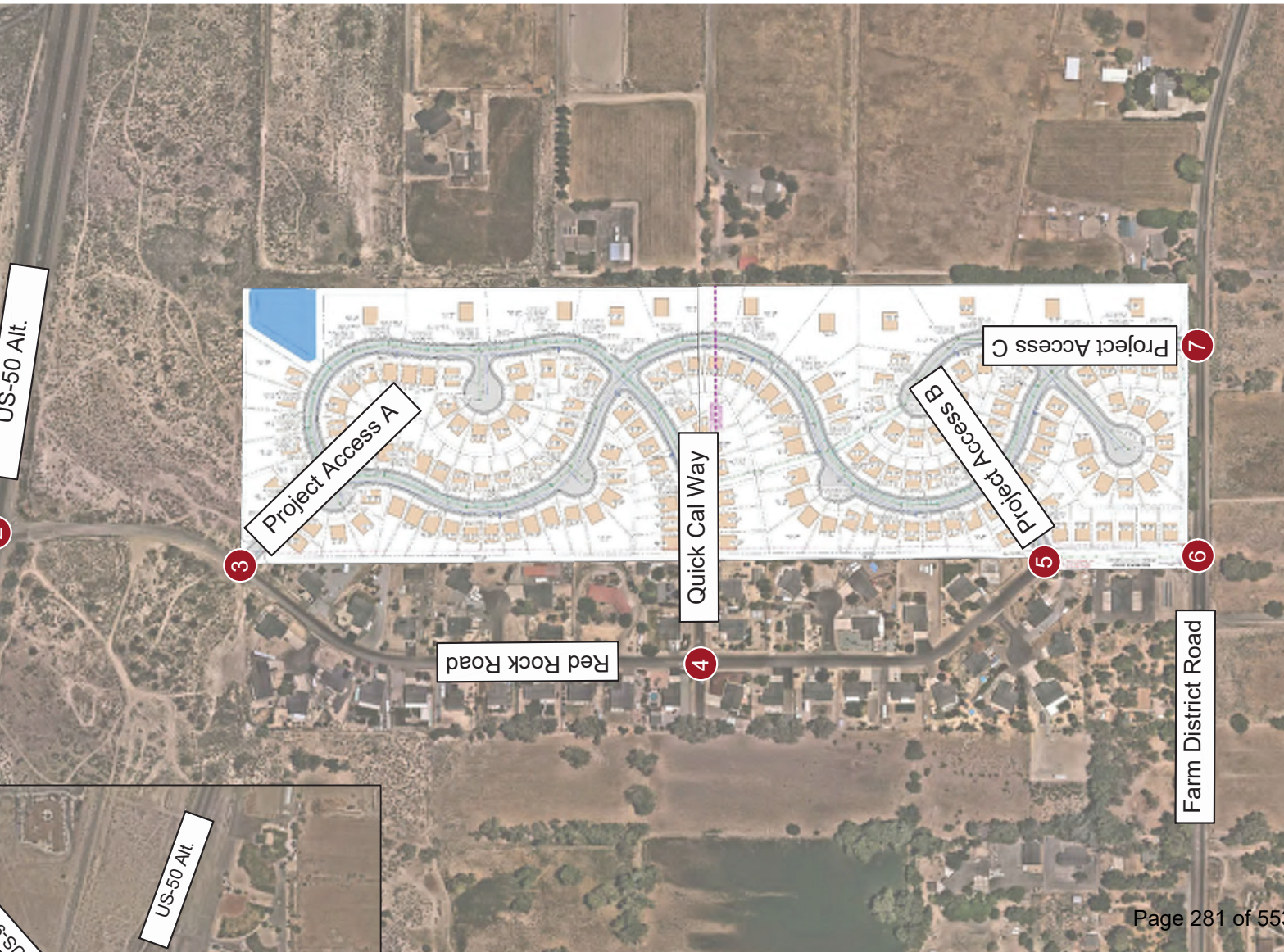
Study A

X

Project

← xx (xx)

AM(PM



1 US-95 Alt./US-50 Alt./Farm District Road Peak Hours 7:00 AM - 8:00 AM (4:30 PM - 5:30 PM) ← 858(818) ← 379(335) ← 48(44) → 291(294) → 223(208) → 86(477) ↔ 382(964) ↔ 209(344) ↔ 308(812) ↔ 158(76) ↔ 540(476) ↔ 96(135)	2 US-50 Alt. and Red Rock Road Peak Hours 7:00 AM - 8:00 AM (4:15 PM - 5:15 PM) ← 753(818) ← 1(10) → 589(988) → 32(81) ↔ 7(6) ↔ 109(58)
3 Red Rock Road and Project Access A Peak Hours 7:00 AM - 8:00 AM (4:30 PM - 5:30 PM) ↔ 15(52) ↔ 18(39) ↔ 46(30) ↔ 70(34)	4 Red Rock Road and Quick Cal Way Peak Hours 7:00 AM - 8:00 AM (4:15 PM - 5:15 PM) ↔ 1(5) ↔ 22(36) ↔ 6(3) ↔ 4(3) ↔ 59(28) ↔ 1(5)
6 Farm District Road and Red Rock Road Peak Hours 8:00 AM - 9:00 AM (4:15 PM - 5:15 PM) ↔ 22(22) ↔ 20(15) ↔ 31(14) ↔ 189(156) ↔ 18(37) ↔ 199(212)	7 Farm District Road and Project Access C Peak Hours 8:00 AM - 9:00 AM (4:15 PM - 5:15 PM) ↔ 13(8) ↔ 3(10) ↔ 207(162) ↔ 4(14) ↔ 207(207)
5 Red Rock Road and Peak 7:005 AM (4:15 PM - ↔ 33(40)	5 Red Rock Road and Peak 7:005 AM (4:15 PM - ↔ 33(40)

Legend

#

Study A

X

Project

← xx (xx)

AM(PM

4. TRAFFIC IMPACT ANALYSIS

Traffic analyses for 2024 existing, 2026 background, 2026 background plus project, 2046 background, and 2046 background plus project scenarios were conducted at the identified key intersections to determine possible existing and/or future deficiencies in the street network.

4.1. Analysis Methodology

Study area intersections were analyzed based on average total delay analysis for signalized and unsignalized intersections presented in the Transportation Research Board's "Highway Capacity Manual" 6th Edition (HCM 6). Under the unsignalized analysis, the level of service (LOS) for a two-way stop-controlled intersection is determined by the computed or measured control delay and is defined for each minor movement. LOS for a two-way stop-controlled intersection is not defined for the intersection as a whole. LOS for a signalized or four-way stop controlled intersection is defined for the intersection as a whole. **Table 3** shows the definition of LOS for intersections.

Table 3 – Level of Service Definitions

Level of Service	Signalized Intersection Average Total Delay (sec/veh)	Unsignalized Intersection Average Total Delay (sec/veh)
A	≤10	≤10
B	>10 and ≤20	>10 and ≤15
C	>20 and ≤35	>15 and ≤25
D	>35 and ≤55	>25 and ≤35
E	>55 and ≤80	>35 and ≤50
F	>80	>50

Definitions provided from the Highway Capacity Manual, 6th Edition, Transportation Research Board.

Synchro 12 was used to analyze the study area intersections and driveways for LOS. Synchro is an interactive computer program that enables planners and engineers to forecast the traffic impacts of new developments; conduct area-wide traffic forecasting studies; test different mitigation measures and compare different traffic scenarios. Synchro 12 utilizes HCM 7 methodology to analyze intersection delay and LOS.

The roundabout operations were analyzed using SIDRA 9.1 with Highway Capacity Manual (HCM) 6 capacity model. Similar to Synchro 12, SIDRA 9.1 allows the forecasting of the traffic impacts of new developments but is designed specifically for analyzing roundabouts.

4.2. Key Intersection Operational Analysis

Calculations for the LOS at the key intersections are provided in **Appendix F**. The 2024 existing, 2026 background, and 2046 background scenarios are based on the lane geometry and intersection control shown in **Figure 2**. The 2026 background plus project and 2046 background plus project analyses are based on the lane geometry and intersection control shown in **Figure 4**. The results of the Key Intersection LOS Analysis for existing and buildout year conditions are summarized in **Table 4**. Volume-to-capacity ratio (v/c) is shown for the roundabout at US-95 Alt./US-50 Alt./Farm District Road (SR 828) (#1).

Table 4 – Key Intersection Peak Hour LOS Analysis

Intersection	2024 Existing		2026 Background		2026 Background Plus Project		2046 Background		2046 Background Plus Project	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)
US-95 Alt./US-50 Alt./Farm District Road (SR 828) (#1)										
Roundabout	11.4 (B)	15.2 (C)	13.6 (B)	18.5 (C)	15.6 (C)	17.1 (C)				
Volume-to-Capacity Ratio (v/c)	0.829	0.855	0.890	0.920	0.936	0.990				
Signalization	-	-	-	-	-	-				
US-50 Alt. and Red Rock Road (#2)¹										
Two-Way Stop Control										
Northbound Left	11.9 (B)	15.1 (C)	12.2 (B)	15.6 (C)	12.9 (B)	17.0 (C)	15.6 (C)	24.5 (C)	17.4 (C)	29.2 (D)
Westbound Left	0 (A)	9.1 (A)	0 (A)	9.3 (A)	8.4 (A)	9.5 (A)	10.4 (B)	12.4 (B)	9.1 (A)	11.2 (B)
Red Rock Road and Quick Cal Way (#4)										
All-Way Stop Control	7.2 (A)	7.1 (A)	7.2 (A)	7.1 (A)	7.1 (A)	7.1 (A)	7.2 (A)	7.2 (A)	7.3 (A)	7.2 (A)
Farm District Road (SR 828) and Red Rock Road (#6)										
Two-Way Stop Control										
Southbound Left	10.3 (B)	9.4 (A)	10.4 (B)	9.4 (A)	10.4 (B)	9.6 (A)	11.9 (B)	10.1 (B)	11.0 (B)	10.2 (B)
Eastbound Left	7.7 (A)	7.5 (A)	7.7 (A)	7.5 (A)	7.7 (A)	7.5 (A)	7.9 (A)	7.6 (A)	8.0 (A)	7.7 (A)

*** Delay Exceeds 300 seconds.

¹Westbound through volumes were set to zero to model the existing High-T intersection layout.

The key intersections are expected to operate at acceptable under 2024 existing, 2026 and 2046 background, and 2026 and 2046 background plus project scenarios with exception for the following:

- US-95 Alt./US-50 Alt./Farm District Road (SR 828) (#1) in the 2046 background and 2046 background plus project AM and PM scenarios.

It should be noted that the Fernley Transportation Master Plan (2020) identified the need for improvements at US-95 Alt./US-50 Alt./Farm District Road (#1) in 2025. Considerations should be made to redesign the roundabout for improved operations, capacity, and safety. It is possible to achieve acceptable LOS in the 2046 background and background plus project AM and PM scenarios via a two-lane roundabout with two (2) entry lanes at the north, south, and west legs.

4.3. Project Access Operational Analysis

The 2046 background plus project analysis is based on the lane configuration and intersection control shown in **Figure 4**. The analysis is based on traffic volumes shown in **Figure 9** and **Figure 10**. Calculations are located in **Appendix G**. The results of the LOS analysis for the project access drive onto Red Rock Road and Farm District Road (SR 828) are presented in **Table 5**. The proposed project access drives are expected to operate at acceptable LOS in 2026 background plus project and 2046 background plus project AM and PM peak hours.

Table 5 – Project Access Drive Peak Hour LOS Analysis

Intersection	2026 Background Plus Project		2046 Background Plus Project	
	AM	PM	AM	PM
	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)
Red Rock Road and Project Access A (Full Access) (#3) Two-Way Stop Control Southbound Left Westbound Left	7.3 (A) 8.7 (A)	7.4 (A) 8.5 (A)	7.4 (A) 8.8 (A)	7.4 (A) 8.6 (A)
Red Rock Road and Project Access B (Full Access) (#5) Two-Way Stop Control Southbound Left Westbound Left	0.0 (A) 9.0 (A)	0.0 (A) 9.1 (A)	0.0 (A) 9.2 (A)	0.0 (A) 9.3 (A)
Farm District Road (SR 828) and Project Access C (Left-in/Right-in/Right-Out Only) (#7) Two-Way Stop Control Eastbound Left	7.6 (A)	7.5 (A)	7.7 (A)	7.6 (A)

5. NDOT ACCESS SPACING STANDARDS REVIEW

This section of the report analyzes project access compliance with the NDOT spacing standards set forth by the NDOT Access Management System and Standards 2017 Edition.

5.1. Spacing Standards Analysis

Chapter 4: Design Standards and Specifications of the Nevada Department of Transportation (NDOT) Access Management System and Standards (AMSS) 2017 Edition details design and construction standards and specifications for access to sites via major and minor roadways. Table 4-1 of the NDOT AMSS specifies access spacing standards based on roadway class (i.e., interstate freeways, expressways, arterials, and collectors), posted speed limits, and access scenarios (i.e., full access or limited access). The functional classification for Farm District Road (SR 828) was determined according to a map on the NDOT website, available [here](#). Table 4-1 is summarized in **Table 6**.

Table 6– Summary of NDOT Access Spacing Standards for Project Site

Roadway Class	Location/Posted Speed Limit	Full Access		Limited Access	
		Signalized Intersection Uniform Spacing	Unsignalized Intersection/Roundabout Minimum Spacing	Left-in/Right-in/Right-out only Minimum Spacing	Right-in/Right-out only Minimum Spacing
4: Minor Arterials	≥ 40 mph	2,640'	1,320'	660'	350' – 600'

Source: Nevada Department of Transportation Access Management System and Standards, 2017 Edition

Farm District Road (SR 828) is functionally classified as “Minor Arterials” with a posted speed limit of 45 miles per hour adjacent to the project site. According to **Table 6**, a minimum of 660 feet is required between the centerline of any proposed left-in/right-in/right-out only driveway and any adjacent intersection. The proposed left-in/right-in/right-out only project access onto Farm District Road (SR 828) (Project Access C) is 606 feet from Red Rock Road. Because the proposed project access deviates less than 10 percent (10%) from the standards set in the NDOT Access Management System and Standards 2017 Edition, a minor deviation is requested for access onto Farm District Road (SR 828).

Upon project buildout, deceleration lanes will be required for the eastbound to northbound left turn movement (ingress) and the westbound to northbound right turn movement (ingress). This is based on traffic volumes shown in **Figure 9** and **Figure 10**, as well as the site plan provided in **Appendix B**. The standards in Table 4-13 and 4-17 of the NDOT Access Management System and Standards 2017 Edition, summarized in **Table 7** and **Table 8**, describe the conditions for a left-turn lane and right-turn lane warrant at unsignalized intersections on two-lane roadways in rural areas, respectively.

Table 7 – Summary of Table 4-13: Left-Turn Lane Warrants at Unsignalized Intersections, Two-Lane Roadways in Rural Areas

Turning Volume (veh.)	Minimum Directional Volume in the Through Lane (veh.)
	45 to 55 mph
10	80
14 ¹	64 ²
15	60

Source: Nevada Department of Transportation *Access Management System and Standards*, 2017 Edition.

¹ Value obtained from eastbound left turn movement in at Intersection #7 in **Figure 9** and **Figure 10**.

² Value interpolated based on information from Table 4-13 of the NDOT AMSS.

Table 8 – Summary of Table 4-17: Right-Turn Lane Warrants at Unsignalized Intersections, Two-Lane Roadways in Rural Areas

Turning Volume (veh.)	Minimum Directional Volume in the Through Lane (veh.)
	45 to 55 mph
10	170

Source: Nevada Department of Transportation *Access Management System and Standards*, 2017 Edition.

¹ Value obtained from westbound right turn movement in at Intersection #7 in **Figure 9** and **Figure 10**.

² Value interpolated based on information from Table 4-17 of the NDOT AMSS.

The largest turning movement volume between the AM and PM scenarios were used to determine if turn warrants are met for the project access driveway. Per **Table 9**, the traffic conditions meet the requirement for the left-turn lane warrant based on turning movement counts shown in **Figure 9** and **Figure 10**, respectively.

Table 9 – Summary of Auxiliary Deceleration Lane Warrants

Warrant	Turning Volume (veh.)	Minimum Directional Volume in the Through Lane (veh.)	Directional Volume in the Through Lane	Warrant Met?
Left-Turn Lane Warrant	14	64	139 veh. – 2026 Background Plus Project PM	Yes
Right-Turn Lane Warrant	10	170	162 veh. – 2046 Background Plus Project PM	No

Based on the Comprehensive Master Plan (2018) and Fernley Transportation Master Plan (2020), the left-turn lane should be implemented as a two-way turn lane between Red Rock Road and Project Access Drive C. This is to maintain a consistent roadway cross-section along Farm District Road (SR 828) and preserve access to properties along the south side of SR 828.

6. CRASH DATA SUMMARY

Crash data was requested for four (4) existing study intersection from the NDOT Safety Engineering Division for the most recent five-year period (January 1, 2016 – December 31, 2020). The crash data for the study intersections is summarized in **Table 10**. The intersection crashes include those crashes on both the major and minor streets of the key intersections during the five-year analysis period.

Table 10 – Crash Data Summary

Intersection Name	Total Crashes	Property Damage Only	Injury	Fatal
US-95 Alt./US-50 Alt./Farm District Road (SR 828) (#1)	35	30 (86%)	5 (14%)	0 (0%)
US-50 Alt. and Red Rock Road (#2)	1	1 (100%)	0 (0%)	0 (0%)
Red Rock Road and Quick Cal Way (#4)	0	0	0	0
Farm District Road (SR 828) and Red Rock Road (#6)	0	0	0	0
Total	36	31 (86%)	5 (14%)	0 (0%)

A total of 36 crashes were recorded at the four (4) intersections in the most recent five-year period. Those 36 crashes resulted in 5 injury crashes (14%) and 31 property damage only crashes (86%). There were no fatal crashes reported at the four (4) study intersections in the most recent five-year period.

7. CONCLUSIONS/RECOMMENDATIONS

The proposed development traffic is anticipated to generate traffic volumes resulting in the following recommendations:

- The following modifications should be made to Farm District Road (SR 828) and Project Access C (#7):
 - The developer is recommended to space Project Access C at least 606 feet from Red Rock Road to stay within minor deviation standards as defined in the NDOT Access Management System and Standards.
 - The eastbound left turn lane should be designed to accommodate a maximum 95th percentile queue length of 25 feet (in addition to deceleration length per NDOT standards). To preserve access to existing properties located along the south side of Farm District Road (SR 828), it is recommended that the developer install a Two-Way Left Turn Lane (TWLTL) between Project Access C and Red Rock Road.
- The developer is recommended to install an R1-1 “STOP” sign with appropriate pavement markings for the egressing access drives onto Red Rock Road (two drives) and Farm District Road (SR 828).
- The NDOT should perform an Intersection Control Evaluation (ICE) on the intersection of US-95 Alt./US-50 Alt./Farm District Road (SR 828) (#1). Based on Table 4, the LOS at the intersection does not fall below acceptable LOS as a result of this project. The ICE may recommend signalization or a multi-lane roundabout which could improve LOS at this intersection for 2046 Background conditions.
- All on-site and off-site signing and striping improvements should be incorporated into the Civil Drawings and conform to the current Manual on Uniform Traffic Control Devices (MUTCD), as applicable.
- The project is not anticipated to have significant impacts to the key study intersections and the surrounding street network.



CITY OF FERNLEY

Planning Commission AGENDA REPORT

Meeting Date: December 11, 2024

REPORT TO: Fernley Planning Commission

REPORT FROM: Michele Rambo, Planning Director

FINANCIAL IMPACT:

Yes: No: X

CURRENTLY BUDGETED:

Yes: No: X

FUND/ACCOUNT:

N/A

ACTION REQUESTED: Motion
Resolution

AGENDA ITEM:

(For possible action) Discussion and possible action regarding a Master Plan Amendment (MPA 24004) and Zoning Map Amendment (ZMA 24005), a request by Wood Rodgers, Inc on behalf of Douglass Development LLC for 1) changing the Master Plan land use designation from RR (Rural Residential) to C (Commercial); and 2) changing the zoning designation from RR1 (Rural Residential; 1-acre minimum) to C2 (General Commercial) on a +/-0.85 acre lot located at 840 Woodchuck Drive (APN 021-343-20).

AGENDA ITEM BRIEF:

An application to change the land use designations of a +/-0.85 acre lot from residential to commercial.

RECOMMENDED MOTION:

I move to approve Joint Resolution #24-020 and recommend that the City Council 1) certify Joint Resolution #24-020 changing the Master Plan designation from Rural Residential to Commercial, and approve Bill #359 and ZMA 24005 changing the zoning from RR1 to C2 on the property located at 840 Woodchuck Drive based on the Findings and Conditions of Approval included in the staff report.

BUSINESS IMPACT (per NRS Chapter 237):

A Business Impact Statement is not required because this is not a rule (term excludes vehicles by which legislative powers are exercised under NRS Chapters 271, 278, 278A, or 278B).

See attached report for background, analysis, alternatives.

ALTERNATIVES:

Denial:

Based on information received in written materials and at the public hearings on this matter, I move to recommend City Council deny the proposed zoning map and master plan amendments for the subject property on Woodchuck Drive. I cannot recommend approval of applications MPA24005 and ZMA24005 because I have determined the proposed changes are detrimental to the public's health, safety, and general welfare and am unable to make the following required findings:

"I am unable to make finding _____ as it relates to _____. " *(Repeat for each applicable finding.)*

Note

Though no further language has been provided, all motions consistent with City of Fernley Planning Commission bylaws and rules of procedure are appropriate.

BACKGROUND:

Past approvals and site utilization.

The project site is located at 840 Woodchuck Drive, a ±0.85-acre parcel located on the north side of Woodchuck Drive, ±160 feet west of Old Highway 40, ±425 feet west of West Main Street/SR-427, and ±2,100 feet south of the West Main Street/SR-427 entrance to Interstate-80, in the City of Fernley, NV. A lot line adjustment was approved and recorded in February 1982 and establishes the current perimeter of the site, regular in shape and containing approximately .85 acres (218' frontage; 170' depth). A 30' wide strip was taken from the subject property and incorporated into the adjacent Commercially zoned property on the corner of Woodchuck Drive and Old Hwy 40.

A public records search found no business licenses or building permits on file. While the Lyon County Assessor lists the property as a single family dwelling, the project site is developed with one ±1,400 square feet (sf) metal shop building with a bathroom and an office, on a concrete slab with one roll top garage-style door and an ±225 sf wooden awning attached to the eastern side of the structure. Kitchen facilities are not included. ±35,400 sf of the project site is undeveloped permeable surface.

Application materials indicate a historic commercial utilization of the site, including vehicle, motorcycle repair, and outdoor storage services. Aerial photos ranging from 2004-present suggest non-residential activity in recent years, while no official documentation could be provided.

Redevelopment desired by the land use change

It should be noted that although a site plan has been submitted as requested, this request does not include any improvements to the project site at this time. Any future improvements will need to be in compliance with the General Commercial (C2) zoning designation and any other applicable design standards including residential adjacency standards upon approval of the MPA and ZMA. As stated in the project description submitted with the original application, the C2 zoning standards require design standards to help mitigate when commercial use is adjacent to a residential development.

This is to reduce impacts on adjacent residential development including, but not limited to, buffers from property lines, provisions for light trespass, noise, location of off-street parking, window placement to ensure residential privacy, and building height. Therefore, any future improvements to the project site would be required to adhere to all applicable residential adjacency standards.

Existing Conditions



Surrounding Uses

NORTH and EAST – To the north and east of the project site is an L-shaped ± 1.89 -acre developed parcel with a land use designation of Suburban Mixed Use (SMU) and a zoning designation of C2. The site is occupied by three commercial structures: 1) a $\pm 3,750$ sf commercial structure occupied by Quinteros Tires and Wheels; 2) a $\pm 2,400$ sf commercial structure occupied by Collected Bargains, an antique and second hand store; and 3) a $\pm 10,000$ sf structure occupied by Fernley Self Storage, All 4 Paws dog grooming, and additional space for Collected Bargains antique and second hand store (Refer to the Aerial Map in Section 2 of the submittal packet). Beyond the neighboring parcel to the north/east, all parcels to the north and east for at least half a mile in each direction are zoned commercial or mixed use. The current use has always intended to be included in this commercial area and has been operating as part of this commercial area for many years.

SOUTH – Adjacent to the site to the south across Woodchuck Drive are parcels with the land use designation of RR and zoned RR-1 occupied by single family residences on lots greater than one acre (± 1.15 acre to ± 1.41 acre).

WEST – Directly west of the site is a ±1.15-acre residential parcel with a land use designation of RR and a zoning designation of RR-1 developed with a single-family residence.

ANALYSIS

Consistency with the zoning district regulations;

Category a) uses

Table 1: Zoning District Regulations “Uses” Comparison (a)	
C2	RR-1
Life care of continuing care services, hotel, animal services, financial institutions, bar/lounge, grocery store, liquor store, tasting room/brewery, office, tattoo parlor, wedding chapel, building equipment/materials sales, auto and truck repair (light), car wash, gas station, funeral parlor, adult day care, social assistance/welfare, medical offices, park, entertainment/theatre, agriculture production/craftwork, research + development, communications facility, renewable energy, agriculture	Group homes, halfway house, single family dwelling, park, wireless communication tower, renewable energy, agriculture
Home occupation, nursery, school, medical marijuana,	EV Storage, home occupation, animal services, childcare (in home)
Halfway House, multifamily housing, live/work, mobile home park, RV park, pawnbroker, vehicle sales, church, crematorium, childcare facility, college, hospital, gaming/recreational facility, mining, mini-warehouse, outdoor storage, heliport, parking facility, utility (minor)	Church, mining, utility (minor), event center,

Category b) dimensions

Table 2: Zoning District Regulations “Dimensions” Comparison (b)		
	C2	RR-1
Residential (Density)	21-30 du/ac	N/A
Nonresidential (FAR)	N/A	N/A
Site size (min)	6,000 sf	1 acre
Site coverage (max)	N/A	20%
Site width (min)	50'	50'
Front/exterior side	0'	30'
Side	0'	10'
Rear (structures not abutting an alley)	0'	20'
Side or Rear (abutting any residential district)	Building height × 1'	20'
Residential	N/A	35'
Nonresidential	60'	35'

Master Plan Land Use Comparison

RESIDENTIAL LAND USES			
Land Use Category	Uses and Density	Characteristics and Location	Equivalent Zoning Category
RURAL RESIDENTIAL (RR)	Primary Uses: Single family detached residences on lots typically smaller than 20 acres to a minimum size of 1 acre. Other Uses: Parks and open space, public facilities, agricultural operations. Density: 0.2 – 2 du/ac	Intended for land that is not planned to receive services or public infrastructure needed for development. Single-family residences may be clustered in order to preserve open space. Areas of steep slopes, floodplains, and/or potential wetland must be mitigated. Municipal services should be required when lot sizes are below 5 acres. Project designs should incorporate rural development standards Locations are generally adjacent to rural neighborhoods.	RR5 RR1 RR½ PD

NON-RESIDENTIAL LAND USES			
Land Use Category	Uses and Density	Characteristics and Location	Equivalent Zoning Category
COMMERCIAL (C)	Primary Uses: Restaurants, bars, lodging, business/office parks, professional, medical, financial, personal and insurance services Other Uses: Gaming, resort, recreational facilities, manufactured/mobile home parks, recreational vehicle parks. Density: N/A	Large parcels are encouraged to provide access via frontage roads rather than multiple driveways Pedestrian access to adjoining residential use is encouraged No direct access to local streets will be allowed Intended to provide a buffer between residential and major highways Infill and redevelopment is encouraged on vacant or underutilized sites Should be located where existing public facilities have capacity to serve Municipal services are required.	C1 C2 TC PD

APPROVAL CRITERIA

The City of Fernley Master Plan is a legislative planning document with respect to the city's vision, goals, and policies relative to such matters as population, housing, streets, and resource use which is governed by NRS 278.150 to and including NRS 278.250.

Notice is provided by publication and mail as provided by NRS 278.210 and chapter 32.03 of this title.

The adoption of the master plan must be by resolution of the planning commission carried by the affirmative votes of not less than two-thirds of the total membership of the commission. The resolution must refer expressly to the maps, descriptive matter and other matter intended by the commission to constitute the plan or any amendment, addition or extension thereof, and the action taken must be recorded on the map and plan and descriptive matter by the identifying signatures of the secretary and chair of the commission.

Applicant note: Due to the similarity in the required master plan amendment (MPA) findings for approval and the zoning map amendment (ZMA) findings for approval, and to avoid repetitive or duplicative responses, the responses for both the MPA and ZMA findings for approval have been combined.

In order to adopt an amendment to the master plan, the planning commission shall find that a change is justified based on the following:

1. The master plan amendment would implement the goals listed within the City of Fernley Master Plan as listed in the staff report.

The proposed MPA to change the land use designation of the ±0.85-acre subject parcel from RR to C and proposed ZMA to change the zoning district from RR-1 to C2 would help meet several of the goals and policies identified in the City's Master Plan, which are outlined in the "Applicable Master Plan Goals and Policies" section of the submittal materials attached to this report.

The City of Fernley has identified nine community principles to help guide the future prosperity of the community which have helped to shape the specific goals and policies found within the Master Plan. One of the guiding principles is Ensure Compatibility which includes how development fits in with the existing fabric of the community and supports interconnected development. This principle encourages development to be organized in a way to respect existing land uses and future growth opportunities. The proposed MPA is consistent with this guiding principle as it is seeking to align the historic commercial use of the property with the appropriate land use designation and will facilitate future utilization and/or development of the site that is compatible with the neighboring commercial uses.

Allowing the site to be developed for commercial land uses aligns with several goals and action strategies of the Master Plan through encouraging development that is compatible with neighboring land uses on an underutilized site that is adequately served by public services and in close proximity to utility service connections.

Stock Lane Special Planning Area (SPA)

The Master Plan specifically outlines a mapped area called the Stock Lane Special Planning Area (SPA) which includes the subject parcel (Refer to the Stock Lane SPA map in Section 2 of the submittal packet). The project site is along the eastern most boundary of the Stock Lane SPA. The SPA designation acts as an overlay to the underlying land uses and provides special or unique land use considerations pertinent to specific areas. This designation will remain unchanged should the zoning and master plan amendments be approved. Development

within this SPA will remain focused on a low density rural concept. Commercial development is allowed, but new development is encouraged to incorporate rural architectural features to compliment the character of the area.

Finally, the proposed Master Plan Amendment, as conditioned, would further implement Goals LU.1.1, LU 1.2, LU1.3, LU.1.4 and LU.1.5 of the City of Fernley Comprehensive Master Plan as described below:

Encourage and plan for new development in areas where adequate public services and facilities can be provided efficiently.

Encourage new development to be in accordance with the Comprehensive Master Plan land use category, and other land use controls to accomplish community principles.

Provide a balanced distribution of employment and population.

Ensure existing and future land uses are compatible.

Promote infill development.

Create a growth pattern that assures flexible, feasible and efficient projects.

2. The master plan amendment would be compatible with surrounding land uses.

Application materials indicate: “The project site is adjacent to zoned residential and zoned commercial areas, and the site is more consistent and compatible with the nearby commercially zoned parcels for several reasons:

Size of the site: The project site is ±0.85-acres. Zoning for the RR-1 zone district requires sites be a minimum of one acre, whereas the adjacent C2 zoning to the north and east allows sites to have a minimum lot size of 6,000 sf (±.137 acre) and no maximum lot size requirements. The existing lot size is non-conforming to the RR-1 zoning district and is in conformance with the C2 zoning district,

Existing structure on site: The site is currently developed with an existing ±1,400 sf metal commercial structure with a roll top garage door on a concrete slab designed for commercial use like a repair or mechanic shop. Retrofitting the existing structure for residential purposes to meet existing residential building code would be infeasible compared to utilization of the structure for commercial purposes.

Historic use of the site: Despite the site having the RR land use designation and the RR-1 zoning district, it has historically been used for commercial purposes, with the most recent commercial use being for a business called Cycle Pads servicing motorcycles and ATVs.

Surrounding land uses: As described above, the surrounding land uses to the north and east are well established commercial land uses in the C2 zoning district, compatible and consistent with commercial land use of the subject parcel. Additionally, further east across Old Highway 40 is a parcel occupied by the Nevada Highway Patrol and the Nevada Department of Transportation, two high traffic land uses bordered by a state highway. In order to ensure continued land use compatibility with the neighboring residential parcels to the south and west all future development projects on site will need to incorporate all applicable residential adjacency development standards.”

3. Public notice was given, and a public hearing held per the requirements of Nevada Revised Statutes and Fernley Development Code.

This item was noticed on 11/25/2024 and considered at a public hearing in accordance with all local and state guidelines.

A zoning map amendment is committed to the city council's legislative discretion. The zoning map amendment may be approved and is eligible for recommendation if it complies with all of the following:

1. Consistent with the city's master plan and otherwise consistent with state and federal law.
2. Consistent with the surrounding land uses.
3. Public notice was given, and a public hearing held per the requirements of the development code and Nevada revised statutes.

As stated above, this ZMA is a companion application to a master plan amendment of the appropriate corresponding land use designation ("Commercial – C") and relies on the same findings for approval.

RELEVANT LAWS, STATUTES, AND REGULATIONS:

General

[Nevada Revised Statutes \(NRS\), Chapter 278](#) - Planning and Zoning

[Fernley Municipal Code \(FMC\), Title 32](#) - Development Code

[City of Fernley Comprehensive Master Plan](#)

Specific

[NRS §278.260](#) - Determination, establishment, enforcement and amendment of zoning regulations

[NRS §278.22](#) - Adoption of master plan; change to plan adopted by commission

[FMC §32.03.040\(e\)](#) - Zoning map amendments (rezoning)

[FMC §32.03.040\(b\)](#) – Comprehensive master plan amendments

[FMC §32.06.060](#) General rural (GR20) and residential rural (RR5, RR1, and RR½)

[FMC §32.06.100](#) - Commercial (C1, C2, and TC).

Note: City of Fernley does not guarantee the operation or applicability of the provided links beyond the December 11, 2024, Planning Commission meeting.

FINANCIAL IMPLICATIONS:

None

ATTACHMENTS:

1. Bill #359
2. Resolution 04-020
3. Conditions of Approval
4. Project Narrative

When recorded, mail to:
City Clerk
City of Fernley
595 Silver Lace Boulevard
Fernley, NV 89408

**BILL #359
CITY OF FERNLEY
ORDINANCE # _____**

A GENERAL ORDINANCE FOR A FOR A ZONING MAP AMENDMENT, ASSOCIATED WITH CASE NUMBER ZMA24001, TO CHANGE THE ZONING ON A ±0.85-ACRE LOT FROM RR-1 (RURAL RESIDENTIAL-1 ACRE MINIMUM) TO C2 (COMMERCIAL) LOCATED AT 840 WOODCHUCK DRIVE (APN 021-343-20)

THE CITY COUNCIL OF THE CITY OF FERNLEY, hereinafter “the Council”, DO HEREBY ORDAIN:

Section 1: The zoning of that certain real property totaling ±.85 acres, more or less, situated in the City of Fernley, Nevada, and owned by Daniel Douglass (Douglass Development LLC), being more particularly described on Exhibit “A” attached hereto and depicted on “Exhibit B” attached hereto is hereby reclassified from RR1 (Rural Residential, 1 acre minimum) to C2 (General Commercial).

Section 2: All ordinances or parts of ordinances in conflict herewith are hereby repealed.

Section 3: The City Clerk is instructed and authorized to publish the title to this ordinance as provided by law and to record the pan certified herein as provided by law.

Section 4: This ordinance shall become effective upon passage, approval, and publication.

Section 5: The provisions of this ordinance shall be liberally construed to effectively carry out its purposes in the interest of public health, safety, welfare, and convenience.

Section 6: If any subsection, phrase, sentence, or portion of this section is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct, and independent provision, and such holding shall not affect the validity of the remaining portions.

Section 7: The Council finds that this ordinance is not likely to impose a direct and significant economic burden upon a business or directly restrict the formation, operation, or expansion of a business, or is otherwise exempt from Nevada Revised Statutes Chapter 237.

BILL #359 BEING HEREBY PROPOSED this 18th day of December 2024.

BILL #359 BEING HEREBY PASSED, APPROVED, AND ADOPTED this 15th day of January 2025, by the following vote of the Council:

Ayes: _____ Nays: _____ Abstentions: _____ Absent: _____

FERNLEY CITY COUNCIL

By: _____ Date: _____
Neal E. McIntyre, Mayor

Attest By: _____ Date: _____
Kimberly Swanson, City Clerk

EXHIBIT "A"
LEGAL DESCRIPTION FOR
MPA & ZMA

All that certain real property situate within the Southeast One-Quarter (SE 1/4) of the Southeast One-Quarter (SE 1/4) of Section 10, Township 20 North, Range 24 East, M.D.M., City of Fernley, Lyon County, State of Nevada, being the parcel as described in Deed Document No. 650517, recorded December 28, 2021, also being Parcel C as shown on Record of Survey No. 66116, recorded February 4, 1982, both filed in the Official Records of Lyon County, Nevada, more particularly described as follows:

BEGINNING at the Southeast corner of said Parcel C;

THENCE North 89°14'20" West a distance of 218.81 feet;

THENCE North 1°11'40" East a distance of 170.00 feet;

THENCE South 89°14'20" East a distance of 217.49 feet;

THENCE South 0°45'00" West a distance of 200.00 feet to the **POINT OF BEGINNING**.

Containing 0.85 acres of land, more or less.

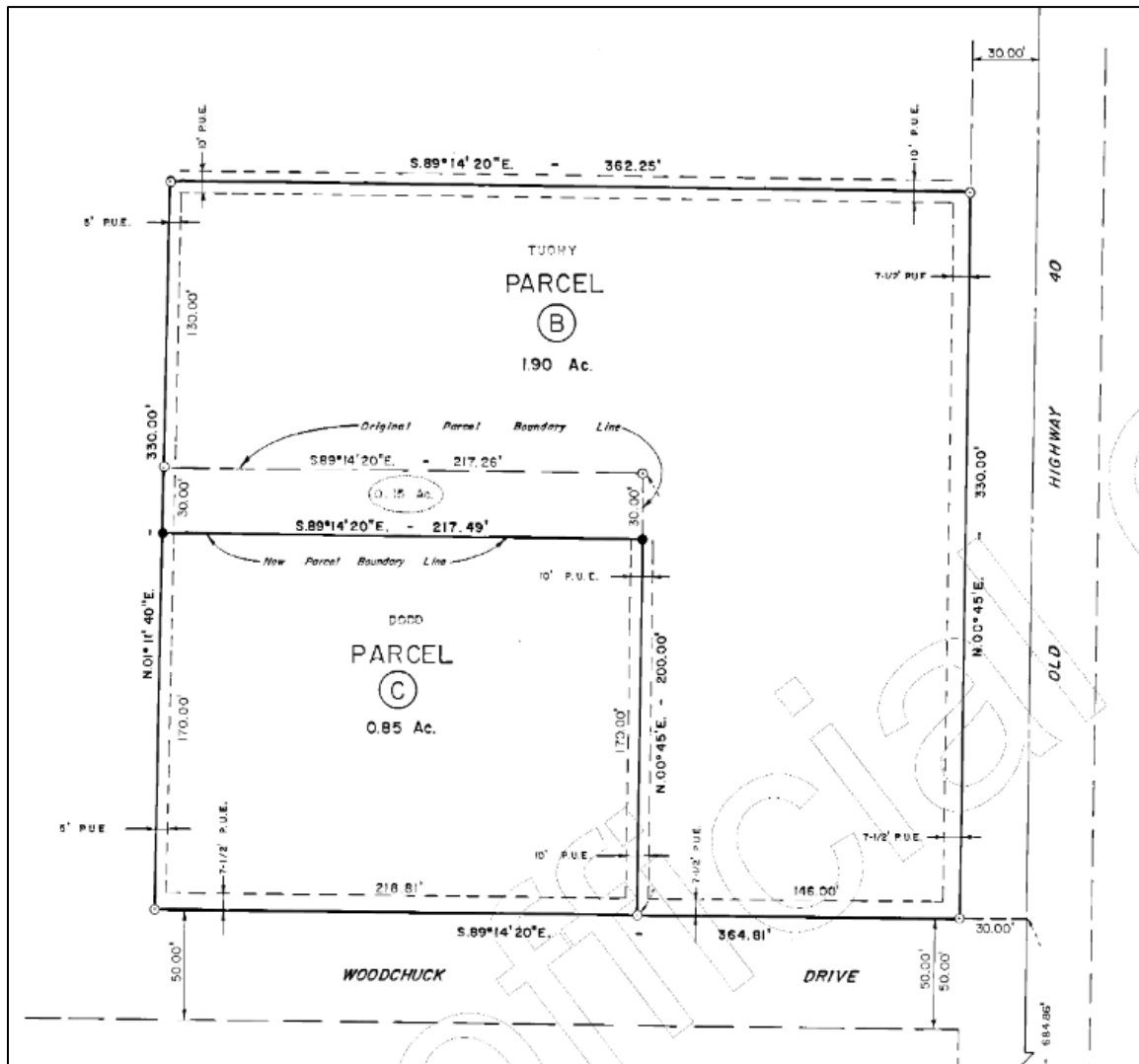
The Basis of Bearings for this description is identical to said Record of Survey No. 66116.

Prepared by:
Wood Rodgers, Inc.
1361 Reno Corporate Dr.
Reno, NV 89502
(775) 823-4068



Eric C. Sage, P.L.S.
Nevada Certificate No. 23301

EXHIBIT A-1
PLAT MAP



CITY OF FERNLEY
RESOLUTION # 24-020

A RESOLUTION OF THE CITY OF FERNLEY FOR A COMPREHENSIVE MASTER PLAN ASSOCIATED WITH CASE NUMBER MPA24001, TO CHANGE THE LAND USE ON A ±.85-ACRE LOT FROM RURAL RESIDENTIAL (RR) TO COMMERCIAL (C) LOCATED AT 840 WOODCHUCK DRIVE (APN 021-343-20)

WHEREAS, the 2018 Fernley Comprehensive Plan was adopted by Resolution of the Planning Commission on August 8, 2018, and by the City Council on August 15, 2018; and

WHEREAS Nevada Revised Statutes chapter 278.210 specifies that master plans or any amendments, including zoning map and text amendments must be adopted by resolution of the Planning Commission and City Council;

WHEREAS the Planning Commission held a public hearing on December 11th, 2024 and the City County heard this item on _____; and

WHEREAS the proposed Master Plan Amendment would implement Goals LU.1.1, LU 1.2, LU1.3, LU.1.4 and LU.1.5 of the City of Fernley Comprehensive Master Plan.

NOW, THEREFORE, BE IT RESOLVED, that based on the discussion and findings provided in the staff report and/or testimony presented at the December 11th, 2024 Planning Commission and the _____ City Council meetings, that the change in the land use classification ±.85-acre lot from Rural Residential (RR) to commercial (C) located at 840 Woodchuck Drive (APN 021-343-20) be adopted as part of the City of Fernley's comprehensive master plan; and

BE IT FURTHER RESOLVED that the Fernley Planning Commission approves and recommends that the City Council certify this Master Plan as part of the Fernley Comprehensive Plan.

RESOLUTION PASSED, APPROVED, AND ADOPTED this 11th day of December 2024, by the following vote of the Fernley Planning Commission:

AYES: _____ NAYS: _____ ABSTENTIONS: _____ ABSENT: _____

By: _____ Date: _____

Jenni McCullar, Chairwoman

Attest By: _____ Date: _____

Brenda Gosser, Deputy City Clerk

RESOLUTION CERTIFIED this _____ day of January 2025, by the following vote of the Fernley City Council:

AYES: _____ NAYS: _____ ABSTENTIONS: _____ ABSENT: _____

FERNLEY CITY COUNCIL

By: _____ Date: _____

Neal E. McIntyre, Mayor

Attest By: _____ Date: _____

Kim Swanson, City Clerk

Conditions of Approval for: **Master Plan Amendment (MPA 24005)** **Zoning Map Amendment (ZMA 24005)**

SCOPE AND DURATION OF APPROVAL

1. APPROVAL:

THE PROJECT IS APPROVED AS CONDITIONED AND DESCRIBED BELOW. ANY SUBSTANTIVE CHANGE WILL REQUIRE APPROVAL FROM THE CITY OF FERNLEY AND SHALL BE PROCESSED AS OUTLINED IN THE DEVELOPMENT CODE.

- A. THE ZONING MAP AMENDMENT IS APPROVED CHANGING THE ZONING OF THE PROPERTY FROM RR1 TO C2.
- B. THE MASTER PLAN AMENDMENT IS APPROVED CHANGING THE LAND USE DESIGNATION FROM RR TO C

2. PROJECT DESCRIPTION:

THE PROJECT APPROVAL IS LIMITED TO THE RECLASSIFICATION OF ZONING AND LAND USE DESIGNATION OF A PARCEL MEASURING APPROXIMATELY .85 ACRES LOCATED AT 840 WOODCHUCK DRIVE (APN 021-343-20); THIS ACTION SHALL NOT BE CONSTRUED AS THE APPROVAL OF ANY LAND USE ENTITLEMENT OR DEVELOPMENT PROPOSAL.

3. GOVERNING DOCUMENTS:

ALL CITY OF FERNLEY MUNICIPAL CODE (FMC) OR DEVELOPMENT CODE REFERENCES HEREIN PERTAIN TO THE VERSION OF THE CODE ESTABLISHED BY ORDINANCE NUMBER 2023-008, UNLESS OTHERWISE NOTED. THE DEVELOPER MUST COMPLY WITH ALL DESIGN STANDARDS AND REGULATIONS AS SET FORTH IN FMC. THE DEVELOPER MAY SUBSTITUTE REQUIREMENTS ESTABLISHED IN FUTURE FMC UPDATES, IF APPROVED BY THE ADMINISTRATOR.

THE DEVELOPER SHALL ALSO COMPLY WITH ALL STANDARDS FOUND WITHIN "CITY OF FERNLEY DEPARTMENT OF PUBLIC WORKS DESIGN STANDARDS & REVIEW GUIDELINES" AS UPDATED MARCH 2024, "CITY OF FERNLEY STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION" AS UPDATED JULY 2022, AND THE MOST CURRENT "CITY OF FERNLEY COMPREHENSIVE MASTER PLAN".

REQUIREMENTS FOR BUSINESS LICENSE

4. STATE OF NEVADA BUSINESS AND DEPARTMENT OF TAXATION:

PER NRS 364A, ALL APPLICANTS MUST REGISTER WITH THE NEVADA SECRETARY OF STATE'S OFFICE FOR A BUSINESS LICENSE. YOU MAY REGISTER ONLINE AT WWW.NVSILVERFLUME.GOV OR IN PERSON AT THEIR OFFICE LOCATED AT 202 N CARSON STREET, CARSON CITY. ADDITIONAL INFORMATION CAN BE FOUND BY CALLING THEIR OFFICE AT (775) 684-5708. THIS NUMBER WILL ALWAYS BEGIN WITH NV. PER NRS 360, SOME APPLICANTS MUST REGISTER WITH THE NEVADA DEPARTMENT OF TAXATION. YOU MAY REGISTER ONLINE AT [HTTP://TAX.NV.GOV/](http://TAX.NV.GOV/) OR IN PERSON AT THEIR OFFICE AT 4600 KIETZKE LANE BLDG L #235, RENO. ADDITIONAL INFORMATION CAN BE FOUND BY CALLING THEIR OFFICE AT (866) 962-3707.

5. HEALTH PERMIT:

PER NRS 446, 444, 585, APPLICANTS THAT WILL BE HANDLING FOOD/EDIBLES, TATTOOS OR COSMETICS MUST OBTAIN A PERMIT FROM THE NEVADA DEPARTMENT OF HEALTH AND HUMAN SERVICES. FOR INFORMATION CONTACT (775) 895-3603 OR M.PORTS@HEALTH.NV.GOV

6. INSPECTOR SIGNATURES

COMMERCIAL BUILDING: PAGE 2 OF THE BUSINESS LICENSE PACKET HAS A LIST OF DEPARTMENTS THAT MAY NEED TO AUTHORIZE THIS LICENSE. PLEASE CONTACT EACH OF THE DEPARTMENTS TO OBTAIN THE APPROPRIATE SIGNOFFS; SOME DEPARTMENTS MAY REQUIRE INSPECTIONS. ALL APPLICABLE SIGNATURES MUST BE OBTAINED BEFORE SUBMITTING AN APPLICATION.

7. ZONING:

AFTER A ZONING MAP AMENDMENT IS APPROVED, ALL NEW DEVELOPMENT WITHIN THE AREA SUBJECT TO THE APPROVED REZONING IS SUBJECT TO THE USES AND DEVELOPMENT STANDARDS IN THE ZONING DISTRICTS APPLIED BY THE ZONING MAP AMENDMENT ORDINANCE. THE PLANNING DEPARTMENT WILL DETERMINE IF YOU ARE IN THE PROPER ZONE, IF YOUR BUILDING MEETS THE PROPER OCCUPANCY CLASSIFICATION FOR YOUR BUSINESS, OR IF A PLANNING PERMIT IS REQUIRED. PLEASE CALL (775) 784-9810 TO ENSURE YOUR BUSINESS MEETS THE REQUIREMENTS.

8. ENLARGEMENT OF NONCONFORMING USES :

A NONCONFORMING USE SHALL NOT BE EXTENDED OR ENLARGED BY MORE THAN TEN PERCENT OF THE AREA LAWFULLY OCCUPIED BY THE NONCONFORMING USE AS OF THE DATE ON WHICH IT BECAME NONCONFORMING, EXCEPT BY CONDITIONAL USE PERMIT. THE ENLARGEMENT OF THE NONCONFORMING USE SHALL NOT EXTEND ONTO AN ADDITIONAL PARCEL. ANY ENLARGEMENT OF A NONCONFORMING USE NOT REQUIRING A CONDITIONAL USE PERMIT SHALL OBTAIN ADMINISTRATIVE REVIEW.

9. SUBSTANDARD DEVELOPMENT :

SUBSTANDARD DEVELOPMENT MEANS A LAWFULLY IMPROVED LOT OR PARCEL, INCLUDING ANY STRUCTURE THEREUPON, WHICH DOES NOT SATISFY THE CURRENT PROVISIONS OF THIS TITLE REGARDING PARKING, LANDSCAPING, SIGNS, OR OTHER SITE DEVELOPMENT STANDARDS INCLUDING BUILDING HEIGHT, BUILDING DESIGN, SETBACKS OR OTHER DIMENSIONAL STANDARDS. A STRUCTURAL ALTERATION, INCLUDING AN EXTENSION OR EXPANSION OF A NONCONFORMING STRUCTURE IS ALLOWED IF IT:

- A) DOES NOT INCREASE THE APPLICABLE NONCONFORMITY AND
- B) DOES NOT INVOLVE OR CREATE A NONCONFORMING USE OR SUBSTANDARD DEVELOPMENT.

10. RIGHT TO CONTINUE A SUBSTANDARD DEVELOPMENT:

A SUBSTANDARD DEVELOPMENT MAY CONTINUE TO BE OCCUPIED AND USED FOR ANY PURPOSE PERMITTED BY THIS TITLE UNLESS IT BECOMES A PUBLIC NUISANCE OR IS DAMAGED OR DESTROYED AS PROVIDED IN THIS TITLE. ROUTINE MAINTENANCE OF NONCONFORMING STRUCTURES IS PERMITTED, INCLUDING NECESSARY NON-STRUCTURAL REPAIRS, PAINT, AND INCIDENTAL ALTERATIONS WHICH DO NOT EXTEND OR INTENSIFY THE NONCONFORMITY.

11. INTENSIFICATION OF A SUBSTANDARD DEVELOPMENT:

INTENSIFICATION OF A SUBSTANDARD DEVELOPMENT IS A CHANGE OF USE THAT INCREASES THE

PARKING REQUIRED FOR THAT DEVELOPMENT. THE USE OF A LOT, PARCEL, OR BUILDING WHICH IS CLASSIFIED AS A SUBSTANDARD DEVELOPMENT SHALL NOT BE CHANGED OR ENLARGED TO A MORE INTENSIVE TYPE OF USE UNLESS THE CHANGES AND/OR ADDITIONS MEET THE CURRENT REQUIREMENTS OF THIS TITLE AND ALL PARKING FOR THE ENTIRE DEVELOPMENT CAN BE PROVIDED.

Master Plan Amendment & Zoning Map Amendment **Woodchuck Drive**

Submitted to City of Fernley
October 15, 2024

Prepared for

Douglass Development LLC
11050 Vincent Lane
Reno, NV 89511

Prepared by



WOOD RODGERS

BUILDING RELATIONSHIPS ONE PROJECT AT A TIME
1361 Corporate Blvd • Reno, NV 89502 • Tel: 775.823.4068 • www.woodrogers.com

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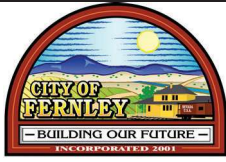
Section 2

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Section 1



Planning Department
595 Silver Lace Blvd, Fernley, NV 89408
Development Application

APPLICATIONS, PLANS, AND/OR SUPPORTING DOCUMENTATION THAT ARE INCOMPLETE OR ILLEGIBLE WILL NOT BE ACCEPTED.

Please complete all sections that apply to you and/or your project. Various applications are only accepted on the application deadline dates. Please call before you submit to verify that someone will be available to assist you at (775) 784-9810.

☐ ADMINISTRATIVE REVIEW(AR)		☐ APPEAL (APP)	
☐ ANNEXATION(ANX)		☐ PLANNED DEVELOPMENT (PD)	
☐ CONDITIONAL USE PERMIT(CUP)		☐ DEVELOPMENT AGREEMENT (DA)	
☐ MAJOR DEVIATION(MJD)		☐ TEMPORARY USE PERMIT(TUP)	
☒ MASTER PLAN AMENDMENT.....(MPA)		☐ VARIANCE(VAR)	
☐ MINOR DEVIATION(MND)		☐ REASONABLE ACCOMMODATION(RAD)	
☒ ZONING MAP AMENDMENT.....(ZMA)		☐ OTHER: _____	

Daniel Douglass		Signature	Primary Contact? No
Applicant's Name			
Company Name: Douglass Development LLC			
Address: 11050 Vincent Lane			
City: Reno	State: NV	Zip Code: 89511	Email: ddouglass@outlook.com
Phone No.: 775-843-4003	Cell No.: N/A	Fax No.: N/A	

Daniel Douglass		Primary Contact? No
Property Owners Name		
Company Name: Douglass Development LLC		
Address: 11050 Vincent Lane		
City: Reno	State: NV	Zip Code 89511
Email: same as applicant		
Phone No.: same as applicant	Cell No.: N/A	Fax No.: N/A

Eric Hasty		Primary Contact? Yes
Engineer / Representative		
Company Name: Wood Rodgers, Inc.		
Address: 1361 Corporate Boulevard		
City: Reno	State: NV	Zip Code 89502
Email: ehasty@woodrodgers.com		
Phone No.: 775-828-7742	Cell No.: N/A	Fax No.: N/A

Brief Project Type/Description (Attach Detailed Project Type / Description):

Master Plan Amendment and Zoning Map Amendment to change the land use designation from Rural Residential (RR) to Commercial (C)and zoning from Rural Residential 1-acre lots (RR-1) to General Commercial (C-2).

Subdivision/Project Name And/Or Phase: Woodchuck Drive Property

Project Location (Street Address): 840 Woodchuck Drive

Assessor's Parcel Number(s): 020-151-05

Current Zoning: Rural Residential 1-acre lots (RR-1)	Comprehensive Plan Land Use Designation	Rural Residential
--	---	-------------------

Total Project Acreage: 0.85 acre	% Commercial: 0	CITY UTILITIES	
Number of Parcels Proposed: 1	% Open Space:	Water:	Sewer
		☐ Currently Served ☐ Proposed	☐ Currently Served ☐ Proposed

Previous Applications For This Site? ☐ Yes ☒ No

List Previous Application No(s) And Names:

2009 Flood Zone Designation: ☐ A ☐ AE ☐ AH ☐ AO	FEMA Map No.: 32019C0082E
---	---------------------------

Application Filing Date:	Office Use Only	Application Fee:	
Application No.:	Development Review Meeting	Outsource Fee:	
Application Intake By:	Date: October 15, 2024	Noticing Fee:	
Planner:	Time:	Total Due:	

LETTER OF AUTHORIZATION

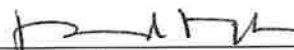
This letter shall serve to notify and verify the I/we am/are the legal owner(s) of the property being considered under this application and do hereby authorize the above representative to file and represent my/our interest in this application.

I/we am/are the legal owner(s) of said property; have read the foregoing "Letter of Authorization" and know the contents thereof; and so hereby certify (or declare) under penalty of perjury under the laws of the State of Nevada that the information contained in this application is true and correct.

OWNER(S) OF RECORD: *(Include all signatures-provide extra sheets if necessary)*

Daniel Douglass

(Print Name)


(Signature)

10/3/24
(Date)

(Print Name)

(Signature)

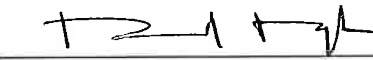
(Date)

I certify under penalty of perjury that I am the applicant and that the foregoing statements and answers contained herein and the information herein submitted, are in all respects true and correct. I grant permission to City staff and officials to enter the property to conduct inspections/site visits necessary for the review of the project. I also certify that all plans and submittal requirements are in accordance with the Nevada Revised Statutes and City Code, have been drawn to a standard engineering scale (e.g. 1"=20', 1"=50', 1"=100') or architectural scale (e.g. 1/4"=1', 1/8"=1') that is appropriate to the project size, and clearly define and identify all of the required information.

APPLICANT:

Douglass Development LLC

(Print Name)


(Signature)

10/3/24
(Date)

APPLICANT'S ENGINEER/REPRESENTATIVE:

Eric Hasty

(Print Name)


(Signature)

10/9/24
(Date)

City of Fernley Development Code, Section 32.03.030, Common Review Procedures: The City will not process incomplete applications. Review for completeness of application forms is solely to determine whether preliminary information required for submission with the application is sufficient to allow further processing. A determination of completeness shall not constitute a decision as to whether an application complies with the City's Development Code.

Note: Development review meetings are preliminary nature and comments expressed by staff should not be construed as being Conditions of Approval for any project application.

EXHIBIT "A"
LEGAL DESCRIPTION FOR
MPA & ZMA

All that certain real property situate within the Southeast One-Quarter (SE 1/4) of the Southeast One-Quarter (SE 1/4) of Section 10, Township 20 North, Range 24 East, M.D.M., City of Fernley, Lyon County, State of Nevada, being the parcel as described in Deed Document No. 650517, recorded December 28, 2021, also being Parcel C as shown on Record of Survey No. 66116, recorded February 4, 1982, both filed in the Official Records of Lyon County, Nevada, more particularly described as follows:

BEGINNING at the Southeast corner of said Parcel C;

THENCE North 89°14'20" West a distance of 218.81 feet;

THENCE North 1°11'40" East a distance of 170.00 feet;

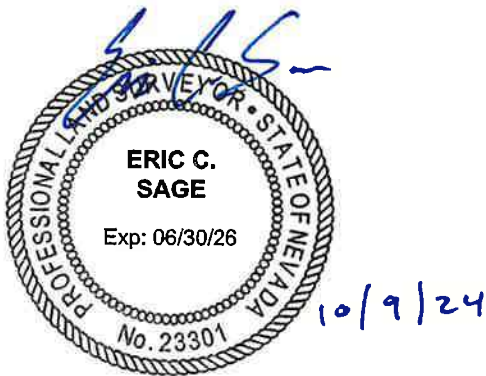
THENCE South 89°14'20" East a distance of 217.49 feet;

THENCE South 0°45'00" West a distance of 200.00 feet to the **POINT OF BEGINNING**.

Containing 0.85 acres of land, more or less.

The Basis of Bearings for this description is identical to said Record of Survey No. 66116.

Prepared by:
Wood Rodgers, Inc.
1361 Reno Corporate Dr.
Reno, NV 89502
(775) 823-4068



Eric C. Sage, P.L.S.
Nevada Certificate No. 23301

MASTER PLAN AMENDMENT

APPLICATION CHECKLIST

City of Fernley, Nevada

The following items shall be submitted as a part of the Master Plan Amendment application:

- ✓ 1. **Pre-application meeting completed.**
- ✓ 2. **Application Fee:** The application fee is due at the time of the application submittal. See **FEE SCHEDULE** for correct amount. Application fee may be made in the form of a check or money order payable to "City of Fernley", by e-check (no fee) or by Visa/Mastercard/Discover (4% fee).
- ✓ 3. **Proof of Ownership:** Must be original signatures or the application may be rejected. If the person signing the owner's affidavit is not listed as the property owner in the most recent records of the Lyon County Assessor, proof of ownership acceptable to the administrator must be submitted with the application. If the signer is an agent of the owner, written documentation of that fact acceptable to the administrator must be submitted. If in Corporate ownership, a list of all Corporate Officers must be provided.
- ✓ 4. **Review Packet: One (1) digital copy containing the following:**
 - ✓ a. Completed DEVELOPMENT APPLICATION form.
 - ✓ b. NRS Time Waiver Agreement.
 - ✓ c. A written description of the proposed Master Plan Amendment request.
 - ✓ d. A list of the goals and policies from the City of Fernley Master Plan which support the proposed Master Plan Amendment.
 - ✓ e. Please include a dimensioned site plan, pictures of existing buildings, and any additional information that would be helpful to illustrate the existing use of the site. All plans shall be drawn to standard architectural or engineering scale and shall include a north arrow.
 - ✓ f. Vicinity Map depicting the existing and proposed land use designation of the respective site including surrounding roadways and the land use designations of the surrounding properties
 - N/A g. If the site is greater than 5 acres, the following application submittal information is required:
 - (1) Report addressing impacts on existing and planned facilities and infrastructure;
 - (2) Report addressing impacts on existing and planned public services.
 - (3) Written narrative on the proposed land use in relationship to existing land uses; and
 - (4) Provide a fiscal impact analysis for public service providers for the proposed land use change.
 - ✓ h. Miscellaneous, as requested, and all required items as outlined in Appendix A of the City of Fernley's Development Code.
- ✓ 5. **Original PDF documents of the application, broken down into individual sections, including all documents, maps, plans, and technical analyses, shall be provided on a USB flash drive or alternative method as determined by the Administrator.**

NOTE: Applications filed under Chapter 32.03 of the City of Fernley's Development Code must include the information required by Appendix A of the same code and is not complete until all required items are submitted. The development review team may request that additional application materials be submitted depending on the specific project request. The application materials required above shall serve as the minimum requirements necessary to make application submittal to the Planning Department.

ZONING MAP AMENDMENT

APPLICATION CHECKLIST

City of Fernley, Nevada

The following items shall be submitted as a part of the Zoning Map Amendment application:

- ✓ 1. **Application Fee:** The application fee is due at the time of the application submittal. See **FEE SCHEDULE** for correct amount. Application fee may be made in the form of a check or money order payable to “City of Fernley”, by e-check (no fee) or by Visa/Mastercard/Discover (4% fee).
- ✓ 2. **Proof of Ownership:** Must be original signatures or the application may be rejected. If the person signing the owner’s affidavit is not listed as the property owner in the most recent records of the Lyon County Assessor, proof of ownership acceptable to the administrator must be submitted with the application. If the signer is an agent of the owner, written documentation of that fact acceptable to the administrator must be submitted. If in Corporate ownership, a list of all Corporate Officers must be provided.
- ✓ 3. **Review Packet: One (1) digital copy containing the following:**
 - ✓ a. Completed DEVELOPMENT APPLICATION form.
 - ✓ b. NRS Time Waiver Agreement.
 - ✓ c. A written description of the Zoning Map Amendment request.
 - ✓ d. A list of the goals and policies from the City of Fernley Master Plan which support the proposed Zoning Map Amendment.
 - ✓ e. Vicinity Map depicting the existing and proposed zoning designation of the respective site including surrounding roadways and the zoning designations of the surrounding properties the respective site and including surrounding roadways.
 - ✓ f. A wet stamped legal description and boundary map of the subject property (8½” x 11” with 1” margins).
 - ✓ g. Please include a dimensioned site plan, pictures of existing buildings, and any additional information that would be helpful to illustrate the existing use of the site. All plans shall be drawn to standard architectural or engineering scale and shall include a north arrow.
 - ✓ h. Property Tax Receipt.
 - ✓ i. Miscellaneous, as requested, and all required items as outlined in Appendix A of the City of Fernley’s Development Code.
- ✓ 4. **Original PDF documents of the application, broken down into individual sections, including all documents, maps, plans, and technical analyses, shall be provided on a USB flash drive or alternative method as determined by the Administrator.**

NOTE: Applications filed under Chapter 32.03 of the City of Fernley’s Development Code must include the information required by Appendix A of the same code and is not complete until all required items are submitted. The Planning Department or other reviewing departments or agencies may request that additional application materials be submitted depending on the specific project request. The application materials required above shall serve as the minimum requirements necessary to make application submittal to the City of Fernley Planning Department.



Tax Account 020-151-05

Owners

DOUGLASS, DANIEL
P O BOX 19944
RENO, NV 89511-0000

Account Summary

Account ID	020-151-05
Account Type	Real Estate
Location	840 WOODCHUCK DR FERNLEY
Balance	\$622.00
Currently Due	\$0.00

No payment currently due.

You can pay any amount up to \$622.00 (the current balance).

Current Year

Description	2024/2025 REAL ESTATE TAXES
Original	\$1,246.93
Total	\$1,246.93
Paid	\$624.93
Balance	\$622.00
Due	\$0.00
Ad Valorem Tax Rate	3.6566
Tax District	6.0 (City of Fernley)

Tax Cap	100% High 8.0%
---------	----------------

Installments

#	Due Date	Penalty Date	Status	Original Total	Penalty	Total	Paid	Total Due	Pay Now
1	08/19/2024	08/29/2024	Paid	\$313.93	\$0.00	\$313.93	\$313.93	\$0.00	
2	10/07/2024	10/17/2024	Paid	\$311.00	\$0.00	\$311.00	\$311.00	\$0.00	
3	01/06/2025	01/16/2025	Due	\$311.00	\$0.00	\$311.00	\$0.00	\$311.00	Pay \$311.00 Now
4	03/03/2025	03/13/2025	Due	\$311.00	\$0.00	\$311.00	\$0.00	\$622.00	Pay \$622.00 Now

Past Years

Description	Original	Penalty	Paid	Balance	Due	Tax Rate	Tax District
2023/2024 REAL ESTATE TAXES	\$1,134.34	\$0.00	\$1,134.34	\$0.00	\$0.00	3.6551	6.0
2022/2023 REAL ESTATE TAXES	\$1,041.50	\$0.00	\$1,041.50	\$0.00	\$0.00	3.6127	6.0
2021/2022 REAL ESTATE TAXES	\$997.35	\$0.00	\$997.35	\$0.00	\$0.00	3.6160	6.0
2020/2021 SECURED TAXES	\$954.83	\$0.00	\$954.83	\$0.00	\$0.00	3.6131	6.3
2019/2020 SECURED TAXES	\$822.78	\$0.00	\$822.78	\$0.00	\$0.00	3.6131	6.0
2018/2019 SECURED TAXES	\$789.94	\$0.00	\$789.94	\$0.00	\$0.00	3.6131	6.0
2017/2018 SECURED TAXES	\$770.96	\$0.00	\$770.96	\$0.00	\$0.00	3.6131	6.0
2016/2017 SECURED TAXES	\$759.90	\$0.00	\$759.90	\$0.00	\$0.00	3.6131	6.0

Special Assessments and Other Fees

Year	Code	Description	Amount	Paid	Balance	Due
2024-2025	S23	TCID Operatn & Maint	380.00	190.10	189.90	.00
2024-2025	S24	TCID Administrative	140.00	70.10	69.90	.00
2024-2025	S25	TCID District Gen.	6.84	3.52	3.32	.00
2024-2025	S33	Fernley Groundwater	1.05	.63	.42	.00
2023-2024	S23	TCID Operatn & Maint	340.00	340.00	.00	.00

Year	Code	Description	Amount	Paid	Balance	Due
2023-2024	S24	TCID Administrative	120.00	120.00	.00	.00
2023-2024	S25	TCID District Gen.	6.56	6.56	.00	.00
2023-2024	S33	Fernley Groundwater	1.99	1.99	.00	.00
2022-2023	S23	TCID Operatn & Maint	320.00	320.00	.00	.00
2022-2023	S24	TCID Administrative	120.00	120.00	.00	.00
2022-2023	S25	TCID District Gen.	6.29	6.29	.00	.00
2022-2023	S33	Fernley Groundwater	2.04	2.04	.00	.00
2021-2022	S23	TCID Operatn & Maint	320.00	320.00	.00	.00
2021-2022	S24	TCID Administrative	120.00	120.00	.00	.00
2021-2022	S25	TCID District Gen.	6.10	6.10	.00	.00
2021-2022	S33	Fernley Groundwater	2.03	2.03	.00	.00
2020-2021	S23	TCID Operatn & Maint	320.00	320.00	.00	.00
2020-2021	S24	TCID Administrative	120.00	120.00	.00	.00
2020-2021	S25	TCID District Gen.	5.96	5.96	.00	.00
2020-2021	S33	Fernley Groundwater	.32	.32	.00	.00
2019-2020	S23	TCID Operatn & Maint	220.00	220.00	.00	.00
2019-2020	S24	TCID Administrative	120.00	120.00	.00	.00
2019-2020	S25	TCID District Gen.	5.83	5.83	.00	.00
2019-2020	S33	Fernley Groundwater	.32	.32	.00	.00
2018-2019	S23	TCID Operatn & Maint	220.00	220.00	.00	.00
2018-2019	S24	TCID Administrative	110.00	110.00	.00	.00
2018-2019	S25	TCID District Gen.	5.70	5.70	.00	.00
2018-2019	S33	Fernley Groundwater	.32	.32	.00	.00
2017-2018	S23	TCID Operatn & Maint	220.00	220.00	.00	.00
2017-2018	S24	TCID Administrative	110.00	110.00	.00	.00
2017-2018	S25	TCID District Gen.	5.00	5.00	.00	.00
2017-2018	S33	Fernley Groundwater	.33	.33	.00	.00
2016-2017	S23	TCID Operatn & Maint	220.00	220.00	.00	.00

Year	Code	Description	Amount	Paid	Balance	Due
2016-2017	S24	TCID Administrative	110.00	110.00	.00	.00
2016-2017	S25	TCID District Gen.	5.00	5.00	.00	.00
2016-2017	S33	Fernley Groundwater	.32	.32	.00	.00

Tax Bill and Payment History

Date	Type	Billed to / Payer Name / Note	Amount	Balance
10/10/2024	PAYMENT	DOUGLASS DEVELOPMENT LLC CHECK 2541	\$-311.00	\$622.00
08/21/2024	PAYMENT	DOUGLASS, DANIEL CHECK 2532	\$-313.93	\$933.00
07/16/2024	BILL	DOUGLASS, DANIEL	\$1,246.93	\$1,246.93
03/05/2024	PAYMENT	DOUGLASS, DEVELOPMENT LLC CHECK 2517	\$-283.00	\$0.00
12/01/2023	PAYMENT	DANIEL DOUGLASS PNP PNP - 146872810	\$-283.00	\$283.00
09/27/2023	PAYMENT	FERNLEY SELF STORAGE CHECK 5134	\$-283.00	\$566.00
08/04/2023	PAYMENT	DAN DOUGLASS PNP PNP - 140449692	\$-285.34	\$849.00
07/17/2023	BILL	DOUGLASS, DANIEL	\$1,134.34	\$1,134.34
02/27/2023	PAYMENT	DANIEL DOUGLASS PNP PNP - 130307091	\$-260.00	\$0.00
10/03/2022	PAYMENT	DANIEL DOUGLASS PNP PNP - 121891340	\$-260.00	\$260.00
10/03/2022	PAYMENT	DANIEL DOUGLASS PNP PNP - 121890463	\$-260.00	\$520.00
08/23/2022	PAYMENT	DOUGLASS, DANIEL CHECK 5101	\$-261.50	\$780.00
07/15/2022	BILL	DOUGLASS, DANIEL	\$1,041.50	\$1,041.50
08/25/2021	PAYMENT	ACOSTA, FRANK & ROBIN JEAN CHECK CK. 2122	\$-747.87	\$0.00
08/19/2021	PAYMENT	ACOSTA, FRANK & ROBIN JEAN CHECK 2118	\$-249.48	\$747.87
07/14/2021	BILL	ACOSTA, FRANK & ROBIN JEAN	\$997.35	\$997.35
01/07/2021	PAYMENT	ACOSTA, FRANK & ROBIN JEAN CHECK 1956	\$-238.00	\$0.00
10/27/2020	PAYMENT	ACOSTA, FRANK & ROBIN JEAN CHECK NUM: 1901	\$-238.00	\$238.00
08/26/2020	PAYMENT	ACOSTA, FRANK & ROBIN JEAN CHECK NUM: 1862	\$-238.00	\$476.00
07/22/2020	PAYMENT	ACOSTA, FRANK & ROBIN JEAN CHECK NUM: 1838	\$-240.83	\$714.00
07/09/2020	BILL	ACOSTA, FRANK & ROBIN JEAN	\$954.83	\$954.83
01/23/2020	PAYMENT	ACOSTA, FRANK & ROBIN JEAN CHECK NUM: 1721	\$-205.00	\$0.00

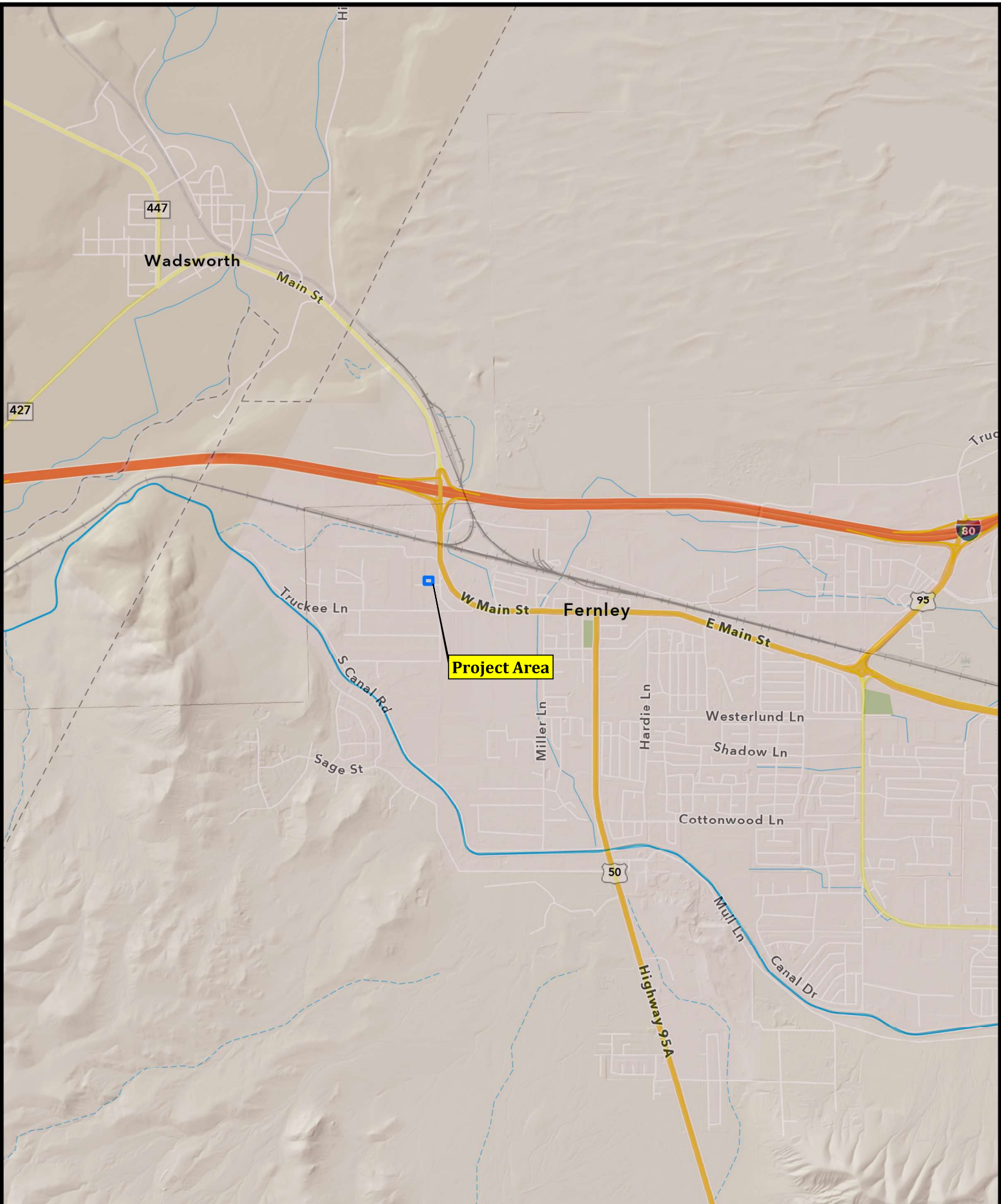
Date	Type	Billed to / Payer Name / Note	Amount	Balance
12/24/2019	PAYMENT	ACOSTA, FRANK & ROBIN JEAN CHECK NUM: 1701	\$-205.00	\$205.00
08/09/2019	PAYMENT	ACOSTA, FRANK & ROBIN JEAN CHECK NUM: 1562	\$-412.78	\$410.00
07/10/2019	BILL	ACOSTA, FRANK & ROBIN JEAN	\$822.78	\$822.78
09/25/2018	PAYMENT	ACOSTA, ROBIN CHECK NUM: 1259	\$-394.00	\$0.00
07/27/2018	PAYMENT	ACOSTA, FRANK & ROBIN JEAN CHECK NUM: 1203	\$-395.94	\$394.00
07/10/2018	BILL	ACOSTA, FRANK & ROBIN JEAN	\$789.94	\$789.94
10/31/2017	PAYMENT	ACOSTA, FRANK & ROBIN JEAN CHECK NUM: 920	\$-384.00	\$0.00
09/05/2017	PAYMENT	ACOSTA, FRANK & ROBIN JEAN CHECK NUM: 864	\$-192.00	\$384.00
07/25/2017	PAYMENT	ACOSTA, FRANK & ROBIN JEAN CHECK NUM: 814	\$-194.96	\$576.00
07/10/2017	BILL	ACOSTA, FRANK & ROBIN JEAN	\$770.96	\$770.96
01/18/2017	PAYMENT	ACOSTA, FRANK & ROBIN JEAN CHECK NUM: 633	\$-189.00	\$0.00
10/10/2016	PAYMENT	ACOSTA, FRANK & ROBIN JEAN CHECK NUM: 521	\$-189.00	\$189.00
09/07/2016	PAYMENT	ACOSTA, FRANK & ROBIN JEAN CHECK NUM: 482	\$-189.00	\$378.00
07/27/2016	PAYMENT	ACOSTA, FRANK & ROBIN JEAN CHECK NUM: 429	\$-192.90	\$567.00
07/11/2016	BILL	ACOSTA, FRANK & ROBIN JEAN	\$759.90	\$759.90
02/16/2016	PAYMENT	ACOSTA, FRANK & ROBIN JEAN CHECK NUM: 279	\$-189.00	\$0.00
12/28/2015	PAYMENT	ACOSTA, FRANK & ROBIN JEAN CHECK NUM: 238	\$-189.00	\$189.00
09/15/2015	PAYMENT	ACOSTA, FRANK & ROBIN JEAN CHECK NUM: 151	\$-189.00	\$378.00
07/28/2015	PAYMENT	ACOSTA, FRANK & ROBIN JEAN CHECK NUM: 101	\$-192.04	\$567.00
07/07/2015	BILL	ACOSTA, FRANK & ROBIN JEAN	\$759.04	\$759.04
02/04/2015	PAYMENT	ACOSTA, FRANK & ROBIN JEAN CHECK NUM: 3502	\$-186.00	\$0.00
10/08/2014	PAYMENT	ACOSTA, FRANK & ROBIN JEAN CHECK NUM: 3399	\$-186.00	\$186.00
07/25/2014	PAYMENT	ACOSTA, FRANK & ROBIN JEAN CHECK NUM: 3335	\$-373.89	\$372.00
07/08/2014	BILL	ACOSTA, FRANK & ROBIN JEAN	\$745.89	\$745.89
03/10/2014	PAYMENT	FRANK ACOSTA CORK: D BANK: PNP INTERNET NUM: 13090902	\$-182.00	\$0.00
12/10/2013	PAYMENT	ACOSTA, FRANK & ROBIN JEAN CHECK NUM: 3142	\$-182.00	\$182.00
07/25/2013	PAYMENT	ACOSTA, FRANK & ROBIN JEAN CHECK NUM: 3036	\$-364.01	\$364.00
07/08/2013	BILL	ACOSTA, FRANK & ROBIN JEAN	\$728.01	\$728.01

Date	Type	Billed to / Payer Name / Note	Amount	Balance
11/27/2012	PAYMENT	ACOSTA, FRANK CHECK NUM: 194	\$-985.33	\$0.00
11/01/2012	INTEREST	Monthly Interest	\$1.43	\$985.33
10/12/2012	PENALTY	Instlmt 2 Penalty for 2012-13	\$18.81	\$983.90
10/01/2012	INTEREST	Monthly Interest	\$1.43	\$965.09
08/31/2012	INTEREST	Monthly Interest	\$1.43	\$963.66
08/30/2012	PENALTY	Instlmt 1 Penalty for 2012-13	\$7.53	\$962.23
07/10/2012	BILL	ACOSTA, FRANK & ROBIN JEAN	\$752.13	\$954.70
07/10/2012	INTEREST	Monthly Interest	\$1.43	\$202.57
07/02/2012	INTEREST	Monthly Interest	\$1.43	\$201.14
06/01/2012	INTEREST	Monthly Interest	\$14.33	\$199.71
04/30/2012	PENALTY	Publication Cost for Delinquency	\$6.50	\$185.38
03/15/2012	PENALTY	Instlmt 4 Penalty for 2011-12	\$6.88	\$178.88
10/11/2011	PAYMENT	HUTCHISON, JEFFERY D ET AL CHECK NUM: 1249432297	\$-172.00	\$172.00
10/04/2011	PAYMENT	HUTCHISON, JEFFERY D ET AL CHECK NUM: 2879	\$-172.00	\$344.00
08/15/2011	PAYMENT	HUTCHISON, JEFFERY D ET AL CHECK NUM: 2874	\$-173.39	\$516.00
07/08/2011	BILL	HUTCHISON, JEFFERY D ET AL	\$689.39	\$689.39
03/04/2011	PAYMENT	HUTCHISON, JEFFERY D ET AL CHECK NUM: 2863	\$-166.00	\$0.00
01/10/2011	PAYMENT	HUTCHISON, JEFFERY & DEANA CHECK NUM: 2860	\$-166.00	\$166.00
10/04/2010	PAYMENT	HUTCHISON, JEFFERY D ET AL CHECK BANK: 90-7851 NUM: 2838	\$-166.00	\$332.00
08/06/2010	PAYMENT	HUTCHISON, JEFFERY D ET AL CHECK BANK: 90-7851 NUM: 2829	\$-167.21	\$498.00
07/08/2010	BILL	HUTCHISON, JEFFERY D ET AL	\$665.21	\$665.21
02/18/2010	PAYMENT	HUTCHISON, JEFFERY D ET AL CHECK BANK: 90-7851 NUM: 2812	\$-219.00	\$0.00
12/24/2009	PAYMENT	HUTCHISON, JEFFERY D ET AL CHECK BANK: 90-7851 NUM: 2757	\$-219.00	\$219.00
09/29/2009	PAYMENT	HUTCHISON, JEFFERY OR DEANA CHECK BANK: 90-7851 NUM: 2752	\$-219.00	\$438.00
07/27/2009	PAYMENT	HUTCHISON, JEFFERY D ET AL CHECK BANK: 90-7851 NUM: 2768	\$-222.88	\$657.00
07/06/2009	BILL	HUTCHISON, JEFFERY D ET AL	\$879.88	\$879.88
08/16/2008	PAYMENT	HUTCHISON, JACK K CHECK BANK: 94-77 NUM: 1652	\$-936.61	\$0.00
07/15/2008	BILL	HUTCHISON, JACK K	\$936.61	\$936.61

Date	Type	Billed to / Payer Name / Note	Amount	Balance
08/07/2007	PAYMENT	HUTCHISON, JACK K CHECK BANK: 94-77 NUM: 2085	\$-781.59	\$0.00
07/12/2007	BILL	HUTCHISON, JACK K	\$781.59	\$781.59
08/25/2006	PAYMENT	HUTCHISON, JACK K & CHERYL L CHECK BANK: 94-77 NUM: 1233	\$-734.80	\$0.00
07/12/2006	BILL	HUTCHISON, JACK K	\$734.80	\$734.80
08/18/2005	PAYMENT	HUTCHISON, JACK K & CHERYL L CHECK BANK: 94-77 NUM: 1135	\$-691.48	\$0.00
07/15/2005	BILL	HUTCHISON, JACK K	\$691.48	\$691.48
07/31/2004	PAYMENT	HUTCHISON, JACK K CHECK BANK: 94-77 NUM: 897	\$-651.93	\$0.00
07/08/2004	BILL	HUTCHISON, JACK K	\$651.93	\$651.93
08/18/2003	PAYMENT	HUTCHISON, JACK K CHECK BANK: 94-77 NUM: 1881	\$-644.07	\$0.00
07/18/2003	BILL	HUTCHISON, JACK K	\$644.07	\$644.07
08/20/2002	PAYMENT	HUTCHISON, JACK K CHECK BANK: 94-77 NUM: 1652	\$-624.86	\$0.00
07/12/2002	BILL	HUTCHISON, JACK K	\$624.86	\$624.86
08/14/2001	PAYMENT	HUTCHISON, JACK K CHECK BANK: 94-77 NUM: 1375	\$-617.51	\$0.00
07/12/2001	BILL	HUTCHISON, JACK K	\$617.51	\$617.51
01/16/2001	PAYMENT	HUTCHISON, JACK K CHECK BANK: 94-77 NUM: 1215	\$-305.88	\$0.00
09/05/2000	PAYMENT	HUTCHISON, JACK CHECK BANK: 94-77 NUM: 1063	\$-306.14	\$305.88
07/17/2000	BILL	HUTCHISON, JACK K	\$612.02	\$612.02
08/20/1999	PAYMENT	HUTCHISON, JACK K CHECK BANK: 94-77 NUM: 709	\$-637.59	\$0.00
07/17/1999	BILL	HUTCHISON, JACK K	\$637.59	\$637.59
02/18/1999	PAYMENT	JACK HUTCHISON CORK: B	\$-167.70	\$0.00
01/20/1999	PENALTY	Instlmt 3 Penalty for 1998-99	\$0.26	\$167.70
01/14/1999	PAYMENT	JACK HUTCHISON CHECK	\$-322.00	\$167.44
10/19/1998	PENALTY	Instlmt 2 Penalty for 1998-99	\$6.44	\$489.44
08/18/1998	PAYMENT	HUTCHISON, JACK CHECK	\$-161.12	\$483.00
07/13/1998	BILL	HUTCHISON, J K & LEE SCHAUPP	\$644.12	\$644.12
04/08/1998	PAYMENT	HUTCHISON, J K & LEE SCHAUPP CHECK	\$-432.32	\$0.00
03/25/1998	PENALTY	Postage Costs	\$1.00	\$432.32
03/13/1998	PENALTY	Instlmt 4 Penalty for 1997-98	\$23.82	\$431.32

Date	Type	Billed to / Payer Name / Note	Amount	Balance
01/20/1998	PENALTY	Instlmt 3 Penalty for 1997-98	\$10.12	\$407.50
10/17/1997	PENALTY	Instlmt 2 Penalty for 1997-98	\$0.31	\$397.38
09/05/1997	PAYMENT	HUTCHISON, J K & LEE SCHAUPP CHECK	\$-389.41	\$397.07
09/03/1997	PENALTY	Instlmt 1 Penalty for 1997-98	\$7.79	\$786.48
07/14/1997	BILL	HUTCHISON, J K & LEE SCHAUPP	\$778.69	\$778.69
01/13/1997	PAYMENT	HUTCHISON, J K & LEE SCHAUPP	\$-358.68	\$0.00
08/15/1996	PAYMENT	HUTCHISON, J K & LEE SCHAUPP	\$-358.80	\$358.68
07/18/1996	BILL	HUTCHISON, J K & LEE SCHAUPP	\$717.48	\$717.48

Section 2





0 0.425 0.85
MILES

Vicinity Map

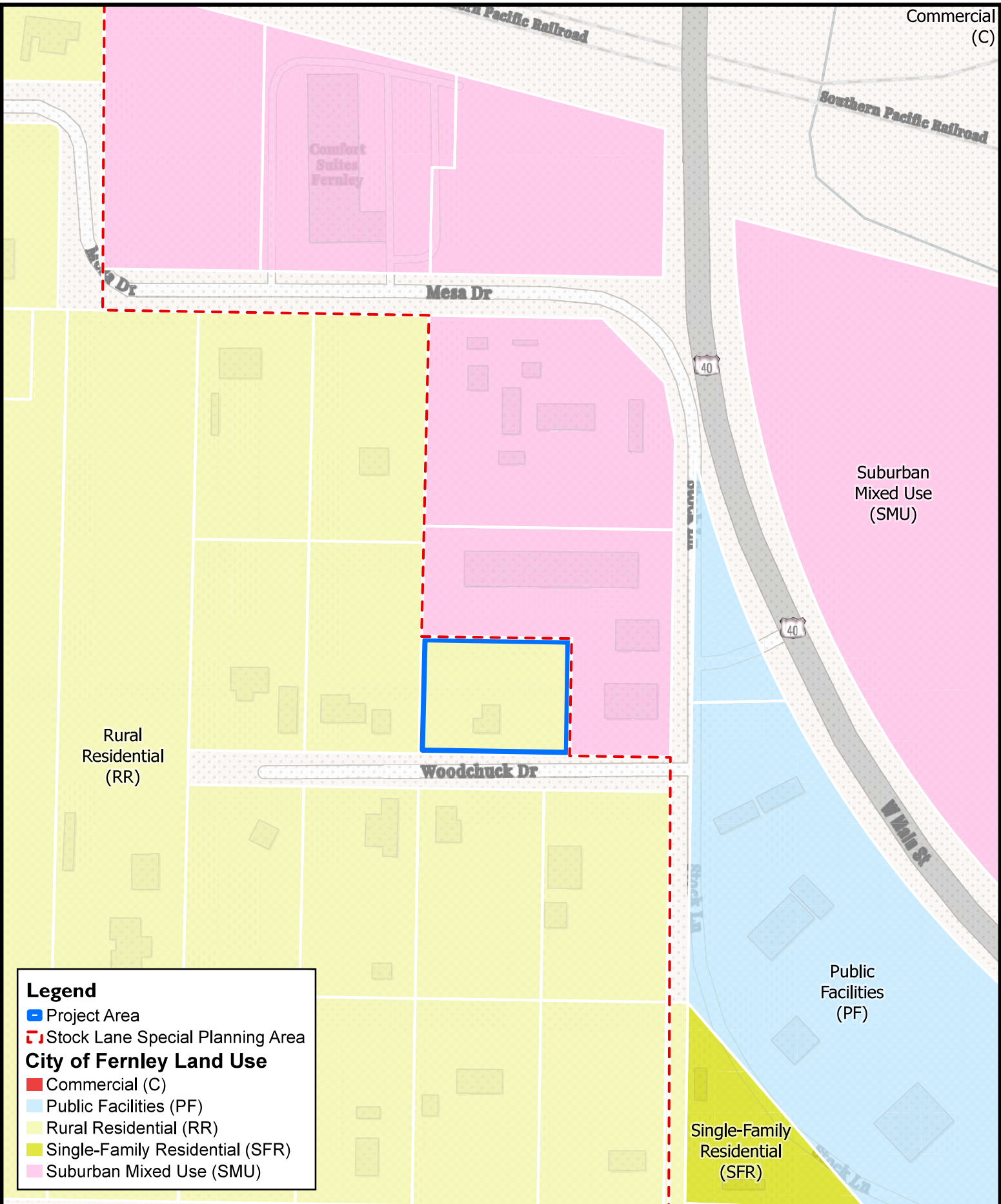
Woodchuck Dr, Fernley, NV

October 2024



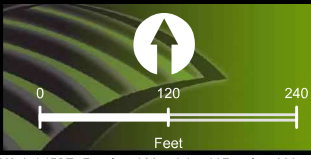
WOOD RODGERS
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME
1361 Corporate Boulevard Tel: 775.823.4068
Reno, NV 89502 Fax: 775.823.4066





Legend

- Project Area
- Stock Lane Special Planning Area
- City of Fernley Land Use**
- Commercial (C)
- Public Facilities (PF)
- Rural Residential (RR)
- Single-Family Residential (SFR)
- Suburban Mixed Use (SMU)



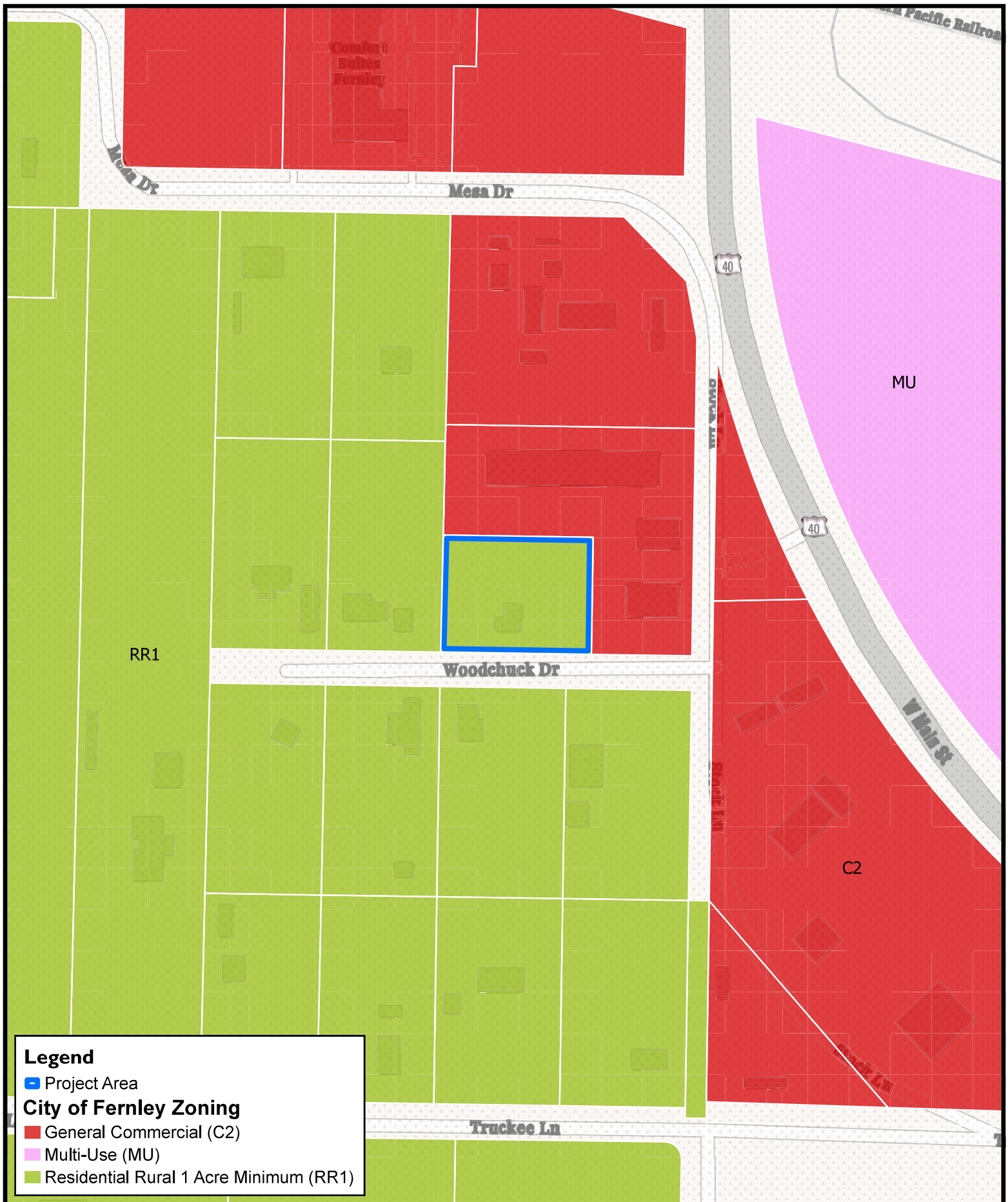
Existing Master Plan

Woodchuck Dr, Fernley, NV

October 2024



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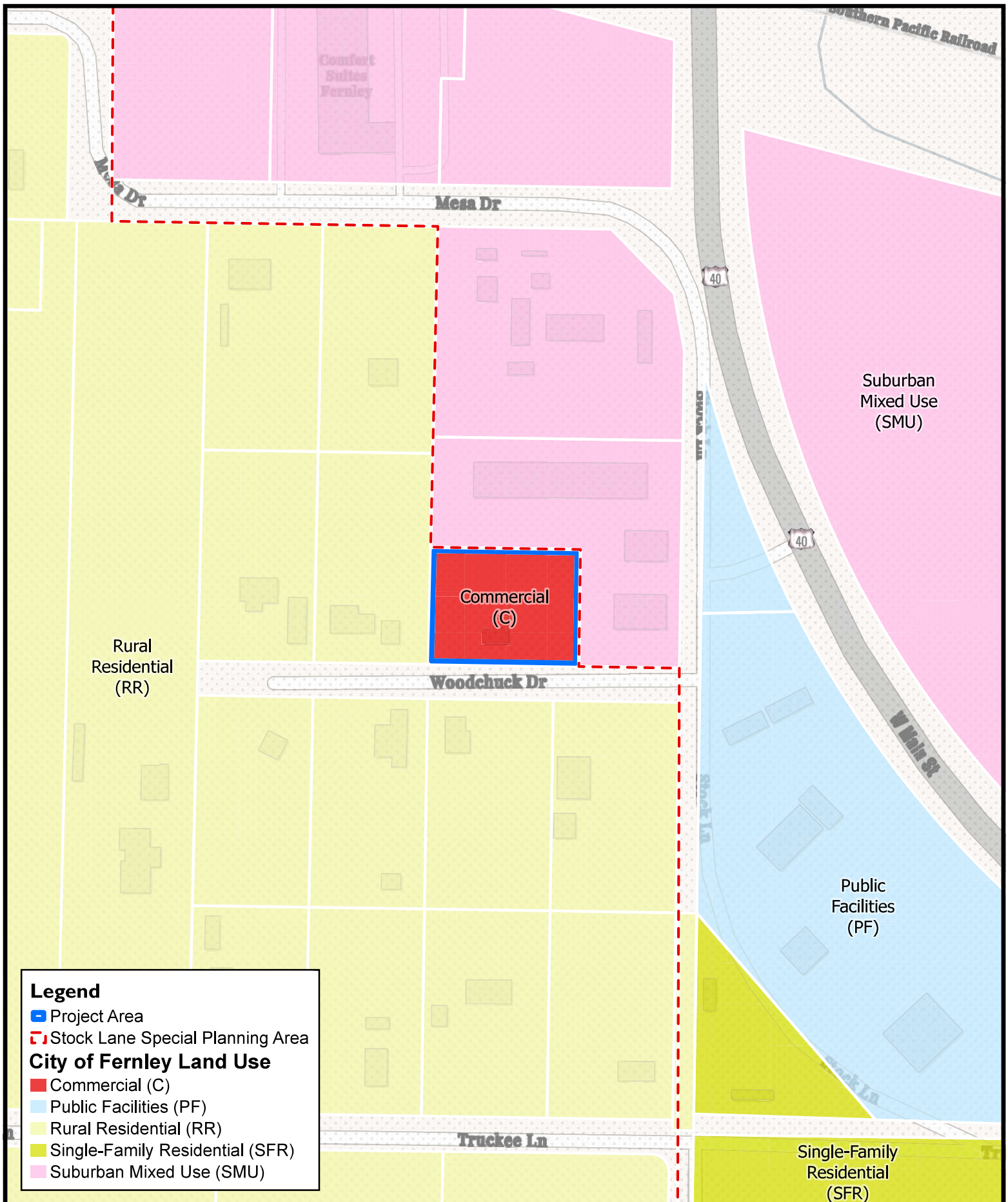


Existing Zoning

Woodchuck Dr, Fernley, NV

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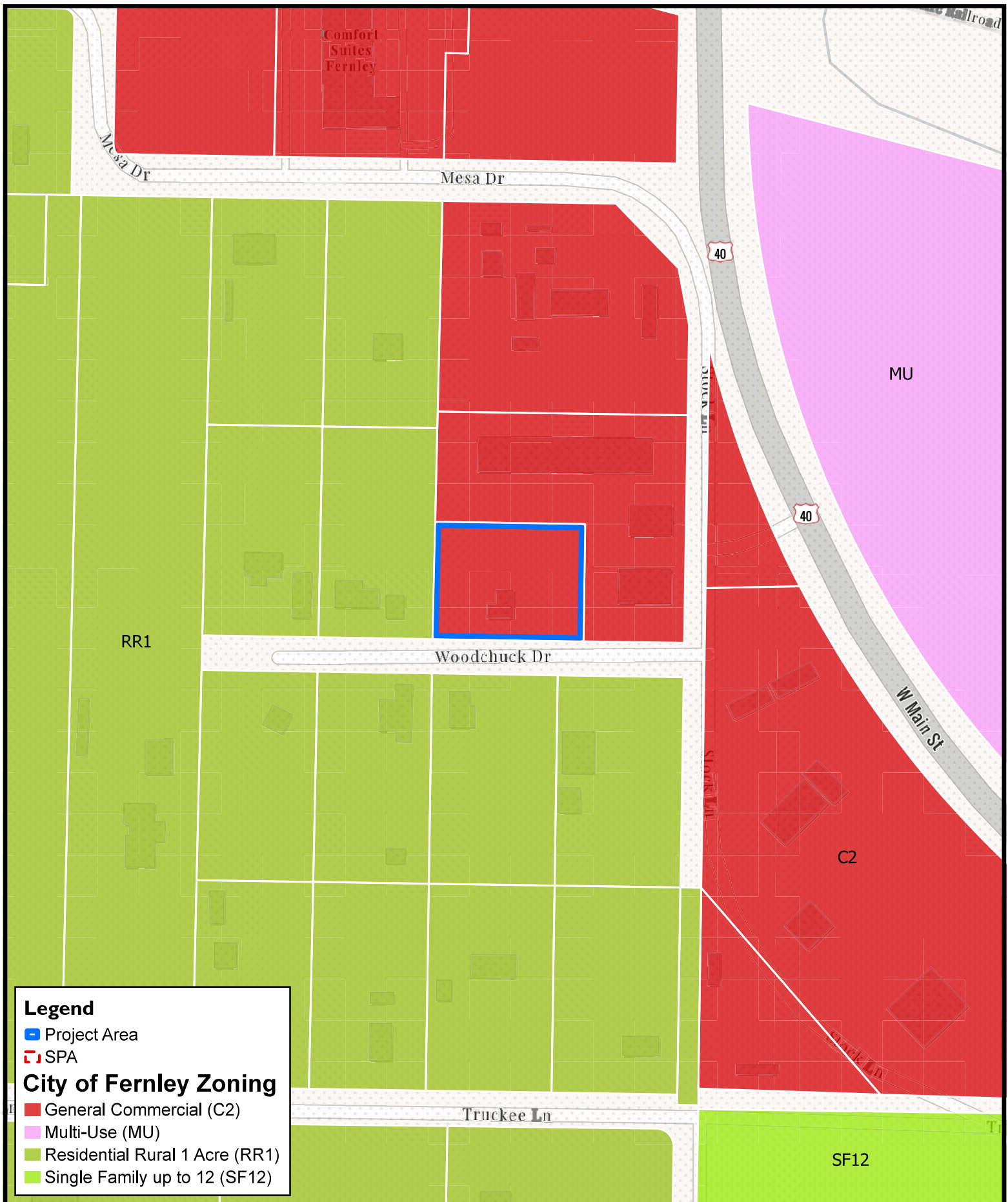
Proposed Master Plan

Woodchuck Dr, Fernley, NV

October 2024



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Legend

- Project Area
- SPA

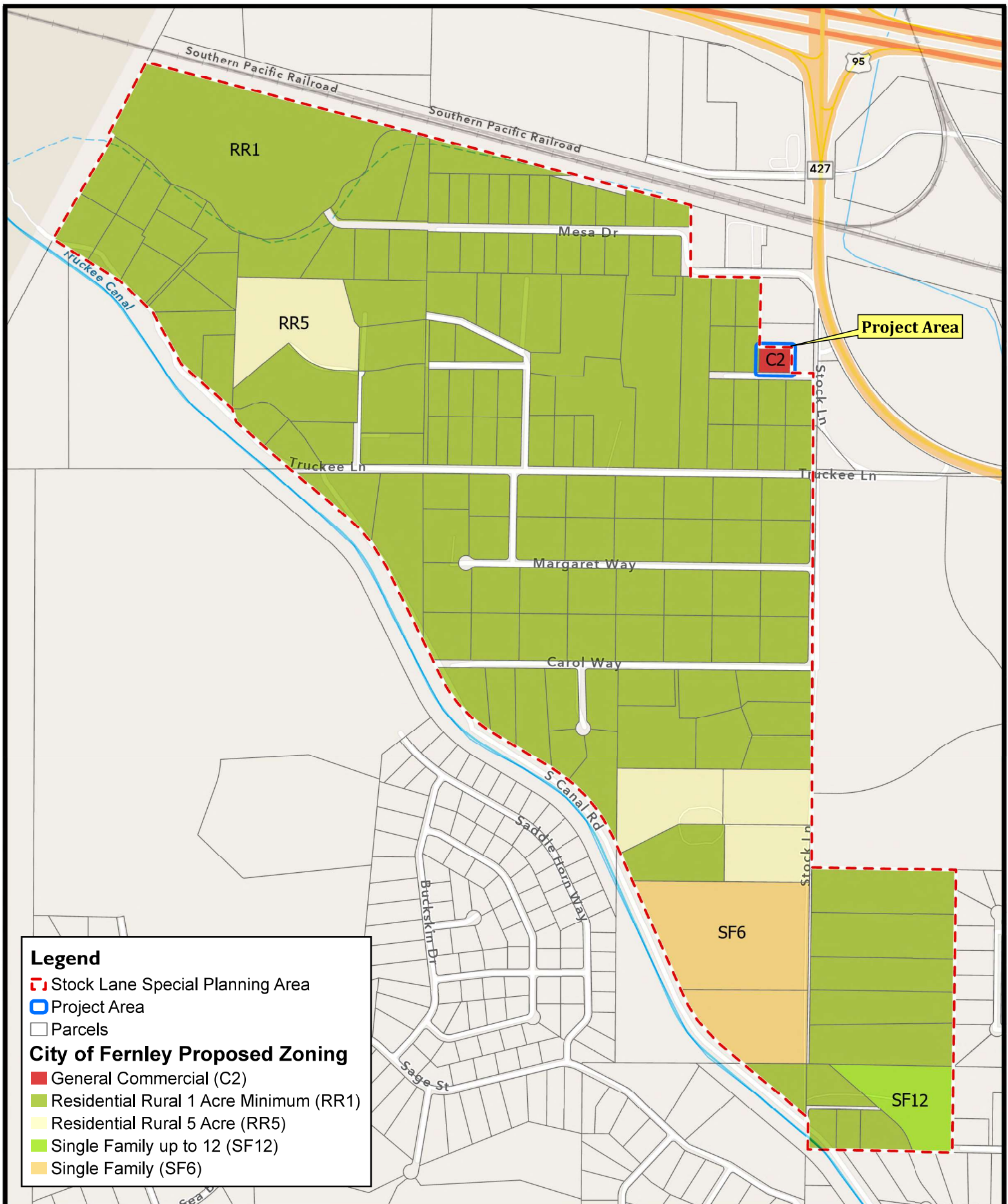
City of Fernley Zoning

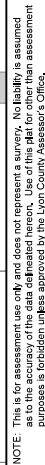
- General Commercial (C2)
- Multi-Use (MU)
- Residential Rural 1 Acre (RR1)
- Single Family up to 12 (SF12)

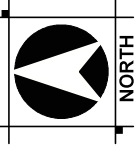
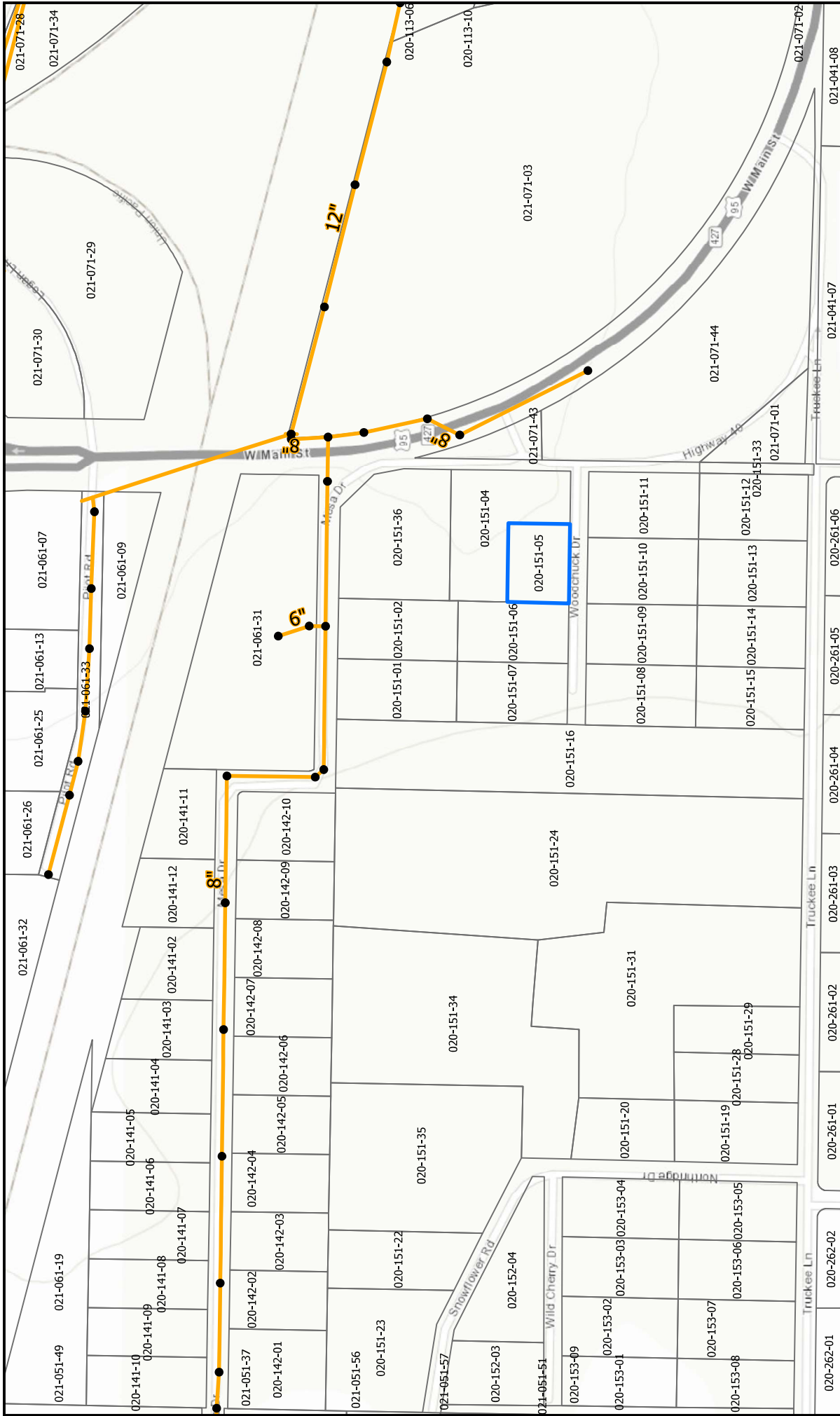


Proposed Zoning
Woodchuck Dr, Fernley, NV
October 2024

WOOD RODGERS
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Legend

Sewer Pipe

Manhole

840 PROJECT AREA SEWER INFRASTRUCTURE

840 WOODCHUCK DR.
FERNLEY, NV
SEPTEMBER 2024



WOOD ROGERS

Section 3

EXECUTIVE SUMMARY

Project Name: 840 Woodchuck Drive Commercial Master Plan and Zoning Map Amendments

Site Location: The project site is located at 840 Woodchuck Drive, a ± 0.85 -acre parcel located on the north side of Woodchuck Drive, ± 160 feet west of Old Highway 40, ± 425 feet west of West Main Street/SR-427, and $\pm 2,100$ feet south of the West Main Street/SR-427 entrance to Interstate-80, in the City of Fernley, NV.

APN Numbers: 020-151-05

Applicant: Douglass Development LLC

Applicant's Representative: Wood Rodgers, Inc., Attention: Eric Hasty

Owner: Daniel Douglass

Proposed Action: This application requests to:

- 1) Zoning Map Amendment on a ± 0.85 -acre parcel (APN 020-151-05) from Rural Residential 1-acre lots (RR-1) to General Commercial (C2);
- 2) Master Plan Amendment to change the Land Use designation from Rural Residential (RR) to Commercial (C).

Current Land Use Classification: Rural Residential (RR)

Proposed Land Use Classification: Commercial (C)

Current Zoning: Rural Residential 1 acre (RR-1)

Proposed Zoning: General Commercial (C2)

Flood Zone Designation: Zone X

Gross Site Area: ± 0.85 acre

ANALYSIS

Background / Existing Conditions

The Woodchuck Drive commercial property, APN 020-151-05 (± 0.85 acres), is located at 840 Woodchuck Drive (Refer to Vicinity map provided in Section 2 of this submittal packet). This entire property will be referred to as the "project site". The project site is developed with one $\pm 1,400$ square feet (sf) metal shop building with a bathroom and an office, on a concrete slab with one roll top garage-style door and an ± 225 sf wooden awning attached to the eastern side of the structure (Figure 1). The structure does not contain a kitchen, thus is not meant for residential use. The remaining

Figure 1: Existing commercial structure (from Woodchuck Dr facing north)



±35,400 sf of the project site is undeveloped permeable surface (Figure 2). This site has historically been used for commercial uses like vehicle and mechanical services and outdoor storage but is currently not occupied. The project site has chain link fencing on all sides and one gate to access the interior of the site along the southern property line via Woodchuck Drive to the east of the commercial structure.

Figure 2: Project site showing vacant portions of the parcel (from Woodchuck Dr facing northwest)



Master Plan and Zoning Designations

The City of Fernley's Comprehensive Master Plan (Master Plan) land use designation for the subject property is Rural Residential (RR), which allows single-family detached residences on lots typically smaller than 20 acres to a minimum size of 1 acre, and the project site is in the Rural Residential 1-acre (RR-1) zoning district. The project site has historically been used for commercial purposes for a number of years as indicated on the commercial building and access which currently exists on site. Therefore, the City of Fernley Planning Staff believes the existing land use designation and zoning district may be a clerical error in the wake of the Master Plan and Development Code update that occurred in 2020. In order to facilitate future continued commercial use of the project site that is inline with the historic uses and in conformance with the Master Plan and Development Code the site will require a change in land use designation that is in conformance with the Master Plan to ensure the zoning district supports the use. A zoning designation that supports the historical uses of auto shops is the General Commercial (C2) zoning district. However, this is not supported by the existing RR land use designation, thus the applicant seeking a Master Plan Amendment (MPA) to change the land use designation from RR to Commercial (C) and a Zoning Map Amendment (ZMA) to amend the zoning district from RR-1 to C2, *(Refer to the Master Plan and Zoning maps in Section 2 of this submittal packet).*

Project Requests

The current request is seeking a:

- 1) Master Plan Amendment to change the land use designation from Rural Residential (RR) to Commercial (C); and
- 2) Zoning Map Amendment to change zoning district from Rural Residential 1-acre lots (RR-1) to General Commercial (C2).

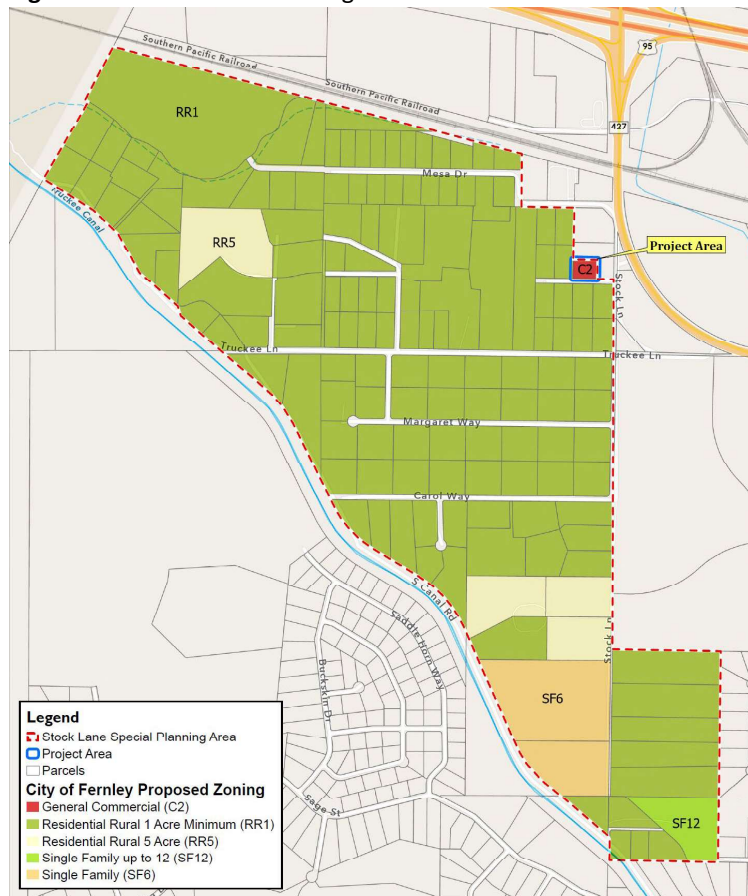
Justification for Requests

Master Plan Amendment

The City of Fernley has identified nine community principles to help guide the future prosperity of the community which have helped to shape the specific goals and policies found within the Master Plan. One of the guiding principles is **Ensure Compatibility** which includes how development fits in with the existing fabric of the community and supports interconnected development. This principle encourages development to be organized in a way to respect existing land uses and future growth opportunities. The proposed MPA is consistent with this guiding principle as it is seeking to align the historic commercial use of the property with the appropriate land use designation and will facilitate future utilization and/or development of the site that is compatible with the neighboring commercial uses.

As discussed below in the *Findings for Approval* section, allowing the site to be developed for commercial land uses aligns with several goals and action strategies of the Master Plan through encouraging development that is compatible with neighboring land uses on an underutilized site that is adequately served by public services and in close proximity to utility service connections.

Figure 3: Stock Lane SPA Zoning Districts



Stock Lane Special Planning Area (SPA)

The Master Plan specifically outlines a mapped area called the Stock Lane Special Planning Area (SPA) which includes the subject parcel (Refer to the Stock Lane SPA map in Section 2 of this submittal packet). The project site is along the eastern most boundary of the Stock Lane SPA. The Master Plan describes the Stock Lane SPA as follows:

*“Properties within the Stock Lane SPA are designated Rural Residential which limits minimum lot sizes to two (2) acres until such time as access is improved and City infrastructure is available to serve the area. Development within this SPA will remain focused on a low-density rural concept, with **little or no commercial development**. New development is encouraged to incorporate rural architectural features to compliment the character of the area.”*

Although the focus of the Stock Lane SPA is rural residential development, the SPA does allow for a small amount of commercial development. There are no other parcels in the Stock Lane SPA zoned for commercial use (Figure 3), thus if this

project site was zoned commercial it would help to satisfy the small portion of commercial development intended for the Stock Lane SPA.

One goal of the Stock Lane SPA is to protect certain areas of Fernley from development until such a time access is improved and City infrastructure is available to serve the area. As discussed in detail below, the site is in close proximity to City sewer and water infrastructure and access is already provided. Any future development of the site would be required to connect to city utility infrastructure, in alignment with the goals of the Stock Lane SPA.

Zoning Map Amendment

The project site, although zoned Rural Residential one acres lots (RR-1), has historically been used for commercial purposes and is surrounded to the north and east by other commercial uses. Furthermore, the site is less than one acre, which is less than the required minimum lot size in the RR-1 zoning district further supporting that this has intended to be a commercial lot. Not only is the lot size non-conforming to the existing zoning district, but the existing structure on site is commercial. The applicant is seeking a ZMA to align the zoning with the site size, use, and structure on site, as well as the allowed land uses of the parcel to the north and east.

C2 Zoning Justification

- ✓ *SITE HISTORICALLY USED FOR COMMERCIAL PURPOSES*
- ✓ *EXISTING COMMERCIAL STRUCTURE ON SITE*
- ✓ *LOT SIZE DOES NOT CONFORM TO EXISTING ZONING, BUT DOES CONFORM TO C2*
- ✓ *COMPATABILITY WITH ADJACENT COMMERCIAL LAND USES*

The purpose of the RR-1 district is to create and preserve areas where single-family, detached homes on one-acre lots with rural road standards are predominant; the maximum number of dwelling units that may be located in the district is one unit per one acre. Given this development standard, future development of this site as residential would not be in compliance as the lot size does not support the density minimum for the RR-1 zoning district. As a result, the parcel will remain underutilized, vacant, and the existing structure will continue to fall into blight due to vacancy. Additionally, retrofitting the existing structure to meet residential buildings codes would be infeasible. By modifying the zoning district to C2 future development of the site is possible, including utilization of the existing commercial structure.

Table 1: Adjacent Land Use and Zoning

Adjacent Properties	Zoning District	Master Plan Land Use Designation
North and East ±1.9 acre L-shaped Commercial parcel occupied by Fernley Self Storage, Quintero Tires and Wheels, Collected Bargains, and All 4 Paws ¹	C2	Suburban Mixed Use (SMU)
West ±1.15 acre Residential parcel occupied with a single-family residence	Rural Residential 1-acre RR-1	Rural Residential (RR)
South ±1.15 acre Residential parcel occupied with a single-family residence	Rural Residential 1-acre RR-1	Rural Residential (RR)

¹Refer to the Aerial Map in Section 2 of this submittal packet

The project site has commercial and residential adjacency with commercial land uses to the north and east and residential land uses to the south and west (see Table 1 above). It is important to note the Fernley Municipal Code (FMC) §32.09.030 (Adjacency Standards) outlines several development standards that must be met by development adjacent to residential development for any future commercial use to reduce impacts on adjacent residential development including, but not limited to, buffers from property lines, provisions for light trespass, noise, location of off-street parking, window placement to ensure residential privacy, and building height. Therefore, any future commercial development on site would be required to adhere to all applicable residential adjacency standards.

Site Characteristics

Access, Traffic, and Circulation

The project site is accessed via Woodchuck Drive, a 50-ft wide unpaved local roadway which provides access to Old Highway 40 to the east of the project site and access to the residential parcels to the west of the project site. This street does not provide through access to the west and terminates at the residential lots. Although the project site is only served by Woodchuck Drive, one parcel east is Old Highway 40 which serves other existing commercial parcels and has adequate capacity for additional commercial uses in the vicinity. A new commercial use on the project site would be able to accommodate traffic generated by commercial uses as it has historically done. The site is already well designed to accommodate commercial traffic and is large enough to allow future development to include separate onsite drive isles for ingress and egress and vehicle parking spaces, eliminating traffic impact to the portion of Woodchuck Drive serving the neighboring residential parcels to the west. Additionally, future development of the project site would require full site improvements including pavement, gutter and sidewalk on the portion of Woodchuck Drive which abuts the project site.

Sewer, Water, and Utilities

Adequate utilities to serve the site are available in the adjacent properties and can feasibly be extended to serve future development. The nearest city public sewer infrastructure is an 8-inch main located two parcels east of the site within SR-427/West Main Street and a 6-inch main located two parcels north of the site along Mesa Drive (*Refer to the Sewer Infrastructure Map in section 2 of this submittal packet*). The city operates a 20-inch water main and a 36-inch pressurized water main one parcel east of the site along Old Highway 40. If development occurs on the site in the future, it will be necessary for the developer to connect the parcel to the existing city sewer and water infrastructure to ensure compliance with local regulations and to provide reliable utility services for any new structures. This connection will facilitate access to clean water and efficient wastewater management, supporting sustainable growth and development on the property.

Dry utilities are serving the site. Southwest Gas and NV Energy provide gas and electrical service, respectively. Telephone service, cable television, and internet can be provided by AT&T or Spectrum.

Police & Fire

The project site is already served by existing police and fire services. Police protection is provided by the Lyon County Sheriff's office which maintains a substation adjacent to Fernley City Hall, 1.6-miles east of the project site. Fire protection is provided by the North Lyon County Fire Protection District Station 62, located 1-mile east of the parcel. The North Lyon County Fire District strives for response times of 4-7 minutes, and the project site is within a 3-minute drive from the project site, within the required response time for emergency vehicles. The subject site is located in a developed area near existing development that is already served by these agencies. The existing police and fire services of the area are well-equipped and prepared to adequately serve the future commercial development of the parcel, ensuring safety and security for all new establishments and neighboring residents and commercial tenants.

FINDINGS FOR APPROVAL

Pursuant to the City of Fernley Municipal Code Section 32.03.040(b)(6) *Findings for approval*, a master plan amendment may be approved if:

- 1) **The master plan amendment would implement the goals listed within the City of Fernley Master Plan as listed in the staff report;**
- 2) **The master plan amendment would be compatible with surrounding land uses; and**
- 3) **Public notice was given, and a public hearing held per the requirements of Nevada Revised Statutes and Fernley Development Code.**

Pursuant to the City of Fernley Municipal Code Section 32.03.040(e)(6) *Findings for approval*, a zoning map amendment may be approved if it is:

- 1) **Consistent with the city's Master Plan and otherwise consistent with state and federal law;**
- 2) **Consistent with the surrounding land uses; and**
- 3) **Public notice was given, and a public hearing held per the requirement of the development code and Nevada Revised Statutes.**

Note: Due to the similarity in the required master plan amendment (MPA) findings for approval and the zoning map amendment (ZMA) findings for approval, and to avoid repetitive or duplicative responses, the responses for both the MPA and ZMA findings for approval have been combined below.

1) *Implementation and Consistency with the City of Fernley Master Plan*

Response: The proposed MPA to change the land use designation of the ±0.85-acre subject parcel from RR to C and proposed ZMA to change the zoning district from RR-1 to C2 would help meet several of the goals and policies identified in the City's Master Plan, which are outlined below.

Applicable Master Plan Goals and Policies

LU.1.1 Encourage new development in area where adequate public services and facilities can be provided

LU.1.1.1 Require new development to provide its proportionate share of improvements to avoid a degradation of services for existing residents. This requirement will be applied regardless of project size in order to avoid incremental erosion of services and facilities.

LU.1.1.2 Encourage development of vacant or underutilized lands within the community core where adequate infrastructure and facilities currently exists.

LU.1.1.3 Require new development to provide certified, stamped studies demonstrating the impact proposed development will have on existing infrastructure and to provide improvements and/or funding in lieu of improvements in proportion to the impacts of the proposed projects on the city's roadway, sewer and water systems.

PSF.1.2 To the maximum extent possible, the costs of improvement, extension and construction of public facilities should be borne by those whose land development and redevelopment actions made such improvement, extension and construction necessary. A procedure is to be established that defines the responsibility for improvements of individual projects.

PSF.2.1 Insure an efficient, adequate and self-supporting wastewater collection treatment and disposal system that will meet the needs of the public and comply with federal, state and local clean water requirements.

PSF.2.1.3 Sewer costs directly attributable to new development shall be paid for by the new development. The cost of providing service shall include the cost of extending service lines or other necessary facilities to the individual project site.

Response: The project site is currently served by a well and septic which can support commercial uses within the existing commercial structure as well as certain allowed land uses under the C2 zoning that do not require any additional level of utility service. The site is not connected to nearby city water or sewer infrastructure, but these services are available nearby and could be feasibly extended to serve future development. The City has water mains ±175 ft east along Highway 40. The City has a 6-inch sewer main ±480 ft north along Mesa Drive and an 8-inch sewer main ±275 ft east along SR-427/West Main Street (*Refer to the Sewer Infrastructure Map in Section 2 of this submittal packet*). Although connection requirements are not necessary at the time of this application, upon any future development of the site the developer will be required to connect the site to the nearby city sewer and water infrastructure in order to ensure access to clean water and efficient wastewater management, supporting sustainable growth and development on the property. Additionally, the developed site is already served by the Lyon County Sheriff department and the North Lyon County Fire Protection District. The existing police and fire services of the area are well-equipped and prepared to adequately serve the future commercial development of the parcel, ensuring safety and security for all new establishments and neighboring residents and tenants. It is for the above reasons the proposed MPA and ZMA can be found consistent with Master Plan goals LU.1.1, PSF.1.2, PSF.2.1, and associated applicable policies.

LU.1.4 Ensure existing and future land uses are compatible.

LU.1.4.2 Projects shall be evaluated with the intent to promote land use compatibility; community design measures can increase compatibility among adjoining land uses.

LU.1.4.3 Prevent future suburban or urban residential subdivisions from locating residences next to principal arterials, freeways, or 300 feet from railroads. Effective shielding and buffering will be required to provide noise abatement with health and safety precautions.

LU.1.4.5 Require development plans to address conditions unique to the developing area and minimize impacts to adjacent properties.

Response: The project site is currently developed with an unoccupied commercial structure which, despite the parcels RR-1 zoning, has historically been used for commercial purposes. The RR-1 zoning district has a requirement that parcels be a minimum of one acre, meaning the project area is non-conforming to the existing zone district's development standards. The site is adjacent to commercially zoned and residentially zoned parcels, and the site is more compatible with the commercial zoning due to the size of the site, the historical use of the site, existing development on site, and the existing land uses of the parcel to the north and east of the site. These facts support that the parcel has always been planned for commercial use. This request will help bring the existing use into compliance with the master plan.

Additionally, the site sits between residential land uses and SR-427, allowing for any future commercial development on the site to buffer the existing residential land uses from the nearby highway. Furthermore, any future commercial development on the site will be required to incorporate all applicable development standards of FMC §32.09.030 (Adjacency Standards) which require commercial development adjacent to residentially zoned parcels implement development standards to conform with properties adjacent to residential development including, but not limited to, buffers from property lines, provisions for light trespass, noise, location of off-street parking, window placement to ensure residential privacy, and building height. It is for all the above reasons future land uses allowed under the proposed MPA and ZMA would be compatible with surrounding land uses, thus the proposed MPA and ZMA can be found consistent with Master Plan goal LU.1.4 and associated applicable policies.

LU.1.5 Promote infill development

Response: Although the project site is currently developed with a ±1,400 sf commercial building, due to the existing zoning this site is not in conformance with the master plan, and the existing use is not within conformance with the underlying land use and zoning. The proposed MPA and ZMA will bring the site into conformance and allow the underutilized site to be occupied and/or redeveloped in the future with updated structures. Future use of the site could be contained within the existing commercial structure, but vacancy of the site will most likely continue under the current zoning. It is for all of these reasons the proposed MPA and ZMA will promote utilization of the site and future development of the site, consistent with Master Plan goal LU.1.5.

2) Consistency and Compatibility with Surrounding Land Uses

Response: The proposed request is consistent and compatible with the surrounding land uses.

Surrounding Land Uses

NORTH and EAST – To the north and east of the project site is an L-shaped ±1.89-acre developed parcel with a land use designation of Suburban Mixed Use (SMU) and a zoning designation of C2. The site is occupied by three commercial structures: 1) a ±3,750 sf commercial structure occupied by Quinteros Tires and Wheels; 2) a ±2,400 sf commercial structure occupied by Collected Bargains, an antique and second hand store; and 3) a ±10,000 sf structure occupied by Fernley Self Storage, All 4 Paws dog grooming, and additional space for Collected Bargains antique and second hand store (*Refer to the Aerial Map in Section 2 of this submittal packet*). Beyond the neighboring parcel to the north/east, all parcels to the north and east for at least half a mile in each direction are zoned commercial or mixed use. The current use has always intended to be included in this commercial area and has been operating as part of this commercial area for a number of years.

SOUTH – Adjacent to the site to the south across Woodchuck Drive are parcels with the land use designation of RR and zoned RR-1 occupied by single family residences on lots greater than one acre (±1.15 acre to ±1.41 acre).

WEST – Directly west of the site is a ±1.15-acre residential parcel with a land use designation of RR and a zoning designation of RR-1 developed with a single-family residence.

The project site, as discussed previously, is already developed with a commercial structure and has historically been used for commercial purposes. In order for areas of the city to transition seamlessly from residential to commercial zones and reduce impacts of commercial development on neighboring residential land uses, the city has included in the municipal code several residential adjacency standards of which future commercial development at this site would be required to adhere to including but not limited to: buffers from property lines, provisions for light trespass, noise, location of off-street parking, window placement to ensure residential privacy, and building height. The Master Plan outlines several areas of the city where commercial and residential land use designations will neighbor each other, thus these adjacency standards of the municipal code bring compatibility to different land uses and encourage cohesive transitions from zone to zone. That being said, the project site is adjacent to zoned residential and zoned commercial areas, and the site is more consistent and compatible with the nearby commercially zoned parcels for several reasons:

- A. **Size of the site:** The project site is ±0.85-acres. Zoning for the RR-1 zone district requires sites be a minimum of one acre, where as the adjacent C2 zoning to the north and east allows sites to have a minimum lot size of 6,000 sf (±.137 acre) and no maximum lot size requirements. The existing lot size is non-conforming to the RR-1 zoning district and is in conformance with the C2 zoning district.
- B. **Existing structure on site:** The site is currently developed with an existing ±1,400 sf metal commercial structure with a roll top garage door on a concrete slab designed for commercial use like a repair or mechanic shop. Retrofitting the existing structure for residential purposes to meet existing residential building code would be infeasible compared to utilization of the structure for commercial purposes.

- C. **Historic use of the site.** Despite the site having the RR land use designation and the RR-1 zoning district, it has historically been used for commercial purposes, with the most recent commercial use being for a business called Cycle Pads servicing motorcycles and ATVs.
- D. **Surrounding land uses.** As described above, the surrounding land uses to the north and east are well established commercial land uses in the C2 zoning district, compatible and consistent with commercial land use of the subject parcel. Additionally, further east across Old Highway 40 is a parcel occupied by the Nevada Highway Patrol and the Nevada Department of Transportation, two high traffic land uses bordered by a state highway. In order to ensure continued land use compatibility with the neighboring residential parcels to the south and west all future development projects on site will need to incorporate all applicable residential adjacency development standards.

3) Public notice was given, and a public hearing held per the requirements of Nevada Revised Statutes and Fernley Development Code.

Response: The Applicant acknowledges that public notice and a public hearing are required per the development code and Nevada Revised Statutes and ensures that these actions will be carried out as part of the project process.



CITY OF FERNLEY

Planning Commission AGENDA REPORT

Meeting Date: December 11, 2024

REPORT TO: Fernley Planning Commission

REPORT FROM: Michele Rambo, Planning Director

FINANCIAL IMPACT:

Yes: X

No:

CURRENTLY BUDGETED:

Yes:

No: X

FUND/ACCOUNT:

N/A

ACTION REQUESTED: Resolution
Motion

AGENDA ITEM:

(For possible action) Discussion and possible action regarding Resolution #25-001 associated with a Master Plan Amendment application (MPA24005) submitted by the City of Fernley to adopt the North Fernley Area Plan document and associated design guidelines for approximately 5,400 acres generally located north of Interstate 80 between Exit 46 and Exit 50.

AGENDA ITEM BRIEF:

The City of Fernley Comprehensive Master Plan designates three areas of town as Future Development Areas and prohibits growth until an Area Plan is adopted for each. The North Fernley area is one of these designated areas generally located north of Interstate 80 between Exit 46 and Exit 50. The proposed Area Plan and associated design guidelines provide a guide for developers to follow in terms of uses, neighborhood compatibility, and individual site design.

RECOMMENDED MOTION:

I move to approve Resolution #25-001 (associated with MPA24005) and recommend that the City Council certify Resolution #25-001 to adopt the North Fernley Area Plan document and design guidelines as presented by staff.

BUSINESS IMPACT (per NRS Chapter 237):

A Business Impact Statement is not required because this is not a rule (term excludes vehicles by which legislative powers are exercised under NRS Chapters 271, 278, 278A, or 278B).

See attached report for background, analysis, alternatives.

ALTERNATIVES:

I move to approve Resolution #25-001 (associated with MPA24005) and recommend that the City Council certify Resolution #25-001 and adopt the North Fernley Area Plan and design guidelines with the following modifications: _____.

I move to deny MPA24005 because the following finding(s) cannot be met: _____.

BACKGROUND:

See Attached Narrative

RELEVANT LAWS, STATUTES, AND REGULATIONS:

City of Fernley Comprehensive Master Plan
City of Fernley Development Code
NRS Chapter 278

FINANCIAL IMPLICATIONS:

Estimated property tax revenue to the City of Fernley of \$57 million.

ATTACHMENTS:

1. Project Narrative
2. Resolution 25-001
3. North Fernley Area Plan
4. Design Guidelines

NORTH FERNLEY AREA PLAN NARRATIVE

HISTORY

Section 3.5 of the Comprehensive Master Plan and Section 32.21.010(e) of the Development Code both discuss three areas identified as “future development areas”. They go on to say that these three areas (North Fernley, South Fernley, and Southwest Fernley) will be required to have an Area Plan developed to “create a unified vision for the area and cumulatively address development challenges” prior to any development of the areas. This North Fernley Area Plan is the first of these plans to be completed, which will open up approximately 5,400 acres of the City for development.

The North Fernley area was chosen for the first Area Plan due to the development pressure coming from the property owners. A large portion of the area is owned by one entity who is anxious to move their proposed Planned Development forward. Other property owners in the area have also expressed desire to develop their individual properties. In addition, this area has the closest connections to water and sewer than the other two future development areas, making this the natural next phase of city growth.

NORTH FERNLEY AREA PLAN

The City of Fernley anticipates considerable growth over the next two decades. An Area Plan allows for careful planning and implementation in coordination with the community and stakeholders, which is particularly important for an area of this size (5,400 acres). The Area Plan works in conjunction with the Comprehensive Master Plan and the Development Code to establish a specific vision and tangible objectives to transform the North Fernley area into a large master planned community with vast employment opportunities, supporting commercial uses, and a diverse range of housing types.

The Area Plan consists of many different elements. The following narrative will focus on future land use, transportation, water, fiscal impacts, and implementation.

Future Land Use

The first step in creating an Area Plan is determining a future land use plan which lays out what types of uses are envisioned and where they should be located. Through many public open house meetings, stakeholders meetings, and discussions with elected officials, the consultant and City Staff created a land use plan that best combines the public vision of the area with property owners’ desired development potential.

Future Land Use Plan

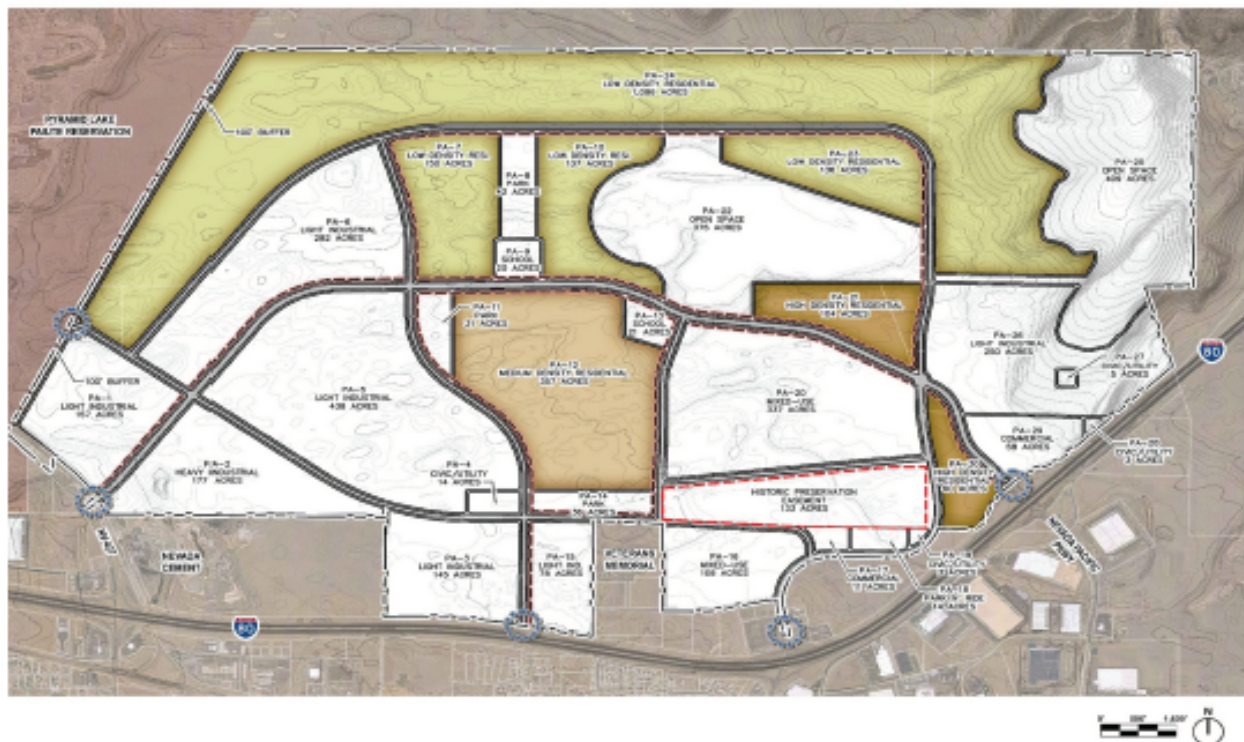


Residential

The North Fernley Area Plan envisions cohesive, high-quality residential areas that will tie into surrounding Mixed-Use and Commercial uses and create a complete neighborhood. Residential uses are concentrated in the center and rear of the area and are divided into three categories: Low Density (1-6 units/acre), Medium Density (7-13 units/acre), and High Density (14-30 units/acre). Based on the amount of land dedicated to each of these categories, the North Area Plan has the potential to provide up to 16,618 housing units at full buildout.

The majority of the residential area (1,509 acres) is dedicated to low density residential located mostly along the north boundary of the plan area. This area would consist of large lot estates, single-family residential units, townhomes, and/or duplexes. The medium density area (357 acres), located in the center of the plan area would allow more concentrated residential development such as small lot single-family residences, duplexes, triplexes, townhomes, and 1-2 story apartment buildings. High density is the smallest area (164 acres) and is located toward the eastern side of the plan area near Exit 50. This area would allow for taller (3-4 story) apartment buildings, condominiums, and workforce housing.

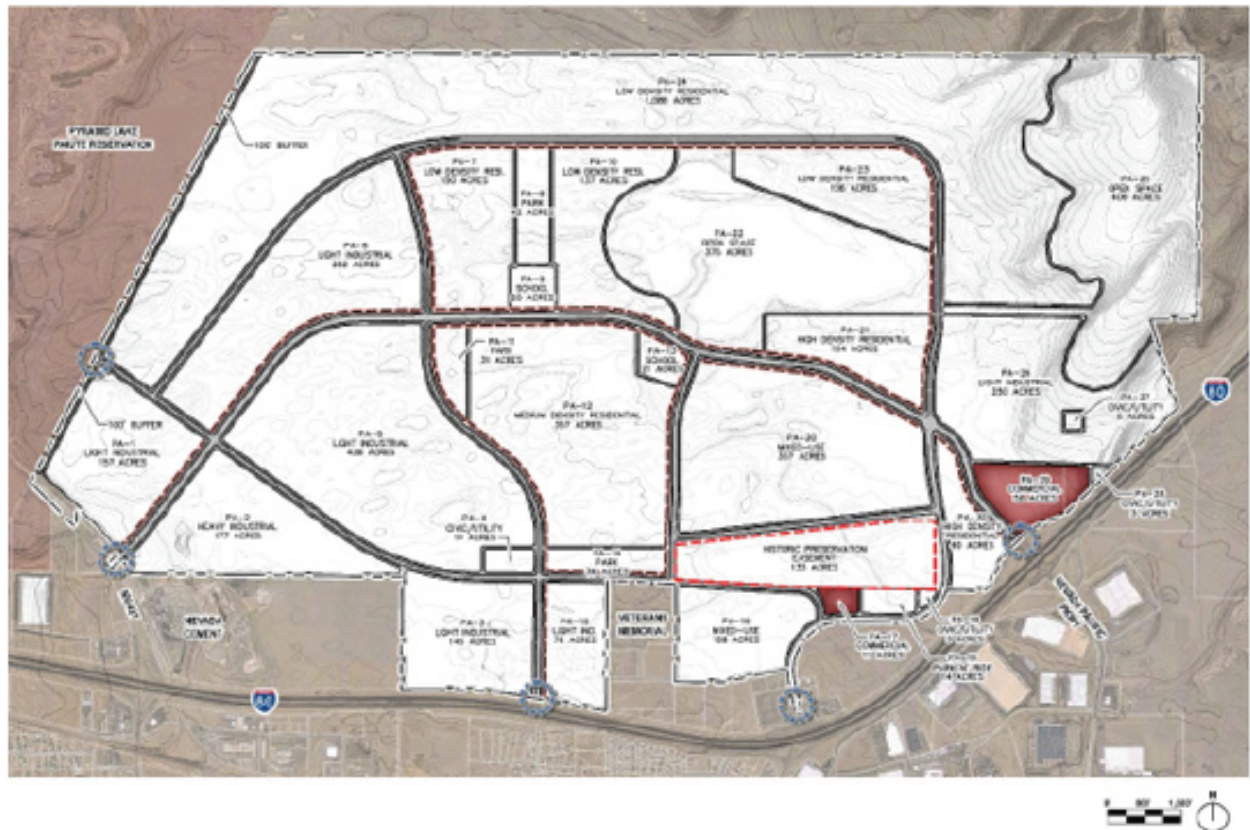
Residential Areas (Yellow/Orange)



Commercial

A total of 69 acres has been set aside on the eastern side of the North Fernley Area Plan near Exit 50 as Commercial. These areas are intended for mainly retail pad sites and larger connected development sites with in-line retail and/or big box retail. Corresponding zoning districts in these areas would include Neighborhood Commercial, General Commercial, and Tourist Commercial. The goal of these areas is to create walkable developments that provide connectivity to adjacent land uses. With a wide variety of uses included in this area, residents would not necessarily need to cross Interstate 80 to find what they need, therefore reducing traffic in other areas of Fernley.

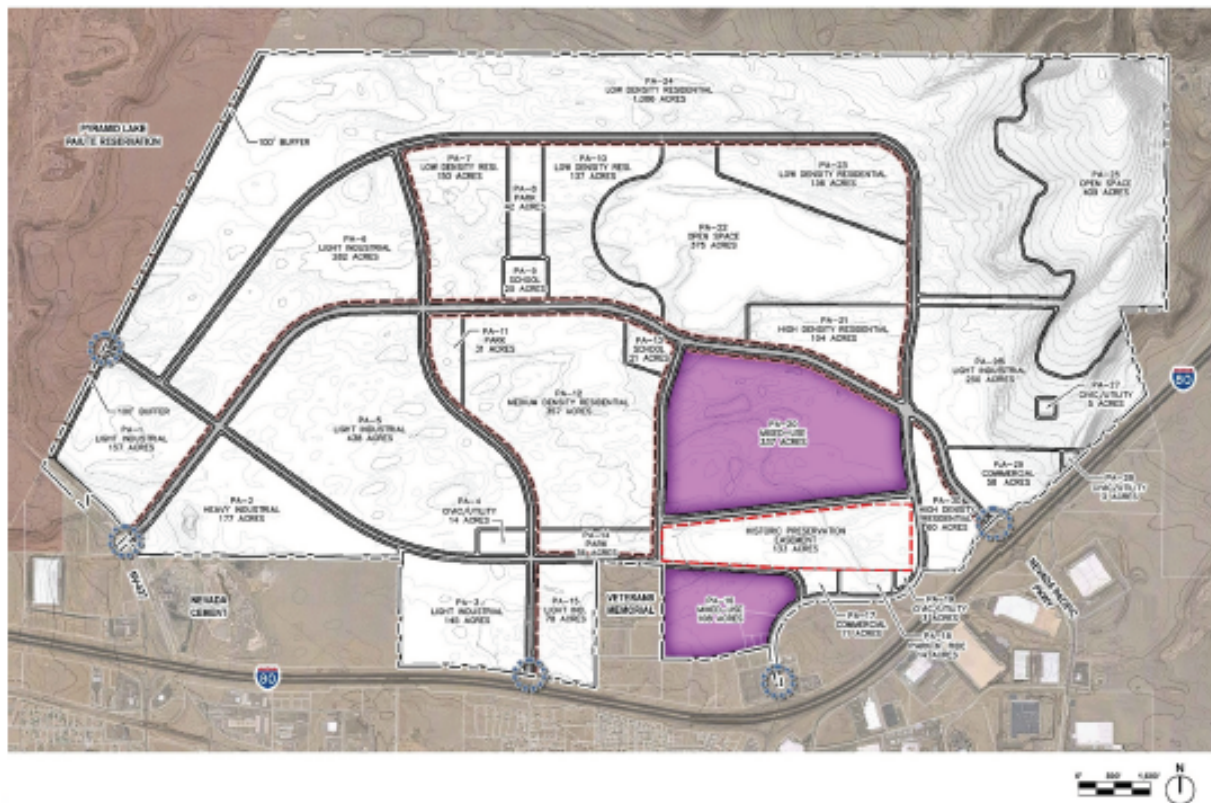
Commercial Areas (Red)



Mixed-Use

At 445 acres, the mixed-use areas within the North Fernley Area Plan include a variety of community-serving land uses incorporating residential, commercial, office, medical, and public facilities. Mixed-use is located near the center of the area to provide a transitional use between residential neighborhoods and commercial/industrial areas. Uses expected in these areas include multiple-family residential, live/work units, commercial retail, medical and professional office, and neighborhood commercial. With a range of densities, it is difficult to estimate the number of future housing units, but the area is intended to promote walkability and connectivity between different types of uses.

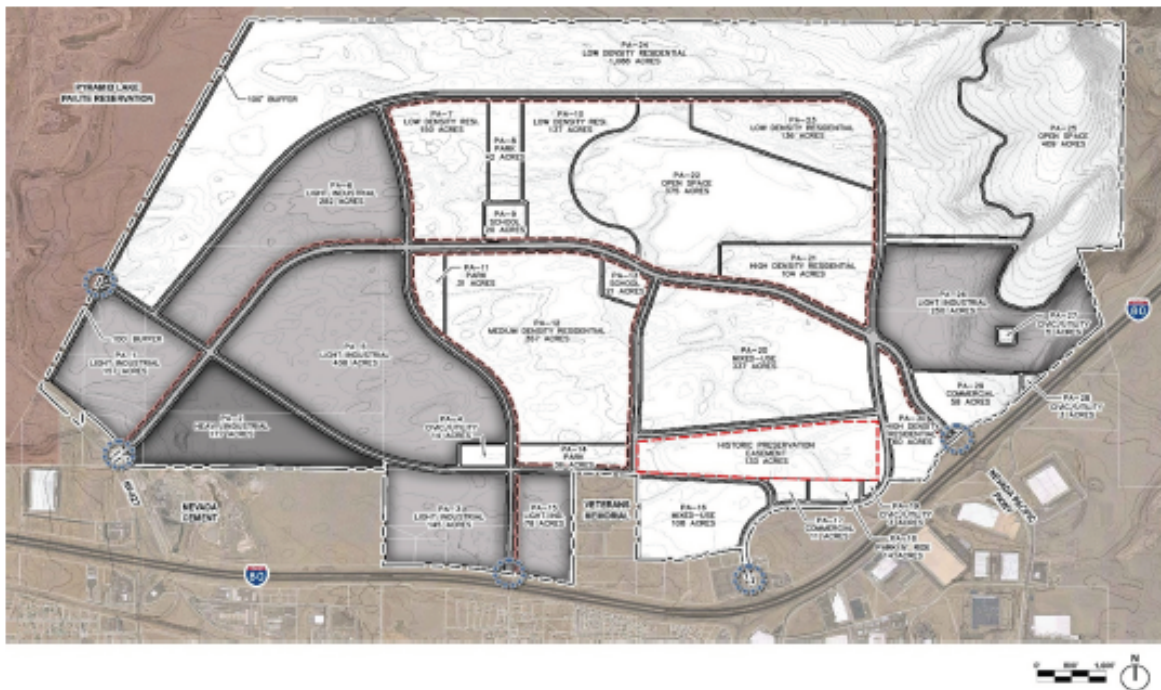
Mixed-Use Areas (Purple)



Industrial

The Industrial designation within the North Area Plan accounts for the second largest land area behind Residential. At 1,527 acres, these areas are located on both the west and east ends of the plan area with the goal of allowing truck traffic easy access to Interstate 80 without needing to drive through residential areas. Including both light and heavy industrial uses such as manufacturing, warehousing, logistics, office, and data center, these areas are intended to provide employment opportunities and create an environment where industrial activities may occur with minimum impact on surrounding land uses.

Industrial Areas (Grey)



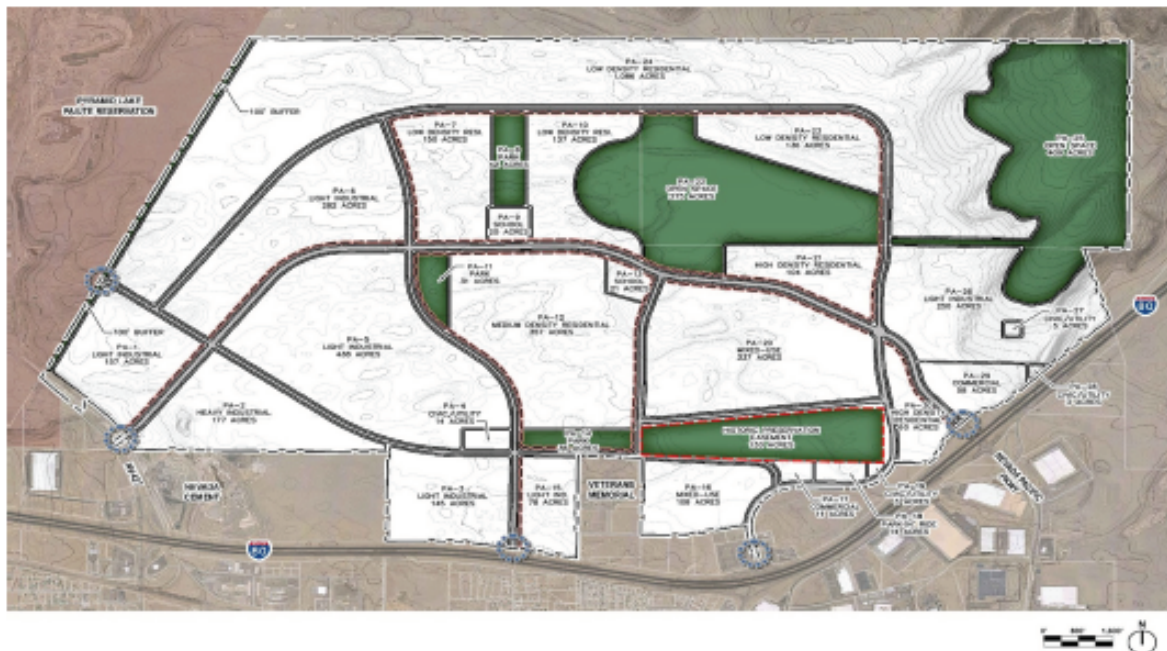
Open Space and Recreation

The third largest acreage (1,026 acres) behind Residential and Industrial falls under the designation of Open Space and Recreation. There are six primary areas intended to provide opportunities for public parks, sports fields, and general open space preservation. In addition, these areas contribute to the overall stormwater management of the area. For example, Planning Area 22 is a natural drainage basin and designated wetland area so, instead of development, this area is proposed as a natural recreation area so it can still collect drainage while acting as an amenity to the area.

Another area of note is the existing historic easement containing the Fernley Swales, a portion of the California Immigrant Trail. The easement, belonging to the Bureau of Land Management, forbids any development within the area so the decision was made to keep it as open space and take advantage of the area. Future surrounding development can incorporate visitor areas such as overlooks into their design to create tourist opportunities for history buffs.

Finally, a strip of open space has been provided between Planning Area 22 and Planning Area 25 to give the public access to existing trails and viewpoints of the mountains located beyond the northeastern corner of the Area Plan. This access was requested by the attendees at one of the public open house meetings to assure that access to this mountainous area would be maintained.

Open Space and Recreation Areas (Green)



Public Facilities

The final land use category outlined in the North Fernley Area Plan is Public Facilities, which includes space for civic/utility uses (emergency services, utility infrastructure, library, civic center, etc.), schools, and park and ride (including transit facilities, public parking, and tractor trailer parking during closures over Donner Summit). These areas have been located to create a cohesive community with appropriate civic infrastructure that supports future employment centers and housing.

Public Facilities Areas (Blue)



Transportation and Connectivity

The North Fernley Area Plan provides a basic framework for future major roadways through the area. Smaller collector and local roads will be determined based on development patterns as individual projects are built. A multi-use path wraps around the center of the area and connects to Main Street in the west, Vine Street to the south, and Nevada Pacific Parkway to the east.

It will be the responsibility of proposed developments to identify how connectivity will be specifically provided for each mode of transportation. These include:

- Walking – Sidewalks are needed throughout the plan area to promote active transportation, connectivity, and pedestrian safety.
- Cycling – Consider added levels of protection for any potential bike lanes where cyclists may share the road with trucks. Additional cycling infrastructure such as bike maintenance stations

and bike stands needs to be considered to promote cycling and create a safe and welcoming environment.

- Driving – Developers will be responsible for main arterial roads, neighborhood linkages, and smaller roads. Main arterials throughout the area will need to be constructed for development to continue progressing.
- Truck Traffic – Truck traffic should be planned in a manner that does not create additional traffic in neighborhoods providing residents, visitors, and employees should have clear access to their destinations. Future developments must identify the routes trucks will travel to and around the industrial areas and how traffic will be mitigated.

Water Capacity

One of the most frequently asked questions from both the public and the elected officials was if there is enough water to serve the proposed uses within the North Fernley Area Plan. Based on that, it was decided to include a water capacity analysis into the plan. The current water demand was used as the baseline of this analysis. The City of Fernley has current capacity to meet all of the following current conditions:

Average Daily Demand = 3.88 Million Gallons/Day (MGD)

Maximum Daily Demand = 6.52 MGD

Peak Hour Demand = 10.90 MGD

The table below gives a brief summary of each system component of the existing water infrastructure and what, if any, upgrades or improvements will be needed to serve the area.

Water Capacity Analysis Summary

System Component	Analysis	Outcome
Available Water	Total Capacity = 12.33 MGD; Groundwater wells only; Working to obtain surface water	Some available capacity; Surface water will add additional capacity; Additional water needed for north area depends on future development demands
Treatment Plan	Average Flow Rate = 4-6 MGD Maximum Flow = 20 MGD	No upgrades needed to meet north area demands
Pump Station	Current Capacity = 21.2 MGD Maximum Capacity = 30 MGD	No upgrades needed to meet north area demands
Transmission Main	No existing water transmission infrastructure to north area	New transmission main needed to extend service to north area
Water Storage	Total Storage Capacity = 7 million gallons 5.37 million gallons below amount outlined in Nevada Administrative Code*	Additional water storage will be required to support development in the north area
Pressure Zones	Current water storage tanks can serve up to elevations of 4,235 feet	No upgrades needed to meet north area demands

Distribution	Pipe network utilizes pipes from 6 inches to 24 inches No distribution lines north of Interstate 80	Distribution pipe will need to be sized in accordance with demands of development
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*Can be offset by excess pumping capacity; Additional storage tanks required as part of the Victory Logistics development will add additional storage capacity

Fiscal Impact Analysis

The Fiscal Impact Analysis builds off the future land use plan to help understand the impact of future revenue associated with the proposed land uses. Based on this, the City can create a framework from which to prioritize public investment in roadway improvements, utilities, parks, and zoning policy.

As shown in the table below, mixed-use and high-density residential uses provide the greatest revenue per acre. This reflects the elevated value per acre that was assumed in this analysis based on a review of comparative mixed-use projects. At full buildout of the North Fernley Area Plan as proposed, the City of Fernley is projected to receive an additional \$57.3 million per year in property tax. This is almost eight times more than current property tax revenue.

Expected Property Tax Revenue by Use Type

Land Use	Revenue per Acre	Acres	Expected Annual Revenue
High Density Residential	\$37,149.61	147.6	\$5,483,281.88
Medium Density Residential	\$17,725.17	321.3	\$5,695,098.50
Low Density Residential	\$10,703.69	1358.1	\$14,536,677.35
Commercial	\$11,366.80	62.1	\$705,878.18
Mixed-Use	\$52,838.95	400.5	\$21,162,000.90
Light Industrial	\$7,785.28	1215	\$9,459,113.63
Heavy Industrial	\$2,044.42	159.3	\$325,676.73
Total			\$57,367,727.18

Implementation Plan

This Plan is the first step in the development of the area north of Interstate 80. Additional work will be required to update policies, adopt regulatory changes, and establish public/private partnerships. This section of the North Fernley Area Plan provides a guide to next steps, including financing options and additional actions and initiatives that should be implemented to achieve the highest level of success. The Implementation Plan focuses on three areas: infrastructure/utilities, water, and transportation.

There are several potential funding sources outlined in this section. These include:

- Special Taxing District/Metro Districts (Also known as Special Assessment District)
- Tax Increment Financing (TIF)
- Impact Fees
- General Fund

- Local, State, and Federal Grants

The Implementation Plan also outlines projects or initiatives that need to be undertaken to implement the plan. These are divided into categories as high priority (1-3 years), moderate priority (4-7 years), and low priority (8+ years). The following is a list of items by priority level as outlined in the North Fernley Area Plan.

High Priority

Complete Surface Water Study
Infrastructure Plan
Zoning Code Update
NDOT Coordination
BLM/BOR Coordination
Master Plan Update
Capital Improvement Plan Update
Stormwater Runoff Study
City Staffing Study

Moderate Priority

Update Transportation Master Plan
Safe Routes to School Plan Update
Water Infrastructure Upgrades
Water Conservation Plan Update

Low Priority

Active Transportation Plan

DESIGN GUIDELINES

The proposed design guidelines are intended to support the Development Code and each of the three Fernley Area Plans. The purpose is to guide the physical development of residential, commercial, mixed-use, industrial, and open space projects in a consistent manner that reinforces key design themes and establishes a distinct character for each area. These guidelines, although not mandatory, will be utilized to inform the design review process, where City staff coordinates with the applicant on how to best follow the guidelines.

Three guiding principles have been established to set the direction of the desired design elements provided in this document. These principles reflect the overall vision for each Area Plan to develop a land use pattern that is well-integrated with surrounding neighborhoods. These principles are:

- Seamless Connectivity – The design of new development should enhance pedestrian and vehicular connections to the existing and future transportation network. To provide a cohesive experience, the design should pay particular attention to pedestrians at the street level to enhance the relationship between individual developments.
- Sustainable Design – The built form should strongly embrace sustainable design to adequately respond to changing market and environmental conditions. Development should focus on providing flexibility in its design, allowing for adaptability to new trends and technologies.
- Cohesive Character – Each Area Plan should aim to have a distinct and cohesive character associated with land uses to enhance the area's sense of place. New development should incorporate urban design elements that prioritize the pedestrian experience.

The first four sections of the design guidelines follows the same general pattern: general site design standards, pedestrian scale streetscape standards, and parks and open space standards. The Parks and Open Space and Tribal sections deviate from this pattern because of their unique needs. A brief outline of some of the design guidelines for each use type is provided below.

Residential

General Site Design

- Streets should be designed to intersect at right angles
- Provide pedestrian and vehicular connections to existing developments
- Provide safe pedestrian and vehicular connections to public facilities
- Prioritize building orientation around centralized open spaces and amenities
- Locate and orient buildings to provide adequate privacy for residential units
- Locate parking internal to the development or to the side or rear of buildings
- Utilize landscaping islands to provide shade
- Provide and maintain clear access to existing utilities for future maintenance



Single family neighborhood facing centralized open space.

Source: Adobe Stock Images

Pedestrian Scale Streetscape

- Provide sidewalks connecting from the street or driveway to building or unit entrances
- Provide stoops or porches to units fronting public spaces and streets
- Integrate bike racks into the development consistent with the surrounding design
- Pedestrian lighting should be integrated into streetscape design elements
- Stormwater runoff should be directed towards landscaped areas
- Locate walls and fences on the property to protect privacy

Parks and Open Space

- Design shared open space to be inclusive for all residents so people can interact
- Locate shared open space in a central location
- Locate private open space in patios, balconies, decks, etc.
- Playgrounds should be designed to accommodate multiple age groups and abilities
- Seating should be provided near and around playgrounds
- Dog parks shall be enclosed with a fence and located to minimize sound or waste issues for residents



Pathway connecting residential development to nearby community amenities.

Source: Adobe Stock Images

Commercial

General Site Design

- Prioritize building orientation around centralized open spaces and amenities
- Locate the buildings close to parking and other amenities
- Locate parking internal to the development or to the side or rear of buildings
- Provide landscaping to screen the parking from view and provide shade
- Locate loading/unloading facilities to the side or rear of the building
- Screen loading/unloading areas from public view
- Ensure loading/unloading areas do not interfere with visitor circulation
- Locate electrical panels and other utilities in a manner that minimizes visibility from the street
- Screen trash enclosures from public view



Commercial buildings oriented around centralized open space.

Source: Adobe Stock Images

Pedestrian Scale Streetscape

- Utilize strategies to articulate buildings such as minor wall offsets, height variation, etc.
- Create flexible pedestrian spaces outside of storefronts to allow for increased foot traffic
- Avoid bringing bicycle paths through heavily trafficked pedestrian areas
- Bike racks that double as public art are encouraged
- Locate bike racks near multi-use trails
- Pedestrian lighting should improve visibility of pedestrians and be designed to minimize light pollution
- Provide street trees to increase shading in public spaces

Parks and Open Space

- Locate open space in a central location that serves all tenants
- Provide seating areas and other passive recreation facilities
- Design public signage in a coordinated manner that complements the development's character
- Incorporate elements that create a sense of arrival
- Incorporate public art that is ornamental and interactive

Mixed-Use

General Site Design

- Design buildings to be respectful of adjacent buildings and create transitions of appropriate height and scale
- Minimize bulk of the buildings by including horizontal/vertical stepbacks and/or variations in roof profile
- Establish rights-of-way for future roadway planning
- Locate buildings close to the right-of-way with direct access sidewalks
- Disperse paved parking areas throughout the project in smaller segmented parking areas rather than creating large parking lots
- Screen loading/unloading areas from public view
- Locate ancillary facilities with buildings rather than along street-facing facades



Source: Adobe Stock Images

Pedestrian Scale Streetscape

- Utilize display windows to allow outsiders to look in
- Provide stoops or porches to units fronting public spaces and streets
- Integrate bike racks into the development consistent with the surrounding design
- Encourage indoor bike storage rooms with maintenance station
- Pedestrian lighting should be integrated into streetscape design elements
- Pedestrian lighting should improve visibility of pedestrians and be designed to minimize light pollution
- Design landscaping to be attractive and consistent throughout the development

Parks and Open Space

- Private, common open space in multi-family developments should be centrally located
- Design private open space to be used exclusively by a single unit
- Incorporate elements that create a sense of arrival
- Public art should be incorporated throughout the development that can be ornamental and interactive



Mixed-use buildings oriented around centralized open space.

Source: Adobe Stock Images

Industrial

General Site Design

- Streets should be designed to form loops and cul-de-sacs
- Provide internal connections to neighboring streets and developments
- Locate buildings behind employee parking areas and landscape buffers to reduce the scale of building frontage to the street
- Provide access to existing utilities for added connections
- Locate parking around the perimeter of the development to reduce the scale of the buildings
- Locate parking in a manner to minimize conflicts with truck driveways, storage, loading, etc.
- Double load buildings when possible to provide noise screening and more efficient layouts

Pedestrian Scale Streetscape

- Provide sidewalks connecting from the street or driveway to the building or unit
- Integrate exterior lighting that is architecturally compatible with the building style, materials, and color
- Lighting should be provided to illuminate parking areas and pedestrian walkways
- Provide enhanced landscaping near parking lots, driveways, and other vehicular areas to signalize entrances and improve visual aesthetics
- Outdoor storage should be screened from public view behind a solid fence or wall

Parks and Open Space

- Locate open space in a central location that serves all tenants
- Design open space that is easily accessible to employees
- Provide seating areas and other passive recreation facilities



Employee break seating area with shade structure.

Parks and Open Space

General Site Design

- Develop opportunities for pedestrian and multi-modal connections with parks and open space
- Design pedestrian connections internal to the development through sidewalks, trails, or connected open space
- Design secure on-site bicycle parking at all parks
- Provide shade structures in parking areas to reduce heat gain
- Provide on-site facilities for trash storage
- Provide trash cans throughout the site and along walkways for visitors to utilize
- Provide opportunities for active and passive recreation
- Provide benches and other forms of seating throughout parks and along walkways
- Incorporate existing unique or significant natural or historical elements into parks
- Provide trees with large canopies to provide more shade

Tribal

The following design guidelines are applicable to land abutting tribal lands:

- Provide a 100-foot landscape buffer. (May include recreation in the form of paved or natural trail connections.)
- Pathways should be provided to adjacent developments through natural corridors and/or other trails or sidewalk systems
- Bike racks and benches may be provided along paved or natural trails

CONCLUSION

The North Fernley Area Plan and the design guidelines have been created as separate yet interconnected documents. Working together, not only do they open a large area for potential future development, they provide a guide of how the area should look and feel. The creation of these documents is a big step forward for the City of Fernley as it prepares for future growth and the challenges that come with it.

CITY OF FERNLEY
RESOLUTION # 25-001

A RESOLUTION OF THE CITY OF FERNLEY FOR A COMPREHENSIVE MASTER PLAN ASSOCIATED WITH CASE NUMBER MPA24005, TO ADOPT THE NORTH FERNLEY AREA PLAN DOCUMENT AND ASSOCIATED DESIGN GUIDELINES FOR APPROXIMATELY 5,400 ACRES GENERALLY LOCATED NORTH OF INTERSTATE 80 BETWEEN EXIT 46 AND EXIT 50.

WHEREAS, the 2018 Fernley Comprehensive Plan was adopted by Resolution of the Planning Commission on August 8, 2018, and by the City Council on August 15, 2018; and

WHEREAS Nevada Revised Statutes chapter 278.210 specifies that master plans or any amendments, including zoning map and text amendments must be adopted by resolution of the Planning Commission and City Council;

WHEREAS the Planning Commission held a public hearing on December 11th, 2024 and the City Council heard this item on _____; and

WHEREAS the proposed Master Plan Amendment would implement Goals LU1.3, LU.1.4, LU.1.6, and LU.1.11 of the City of Fernley Comprehensive Master Plan.

NOW, THEREFORE, BE IT RESOLVED, that based on the discussion and findings provided in the staff report and/or testimony presented at the December 11th, 2024 Planning Commission and the _____ City Council meetings, that the North Fernley Area Plan and associated design guidelines be adopted as part of the City of Fernley's comprehensive master plan; and

BE IT FURTHER RESOLVED that the Fernley Planning Commission approves and recommends that the City Council certify this Master Plan Amendment as part of the Fernley Comprehensive Plan.

RESOLUTION PASSED, APPROVED, AND ADOPTED this 11th day of December 2024, by the following vote of the Fernley Planning Commission:

AYES: _____ NAYS: _____ ABSTENTIONS: _____ ABSENT: _____

By: _____

Date: _____

Jenni McCullar, Chairwoman

Attest By: _____

Date: _____

Brenda Gosser, Deputy City Clerk

RESOLUTION CERTIFIED this ____ day of January 2025, by the following vote of the Fernley City Council:

AYES: _____ NAYS: _____ ABSTENTIONS: _____ ABSENT: _____

FERNLEY CITY COUNCIL

By: _____

Neal E. McIntyre, Mayor

Date: _____

Attest By: _____

Kim Swanson, City Clerk

Date: _____

CITY OF FERNLEY

North Area Plan



2025



Kimley»Horn



Acknowledgments

City Council

Mayor Neal E. McIntyre

Ryan Hanan, Ward One Councilmember

Felicity Zoberski, Ward Two
Councilmember

Stan Lau, Ward Three Councilmember

Albert Torres, Ward Four Councilmember

Joe Mendoza, Ward Five Councilmember

Planning Commission

Chairwoman Jenni McCullar

Vice-Chair Angela Lewis

Robert Flores

Tessa Garvin

Jacob VanderHeiden

Cody Wagner

Barry Williams Sr.

City of Fernley

Benjamin Marchant, City Manager

Lydia Altick, Deputy City Manager

Michele Rambo, AICP, Planning Director –
Project Manager

Consultant Team – Kimley-Horn

Blake Young, AICP – Project Manager

Ines Galmiche, AICP – Deputy Project
Manager

Devin Moore, PE – Transportation Lead

Jessica Rossi, AICP – Market Analysis Lead

Joseph Cuffari – Public Engagement Lead

Kimley»Horn

Thank You to All Engaged Fernley Residents and Stakeholders

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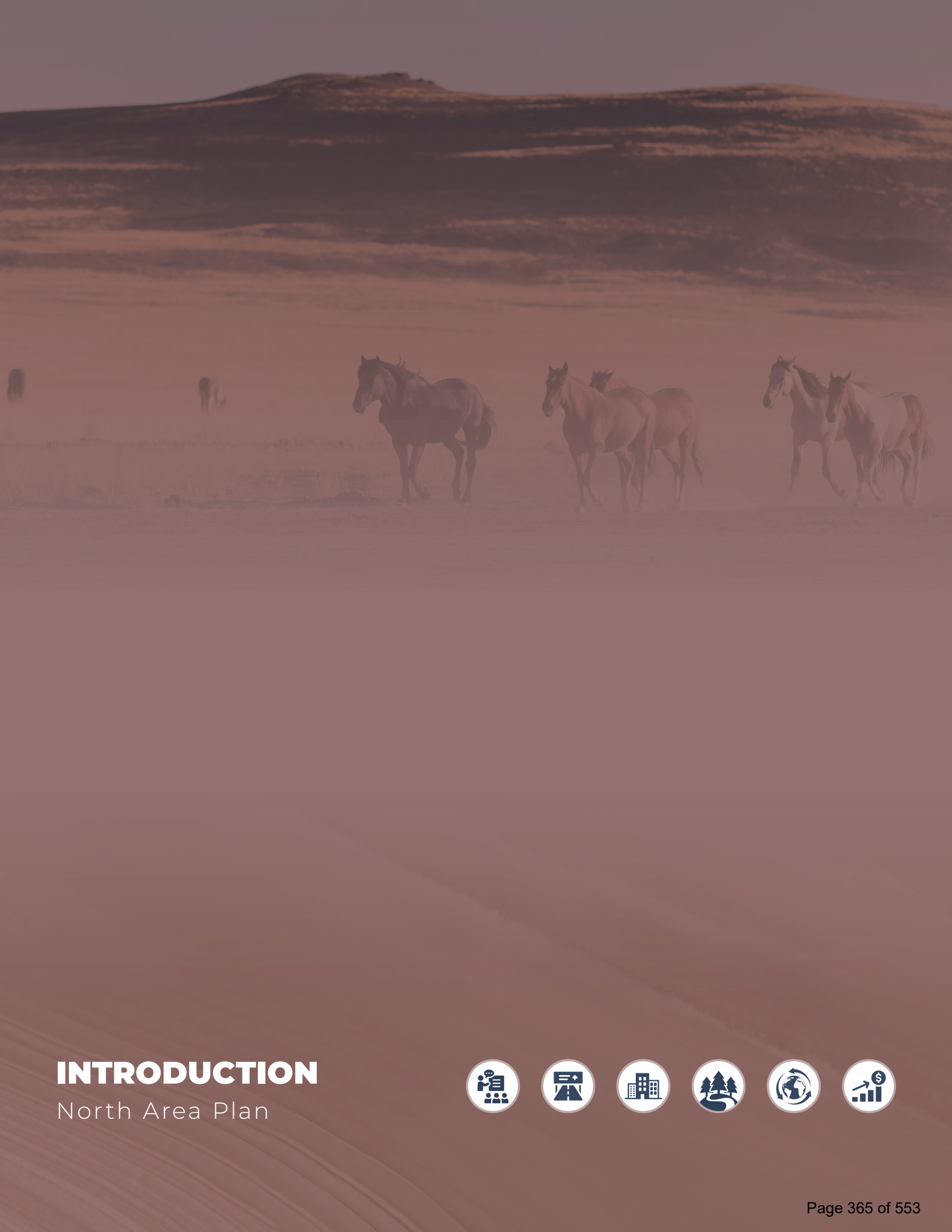
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INTRODUCTION

North Area Plan





Introduction

Plan Purpose

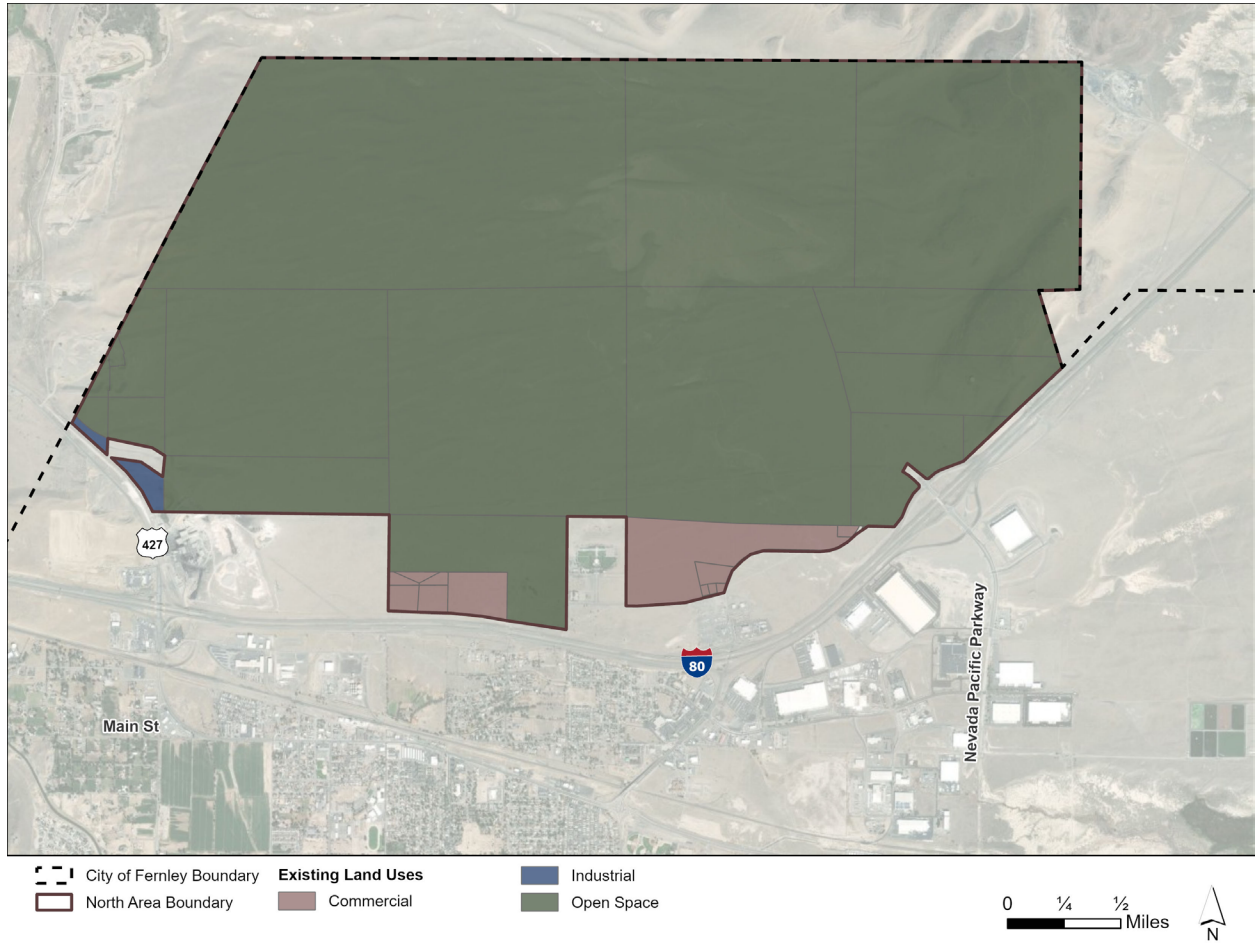
In 2018, the City's Comprehensive Master Plan was adopted with a vision for the City of Fernley. The Master Plan identified three future development areas – North Area, Southwest Area, and South Area. These areas are the largest remaining developable areas in the community and will play a key role in the City's future growth.

Fernley anticipates considerable continued growth over the next two decades. Local planning considerations include the development of a major rail facility that would function as an inland port, creating a significant increase in truck traffic along the I-80 and US-95 corridors. With its location along I-80 and the Union Pacific Railroad (UPRR) corridor, and approximately 35 minutes from Reno, the City is well positioned to provide both employment – particularly for manufacturing and distribution – and housing for the region.

An Area Plan allows for careful planning and implementation, in coordination with the community and stakeholders, which is particularly important when considering intense growth as anticipated in Fernley and the size of the project area (approximately 5,400 acres of largely undeveloped land). This Area Plan works in conjunction with the Fernley Comprehensive Master Plan and current development plans, and it establishes the specific vision and objectives to transform the North Fernley area into a large master planned community with vast employment opportunities, supporting commercial services and a diverse range of housing types.

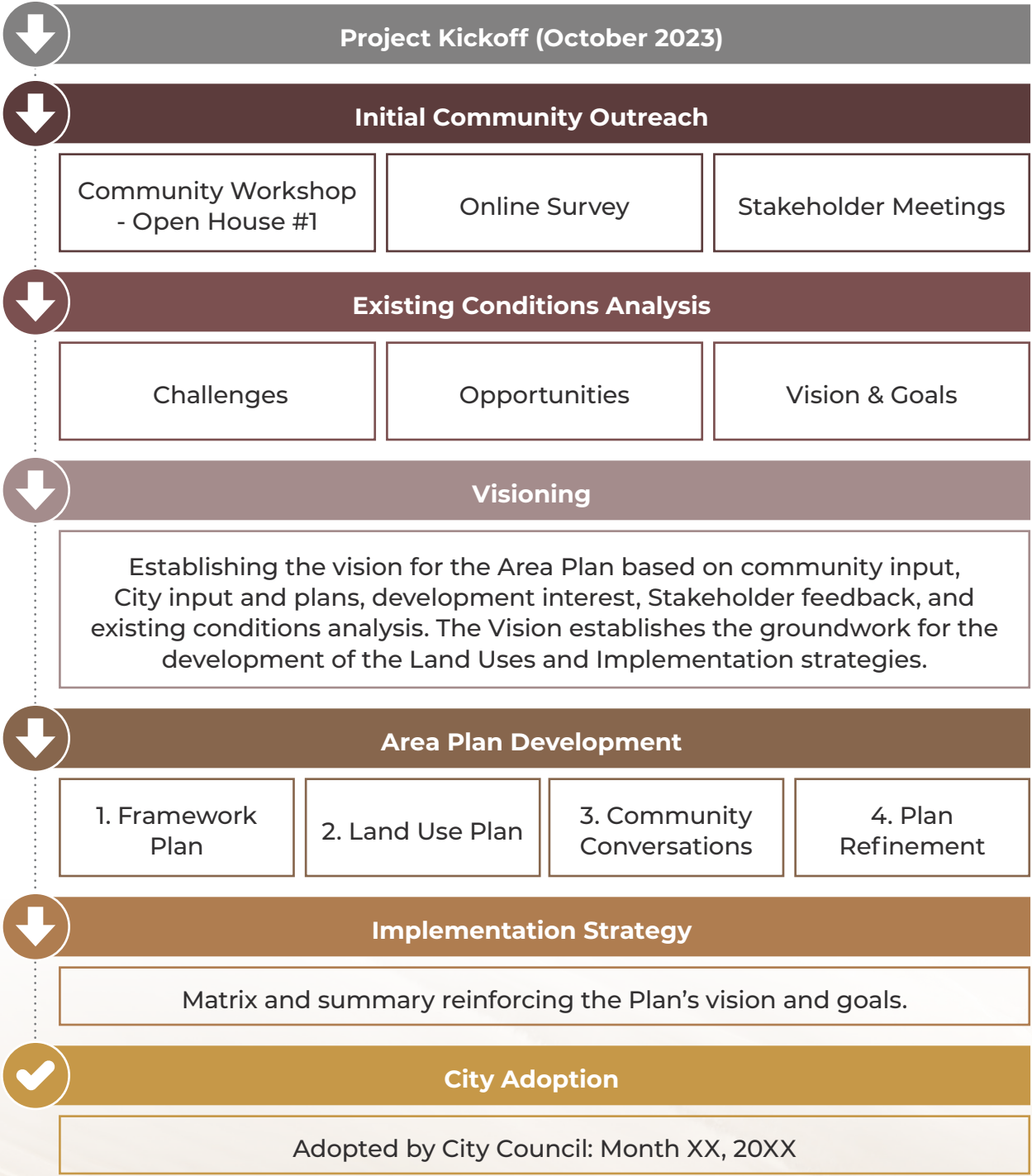


Figure 1. Planning Area Map





The Planning Process





Plan Context

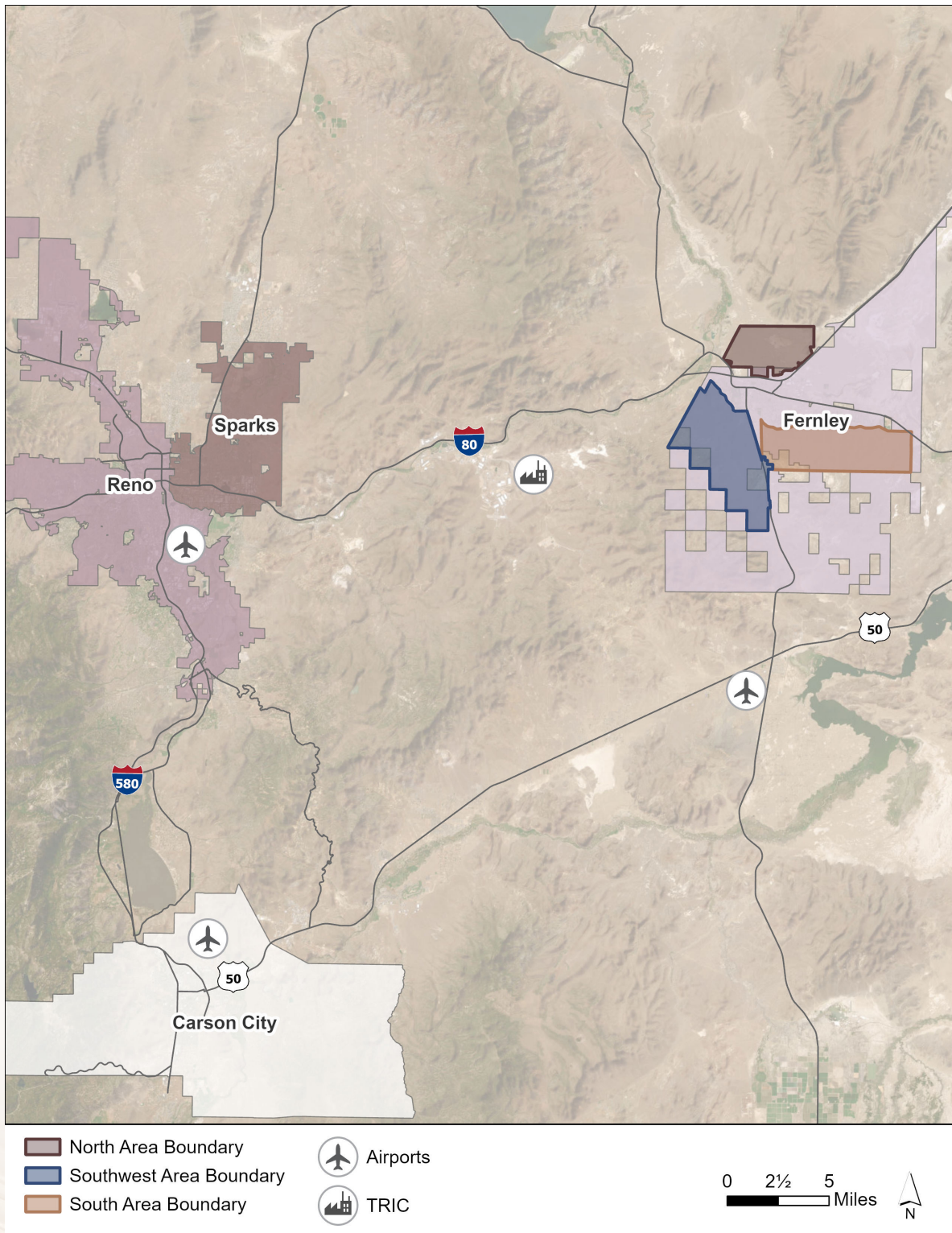
REGIONAL CONTEXT

The City of Fernley is located along the western edge of the State of Nevada, approximately 30 miles east of Reno, and approximately 77 miles northeast from South Lake Tahoe in California. Fernley is part of Lyon County, which is home to a population of about 59,235 residents, according to the 2020 U.S. Census.

Fernley rests in the Great Basin Desert, which extends from Salt Lake City to Reno. The semi-arid environment is one of the region's most valuable resources, with an average elevation of approximately 4,200 feet and surrounding mountain ranges rising to 10,000 feet. The average annual rainfall is five inches with generally no air quality problems or severe winter snow conditions. There are several lakes and rivers throughout the region, as well as federally-owned land (Bureau of Land Management – BLM) that checkerboards the landscape and provides abundant opportunities for outdoor recreation and scenic vistas.



Figure 2. Regional Context Map





EXISTING PLANNING INITIATIVES

The City of Fernley has completed several plans in the last decade that guide the vision of future growth for the community. These plans include:

- 2017 Parks Master Plan
- 2018 Comprehensive Master Plan
- 2019 Community Assessment
- 2020 Development Code
- 2020 Transportation Master Plan
- 2022 Water Master Plan

As part of the Comprehensive Master Plan, Fernley residents formed several community principles to shape the future of the city:

- A desire to coordinate growth and the provision of services,
- Ensure compatibility for development,
- Nurture the unique character of Fernley, and
- Provide a balance of housing types and improved employment opportunities.

This plan carries forward these core principles of the Comprehensive Master Plan and ensures that recommendations from all past planning initiatives are both honored and refined to best reflect current conditions and community priorities.

FEDERAL LANDS BILL

On December 19, 2014, the National Defense Authorization Act (Act) was signed in to law (Public Law 113-291.) Included in this Act is Section 3009(c) titled, “conveyance to the City of Fernley, Nevada,” which is commonly referred to as the “Lands Bill.” Under section 309 (c)(2), the Bureau of Land Management (BLM) is required to convey to the City of Fernley approximately 9,779 acres of Public Lands.

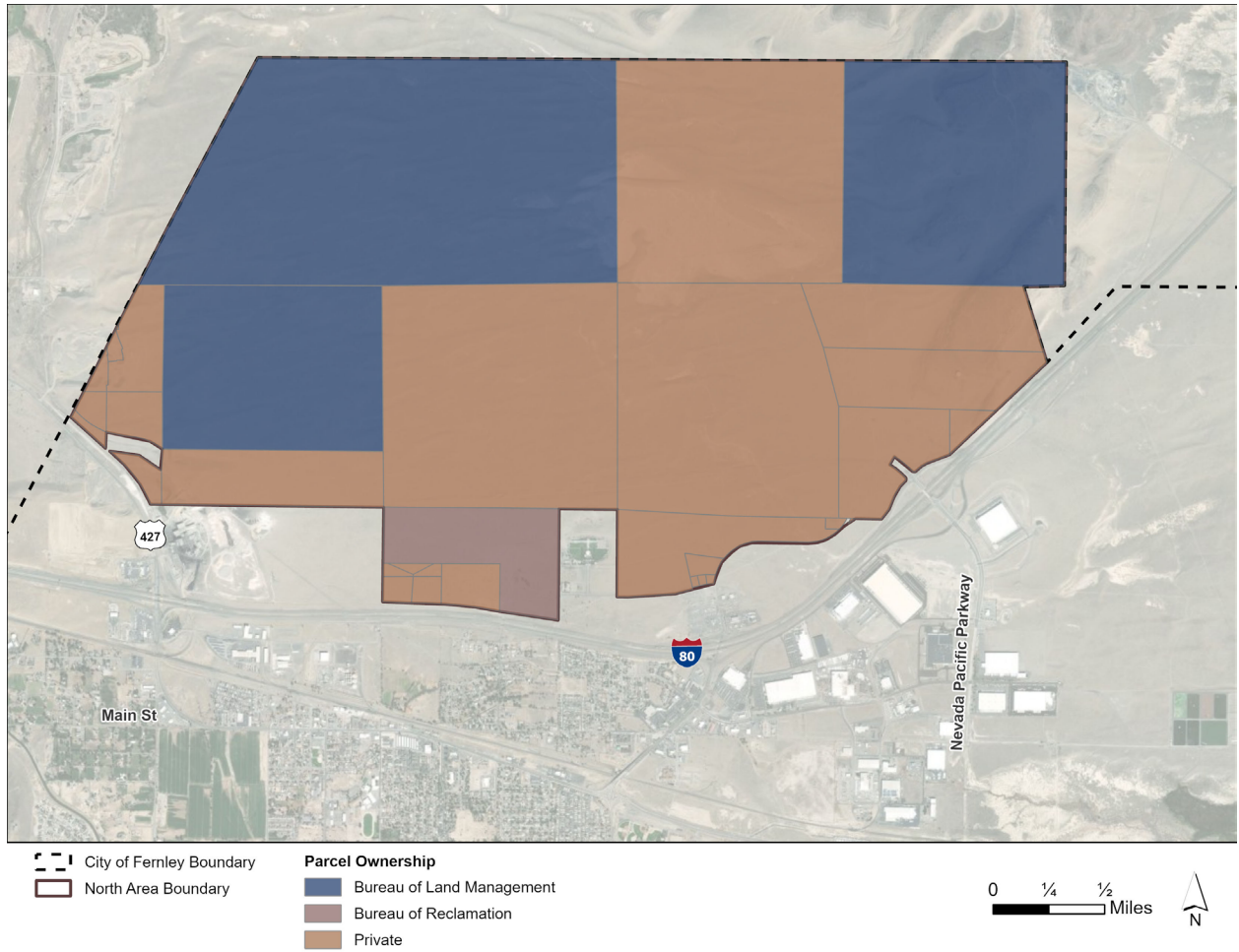
On November 2, 2016, a memorandum of understanding (MOU) was executed which establishes a relationship between BLM and the City regarding their respective roles, responsibilities, conditions, and procedures for land conveyance, which includes compliance with the National Environmental Policy Act (NEPA), the National Historic Preservation Act (NHPA), and any other federal law(s) applicable to the project.

The MOU provides guidelines for projects moving forward, particularly economic development projects. This agreement outlines the specific steps needed and will help establish a guideline when coordinating with developers interested in projects within the designated areas.

On November 6, 2019, City Council authorized City staff to move forward with identified parcels in the Fernley Lands Bill for recreation and public purpose. Roughly 40% of the land in the North Area is currently owned by BLM with plans for land conveyance to the City (see **Figure 3**).



Figure 3. Parcel Ownership Map





How to Use This Plan

This plan establishes guidance for the use and development of the North Area. It is intended to be used by City staff, prospective applicants, and property owners to understand the vision and expectation of future development. This plan supersedes the Fernley Comprehensive Master Plan and guides policy and regulatory decisions that are made after plan adoption.

The Land Use Plan establishes the land uses permitted and encouraged within the Plan Area. Through this Plan, and the adjoining Design Guidelines, future development is guided in a manner that corresponds with the vision and goals for the Area.

Prospective applicants should consult this Area Plan to be well informed on what uses are permitted within the Area, and subsequently should refer to the design guidelines for more direction on what will be expected for any new development. City and elected officials will refer to this Plan and the Design Guidelines when reviewing project applications to ensure consistency.

TELL US YOUR THOUGHTS

PLEASE WRITE ON A STICKY NOTE AND PLACE BELOW

How will this development prevent or educate people about illegal dumping on BLM land?

Will the development require xeriscaping, low water landscaping, will it blend in with high desert environment? Or will it look out of place with lots of green?

I understand NDM will not install stoplights without an approved city plan - but we already need stoplights on US-95 in town...

There Needs to Be a Traffic Light on 95A when High School gets out you can't turn left

Will this plan restrict access to the Blm land west of the proposed development?

I live in PA-3 and I'm concerned with water, traffic and not being able to get to school. Having to go to school having to go to work and not being able to go to school.

Would love to have a grocery store in the Sage estate area along with the gas station and a bank. Also a new road to go out of town currently the only way out is to go to the bank and not being able to go to the bank.

We should work on our infrastructure and make this a better community. This plan just makes Fernley a suburb of Reno. -Bad Idea

What does the Pyramid Lake Paiute Tribe think of this proposed development going all the way to the reservation boundary? -There

Along the Truckee Canal, north of Sage to, please have residents keep area in good order.

Get from I-80 through this area. Don't want to be a bad thing. Our streets don't have it. Now we have it. Just making it worse. There is enough to do now. -BAD!!

Southwest Meadows SUB Division
• Traffic
• Police
• Fire
• High School
• Speed Limit
• Reduce Speed from 45 to 35 mph

Short Substation? Urgent Care? Police? Fire? High school waiting trails for dogs?

Where is the water for this development going to come from?

Leave this town alone. No apartment. No commercial. People live here because it's small, quiet, small.

Would like a more formal (sidewalk) entry so all the locals can hear everyone's concerns. And maybe add on their own concerns.

If we wanted Reno, we would live there

Don't want this - my neighbor is going to become dangerous with the traffic. What about safety?

Will the City require some sort of guarantee from a proposed development so land is not blighted (all vegetation removed) and then nothing happens for several years - like

The Truckee River is a Traditional Cultural Property for the Keno-Sparks Indian Colony. Crossing the Truckee River with the proposed bypass.

No light at High School. No Bypass

Move PA-6 + PA-5 by PA-15 and the School

PA-6 Median Bypass. Adding low density is problematic. Would prefer more low density here. Access issues - PA light is already a bottleneck. Need alternate routes before developing any of the area.

no bypass

Will this development restrict wild horse access to the Truckee Canal/Truckee River?

Move High School. Move High School. Move High School.

PLEASE provide access to public lands for recreation + the horses!



Community Engagement

The North Area Plan's engagement process encouraged the community to get involved in the progression of the Plan and provide as much feedback as possible to create a cohesive vision that truly reflects the community's goals for future growth. This process built upon the preliminary input from the stakeholder's workshop and public open house, unfolding as a continuous and evolving process that utilized several methods of communication and interaction over the course of the year. As a result, this Area Plan represents a true community planning initiative that brings together various perspectives and goals. Key themes that emerged throughout the process are:

- A desire to protect the Pyramid Lake Paiute Tribe from pollutive uses and inclusion of a buffer on the western boundary of the Area Plan.
- A desire for more attractions, entertainment, restaurant, and retail options in Fernley, with the North Area as a Mixed-Use Town Center.
- Protection of the California trail as a historical asset.
- Strong interest in a medical facility.
- A concern for water conservation with increased development.
- Importance of maintaining open space, ATV roads, and hiking trails for recreation and athletic events.
- Concerns for traffic flow and desire for improved multi-modal access and connectivity.
- Need to integrate commercial, retail, and public services into the North Area rather than solely industrial uses.



Open House #1 and #2

On January 16, 2024, the City held a public open house with the intent of focusing conversation on the community's vision and values, land use, and overall future of the areas. In total, 73 people attended. This initial event was facilitated through open-ended conversations with several interactive boards and maps that helped reveal residents' goals and concerns surrounding development and growth in the North Area.



On August 8, 2024, the City held a second public open house with the intent of refining and finalizing the draft Land Use Plan that had been formed through previous discussions at the first open house and during stakeholder meetings. In total, 40 people attended. The planning team also presented at Planning Commission and City Council meetings in August 2024 to discuss both the North and Southwest Area Plans. This word cloud helped paint a picture of what the planning team heard from the community during both open houses, the Planning Commission, and City Council meetings.





Stakeholder Workshop and Meetings

An initial stakeholder workshop took place on January 16th, 2024. This workshop was intended to introduce the project team to local influencers and decision makers to develop an initial understanding of the community, current development interest, existing site and market conditions, and the overall community vision. Between January and June 2024, the planning team held one-on-one meetings with stakeholders to receive preliminary thoughts on development throughout the area. Stakeholders included property owners, local businesses, community leaders, residents of adjacent properties (including the Pyramid Lake Paiute Tribe), and prospective developers.



Generally, stakeholders the planning team met with were interested in opportunities for mixed uses along I-80 and less through truck traffic through Fernley's main street, which might facilitate better access points to Fernley for both locals and visitors. More housing variety, clear bike and pedestrian trails that complement the California Trail, and water conservation were also priorities discussed. The Pyramid Lake Paiute Reservation expressed a desire for a buffer between proposed uses and the reservation boundary, as well as maintaining air and water quality as the North Area develops.

Online Survey

In addition to Stakeholder meetings and Open Houses, the City facilitated online surveys to gather more feedback and insight from a broader group of citizens. The surveys were advertised on Facebook, the City's website, and at City Hall to encourage active participation. Between December 22, 2023, and April 18, 2024, the City of Fernley collected and synthesized the survey responses from the community. The survey was intended to collect preliminary thoughts surrounding development and community needs – within Fernley as a whole and within the North Area.

A total of 136 people contributed their feedback in the five months the survey was available. The majority of respondents were homeowners, had lived in Fernley for at least 6 years, and represented a wide age and income range. Respondents generally



valued Fernley's access to open space, were concerned about overcrowding and water sustainability, and overwhelmingly wanted to see improved traffic circulation over the next 20 years. The majority of respondents support future development within the City to create more businesses and services.

Specifically, the City asked survey respondents what types of businesses and services they would like to see most to attract both visitors and locals. The following summarizes the top five reoccurring responses:

- 1** National chain retail and generally more shopping options
- 2** Restaurants
- 3** Entertainment diversity and attractions for kids
- 4** Grocery stores and bulk food stores
- 5** Medical offices/services and a hospital

Other key themes from respondents include a desire for multi-modal access and connectivity, a mixed-use town center, enhanced open space and recreational facilities, and concern about access to water. A summary of survey responses is provided in **Appendix A**.

First Graders Visit To City Hall

On Friday, April 26, 2024, two classes of first graders visited City Hall and participated in a planning exercise suggesting land uses for the North Area Plan. The children used post-it notes to suggest where three uses should be located based on the Area Plan's parcels:

- Yellow – residential
- Blue – parks
- Pink – commercial

The group of children recommended a buffer of parks in the north-west section of the Area, along the reservation boundary. They also suggested a variety of uses throughout – steering clear of concentrating one singular use.



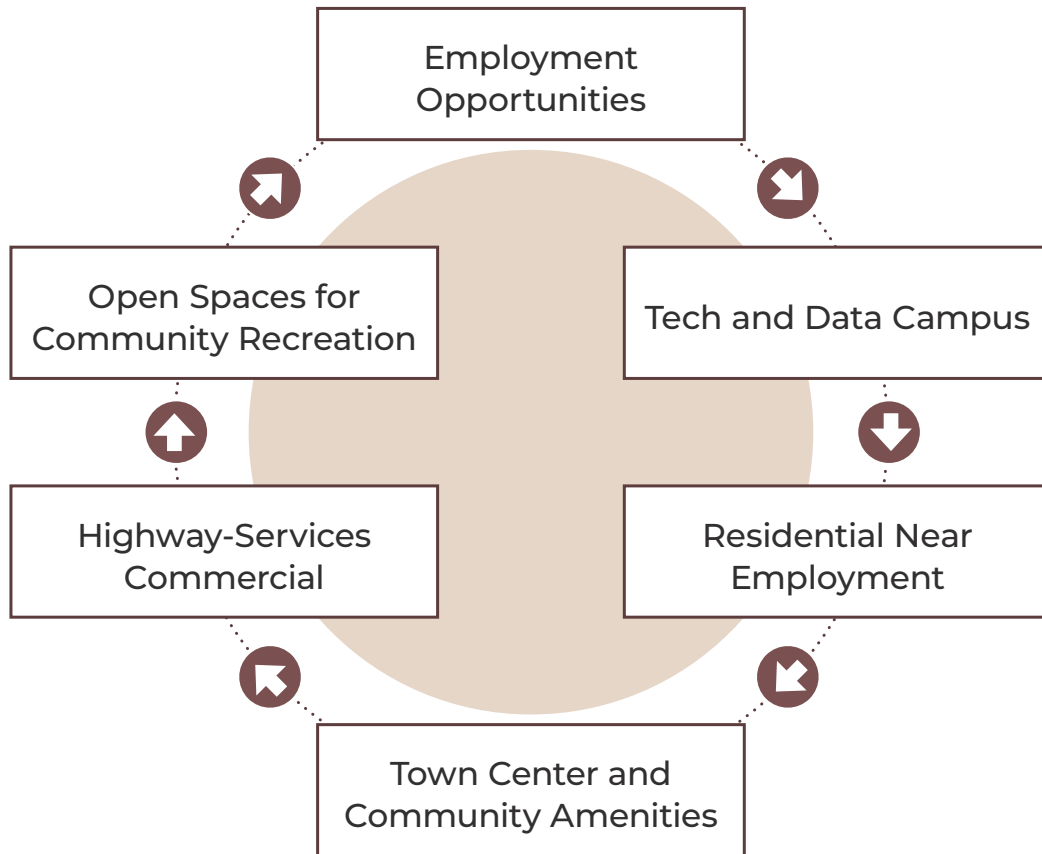
VISION AND GOALS

North Area Plan





Vision and Goals



GOALS

Land Use

Facilitate and promote orderly development.

Encourage compatible mixed-use development that results in decreased travel time and increases access to resources.

Promote housing development that meets the needs of all segments of the community.

Protect the Pyramid Lake Paiute Reservation by mitigating impacts of development.

Mitigate natural hazards from land uses through appropriate site design and review standards.



Infrastructure

Encourage safe, efficient, and multi-modal transportation.

Require developments have access to adequate resources, infrastructure, and public services.

Facilitate a transportation and circulation system that alleviates and mitigates traffic associated with land uses; including the movement of goods to/from industrial sites in a manner which does not contribute to traffic congestion.

Create a safe and welcoming environment for the existing Fernley community, future residents, and visitors.

Recreation/ Open Space

Expand and diversify recreational opportunities.

Protect the Historic Preservation Easement and promote it as a visitor destination.

Promote active transportation as a form of recreation via the multi-use path.

Economic Development

Advance the economic well-being of Fernley.

Expand Fernley's employment opportunities and attract new businesses and corporations that will grow the city's economy.

Attract business from I-80 travelers by providing retail, restaurant, and commercial opportunities within convenient access from the highway and through clear signage.

Facilitate the creation of "third place[s]" through the town center and mixed-use areas – creating a place for people to go and spend quality time between work and home.

Establish Fernley as an employment hub with access to high quality jobs and affordable living.

Implementation

Maintain consistency with other City Planning documents and the community's vision.

Pursue a variety of funding opportunities to complete the needed improvements and facilitate development of the planning area.

Maintain existing relationships and establish new partnerships amongst agencies, neighboring jurisdictions, stakeholders, and the community.



COMMUNITY PROFILE

North Area Plan





Community Profile

Demographics

Figure 4. Planning Study Area

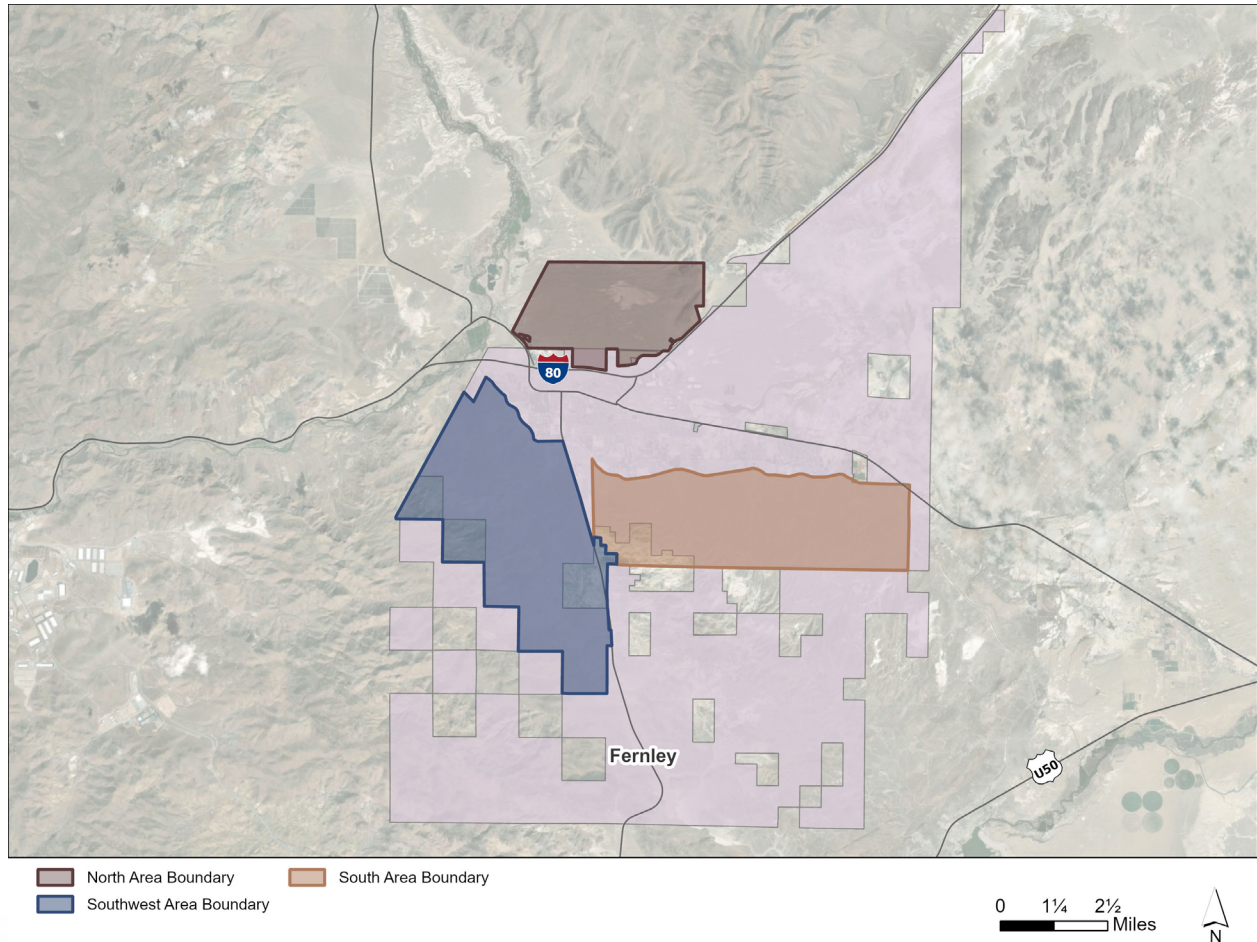
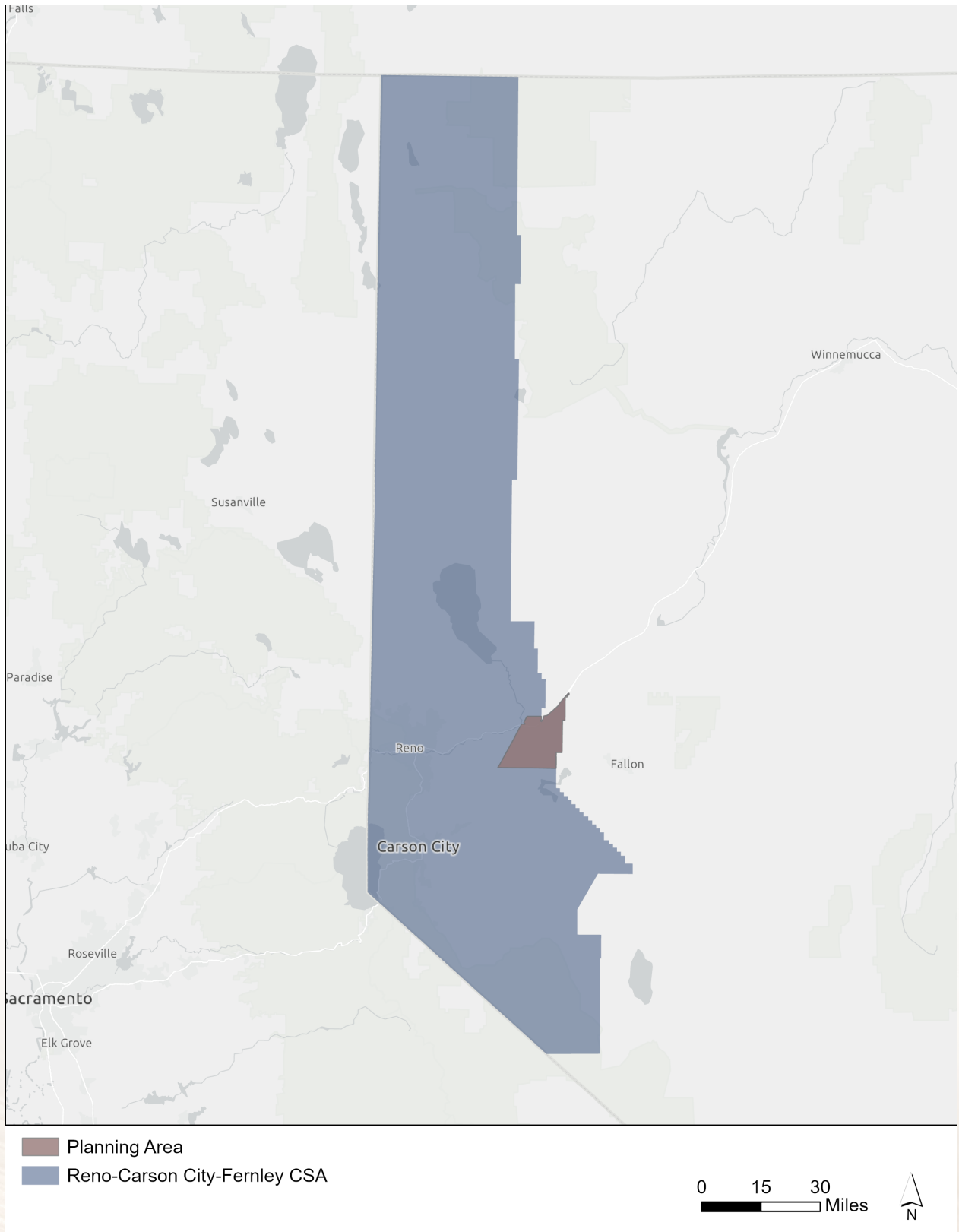
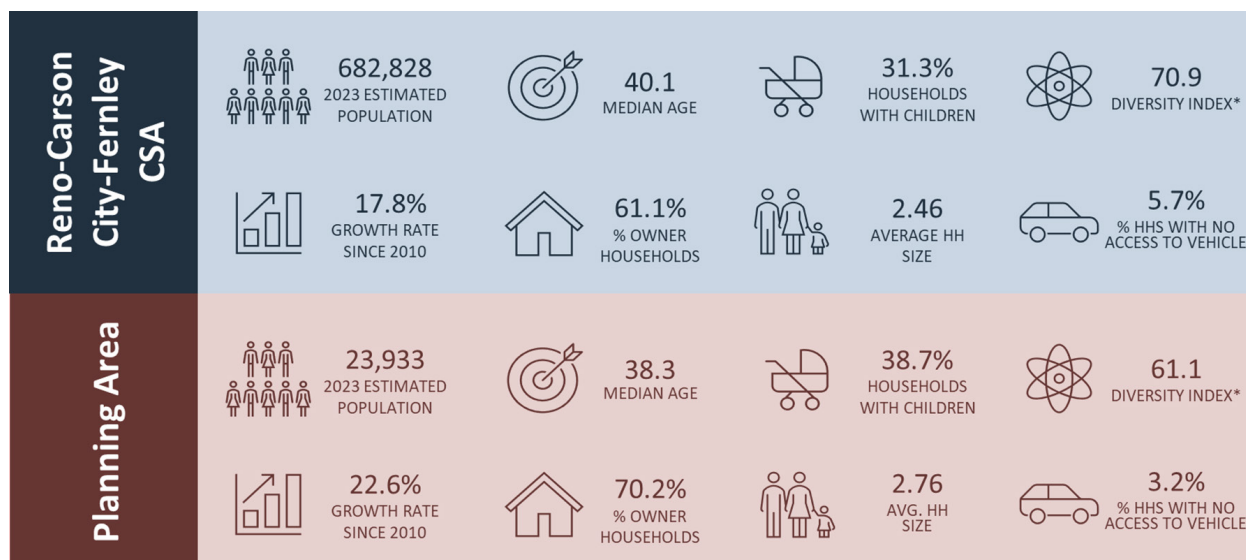




Figure 5. Planning Study Area and CSA



**Figure 6.** Demographic Summary

Population

The planning area¹, pictured in **Figure 3**, contains 23,933 people with a median age of 38.3 years old. The largest racial group is white with 73% of the population. Fernley is considerably less diverse than the Reno- Carson City-Fernley combined statistical area (CSA) holding a diversity index of 61.1 versus 70.9 for the CSA. The population has experienced a 22.6 percent growth (1.6% per year) since 2010, 4.8 percent higher than the CSA.

¹ The “Planning Area” term is used for the purposes of the Community Profile and includes areas outside of solely the North Area Plan.



Education And Earnings



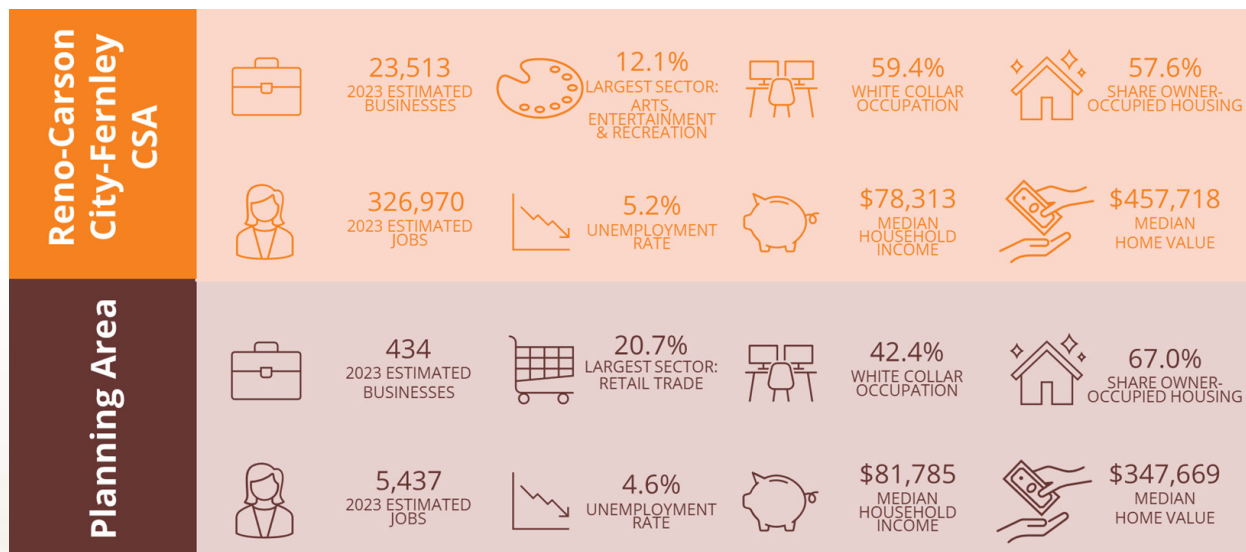
Fernley's education attainment levels are notably lower than the CSA, with fewer people holding bachelor's or master's degrees and more with only a high school diploma. Median income in the planning area is \$81,785, about \$3,000 more than the CSA, with the largest income group being those making \$100,000-149,999. The planning area's income earnings are concentrated in middle brackets, with less people earning below \$50,000 or above \$150,000 than the CSA. Lower educational attainment and a higher median point to a strong middle class of service and trade workers, aligned with the area's

largest employment sectors being retail trade, hospitality, and manufacturing.

However, the planning area currently lacks high paying, white collar jobs, which mostly exist in the Reno metro area.

Market Conditions

Figure 6: Economic Summary





Market Analysis Summary

The planning area's economy is defined by its proximity to Reno and Lake Tahoe, as well as a large existing and growing industrial sector. The retail trade sector is the largest employment group, employing 20.7% of total employees. The area is surrounded by large factories and distribution centers for companies including Apple, Tesla, Polaris, and Walmart. The upcoming completion of the Nevada Commerce Center and its 1,100 industrial jobs is the latest example of the area's planned job growth and fruitful market for warehousing and distribution. The planning area presents a cheaper yet proximal location to Reno and nearby employers, making it a bedroom community for residents—where 7,904 workers commute out of the planning area for work, far more than the 2,644 who commute in and the 2,217 who work and live in the planning area. Those living in the planning area and commuting to places such as Reno and Sparks capitalize on the area's lower housing prices where the median home price is \$369,154, well below the CSA's \$504,449. Recent housing development trends reflect the market's comparatively low prices and proximity to employment and tourism, showing 60.5% of existing housing inventory constructed since 2020. The current housing stock of the area is 80.6% single family, which will likely change as multi-family inventory is expected to increase by 230% by 2027, adding 1,167 units. In addition to housing and industry, there is recent growth in the hospitality industry for tourists heading to Reno, Lake Tahoe, and further along I-80 into California. The hospitality industry's growth is evident in the upcoming addition of four new economy class hotels over the next four years, adding 361 new rooms, or a 143% increase over the current stock. All these factors lead to retail trade being the largest employment sector at 20.7 percent of total employees.



Figure 7: Employment locations for planning area residents

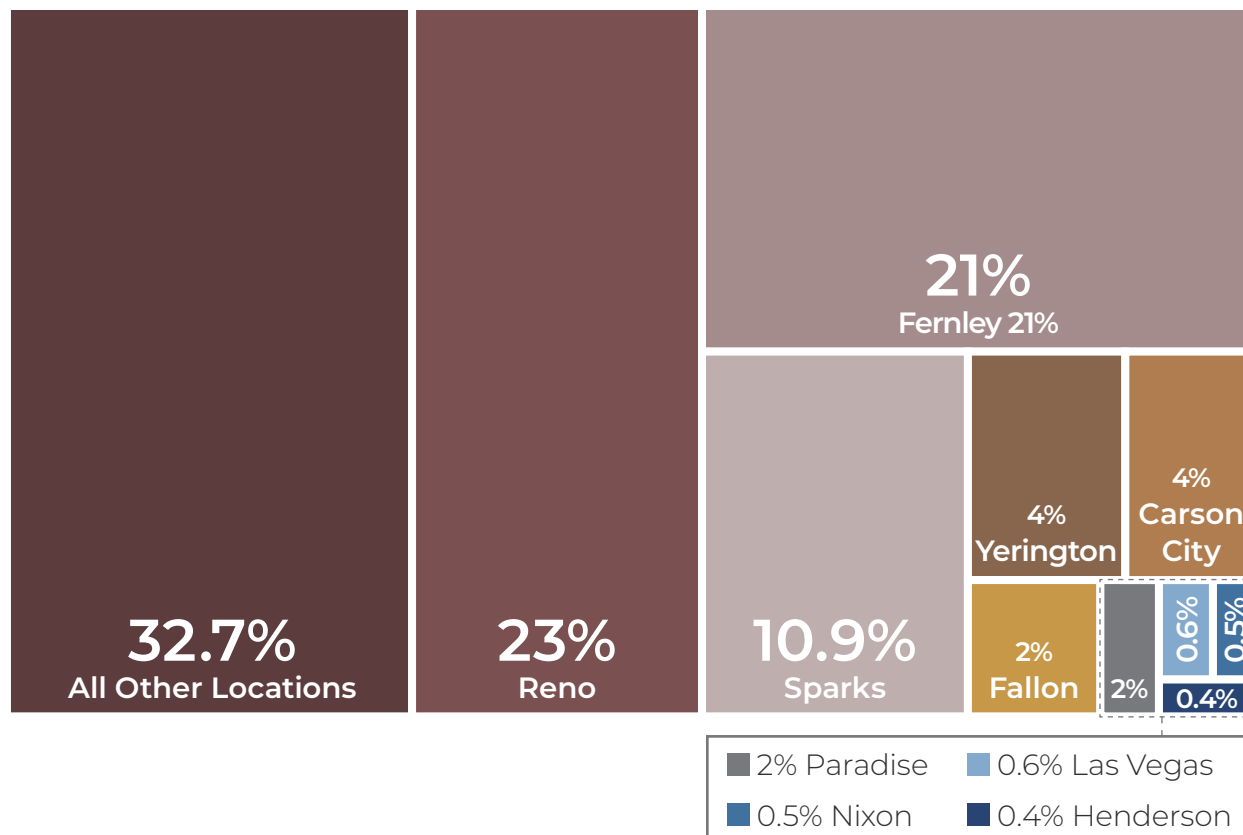


Figure 8: Commuting in the planning area





EXISTING CONDITIONS

North Area Plan





Existing Conditions

This chapter summarizes the existing conditions of the City of Fernley and specifically within the North Area to establish the foundation of the planning process. The purpose of this chapter is to identify specific challenges and opportunities that exist within the area to better understand how growth can serve the community. These factors may include natural constraints, infrastructure hurdles, and development opportunities that influence the potential for the North Area Plan.

Challenges

TOPOGRAPHY

Historically, development has occurred in Fernley across the flat lands along the Truckee Canal and transportation routes. The Virginia Range is located at the center of the City – south of I-80 – and a number of additional ranges surround Fernley to the north: Truckee Range to the east and Pah Rah Range to the west. The Truckee Range begins in the northeast corner of the North Area Plan, which includes the Fortymile Desert.

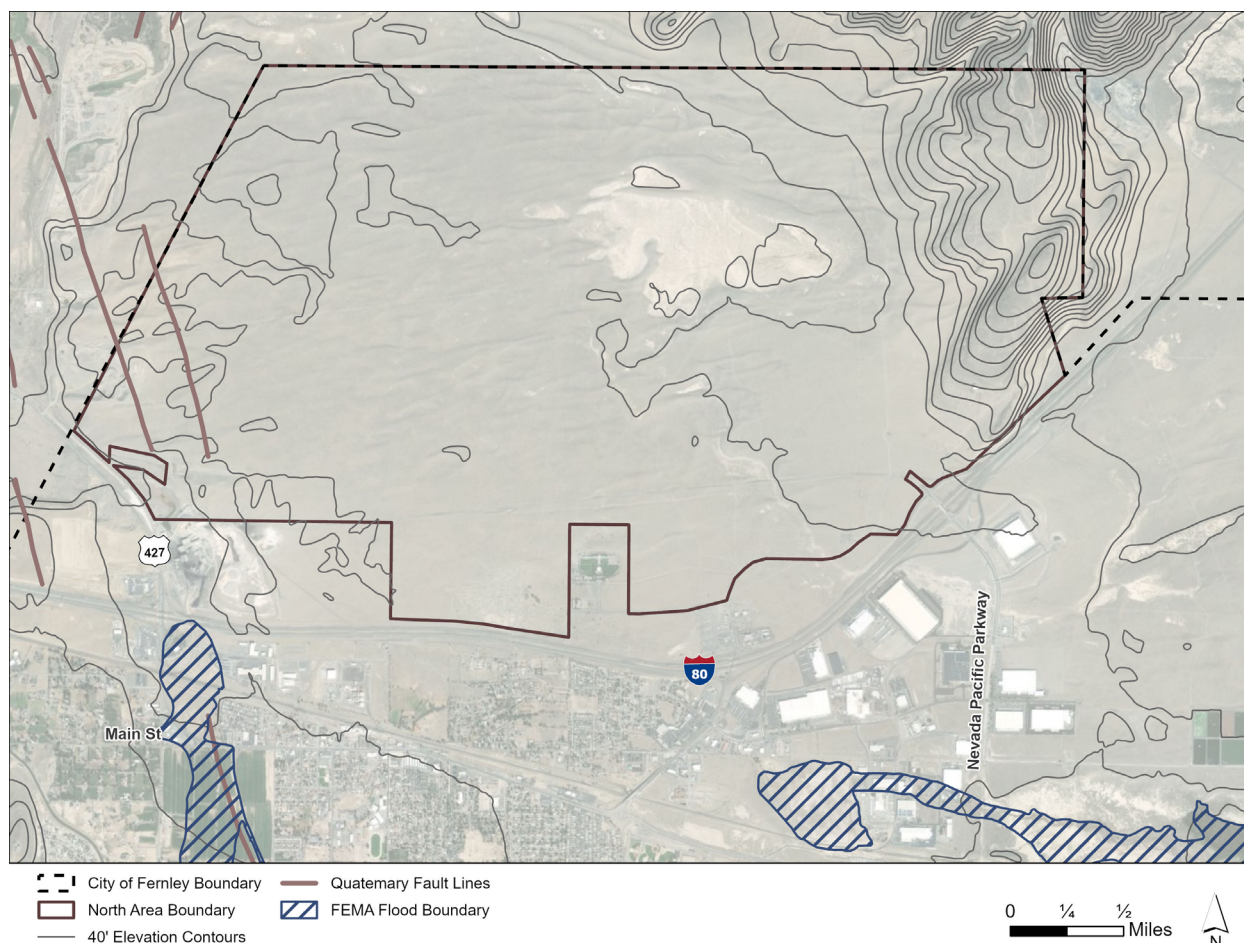


Topography will play a minor role in the development of the North Area Plan in comparison to the Southwest and South Area Plans which overlay the Virginia Range. However, slopes remain a particularly important factor when considering site access and development potential for large scale building formats. Slopes on the eastern and western boundaries may create a challenge for developing an accessible connection to Hill Ranch Road, NV-427, and across I-80, particularly for large trucks carrying goods and products to/from industrial sites.

The Fernley Development Code allows development on slopes up to 15% and limits development on slopes in excess of 15%. With the exception of the Northeast corner, slopes do not exceed 15% in the North Area Plan.



Figure 7. Elevation, Flood, and Fault Lines Map



Geologic Hazards

Geologic hazards include earthquakes, floods, landslides, mudslides and snowslides. In Fernley, seismic activity and stormwater management are the only two hazards with greater potential risk.

Seismic Activity

Western Nevada has had a seismically active history. Risk zone mapping prepared by the Governor's office indicates that most of western Nevada, including Fernley, falls in Seismic Risk Zone 3 and that major damage could occur during an earthquake. **Figure 7** illustrates the location of different fault lines in the Plan Area: Holocene, Pleistocene, and Lineaments. Proposed development in these, or other confirmed areas, will need to proceed based upon the recommendations of a detailed fault study.



Stormwater Management

No FEMA Flood risks have been identified in the North Area. However, the City is susceptible to flash floods during heavy rains and extreme weather events. The North Area may be at higher risk due to its location at the base of the Truckee Range. A detention basin, located towards the center of the Area Plan may assist in collecting stormwater runoff to protect developments once constructed. Potential exists to convert the detention basin into a retention basin for water collection and an outdoor recreational amenity space for surrounding land uses.

Existing Infrastructure

The North Area is entirely vacant of buildings; no existing uses exist within the area other than a water storage tank and various utilities infrastructure. Utilities infrastructure includes long range transmission lines and a step-up substation. These are located mostly along the southeast portion of the area. These uses may not be a constraint to surrounding development in the area, but they do decrease the buildable acreage of particular parcels.





Accessibility

The North Area is primarily accessible from the southern limits, though additional potential connections are possible on the southeastern and southwestern corners.

Due to the Area's size and location between the foothills and I-80, land access is currently constrained and will require a major east-west corridor connection between NV-427 and Nevada Pacific Parkway. The North Area is also located directly adjacent to the Pyramid Lake Paiute Reservation. This will require coordination with the Tribe to plan for connected road access. Additionally, the slope grade increases to the west. While it is not as steep as the hillside located on the eastern edge, the grade and the coordination with the Tribe provides added challenges that must be considered when planning for circulation



Conservation and Water Resources



The challenge for Fernley is to balance conservation of its important scenic and natural resources while fulfilling the needs of its existing and future residents by promoting commerce. The city's water supply primarily comes from groundwater wells, supplemented by water stored in upstream reservoirs through a contract with the US Bureau of Reclamation. The City is committed to water conservation and has developed a conservation plan in compliance with federal regulations. The City has also entered into an agreement to manage water usage from the Truckee Canal.

More information on conservation and water resource conditions in Fernley is available in the Fernley Water Resource Plan adopted in January 2020. See the Water Capacity section for more information.

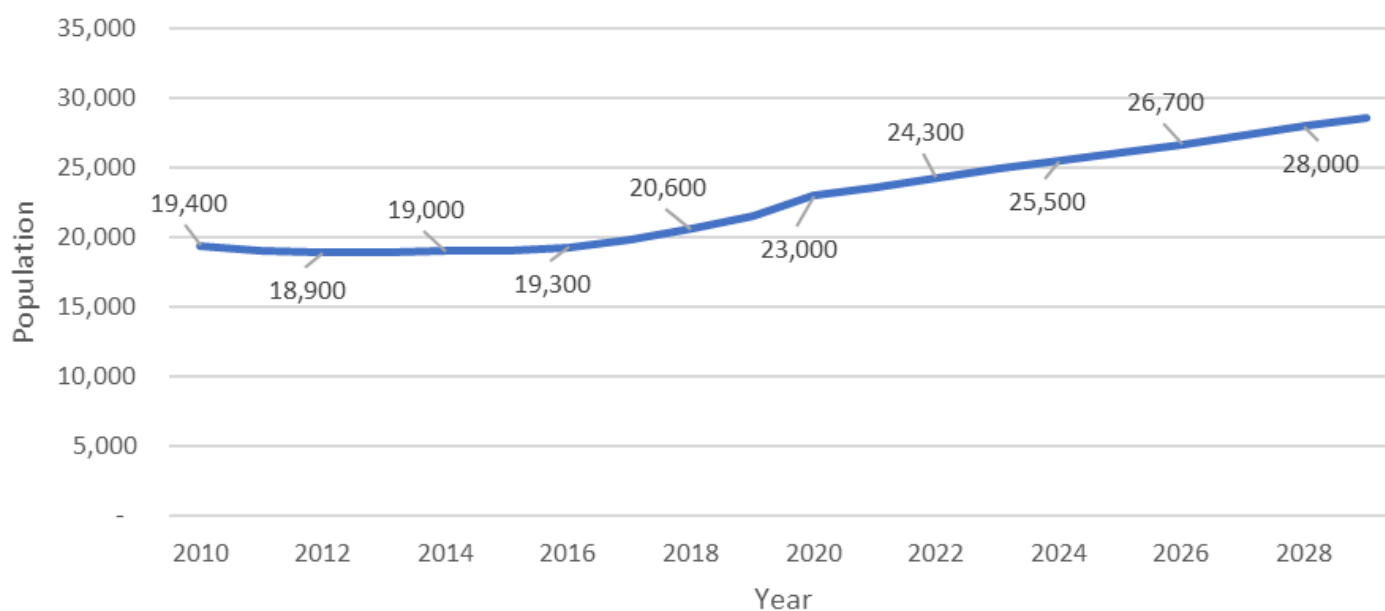


Opportunities

Growing Population

Since the start of 2016, the Fernley population has been on a steady increase; it is currently growing at a rate of 2.48 percent annually and has increased by about 10.7 percent since the 2020 U.S. Census. If the current population growth rate is applied to future years, the projected population size in 2029 will be about 28,600 – an increase of about 47 percent since 2010. With growing industry interests and employment opportunities in the region, continued population growth is certain.

Figure 8. Past and Projected Population Growth



Regionally, the Reno MSA has also experienced consistent growth, with a growth from 119,081 in 1969 to 500,915 in 2022. This represents a growth of about 320 percent. To meet continued population demand, the City must plan ahead for future housing needs. The Area Plan provides an ideal opportunity to establish designated areas for future housing development to occur.



Existing Public Resources

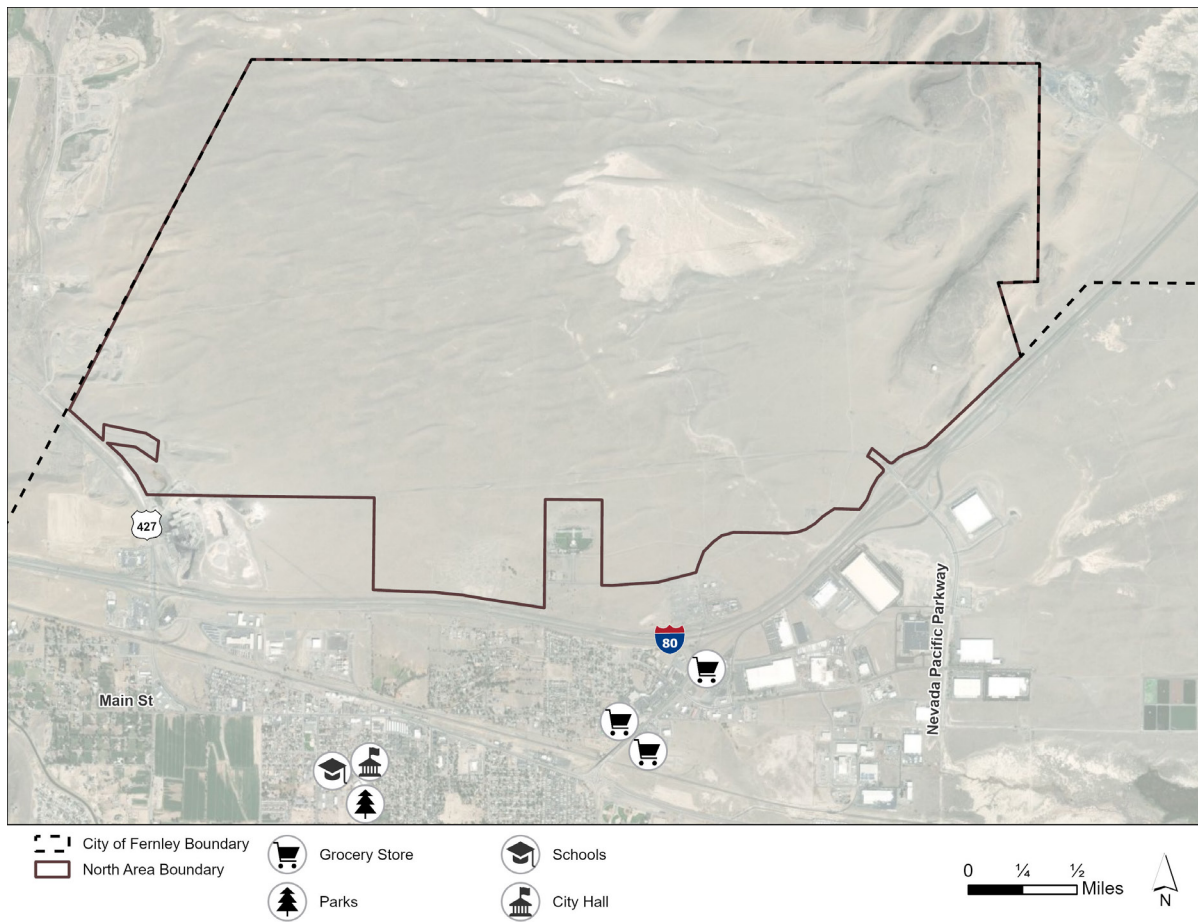
Fernley provides a number of public resources and amenities for residents and visitors, including:

- Public parks
- Dog parks
- Public library
- Community center
- Senior center
- Fernley swimming pool
- Public schools (elementary, middle, and high schools)





Figure 9. Community Resources Map



Surrounding Uses

Existing uses adjacent to the North Area Plan include the Northern Nevada Veterans Memorial Cemetery, a gas station and highway-serving businesses, as well as a cement manufacturer.

The North Area region is well suited for businesses and industries that benefit from convenient access to the highway and the railroad line located just south of I-80. The I-80 Highway provides an extensive connection from Fernley west to San Francisco and east to Chicago. This may primarily benefit manufacturers, distribution warehouses, and data centers.





Highway I-80 also creates an opportunity for commercial uses providing services and retail for travelers. Gas stations, shopping centers, restaurants, and convenience stores may provide the most benefit to visitors.

Recreation and Open Space

While no official roads are paved through the North Area, a number of informal gravel and dirt trails already exist throughout. These trails provide the community with recreational off-roading, motocross and dirt-bike racing, mountain biking, trail running, and hiking. There are opportunities to retain and enhance existing trail networks in the North Area while still encouraging new development, especially in the northeast section with steep slopes and beautiful mountain views to the west.





California National Historic Trail

Cutting directly through the North Area is the California National Historic Trail which led over 250,000 emigrants to California for the gold rush and farmland between the 1840s and 1850s.

Figure 10. California National Historic Trail Map



Source: National Park Service

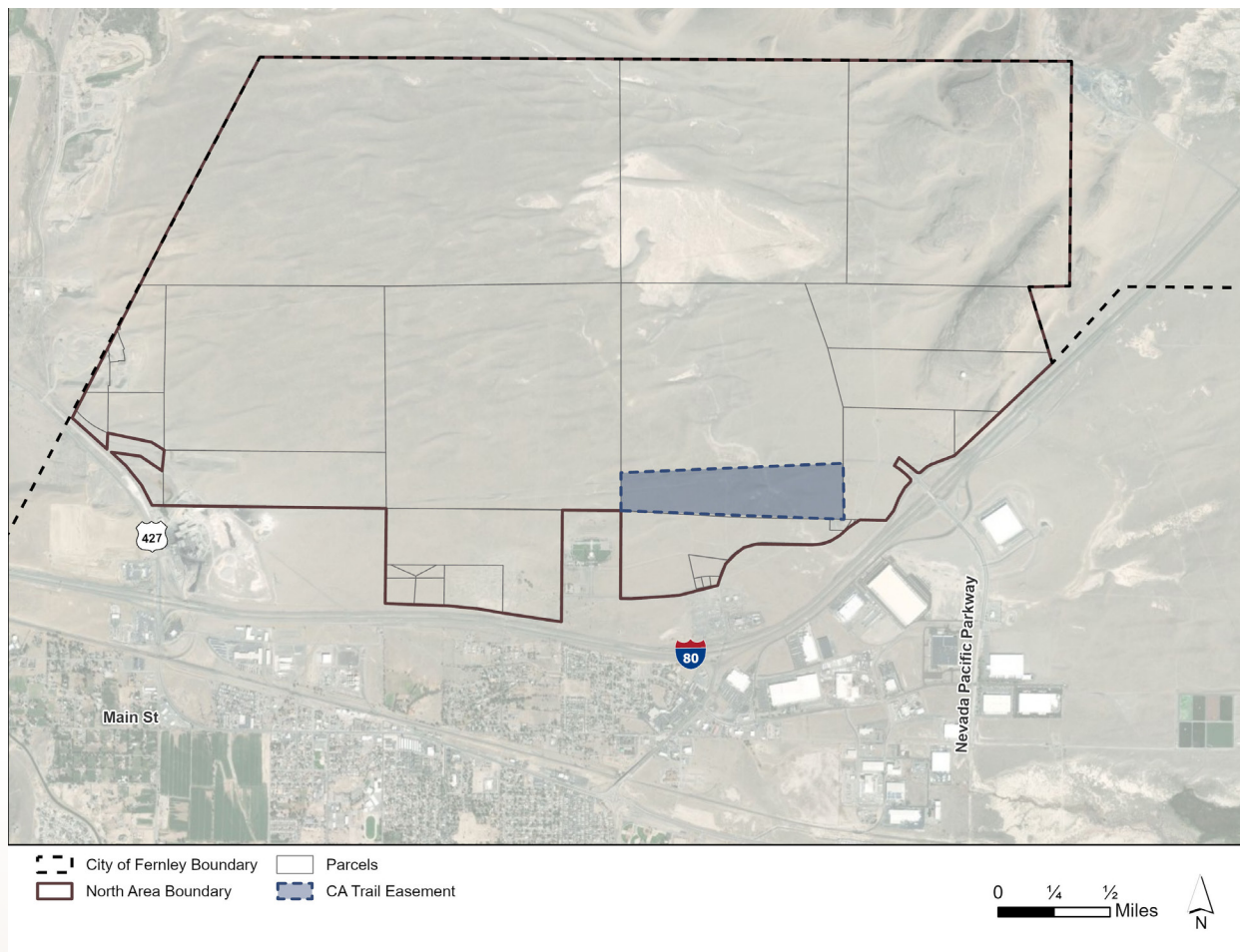
The following description comes from the California Trail Center:

“The last seven miles at the end of the Forty-Mile Desert was through dunes of soft sand that mired wagons pulled by exhausted and often collapsing stock. Many diaries of the time called this the hardest travel of the entire California Trail. Between 1849 and 1860, the passage of thousands of emigrant wagons wore deep trenches (swales) in the soft sand that are visible today. These ‘Fernley Swales’ are among the best examples of deep sand swales along the entire California Trail.”



A Historic Preservation and Access Easement was created in a section of the southeast corner of the plan area in 2001 to preserve a portion of these swales formed by wagons travelling on the California Trail. See **Figure 12** and the Land Use Plan on page 46 for details on the location and size of the easement. Where possible, the development of the North Area Plan should consider preserving additional portions of the Fernley Swales and provide accessible public viewing areas to acknowledge the history of Fernley. This condition presents both an opportunity to leverage the historical trail for recreation and tourism, and a challenge to ensure that development does not encroach on the easement.

Figure 11. Historic Preservation Easement for the California Trail





Vacant Land

Vacant land allows for greater development opportunities without needing to consider existing uses and businesses – and vacant land of this magnitude is additionally advantageous. With over 40% of the land in the North Area owned by the Bureau of Land Management and set for conveyance to the City, there is unique potential for the City to facilitate desired land uses on these vacant parcels for a public purpose. However, over half of the land in the North Area is privately owned. This adds a level of complexity to coordinate with property owners and individual development interests.

Regional Industries

Regional industries are an important opportunity as they may indicate potential interest for development in the Plan Area. As of 2021, regional industries were fairly similar across local jurisdictions

Reno

- Health care and social assistance
- Retail trade
- Accommodation and food services

Silver Springs

- Transportation and warehousing
- Construction
- Retail trade

Sparks

- Retail trade
- Health care and social assistance
- Manufacturing

Fallon

- Health care and social assistance
- Construction
- Retail trade

Carson City

- Public administration
- Retail trade
- Health care and social assistance

Fernley

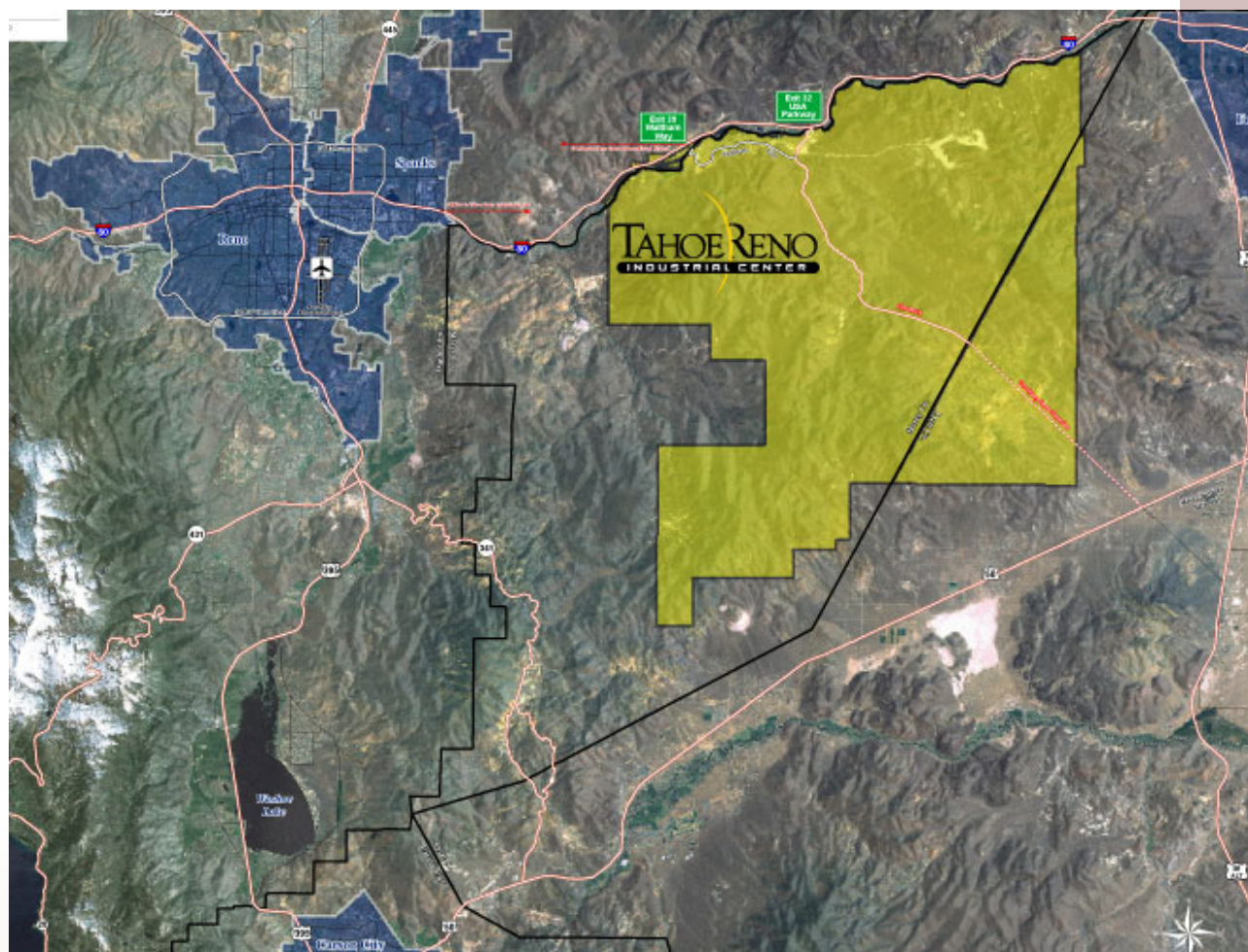
- Manufacturing
- Retail trade
- Health care and social assistance



Tahoe-Reno Industrial Center (TRI)

Industrial development throughout the region has experienced the greatest amount of interest from developers over recent years. Fernley itself has welcomed several industrial sites just southeast of I-80, and just west of Fernley is the Tahoe-Reno Industrial Center (TRI) – the largest industrial park in the world. TRI is home to the Tesla Gigafactory, Blockchains, Switch, and Google. Industry types at TRI include distribution, manufacturing, and data centers.

Source: Tahoe-Reno Industrial Center





FUTURE LAND USE

North Area Plan





Future Land Use

An effective and realistic land use strategy enables the City to partner with public, private, and community sectors to shape the physical character and design of the North Area. **Figure 12** demonstrates a land use plan that can help bring the community's vision and goals for both the North Area and Fernley as a whole to life. This land use strategy was formed through community dialogue and integrates existing plans, economic feasibility, and infrastructure capacity to shape the future development of the area.

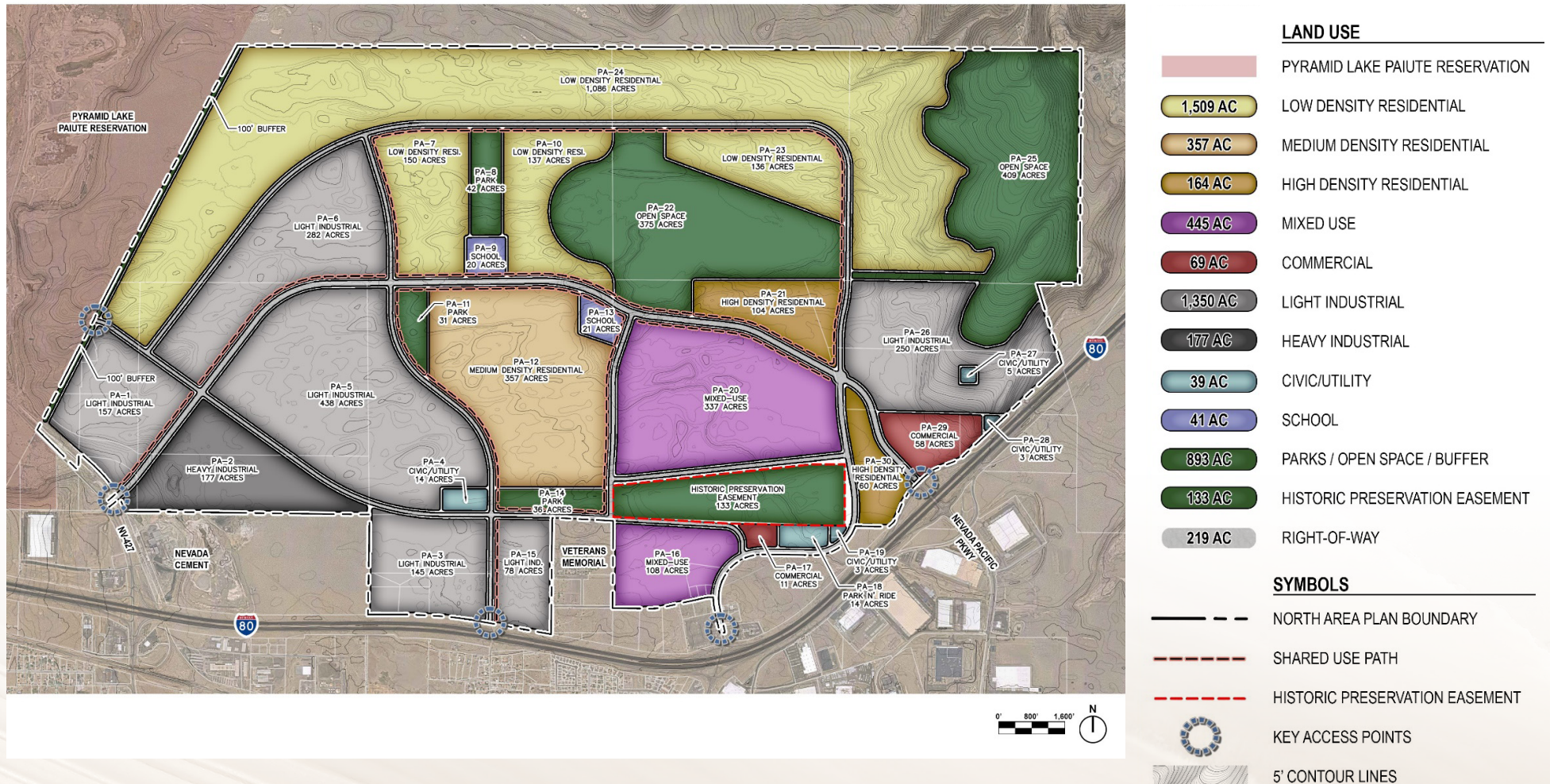
The land use strategy started with forming a Framework Map informed by community members during the first Open House and the Fernley Transportation Master Plan. This map provides a preliminary transportation network with a high-level outline for roadway, bike/pedestrian elements, and public transportation connections throughout the area. Although Fernley is not currently served by transit, the Framework Map identifies areas for future transit and park-and-ride opportunities.

The Future Land Use Map fills in the gaps of this transportation network to communicate a well-organized and market-supportive allocation of land uses in the North Area. Potential land uses² include several residential types, mixed use, commercial, light and heavy industrial, civic/utility, school, parks and open space, historic preservation, and the right-of-way. These land use designations serve as an overall vision and guidance for new development in the North Area, although flexibility is possible at the City's discretion to best adapt to future conditions and community feedback. Turning this land use strategy into reality will require cross-sector partnerships between the City and a wide range of development professionals and community leaders.

² Disclaimer: If land uses are not clearly defined in this Plan, the City of Fernley shall use their discretion to approve uses that align with the 2018 Comprehensive Master Plan and comply with the 2020 Development Code.



Figure 12. North Area Plan Land Use Map

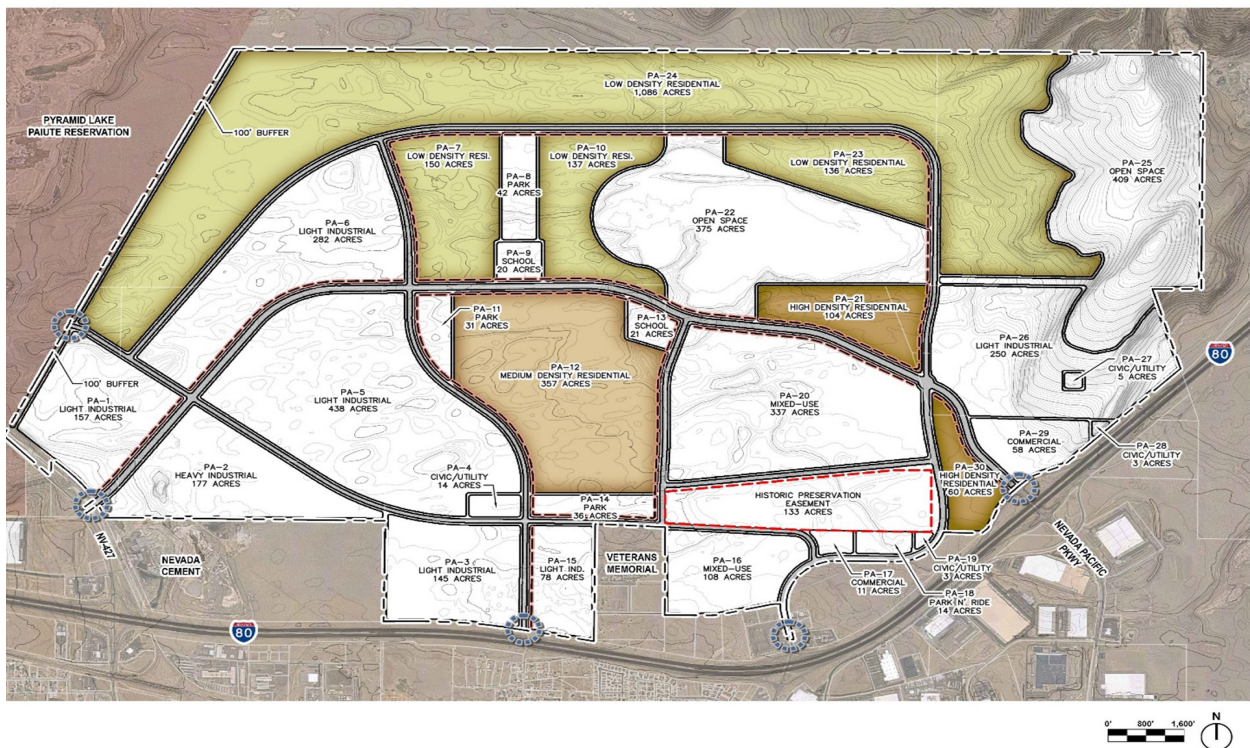




Residential

Residential uses are located throughout the Area Plan in a manner that facilitates cohesive, high-quality developments that will result in more attractive, livable neighborhoods. These uses range in density from low, medium, to high with residential also possible in mixed-use land categories.

Figure 13. Residential Land Use Map



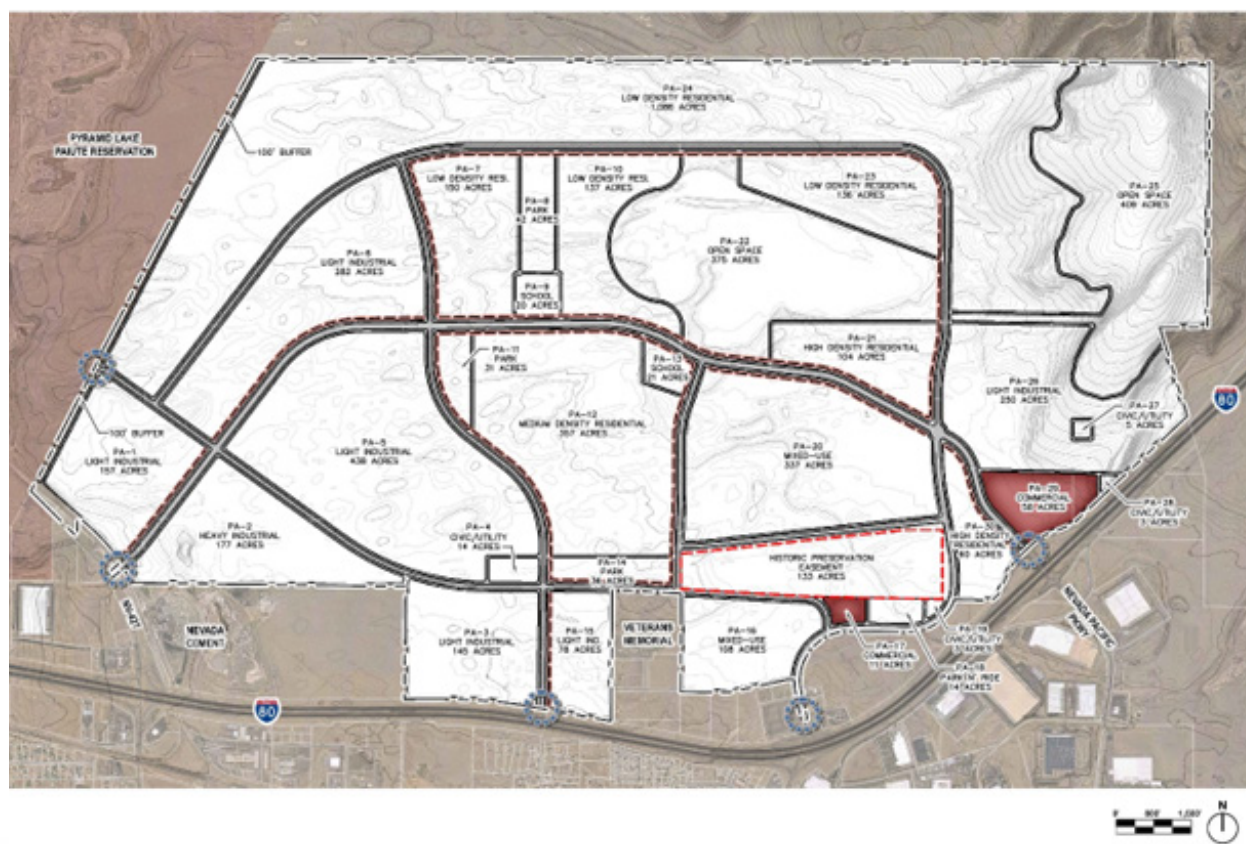
Land Use	Acreage	Density Range	Development Yield	Allowable Uses
Low Density	1,509	1-6 du per acre	9,054 Units	Large lot estates; single-family; townhomes; duplex; attached and detached accessory dwelling units
Medium Density	357	7-13 du per acre	4,284 Units	Duplex; triplex; fourplex; townhome; multi-story apartments and condominiums
High Density	164	14-30 du per acre	3,280 Units	Multi-family apartments; condominiums; townhomes; workforce housing; all uses permitted in low-density
TOTAL	2,030	-	16,618 Units	-



Commercial

Commercial uses for the North Area are intended for mainly retail pad sites and larger connected development sites with in-line retail and/or big box retail. Commercial uses should serve the needs of neighboring residential communities and employment centers. The goal is to create walkable developments that provide connectivity to adjacent land uses.

Figure 17. Commercial Land Use Map



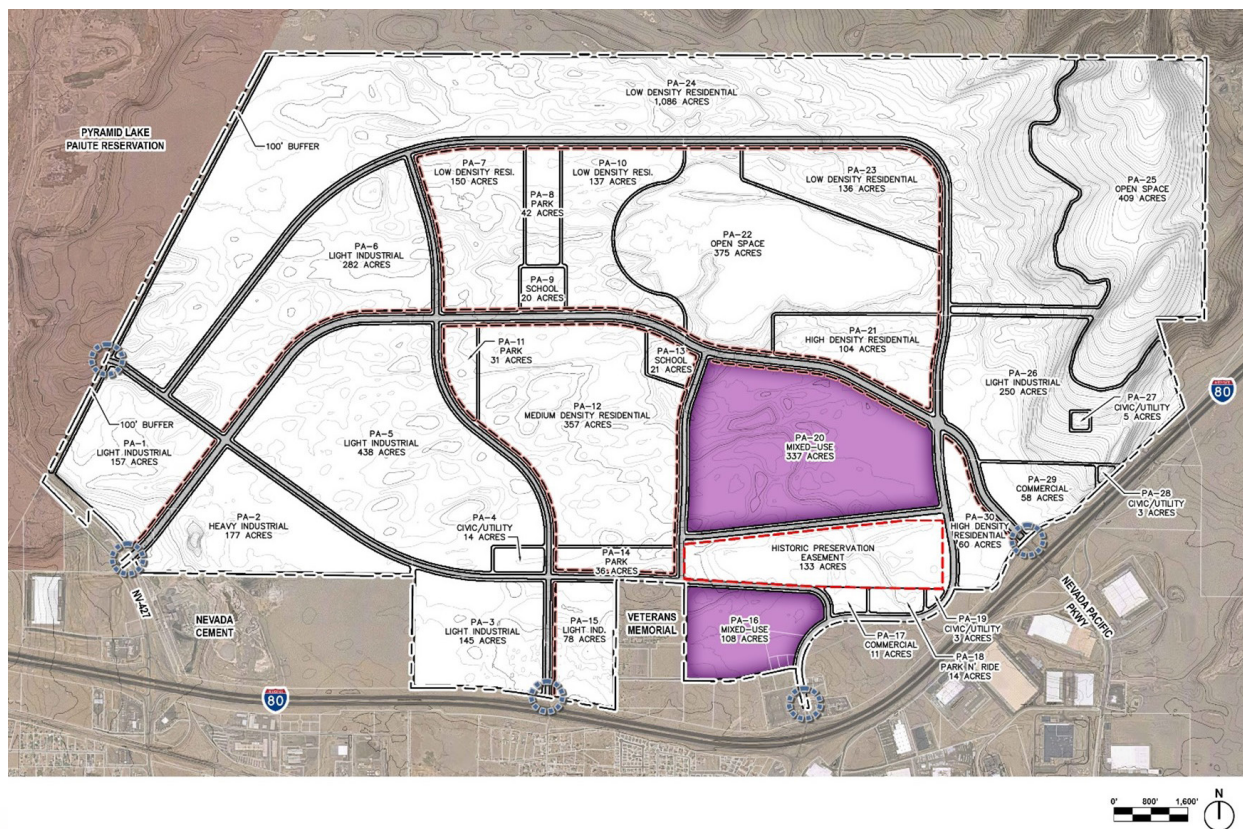
Land Use	Acreage	Maximum FAR	Square-Foot Yield	Allowable Uses
■ Commercial	69	N/A	N/A	Highway Commercial Neighborhood commercial; tourist commercial
TOTAL	69	-	-	-



Mixed Use (Residential/Commercial)

Mixed-Use areas include a variety of community-serving land uses incorporating residential, commercial, medical, and public facilities in a cohesive manner. These areas are located throughout the center of the Area Plan to provide a transitional use between residential neighborhoods and commercial districts. The mixed-use planning areas can have a range of densities while promoting walkability, connectivity, and access to neighborhood-serving uses.

Figure 14. Mixed Use Land Use Map



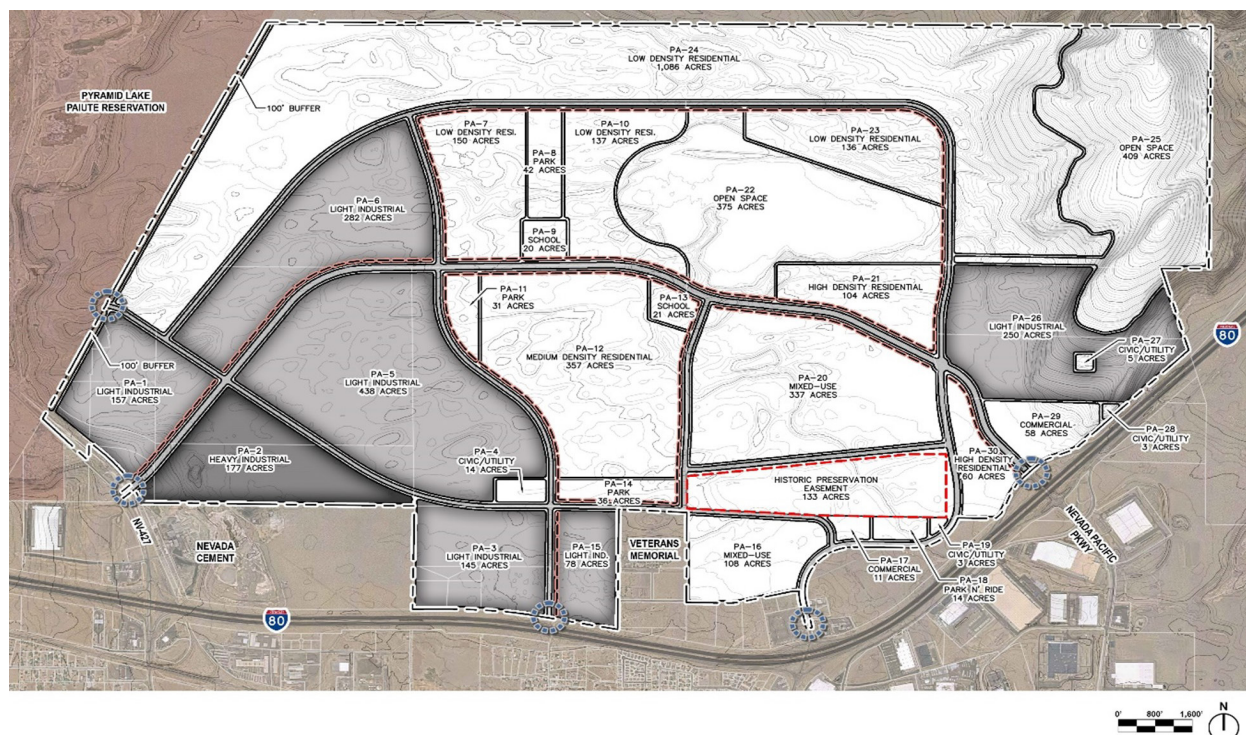
Land Use	Acreage	Density Range	Development Yield	Allowable Uses
 Mixed-Use	445	Up to 30 du per acre	N/A	Multi-family apartments; condominiums townhomes; live/work units; commercial retail; office; neighborhood commercial; tourist commercial
TOTAL	445	-	-	-



Industrial

Industrial uses include both light and heavy industrial work such as manufacturing, warehousing, logistics, office, data centers, as well as small-scale commercial uses that serve industrial use employees. Industrial uses are intended to supplement Fernley's employment opportunities and create an environment where industrial activities may occur with minimum impact on the surrounding land uses and the natural environment.

Figure 15. Industrial Land Use Map



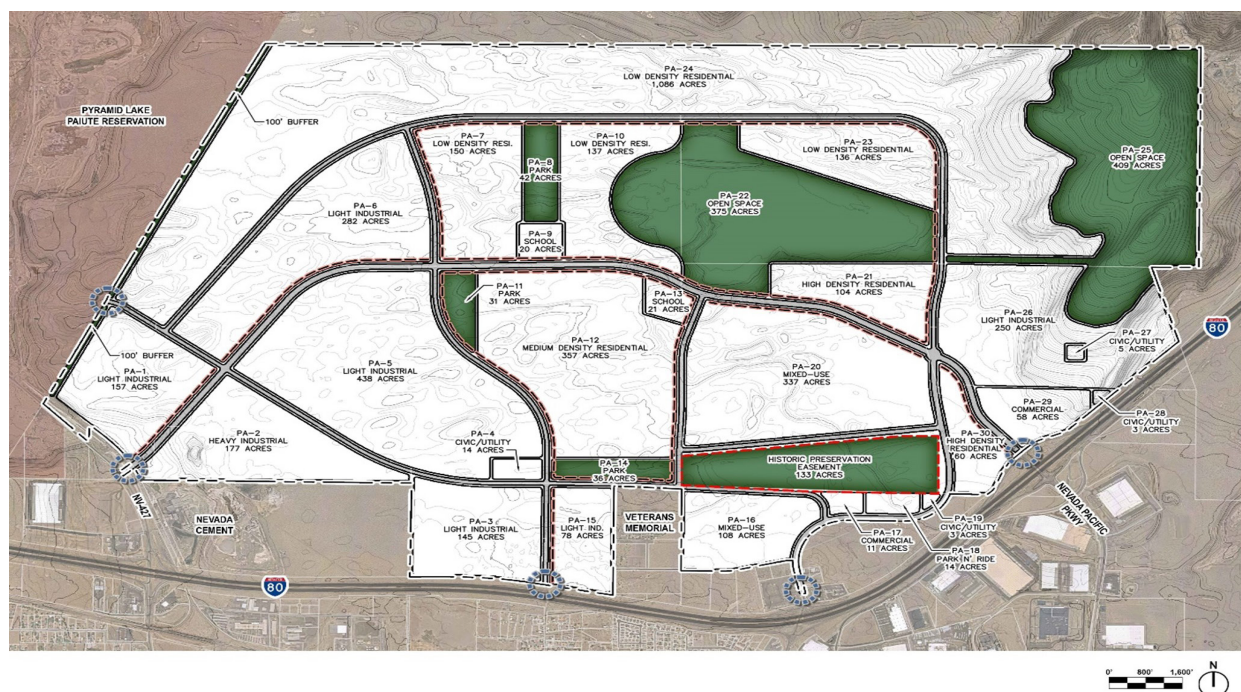
Land Use	Acreage	Max. FAR	Development Yield	Allowable Uses
■ Light Industrial	1,350	1.1	8,820,900 Sq. Ft.	Light manufacturing; distribution; data center; logistics; warehousing Employment Center: major office and business uses; flex office; research centers; corporate headquarters; clean tech; clean industry hubs Medical: medical offices; emergency services Industry-serving commercial uses
■ Heavy Industrial	177	N/A	N/A	Heavy manufacturing; refinery; labor- and capital-intensive industrial activities
TOTAL	1,527	-	8,820,900 Sq. Ft.	-



Open Space and Recreation

There are six primary Open Space and Recreation areas intended to provide opportunity for public parks, sports fields, and general open space preservation. Existing trails and viewpoints of the mountains in the northeastern corner of the Area will be preserved. A shared use path will connect these open spaces to each other and to surrounding commercial, industrial, and residential uses.

Figure 16. Open Space and Recreation Land Use Map



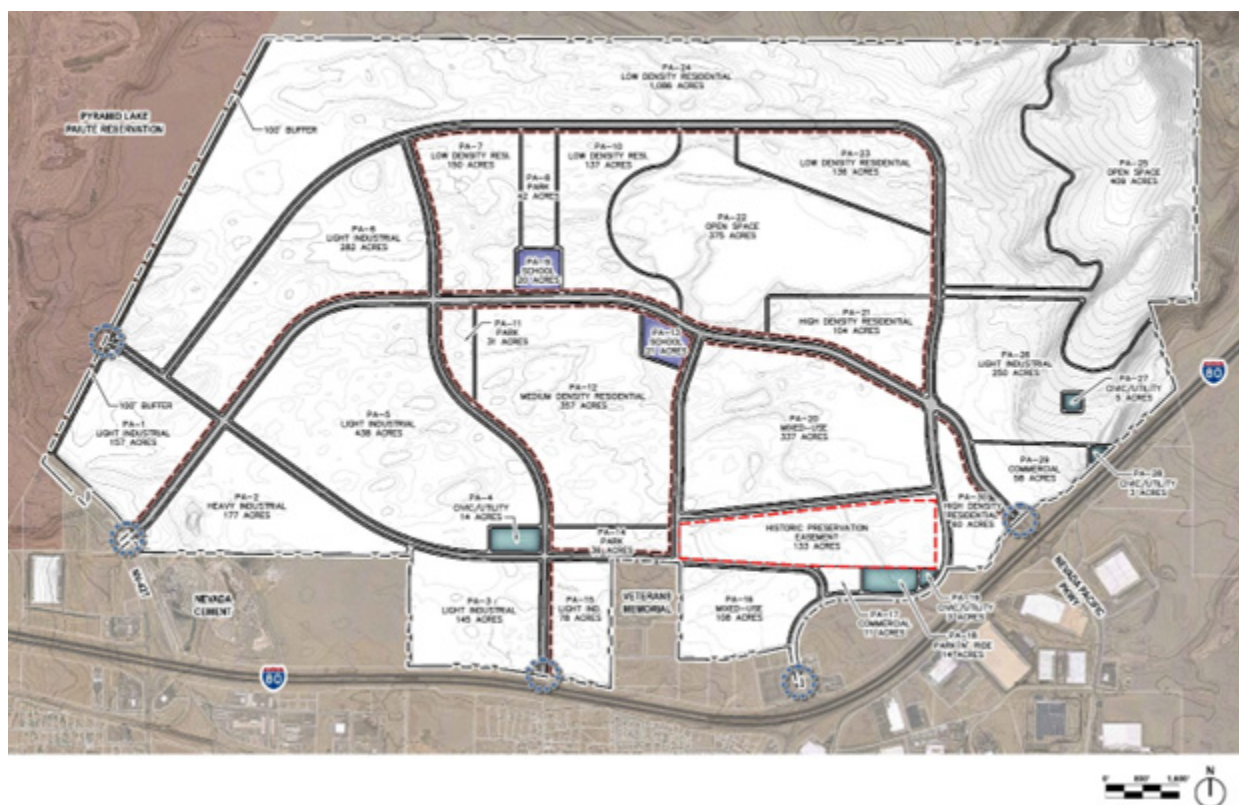
Land Use	Acreage	Maximum FAR	Square-Foot Yield	Allowable Uses
 Park/Open Space	1,026	N/A	N/A	Public parks; recreational fields; hiking and/or cycling trails; natural resource conservation land; stormwater
TOTAL	69	-	-	-



Public Facilities

Public Facilities are intended to create a cohesive community with civic infrastructure that supports future employment centers and housing. Public facilities include schools, emergency services, and childcare facilities. Typical school sites range from 20-40 acres and should reflect the current need of population size at full build out.

Figure 18. Public Facilities Land Use Map



Land Use	Acreage	Maximum FAR	Square-Foot Yield	Allowable Uses
 Civic/Utility	25	N/A	N/A	Emergency services; utilities infrastructure; public resources (library, senior center, etc.); civic center
 School	41	N/A	N/A	Schools; childcare facilities (12 or fewer)
 Park N' Ride	14	N/A	N/A	Transit-related facilities, public parking including tractor trailers
TOTAL	80	-	-	-



TRANSPORTATION AND CONNECTIVITY

North Area Plan





Transportation and Connectivity

Overview

The North Area presents an opportunity to create new connections from Fernley's existing neighborhoods to hiking trails and future recreational and open spaces. The area is currently only accessible by Nevada Pacific Parkway to the southeast, Truck Inn Way and Vine Street to the south, and Hill Ranch Road to the southwest. No existing roads exist within the plan area, other than dirt trails created by off-road recreation.

It will be the responsibility of proposed developments to identify how connectivity will be specifically provided for each transportation mode. The Fernley Development Guidelines provide additional specificity to the general descriptions provided in this section.

*Nevada Pacific
Pkw (Northwest
Facing)*



*Vine St.
(East Facing)*





Walking

Walking connectivity throughout the North Area will provide a variety of opportunities from promoting active transportation, to offering recreational connectivity, to providing a safe environment to all benefiting from pedestrian infrastructure and facilities.

The intent of the Area Plan is to create an environment where residents may walk to retail needs, where employees may walk to lunch-serving businesses, and where all –current and future residents and employees – may have convenient access to the number of recreational opportunities throughout the area.

An important element will be consistency throughout the area plan. Gaps in sidewalk infrastructure will create barriers to walking and will dissuade the use of the available infrastructure. Additional factors that will assist in ensuring the use of sidewalks and pedestrian infrastructure is safety (protection from vehicles) and the environment (shade infrastructure, landscaping, lighting, and street furniture).

Cycling

Cycling throughout the North Area provides opportunity for active transportation and for recreational purposes. Fernley does not currently offer cycling infrastructure to the North Area, though the Transportation Master Plan establishes plans to provide bike lanes along Nevada Pacific Parkway, Vine Street, and along Main Street. Once the infrastructure is added, the City's center will be connected to the north area and cyclists may travel between the two areas.

While the Transportation Master Plan proposed bike lanes, they are not currently marked as protected or separated lanes. On-street, striped bike lanes provide the lowest level of safety for cyclists. As it develops, the North Area will need to consider added levels of protection for any potential bike lanes where cyclists may share the road with trucks. Additional cycling infrastructure, such as bike maintenance stations and bike stands, also need to be considered residential, commercial, and mixed-use areas to promote cycling and create a safe and welcoming environment.



Nevada Pacific Pkwy. and Gateway Dr. intersection bike lanes



As shown in the Future Land Use Map, the North Area includes a multi-use path which wraps around the center of the area and connects to Main Street, Vine Street, and Nevada Pacific Parkway. This will fully connect all uses in the North Area to the rest of the City for transportation and recreational uses.

Additionally, mountain biking linkage is also created with the extension of the open space in the northeast to the multi-use path. The open space is established as such due to the increasing grade of the slope. Mountain biking and hiking trails may already exist in this area, or they may be created with the development of the area.

Driving

Cars represent the main form of transportation for households in Fernley and the region. As such, roads and transportation largely favor automobile use.

Connectivity to the rest of the City remains limited due to I-80 creating a barrier between the City center and the North Area. Accessibility is limited to Main Street, Vine Street, Truck Inn Way, and Nevada Pacific Parkway.

Developers will be responsible for neighborhood linkages and smaller roads throughout the North Area. The Future Land Use Plan establishes the main arterials throughout the Area Plan that will need to be constructed first and foremost for development to continue progressing.

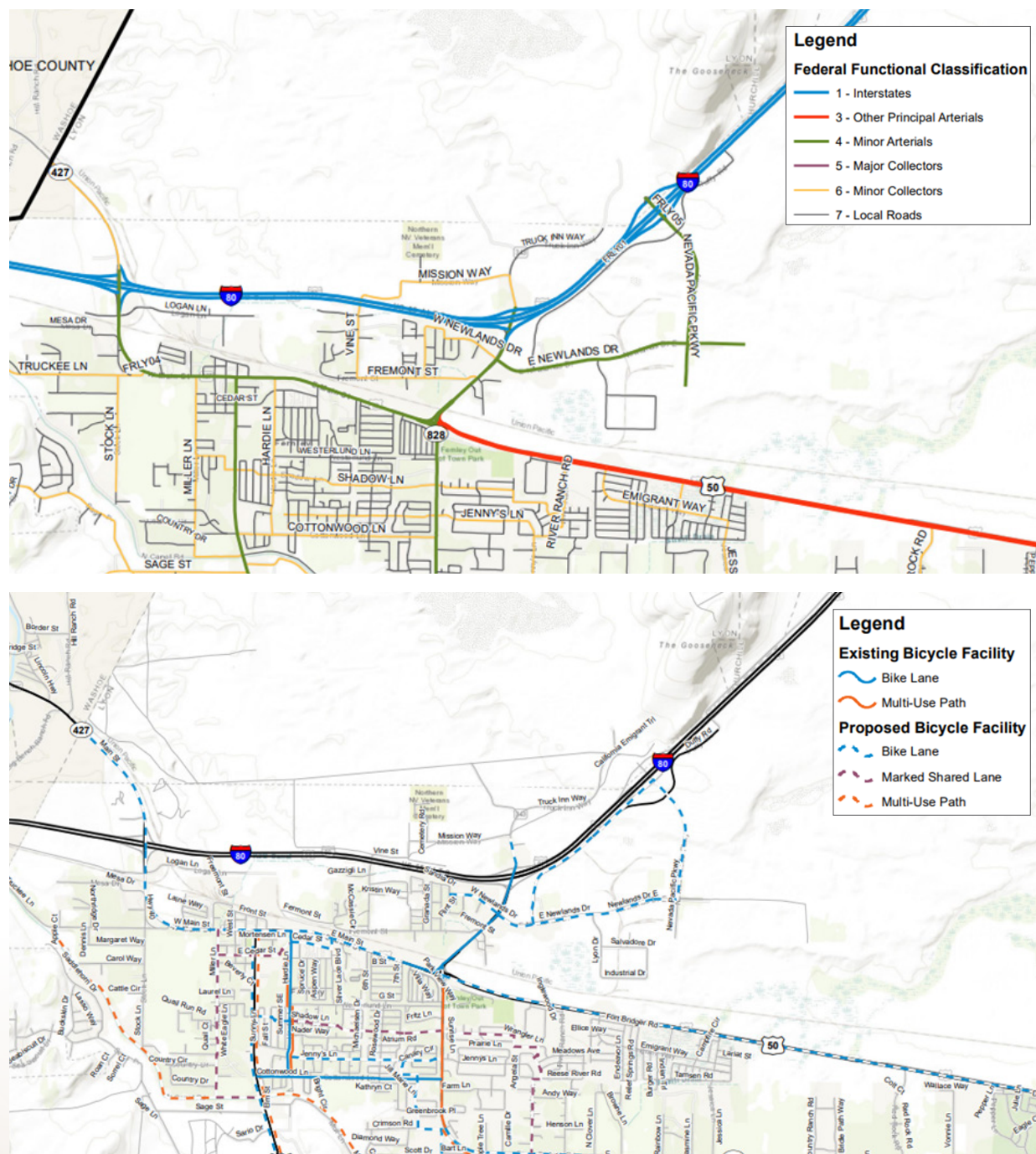
Truck Traffic

With opportunity for future industrial developments in the North Area, it is important for truck traffic to be planned in a manner that does not create additional traffic in neighborhood and commercial areas. Residents, visitors, and employees should have clear access to their destinations. However, the North Area also creates an excellent opportunity for industrial businesses to be conveniently located next to I-80. As such, it is also important for trucks to be able to easily access industrial sites. Future developments must identify the routes trucks will travel through the Area and identify how traffic will be mitigated. For example, this may include travel early in the morning.

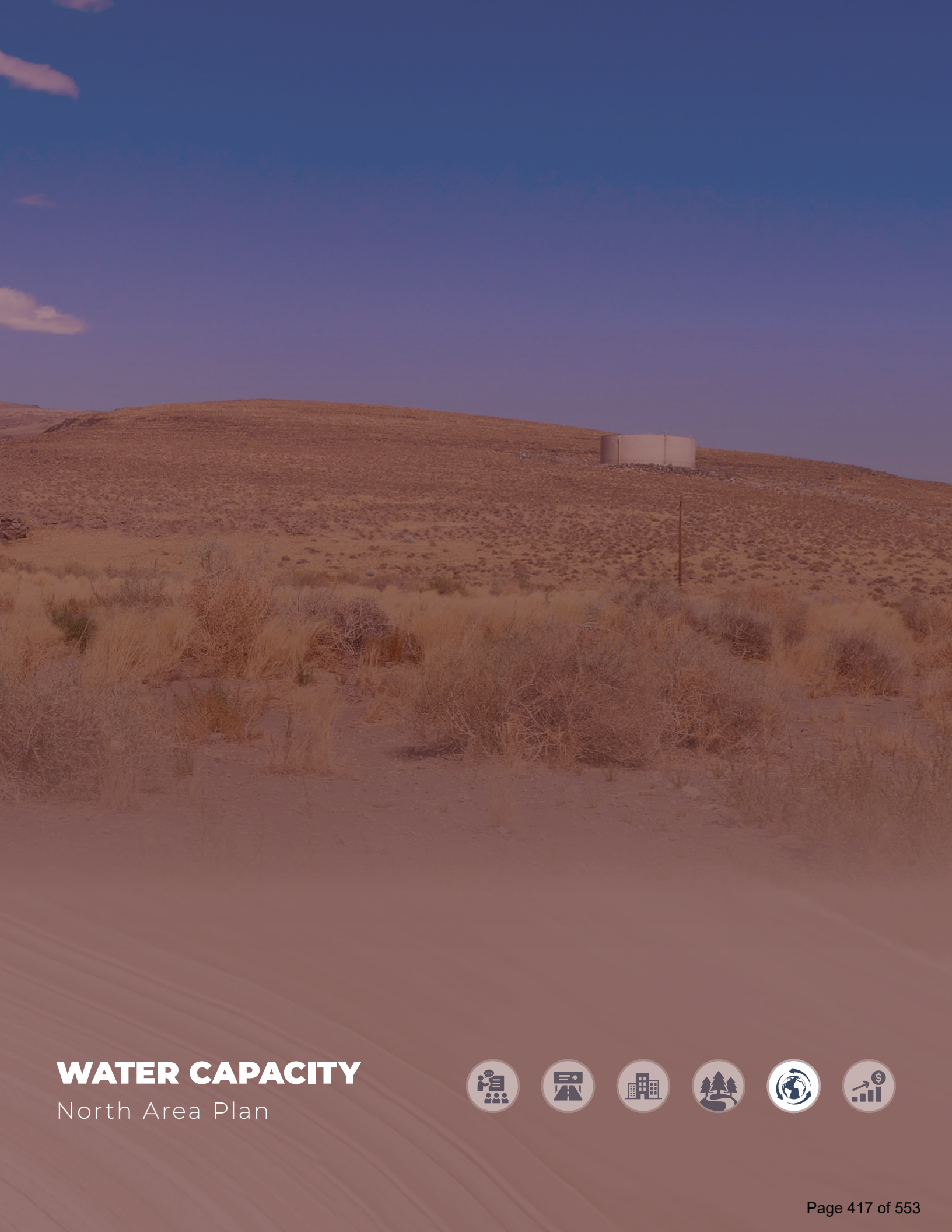




Figure 19. Roadway Functional Classification (Fernley Transportation Master Plan)



Source: City of Fernley Transportation Master Plan, 2020



WATER CAPACITY
North Area Plan





Water Capacity

Current Demand

According to data provided in the City of Fernley's 2022 Water Master Plan, the average day demand for the potable water system is approximately 3.88 million gallons per day (MGD) and the maximum day demand is approximately 6.52 MGD. The most recent available peak hour flow monitoring data suggests that the peak hour demand is approximately 10.90 MGD. The City's water system currently meets the demands of all three flow scenarios. The proposed land plan to develop the North Area would result in additional water demands. The following sections discuss each system component and present information regarding their capacity to meet additional demands.

Available Water Resources

The City water system is currently supplied through groundwater wells only, including six groundwater wells (numbered 4, 9, 9A, 11, 13, and 14). The total production capacity of these combined wells is 12.33 MGD³. The firm capacity, which refers to the amount of water that can be reliably produced by the system accounting for possibility of equipment failure, maintenance needs, operational limitations, and long-term sustainability, is 8.65 MGD. NAC 445A.6672 suggests that if a public water system is served primarily from wells, then the total capacity of the system should be able to serve MDD plus fire flow when all wells are functioning or ADD plus fire flow when the most productive well is not functioning.

Takeaway

In each of these scenarios, it appears that the City's water supply has some available capacity, however, it is unclear whether this available capacity exceeds the future demands of the North Area Plan. The amount of additional raw water resources required will depend on future development demands.

³ Assumes that every well and pump in the system is operating at full capacity, over a continuous 24-hour period. While this figure represents the upper limit of what the system could theoretically deliver if all components were functioning perfectly and continuously, it is not an accurate representation of the reliable output of the wells.



Treatment Plant

The City's groundwater contains arsenic levels ranging between 20 and 40 parts per billion (ppb), which exceeds the maximum contaminant level (MCL) of 10 ppb established by the Environmental Protection Agency (EPA) for national primary drinking water standards. To ensure compliance with these standards, the City's Water Treatment Plant (WTP) is designed to reduce arsenic levels in the groundwater to below 2 ppb, utilizing a variety of advanced treatment processes.

Currently, the WTP operates at an average flow rate of 4-6 MGD but is capable of handling a maximum flow of 20 MGD. Recognizing the need for future growth and diversification of water sources, the City has identified potential upgrades to the WTP that would allow it to treat surface water in addition to groundwater. These upgrades would increase the plant's capacity to a flow rate of 30 MGD. The WTP was designed with future expansion and increased flows in mind, no further upgrades are expected to be necessary to meet the demands of the Area Plan.

Pump Station

After treatment, water is delivered to the transmission and distribution systems via a central high service pump station at the WTP site. The high service pump station is a triplex station with a fourth pump for redundancy, and each pump is equipped with a variable frequency drive (VFD) for precise flow control. The current firm capacity of the pump station is 21.2 MGD, though, like the WTP, it was designed with space for two additional pumps to accommodate the plant's ultimate expansion flow of 30 MGD. The pump station capacity currently exceeds demands and has room for further expansion with the WTP, no further upgrades are expected to be necessary to meet the demands of the Area Plan.

Transmission Main

A majority of the City's current water service area resides south of I-80. The City utilizes a high-pressure transmission main to deliver flow to this area at adequate pressure. This transmission main ranges in size from 30-inches to 42-inches in diameter and begins at the WTP, following a generally southeast alignment. From available information, it appears there is no existing water transmission infrastructure serving the area north of I-80. Since the Area Plan is situated north of the interstate, it is likely that a new transmission main would need to be extended to cross I-80.



Water Storage

The City's distribution system consists of four (4) water storage tanks (Sage, Ricci, Northeast, and Sage Ranch) with a total water storage capacity of just over 7 million gallons⁴. The City's Water Master Plan suggests that these tanks provide adequate storage for the existing service area based on the requirements of AWWA M42 Chapter 5. However, NAC 445A provides more specific standards regarding water storage for public water systems in Nevada. NAC 445A.6674 requires that *"an existing public water system maintains a storage... that is sufficient to ensure that the total capacity of the public water system will meet current and anticipated demands"*. NAC 445A further qualifies these demands as operating storage, emergency reserve, and fire flow demand, where operating storage is equivalent to MDD, emergency reserve is equivalent to 75% of MDD, and fire flow is determined by the governing fire code. Using these standards, a volume of 12.37 million gallons would be needed to accommodate current demands. This suggests that the current system's storage capacity has a 5.37-million-gallon deficit.

It is suspected that this storage deficiency is offset via "alternative pumping capacity", which is a strategy identified in the NAC for serving water demands in areas where conventional storage is not accessible by gravity⁵. The system's apparent excess in pumping capacity supports this assumption.

Takeaway

As the service area grows, however, it is recommended that future development be supported by conventional water storage. As such, it is anticipated that additional water storage will be required to support the development of the Area Plan.

⁴ Three additional water storage tanks exist within the system, however they were not considered in evaluating the system's ability to serve the North Area as they either store raw water or act as chlorine contact on the WTP site.

⁵ NAC 445A.6554, and .66755



Pressure Zones

The majority of the City's water system operates within a single pressure zone that includes three of the four water storage tanks. These tanks are at similar ground elevations, which allows them to exert the same static pressure on the system. The static pressure at any point in the system depends on the elevation difference between the tank water level and the location being served. With the tanks setting the hydraulic grade line (HGL) at 4,342 feet, the City's water master plan indicates that this zone can serve areas at elevations of 4,235 feet and below.

Takeaway

Since most of the Area Plan lies below this elevation, it could theoretically be served by the system without establishing a new pressure zone.

Distribution

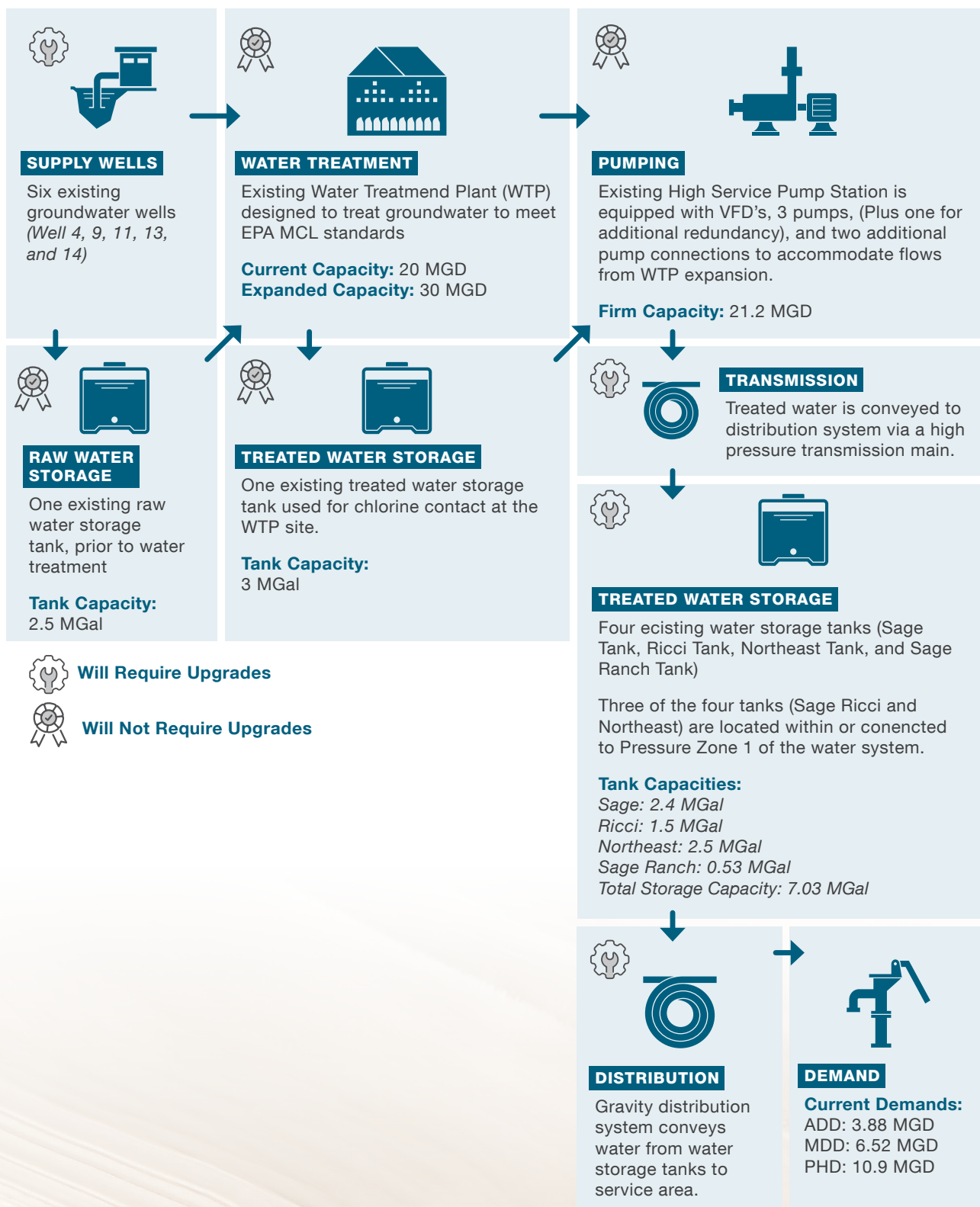
The COF's distribution system is served through a combination of the high service pump station and the four water storage tanks. The distribution pipe network utilizes pipes ranging in size from 6-inch to 24-inch. As previously mentioned, the current water distribution system is located south of I-80.

Takeaway

To service the North Area, distribution pipelines will need to be sized in accordance with the demands of the individual developments.



EXISTING WATER SYSTEM OVERVIEW



FISCAL IMPACT ANALYSIS

North Area Plan





Fiscal Impact Analysis

Overview

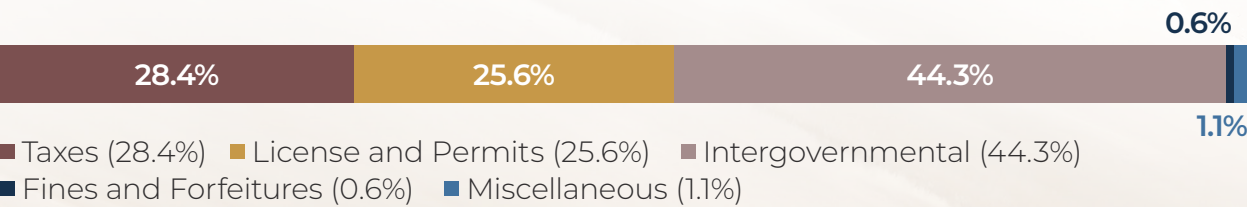
The fiscal impact analysis builds upon the future land use plan to guide the decision-making process throughout the implementation of this plan. This analytical model is a tool to help understand the impact to future revenue associated with the proposed land uses and provides the City a framework in which to prioritize public investment in roadway improvements, utilities, parks, and zoning policy.

The City of Fernley has a proposed increase of \$600,000 (12.7%) in new revenue associated with property value increases and new development between fiscal years 2024 and 2025. As new projects emerge, the benefits to the City’s tax roll are easy to quickly estimate. When thinking into the future, fiscal and economic resilience is instrumental in preserving quality of life for today’s residents, as well as the next generation. As new development proposals come through, the City of Fernley must set a course for making sustainable and forward-thinking land use decisions that set the stage for a resilient and sustainable community.

Existing Revenue Streams

Based on the approved 2024-2025 budget, the property tax revenue for Fernley is \$5,249,790. This estimate represents 28.4% of the city’s annual general fund balance. Other significant sources are intergovernmental transfers, which is predominantly Regional Transportation Commission (RTC) funding for roads at 44.3%, and licensing and permit fees at 25.6%. For this analysis, only property tax revenue was considered. Licenses and permits may be a substantial revenue source given the high volume of new buildings included in the plan; however, exact amounts are unknown as permitting and infrastructure fee amounts change regularly. The proposed land uses for the Area Plan at full buildout will likely increase the proportion of City revenue from property taxes.

Figure 20. City of Fernley FY 2024-25 Revenue by Source



Source: City of Fernley



POTENTIAL FUTURE PROPERTY TAX REVENUE

The expected annual property tax revenue for the North Area Plan's full build-out is more than \$57.0 million, nearly eight times greater than Fernley's current property tax revenue. Mixed-use and high-density residential uses present the greatest revenue per acre. Mixed-use developments are projected to be the largest contributor to annual revenue despite being the third largest use by acreage. This reflects the elevated value per acre that was assumed in this analysis based on a review of comparative mixed-use projects. Full build-out of the Area Plan will result in transformative property tax revenue increases for the City. It's important to note that the Area Plan is currently outside the jurisdiction of the City of Fernley. In order for the projected property tax value to be generated for Fernley, the properties would have to be annexed into the City.

Table 1: Total Expected Property Tax Revenue

Land Use	Revenue per Acre	Acres	Expected Annual Revenue
High Density Residential	\$37,149.61	147.6	\$5,483,281.88
Medium Density Residential	\$17,725.17	321.3	\$5,695,098.50
Low Density Residential	\$10,703.69	1358.1	\$14,536,677.35
Commercial	\$11,366.80	62.1	\$705,878.18
Mixed-Use	\$52,838.95	400.5	\$21,162,000.90
Light Industrial	\$7,785.28	1215	\$9,459,113.63
Heavy Industrial	\$2,044.42	159.3	\$325,676.73
Total			\$57,367,727.18

Attracting new growth and development increases and diversifies the overall tax base for a community; however, it is critical to carefully consider the short- and long-term fiscal implications of this growth. Not all development projects are created equal from an economic resilience standpoint, which is largely driven by costs associated with expanding and maintaining community services and infrastructure, like water, sewer, police, fire, roads, parks, libraries, and many more, that is required to support the new residents, jobs, or visitors. This analysis provides a simplistic view into the future; additional revenues and expenditures will be attributed to development in the North Area.



IMPLEMENTATION PLAN

North Area Plan





Implementation Plan

The North Area Plan was developed in coordination between residents, stakeholders, developers, City staff, and elected officials in order to achieve a common goal of expanding opportunities and quality of life within the City. Input from all led to the development of the goals outlined at the beginning of this Plan, which then culminate into the implementation.

This section provides a guide to next steps – including financing options and additional actions and initiatives that should be implemented to achieve the highest level of success. Ultimately, this Plan is the first step in the development of the area. Additional work will be required to update policies, adopt regulatory changes, and establish public/private partnerships.

Key focus areas for the implementation include:

- **Infrastructure and Utilities.** It is of the utmost importance to develop a plan for how infrastructure and utilities will be financed and built. Development will be hindered without a clear path forward. This will require public/private partnership between the City and developers.
- **Water.** With a level of development such as that of the North Area, paired with the Southwest and the South Areas, it is critical for the City to establish a plan for adequate water supply and infrastructure.
- **Transportation.** The development of the North Area Plan, in addition to the South and Southwest Area Plans, will result in added vehicles on the roads. The City and NDOT must coordinate to ensure that the level of service provided throughout the entirety of Fernley is adequate to avoid traffic congestion and safety hazards.

Proposed developments will be required to obtain the permits required by the City and be consistent with the goals and policies established in this North Area Plan Implementation Plan, the Fernley Comprehensive Master Plan, as well as the use regulations and development standards established in the Fernley Municipal Code.



Potential Funding Mechanisms

The Implementation Plan identifies potential funding sources for each policy program, each of which are detailed below. The goal of the City is to facilitate development of the North Area Plan without causing an undue burden on developers and property owners. As such, these potential funding sources may serve to provide services and infrastructure required for development to occur.

- **Special Taxing District/Metro Districts** – As outlined by the Special District Control Law, “special districts” may be established to fund various services and needs through water and sanitation districts, general improvement districts, or any quasi-municipal corporation organized under the local improvements and service district laws, for example. This mechanism may be initially funded by grants or bonds, the City, or a developer or group of developers. Future developers in the North Area would pay a tax into the District to pay back the improvements paid for by the District.
- **Tax Increment Financing (TIF)** – Used as a subsidy for redevelopment, infrastructure, and other community-improvement projects. TIF does not increase taxes, but rather captures and reinvests any increases in property and/or sales tax revenue as a result of new development and other site improvements over a set period of time.
- **Impact Fees** – Fees added to the cost of construction to offset the toll of new developments on local infrastructure.
- **General Fund** – The main operating fund for a jurisdiction. The General Fund is typically discretionary to the City Council for the provision of activities, programs, and services. Major sources of revenue for the General Fund come from sales taxes, property taxes, franchise fees, business license fees, unrestricted revenues from the state, fines and forfeitures, and interest income.
- **Local, State, Federal Grants** – Various grants are available to jurisdictions for differing purposes.



Implementation Matrix

Table 2: Implementation Matrix

Implementation Project/Initiative	Anticipated Outcome	City Department/ Agency	Funding	Timeframe
High Priority (1-3 Year Implementation Horizon)				
Surface Water Study	Complete the ongoing surface water study.	Public Works	General Fund	Within 1 year
Infrastructure Plan	Development of an infrastructure plan which identifies all infrastructure demand for the build-out of the North Area Plan and identifies potential gaps and solutions.	Private Developers; Public Works	Public-Private Investment; Grants	Within 1 year
Zoning Code Update	Adopt a zoning code update establishing zoning in the North Area.	Planning	General Fund	Within 1 year
NDOT Transportation Coordination	Coordinate with Nevada Department of Transportation (NDOT) to study traffic and circulation to provide adequate infrastructure that meets capacity needs. This includes infrastructure such as street lighting, sidewalks, etc.	NDOT; Public Works	NDOT Funded	Within 2 years



Implementation Project/Initiative	Anticipated Outcome	City Department/ Agency	Funding	Timeframe
High Priority (1-3 Year Implementation Horizon)				
Bureau of Land Management and Bureau of Reclamation	Coordinate with the Bureau of Land Management and Bureau of Reclamation regarding the Land Bills Act and City purchase of land owned by both agencies. The City must first acquire the parcels and then will coordinate with interested parties in selling them for development as intended in this Area Plan.	Bureau of Land Management and Bureau of Reclamation; City Manager's Office; Planning	General Fund	Begin Coord. within 2 years
City Master Plan Update	Adopt an update to the Fernley Master Plan.	Planning Department	General Fund	Within 2 years
Capital Improvement Plan Update	Update the Capital Improvement Plan to include the North Area.	Planning; Public Works	General Fund	Within 3 years
Stormwater Runoff Study	Conduct and adopt a Stormwater Runoff Study.	Planning; Public Works	General Fund	Within 3 years
City Staffing Study	Conduct a study of staffing needs to result from the three Area Plans (north, southwest, and south) to ensure the City is adequately prepared to received development applications.	City Manager's Office; Planning; Public Works	General Fund	Within 3 years



Implementation Project/Initiative	Anticipated Outcome	City Department/ Agency	Funding	Timeframe
Moderate Priority (4-7 Year Implementation Horizon)				
Transportation Master Plan Update	Amend the Transportation Master Plan to include the North Area.	Planning; Public Works	General Fund	Within 4 years
Safe Routes to School Plan Update	Amend the Safe Routes to School Plan to include the North Area.	Planning; Public Works	General Fund; Grants	Within 5 years
Water Infrastructure Upgrades	Contingent upon completion of the Infrastructure Plan, begin coordinating and planning for water infrastructure upgrades as needed.	Planning; Public Works	Public-Private Investments; Grants	Within 5 years
Water Conservation Plan Update	Amend the Water Conservation Plan to include and account for new developments in the North Area.	Planning; Public Works	General Fund; Grants	Within 7 years
Low Priority (8+ Year Implementation Horizon)				
Active Transportation Plan	Adopt and implement a city-wide Active Transportation Plan that includes the North Area.	Planning; Public Works	General Fund	Within 10 years



APPENDIX

North Area Plan





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APPENDIX A

FISCAL IMPACT ANALYSIS





A. Fiscal Impact Analysis

This fiscal analysis serves to inform the City of the expected property tax revenue that could be realized from implementing the North Area Plan. Results from this analysis enable an understanding of how the potential mix of land uses prescribed at buildout of the Area Plan may benefit the City of Fernley's future revenue earnings. To determine the expected fiscal impact of the Area Plan, a model was developed to calculate total expected property tax revenue by land use on a per acre basis. This analysis describes the existing conditions and inputs behind development of the model, the methodology used to create and implement the model, and resulting fiscal forecasts.

The City of Fernley has a proposed increase of \$600,000 (12.7%) in new revenue associated with property value increases and new development between fiscal years 2024 and 2025. As new projects emerge, the benefits to the City's tax roll are easy to quickly estimate. When thinking into the future, fiscal and economic resilience is instrumental in preserving quality of life for today's residents, as well as the next generation. As new development proposals come through, the City of Fernley must set a course for making sustainable and forward-thinking land use decisions that set the stage for a resilient community.

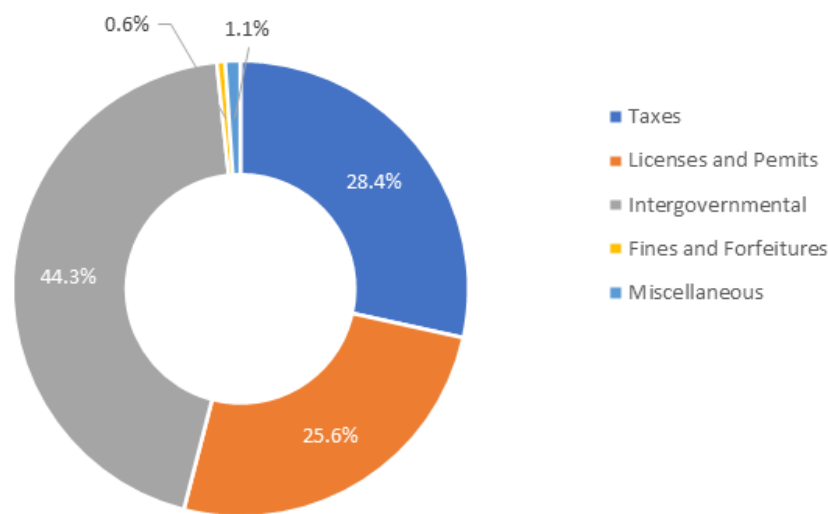
Private corporations carefully compare revenues and expenditures to ensure financial health and long-term success. City governments take a similar approach each year during budget season to weigh expected revenues from taxes and fees with known expenditures, including larger capital investments, as well as regular maintenance of community infrastructure and provision of critical community services. Both short- and long-term expenditures are essential as they ensure that a community remains an attractive place to live, work, and play, but they must be grounded in an understanding of the City's bottom line.

EXISTING REVENUE STREAMS

Based on the approved 2024-2025 budget, the property tax revenue for Fernley is \$5,249,790. This estimate represents 28.4% of the city's annual general fund balance. Other significant sources are intergovernmental transfers, which is predominantly Regional Transportation Commission (RTC) funding for roads at 44.3%, and licensing and permit fees at 25.6%. For this analysis, only property tax revenue was considered. Licenses and permits may be a substantial revenue source given the high volume of new buildings included in the plan; however, exact amounts are unknown as permitting and infrastructure fee amounts change regularly. The proposed land uses for the Area Plan at full buildout will likely increase the proportion of City revenue from property taxes.



Figure A.1: City of Fernley FY 2024-25 Revenue by Source



Source: City of Fernley

METHODOLOGY

The annual property tax revenue the City of Fernley could expect under a full build-out of the Area Plan is the final output of the fiscal model. Full build-out calculations are based on the Area Plan’s expected acreage for each land use as shown in **Table A.1**. Low-density residential and light industrial land uses represent the future land uses that comprise the most acreage at 1,509 acres and 1,350 acres, respectively.

Table A.1: North Area Plan Full Buildout Acreage by Land Use⁶

Land Use	Acreage
Light Industrial	1,350
Heavy Industrial	177
Low Density Residential	1,509
Med Density Residential	357
High Density Residential	164
Mixed Use	445
Commercial	69

6 See the Land Use map on page 46



Expected annual revenue is a product of the average revenue per acre for each land use in the Area Plan multiplied by the expected acreage of each land use. To achieve this, a model was prepared which analyzes revenues from existing land uses within the planning and surrounding areas and extrapolates them to expected revenues from full buildout of the Area Plan. The model uses comparative properties to create a suite of parcels from Fernley and surrounding areas mimicking the expected land value of parcels in the Area Plan. Comparative (Comp) property methodology is explained in the following land use section. Using data from the Washoe County and Lyon County assessor's offices, the revenue per acre for comp properties was calculated. **Table A.2** shows a snapshot of the estimation for low-density residential based on this approach:

Table A.2: Low Density Residential Model

Address	Acreage	Assessed value	Taxable Value (Assessed*.35)	Tax Rate	Revenue	Revenue/acre
1661 Round Up Rd	0.138	\$280,359	\$98,125.65	0.036127	\$3,544.99	\$25,688.30
302 Peregrine Ct	1	\$522,482	\$182,868.70	0.036127	\$6,606.50	\$6,606.50
549 Saddle Horn Way	0.5	\$251,550	\$88,042.50	0.036127	\$3,180.71	\$6,361.42
237 Meadow Circle	2.84	\$934,024	\$326,908.40	0.036127	\$11,810.22	\$4,158.53
Average Revenue						\$10,703.69

LAND USE ASSUMPTION SUMMARY

Each group of comp properties was chosen to best represent the expected build-out mix of uses in the Area Plan as explained in the following paragraphs.

High-Density Residential

High-density residential buildings were chosen from Fernley, Sparks, and Reno, as there are few examples in the Fernley area, which is predominantly single family residential. High-density residential building's sizes are at or slightly above the current 30 du/acre density cap in Fernley. Comps in this section focus on buildings constructed in the 2020s.

Medium-Density Residential

Medium-density residential in Fernley is defined by a 14 dwelling units (du) per acre limit, making low-rise apartments and du/triplexes suitable comps. Fernley has several developments in this group which were used as comps.



Low-Density Residential

Low-density parcels were chosen from different single-family residential areas around Fernley to capture different lot and home sizes and locations.

Commercial

Commercial parcels were compiled to represent retail and some office of varying sizes. Comparative properties included big box stores, family offices, chain stores, and small retail, which were used to capture the different types of Fernley's existing commercial uses.

Mixed-Use

The Area Plan has a wide range of use types in its mixed-use guidelines. Eight parcels were used, capturing mixed use residential of varying sizes, office/commercial buildings, and strip malls. Most mixed-use comps are in Reno as it is the only location in the area with a diverse mix of mixed-use types.

Heavy Industrial

Heavy Industrial includes factories and refineries of intense impact and use. The Fernley and the planning area's mining and refining factories are reflected in the comps.

Light Industrial

Light industrial uses were chosen to reflect proposed zoning which includes office, data centers, warehouses, and others. Market analysis indicates Fernley is currently and will continue to experience growth in manufacturing, transport, and warehousing, all use types included in light industrial. Properties included are Polaris and Trex's distribution centers and factories, the Apple Data Center, and the Sherwin-Williams emulsion plant and distribution center.



MARKET ADJUSTER

Due to the existing size of the Fernley community and existing land use mix, not all comps used in the analysis are in Fernley. Non-Fernley comps were pulled from Sparks, Reno, and elsewhere in Washoe County. These areas can have more expensive land, particularly in urban areas, so an adjustment factor was calculated to modify the land value of properties in higher value areas to reflect their estimated value in Fernley. To accomplish this, fast food properties present in both Reno and Fernley were used, as their parcels, property, products, and buildings are typically standardized across geographies. This minimizes the fluctuations in improved property value and building type seen in office, residential, and some commercial markets. Five common fast-food parcels were chosen and their property value per acre was calculated as shown in **Table A.3.**

Table A.3: ImplemAdjuster Calculation Table

\$5,997,824.00	\$2,099,238.40	0.036127	\$75,839.19	\$7,177.64
\$6,585,543.00	\$2,304,940.05	0.036127	\$83,270.57	\$199,745.60

Using the ratio of taxable land value per acre between Fernley and Reno, the adjuster is ~0.77. The final revenue per acre value of all properties located in Reno and Sparks were multiplied by this number.



POTENTIAL FUTURE PROPERTY TAX REVENUE

The expected annual property tax revenue for the Area Plan’s full build-out is more than \$57.0 million, nearly eight times greater than Fernley’s current property tax revenue. Mixed-use and high-density residential uses present the greatest revenue per acre. Mixed-use developments are projected to be the largest contributor to annual revenue despite being the third largest use by acreage. This reflects the elevated value per acre that was assumed in this analysis based on a review of comparative mixed-use projects. Full build-out of the Area Plan will result in transformative property tax revenue increases for the City. It’s important to note that the Area Plan is currently outside the jurisdiction of the City of Fernley. In order for the projected property tax value to be generated for Fernley, the properties would have to be annexed into the City.

Table A.4: Total Expected Property Tax Revenue

Land Use	Revenue per Acre	Acres	Expected Annual Revenue
High Density Residential	\$37,149.61	147.6	\$5,483,281.88
Medium Density Residential	\$17,725.17	321.3	\$5,695,098.50
Low Density Residential	\$10,703.69	1358.1	\$14,536,677.35
Commercial	\$11,366.80	62.1	\$705,878.18
Mixed-Use	\$52,838.95	400.5	\$21,162,000.90
Light Industrial	\$7,785.28	1215	\$9,459,113.63
Heavy Industrial	\$2,044.42	159.3	\$325,676.73
Total			\$57,367,727.18

Attracting new growth and development increases the overall tax base for a community; however, it is critical to carefully consider the short- and long-term fiscal implications of this growth. Not all development projects are created equal from an economic resilience standpoint, which is largely driven by costs associated with expanding and maintaining community services and infrastructure, like water, sewer, police, fire, roads, parks, libraries, and many more, that is required to support the new residents, jobs, or visitors. This analysis provides a simplistic view into the future; additional revenues and expenditures will be attributed to development in the North Area. As future action items are considered through the implementation process, it is important to fully understand the magnitude of installation and long-term upkeep/maintenance costs and how those expenditures are proposed to be met in the future. As projects move forward, assessing their fiscal impacts will be important, particularly for those that require large-scale infrastructure investments or significantly shift the socioeconomics of the community, like adding new residents with different service expectations than the current base. These conversations are critically important as Fernley is well-positioned to attract residential and commercial development in the future.



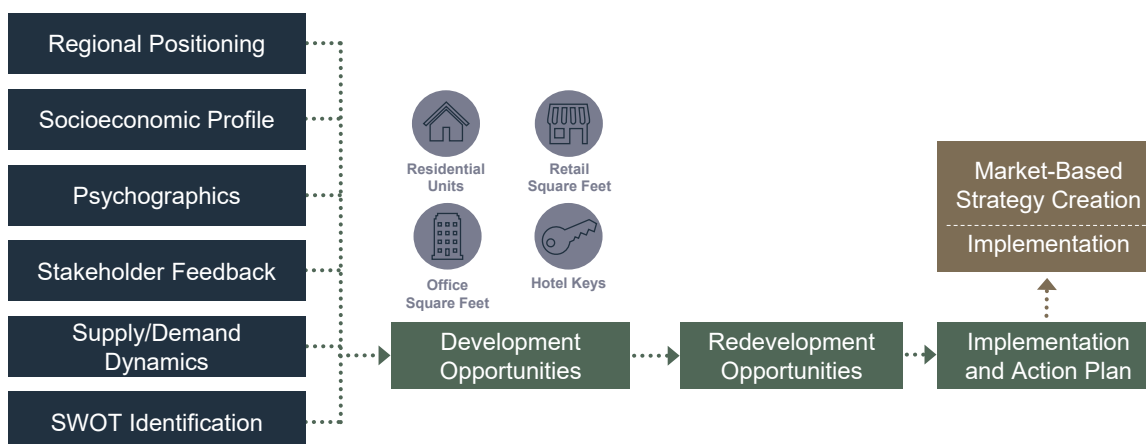
APPENDIX B
MARKET CONDITIONS





B. Market Conditions

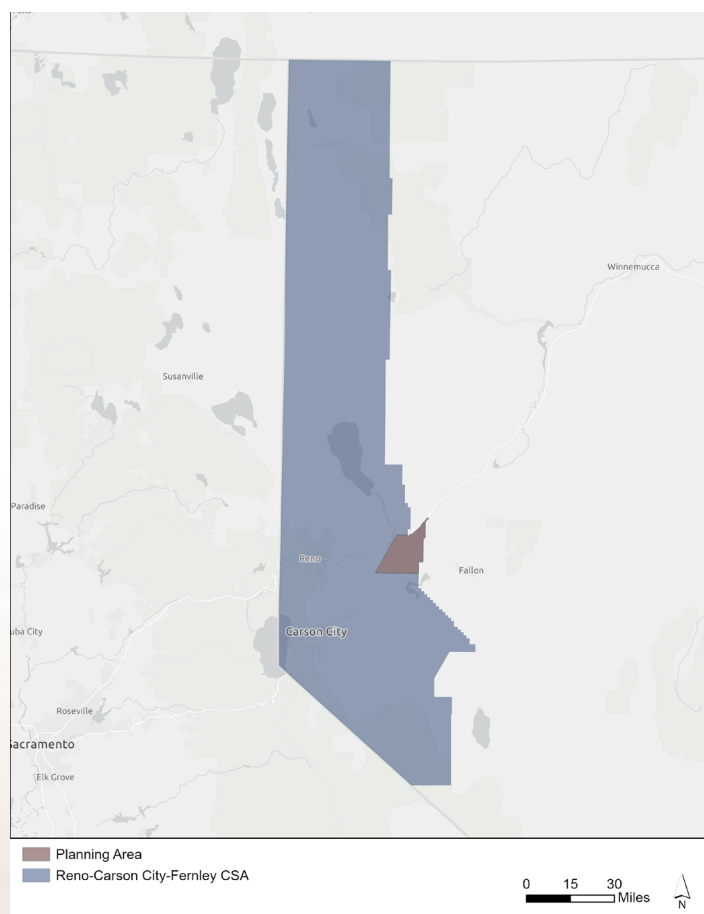
Process



Area Definition

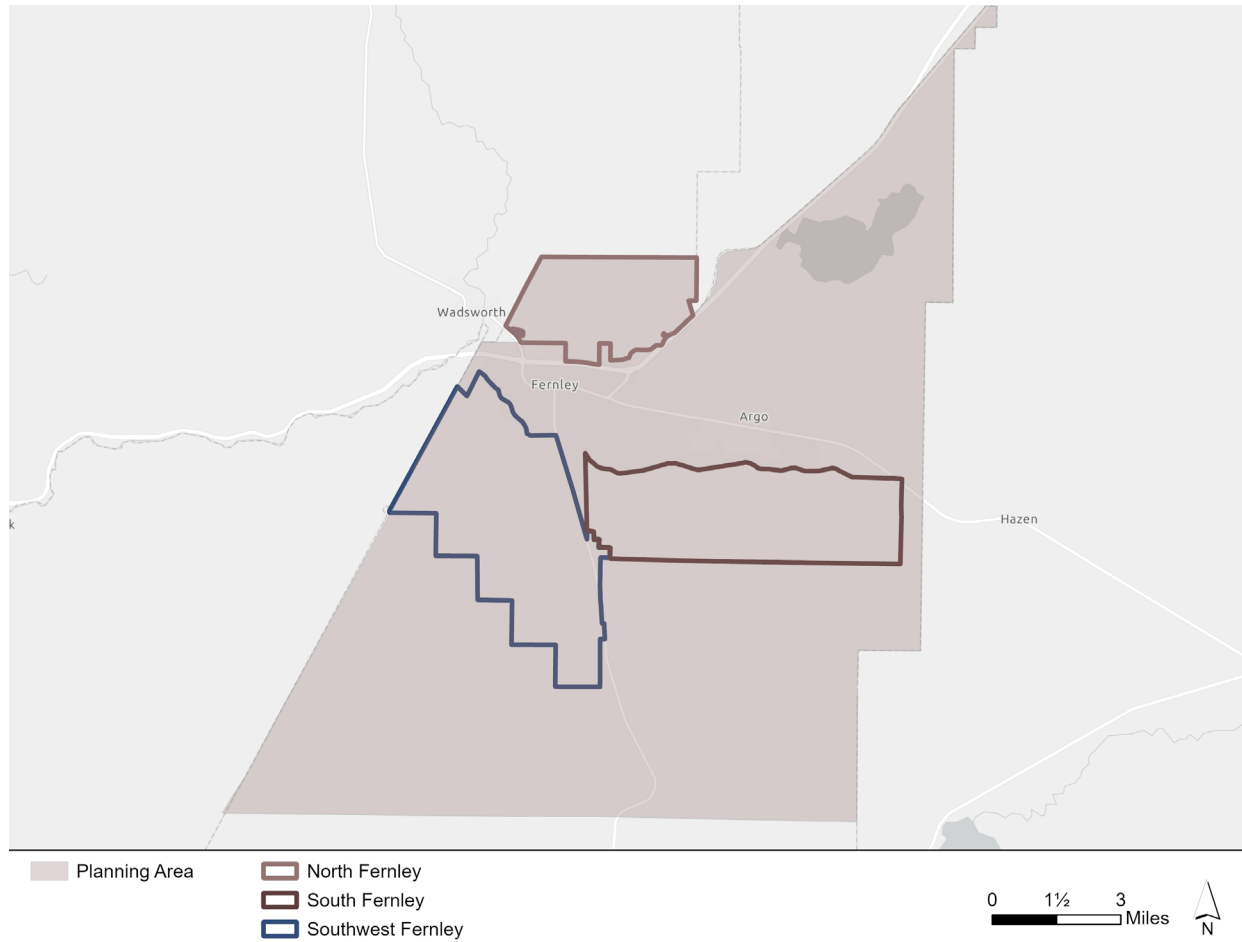
For the market analysis, a larger area that encompass the City was analyzed to provide a better understanding of dynamics influencing real estate demand and development.

A regional perspective was also reviewed by incorporating findings from the Reno-Carson City-Fernley Combined Statistical Area (CSA), which only includes Washoe, Lyon, Carson City, Douglas and Storey counties. The CSA also encompasses the City of Fernley.





The Planning Area includes the City of Fernley and encompass three future development areas of North Fernley, South Fernley and Southwest Fernley



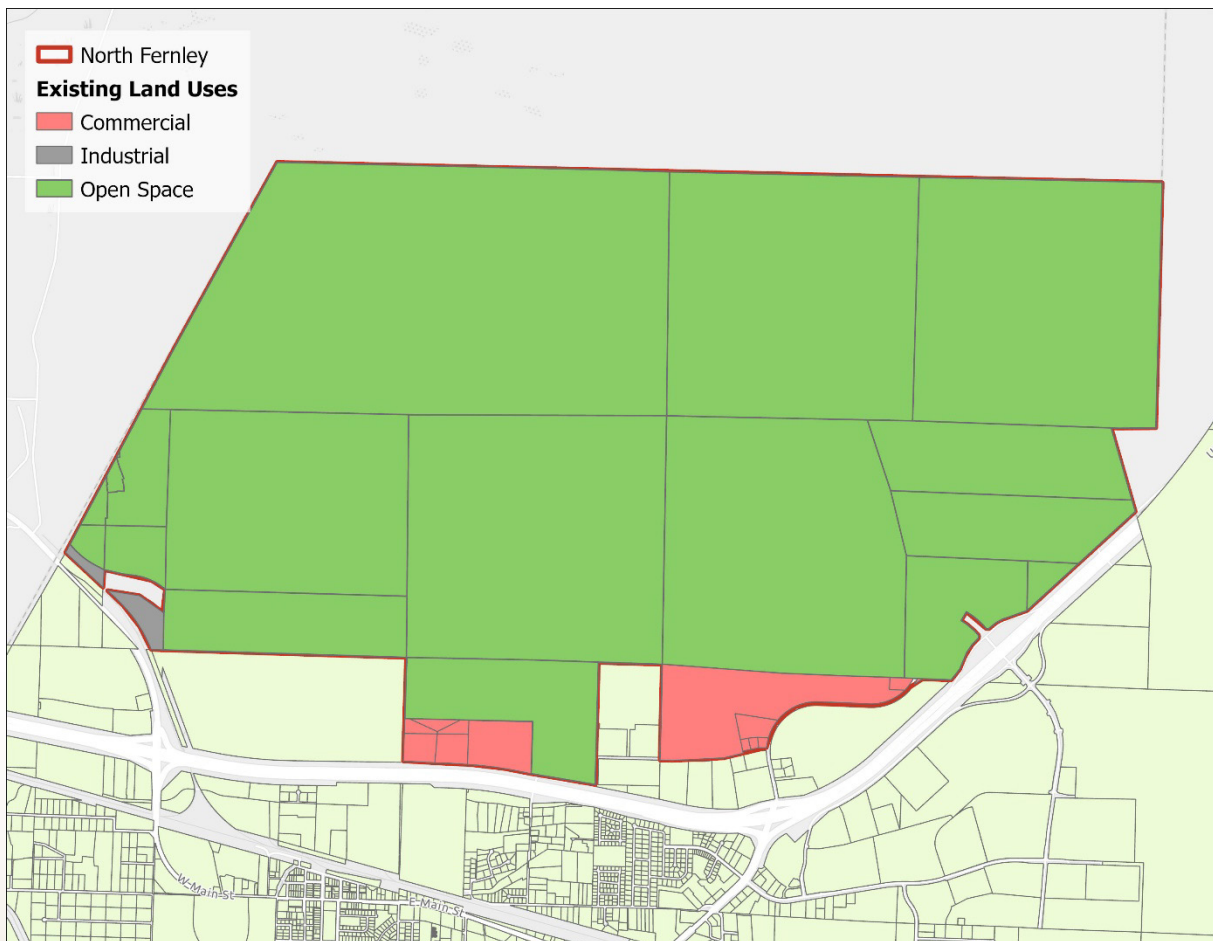


Future Development Areas

North Fernley

North Fernley has been identified as a Future Development Area(FDA). North Fernley has a potential to become a large master planned employment center to support commercial services and higher density housing. The North Fernley FDA encompasses over 6,000 acres with minimal physical constraints that could connect to the City's existing transportation networks.

Presently, North Fernley has no existing buildings or residents and is largely undeveloped. Plans to access to the community infrastructure are feasible in the near future. North Fernley FDA is in close proximity to the City's commercial center

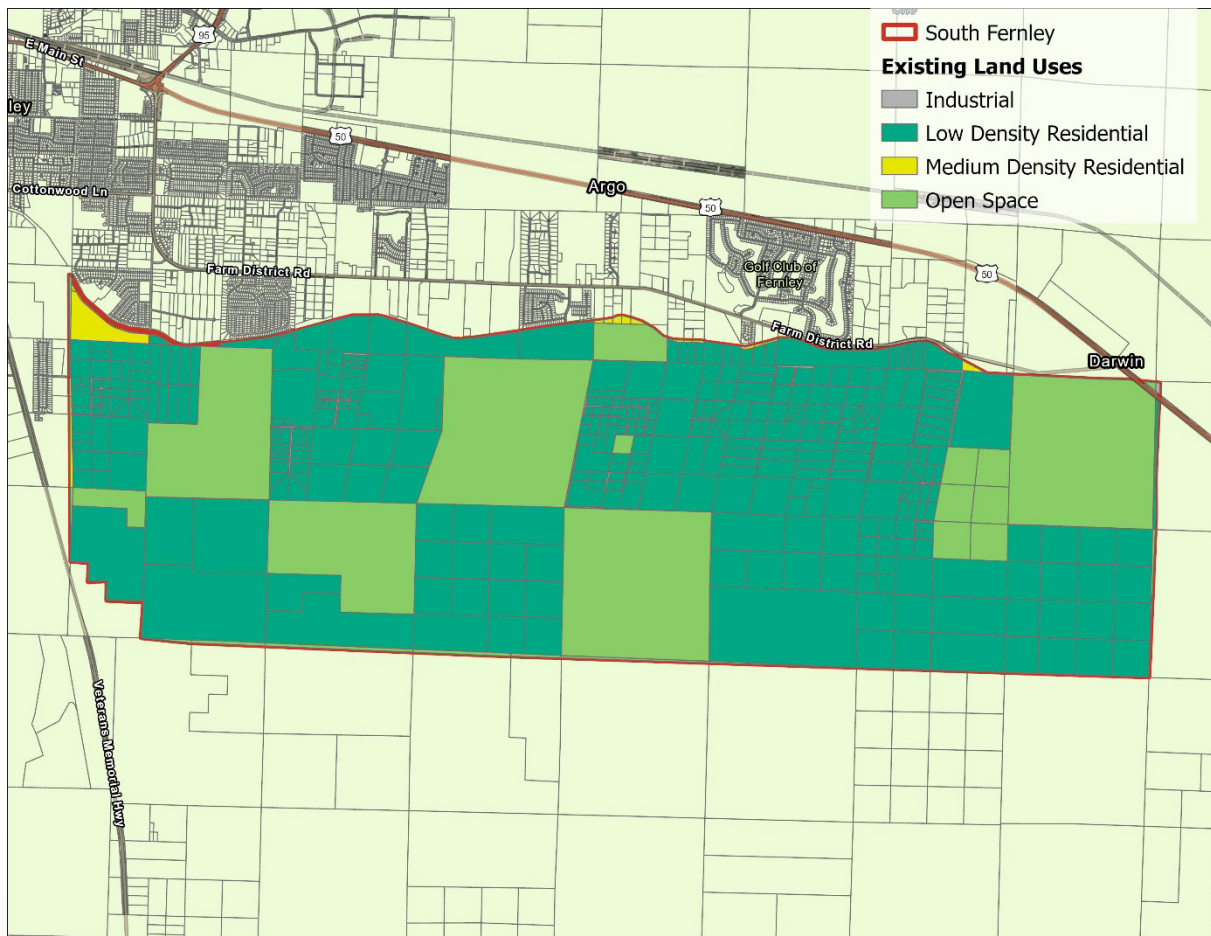




South Fernley

The South Fernley Future Development Area is located south of the Truckee Canal and east of US 95A. The area is rural with minimal infrastructure improvements and municipal services are required to be addressed.

South Fernley FDA is largely undeveloped. The existing land uses consist of low density residential and open space and an estimate of 151 housing units are present. The South Fernley FDA spans about 10,000 acres. Large estate lot subdivisions with curb and gutter are encouraged in this area.

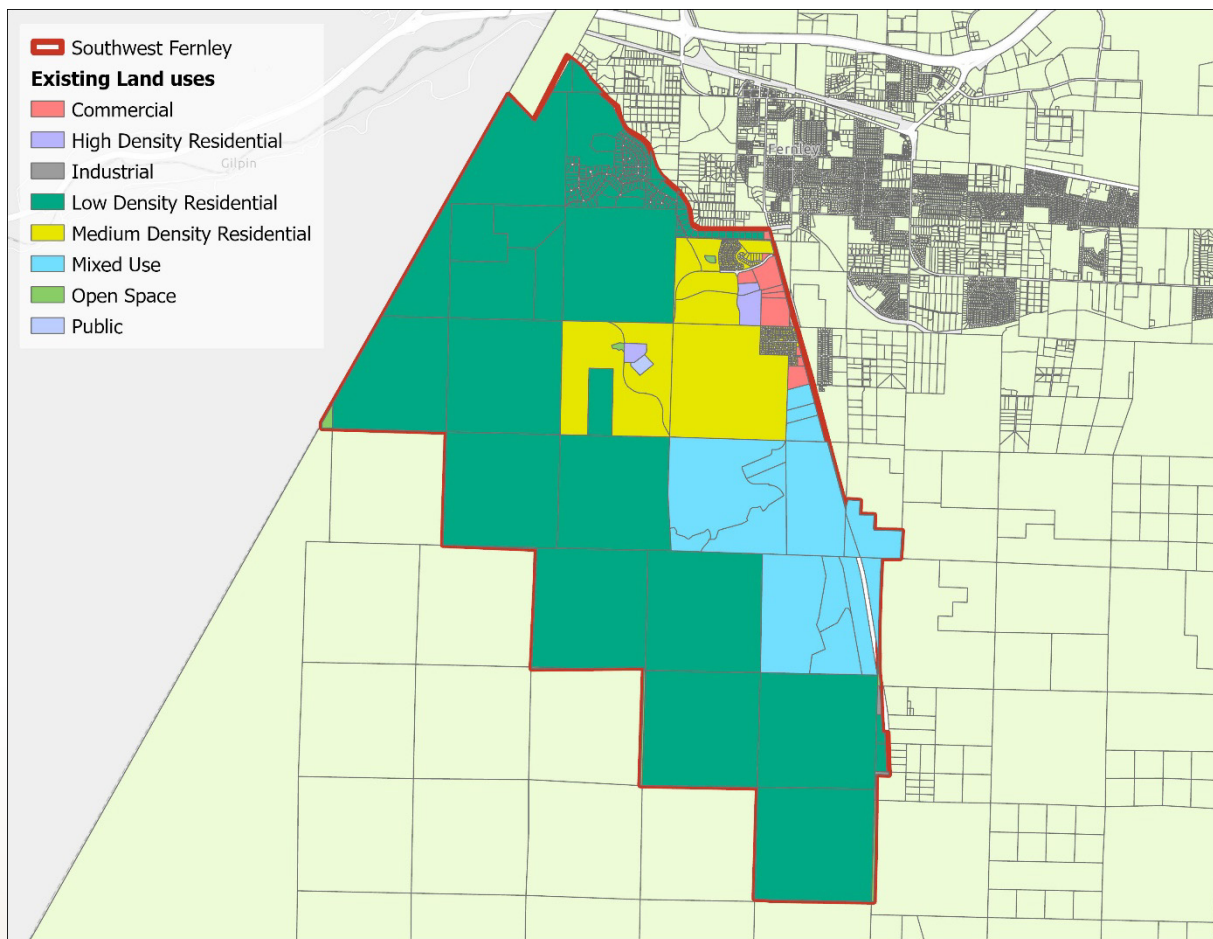




Southwest Fernley

The Southwest Fernley Future Development Area is located south of the Truckee Canal and west of US 95A. The area spans across 11,000 acres and has the highest potential for future development. Located just north of the airport and racetrack, the Southwest Fernley FDA could create the potential for additional employment and commercial uses and become a southern employment center for Fernley.

The existing land uses in the Southwest Fernley FDA are primarily low and medium density residential and mixed use. This area includes the BC Ranch master planned community which has an active development agreement. When completed, the planned development consists of 3,189 residential units, 39 acres of commercial land and 750 acres of banked water rights.





Demographic Overview

Reno-Carson City-Fernley CSA	 682,828 2023 ESTIMATED POPULATION	 40.1 MEDIAN AGE	 31.3% HOUSEHOLDS WITH CHILDREN	 70.9 DIVERSITY INDEX*
	 17.8% GROWTH RATE SINCE 2010	 61.1% % OWNER HOUSEHOLDS	 2.46 AVERAGE HH SIZE	 5.7% % HHS WITH NO ACCESS TO VEHICLE
Planning Area	 23,933 2023 ESTIMATED POPULATION	 38.3 MEDIAN AGE	 38.7% HOUSEHOLDS WITH CHILDREN	 61.1 DIVERSITY INDEX*
	 22.6% GROWTH RATE SINCE 2010	 70.2% % OWNER HOUSEHOLDS	 2.76 AVG. HH SIZE	 3.2% % HHS WITH NO ACCESS TO VEHICLE

Population Characteristics

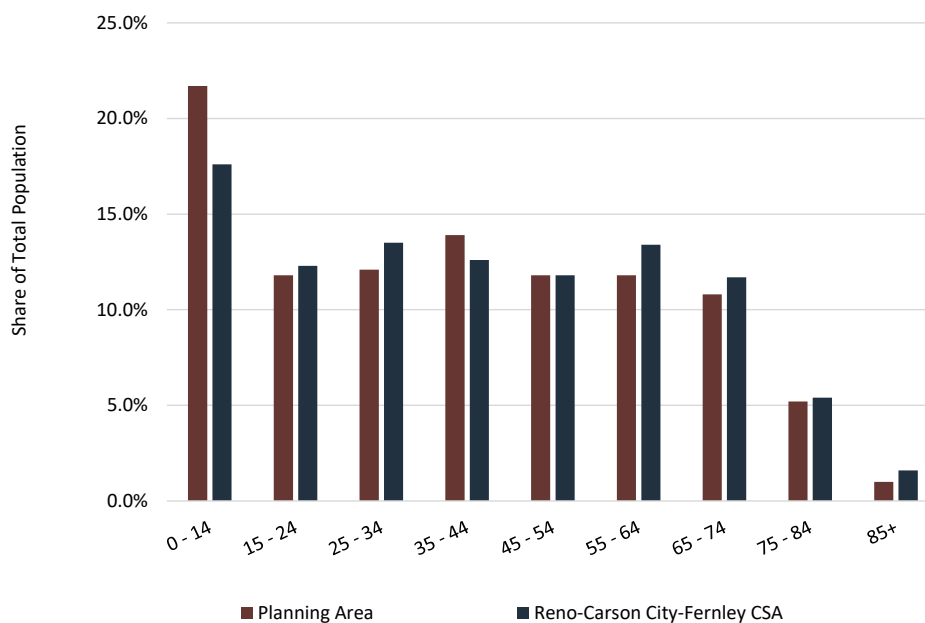
Population and Age Comparison

Area	Total Population		Annual Growth Rate	2023 Median Age
	2010	2023		
Planning Area	19,514	23,933	1.6%	38.3
Reno-Carson City-Fernley CSA	579,668	682,828	1.3%	40.3

Source: ESRI Business Analyst



Comparison of Age Cohorts, 2023

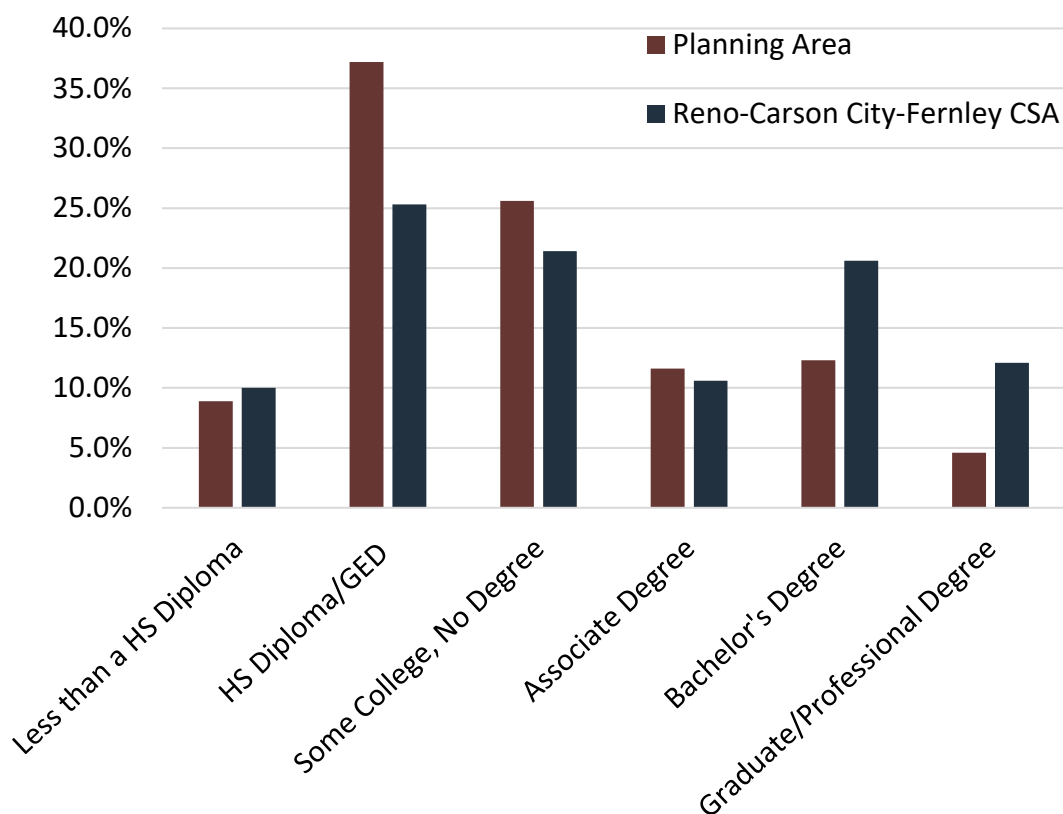


Source: ESRI Business Analyst

- The Planning Area has seen an annual growth rate of 1.6%, reaching a total population of more than 23,900 in 2023.
- The Planning Area has a median age of 38.3; Over 70% of the area's residents are under the age of 45.
- The Planning Area hosts more young families, with 38.7% of households having children and the largest age cohort is children under 14.
- When compared to the CSA, the Planning Area also has lower shares of older residents, particularly those over the age of 65.

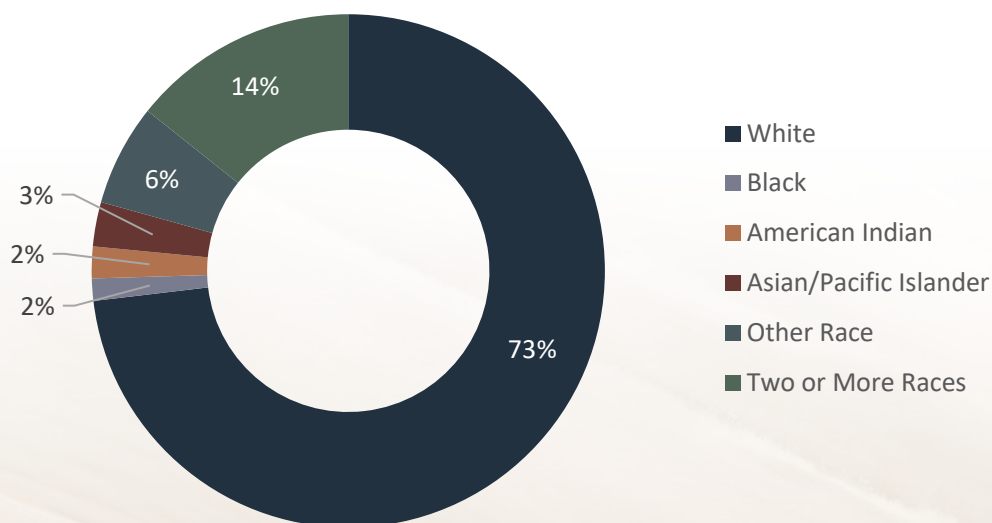


Comparison of Educational Attainment, 2023



Source: ESRI Business Analyst

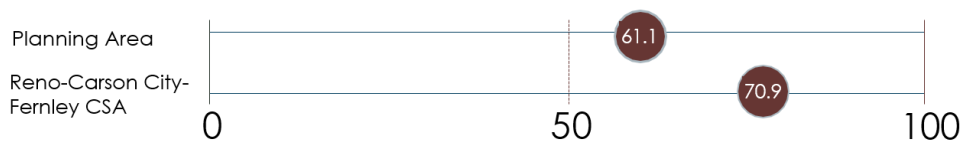
Market Area Racial Make Up, 2023



Source: ESRI Business Analyst



Comparison of Diversity Index, 202



Source: ESRI Business Analyst

*Note: ESRI's diversity index measures the racial and ethnic diversity of an area on a scale ranging from: 0 (no diversity) to 100 (complete diversity). As more race groups are evenly represented in an area's population, the diversity index increases.

Planning Area Tapestry Segmentation

TAPESTRIES

- Households across US are categorized into 67 segments
- Put a "face on the numbers"
- In addition to demographic information, includes preferences on housing, spending, and labor force
- Used by developers and retailers to understand the character of a community and the market's needs and desires

Tapestry	Share of Market Area Households
Middleburg	14.8%
Down the Road	26.3%
Green Acres	7.9%
Up and Coming Families	7.2%
The Great Outdoors	5.9%

traditional homeowners pride low density communities
 semi-rural thrifty
 convenience families with children
 outdoor activities lower labor force participation
 young couples mobile home living
 Single-family households

Source: ESRI Business Analyst

PLANNING AREA TAPESTRIES

- The Market Area consists of five tapestry segments, one of which are greater than 25%.
- This is consistent for smaller geographies



MIDDLEBURG

52.8% of Area Households

Source: ESRI Business Analyst

- Young families living in semirural subdivisions
- Neighborhoods changing rapidly with the addition of new single-family homes
- Traditional, family-oriented, and patriotic consumers
- Thrifty but willing to carry some debt

DOWN THE ROAD

26.3% of Area Households

Source: ESRI Business Analyst

- Young family-oriented residents in semi-rural neighborhoods
- Almost half of householders reside in mobile homes
- Consumers have placed an importance on preserving time-honored customs

GREEN ACRES

7.9% Of Area Households

Source: ESRI Business Analyst

- Older married couples with no children
- Avid do-it yourselfers who enjoy outdoor living
- Use technology as a tool rather than a trend and cautious consumers

UP AND COMING FAMILIES

7.2% Of Area Households

Source: ESRI Business Analyst

- Young and mobile families establishing their styles Avid do-it yourselfers who enjoy outdoor living
- New families in new housing subdivisions
- Seek the latest and best technology
- Cautious and thrifty consumers



THE GREAT OUTDOORS

5.9% Of Area Households

Source: ESRI Business Analyst

- Mix of married-couples with and without children
- Low labor force participation
- Consumers are educated empty nesters with active lifestyles
- Residents are do-it-yourself oriented and cost conscious

Household Characteristics

Median Household Income, 2023

- The Planning Area has a higher median household income when compared with the CSA.
- The largest concentration of households in both the geographies earn \$100,000 to \$149,999 annually.
- Almost 30% of households in the Planning Area earn between \$100,000 to \$149,999 annually and incomes have increased in both geographies and expected to continue the upwards trajectory into 2028.



Planning Area

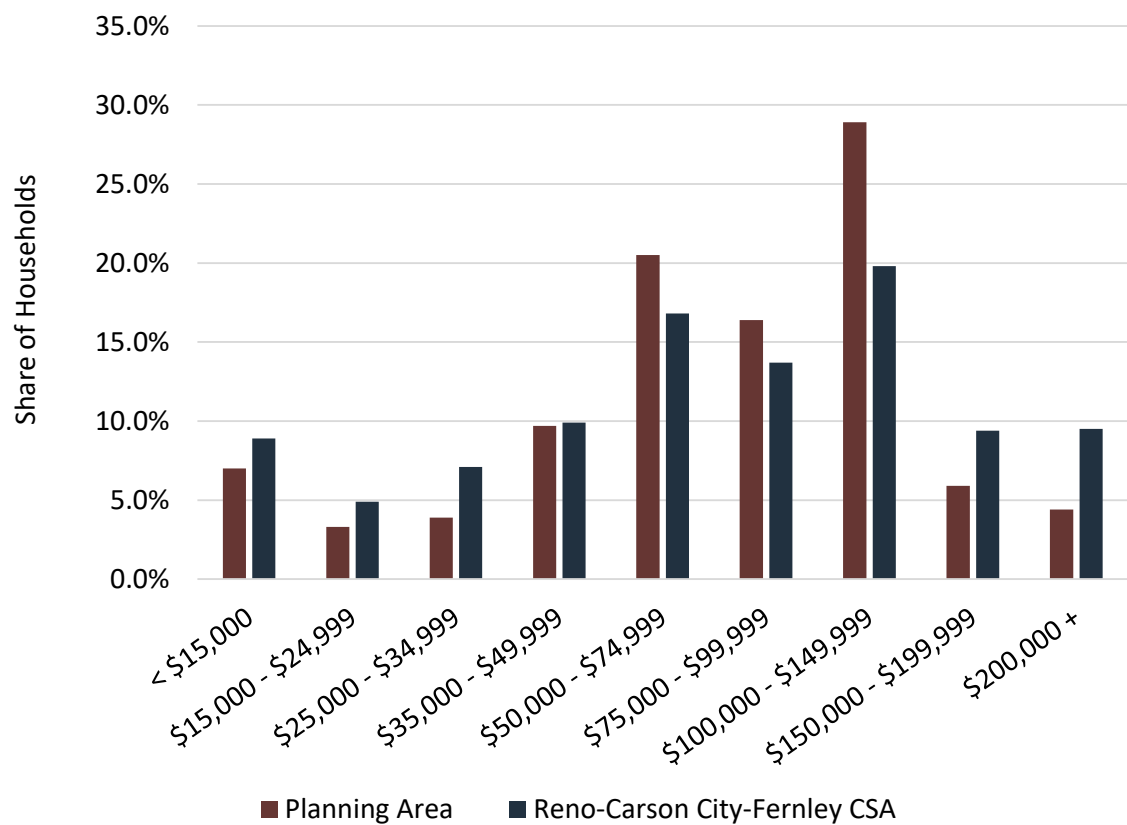


Reno-Carson City-Fernley CSA

Source: ESRI Business Analyst



Comparison of Household Income, 2022



Source: ESRI Business Analyst

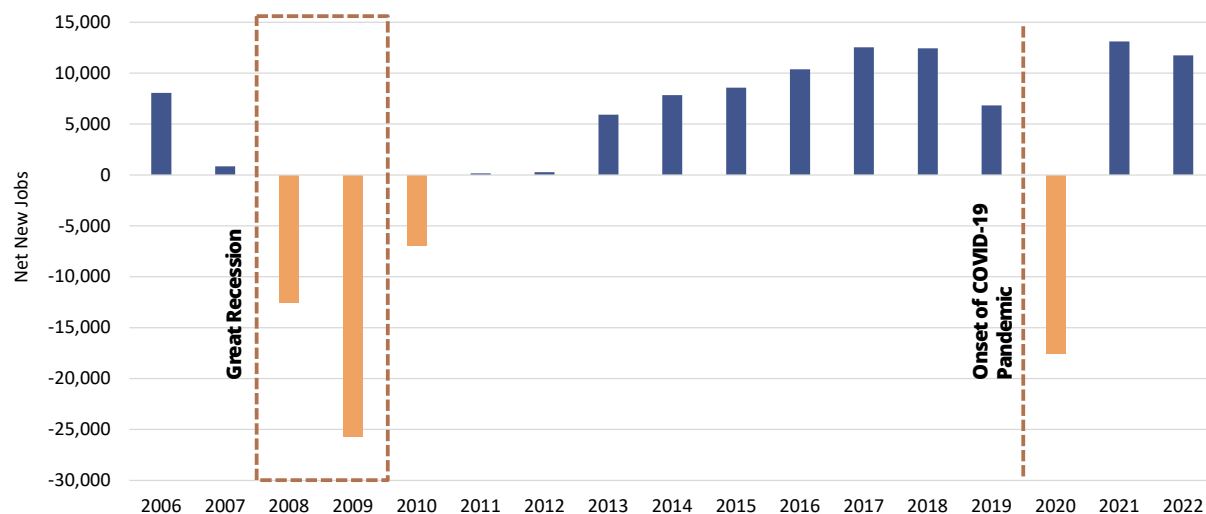
Economics & Prosperity Overview

Reno-Carson City-Fernley CSA	 23,513 2023 ESTIMATED BUSINESSES	 12.1% LARGEST SECTOR: ARTS, ENTERTAINMENT & RECREATION	 59.4% WHITE COLLAR OCCUPATION	 57.6% SHARE OWNER-OCCUPIED HOUSING
	 326,970 2023 ESTIMATED JOBS	 5.2% UNEMPLOYMENT RATE	 \$78,313 MEDIAN HOUSEHOLD INCOME	 \$457,718 MEDIAN HOME VALUE
Planning Area	 434 2023 ESTIMATED BUSINESSES	 20.7% LARGEST SECTOR: RETAIL TRADE	 42.4% WHITE COLLAR OCCUPATION	 67.0% SHARE OWNER-OCCUPIED HOUSING
	 5,437 2023 ESTIMATED JOBS	 4.6% UNEMPLOYMENT RATE	 \$81,785 MEDIAN HOUSEHOLD INCOME	 \$347,669 MEDIAN HOME VALUE



Employment Growth

Annualized Job Growth, Reno-Carson City-Fernley CSA, 2006-2022



Source: Bureau of Labor Statistics

Job growth in the CSA has typically averaged 2,100 new jobs annually. Disruptions during the Great Recession were consistent with national trends; and the CSA recovered and experienced strong growth between 2015 through 2018. Also consistent with national trend, the region experienced disruption during in 2020 due to the COVID-19 pandemic; however, the region recovered quickly in the following year.



Planning Area Employment Characteristics

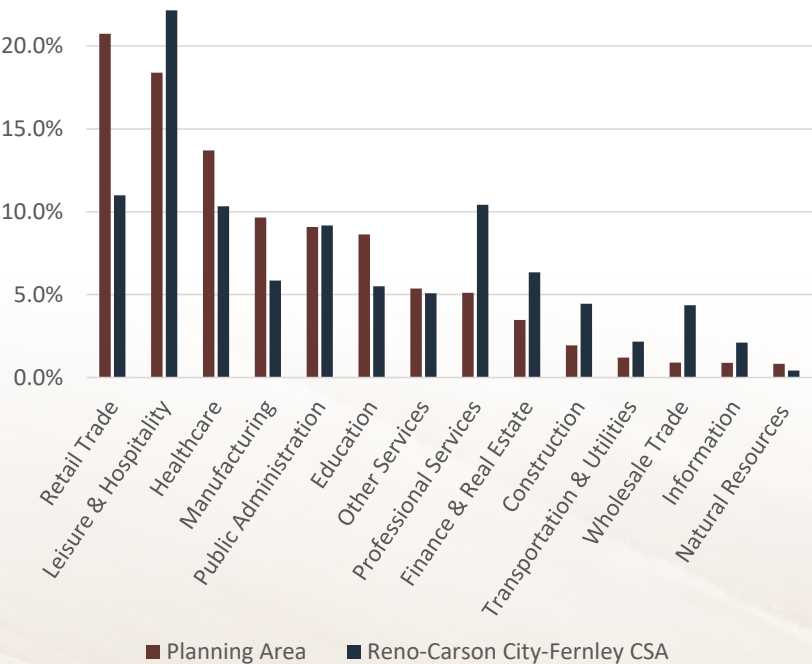
Planning Area Industry Classification, 2023



Source: ESRI Business Analyst

Area	Estimated Jobs (2023)	Top Three Industries
Planning Area	2,873	Retail Trade, Leisure & Hospitality, Healthcare
Reno CSA	142,130	Leisure & Hospitality, Retail Trade, Professional Services

Planning Area Industry Classification, 2023



Source: ESRI Business Analyst



COMMUTING PATTERNS

INFLOW / OUTFLOW OF WORKERS TO PLANNING AREA

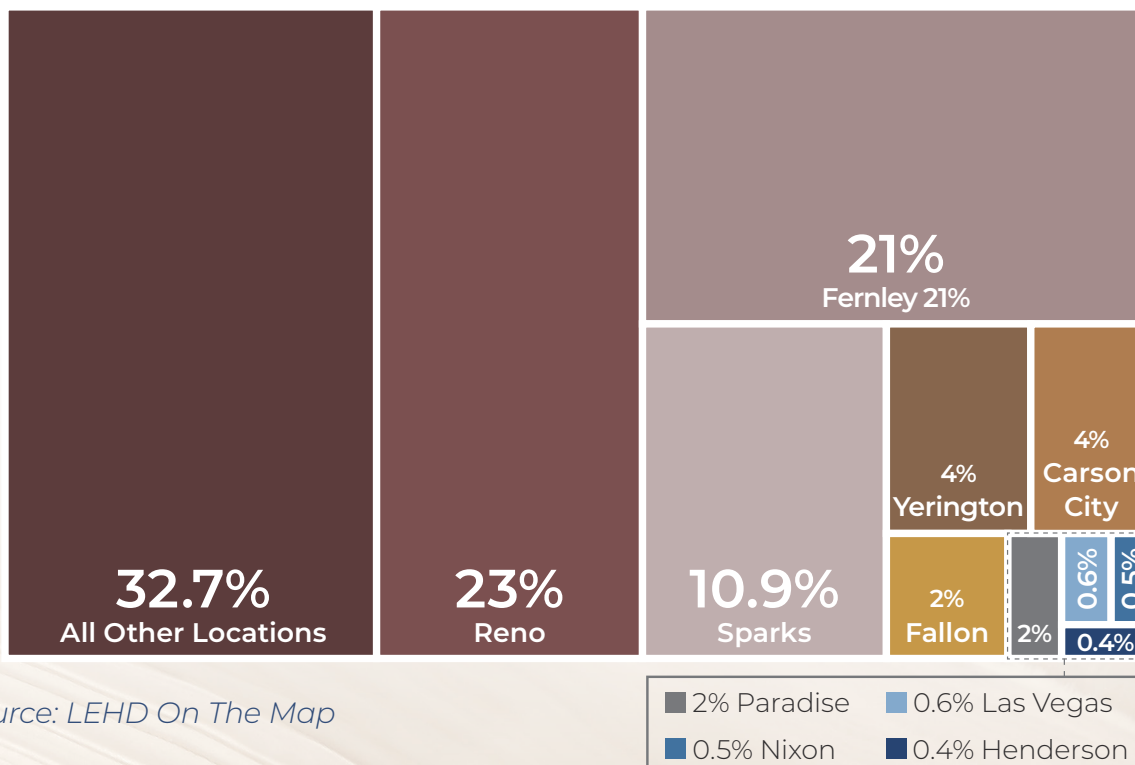


Source: LEHD On The Map

For people commuting into the Planning Area for work, most (52.4%) are coming from Lyon County. Other sources for in-commuting include Washoe County (20.4%), Churchill County (10.7%), and Carson City County (3.5%).

Approximately 46% of the people traveling into the Market Area for work are traveling less than 10 minutes.

Destination for Employed Planning Area Residents Commuting to Work, 2021



Source: LEHD On The Map



Housing Characteristics

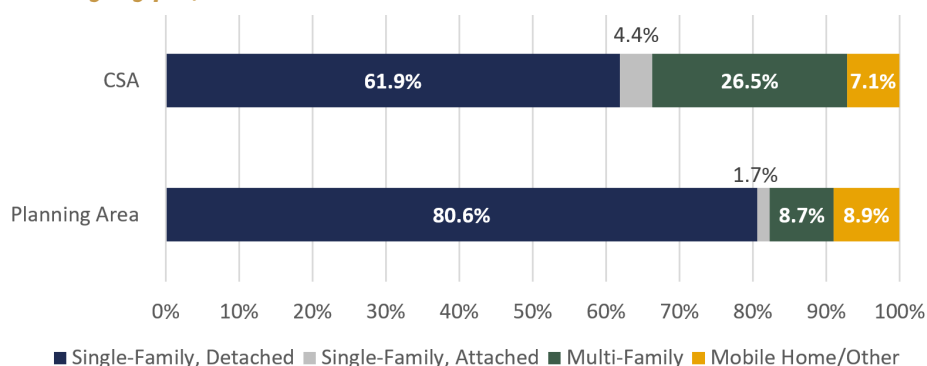
Housing Summary Facts

2023	Planning Area	Reno-Carson City-Fernley CSA
Median Year Built	2000	1989
Median Home Value	\$347,669	\$457,718
Owner-Occupied	67.0%	57.6%
Renter-Occupied	28.7%	35.5%
Vacant	4.4%	6.9%

Source: ESRI Business Analyst

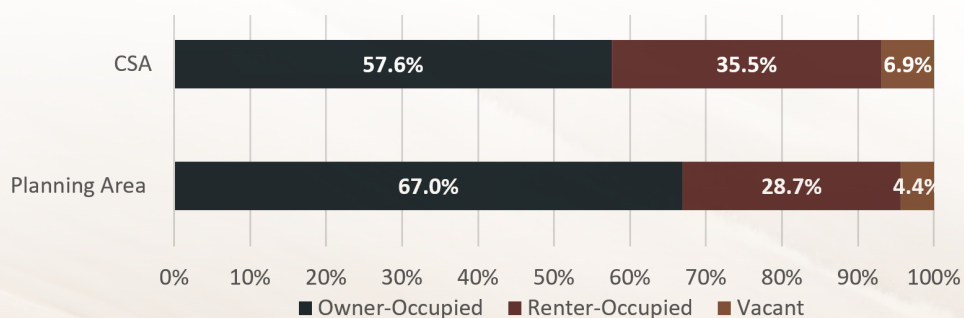
The larger CSA has a comparatively older, yet higher-value housing stock when compared to the Planning Area. The Planning Area has a high owner-occupied housing unit share, when compared to the CSA and a large share of single-family, detached housing.

Housing Units By Type, 2023



Source: ESRI Business Analyst

Housing Units By Tenure, 2023



Source: ESRI Business Analyst



Residential Building Permit Trends

City Permit Summary Facts

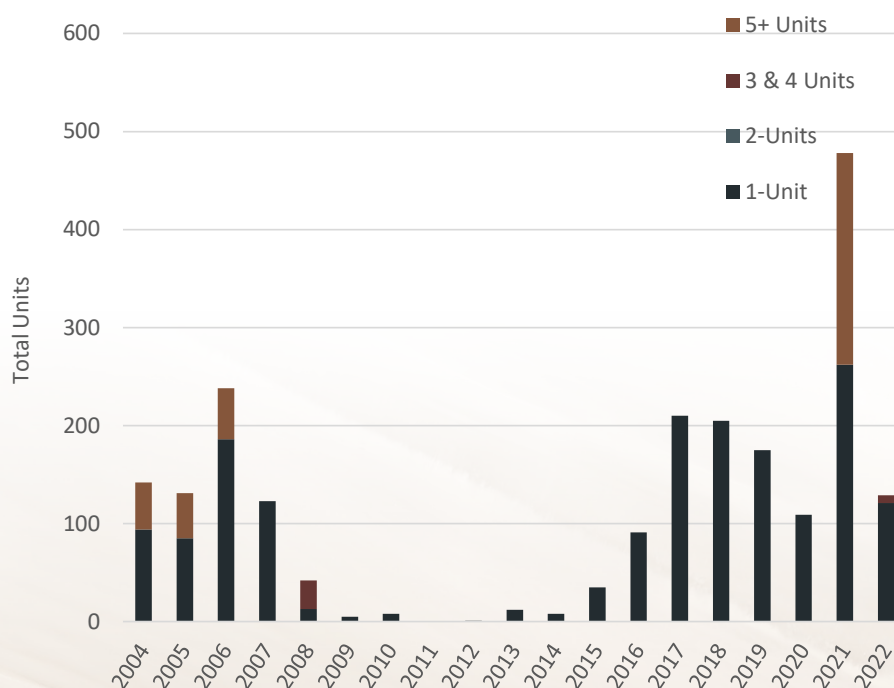
City Residential Building Permits	Single- Family	Multi-Family
Pre-Recession Avg Annual Total	122	37
Post-Recession Avg Annual Total	95	17
Pre-Recession Share of Residential Total *	77%	23%
Post-Recession Share of Residential Total *	84%	5%

Source: US Census

* The pre- and post-Recession share of total is measuring the percentage of single-family and multi-family permits as a share to total residential permits issued.

Residential building permitting activity dropped significantly after the 2007-2009 Great Recession. Single family home permits have been predominant in the City and annual totals have surpassed pre-Recession levels. Most multi-family permits have been for larger buildings, with at least five units with 2021 being the most active year for multifamily permitting.

Residential Building Permit Trends, 2004-202

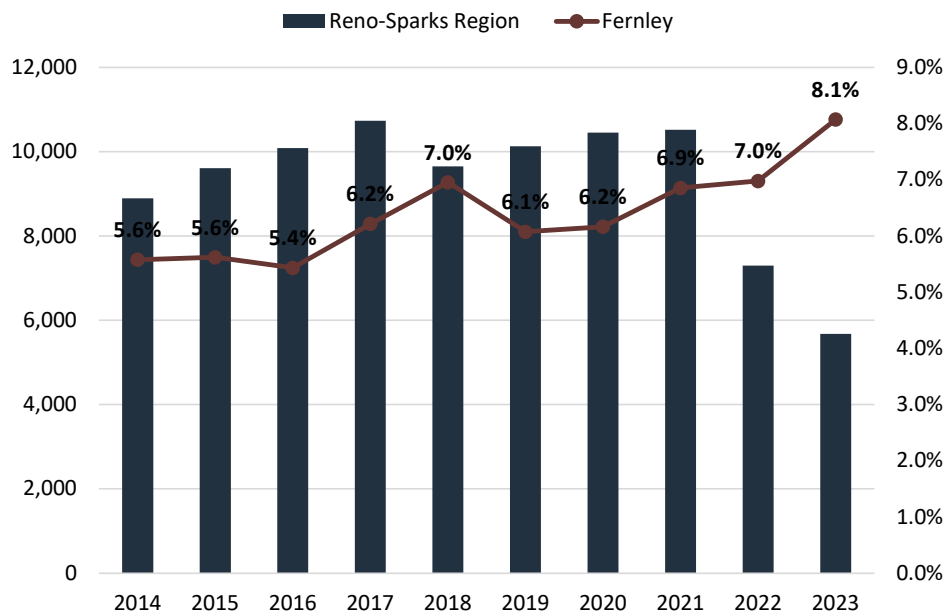


Source: US Census



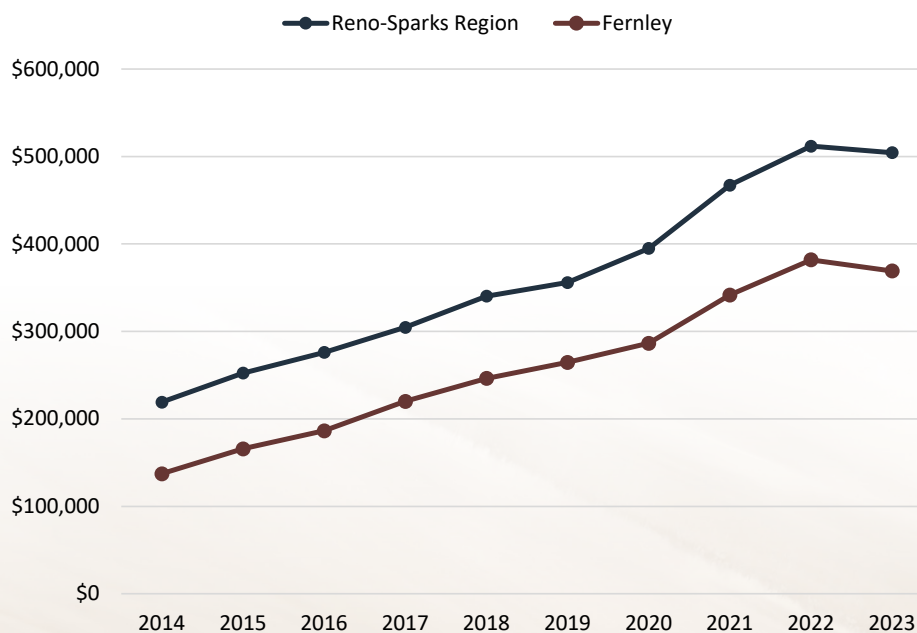
For-Sale Residential Performance

Fernley Annual Closings as Share of Region



Source: Northern Nevada Region MLS; Kimley-Horn

Average Median Sales Price Comparison

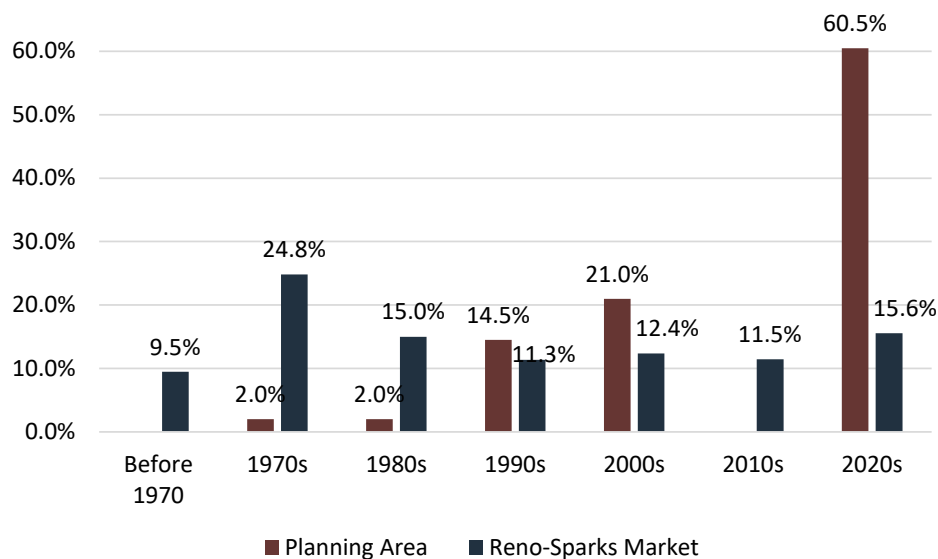


Source: Northern Nevada Region MLS; Kimley-Horn



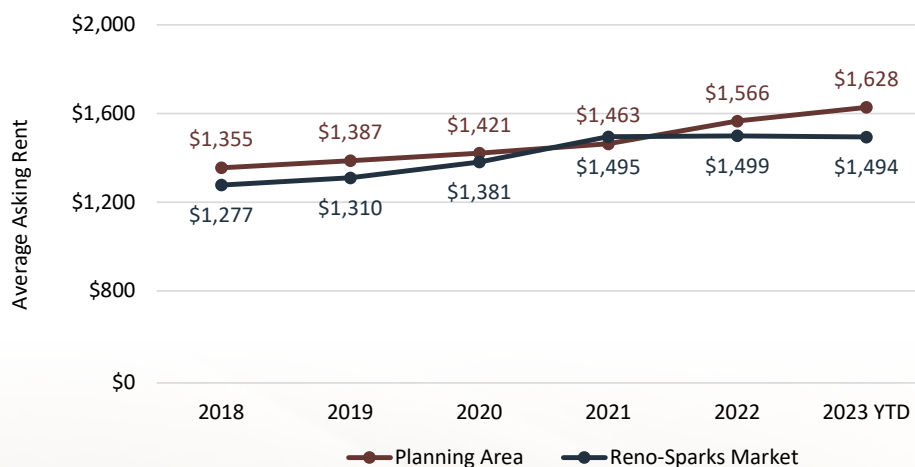
Rental Residential Trends

Share of Rental Residential Inventory by Decade Built



Source: CoStar; Kimley-Horn

Comparison of Rental Residential Rent Rate, 2018-2023 YTD



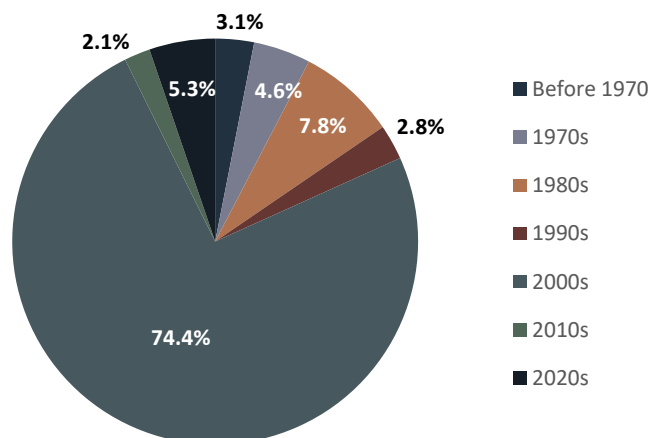
Source: CoStar; Kimley-Horn

- The 9 multifamily communities with a combined 496 multifamily units in the Planning Area represent 1.1% of the Reno-Sparks Market.
- Multifamily development in the Planning Area has remained prevalent since the 1990s. No new units were built in the 2010s but the 2020s have been the most active decade with 300 units being delivered.



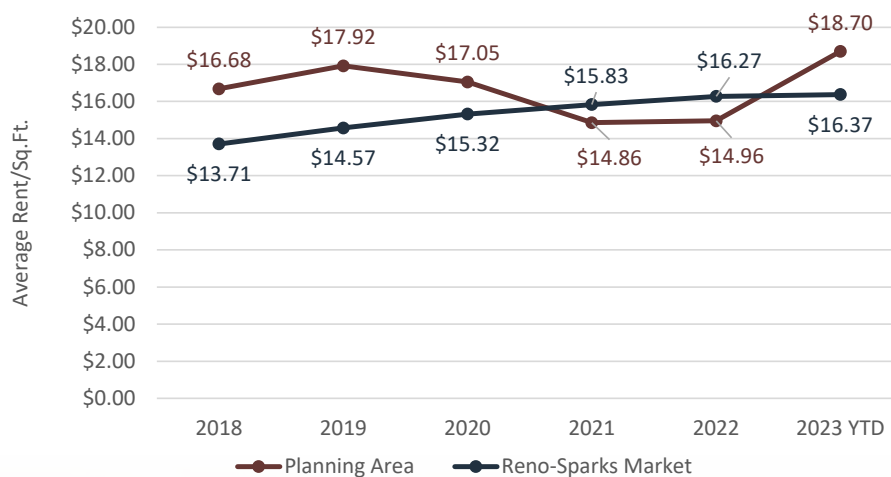
Retail Trends

Share of Retail Inventory in Planning Area by Decade Built



Source: CoStar; Kimley-Horn

Comparison of Retail Rent Rate, 2018-2023 YTD



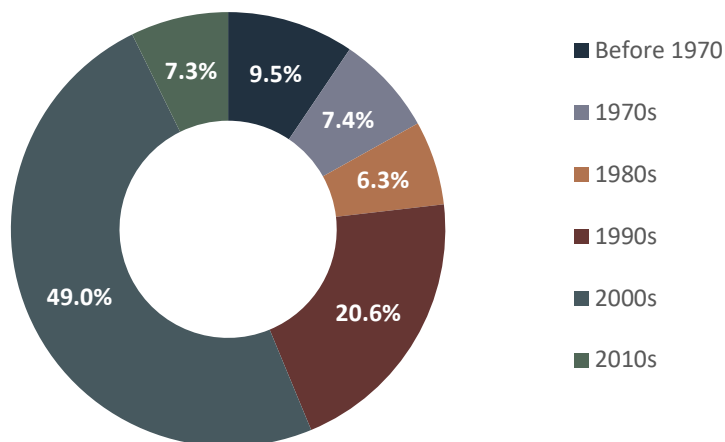
Source: CoStar; Kimley-Horn

- The Planning Area has 986,224 sq. ft. of retail space which accounts for 2.7% of the total share of the Market Area.
- Approximately 74% of retail was delivered during the 2000s. A Wal-Mart Supercenter, Lowes Home Improvement Center, the Fernley Village Marketplace, and the Skyridge Plaza were delivered during this decade.
- The Planning area has higher rent rates with lower vacancy rates than the Market Area. This can suggest a higher demand for retail space in the Planning Area.



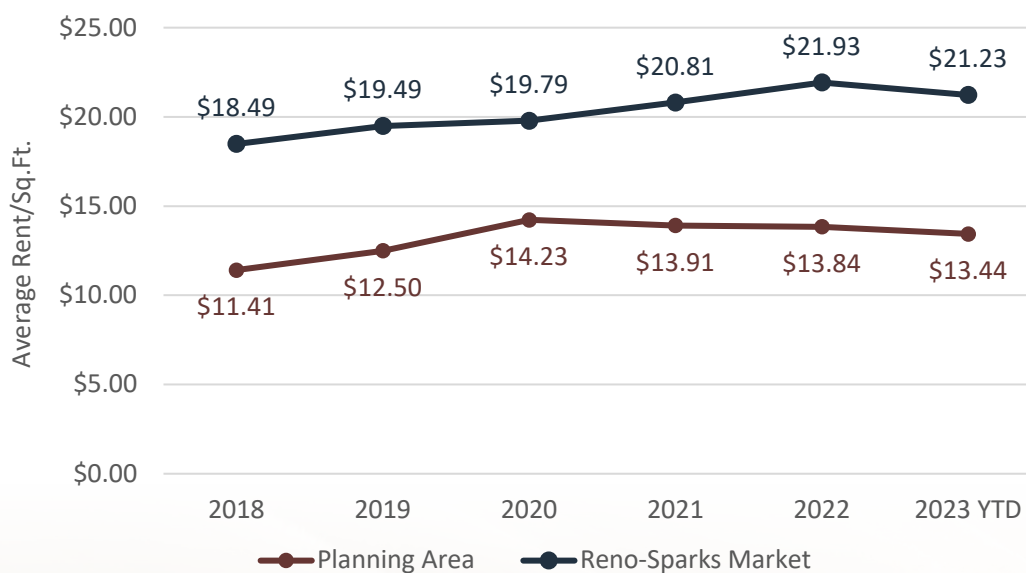
Office Trends

Share of Office Inventory in Planning Area by Decade Built



Source: CoStar; Kimley-Horn

Comparison of Office Rent Rate, 2018-2023 YTD



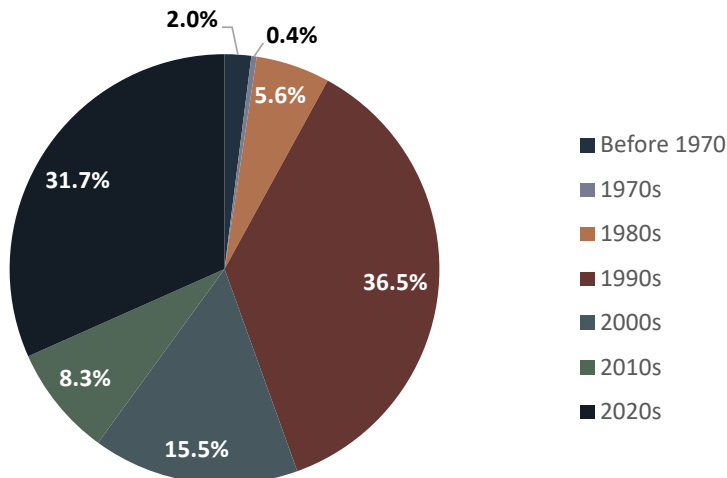
Source: CoStar; Kimley-Horn

- The Planning Area has 11,166 sq. ft. of office space which accounts for 0.5% of the total share of the Market Area.
- 1990s and the 2000s were the most active decades for office construction, delivering almost 70% of the office inventory. No new office construction has occurred since 2019.
- Rent rates and vacancy rates are lower in the Planning Area than in the Market Area, with a stable demand but limited supply.



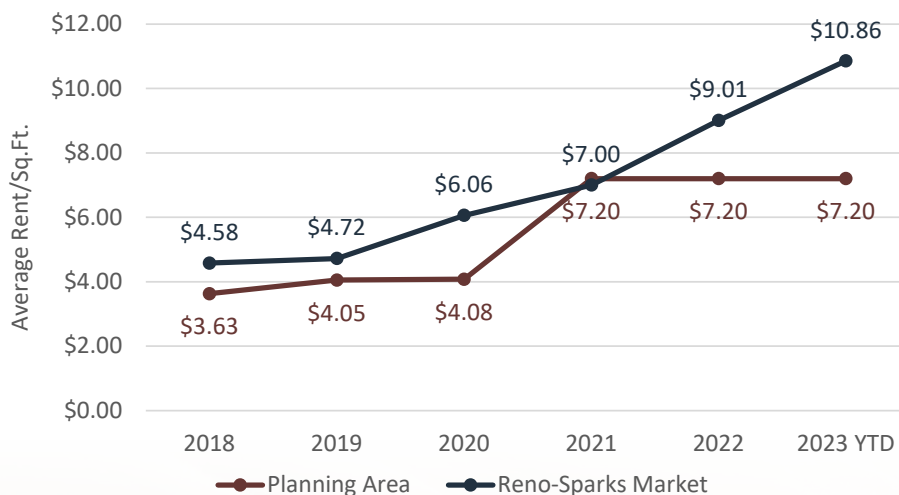
Industrial Trends

Share of Industrial in Planning Area by Decade Built



Source: CoStar; Kimley-Horn

Comparison of Industrial Rent Rate, 2018-2023 YTD



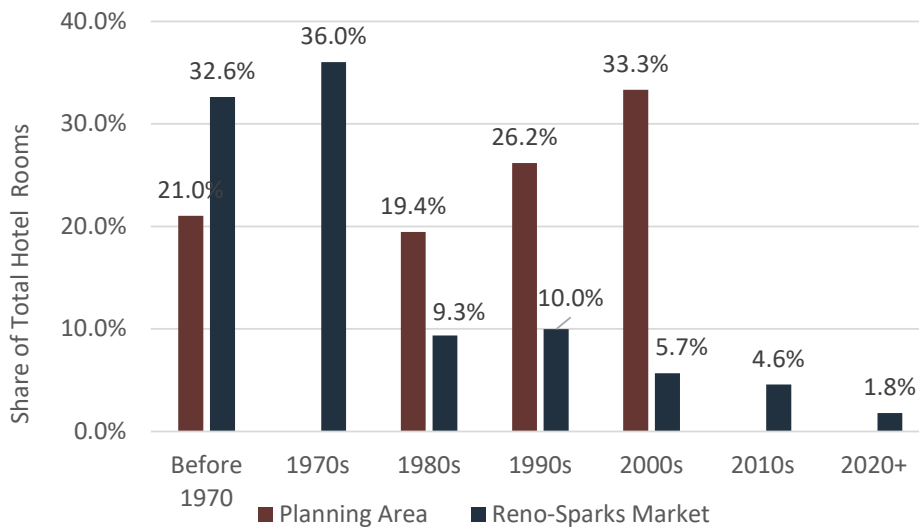
Source: CoStar; Kimley-Horn

- The Planning Area has 7,299,414 sq. ft. of industrial space which accounts for 5.8% of the total share of the Market Area.
- The 1990s was the most active decades for industrial construction but the 2020s has seen a considerable amount of activity, adding 31.7% to the inventory thus far or approximately 2,310,000 square feet of industrial space.
- Rent rates are lower in the Planning Area but year-to-date vacancy are 16% compared to 5.6% in the Market. High vacancies are likely due to a recent construction of industrial space being delivered in the Planning Area.



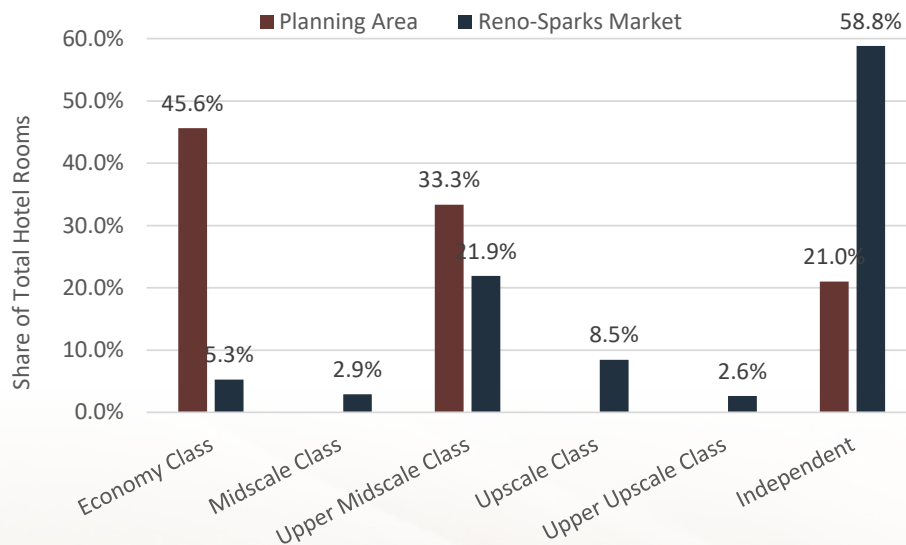
Hotel Trends

Share of Hotel Inventory in Planning Area by Decade Built



Source: CoStar; Kimley-Horn

Share of Hotel Inventory by Property Type



Source: CoStar; Kimley-Horn

- The Planning Area has 252 hotel rooms across 4 hotel properties.
- The Comfort Suites, an upper midscale hotel, is the largest and newest hotel in the Planning Area with a total of 84 rooms and was delivered in 2009.
- Most of the hotel inventory falls under economy class while most of the hotels in the Market Area are independent.



PLANNING AREA MULTIFAMILY DEVELOPMENT ACTIVITY

Property Name	Address	Estimated Completion	Total Units	Status
River Ranch Apartments	501 River Ranch Rd	2024	320	Under Construction
Sherwood Villages	890 Fremont Street	2026	316	Proposed -Entitlement Approved
West Main Station	600 W Main Street	2025	276	Proposed -Entitlement Approved
Nevada Pacific Apartments	Emigrant Way	2025	138	Proposed – Conditional Use Permit Approved

- The Planning Area is estimated to see an increase in their multifamily inventory of over 230% by 2027, with 1,164 rental residential units being delivered within the next five years.
- River Ranch Apartments will be the newest community with 320 total units and amenities such as EV charging stations, fitness center, playground and dog park.

PLANNING AREA RETAIL DEVELOPMENT ACTIVITY

Property Name	Address	Estimated Completion	Total Sq. Ft.	Status
Fernley Pad Sites	E Newlands Dr	2024	6,000	Proposed
Lickety Splits Express Car Wash	1245 Fremont Street	2024	5,809	Under Construction

- Retail development in the Planning Area could increase by 1.2% by the end of 2024, with 11,809 square feet of retail space being delivered.
- Current construction projects include panda express, Tractor Supply, and a quick serve retail chain.
- Proposed projects include development of 2 pad sites with 2,000 to 3,000 square feet of leasable available in each.



PLANNING AREA INDUSTRIAL DEVELOPMENT ACTIVITY

Property Name	Address	Estimated Completion	Total Sq. Ft.	Status
Nevada Commerce Park – Building B	Commerce Center Dr	2024	641,920	Proposed
Warehouse Development	1000 Pilot Road	2025	446,940	Proposed
Nevada Commerce Park – Building D	Commerce Center Dr	2024	105,040	Proposed
Nevada Commerce Park – Building C	Commerce Center Dr	2024	96,720	Proposed

- Industrial development activity includes the proposed Nevada Commerce Park and a warehouse development.
- The Planning Area is expecting an estimate of 17.7% of industrial space added to their existing inventory or 1,290,620 square feet by the end of 2025.
- When completed, Nevada Commerce Park will be the second largest industrial park after the Victory Logistics District.

PLANNING AREA HOTEL DEVELOPMENT ACTIVITY

Property Name	Address	Estimated Completion	Total Rooms	Status
Candlewood Suites Fernley	700 Mesa Dr	2027	100	Proposed
Home2Suites by Hilton Fernley	NEQ Stanley and E Newland Rd	2026	91	Proposed
Holiday Inn Express Fernley	900 Mesa Dr	2025	90	Proposed
Hampton Inn by Hilton Fernley	150 Hwy 95A and Penny Lane	2028	80	Proposed

- The Planning Area is expecting an estimate of 143% of hotel space added to their existing inventory or 361 Total rooms within the next 5 years.
- When completed, the Candlewood Suites Hotel will be the largest hotel in the Planning Area with 100 rooms and the only mid-scale hotel.
- The Planning Area is expected to add an additional three upper midscale hotels with the completion of Home2Suites, the Holiday Inn Express, and the Hampton Inn.



APPENDIX C
GLOSSARY





C. Glossary

Accessibility – Relating to transportation: how an area is attained.

Active Transportation – Human-powered transportation such as walking, cycling, and wheelchair use.

Amenity – Something that helps provide comfort, convenience, or enjoyment. This may be provided by a municipality, a neighborhood organization, and/or a developer and may include a park, trail, community center, playground, sports facilities and fields, etc.

Area Plan – A comprehensive document that outlines the goals, strategies, and policies for a specific geographic area. It serves as a guide for land use, development, and infrastructure decisions within that area. The purpose of an area plan is to provide a framework for coordinated and sustainable development, while also preserving and enhancing the quality of life for residents and stakeholders within the area.

Arterial – A high-capacity urban road that connects collector roads to expressways or freeways. Arterials may be divided into major and minor arterials.

Arterial (Major) – A roadway typically designed with at least 4 lanes and with speeds exceeding 45 MPH. Major arterials are the highest traffic volume surface streets and typically connect multiple towns, neighborhoods, and major activity centers. (May also be referred to as Other Principal Arterial).

Arterial (Minor) – A roadway which serves a smaller geographic area than a major arterial and may resemble a primary collector. Minor arterials are typically constructed with an 80-foot ROW width that includes sidewalks on both sides of the street.

Buffer – A strip of land established to separate and protect one type of land use from another to screen other properties from objectionable noise, smoke, or visual impact or to provide for future public improvements or additional open space.

Buildable Acreage – Land that is suitable for construction or development. The portion of a property or tract of land that can be legally and feasibly built upon, taking into account various factors such as zoning regulations, environmental considerations, topography, access to utilities, and any other restrictions or limitations that may apply.

Bureau of Land Management – An agency within the United States Department of the Interior. Its primary responsibility is to manage and conserve public lands, including around 245 million acres of land and 700 million acres of subsurface mineral estate. The BLM is responsible for balancing multiple uses of public lands, such as recreation, conservation, energy development, and grazing.



Capacity – The maximum potential for development or construction on a particular piece of land or property. It represents the highest level of development that can be achieved within the boundaries of applicable regulations, zoning restrictions, and other factors that may limit or influence the development process. Development capacity takes into account various considerations such as building density, height restrictions, setback requirements, infrastructure availability, environmental impact assessments, and other relevant factors.

Circulation – The movement of vehicles, pedestrians, and other modes of transportation within a transportation network. It encompasses the flow of traffic, the efficiency of movement, and the functionality of transportation infrastructure, such as roads, highways, intersections, and intersections. Transportation circulation focuses on optimizing the movement of people and goods, minimizing congestion and delays, and ensuring safe and efficient travel within a given area or city.

Collector – Collector roadways are intended to accommodate fewer travelers than arterials; this can vary depending on the hierarchy of roadways within a community. The collector street system may also carry local bus routes. Collector streets in Fernley are typically constructed with a 60-foot right-of-way width that includes sidewalks on both sides of the street.

Primary Collector – A roadway which distributes traffic between local streets and arterials; often linking multiple streets within a neighborhood. (May also be referred to as a Major Collector).

Secondary Collector – A shorter roadway which serves a smaller geographic area than a primary collector. (May also be referred to as a Minor Collector).

Comprehensive Master Plan – A long-term planning document that outlines a vision and sets forth policies, goals, and strategies for the future development and growth of a community, city, or region. It serves as a guide for land use, transportation, infrastructure, economic development, housing, environmental conservation, and other aspects of urban or regional planning.

Conservation – The protection, preservation, and sustainable management of the natural environment and its resources. It involves efforts to maintain and restore ecosystems, protect biodiversity, and mitigate the impacts of human activities on the environment.

Constraints – The limitations or factors that impede or restrict the progress or growth of a project, initiative, or area of development. These constraints can be physical, economic, social, political, or environmental in nature. They can arise from a variety of sources, such as limited financial resources, inadequate infrastructure, legal and regulatory barriers, social conflicts, environmental concerns, or lack of technical capacity.



Data Center – A facility used primarily to store, manage, process, and transmit digital data, which houses computer and/or network equipment, systems, servers, appliances and other associated components related to digital data operations. The facility may also include air handlers, power generators, water cooling and storage facilities, utility substations, and other associated utility infrastructure to support sustained operations at a data center.

Data Processing, Hosting, and Related Services (Including Data Centers) – Establishments that provide infrastructure for hosting or data processing services. These establishments may provide specialized hosting activities, such as web hosting, streaming services or application hosting; provide application service provisioning; or may provide general timeshare mainframe facilities to clients. Data processing establishments provide complete processing and specialized reports from data supplied by clients or provide automated data processing and data entry services.

Design Guidelines – A set of principles, standards, and recommendations that guide the design and planning of development projects or areas. Guidelines provide recommendations on issues such as building heights, setbacks, architectural styles, landscaping, pedestrian and bicycle infrastructure, parking requirements, and environmental sustainability features. They help developers, architects, and planners make informed decisions and ensure that new developments are visually appealing, functional, safe, and compatible with the surrounding context.

Detention Basin (Retention Basin) – A man-made structure designed to temporarily store and manage excess stormwater runoff. It is typically constructed in areas with inadequate drainage systems or in urban areas where impervious surfaces like roads, parking lots, and buildings prevent natural infiltration of rainwater into the ground.

Development – Any construction or any division of land.

Development Project – The use of land, buildings and structures on any property in the city subject to this title, except single-family dwellings and two-family dwellings, and includes new developments, planned developments, and the expansion of existing developments.

Distribution Center – A facility that stores merchandise for distribution to businesses or customers, but that does not fulfill orders directly from customers at that location.

Dwelling, Single-Family Detached – A building containing one kitchen designed or used or designed and used to house not more than one family, including necessary employees of the family. This also includes: 1) only those dwelling units that comply with the city's building code, whether built on site or in a factory (commonly referred to as "modular homes"), and factory-built housing as defined in NRS 278.0209; and 2) manufactured homes pursuant to NRS 278.02095.



Dwelling, Single-Family Attached – A dwelling unit attached to one or more other dwelling units located on a separate lot. Each dwelling has its own front and rear access, no unit is located over another unit, each unit is separated from other units by one or more vertical common walls, and each dwelling is located on a separately owned lot. A townhouse complex may include common areas and facilities owned by all of the owners on a proportional, undivided basis.

Dwelling, Two-Family (Duplex) – A building containing up to two kitchens designed and/or used to house two families, living independently of each other.

Economic Development – The process by which a region or country improves its economic well-being and quality of life. It involves various strategies, policies, and actions aimed at fostering economic growth, creating jobs, increasing productivity, and improving living standards. The goal of economic development is to stimulate and sustain economic activity in a particular area. This can be achieved through initiatives such as attracting businesses and investments, supporting entrepreneurship and innovation, improving infrastructure, enhancing education and workforce development, and promoting trade and exports.

Floor Area Ratio (FAR) – The measurement of a building's floor area in relation to the size of the lot/parcel that the building is located on.

Fault Lines – Fractures or cracks in the Earth's crust where rocks on either side have moved relative to each other. These fractures occur due to tectonic forces and are usually associated with plate boundaries, where two or more tectonic plates interact. Fault lines are responsible for earthquakes, as the movement along these fractures releases accumulated stress in the Earth's crust.

Frontage – The lot line that fronts a public or private street or right-of-way.

Frontage (Building) – The length of the face or wall of a completely enclosed and permanent building on a site which fronts directly on a public or private street or right-of-way.

Fulfillment Center – A business whose services include the fulfillment of orders placed directly by a customer or by an affiliate company, whether those orders are placed by means of mail, fax, email, telephone, or an internet transaction, and that includes warehouse or storage facilities from which the goods are shipped. A business that fulfills order completely within an office, but that does not maintain a warehouse or storage facilities, is classified as an "office."

Functional Classification(s) – The categorization of roads based on their intended purpose and the level of service they provide. The functional classification of roads helps in determining their design standards, maintenance requirements, and access management policies. It also assists in planning and allocating resources for transportation infrastructure.



Interstate Highways – These are the highest class of roads in the United States and are designed for long-distance travel between states. They have controlled access, multiple lanes, and high design standards.

Arterial Roads – These roads serve as major traffic corridors within urban areas, connecting different neighborhoods and providing access to highways. Arterial roads often have higher speeds and carry a significant volume of traffic.

Collector Roads – These roads collect and distribute traffic from local streets to arterial roads. They provide access to residential areas, commercial centers, and other local destinations.

Local Roads – These roads primarily serve local traffic within residential areas or commercial developments. They have lower speeds and are designed for shorter trips.

Geologic Hazards – Natural events or processes that pose a risk to human life, property, and infrastructure due to the Earth's geological features and processes. These hazards can include earthquakes, volcanic activity, landslides, and sinkholes.

Grading – Any clearing, excavating, cutting, filling or other earth moving operation.

Groundwater – The water that is found beneath the Earth's surface in the tiny spaces, or pores, between soil particles and in the cracks and fractures of rocks. It is a vital natural resource that plays a crucial role in supporting ecosystems, sustaining agriculture, and providing drinking water for many communities. Groundwater can be accessed through wells, which are drilled or dug deep into the ground to reach the saturated zone. It is then pumped to the surface for various uses, including irrigation, industrial processes, and drinking water supply.

Household – A group of people who live together and share common living arrangements, typically in a residential dwelling. This includes individuals who are related by blood or marriage, as well as non-relatives who live together and share expenses and responsibilities. A household may consist of a single person living alone or multiple individuals, such as a family or roommates, sharing a home.

Implementation – The process of putting a planned program or project into action. It involves translating the goals, objectives, and strategies of a program into practical activities and tasks to achieve the desired outcomes.

Industrial Services – An establishment involved in the manufacturing of products, primarily from extracted or raw materials, or bulk storage and handling of such products and materials that typically involve a high incidence of truck or rail traffic, and outdoor storage. May include items as food processing and packaging and stonework. Does not include noxious industrial uses, such as asphalt and chemical manufacture, hot-mix plants, rendering, and tanneries.



Infrastructure – The physical systems and facilities that are owned and operated by the government or public entities to provide essential services and support the functioning of a community or society as a whole. It includes various types of infrastructure, such as transportation networks, utilities, social amenities, and public facilities.

Transportation Infrastructure – This includes roads, highways, bridges, tunnels, railways, airports, seaports, and public transit systems that enable the movement of people and goods within and between cities and regions.

Utilities Infrastructure – This comprises systems for water supply and sanitation, electrical power generation, transmission, and distribution, natural gas distribution, and telecommunications networks that provide essential services to residents, businesses, and institutions.

Social Infrastructure – Public infrastructure also encompasses facilities like schools, hospitals, libraries, community centers, parks, and recreational areas that support the well-being, education, and social interactions of the community.

Public Facilities – This includes government buildings, administrative offices, police and fire stations, courthouses, prisons, and other facilities that serve the public and ensure the proper functioning of governance and law enforcement.

Landowner – The legal or beneficial owner or owners of all the land proposed to be included in a planned unit development. The holder of an option or contract of purchase, a lessee having a remaining term of not less than 30 years, or another person having an enforceable proprietary interest in the land is a landowner for the purposes of this title.

Land Use – The way land is utilized or developed for various purposes, such as residential, commercial, industrial, agricultural, or recreational activities. It involves the allocation and management of land resources to meet the needs of a community.

Land Use Plan – A document or framework that outlines the intended allocation and management of land for various purposes within a specific area or jurisdiction. It is a strategic tool used by government agencies, planners, and communities to guide future development, ensure efficient land use, and promote sustainable growth.

Manufacturing – The allocation or utilization of land specifically for manufacturing activities. It involves the designation of land areas or zones where industrial facilities, factories, or production plants are located to carry out various manufacturing processes.



Missing Middle Housing – A range of housing types that fall between traditional detached single-family homes and large-scale apartment buildings. It encompasses a variety of medium-density housing options that can help address the housing needs of diverse communities. Examples of missing middle housing include duplexes, triplexes, townhouses, courtyard apartments, and small-scale multi-unit buildings. These housing types are typically designed to fit within established neighborhoods, offering a mix of private and shared spaces, and providing more affordable options compared to single-family homes.

Mixed-Use – Any single building or development that blends a combination of residential, commercial, cultural, institutional, or industrial uses, where those functions are physically and functionally integrated. In a mixed-use development, the different types of land uses are in close proximity, planned as a unified complementary whole, and functionally integrated to the use of vehicular and pedestrian access and parking areas.

Mobility – The efficiency, accessibility, and sustainability of transportation systems. It involves ensuring that people can easily and safely travel within and between different areas, whether for commuting, social activities, or accessing essential services.

Multi-Modal Connectivity – The integration and seamless connection of different modes of transportation within a transportation system. It involves designing and planning transportation infrastructure and services to facilitate easy movement and transfers between different modes such as walking, cycling, public transit, and private vehicles.

Multi-Family – A building designed to house three or more families living independently of each other, having their own kitchen facilities. Examples include apartments, townhouses, rowhouses, quadruplexes, single-room occupancy buildings, condominiums, and similar combinations of three or more attached single-family dwellings. It includes any form of family occupancy, including traditional or non-traditional households, elderly housing, or retirement housing.

National Register of Historic Places – The official national list of cultural resources worthy of preservation. The list is compiled and maintained by the National Parks Service and the United States Department of the Interior.

NEPA – NEPA stands for the National Environmental Policy Act. It is a United States environmental law that was enacted in 1970 and requires federal agencies to assess the environmental impacts of their proposed actions and consider alternatives before making decisions.

Open Space/Park – A park, playground, natural area, or open space. Examples include community centers, picnic facilities, public recreation areas, and accessory food concessions.



Parcel (Lot) – A distinct part or parcel of land divided with the intent to transfer ownership or for building purposes which abuts upon a means of access.

Public Facility – A public, civic, or institutional use facility used for the conduct of operations and services, including, but not limited to, offices, maintenance facilities, and recreational or cultural facilities.

Public Lands – Lands that are owned and managed by the government for the benefit and use of the general public. These lands are typically held by federal, state, or local government agencies and are open for various purposes such as recreation, conservation, resource management, and public access.

Slope – The steepness of the land or the inclination of a surface. It is often expressed as a percentage or an angle of inclination. Slope is an important factor in various fields, including civil engineering, geology, and hydrology, as it affects water drainage, stability, and construction design.

Stakeholder – An individual, group, or organization that has an interest or concern in a particular project, organization, or system. They can be affected by the outcomes or decisions made and may also have the ability to influence those outcomes or decisions. Stakeholders can include a wide range of entities, such as employees, customers, suppliers, shareholders, communities, government agencies, advocacy groups, and more.

Sustainability – The practice of meeting the needs of the present generation without compromising the ability of future generations to meet their own needs. It involves balancing environmental, social, and economic considerations to ensure long-term well-being and resilience. Sustainable practices aim to minimize negative impacts on the environment, promote social equity and inclusivity, and foster economic prosperity.

Swales – Natural depressions or shallow valleys that were often followed by wagon trains as they traveled westward during the mid-19th century. These swales were formed by the continuous passage of wagons and livestock, creating tracks that became worn and lower than the surrounding terrain.

Third Place – A term used to refer to a place people spend time at between home and work. This can include places like parks, coffee shops, community centers, church, town centers, shopping centers, etc. Third places are also used by people to connect with one-another.

Topography – The physical features and characteristics of a particular area or region of land. It involves the study and representation of the shape, elevation, and other attributes of the Earth's surface, including its hills, valleys, mountains, rivers, lakes, and other natural and man-made features.



Transportation – The movement of people, goods, or materials from one place to another. It involves the physical or virtual transfer of objects or individuals using various modes of transportation, such as vehicles, trains, ships, aircraft, or even telecommunication systems.

Vacant – Land that is unoccupied or not currently being used for any specific purpose. It signifies that there are no buildings, structures, or significant improvements on the land.

Water Rights – Legal entitlements that grant individuals or entities the authority to use or access water resources. They define the rights and responsibilities associated with water usage, allocation, and distribution.

Wildlife Management Area (WMA) – State-owned land intended to protect wetlands and waterfowl include the use of the areas as public hunting grounds. Hunting on WMAs includes migratory game bird, upland game bird, furbearer, and big game hunting.



APPENDIX D
ACRONYMS





D. Acronyms

ADA – Americans with Disabilities Act

ADU – Accessory Dwelling Unit

AFA – Ace-Foot per Annum

BLM – Bureau of Land Management

CSA – Combined Statistical Area

DU – Dwelling Units

EDU – Equivalent Dwelling Unit

EPA – Environmental Protection Agency

FAR – Floor Area Ratio

FEMA – Federal Emergency Management Agency

HGL – Hydraulic Grade Line

I-80 – Interstate 80

MCL – Maximum Contaminant Level

MGD – Million gallons per day

MOU – Memorandum of Understanding

MPH – Miles Per Hour

NAC – Nevada Administrative Code

NDA – Non-Disclosure Agreement

NDOT – Nevada Department of Transportation

NDWR – Nevada Division of Water Resources

NEPA – National Environmental Policy Act

NHPA – National Historic Preservation Act

NRS – Nevada Revised Statutes

NSE – Nevada State Engineer

OHV – Off-Highway Vehicle



PPB – Parts per billion

ROW – Right-of-Way

RRA – Reclamation Reform Act

RTC – Regional Transportation Commission

TIF – Tax Increment Financing

TRI/"TRIC" – Tahoe-Reno Industrial Center

TROA – Truckee River Operating Agreement

UPRR – Union Pacific Railroad

US 50A – U.S. Highway 50 Alternate

US 95A – U.S. Highway 95 Alternate

USBR – United State Bureau of Reclamation

VFD – Variable Frequency Drive

WCP – Water Conservation Plan

WTP – Water Treatment Plant

CITY OF FERNLEY

Design Guidelines

NORTH – SOUTH – SOUTHWEST



— 2025 —



ACKNOWLEDGMENTS

City Council

Mayor Neal E. McIntyre

Ryan Hanan, Ward One Councilmember

Felicity Zoberski, Ward Two Councilmember

Stan Lau, Ward Three Councilmember

Albert Torres, Ward Four Councilmember

Joe Mendoza, Ward Five Councilmember

Planning Commission

Chairwoman Jenni McCullar

Vice-Chair Angela Lewis

Robert Flores

Tessa Garvin

Jacob VanderHeiden

Cody Wagner

Barry Williams Sr.

City of Fernley

Benjamin Marchant, City Manager

Lydia Altick, Deputy City Manager

Michele Rambo, AICP, Planning Director –
Project Manager

Consultant Team – Kimley-Horn

Blake Young, AICP – Project Manager

Ines Galmiche, AICP – Deputy Project
Manager, Report Photographer

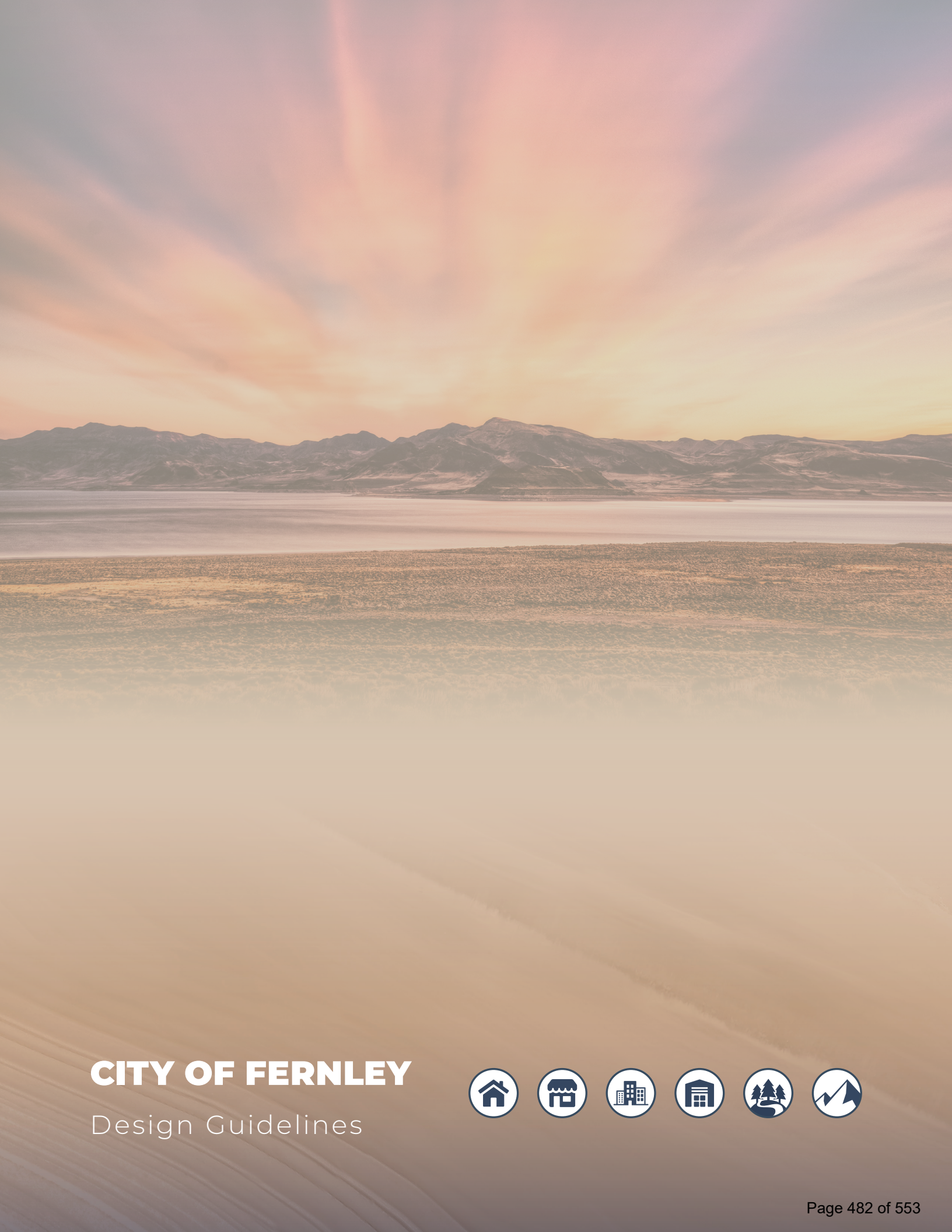
Devin Moore, PE – Transportation Lead

Jessica Rossi, AICP – Market Analysis Lead

Joseph Cuffari – Public Engagement Lead

Kimley»Horn

Thank You to All Engaged Fernley Residents and Stakeholders



CITY OF FERNLEY

Design Guidelines



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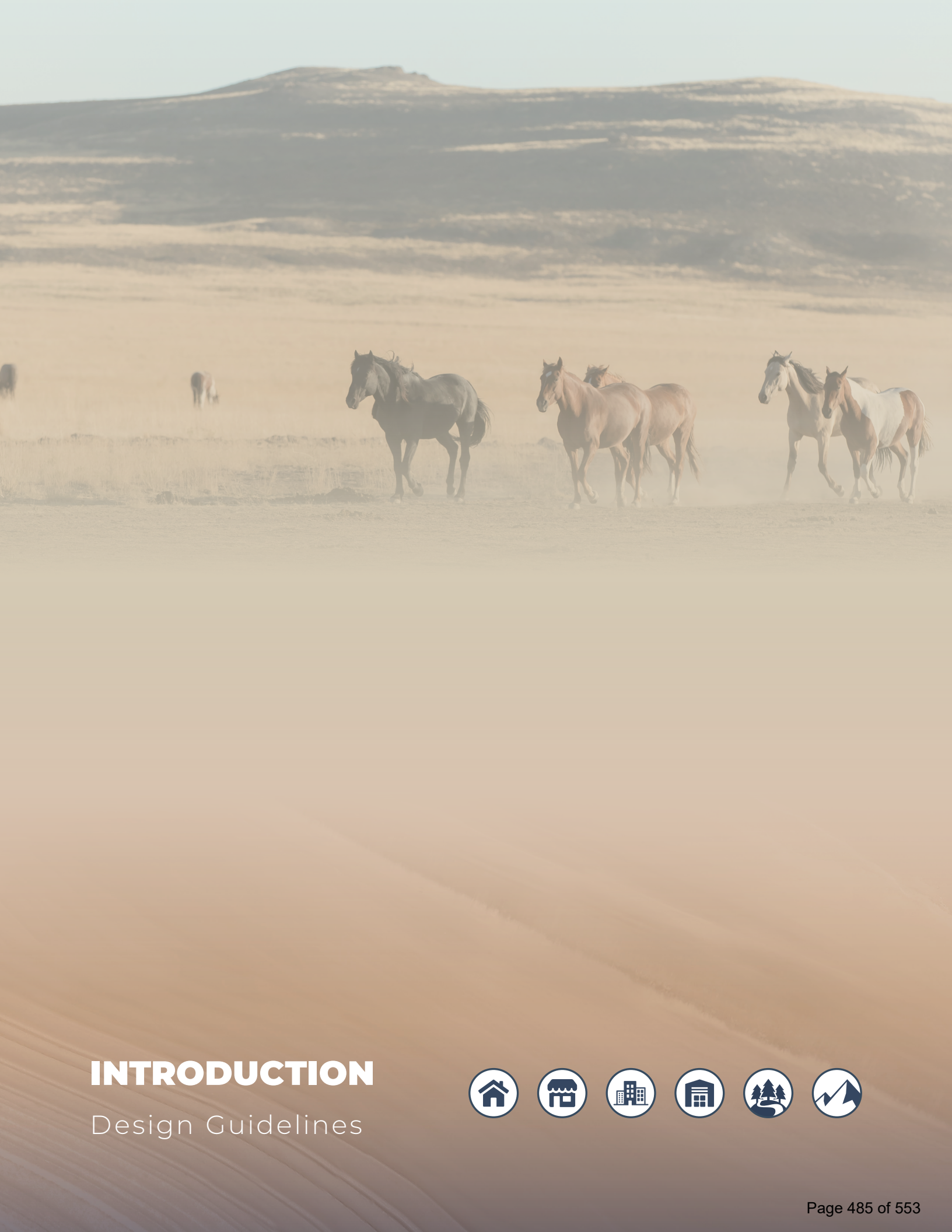
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INTRODUCTION

Design Guidelines

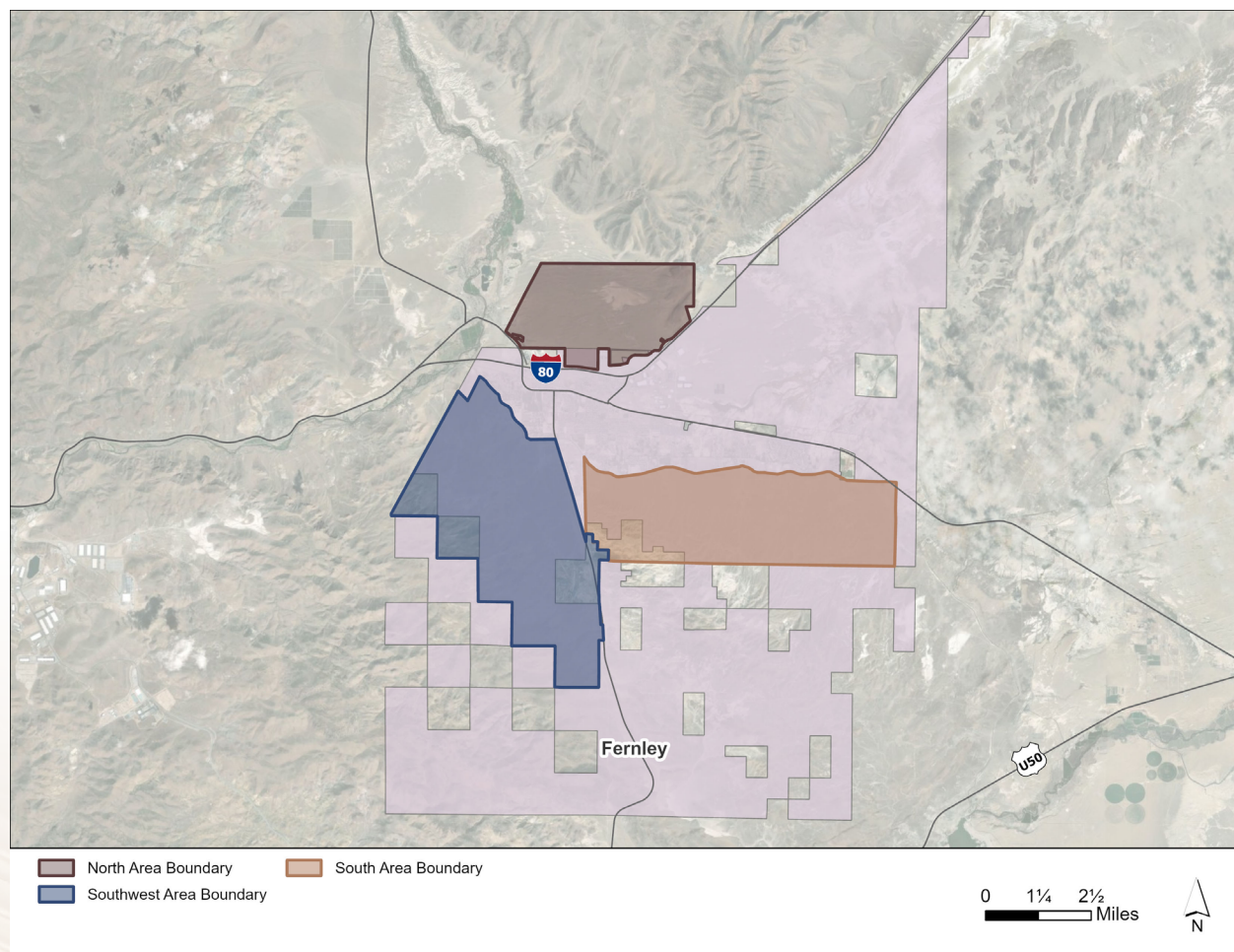


INTRODUCTION

Purpose and Intent

The Design Guidelines are intended to supplement the Development Code (Fernley Municipal Code Title 32) and each of the three Fernley Area Plans. The purpose is to guide the physical development of residential, commercial, mixed use, industrial, and open space projects in a consistent manner that reinforces key design themes and establishes distinct character for each Area Plan. While these guidelines are specific to the North, Southwest, and South Area Plans, they reflect the overall vision set forth in the City of Fernley's Comprehensive Master Plan. This vision was established throughout the community and stakeholder engagement sessions held during the planning process for the Fernley Area Plans.

Figure 1. Area Plans



Applicability

The Design Guidelines will be utilized to inform the design review process for the City's three Area Plans – Future projects within the Area Plans will be reviewed comprehensively for consistency with the Design Guidelines by the applicable review authority. Review authorities for each application type are established in the City's Municipal Code. The City may coordinate with applicants to make revisions as necessary to best follow the guidelines. Section 1.4: Implementation establishes the findings required for approval of the proposed document project.

Guiding Design Principles

As a foundation for the Design Guidelines, three guiding principles have been established to set the direction for the desired design elements provided in this document. These principles reflect the overall vision for each Area Plan to develop a land use pattern that is well-integrated with surrounding neighborhoods, economically feasible, attracts a mix of development types, and promotes lasting successful communities.

Guiding Principles

Seamless Connectivity:

The design of new development should enhance pedestrian and vehicular connections to the existing and future transportation network. To provide a cohesive experience, the design should pay particular attention to pedestrians at the street level to enhance the relationship between individual developments.

Sustainable Design

The built form should strongly embrace sustainable design to adequately respond to changing market and environmental conditions. Development should focus on providing flexibility in its design, allowing for adaptability to new trends and technologies.

Cohesive Character

Each Area Plan should aim to have a distinct and cohesive character associated with land uses to enhance the area's sense of place. New development should incorporate urban design elements that prioritizes the pedestrian experience.

Implementation

Using the Design Guidelines

The Design Guidelines are intended to serve the needs of property owners, developers, architects and designers, contractors, community organizations, and City officials. These guidelines should be referred to in conjunction with the Development Code as they provide guidance on a variety of design elements to foster a connected, sustainable, and cohesive character which builds upon the vision for each Area Plan.

The following process is recommended for project applicants:

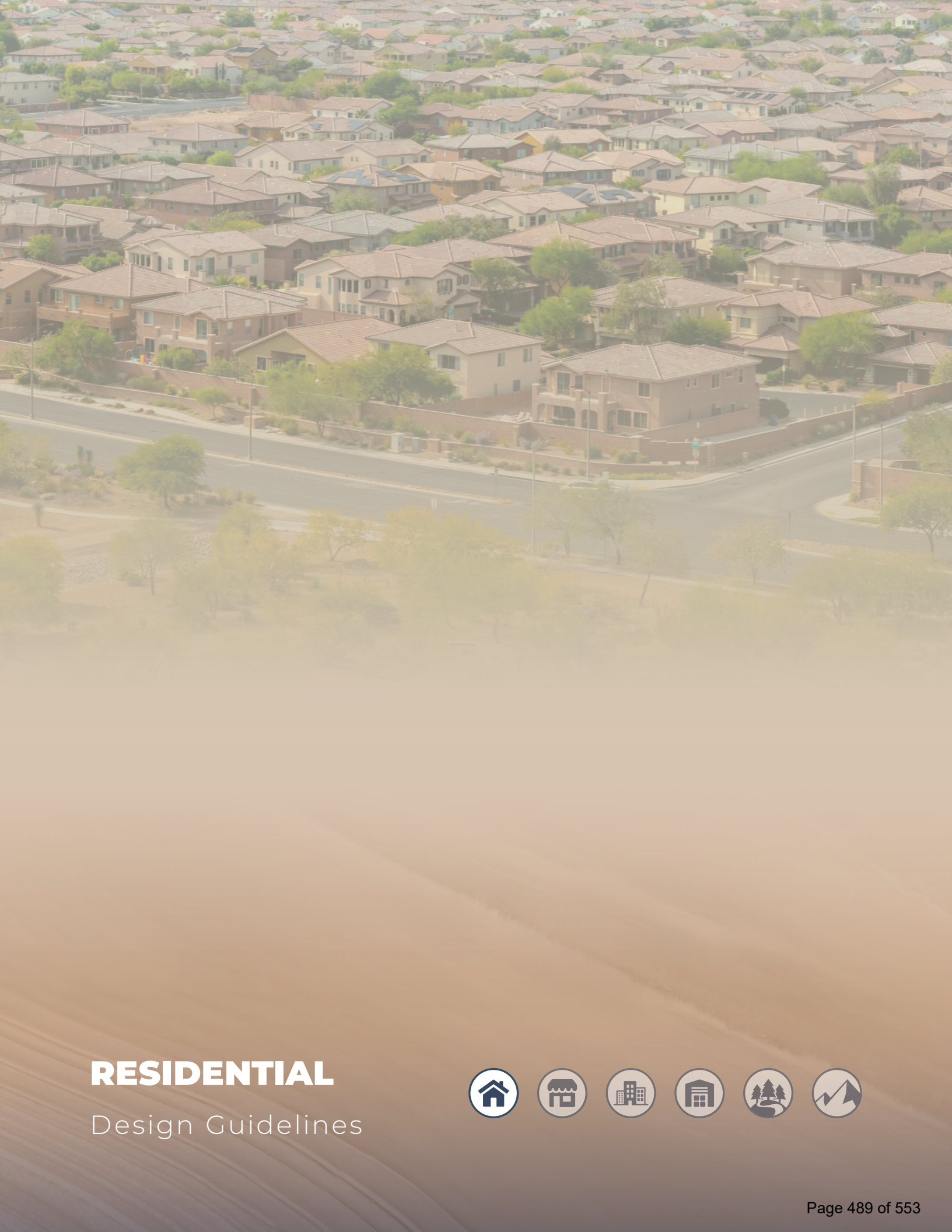
- Review the Comprehensive Master Plan;
- Consult the individual Area Plans;
- Identify the specific development type(s) and refer to each subsection of this document for use-type specific guidelines; and,
- Schedule a pre-application meeting with the City's Planning Department to review ideas, identify processes and requirements, ask questions, and discuss potential issues, solutions, and approaches.

Relationship to Other Planning Documents

The Design Guidelines are one of several documents providing design guidance for the Fernley Area Plans. Future implementing projects should consider the relevant sections of each of the documents listed below. Other documents relating to the physical development include, but are not limited to, the following:

- Fernley Municipal Code Title 32
- City of Fernley Comprehensive Master Plan
- North Fernley Area Plan
- South Fernley Area Plan
- Southwest Fernley Area Plan

Title 32 of the Fernley Municipal Code is the City's Development Code which establishes permitted uses and development standards such as setbacks, height, density, FAR, and other requirements for future development. The Design Guidelines should be thoroughly considered by all applicants when pursuing a project. If conflicts arise between the Fernley Development Code and the Design Guidelines for the Area Plans, the Development Code takes precedent.



RESIDENTIAL

Design Guidelines



RESIDENTIAL

Purpose and Intent

The following section of guidelines are applicable to residential development as defined by the City of Fernley Municipal Code Title 32. The residential guidelines provide recommendations to create high quality developments that will result in more attractive, livable neighborhoods. They aim to be prescriptive enough to create a framework for design and carry out the community's urban design vision but flexible enough to allow for creativity in the planning and design phases.

This chapter will apply to the following land use categories from the City of Fernley Comprehensive Master Plan:

Low Density Residential

Low Density development encompasses the following land use categories from the City of Fernley Comprehensive Master Plan:

Table 1. Low Density Residential Categories

Land Use Category	Equivalent Zoning Category
General Rural (GR)	GR20
Rural Residential (RR)	RR5 RR1 RR½ PD
Single Family Residential (SFR)	SF6 SF9 SF12 SF20 PD

Medium Density Residential

Medium Density development encompasses the following land use categories from the City of Fernley Comprehensive Master Plan:

Table 2. Medium Density Residential Categories

Land Use Category	Equivalent Zoning Category
MIXED RESIDENTIAL (MR)	MDR14 PD

High Density Residential

High Density development encompasses the following land use categories from the City of Fernley Comprehensive Master Plan:

Table 3. High Density Residential Categories

Land Use Category	Equivalent Zoning Category
MULTI-FAMILY RESIDENTIAL (MFR)	MF21 MF30 PD

This Chapter presents design guidelines on the following topics:

- General Site Design
- Development Type and Design
- Pedestrian Scale Streetscape
- Parks and Open Space

General Site Design

This section provides design guidance for residential land uses. The intent of this section is to set a structure which enforces a cohesive neighborhood character while providing complimentary land use transitions and connection opportunities to adjacent developments.

Surrounding Context and Connectivity

It is important for future development to consider the surrounding context in order to create a cohesive look and feel for the community. As different sections of the Area Plan develop over time, development should create opportunities for pedestrian and multi-modal connections to seamlessly blend communities and create more natural interconnectivity.

- Streets should be designed to intersect at right angles, forming a grid pattern when possible for easier navigation.
- Provide pedestrian and vehicular connections to existing developments, including adjacent residential and non-residential developments. Consider opportunities for connections with future development through flexibility in ingress/egress patterns while complying with the City's Access Management Policy.
- Provide safe pedestrian and vehicular connections to public facilities (parks, schools, community amenities) by integrating open space near these elements to create a connected open space network.
- Pathways should be provided to adjacent developments through natural corridors and/or other trails or sidewalk systems. These connections shall be stubbed out to the edge of the property for future connections.



The design of each single-family home is unique, but is patterned in a way to complement the neighborhood character.



Pathway connecting residential development to nearby community amenities.

Source: Adobe Stock Images

Building Placement

Buildings can be one of the most important defining features within a space. In addition to displaying visually interesting aspects, building forms and placement within an area will define open spaces, walkways, and parking. Given the potential impact in defining a sense of place, it is important to consider building placement and orientation when site planning future development uses within the Area Plans.



Single family neighborhood facing centralized open space.

Source: Adobe Stock Images

- Prioritize building orientation around centralized open spaces and amenities.
- Locate and orient the buildings to provide adequate privacy for residential units in the development as well as neighboring residential units.
- Consider orientation in reference to sunlight to promote sustainable energy saving practices and rooftop solar compatibility.
- Design buildings to create transitions of appropriate height and scale. Upper floors on multi-story buildings should step back when adjacent to single-family development.

Parking

Vehicular parking should be provided in a manner that meets the needs of the development while minimizing visibility from the street. The number of parking spaces required will be determined by the development standards within the City's Development Code.



Parking is located internal to the development surrounded by landscaping and dispersed throughout the project to avoid creating a large parking lot.

Source: Nearmap Imagery

- Locate parking internal to the development or to the side or rear of buildings. Connect parking areas to residential units and open spaces with clear pedestrian walkways for safety and ease of navigation.
- Disperse paved parking areas throughout the project in smaller segmented parking areas rather than creating large parking lots.
- Utilize landscaping islands to provide shade and break up large parking areas.

Services and Utilities

Services and utilities are a vital aspect of any development. They should be located in convenient locations for maintenance and service but should be screened from public view. Locate and screen electrical panels and other utilities in a manner that minimizes their visibility from the street.

- Provide and maintain clear access to existing utilities for future maintenance and repair.
- Locate ancillary facilities within buildings rather than along street-facing facades.
- Provide on-site facilities for trash storage and ensure they are easily accessible for waste management vehicles.
- Build trash enclosures with durable materials.
- Screen trash enclosures from public view.



On-site trash storage made of durable material screened from public view.

Source: Adobe Stock Images



Landscaped screening of utilities

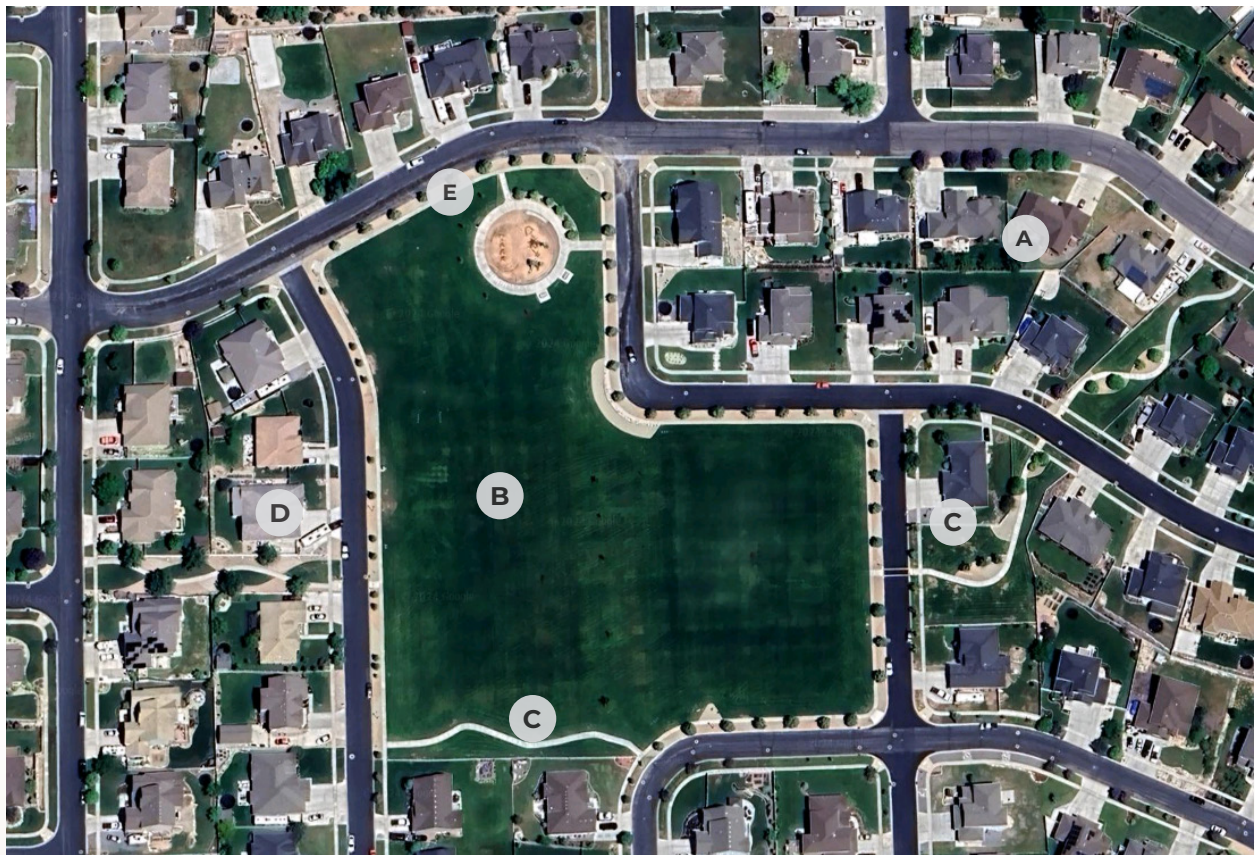
Source: Adobe Stock Images

Development Type and Design

The following development examples illustrate some of the desired site planning elements for residential development including building orientation, centrally located shared open spaces, pedestrian connectivity, and gridded street patterns.

Low Density Residential

Low Density residential refers to traditional single-family layouts. This is typically characterized by one and two-story structures fronting on local roadways or private drives. Residential units typically have private open space associated with each unit as well as a shared community open space.



Regal Park | Saratoga Springs, UT

- A.** Low Density Development
- B.** Centrally Located Open Space
- C.** Sidewalks/Pedestrian Connectivity
- D.** Buildings Oriented Towards Park Space

Medium Density

Medium density residential refers to mostly multi-family layouts which include garden-style apartments, duplexes, triplexes, and townhomes. This product type typically includes internal circulation and on-site amenity features such as a clubhouse, pool, dog park, and open space.



Midtown | Denver CO

- A.** Medium Density Development
- B.** Centrally Located Open Space
- C.** Internally Shaded Parking
- D.** Sidewalks/Pedestrian Connectivity
- E.** Neighborhood Serving Community Center/School

High Density

High density residential refers to apartments ranging from 14-30 dwelling units per acre. This product type may include surface, tuck-under, and/or structured parking with internal circulation and enhanced amenities.



Meridian, ID

- A.** High Density Development
- B.** Centrally Located Open Space
- C.** Internally Located Parking
- D.** Sidewalks/Pedestrian Connectivity
- E.** Buildings Oriented Towards the Street
- F.** Community Amenity Area

Pedestrian Scale Streetscape

Pedestrian scale streetscape addresses the character of the space generally located between the street edge and façade of adjacent buildings including sidewalks, patios, and amenity zones. These guidelines ensure that well designed and adequate facilities for pedestrians and bicyclists are provided to support a healthier, safer, and more sustainable pedestrian experience.

Active Frontage

It is important to provide engagement between those in the street and those on the ground and upper floors of buildings. This is done when the façade of buildings face and open towards the street. A building's upper floors may contribute to active frontage through windows or balconies. Active frontages provide informal surveillance opportunities and often improve the energy and safety of an area.

- Provide sidewalks connecting from the street or driveway to building or unit entrances.
- Provide benches and other seating options to improve functionality and social encounters.
- Locate windows of living areas to overlook streets and other public spaces.
- Where possible, provide stoops or porches to units fronting public spaces and streets.



Single-family homes with sidewalks connecting to unit entrances and living room windows fronting the street.

Source: Adobe Stock Images



Townhomes with sidewalk access to active street frontage.

Source: Adobe Stock Images

Bicycle Use

Bicycle parking is an important element in urban design. When done well, it encourages people to ride bikes more often, improving sustainability and public health.

- Integrate bike racks into the development consistent with the surrounding design.
- Bike racks that double as public art are encouraged.
- Indoor bike storage rooms with maintenance station are encouraged in multi-family residential products.
- Locate bike racks near multi-use trails.



Bike rack that doubles as public art.

Source: Adobe Stock Images

Streetscape Lighting

Streetscape lighting illuminates the pedestrian realm and can reinforce the character and vibrancy of an area. It increases pedestrian safety through visibility and defines the street edge making it easier for vehicles, cyclists, and pedestrians to navigate through the corridor.

- Pedestrian lighting should be integrated into streetscape design elements such as branded signage, furnishings, paving systems, railings, walls, or bollards.
- Lighting fixture design should complement the surrounding building and public realm elements.
- Pedestrian lighting should improve visibility of pedestrians and be designed to minimize light pollution.
- Pedestrian lighting can be placed on the same pole as roadway lighting



Source: Adobe Stock Images

Landscaping and Stormwater Management

Trees and landscaping provide a range of benefits for urban development. Landscaping assists in stormwater management, pollution mitigation, and softens the built environment, making it more inviting to pedestrians. Tree canopies can provide shade, reducing heat islands while also providing natural safety barriers for pedestrians along street frontage and walkways.



Attractive landscaping that doubles as stormwater management.

Source: Adobe Stock Image

- Design landscaping to be attractive and consistent throughout the development.
- Provide enhanced landscaping near parking lots, driveways, and other vehicular areas to signalize entrances and improve visual aesthetics.
- Stormwater runoff should be directed towards landscaped areas where possible. Tolerant plants and trees should be incorporated in these areas.
- Landscaped areas should be coordinated with stormwater management to create multi-use systems.

Walls and Fences

The design of walls and fences should be carefully considered to ensure the desired aesthetic is achieved. Wall and fence height requirements will be determined by the City's Development Code.

- Design walls and fences to be an attractive part of the project with materials compatible with the exterior building materials of the project.
- Locate walls and fences on the property to protect privacy and define private and shared open space.



Variation in walls to complement the architectural style of the development.

Source: Adobe Stock Image

Parks and Open Space

This section provides guidance for open spaces associated with residential development. Broader guidelines are included in Section 6: Parks and Open Space regarding larger open space development.

Parks and Open Space is generally defined as spaces within a city or defined area which are open and accessible to the public. Examples of these spaces may be streetscape areas along walkable corridors, parks, natural open space, or community gathering spaces. These design guidelines are intended to ensure that future projects provide and maintain enjoyable and usable open space.

Public Open Space

Public open space refers to spaces that are open and accessible to the public. Examples include parks or community gathering spaces.

- A variety of shared open space is encouraged depending on the development including, but not limited to, parks, courtyards, paseos, etc. The amount of required common open space is determined by development standards within the City's Development Code.
- Design shared open space to be inclusive for all residents so people can interact.
- Locate shared open space in a central location that serves all units.
- Include landscaping with trees, shrubs, and groundcover.
- Provide seating areas and other passive recreation facilities in public open spaces.



Private, common open space, centrally located with adequate landscaping, seating, and other passive recreation opportunities.

Source: Adobe Stock Image

Private Open Space

Private open space refers to spaces that are designated exclusively for residents of the property and include patios, balconies, and amenity spaces. Multi-family developments may include common, private open space that is shared by residents of the multi-family development.

- Design private open space to be used exclusively by a single unit.
- Locate private open space in patios, balconies, decks, or other outdoor spaces attached to individual units.
- Private, common open space in multi-family developments should be centrally located.

Dog Parks

A dog park is a space within a development for residents to take their dogs to run off-leash.

- The park shall be enclosed with a fence and located to minimize sound or waste issues for adjacent residents.
- Seating should be provided inside the dog park.
- Sufficient dog waste stations, including a waste bin and location for waste bags, should be provided.
- Dog parks should include signage that requires the pickup and proper disposal of pet waste.



Enclosed dog park with seating

Source: Adobe Stock Images

Playgrounds

Playgrounds are spaces within a development for children to play and exercise.

- Playgrounds should be designed to accommodate multiple age groups and should provide inclusive opportunities for play. If space permits, this should be through separated play structures in adjacent spaces.
- Multiple types of seating should be provided near and around playgrounds.



Outdoor Playground

Source: Adobe Stock Images



COMMERCIAL

Design Guidelines



COMMERCIAL

Purpose and Intent

The following section of guidelines are applicable to commercial development as defined by the City of Fernley Municipal Code Title 32. The commercial guidelines provide recommendations for retail pad sites and larger connected development sites with in-line retail and/or big box retail. The goal is to create walkable developments that provide connectivity to adjacent land uses.

This Chapter will apply to the following land use categories from the City of Fernley Comprehensive Master Plan:

Table 4. Commercial Categories

Land Use Category	Equivalent Zoning Category
Commercial (C)	C1
	C2
	TC
	PD

This Chapter presents design guidelines on the following topics:

- General Site Design
- Development Type and Design
- Pedestrian Scale Streetscape
- Parks and Open Space

General Site Design

This section provides design guidance for commercial land uses. The intent of this section is to foster the development of vibrant commercial centers with the Area Plans that complement the character of the surrounding community.

Surrounding Context and Connectivity

It is important for future development to consider the surrounding context in order to create a cohesive look and feel for the community. As different sections of the Area Plan develop over time, development should create opportunities for pedestrian and multi-modal connections which will help to seamlessly blend communities and create a more natural interconnectivity of land uses.

- Design buildings to be respectful of adjacent buildings and create transitions of appropriate height and scale when abutting residential or sensitive uses.
- Minimize the bulk of the buildings by including variation in facades, articulation, and multi-story step backs.
- Streets should be designed to run at right angles, forming a grid pattern.
- Provide internal connections to neighboring streets and developments for motor vehicles and pedestrians.
- Design pedestrian connections internal to the development through sidewalks, trails, or connected open space.
- Plan for and accommodate secure on-site bicycle parking.



Variations in building facade and articulation.

Source: Adobe Stock Images

Building Placement

Buildings are often one of the most important defining features within a space. In addition to displaying visually interesting aspects, building forms and placement within an area will define open spaces, walkways, and parking. Given the potential impact in defining a sense of place, it is important to consider building placement and orientation when site planning future development uses within the Area Plan.



Commercial buildings oriented around centralized open space.

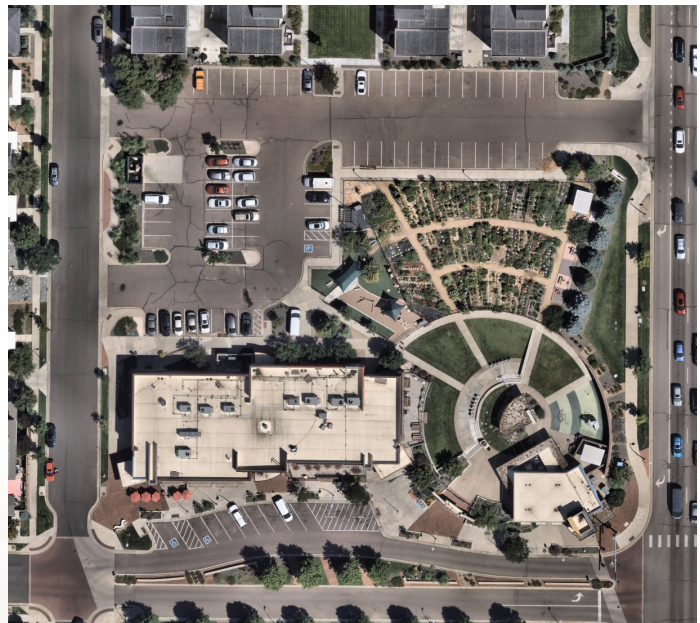
Source: Adobe Stock Images

- Prioritize building orientation around centralized open spaces and amenities.
- Consider orientation in reference to sunlight to promote sustainable energy saving practices and rooftop solar compatibility.
- Locate the buildings close to parking and other amenities.

Parking

Motor vehicle parking should be provided in a manner that meets the needs of the development while minimizing visibility from the street. The number of parking spaces required will be determined by the City's Development Code.

- Locate parking internal to the development or to the side or rear of buildings.
- Provide landscaping to screen the parking from view and provide shade.
- Disperse paved parking areas to the extent possible throughout the project in smaller segmented parking areas rather than creating large parking lots.
- Provide shade structures to reduce heat gain.



Pick up/Drop off and accessible parking located near entrance. Additional parking located behind building frontage.

Source: Nearmap Imagery

Loading/Unloading

If necessary, loading/unloading areas should be provided to meet the needs of the development while minimizing visibility from the street.

- Locate loading/unloading facilities to the side or rear of the building, combining with parking if possible, as detailed in the City of Fernley Municipal Code Title 32.
- Screen loading/unloading areas from public view.
- Ensure loading/unloading areas do not interfere with visitor circulation.



Shared loading area located at the rear of the building.

Source: Nearmap Imagery

Services and Utilities

Services and utilities are a vital aspect of any urban development. They should be located in convenient locations for maintenance and service but should be screened from public view.

- Locate electrical panels and other utilities in a manner that minimizes their visibility from the street.
- Provide access to existing utilities for added connections.
- Locate ancillary facilities within buildings rather than along street-facing facades.
- Provide on-site facilities for trash storage.
- Build trash enclosures with durable materials.
- Screen trash enclosures from public view.

Development Type and Design

Neighborhood Commercial (C1)

Neighborhood commercial is intended for uses that are complementary to surrounding residential uses. This development is intended to provide a buffer between more intensive and less intensive uses or between highways and residential uses.



Seaside, FL

- A.** Neighborhood Commercial Development
- B.** Parking Screened by Building
- C.** Street Trees
- D.** Outdoor Seating
- E.** Centralized Open Space
- F.** Low Density Residential

General Commercial (C2)



Shops of Southlake | Southlake, TX

- A.** General Commercial Development
- B.** Centralized Parking
- C.** Centralized Open Space
- D.** Retail Frontage
- E.** Sidewalk Connections
- F.** Plaza/Seating Areas
- G.** Loading/Services Located in the Rear of Building

Town Center

A Town Center focuses on providing a walkable interconnected environment to adjacent residential communities. This area is intended for uses that provide a variety of services including retail, small-scale office spaces, community centers such as libraries and informal/formal meetings spaces, and a mix of residential housing types. Town Centers typically have multiple retail anchors connected by parks, plazas, and active store frontage.



The Shops at Northfield, Denver CO

- A.** General Commercial Development
- B.** Dispersed Parking Located Behind Buildings
- C.** Activated Open Space
- D.** Anchor Retail Tenant
- E.** Sidewalk Connections
- F.** Grand Entrance to Town Center
- G.** Outdoor Seating

Pedestrian Scale Streetscape

Pedestrian scale streetscape addresses the character of the space generally located between the street edge and façade of adjacent buildings including sidewalks, patios, and amenity zones. These guidelines ensure that well designed and adequate facilities for pedestrians and bicyclists are provided to support a healthier, safer, and more sustainable pedestrian experience.

Active Frontage

It is important to provide engagement between those in the street and those on the ground and upper floors of buildings. This is done when the façade of buildings face and open towards the street. A building's upper floors may contribute to active frontage through windows or balconies. Active frontages provide informal surveillance opportunities and often improve the energy and safety of an area.

- Utilize strategies to articulate buildings such as minor wall offsets, height variation, wall setbacks, and accent lines.
- Provide sidewalks connecting from the street or driveway to building or store entrances.
- Create flexible pedestrian spaces outside of storefronts to allow for increased foot traffic, signage, or outdoor sales. Provide benches and other seating options to improve functionality and social encounters.
- Ensure street furniture, utilities, or other fixtures do not impede access or visibility of storefronts.
- Utilize display windows on the majority of the ground floor retail facades to attract shoppers into the space.
- Where possible, provide stoops or porches to units fronting public spaces and streets.



Articulated, multi-tenant building with sidewalk connecting to entrances, benches, display windows, and pedestrian level lighting.

Source: Adobe Stock Images



Activated street frontage with outdoor patio/seating areas.

Source: Project Team Photography

Bicycle Use

Bicycle parking is an important element in urban design. When done well, it encourages people to ride bikes more often, improving sustainability and public health.

- Avoid bringing bicycle paths through heavily trafficked pedestrian areas.
- Integrate bike racks into the development consistent with the surrounding design.
- Bike racks that double as public art are encouraged.
- Indoor bike storage rooms for workers and visitors with a maintenance station are encouraged.
- Locate bike racks near multi-use trails.



Artistic bike rack integrated into the surrounding development.

Source: Adobe Stock Images

Streetscape Lighting

Streetscape lighting illuminates the pedestrian realm and can reinforce the character and vibrancy of an area. It increases pedestrian safety through visibility and defines the street edge making it easier for vehicles, cyclists, and pedestrians to navigate through the corridor.

- Pedestrian lighting should be integrated into streetscape design elements such as branded signage, furnishings, paving systems, railings, walls, or bollards.
- Pedestrian lighting should improve visibility of pedestrians and be designed to minimize light pollution.
- Pedestrian lighting can be placed on the same pole as roadway and streetscape lighting



Source: Adobe Stock Images

Landscaping and Stormwater Management

Trees and landscaping provide a range of benefits for urban development. Landscaping assists in stormwater management, pollution mitigation, and softens the built environment, making it more inviting to pedestrians. Tree canopies can provide shade, reducing heat islands while also providing natural safety barriers for pedestrians along street frontage.

- Provide street trees to increase shading in public spaces, as well as other landscaping elements such as sidewalks and walkways.
- Avoid placing trees where the canopy may block visibility of signage for stores.
- Design landscaping to be attractive and consistent throughout the development.
- Landscaping should complement the architectural style of adjacent development.
- Landscaping should prioritize drought tolerant plants to promote sustainable water usage.
- Provide enhanced landscaping near parking lots, driveways, and other vehicular areas to signalize entrances and improve visual aesthetics.
- Stormwater runoff should be directed towards landscaped areas where possible. Tolerant plants and trees should be incorporated in these areas.
- Landscaped areas should be coordinated with stormwater management to create multi-use systems.



Attractive, consistent landscaping throughout commercial development with walkways integrated.

Source: Adobe Stock Images

Parks and Open Space

This section provides guidance for open spaces associated with commercial development. Broader guidelines are included in Section 6: Parks and Open Space regarding larger open space development.

Parks and Open Space is generally defined as spaces within a city or defined area which are open and accessible to the public. Examples of these spaces may be streetscape areas along walkable corridors, parks, natural open space, or community gathering spaces. These design guidelines are intended to ensure that future projects provide and maintain enjoyable and usable open space.

Public Open Space

Public open space refers to spaces that are open and accessible to the public. Commercial open space examples include parks, plazas, or other community gathering spaces.

- A variety of shared open space is encouraged depending on the development including, but not limited to, parks, courtyards, paseos, etc. Design open space for all visitors so people can interact.
- Locate open space in a central location that serves all tenants.
- Include landscaping with trees, shrubs, and groundcover.
- Provide seating areas and other passive recreation facilities.
- A variety of seating types is encouraged including, but not limited to, benches, movable chairs, ledges, steps, etc.



Centrally located open space with a range of seating types designed so people can interact.

Source: Adobe Stock Images

Placemaking

Placemaking is the process of creating high-quality urban environments that people want to live, work, and play in. While every urban environment is different, there are some shared design elements that help in the process of placemaking.

- Design public signage in a coordinated manner that complements the development's character.
- Incorporate elements that create a sense of arrival such as high-quality architecture, entry monuments, water features, and enhanced landscaping.
- Establish gateways at prominent locations with elements easily visible to pedestrians and vehicles.
- Public art should be incorporated throughout the development and can be ornamental and interactive.



Bench seating and enhanced landscaping can act as a gateway to commercial development for pedestrians.

Source: Adobe Stock Images



Branded signage to enhance character.

Source: Adobe Stock Images

Playgrounds

Playgrounds are activated open spaces within a development for children to interact, play, and exercise.

- Playgrounds should include structures appropriate for multiple age groups and should provide inclusive opportunities for play.
- Various types of seating should be provided near and around playgrounds.
- Landscaping and trees should be provided near seating areas for shade and comfort.
- Where possible, locate playgrounds within large open spaces which are connected to storefronts to enhance the activation of the spaces.
- Playgrounds should include structures appropriate for multiple age groups and should provide inclusive opportunities for play. Varied types of seating should be provided near and around playgrounds.



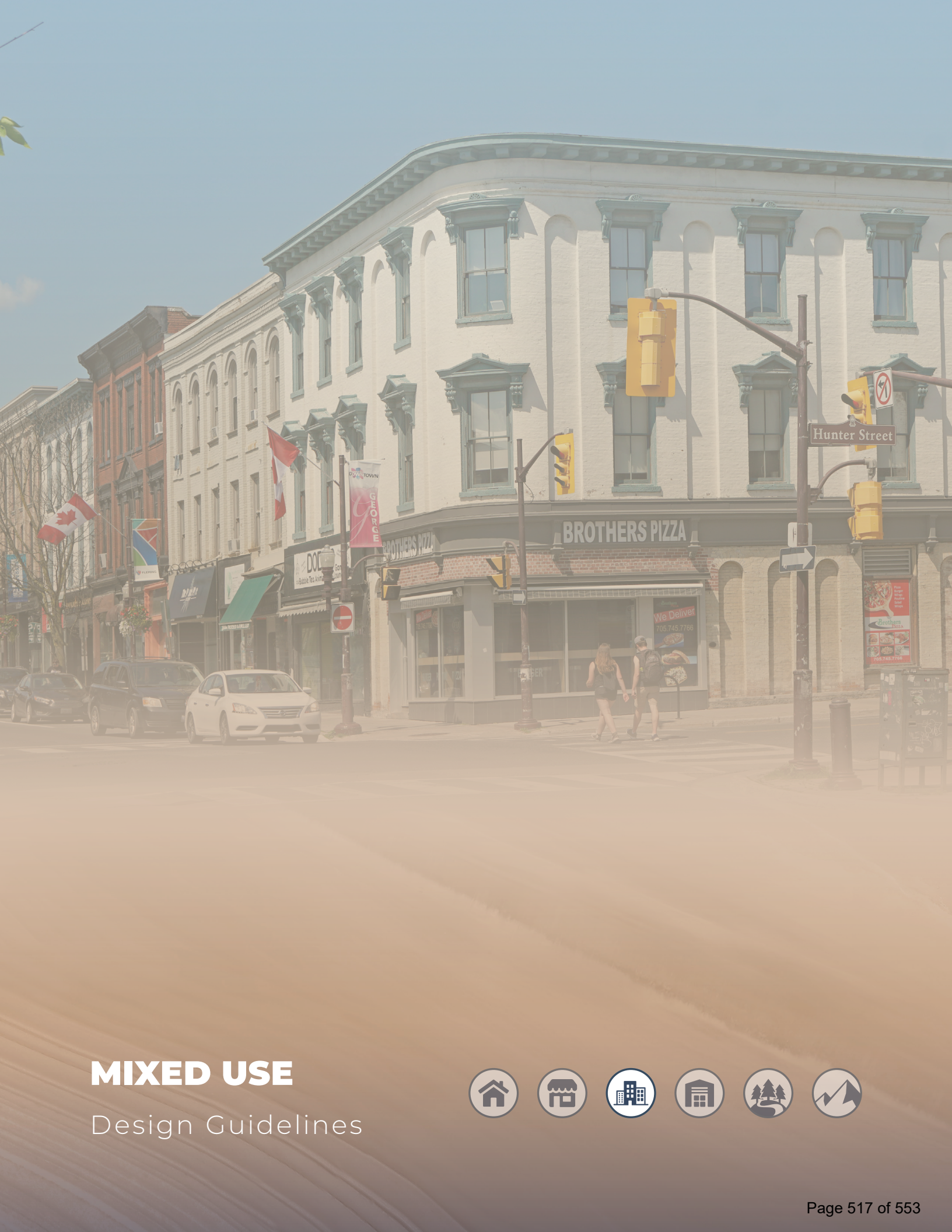
Varied seating types surround the playground with activities multiple age groups can enjoy.

Source: Adobe Stock Images



Play structures.

Source: Adobe Stock Images



MIXED USE

Design Guidelines



MIXED-USE

Purpose and Intent

The following section of guidelines are applicable to mixed use development as defined by the City of Fernley Municipal Code Title 32. The mixed-use guidelines provide recommendations to create high quality developments that provide a variety of vertically or horizontally integrated, pedestrian-friendly uses such as retail, office, and residential.

This Chapter will apply to the following land use categories from the City of Fernley Comprehensive Master Plan:

Mixed-Use

Mixed Use development encompasses the following zoning designations of the Fernley Municipal Code:

Table 5. Mixed-Use Categories

Land Use Category	Equivalent Zoning Category
Suburban Mixed Use (SMU)	MDR14 MF30 MU C1 PD
Mixed Employment (ME)	EC I MF30 MU PD

This Chapter presents design guidelines on the following topics:

- General Site Design
- Development Type and Design
- Pedestrian Scale Streetscape
- Parks and Open Space

General Site Design

The design elements in this section provides design guidance for mixed-use land uses. The goal is to create cohesive neighborhood character where residents can live, work, and play.

Surrounding Context and Connectivity

It is important for future development to consider the surrounding context in order to create a cohesive look and feel for the community. As different sections of the Area Plan develop over time, development should create opportunities for pedestrian and multi-modal connections which will help to seamlessly blend communities and create a more natural interconnectivity.

- Streets should be designed to run at right angles, forming a grid pattern.
- Design buildings to be respectful of adjacent buildings and create transitions of appropriate height and scale.
- Minimize the bulk of the buildings by including horizontal/vertical stepbacks and/or variations in roof profile.
- Provide internal connections to neighboring streets and developments for motor vehicles and pedestrians.
- Establish rights-of-way for future roadway planning.
- Design pedestrian connections internal to the development through sidewalks, trails, or connected open space.
- Design secure on-site bicycle parking.



Slight variations in building heights and roof profile with on-street parking.

Source: Adobe Stock Images



RRFB (Rapid Rectangular Flashing Beacon) and bulb outs to enhance pedestrian safety and increase surrounding aesthetics.

Source: Project Team Photography

Building Placement

Buildings are often one of the most important defining features within a space. In addition to displaying visually interesting aspects, building forms and placement within an area will define open spaces, walkways, and parking. Given the potential impact in defining a sense of place, it is important to consider building placement and orientation when site planning future development uses within the Area Plan.

- Prioritize building orientation around centralized open spaces and amenities.
- Consider orientation in reference to sunlight to promote sustainable energy saving practices and rooftop solar compatibility..
- Locate buildings close to the right-of-way with direct access to sidewalks, on-street parking, and other amenities.



Mixed-use buildings oriented around centralized open space.

Source: Adobe Stock Images

Parking

Motor vehicle parking should be provided in a manner that meets the needs of the development while minimizing visibility from the street. The number of parking spaces required will be determined by the development standards within the City's Development Code.

- Locate parking, which may include surface and/or structured parking, internal to the development or to the side or rear of buildings.
- Provide landscaping to screen the parking from view and provide shade.
- Disperse paved parking areas to the extent possible throughout the project in smaller segmented parking areas rather than creating large parking lots.
- Provide shade structures to reduce heat gain.



Parking located on-street.

Source: Adobe Stock Images

Loading/Unloading

If necessary, loading/unloading areas should be provided to meet the needs of the development while minimizing visibility from the street.

- Locate loading/unloading facilities to the side or rear of the building, combining with parking if possible, as detailed in the City of Fernley Municipal Code Title 32.
- Screen loading/unloading areas from public view.
- Ensure loading/unloading areas do not interfere with visitor circulation.

Services and Utilities

Services and utilities are a vital aspect of any urban development. They should be located in convenient locations for maintenance and service but should be screened from public view.

- Locate electrical panels and other utilities in a manner that minimizes their visibility from the street.
- Provide access to existing utilities for added connections.
- Locate ancillary facilities within buildings rather than along street-facing facades.
- Provide on-site facilities for trash storage.
- Build trash enclosures with durable materials.
- Screen trash enclosures from public view.



Trash enclosures match the architectural style of the building and screened from public view.

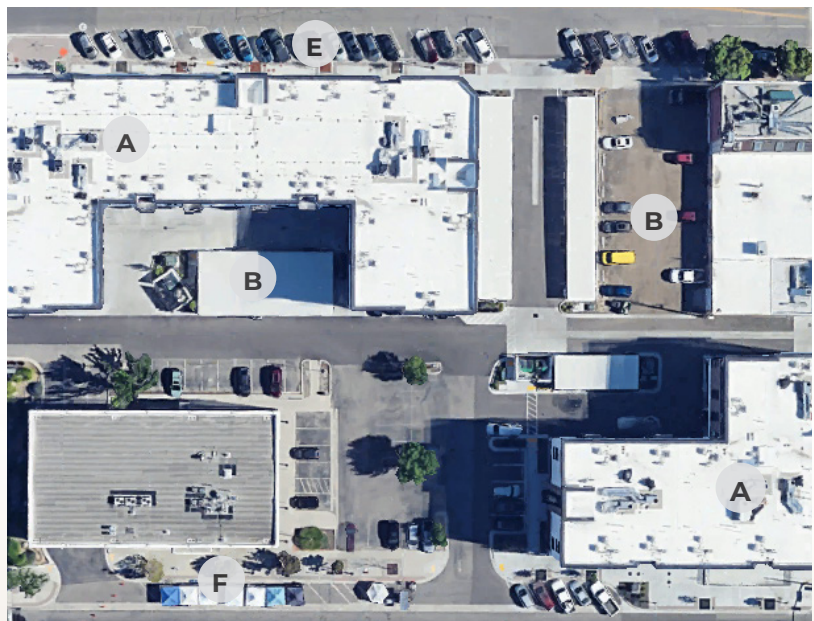
Source: Adobe Stock Images

Development Type and Design

Suburban Mixed Use

Suburban Mixed Use is intended to encourage a broad mix of uses including high-density residential in a suburban context within proximity to services and employment.

- A.** Suburban Mixed Use Development
- B.** Parking Integrated into the Building
- C.** Upper Floor Residential Units
- D.** Ground-Floor Commercial Space
- E.** On-Street Parking
- F.** Outdoor Seating Areas



Mixed Employment

Mixed Employment provides for concentrated areas of employment and supporting uses, such as small-scale commercial uses and/or residential uses.

- A.** Mixed Employment Development
- B.** Parking to the Side of the Development
- C.** Upper Floor Office Space
- D.** Ground Floor Commercial Space
- E.** On-Street Parking



Pedestrian Scale Streetscape

Pedestrian scale streetscape addresses the character of the space generally located between the street edge and façade of adjacent buildings including sidewalks, patios, and amenity zones. These guidelines ensure that well designed and adequate facilities for pedestrians and bicyclists are provided to support a healthier, safer, and more sustainable pedestrian experience.

Active Frontage

It is important to provide engagement between those in the street and those on the ground and upper floors of buildings. This is done when the façade of buildings face and open towards the street. A building's upper floors may contribute to active frontage through windows or balconies. Active frontages provide informal surveillance opportunities and often improve the energy and safety of an area.

- Utilize strategies such as minor wall offsets, height variation, wall setbacks, and accent lines to articulate buildings.
- Provide sidewalks connecting from the street or driveway to building or unit entrances.
- Provide benches and other seating options to improve functionality and social encounters.
- Utilize display windows rather than mirrored windows to allow outsiders to look in.
- Where possible, provide stoops or porches to units fronting public spaces and streets.



Mixed-Use buildings provide activated ground floor retail.

Source: Adobe Stock Images

Bicycle Use

Bicycle parking is an important element in urban design. When done well, it encourages people to ride bikes more often, improving sustainability and public health.

- Integrate bike racks into the development consistent with the surrounding design.
- Bike racks that double as public art are encouraged.
- Indoor bike storage rooms with maintenance station are encouraged.
- Locate bike racks near multi-use trails.



Indoor bicycle storage room at a mixed-use building.

Source: Adobe Stock Images

Streetscape Lighting

Streetscape lighting illuminates the pedestrian realm. It allows pedestrians to see where they are going and also makes it easier for drivers to see pedestrians.

- Pedestrian lighting should be integrated into streetscape design elements such as branded signage, furnishings, paving systems, railings, walls, or bollards.
- Pedestrian lighting should improve visibility of pedestrians and be designed to minimize light pollution.
- Pedestrian lighting can be placed on the same pole as roadway lighting to reduce the number of poles within a project.



Pedestrian Scale Lighting.

Source: Adobe Stock Images

Landscaping and Stormwater Management

Trees and landscaping provide a range of benefits for urban development. Landscaping assists in stormwater management, pollution mitigation, and softens the built environment, making it more inviting to pedestrians.

- Provide street trees to increase shading in public spaces, as well as other landscaping elements such as sidewalks and walkways.
- Design landscaping to be attractive and consistent throughout the development.
- Provide enhanced landscaping near parking lots, driveways, and other vehicular areas to signalize entrances and improve visual aesthetics.
- Stormwater runoff should be directed towards landscaped areas where possible. Tolerant plants and trees should be incorporated in these areas.
- Landscaped areas should be coordinated with stormwater management to create multi-use systems.



Bio-retention basin to treat stormwater runoff and enhance streetscape.

Source: Adobe Stock Images

Parks and Open Space

This section provides guidance for open spaces associated with mixed-use development. Broader guidelines are included in Section 6: Parks and Open Space regarding larger open space development.

Parks and Open Space is generally defined as spaces within a city or defined area which are open and accessible to the public. Examples of these spaces may be streetscape areas along walkable corridors, parks, natural open space, or community gathering spaces. These design guidelines are intended to ensure that future projects provide and maintain enjoyable and usable open space.

Public Open Space

Public open space refers to spaces that are open and accessible to the public. Examples include parks or community gathering spaces.

- A variety of shared open space is encouraged depending on the development including, but not limited to, parks, courtyards, paseos, etc.
- Design shared open space for all visitors so people can interact.
- Locate shared open space in a central location that serves all tenants.
- Include landscaping with trees, shrubs, and groundcover.
- Provide seating areas and other passive recreation facilities.
- A variety of seating types is encouraged including, but not limited to, benches, movable chairs, ledges, and steps.



Central patio space designed to serve all tenants.

Source: Adobe Stock Images

Private Open Space

Private open space refers to spaces that are designated exclusively for residents of the property and include patios, balconies, and other outdoor spaces. Mixed-Use developments may include common, private open space that is shared by residents of the multi-family development.

- Design private open space to be used exclusively by a single unit.
- Locate private open space in patios, balconies, decks, or other outdoor spaces attached to individual units.
- Private, common open space in multi-family developments should be centrally located.



Private balcony space to active street frontage.

Source: Adobe Stock Images

Placemaking

Placemaking is the process of creating high-quality urban environments that people want to live, work, and play in. While every urban environment is different, there are some shared design elements that help in the process of placemaking.

- Design public signage in a coordinated manner that complements the development's character.
- Incorporate elements that create a sense of arrival such as high-quality architecture, water features, enhanced landscaping, etc.
- Public art should be incorporated throughout the development and can be ornamental and interactive.



Public art and coordinated signage complement the development's character.

Source: Adobe Stock Images



INDUSTRIAL

Design Guidelines



INDUSTRIAL

Purpose and Intent

The following section of guidelines are applicable to industrial development as defined by the City of Fernley Municipal Code Title 32. The industrial guidelines provide recommendations to create an environment where industrial activities may occur with minimum impact on the surrounding land uses and the natural environment.

This chapter will apply to the following land use categories from the City of Fernley Comprehensive Master Plan:

Table 7. Industrial Categories

Land Use Category	Equivalent Zoning Category
Industrial (I)	I PD

This Chapter presents design guidelines on the following topics:

- General Site Design
- Development Type and Design
- Pedestrian Scale Streetscape
- Parks and Open Space

General Site Design

Surrounding Context and Connectivity

It is important for future development to consider the surrounding context in order to create a cohesive look and feel for the community. As different sections of the Area Plan develop over time, development should create opportunities for pedestrian and multi-modal connections which will help to seamlessly blend communities and create a more natural interconnectivity.

- Streets should be designed to form loops and cul-de-sacs. Design buildings to be respectful of adjacent buildings and create transitions of appropriate height and scale.
- Minimize the bulk of the buildings by including horizontal/vertical stepbacks and/or variations in roof profile.
- Provide internal connections to neighboring streets and developments for motor vehicles and pedestrians.
- Establish rights-of-way for future road planning.



Industrial building with horizontal/vertical stepbacks.

Source: Adobe Stock Images

Building Placement

Buildings are often one of the more important defining features within a space. In addition to displaying visually interesting aspects, building forms and placement within an area will define open spaces, walkways, and parking. Given the potential impact in defining a sense of place, it is important to consider building placement and orientation when site planning future development uses within the Area Plan.

- Consider orientation in reference to sunlight to promote sustainable energy saving practices and rooftop solar compatibility.
- Locate the buildings close to parking and other amenities.
- Locate buildings behind employee parking areas and landscape buffers to reduce the scale of building frontage to the street.



Parking and walkways located near entrances with landscape buffers.

Source: Adobe Stock Images

Services and Utilities

Services and utilities are a vital aspect of any urban development. They should be located in convenient locations for maintenance but should be screened from public view.

- Locate electrical panels and other utilities in a manner that minimizes their visibility from the street.
- Provide access to existing utilities for added connections.
- Locate ancillary facilities within buildings rather than along street-facing facades.
- Provide on-site facilities for trash storage.
- Build trash enclosures with durable materials.
- Screen trash enclosures from public view.



Electrical equipment located out of sight and within secured facilities

Source: Adobe Stock Images

Development Type and Design

Industrial

Industrial is intended to create and preserve areas for intensive activities and land uses that have the most potential for impacting adjacent land uses and infrastructure. This use should be in areas with access to roadway and/or railway transportation systems.



- A. Industrial Development
- B. Loading/Unloading Area Behind Building
- C. Parking Dispersed Throughout Development
- D. Landscaping to Screen Parking
- E. Connection to Neighboring Development

Circulation

Parking

Motor vehicle parking should be provided in a manner that meets the needs of the development while reducing the building frontage to the street. The number of parking spaces required will be determined by the development standards within the City's Development Code.

- Locate parking, around the perimeter of the development to reduce the scale of the buildings.
- Provide landscaping to screen the parking from view and provide shade.
- Locate parking in a manner to minimize conflicts with truck driveways, storage, loading, and other operational areas.



Parking located around the perimeter of the site.

Source: Adobe Stock Images

Loading/Unloading

Loading/Unloading areas should be provided to meet the needs of the development while minimizing visibility from the street.

- Locate loading/unloading facilities to the side or rear of the building.
- Screen loading/unloading areas from public view.
- Ensure loading/unloading areas do not interfere with visitor circulation.
- Double load buildings when possible to provide noise screening and more efficient layouts



Loading facilities to the side of the building screened from public view.

Source: Adobe Stock Images

Pedestrian Scale Streetscape

Pedestrian scale streetscape addresses the character of the space generally located between the street edge and façade of adjacent buildings including sidewalks and amenity zones. These guidelines ensure that well designed and adequate facilities for pedestrians and bicyclists are provided to support a healthier, safer, and more sustainable pedestrian experience.

Active Frontage

It is important to provide engagement between those in the street and those on the ground and upper floors of buildings. This is done when the façade of buildings face and open towards the street. Active frontages in industrial contexts can often improve the energy and safety of an area. Even for developments that do not typically experience high pedestrian traffic, employees of industrial manufacturing and users of surrounding land benefit from pedestrian infrastructure and visual interest integrated into the façades of industrial buildings.

- Utilize strategies such as minor wall offsets, height variation, wall setbacks, and accent lines to articulate buildings.
- Provide sidewalks connecting from the street or driveway to building or unit entrances.

Site Lighting

Site lighting illuminates the pedestrian realm. It allows pedestrians to see where they are going and also makes it easier for drivers to see pedestrians.

- Integrate exterior lighting that is architecturally compatible with the building style, materials, and colors.
- Lighting should be provided to illuminate parking areas and pedestrian walkways.
- Design exterior lighting to point downward to avoid light spillover onto neighboring properties.

Landscaping and Stormwater Management

Trees and landscaping provide a range of benefits for urban development. Landscaping assists in stormwater management, pollution mitigation, and softens the built environment, making it more inviting to pedestrians.

- Provide street trees and other landscaping elements in public spaces, including sidewalks and walkways, to increase shading.
- Design landscaping to be attractive and consistent throughout the development.
- Provide enhanced landscaping near parking lots, driveways, and other vehicular areas to signalize entrances and improve visual aesthetics.
- Stormwater runoff should be directed towards landscaped areas where possible. Tolerant plants and trees should be incorporated in these areas.
- Landscaped areas should be coordinated with stormwater management to create multi-use systems.



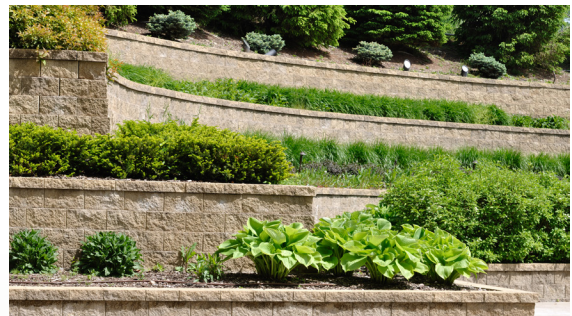
Street trees and other landscaping around sidewalks.

Source: Adobe Stock Images

Walls and Fences

The design of walls and fences should be carefully considered to ensure the desired aesthetic is achieved. Wall and fence height requirements will be determined by the development standards within the City's Development Code.

- Design walls and fences to be an attractive part of the project with materials compatible to the exterior building materials of the project.
- Utilize landscaping to break up large, uninterrupted walls and/or fences.
- Outdoor storage should be screened from public view behind a solid fence or wall.



Landscaping integrated within retaining walls.

Source: Adobe Stock Images

Parks and Open Space

This section provides guidance for open spaces associated with industrial development. Broader guidelines are included in Section 6: Parks and Open Space regarding larger open space development.

Open Space Placement

Open space in an industrial development refers to outdoor spaces where employees can get fresh air and natural light.

- Locate open space in a central location that serves all tenants.
- Design open space that is easily accessible to employees.
- Include landscaping with trees, shrubs, and groundcover.
- Provide seating areas and other passive recreation facilities.



Industrial building landscaping with trees, shrubs, and groundcover.



Employee break seating area with shade structure.

Source: Adobe Stock Images

PARKS AND OPEN SPACE

Design Guidelines



PARKS AND OPEN SPACE

Purpose and Intent

The following section of guidelines are applicable to park and open space development as defined by the City of Fernley Municipal Code Title 32. Quality open space should provide the opportunity for users to interact in small to large groups. Each space should have a unique quality and be located within reasonable walking distance of the designated user group it serves.

According to the City of Fernley Comprehensive Master Plan, there are five (5) park designations: Neighborhood, Community, Sports Complex, Special Use Properties, and Regional. There are also five (5) open space designations: Greenways, Landscaped Areas, Preservation, Wildlife Corridors, and Resource Conservation (Community Separators/Agricultural Views).

This chapter will apply to the following land use categories from the City of Fernley Comprehensive Master Plan:

Land Use Category	Equivalent Zoning Category
Open Space & Parks (OSP)	OSP
	PD

This Chapter presents design guidelines on the following topics:

- General Site Design
- Development Type and Design
- Pedestrian Scale Streetscape
- Parks and Open Space

General Site Design

The design elements in this section provide design guidance for parks and open space. The goal is to create cohesive and sustainable opportunities for residents to enjoy parks and open space while providing complimentary land use transitions and connection opportunities to adjacent developments.

Surrounding Context and Connectivity

- It is important for future development to consider the surrounding context in order to create a cohesive look and feel for the community. As different sections of the Area Plan develop over time, development should create opportunities for pedestrian and multi-modal connections which will help to seamlessly blend communities and create a more natural interconnectivity. Streets should be designed to run at right angles, forming a grid pattern.
- Provide internal connections to neighboring streets and developments for motor vehicles and pedestrians.
- Design pedestrian connections internal to the development through sidewalks, trails, or connected open space.
- Design secure on-site bicycle parking at all parks.
- Provide bicycle repair stands near bicycle parking and/or multi-use trails.



Public bicycle repair stand with tools and pump in a park.

Source: Adobe Stock Images

Parking

Motor vehicle parking should be provided in a manner that meets the needs of the development while minimizing visibility from the street. The number of parking spaces required will be determined by the development standards within the City's Development Code.

- Provide landscaping to screen the parking from view and provide shade.
- Disperse paved parking areas to the extent possible throughout the project in smaller segmented parking areas rather than creating large parking lots.
- Provide shade structures to reduce heat gain.



Landscaped parking area.

Source: Adobe Stock Images

Services and Utilities

Services and utilities are a vital aspect of any urban development. They should be located in convenient locations for maintenance but should be screened from public view.

- Locate electrical panels and other utilities in a manner that minimizes their visibility from the street.
- Provide on-site facilities for trash storage.
- Provide trash cans throughout the site and along walkways for visitors to utilize.
- Build trash enclosures with durable materials.
- Screen trash enclosures from public view.



A trash can located along a paved walkway in a park.

Source: Adobe Stock Images

Development Type and Design

1. Neighborhood Park

Neighborhood parks are areas for both active and passive recreational and social activities, such as multi-purpose field games, court games, playground apparatus, picnicking, etc. On-street parking is typically adequate. Ideally, these parks are linked by pathways and sidewalks and respond to the need for basic recreational amenities close to peoples' homes, ideally located adjacent to schools.



Teal Pedals Park, North Las Vegas, NV

- A.** Neighborhood Park
- B.** Adequate On Street Parking
- C.** Connection to Multi-Use Pathway
- D.** Shaded Playground
- E.** Shaded Picnic Tables
- F.** Proximity to Residential Neighborhoods

2. Community Park

Community Parks are areas for community-wide activities for active and passive recreation such as programmed sports facilities, informal/formal fields, or large play structures. These may be an area of natural quality for outdoor recreation such as walking, picnicking, or viewing. Portions of the site should have gentle topography to accommodate fields and open turn areas. Special site features such as streams, lakes, reservoirs, rock outcrops, or historic sites may add to the park's character. Parking should be provided off-street or shared with other uses.



Huckleberry Park, Las Vegas, NV

- A.** Community Park
- B.** Off-Street Parking
- C.** Large Play Structure
- D.** Sports Facility
- E.** Passive Open Space
- F.** Natural and Paved Walking Paths

3. Sports Complex

A Sports Complex is an area for community-wide programmed and non-programmed sports in higher intensity use facilities. Limited areas should be available for passive recreation uses that appeal to the broader community. The majority of the site should be relatively flat to accommodate active sports fields and other facility development, and located away from residential areas to avoid traffic, light, and noise conflicts. These areas should provide a mix of facilities to accommodate a wide range of activities such as a playground, tennis/pickle ball courts, skate parks, and passive open space.



Mountain Ridge Park, Las Vegas, NV

- A.** Sports Complex
- B.** Active Sports Fields
- C.** Play Structure
- D.** Centrally located parking
- E.** Secondary Sports Activation

4. Special Use Properties

Special Use Properties provide areas for specific community needs, including performance areas, civic plazas, skateboard parks, or other specialized activity or recreation interests. Site characteristics vary based on requirements of the park purpose. The location of special use properties has to be carefully planned to ensure that access, traffic control, lighting issues, and noise issues do not negatively impact neighborhoods.



Sun Valley Community Park, Reno, NV

- A.** Special Use Property
- B.** Neighborhood Center
- C.** Specialized Activity Space (BMX Track)
- D.** Skateboard Park
- E.** Active Sports Field
- F.** Centrally Located Parking

5. Regional Park

Regional Parks provide areas of natural or ornamental quality for outdoor recreation such as picnicking, horseback riding, fishing, swimming, camping, and trail uses. The emphasis is on achieving a balance between resource protection and public use. Diverse or unique natural resources, such as lakes, streams, and topography add to the park's character.



Floyd Lamb Park, Las Vegas, NV

- A.** Regional Park
- B.** Fishing Ponds
- C.** Equestrian/Hiking Trails
- D.** Mountain Bike Trails
- E.** Paved Walking/Jogging Trail
- F.** Restored Historic Hay Barn
- G.** Pedestrian Connection to Neighborhoods

Open Space Development Type

Greenways

Greenways are vacant but in the path of urbanization in the community or adjacent to existing and planned trail facilities. Site plans should be reviewed for sensitivity to open space opportunities associated with the specific tract and the chance to provide trail access to destinations in and around the community. Recreational uses may be public or private and include paved and natural surface trails. Facilities may include restrooms, bike stations, and bike racks.

Landscaped Areas

Landscaped Areas provide areas of enhanced landscape character along rights of ways or in places of community importance, such as a cemetery. Landscaped Areas may be used for pedestrian connectivity, but no facilities are located within Landscaped Areas.

Preservation

Preservation areas provide protection of areas with fragile environmental and ecological conditions, areas with irreplaceable wildlife habitats, and areas which are subject to flood hazards. Opportunities for nature-oriented, outdoor recreation may be limited to protect the resource. This generally corresponds to corridors along rivers and drainages as well as the bluffs area. Continuity and connectivity of lands should be emphasized. Recreational uses vary based on the sensitivity of the land but may include nature study and observation, picnicking, hiking, and fishing. Facilities may include parking, nature centers, multi-purpose trails, restrooms, bike stations, and bike racks.

Wildlife Corridors

Wildlife Corridors provide a barrier-free travel route which animals follow during daily, periodic, or seasonal movements. These corridors may remain in private ownership. Recreational uses are limited and include seasonal watchable wildlife opportunities, bird watching, and educational activities that do not interfere with wildlife activities. No facilities are to be built on Wildlife Corridors.

Resource Conservation (Community Separators/Agricultural Views)

Resource Conservation areas separate developing portions of the city. These may also be in agricultural production or mineral extraction. These areas are strategically located, contributing to the open space feeling of the area, including important viewsheds. Where possible, these lands should continue to be working lands serving as economic assets. They will likely remain in private ownership and be conserved through agricultural or conservation easements. Recreational uses vary but, in most cases, public access will be prohibited. No facilities are to be built on Resource Conservation land.

Design

Features and Amenities

Parks and Open Space should utilize a range of features and amenities that attract varying types of recreation activities at various times of the day.

- Provide opportunities for active and passive recreation.
- Provide benches and other forms of seating throughout the parks and along walkways.
- Provide shade for seating through trees and/or shade structures where possible.
- Incorporate existing unique or significant natural or historical elements in proposed parks such as streams, lakes, reservoirs, rock outcrops, or historic sites where possible.



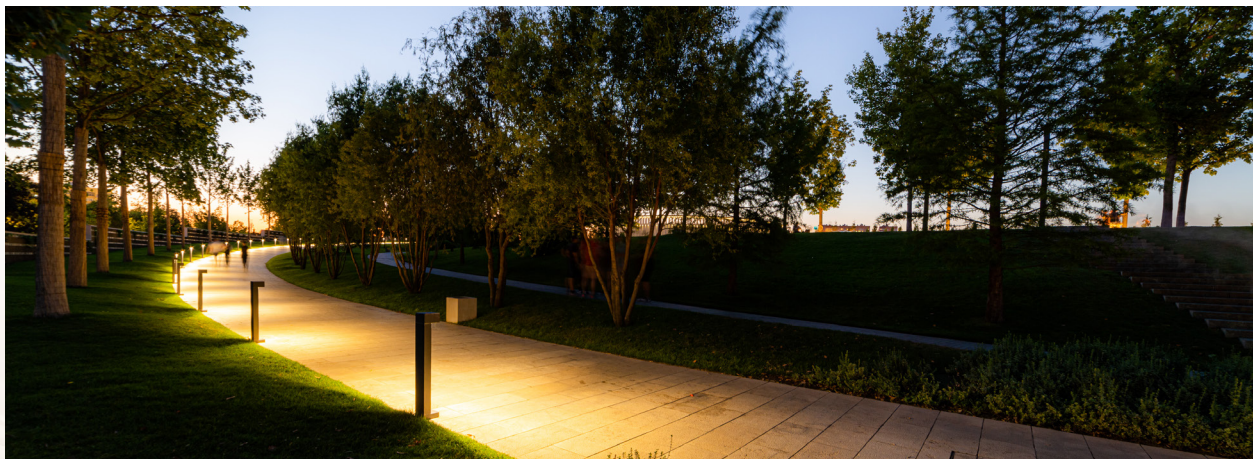
A range of amenities providing opportunities for active and passive recreation.

Source: Adobe Stock Images

Site Lighting

Site lighting illuminates the pedestrian realm. It allows pedestrians to see where they are going and also makes it easier for drivers to see pedestrians.

- Provide pedestrian-scaled lighting in parks and along walkways to promote public safety and security.
- Utilize lighting fixtures to avoid light spillover onto neighboring properties.



Pedestrian-scaled lighting and shade trees along walkway to increase safety and comfort.

Source: Adobe Stock Images

Landscaping and Stormwater Management

Trees and landscaping provide a range of benefits for urban development. Landscaping assists in stormwater management, pollution mitigation, and softens the built environment, making it more inviting to pedestrians.

- Provide trees with large canopies to provide more shade.
- Provide enhanced landscaping near parking lots, driveways, and other vehicular areas to signalize entrances and improve visual aesthetics.
- Landscaped areas should be coordinated with stormwater management to create multi-use systems.



TRIBAL FERNLEY

Design Guidelines



TRIBAL

Purpose and Intent

The following section of guidelines are applicable to land abutting Tribal Lands as defined by the City of Fernley Municipal Code Title 32. Tribal Lands are properties within the City’s corporate boundary but not within the City’s jurisdiction. Proposed land use changes occurring adjacent to Tribal properties will require coordination with the Tribe’s designated planning representative.

This Chapter will apply to the following land use categories from the City of Fernley Comprehensive Master Plan:

Table 8. Tribal Land Use

Land Use Category	Equivalent Zoning Category
Tribal (T)	N/A

This Chapter presents design guidelines on the following topics:

- General Site Design
- Coordination

General Site Design

Surrounding Context

It is important for future development to consider the surrounding context in order to create a cohesive look and feel for the community. As different sections of the Area Plan develop over time, development should create opportunities for pedestrian and multi-modal connections which will help to seamlessly blend communities and create more natural interconnectivity.

- Provide pedestrian and vehicular connections to existing and future developments.
- Pathways should be provided to adjacent developments through natural corridors and/or other trails or sidewalk systems. These connections shall be stubbed out to the edge of the property for future connections.
- Provide a 100-foot landscaped buffer between development and abutting Tribal Lands. Recreational uses should be limited within the landscaped buffer but may include paved or natural trail connections where applicable.
- Bike racks and benches may be provided along paved or natural trails.



Paved trail within landscape buffer.

Source: Adobe Stock Images

Coordination

The developer shall coordinate with the Tribe's designated planning representative for any proposed land use change or development occurring adjacent to Tribal properties.