



N E V A D A

AGENDA
Regular Meeting
Planning Commission

Wednesday, September 10, 2025 • 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. STAFF REPORTS

- 2.1. (For Possible Action) Presentation by Chris Molina regarding the management of SF6 Zoning and its consequences.**

3. 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

- 3.1. (For Possible Action) Discussion and possible action regarding the First Amendment to the Red Hawk Ranch Development Agreement (Bill #368, DA20002-AMD1) submitted by Wood Rodgers, Inc. on behalf of Red Hawk Ranch LLC, Series B and DB-BB Investments I, LCC to request the following changes: 1) incorporate all property owners and parcels into the agreement, 2) extend the expiration date of all applicable tentative subdivision maps, 3) establish the framework for a future Special Assessment District, 4) allow an on-site density transfer, and 5) relocate the community park. The Red Hawk Ranch Development Agreement, as amended, encompasses four (4) parcels totaling approximately 161.09 acres in area (APNs 021-041-07, -08, -09, -10).**
- 3.2. (For Possible Action) Discussion and possible action regarding concurrent requests for a Zoning Map Amendment (ZMA25001) and Tentative Subdivision Map (TSM25001) from Wood Rodgers, Inc. on behalf of Genica Clover Ranch, LLC, rezoning six (6) parcels containing approximately 24.72 acres from RR½ (Rural Residential, ½-acre minimum) and RR5 (Rural Residential, 5-acre minimum) to SF6 (Single Family, 6000-square foot minimum) and creating a 105-lot single-family residential subdivision generally located between Farm District Road to the south, Langdon Street to the north, Winnie Lane to the west, and Nevada Pacific Boulevard to the east (APNs 021-331-15, -19, -20, -22, -29, and -38).**
- 3.3. (For Possible Action) Discussion and possible action regarding Bill #367 associated with a Zoning Map Amendment request (ZMA25002) from the City of Fernley rezoning one parcel containing approximately 23.19 acres generally located at 2305 Farm District Road from SF20 (Single Family, 20,000-square foot minimum) to OSP (Open Space and Parks) to bring the site into conformance with the Comprehensive Master Plan land use designation of Open Space and Parks (OSP) (APN 021-303-16).**
- 3.4. (For Possible Action) Discussion and possible action regarding a Comprehensive Master Plan Amendment request (MPA25003) from the City of Fernley to adjust the Comprehensive Master Plan land use designation for an approximately 2.29-acre parcel located at 60 Sage Street from Low Density Residential (LDR) to Commercial (C) for consistency with the existing zoning designation of C2 (General Commercial) and for consistency with past Master Plan Amendments for this site (APN 020-272-01).**

4. 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.)

5. 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.)

5.1. Update on City Council actions from August 20, 2025, and September 3, 2025.

5.2. General Planning Department updates and announcements

6. ADDRESS REQUEST(S) FOR FUTURE AGENDA ITEMS

7. PUBLIC FORUM

8. ADJOURNMENT

Next Meeting: October 8th @ 5pm

**MINUTES OF THE
FERNLEY PLANNING COMMISSION MEETING
AUGUST 13, 2025**

Chair 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, Commissioner Jacob VanderHeiden, Commissioner Robert Flores, Commissioner Tessa Garvin, Commissioner Julianne Holt (Zoom), Commissioner Barry Williams Sr., City Attorney Aaron Mouriten, Deputy City Manager Lydia Altick, Deputy City Clerk Brenda Gosser, Administrative Specialist I Sandy Harris, Planning Director Michele Rambo, Senior Planner Alisa Johansson, Assistant Planner Lisa Warner. **Absent:** Commissioner Cody Wagner.

1.3. Public Forum

Tammy Dittman, Fernley resident, stated they were having issues hearing in the back of the room.

1.4. (For Possible Action) Approval of Agenda

Motion: I MOVE TO APPROVE THE AGENDA WITH ITEM 2.1 MOVED TO THE SEPTEMBER 5TH MEETING. **Action:** Approved **Moved by:** Vice-Chair Angela Lewis, **Seconded by:** Commissioner Tessa Garvin. **Vote:** Passed, **Summary:** Yes 7. **Yes:** Chairwoman McCullar, Vice-Chair Lewis, Commissioner VanderHeiden, Commissioner Flores, Commissioner Garvin, Commissioner Holt, Commissioner Williams.

1.5. (Possible Action) Approval of Minutes

Motion: I MOVE TO APPROVE THE MINUTES FROM THE LAST PLANNING SESSION. **Action:** Approved, **Moved by:** Commissioner Robert Flores, **Seconded by:** Commissioner Tessa Garvin. **Vote:** Passed, **Summary:** Yes 7. **Yes:** Chairwoman McCullar, Vice-Chair Lewis, Commissioner VanderHeiden, Commissioner Flores, Commissioner Garvin, Commissioner Holt, Commissioner Williams.

2. PRESENTATIONS

2.1. (For Possible Action) Presentation by Chris Molina regarding the management of SF6 Zoning and its consequences.

Item moved to September 5, 2025, meeting.

3. STAFF REPORTS

3.1. (For Possible Action) Consideration and possible action regarding a Waiver application (WVR25002) submitted by Diane Anderson and Lisa Young for a site located at 80 Main Street (APN: 020-021-03) in a C2 (Commercial) zoning district. The Waiver application is to request the removal of curb, gutter, sidewalk, parking, and landscaping requirements.

Lisa Warner, Assistant Planner, presented. This building was constructed in 1983 and has primarily been used for commercial use. The applicant is requesting to change the use from personal services to a coffee house, which is defined as a restaurant use. The intensification of use has triggered the site to be

brought up to the current Development Code, which includes curb, gutter, sidewalk, parking, and landscaping requirements. The site is a substandard development, meaning it was originally constructed in accordance with the regulations but no longer meets the standards of our current Development Code. Per Fernley Municipal Code (FMC) 32.03.090-1 the site is located in the designated downtown area where waiver applications are permitted for curb, gutter, sidewalk, number of parking spaces, and landscaping requirements. There are 5 findings that have to be met to approve a waiver. In conclusion, because it is in the waiver applicability area, staff can make all five required findings.

Motion: I MOVE TO APPROVE THE WAIVER ASSOCIATED WITH WVR25002 SUBJECT TO CONDITIONS OF APPROVAL 1 THROUGH 14 BASED ON THE FINDINGS WVR01 THROUGH WVR05 FOR THE WAIVER, AND THE FACTS SUPPORTING THESE FINDINGS AS SET FORTH IN THE STAFF REPORT. **Action:** Approved, **Moved by:** Commissioner Tessa Garvin, **Seconded by:** Commissioner Robert Flores. **Vote:** Passed, **Summary:** Yes 7. **Yes:** Chairwoman McCullar, Vice-Chair Lewis, Commissioner VanderHeiden, Commissioner Flores, Commissioner Garvin, Commissioner Holt, Commissioner Williams.

4. GENERAL BUSINESS

4.1. (For Possible Action) Discussion and possible action to appoint one member of the Planning Commission to sit on the Technical Advisory Group working on the three Corridor Studies currently underway.

Michele Rambo, Planning Director, stated that the City has recently begun working with NDOT on three Corridor Plans intended to identify how roads are improved to accommodate future growth. These roads are: 1) Main Street/Hwy 95 from Exit 46 to Exit 48 (including the roundabout), 2) Farm District Road, and 3) Hwy 95/50 south from Main Street. A Technical Advisory Committee has been created consisting of city employees, representatives from the Fire and the Sheriff's offices, and other interested stakeholders. Involving a member of the Planning Commission has also been suggested.

Commissioner Robert Flores volunteered as the alternate.

Motion: I MOVE TO APPOINT COMMISSIONER CODY WAGNER TO REPRESENT THE PLANNING COMMISSION AS A MEMBER OF THE CORRIDOR STUDY TECHNICAL ADVISORY COMMITTEE AS WELL AS COMMISSIONER FLORES AS AN ALTERNATIVE AS NEEDED. **Action:** Approved **Moved by:** Vice-Chair Angela Lewis, **Seconded by:** Commissioner Jake VanderHeiden. **Vote:** Passed, **Summary:** Yes 7. **Yes:** Chairwoman McCullar, Vice-Chair Lewis, Commissioner VanderHeiden, Commissioner Flores, Commissioner Garvin, Commissioner Holt, Commissioner Williams.

5. PUBLIC HEARINGS

5.1. (For Possible Action) Discussion and possible action to recommend approval of Bill #362 (associated with CA25002) to amend Title 32, Chapter 9, Section 090 (Landscaping and Screening) of the City of Fernley Development Code to update the location and design requirements for trash enclosures and update the screening requirements for mechanical and electrical equipment and facilities.

Lisa Warner, Assistant Planner, stated that recent commercial projects have shown that current requirements in the Fernley Development Code for trash enclosures, and mechanical, electrical screening are vague and unclear; therefore, it was determined that more specific requirements should be added to the Development Code. These additional requirements will make it easier for City staff to enforce the requirements and ensure consistent and compliant trash enclosures and screening of mechanical and electrical equipment and facilities throughout the City of Fernley.

Motion: I MOVE TO RECOMMEND THAT THE CITY COUNCIL APPROVE BILL # 362 ASSOCIATED WITH CA25002 AS PRESENTED BY STAFF. **Action:** Approved, **Moved by:** Vice-Chair Angela Lewis, **Seconded by:** Commissioner Tessa Garvin. **Vote:** Passed, **Summary:** Yes 6, No 1. **Yes:** Chairwoman McCullar, Vice-Chair Lewis, Commissioner VanderHeiden, Commissioner Garvin, Commissioner Holt, Commissioner Williams, **No:** Commissioner Flores.

5.2. (For Possible Action) Discussion and possible action regarding concurrent requests for a Zoning Map Amendment (ZMA25001) and Tentative Subdivision Map (TSM25001) from Wood Rodgers, Inc. on behalf of Genica Clover Ranch, LLC, rezoning six (6) parcels containing approximately 24.72 acres from RR½ (Rural Residential, ½-acre minimum) and RR5 (Rural Residential, 5-acre minimum) to SF6 (Single Family, 6000-square foot minimum) and creating a 105-lot single-family residential subdivision generally located between Farm District Road to the south, Langdon Street to the north, Winnie Lane to the west, and Nevada Pacific Boulevard to the east (APNs 021-331-15, -19, -20, -22, -29, and -38).

Chair McCullar stated the matter before this body affects a material interest on her commitment in a private capacity, as her home is on the adjoining property therefore, she is going to abstain from the vote. Alisa Johansson, Senior Planner, presented this application to rezone, merge, and re-subdivide six (6) parcels containing approximately 24.72 acres into 105 single-family lots. The project has been designed to comply with all applicable regulations.

Eric Hasty, Wood Rodgers, Inc., also presented.

After comments from the Commissioners, Chair Jenni McCullar called for public comment.

Public Comment:

Jeff Kling expressed concern about flooding.

RC Herrera expressed concern about flooding, and the subdivision is bordered on three sides that are agricultural and that land is irrigated. There is a subdivision directly to the east that is half-acres. They were selling just fine and building beautiful homes.

Joyce Kling expressed concern about the water levels in the ditch and no fence.

Steve Griswold expressed concerns about the irrigation flooding the lots, fencing and drainage for the houses. He stated that Browne Lane is not a public road, it belongs to him and his neighbor.

Jennifer VanWormer expressed concern about the road being pushed through and then preconfiguring the wash to make it fit. If we must have this road, we'd like boulders.

Donnia Herrera expressed concern about no consideration for the livestock. They need fencing on both sides of the subdivision to protect them.

Rhio Mueller expressed concern over the traffic on Clover Lane.

Motion: I MOVE TO CONTINUE THIS ITEM TO NEXT MONTH'S MEETING BASED ON THE PREVIOUS CONTINUANCE OF ITEM 2.1, PRESENTATION BY CHRIS MOLINA, REGARDING THE MANAGEMENT OF SF6 ZONING AND ITS CONSEQUENCES. **Action:** Approved. **Moved by:** Vice-Chair Angela Lewis, **Seconded by:** Commissioner Tessa Garvin. **Vote:** Passed, **Summary:** Yes 7. **Yes:** Chairwoman McCullar, Vice-Chair Lewis, Commissioner VanderHeiden, Commissioner Flores, Commissioner Garvin, Commissioner Holt, Commissioner Williams.

Chair Jenni McCullar stated that she needed to withdraw her vote because she was going to abstain.

Motion: I MOVE TO WITHDRAW THE DECISION THAT WAS JUST SET FORTH. **Action:** Approved. **Moved by:** Vice-Chair Angela Lewis, **Seconded by:** Commissioner Robert Flores. **Vote:** Passed, **Summary:** Yes 6, Abstain 1. **Yes:** Vice-Chair Lewis, Commissioner VanderHeiden, Commissioner

Flores, Commissioner Garvin, Commissioner Holt, Commissioner Williams. **Abstain:** Chairwoman McCullar.

Motion: I MOVE TO CONTINUE THIS ITEM TO THE SEPTEMBER 10, 2025, MEETING BASED ON THE PREVIOUS CONTINUANCE OF ITEM 2.1, PRESENTATION BY CHRIS MOLINA, REGARDING THE MANAGEMENT OF SF6 ZONING AND ITS CONSEQUENCES. **Action:** Approved. **Moved by:** Vice-Chair Angela Lewis, **Seconded by:** Commissioner Tessa Garvin. **Vote:** Passed, **Summary:** Yes 6, Abstained 1. **Yes:** Vice-Chair Lewis, Commissioner VanderHeiden, Commissioner Flores, Commissioner Garvin, Commissioner Holt, Commissioner Williams. **Abstain:** Chairwoman McCullar.

5.3. (For Possible Action) Discussion and possible action regarding a request from the Planning Department to amend the home occupation use standards contained in Fernley Municipal Code, Title 32, Chapter 7, Section 200 (Bill 364, CA25003).

Alisa Johansson, Senior Planner, stated the Planning Department and City Clerk's Office propose to amend the City of Fernley's Municipal Code, Title 32, Chapter 7, Section 200, to refine and clarify regulations for home occupation accessory use. The proposed changes include, but are not limited to, the addition of a floor area limit and a prohibited home occupations list, as well as clarification and revision to limitations on associated vehicles and employees. Word choice revisions, punctuation and grammar corrections, and reorganization of the section are also proposed. These proposed changes are consistent with the Master Plan's goal of ensuring land use compatibility, preventing and mitigating adverse impacts resulting from development, encouraging development that can be efficiently served by services and infrastructure, and effectively managing growth.

Commissioner Tessa Garvin asked what type of home occupations they are talking about?

Senior Planner Johnansson, stated we are in our promulgation of this code, choosing to focus on the other end of the spectrum. We focused our efforts on which types of home occupations are not compatible and not appropriate. That is why you'll see the inclusion of a brand-new prohibited home occupations list in our proposed code. That was missing from the previous code. So, rather than specifically, prescriptively identifying the types of home occupations that are permitted, we are instead focusing on the sort of easier, smaller number of home occupations that can be identified on the negative end of the spectrum: those that are not appropriate, that are restricted.

Commissioner Tessa Garvin stated she would like to see it be specific regarding cosmetology.

Senior Planner Johansson explained the exceptions to the prohibited home occupations list. The business may be approved by the administrator with the provision of a business plan. If someone is proposing a new home occupation business, and they feel that their business is on this prohibited home occupation list, but they think that they can meet the intent of the code, they believe they can make their proposed home occupation compatible. They can provide us with a detailed business plan, and based on the consideration of their specific circumstances, we might make an exception.

Public comment:

Becki Howlett stated she found it odd that you can groom a dog at your house, but not a person.

Michele Rambo, Planning Director, stated that you cannot have a dog grooming business in a home.

Motion: MOVE TO RECOMMEND APPROVAL OF BILL 364 ASSOCIATED WITH CA25003 AMENDING THE USE STANDARDS FOR HOME OCCUPATIONS AS PROPOSED AND PRESENTED BY STAFF. **Action:** Approve, **Moved by:** Commissioner Garvin, **Seconded by:** Commissioner VanderHeiden. **Vote:** Passed, **Summary:** Yes 7. **Yes:** Chairwoman McCullar, Vice-Chair Lewis, Commissioner VanderHeiden, Commissioner Flores, Commissioner Garvin, Planning Commissioner Holt, Commissioner Williams.

6. CHAIR AND COMMISSION ITEMS

None at this time.

7. PLANNING DIRECTOR ITEMS

7.1. Update on City Council actions from July 16, 2025 and August 6, 2025.

Michele Rambo, Planning Director, on August 6th, we had the first reading of the Master Plan Amendment Code of change that was presented to the Planning Commission last month.

7.2. General Planning Department updates and announcements

Planning Director Rambo announced that the new associate planner will start on Monday. A consultant has been chosen for the Capital Improvement Plan and the Impact Fee Study. We are working on the contract for the infrastructure plans for the north and the southwest areas. The RFP for South Area Plan is out and proposals are due on Friday. The Master Plan update RFP will be going out on Monday, and then we're giving them 6 weeks, because it's a huge project.

8. ADDRESS REQUEST(S) FOR FUTURE AGENDA ITEMS

None at this time.

9. PUBLIC FORUM

Tammy Dittman stated that the speakers in the back were not working. She also asked why postings are posted in the Reno Gazette Journal.

Michele Rambo, Planning Director, stated because of NRS requirements, we still have to rely on the Reno-Gazette Journal, because it's published every day. If the Fernley Recorder was published more often, we would publish there.

The next meeting will be on September 10, 2025, at 5:00 pm.

10. ADJOURNMENT

There being no further business to come before it, the Fernley Planning Commission meeting adjourned at 7:11 pm.

Approved by the Fernley Planning Commission on September 10, 2025, by a vote of:

AYES _____ NAYS: _____ ABSTENTIONS: _____ ABSENT: _____

Chairwoman Jenni McCullar

ATTEST:



CITY OF FERNLEY

Planning Commission AGENDA REPORT

Meeting Date: September 10, 2025

REPORT TO: Fernley Planning Commission

REPORT FROM: Alisa Johansson

FINANCIAL IMPACT:

Yes: X

No:

CURRENTLY BUDGETED:

Yes:

No: X

FUND/ACCOUNT:

N/A

ACTION REQUESTED: Motion
Ordinance

AGENDA ITEM:

(For Possible Action) Discussion and possible action regarding the First Amendment to the Red Hawk Ranch Development Agreement (Bill #368, DA20002-AMD1) submitted by Wood Rodgers, Inc. on behalf of Red Hawk Ranch LLC, Series B and DB-BB Investments I, LCC to request the following changes: 1) incorporate all property owners and parcels into the agreement, 2) extend the expiration date of all applicable tentative subdivision maps, 3) establish the framework for a future Special Assessment District, 4) allow an on-site density transfer, and 5) relocate the community park. The Red Hawk Ranch Development Agreement, as amended, encompasses four (4) parcels totaling approximately 161.09 acres in area (APNs 021-041-07, -08, -09, -10).

AGENDA ITEM BRIEF:

City Council authorized the City of Fernley to enter into a Development Agreement with the developer of Red Hawk Ranch on February 3, 2021. The original agreement primarily dealt with adjacency standards as they would be applied to development within the future subdivisions. Tentative subdivision maps TSM21004 and TSM22007 were approved in 2022. The proposed amendment (AMD1) intends to add several additional stipulations while extending the expiration dates for the applicable tentative maps.

RECOMMENDED MOTION:

"Based on the analysis presented in the staff report, I move to recommend approval of Bill #368 and DA20002-AMD1 amending the Development Agreement for Red Hawk Ranch as proposed."

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:

Modification

“Based on the analysis presented in the staff report, the facts of the case, and information provided through public comment, I move to recommend approval of Bill #368 and DA20002-AMD1 amending the Development Agreement for Red Hawk Ranch with the following modification(s):
(Identify proposed modification and state rationale—repeat for each requested modification).”

Denial

“Based on the analysis presented in the staff report, the facts of the case, and information provided through public comment, I move to recommend denial of Bill #368 and DA20002-AMD1 amending the Development Agreement for Red Hawk Ranch because I am unable to make the following required finding(s):
(State finding and supporting analysis—repeat for each applicable finding).”

BACKGROUND:

Site, Vicinity, & History

Presently undeveloped, the site is generally flat and sparsely vegetated, with trees and shrubs present along the perimeter of active and inactive farming fields. Gravel and dirt roads provide connection to the site from adjoining roadways. The immediate vicinity is likewise characterized by low density developments consisting of pastures, rural residences, and small-scale commercial buildings along Stock Lane and Main Street.

Development of the subject property has been the objective of many mapping and entitlement applications over the years. In its current form, the project has most recently been reviewed and tentatively approved as Red Hawk Ranch (TSM21004) and the Duets at Red Hawk Ranch (TSM22007). The Development Agreement for Red Hawk Ranch (DA20002) originally encompassed three parcels and was executed as part of a past Zoning Map Amendment approval process (ZMA20001) in response to community and regulatory body feedback regarding adjacency requirements and compatibility with the existing rural agricultural fabric in the Stock Lane area of Fernley.

Amendment Scope

The current amendment request consists of several new stipulations intended to assist the developers in advancing the project to completion. The full scope of the proposed amendment is as follows:

1. Incorporate all property owners and parcels into the agreement,
The Red Hawk Ranch Development Agreement originally encompassed three parcels (APNs 021-041-07, -08, and -10). The adjoining fourth parcel (021-041-09), previously known as “Duets at Red Hawk Ranch” is now proposed to be incorporated into the agreement.
2. Extend the expiration date of all applicable tentative subdivision maps,
TSM21004 and TSM22007 are set to expire on January 19, 2026 and December 7, 2026, respectively. The final expiration date for both maps is proposed to be extended to December 31, 2031. This adjusted expiration date includes the two-year extensions allowable under Nevada Revised Statutes 278.360(1)(c).
3. Establish the framework for a future Special Assessment District,
Infrastructure planning and development constitutes a significant challenge to Fernley’s development community. On June 4, 2025, the Fernley City Council approved a resolution to adopt Special Assessment District guidelines consistent with Nevada Revised Statutes Chapter 271. This resolution (25-005) and the

associated guidelines are attached to this staff report for reference. The Red Hawk Ranch development team wishes to utilize these guidelines to establish a SAD which will provide some relief from the upfront cost associated with installation of utility and roadway infrastructure within and connecting to these subdivisions. The SAD would finance the following improvements: 1) Offsite roadways and associated improvements, 2) Off-site sewer and other utility connections, 3) Backbone (on-site) roadways and utilities, 4) Mass grading for the overall site including the drainage channel and retention basin, and 5) Community park improvements in the retention basin.

4. Allow an on-site density transfer,

As the projects' final designs have progressed, storm and surface water controls have been particularly challenging to address. The need to devote a substantial amount of the overall site area to stormwater infrastructure necessitates relocation of allowable density from one portion of the site to another. This transfer does not change the total number of dwelling units allowed and only adjusts their potential location. This transfer does not alter the previously-approved tentative subdivision maps and only applies to the central portion of the site that has not yet been platted.

5. Relocate the community park.

To provide a more substantial community benefit, the developers are proposing to relocate the community park to the retention basin. Previously proposed in the southeast corner of the Red Hawk Ranch subdivision, the adjusted location in the northwest corner is more conducive to use by all residents of the now joined developments as well as the broader community. The preliminary design for the retention basin allows the park to roughly double in size, accommodating additional turf areas suitable for community events and even tournament or championship sporting events. This shift enhances the landscaping and active use of the retention basin, contributing to efficient use of land within the development site.

Analysis: Development Agreement

Development agreements are committed to the city council's legislative discretion. The city council may approve the development agreement if it meets the following criteria.

1. Consistent with the city's master plan (NRS 278.0284);

The proposed amendment to the Red Hawk Ranch Development Agreement is consistent with the Comprehensive Master Plan's overarching goal of facilitating orderly, responsible growth and development in the City. The proposed amendment, in its facilitation of the advancement of the subject projects, is also supported by the following specific goals and policies:

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.

The proposed amendment includes two stipulations that support this goal: the on-site density transfer and the relocation of the community park. By allowing the developer to shift allowable housing units from one portion of the site to another, effective stormwater controls are made feasible without sacrificing valuable potential housing stock. By relocating the community park to within the retention basin, the large area of land devoted to flood control is given a dual purpose, increasing the efficiency of the development of the site while simultaneously siting the park in a portion of the property that is more accessible and visible to the community.

HP.1.4 Provide opportunities for high-density residential development near the downtown core and elsewhere in the community where appropriate.

Sited south of Main Street and east of Stock Lane, the property is located at the western end of the downtown

core where existing aging developments punctuate tracts of vacant land. The proposed housing types, duplex and single-family, while not as dense as true multifamily developments, still provide plentiful housing opportunities in close proximity to downtown Fernley while also establishing an informal gateway and welcoming presence as travelers proceed east along Main Street.

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

The proposed unit and lot size mix contribute to the variety and spectrum of housing options called for in the Comprehensive Master Plan. The proposed amendment facilitates successful advancement of a project that may otherwise be abandoned.

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.

As part of the tentative subdivision mapping process, the proposed development's impacts to existing infrastructure were preliminarily analyzed. In authorizing the developer to engage with the City in the creation of a Special Assessment District, the City ensures that necessary infrastructure is constructed to standards while reducing risk for the project's development team, thereby encouraging completion of the project.

LU.1.5.1 Encourage the intensification of land use in the existing community core.

Located in the existing community core and defined as an infill site, the development proposes intensification of land use in the portion of the City emphasized in this goal. The proposed development agreement amendment seeks to ensure the project's success by facilitating completion of the project.

LU.1.9 Sustain the residential character of the Stock Lane area.

Sited along the east side of Stock Lane, the project is not mapped within the Stock Lane Special Planning Area. However, the property's location on the east side of Stock Lane, just beyond the SPA's boundary, supports this Master Plan goal by ensuring that residential development is present adjoining the Stock Lane SPA, reinforcing the residential character of the area.

2. Otherwise consistent with Nevada or federal law.

Both the original development agreement and the proposed amendment have been thoroughly vetted by the City Attorney as well as by City of Fernley's outside counsel. As adjusted, no apparent statutory violations or conflicts were noted and the amendment is presumed to comply with applicable State and federal law.

RELEVANT LAWS, STATUTES, AND REGULATIONS:

General References

Nevada Revised Statutes Chapter 271

Nevada Revised Statutes Chapter 278

City of Fernley Comprehensive Master Plan (2020 Update)

Fernley Municipal Code Title 32

Specific References

NRS 278.0201-.0207 – Agreement with governing body concerning development of land

FMC 32.03.100(a) – Development agreements

FINANCIAL IMPLICATIONS:

The amended agreement authorizes the formation of a Special Assessment District.

ATTACHMENTS:

1. Exhibit 1 - Resolution 25-005
2. Exhibit 2 - Proposed Amendment
3. Exhibit 3 - Original Recorded Agreement
4. Exhibit 4 - Project Narrative and Maps - Applicant

CITY OF FERNLEY
RESOLUTION # 25-005

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF FERNLEY
ESTABLISHING GUIDELINES AND PROCEDURES FOR THE CREATION OF
PRIVATE PROPERTY OWNER-REQUESTED SPECIAL ASSESSMENT DISTRICTS
PURSUANT TO NRS CHAPTER 271**

WHEREAS, the City of Fernley (the “City”) is empowered under the Consolidated Local Improvements Law, Nevada Revised Statutes (NRS) Chapter 271, including NRS 271.325 and NRS 271.700 through 271.730, to create Special Assessment Districts (“SADs”) for the purpose of acquiring, improving, equipping, operating, or maintaining certain public improvements; and

WHEREAS, the City recognizes that SADs provide an important financing mechanism for the construction of public infrastructure benefiting one or more properties being developed for residential, commercial, or industrial use; and

WHEREAS, the City desires to provide a clear framework for private property owners to request the creation of SADs and to ensure that such districts are created in a financially sound, environmentally responsible, and administratively efficient manner; and

WHEREAS, the City Council has reviewed and considered comprehensive guidelines governing the formation, financing, and operation of such SADs;

NOW THEREFORE, BE IT RESOLVED, by the City of Fernley, Nevada, City Council as follows:

Section 1. Purpose

The purpose of this Resolution is to adopt the City of Fernley Guidelines for Private Property Owner-Requested Special Assessment Districts (the “Guidelines”) and to formally establish the City’s process for receiving, evaluating, approving, and administering SADs initiated by petition under NRS Chapter 271.

Section 2. Adoption of Guidelines

The City Council hereby adopts the Guidelines attached hereto as **Exhibit A**, titled “**City of Fernley Guidelines for Private Property Owner-Requested Special Assessment Districts.**” These Guidelines establish the minimum legal, financial, environmental, and procedural criteria for SAD formation and shall govern all such private owner-initiated requests unless otherwise waived by the City Council as provided herein.

Section 3. Authority

This Resolution is adopted pursuant to NRS 271.325, which authorizes municipalities to create special assessment districts and enter into contracts with persons or developers

for infrastructure improvements that benefit new development, and to finance such improvements through the issuance of bonds and levy of assessments.

Section 4. Eligibility and Limitations

- Improvements must be public in nature and constructed to City standards;
- Only infrastructure ultimately owned or maintained by the City, or by agreement with another political subdivision, may be financed;
- Stand-alone districts shall generally involve no less than \$10,000,000 in bond issuance;
- Projects must show a minimum property benefit equal to the assessments levied; and
- All environmental and development conditions specified in the Guidelines must be met unless otherwise waived by the City Council as provided herein.

Section 5. Bond Issuance and Security

All SAD bonds shall be:

- Secured by assessment liens on the benefited property;
- Issued only upon satisfaction of minimum value-to-lien and security requirements;
- Structured to exclude any pledge of the City's general fund or taxing power;
- Sold only with evidence of marketability through underwriter commitment; and
- Structured not to exceed 30-year terms with reserve and disclosure requirements as detailed in the Guidelines.

Section 6. City Council Discretion

The City Council retains full discretion to:

- Waive or modify specific requirements of the Guidelines upon finding that such waiver is in the City's best interest;
- Approve or deny SAD applications based on staff and consultant review; and
- Require additional security, reporting, or documentation where necessary to protect the City's financial or operational interests.

Section 7. Procedure

The process for requesting formation of an SAD shall include:

1. A pre-application meeting with City staff;

2. Submission of a petition signed by all owners of record in the proposed district;
3. Submittal of an application demonstrating full compliance with the Guidelines;
4. Approval by the City Council to proceed with negotiations and formation;
5. Posting of financial security by the Property Owner for all preliminary and non-reimbursable costs.

Section 8. Effective Date

This Resolution shall become effective immediately upon its adoption.

ADOPTED this 4th day of June 2025 by the City of Fernley, Nevada City Council.

Aye: 5 Nay: 0 Abstention: 0 Absent: 0

FERNLEY CITY COUNCIL

By: Neal E. McIntyre Date: 6/4/2025
Neal E. McIntyre, Mayor

Attest: By: Kim Swanson Date: 6/4/2025
Kim Swanson, City Clerk

CITY OF FERNLEY
GUIDELINES FOR PRIVATE PROPERTY OWNER-REQUESTED
SPECIAL ASSESSMENT DISTRICTS

Pursuant to Nevada Revised Statutes (NRS), 271.700 through 271.730, The City of Fernley (the "City") is authorized under NRS 271.325 to create a district and order a project as defined under NRS 271.265 to be acquired or improved and may contract with a person (or developer) to construct or improve a project that benefits new development and issue bonds or otherwise finance the cost of the project and levy assessments. The purpose of these guidelines is to set forth the circumstances under which the City will consider this type of financing for infrastructure projects involving one or a small number of private property owners (referred to herein as "Property Owner") who intend on developing their property for commercial, industrial, residential or other beneficial use. Notwithstanding any other provision herein, these guidelines do not apply if the SAD (as defined below) is initiated by the provisional order method on the recommendation of the City Manager. The City Council reserves the right, on a case-by-case basis, to approve additional requirements or to waive specific requirements listed herein. Such additional or waived requirements shall be noted in the approval of any petition, together with a finding that the deviation from this policy is in the best interest of the City.

I. ELIGIBLE IMPROVEMENTS

A. Local Improvements

Through the "Consolidated Local Improvement Law" (Chapter 271 of the Nevada Revised Statutes), counties, cities, and towns are authorized to form special improvement districts (referred to herein as an "SAD") for the purpose of acquiring, improving, equipping, operating, and maintaining specific projects within the municipality. Projects include improvements such as street pavement, curb and gutter, sidewalk, streetlights, driveways, sewer and water facilities, etc. Such local improvement districts are generally formed to provide a source of funding for the construction and/or maintenance of eligible improvements within the City.

B. Public Ownership Requirements

Only publicly owned infrastructure for which the City is ultimately responsible or for which the City has entered into a cooperative agreement with another political subdivision is eligible for financing. Privately-owned improvements, such as electric, gas, and cable television improvements, streets or roads that are not dedicated to the City, and private portions of other improvements, such as sewer service lines from the property lines to the home or other structure, are not eligible for financing. Construction and improvements must be constructed in accordance with the City's standards and will only be accepted upon proper dedication of right-of-way and approval of said infrastructure improvements. Further, NRS Chapter 338.010 to 338.090, inclusive, applies to the public improvements.

C. Benefit

The improvements proposed to be constructed must benefit the property assessed (pre-appraisal value) by an amount at least equal to the amount of the assessments.

II. LIMITATIONS RELATED TO IMPROVEMENTS

A. Size

Generally, the City will not consider stand-alone assessment districts which involve less than \$10,000,000 in bonds.

III. ENVIRONMENTAL MATTERS

A Phase I environmental assessment (hazardous waste assessment) shall be performed on the property to be assessed, property on which the improvements are to be located, and any property to be dedicated to the City. Such Phase I environmental assessment must be provided to the City as part of the application for the SAD. Each Property Owner must also provide the City with an indemnification agreement in a form acceptable to the City, promising to indemnify the City (see example in Section VII. SAD application) for any and all liability and/or costs associated with any environmental hazards located on property assessed, property on which improvements financed with the assessment district are proposed to be located, or on any property dedicated to the City. In instances where there is other compelling evidence of environmental contamination, the Property Owner will be required to perform the environmental clean-up. Hazardous material mitigation will not be a reimbursable cost. If required by the City, the Property Owner shall perform a Phase II environmental assessment.

IV. DEVELOPMENT

A. Property Owner Experience and Financial Information

The Property Owner must demonstrate to the City that it has the expertise and financial resources to develop the property involved in the assessment district or has the expertise, resources and ability to complete the project for which the assessments are to be levied. To demonstrate its ability to develop, the Property Owner shall furnish the City with the following:

- Financial statements for the last three years (last two years audited) or third-party compilation as defined by the American Institute of Certified Public Accountants;
- List of prior developments of similar or larger size which the Property Owner has completed;
- List of references consisting of the names of officials of other political subdivisions in which the Property Owner has completed similar or larger size developments; and
- Evidence that the Property Owner has the financing to proceed with the development. (This evidence could consist of a commitment letter from a bank or other financial institution or other evidence that the Property Owner has

sufficient resources in its bank accounts and other investments to commence and complete development.)

B. Land Uses

The proposed development must be consistent with the City's Comprehensive Master Plan, City Zoning, and City Capital Improvement Program. The property owner must demonstrate that it reasonably expects to obtain all required discretionary development permits in sufficient time to complete the development as proposed.

C. Preliminary Title Report

A preliminary title report will be required to determine ownership of the impacted parcels as well as any lien, easement, judgment, etc., against the property.

D. Sewer Capacity

Connection to a public sewage treatment plant is required. The Property Owner must provide a "will serve" or similar commitment from the entity providing sewer service to the development stating that sufficient capacity has been reserved and is in existence or will be constructed concurrently with the subject development.

E. Other Permits

The Property Owner must provide to the City a status report of all other permitting processes required for the development of the property, including but not limited to historic preservation, wetlands, archeological, geological, etc. The City may deny any proposal based on an unsatisfactory report.

F. Water and Other Utilities

The Property Owner must provide letters from each entity that will provide utility (e.g., electricity, gas, telephone/internet) services to the development, if applicable, stating that capacity is then in existence or otherwise to be made available for the portions of the development to be assessed, in a sufficient quantity for the development to proceed to completion as proposed. With respect to water, the Property Owner must provide the City with information and documentation satisfactory to the City as to the availability of water for the development, if applicable.

V. ASSESSMENT BONDS AND BOND SECURITY

A. Primary Security

The primary security for bonds will be the assessment lien on the land proposed to be assessed. The Property Owner must demonstrate to the City that there is no significant financial risk to the City in issuing the Bonds. Property Owner's guarantee of payment of the assessment will be required unless a letter of credit or bond insurance policy is

provided guaranteeing payment of the bonds or unless either the appraisal indicates that the value of the property and other security pledged to the bonds is at least three and one-half (3.5) times the amount of the bonds proposed to be issued. If guarantees are required, they will be released with respect to any parcel that has been improved in any manner if the appraised value (as determined by an appraiser acceptable to the City) of the parcel is four or more times the amount of the unpaid assessment on such parcel or on which a substantial improvement, such as a commercial building, has been completed if the parcel has a size of two acres or less. The proposed security ratio shall not be reduced but may be increased for additional security.

B. Appraisal: Value to Lien Ratio

The Property Owner must provide the City with funds with which to have an expert prepare an appraisal. The appraiser will be selected by and contracted with the City. The City will require that an appraisal of the property that will be assessed indicate that the appraised value of the property "as is" (prior to further subdivision and without considering the installation of the improvements) is at least one and one-half (1.5) times the amount of the bonds proposed to be issued, and that the value of each parcel to be assessed after improvements financed with the assessment bonds are installed is at least three and one-half (3.5) times the amount of the proposed assessment against that parcel. These proposed value-to-lien ratios shall not be reduced but may be increased for additional security.

C. Absorption Study

The Property Owner must provide the City with funds to have an expert to prepare an absorption study, if applicable. The City shall select and contract with the expert who is to prepare this study illustrating the economic feasibility of the project based upon supply and demand trends and estimated conditions in the market area for the proposed product mix.

D. No Pledge of General Fund or Taxing Power

The City will not pledge its general fund, surplus and deficiency fund (if any) or taxing power to bonds issued to finance project improvements.

E. Bond Underwriting Commitment

The Property Owner must demonstrate to the City, and the City's financial advisor, that bonds proposed to be issued for the financing are saleable. Prior to the time the City commences work on the assessment district, the Property Owner must provide the City with a letter from a reputable underwriter or bond buyer, acceptable to the City, which states that the underwriter believes the bonds are marketable at a fixed interest rate acceptable to the Property Owner based on the prevailing market conditions, that it is willing to contract with the City to underwrite the bonds on a best efforts basis or that the bond buyer intends to acquire the bonds at a fixed interest rate which the bond

buyer and the Property Owner agree is acceptable and that it is willing to contract with the City to so acquire the bonds.

F. Bond Reserves

Interest accrued on the bond proceeds shall be held by the City in a debt service reserve fund.

G. Bond Terms

The term of the fixed-rate bonds shall not exceed thirty (30) years. The City will allow not more than two years of interest or the maximum permitted under federal tax laws, whichever is less, to be capitalized.

H. Additional Security

The Property Owner must demonstrate, to the satisfaction of the City, that there is no significant financial risk to the City in issuing the bonds. The determination of no significant financial risk will be determined by the City Council based upon a recommendation of the City Manager. If the City determines that it is not adequately protected by the security described in subsections A, B, and E of this Section V, the City may require additional security as it deems necessary.

I. Consultants

The City will permit the Property Owner to choose the consulting engineers and underwriter, provided that the entities chosen are acceptable to the City. The payment of all fees and expenses of these consultants shall be the responsibility of the Property Owner; however, these consultants will be responsible to and will act as consultants to and on behalf of the City in connection with the SAD. The City will select the bond counsel and financial advisor to be used in the issuance of the bonds.

J. Expenses

The Property Owner is responsible for all of the costs of the project prior to the time bonds are issued, including the costs of consulting engineers, assessment engineers, project management engineers, underwriters, the City's financial consultant, the City's bond counsel, the City's direct staff time set by an hourly rate or formula, the cost of preparing the appraisal, the absorption study, the environmental review and other matters listed above. These items will be eligible for reimbursement from bond proceeds if the bonds are ultimately issued; however, the Property Owner must agree to pay these costs even if bonds are not issued. At the time of application, the City will provide an estimate for these expenses in order to enable the Property Owner to more precisely anticipate costs associated with the process.

K. Project Acquisition.

The City will acquire completed projects after final inspection by the City, and audit by the City Public Works Department and City staff, and acceptance by the City Council. Unless approved by the City Manager, the City will only acquire discrete complete projects whose cost, together with the cost of other complete discrete projects being acquired at the same time, is \$250,000 (two hundred fifty thousand dollars) or more.

Disbursement of bond proceeds will be governed by a financing agreement between the Property Owners and the City.

Consistent with the Internal Revenue Code of 1986, as amended, and the regulations promulgated thereunder, the Property Owner must demonstrate that it reasonably expects to submit reimbursable costs to the City, pursuant to the provisions of the financing agreement to be entered into by the Property Owner and the City, as will permit the City to expend not less than 85% of the net sale proceeds of any bonds issued to finance the SAD (or any portion thereof) within three years of the date of issuance of such bonds.

L. Cost Overruns

The Property Owner must agree to fund all project costs that exceed the amount available from the proceeds of the bonds issued for the project. The City will not commit to issuing additional bonds or otherwise provide funding for any such cost overruns.

M. Continuing Disclosure Reports

The Property Owner will prepare and distribute, at their own expense, reports associated with SEC Rule 15(c)2-12.

VI. PROCEDURE

A. Pre-Application Meeting

Initially, the Property Owner shall schedule a meeting with such representatives of the City as are designated by the City Manager to review the proposed development to discuss whether the development is one that may be eligible for financing under these guidelines.

B. Application

If the Property Owner decides to proceed after the initial meeting, the Property Owner and all owners of record of property in the proposed district must sign a petition for the district and file the petition and an application that contains sufficient information and exhibits to demonstrate that the proposed district will comply with all parts of these guidelines. The petition and application must be filed with the City Manager's office.

C. City Council Approval

If the application satisfies all sections of these guidelines, an item will be placed on the City Council agenda authorizing negotiations with respect to the proposed project. If this item is approved by the City Council, it is anticipated that staff will be authorized to begin negotiating the particulars of the financing with the Property Owner and other appropriate parties.

D. Security for Costs

Prior to entering negotiations, the Property Owner must post cash, a letter of credit, surety bond, or other acceptable form of security that the City Manager deems sufficient for payment of the costs described above.

VII. SPECIAL ASSESSMENT DISTRICT APPLICATION

Application Information — The following information needs to be supplied as part of the Application.

- A. Contact information
 - a. Applicant Name (if other than sole proprietor, please include individual contact name and information)
 - b. Applicant Physical Address/Mailing Address
 - c. Applicant Phone Number
 - d. Applicant E-mail Address
 - e. Date of Application
- B. Previous Special Assessment District experience, previous project description
 - a. Allocating Agency (Issuer of the previous SAD bonds, if not the City of Fernley) SAD Amount
 - b. Land Value
 - c. Date of SAD origination
 - d. Date of SAD Bond Sale/Placement
 - e. Development Team Information (Names/Phone Numbers/E-mail Addresses) Developer
- C. Contractor management Company Consultant
 - a. Attorney CPA
 - b. Appraiser
- D. Financial statements for the last three years (last two years audited) or third party compilation as defined by the American Institute of Certified Public Accountants
- E. Project Identification Site Information
 - a. Address (street, zip code) Parcel Number Approximate size in acres
 - b. Type of project (sewer, streets, sidewalks, etc.)
 - c. Zoning
 - d. If not properly zoned, is site currently in the process of rezoning? When will the zoning issue be resolved?
 - e. Date of transfer to the City (estimate). Appraisal, if available.
 - f. Phase I Environmental Assessment
 - g. Absorption Study, which shall, at a minimum, indicate the economic feasibility of the project based on supply and demand trends and estimated conditions in the market area for the proposed product mix.
- F. Discussion of the ability to make assessment payments if property develops slower than anticipated.
- G. Ownership Information
 - a. Parcel No. with Owner Name and Contact Address/Phone Name(s) of vested owner on Preliminary Title Report.

H. Source of Funds

- a. Construction Financing (by source-must include all sources)
- b. Provider's Name
- c. Provider's Address (physical and mailing) Contact Person (Name, telephone, fax, and email)
- d. Financing Source (Bond financing, Conventional, Non-Recourse, Owner Equity, Private, Other) Finance Type (Balloon Loan, Credit Enhancement, Deferred Loan, Forgivable Loan, Amortizing Loan, Other)
- e. Commitment Date Principal Amount Interest Rate
- f. Percentage of Construction Funding Underwriter Information
- g. Expected Fixed Interest Rate Underwriter's Name
- h. Underwriter's Address (physical and mailing) Underwriter Contact (Name, telephone, fax and e-mail) Finance Source (Bond financing, Other)
- i. Commitment Date Principal Amount Term in Years
- j. Type of Amortization Payment Frequency
- k. Amortization beginning in year

I. Potential Costs and Uses

- a. Land Buildings Construction Costs
- b. Professional Fees Interim Costs
- c. Permanent Financing Costs City Staff Costs
- d. Soft costs (feasibility, market, environmental, compliance, appraisal, survey, other)
- e. Number of subdivided parcels
- f. Anticipated sales dates Anticipated sales costs
- g. Administration costs (accounting, advertising, legal, management fees, taxes other)

J. Proposed Project Time Schedule (Build-Out Time frame required)

The City reserves the right to request additional information. The Applicant is required to make their best efforts to deliver the requested information.

K. Indemnification Certification

Sample:

The Property Owner (herein "Applicant"), _____ agrees to indemnify and hold harmless the City of Fernley, its officers, and employees against any and all losses, claims, damages, or liability to which the City, its officers, and employees may become subject under any law in connection with the issuance and sale of the Bonds and the carrying out of the transactions contemplated by the [name of applicable agreement], and to reimburse the City, its officers, and employees, for any out-of-pocket legal and other expenses (including reasonable counsel fees) incurred by the City, its officers, and employees, in connection with investigating any such losses, claims, damages, or liabilities or in connection with defending any actions relating thereto. The Applicant further agrees to indemnify the City and its officers and employees for any and all liability and/or costs associated with any environmental hazards located on the property assessed, property on which improvements financed with the assessment district are proposed to be located, or on any property dedicated to the City.

The City agrees, at the Applicant's request and expense, to cooperate in the investigation in defense of any claims, threatened litigation, and litigation and, upon the Applicant's request, to assert any and all rights, privileges, and defenses identified by the Applicant that may be available to the City's determination that such assertion is reasonable and warranted under the facts and circumstances.

PLEASE READ THE FOLLOWING IMPORTANT PARAGRAPHS AND ACKNOWLEDGE YOUR UNDERSTANDING BY INITIALING ALL APPLICABLE PARAGRAPHS

This application is for bond financing; the undersigned is responsible for ensuring that the project complies or will comply with the requirements of all City, State, and Federal Laws. The undersigned agrees to indemnify and save and hold the City of Fernley, its agents, officers, and employees harmless against all losses, costs, damages, expenses, and liabilities, whatsoever the nature and kind (including, but not limited to, attorney's fees, litigation and court costs, amounts paid in settlement, and amounts paid to satisfy a judgment) directly or indirectly resulting from, arising out of or related to acceptance, consideration and approval or disapproval of this application for bond financing.

Initial here_____

In all cases, the undersigned acknowledges and agrees that the project will be regulated in accordance with the terms of these guidelines and the agreement between the property Owner (Applicant) and the City of Fernley.

Initial here_____

The undersigned further acknowledges that the application becomes a matter of public record upon submission to the City of Fernley, its agents, officers, and/or employees.

Initial here_____

THE UNDERSIGNED, BEING DULY SWORN AND UNDER PENALTY OF PERJURY, HEREBY REPRESENTS AND CERTIFIES THAT HE/SHE IS DULY AUTHORIZED TO EXECUTE THIS APPLICATION ON BEHALF OF THE PROJECT SPONSOR AND THAT THE FOREGOING INFORMATION, TO THE BEST OF HIS/HER KNOWLEDGE, IS TRUE, COMPLETE AND ACCURATELY DESCRIBES THE PROPOSED PROJECT.

IN WITNESS HEREOF, the project sponsor has caused this document to be duly executed in its name on this day of _____.

Project Name:

Project Sponsor:

Authorized Agents Name:

Title:

Signature: _____

APNs: 021-041-07, 021-041-08, 021-041-09,
021-041-10

Recording Requested By And
When Recorded, Mail To:

City of Fernley
595 Silver Lace Boulevard
Fernley, NV 89408
Attn: City Clerk

FIRST AMENDMENT TO DEVELOPMENT AGREEMENT

BETWEEN

**CITY OF FERNLEY,
a Nevada municipal corporation**

AND

**RED HAWK RANCH LLC, SERIES B,
a Nevada limited liability company**

**DB BB INVESTMENTS I, LLC,
a Nevada limited liability company**

THIS FIRST AMENDMENT TO DEVELOPMENT AGREEMENT (this “Amendment”) dated as of the date of City Council action listed on the signature page hereto (“Effective Date”) is made and entered into by and between (i) the City of Fernley, a Nevada municipal corporation (the “City”), and (ii) RED HAWK RANCH LLC, SERIES B, a Nevada limited liability company, and DB-BB INVESTMENTS I LLC, a Nevada limited liability company (collectively the “Developers” and each, individually, a “Developer”).

RECITALS

A. The City is authorized under the general laws of the State of Nevada to enact ordinances and enter into agreements to promote and safeguard the health, safety, and welfare of its citizens.

B. The City and Relief Springs, LLC, Series 3 entered into that certain Development Agreement dated March 13, 2021, and approved by the City Council on January 19, 2022 (the “Agreement”).

C. The Developers are now the owners of the Project Property and desire to amend the Agreement to include them as parties, extend certain Tentative Subdivision Maps, establish a framework for a Special Assessment District, allow density transfer due to drainage improvements, and relocate the community park.

D. The parties have determined that an amendment to the Development Agreement is necessary to incorporate both Developers, extend the Tentative Subdivision Maps, establish the framework for the Red Hawk Ranch Special Assessment District, allow density shift, and relocate the community park.

E. Pursuant to NRS 278.0201 through 278.0207 and Code §32.03.100, the parties desire to amend the Development Agreement to set forth the parties’ mutual understanding with respect to the orderly development of the Project.

F. The City Council, after recommendation by the Planning Commission, having determined that all of the procedural requirements for approval of this Amendment have been satisfied and after giving notice as required by law, held a public meeting on _____, 2025 wherein the City Council found this Amendment to be: (1) in the public interest; (2) in conformance with the City’s comprehensive and other plans, policies, and regulations; and (3) lawful in all respects.

NOW, THEREFORE, in exchange for mutual considerations, the sufficiency of which is hereby acknowledged, the parties agree as follows:

1. **Capitalized and Conflicting Terms; Continued Effect; Captions.** Capitalized terms not otherwise defined in this Amendment shall have the meanings ascribed to them in the Agreement. To the extent the provisions of this Amendment conflict with any of the terms and conditions of the Agreement the provisions of this Amendment shall control. The parties acknowledge and agree that, except as specifically modified hereby, each of the terms and conditions of the Agreement shall remain in full force and effect.

2. **Amendment to Article 1 - Parties and Property Description.** Article 1 of the Agreement is hereby amended to replace “Developer” Relief Springs, LLC, Series 3 with the following Developers:

Red Hawk Ranch LLC, Series B,
a Nevada limited liability company
14230 E. Windriver Drive Reno, NV 89511

DB-BB Investments I LLC,
a Nevada limited liability company
14230 E. Windriver Drive Reno, NV 89511

The “Project Property” is amended to include APN 021-041-09, with the legal description in Exhibit A hereto.

3. **Amendment to Article 3 - Development Matters.** Article 3 of the Agreement is hereby amended by adding the following new sections:

Section 3.5 Tentative Subdivision Map Extensions. The terms of the approved Tentative Subdivision Maps TSM21004 (approved January 19, 2022) and TSM22007 (approved December 7, 2022) are hereby extended to December 31, 2031.

Section 3.6 Special Assessment District Framework. The parties agree to establish a Special Assessment District (SAD) for the Project Property to finance the following improvements:

- (a) Offsite roadway and associated improvements including Main Street, Stock Lane, and Miller Lane (as conditioned in the TSMs).
- (b) Off-site sewer and other utility connections.
- (c) Backbone roadways and utilities.
- (d) Mass grading for the overall site including drainage channel and retention basin.
- (e) Community park improvements in the retention basin.

The SAD shall be formed in accordance with NRS 271 and the City's guidelines adopted by Resolution #25-005 on June 4, 2025. Maintenance of the community park shall be addressed in a future agreement between the City and the applicable homeowners' association.

Section 3.7 Density Transfer. The Developers are permitted to shift the density encompassed by the drainage channel and retention basin (approximately 191

units) to any location within the Project Property, provided that the total number of units developed across the Project Property does not exceed the maximum allowable number of units for the Project Property as a whole, and this transfer shall not be restricted by maximum density limits applicable to any sub-areas or portions thereof.

Section 3.8 Community Park Relocation. The proposed community park shall be shifted from the southeast corner of Red Hawk Ranch to the retention basin to provide a larger community amenity.

4. Binding Effect. This Amendment shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns.
5. Counterparts. The Parties may sign this Amendment in multiple identical counterparts, all of which taken together shall constitute one and the same Amendment. Further, the Parties shall treat a copy of an original signature to this Amendment for all purposes as an original signature. The parties shall consider a copy of the signed Amendment for all purposes as an original of the Amendment to the maximum extent permitted by law, and no party to this Amendment shall have any obligation to retain a version of this Amendment that contains original signatures in order to enforce this Amendment, or for any other purpose.

[Signature Page Follows]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the Effective Date.

CITY OF FERNLEY, a municipal corporation
and political subdivision of the State of Nevada

Neal E. McIntyre, Mayor

ATTEST

By: _____
Kim Swanson, City Clerk

Date of City Council Action: _____

APPROVED AS TO FORM

By: _____
Aaron Mouritsen, City Attorney

DEVELOPER

RED HAWK RANCH LLC, SERIES B,
a Nevada limited liability company

Todd Pardula, Manager

STATE OF NEVADA)
)
COUNTY OF WASHOE)

This instrument was acknowledged before me on _____, 2025 by Todd Pardula as Manager of Red Hawk Ranch LLC, Series B, a Nevada limited liability company.

Notary Public

DEVELOPER

DB BB INVESTMENTS I LLC,
a Nevada limited liability company

Brandon Barker, Manager

STATE OF NEVADA)
)
COUNTY OF WASHOE)

This instrument was acknowledged before me on _____, 2025 by Brandon Barker as Manager of DB BB Investments I, LLC, a Nevada limited liability company.

Notary Public

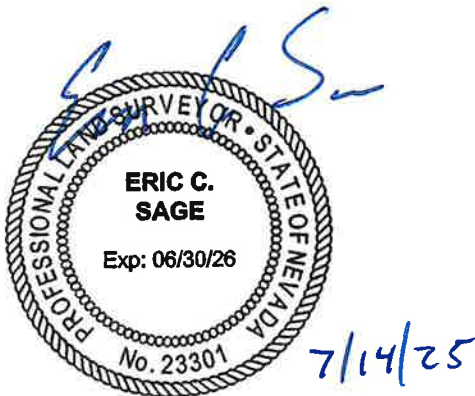
Exhibit A
PROJECT LEGAL DESCRIPTION

**PROJECT
LEGAL DESCRIPTION**

All that certain real property situate within a portion of the Northwest One-Quarter (NW 1/4) of Section Fourteen (14), Township North (20) North, Range Twenty-Four (24) East, Mount Diablo Meridian, City of Fernley, County of Lyon, State of Nevada. Being Parcels 1, 2, 3, and 4 as shown on the Parcel Map for SCC-Canyon II, LLC, filed in the official record of Lyon County, State of Nevada, on January 27, 2006, as Document Number 373825.

APNs: 021-041-07, 021-041-08, 021-041-09 & 021-041-10

Prepared by:
Wood Rodgers, Inc.
1361 Corporate Blvd.
Reno, NV 89502



Eric C. Sage, P.L.S.
Nevada Certificate No. 23301

DOC #: 633401
CONFORMED COPY

(Not Compared to Original)

03/22/2021 02:12 PM

OFFICIAL RECORD

Requested By:
CITY OF FERNLEY

Lyon County, NV
Margie Kassebaum, Recorder

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

BILL #292
CITY OF FERNLEY
ORDINANCE # 2021-001

AN ORDINANCE AUTHORIZING THE CITY OF FERNLEY TO ENTER INTO A DEVELOPMENT AGREEMENT (DA20002) WITH RELIEF SPRINGS, LLC, TO ESTABLISH SPECIFIC ADJACENCY STANDARDS FOR FUTURE DEVELOPMENT IN COMPLIANCE WITH THE ADJACENCY STANDARDS SET FORTH IN §32.09.030 OF THE FERNLEY MUNICIPAL CODE, AND PROVIDING OTHER MATTERS PROPERLY RELATED THERETO FOR A SITE APPROXIMATELY 129.94 ACRES IN SIZE GENERALLY LOCATED SOUTH OF MAIN STREET, EAST OF STOCK LANE, WEST OF MILLER LANE, AND NORTH OF THE EXISTING MILLER MEADOWS SUBDIVISION, FERNLEY, NV. (APN 021-041-07, 021-041-08, AND 020-041-10)

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

Based on the provisions set forth in Nevada Revised Statutes and the City of Fernley Development Code, the Council does hereby authorize the City of Fernley to enter into a Development Agreement with Relief Springs, LLC, as attached.

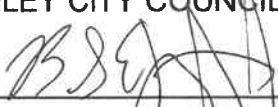
The Development Agreement involves future development on the aforementioned parcels. The purpose of this development agreement is to memorialize specific requirements which would satisfy the adjacency standards set forth in §32.09.030 of the Fernley Municipal Code.

BILL # 292 BEING HEREBY PROPOSED on the 6th day of January 2021.

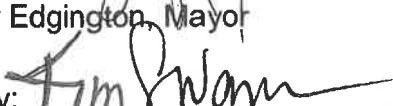
BILL # 292 BEING HEREBY PASSED, APPROVED and ADOPTED this 20th day of January 2021, by the following vote of the Council:

Ayes: 4 Nays: 1 Abstentions: 0 Absent: 0

FERNLEY CITY COUNCIL

By: 
Roy Edgington, Mayor

Date: 2-3-21

Attest By: 
Kim Swanson, City Clerk

Date: 2/3/2021

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

DEVELOPMENT AGREEMENT

Article 1. Parties, definitions and property description.

This Development Agreement (“**Agreement**”) is by and between:

“Developer” **Relief Springs, LLC,**
 a Nevada limited liability company, Series 3
 14230 E. Windriver Drive
 Reno, NV 89511
 Fax No.: 775-_____

“City” City of Fernley, a Nevada municipal corporation
 595 Silver Lace Boulevard
 Fernley, NV 89408
 Fax No.: 775-_____

Key definitions in this Agreement are:

“Project” means the residential project located off West Main Street, just to the east of Stock Lane and just to the west of Miller Lane, in Fernley, Nevada.

“Project Property” means that real property located in the City of Fernley, County of Lyon, State of Nevada, more particularly described as **Exhibit A** attached hereto, having APNs 021-041-07, 021-041-08, and 020-041-10.

Article 2. Recitals.

- A. Developer is the current owner of the Project Property and is the developer of the Project.
- B. The vast majority of the Project Property is presently located in zoning district SF12 (Residential Single Family 12,000 square feet), with a small portion of the Project Property presently located in zoning district C1 (neighborhood commercial). The land located to the west and to the south of the Project Property is generally zoned RR1 (Rural Residential 1-acre), with pockets of RR5 (Rural Residential 5-acre) and SF6 (Residential Single Family 6,000 square feet).
- C. The Developer has submitted an application for a Zoning Map Amendment (“**Map Amendment**”) to effect a zone change for the Project Property from SF12 (Residential Single

Family 12,000 square feet) to SF6 (Residential Single Family 6,000 square feet), and from SF12 (Residential Single Family 12,000 square feet) and C1 (neighborhood commercial) to MDR14 (Residential Medium Density Residential 14 dwelling units per acre), all as more particularly set forth in the Map Amendment application. Reference is hereby made to Developer's application for the Map Amendment relative to any submission requirements for this Agreement identified in Table A-1 (Application Checklists) of the City's Municipal Code ("**Code**").

- D. Given the land uses surrounding the Project Property, were the City to approve the Map Amendment application, development of the Project Property would require implementation of the City's lot adjacency and transition standards set forth in §32.09.030(D) of the Code (the "**Adjacency Rule**").
- E. The Adjacency Rule favors flexibility by granting the City discretion to determine appropriate transition requirements on a case-by-case basis. That being said, given the size and location of the Project Property, and the potential density of the Project, both the City and Developer desire to set expectations and agree how the Adjacency Rule will be applied in the event the City approves Developer's Map Amendment application. The City and Developer intend that this Agreement memorialize and effectuate their understanding of the proper application of the Adjacency Rule to development of the Project Property in the event of the City's approval of Developer's Map Amendment application.
- F. The City is authorized, pursuant to NRS 278.0201 through 278.0207, inclusive, and Code §32.03.100(a), to enter into binding development agreements with any person having a legal or equitable interest in land concerning the development of that land—such as an agreement to determine proper application of the Adjacency Rule to particular property—provided that such agreement is consistent with the City of Fernley Comprehensive Master Plan August 2018 ("**Master Plan**").
- G. The Master Plan includes the following goals:
- 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. Master Plan §HP.1.1.
 - Encourage housing that supports sustainable development patterns by promoting the efficient use of land [...and] easy access to services and public facilities[...]. Master Plan §HP.1.2.
 - Strive for viable mixed income neighborhoods throughout Fernley that collectively reflect the diversity of housing types and tenure (rental and ownership). Master Plan §HP.1.3.

- Provide opportunities for high-density residential development near the downtown core and elsewhere in the community where appropriate. Master Plan §HP.1.4.
- Encourage new development in areas where adequate public services and facilities can be provided efficiently. Master Plan §LU.1.1
- Encourage new development to be in accordance with the Comprehensive Master Plan land use category. Master Plan §LU.12.
- Promote infill development. Master Plan §LU.1.5.

H. By entering into this Agreement establishing application of the Adjacency Rule to future development of the Project Property as zoned per the Map Amendment, the City will achieve the certainly both the City and Developer require to move forward with Developer's Map Amendment application, approval of which in turn would be consistent with the City's goals set forth in the Master Plan as identified in Recital G above. As such, approval of this Agreement is consistent with the Master Plan, as required by NRS 278.0203 and Code §32.03.100(A)(6)(a).

I. Acknowledging the foregoing, the parties desire to enter into this Agreement to confirm the proper requirements for implementing the Adjacency Rule in relation to the Project and Project Property, and to provide for such other matters as set forth herein.

NOW, THEREFORE, in exchange for mutual considerations, the sufficiency of which is hereby acknowledged, the parties agree as follows:

Article 3. Development Matters.

Section 3.1 Development Standards.

The permitted uses of the Project Property, the density or intensity of its use, the maximum height and size of the proposed buildings, and any dedication of any portion of the Project Property to the City for public use shall be as provided in this Agreement, the Map Amendment, the Code, and any future entitlements or approvals issued by the City for the Project or the Project Property, as the same may hereafter be revised, modified or amended from time to time in accordance with applicable law.

Section 3.2 Adjacency Rule.

The City and Developer agree that the Adjacency Rule, as applied to the Project, the Project Property, and all future permits and approvals considered by the City in connection therewith, shall require the following development standards and impose the following development constraints upon the Project Property:

(1) There shall be a Buffer Zone along the southerly boundary of the Project Property, which Buffer Zone shall include all that area within twenty feet of the southerly boundary of the Project Property, and may include, in the City's discretion, any area within fifty feet of the southerly boundary of the Project Property (such area, the "**Southern Buffer Zone**"). Similarly, there shall be a Buffer Zone along the westerly boundary of the Project Property, which Buffer Zone shall include all that area within twenty feet of the easterly boundary of the Stock Lane right-of-way as it runs parallel to the westerly boundary of the Project Property, and may include, in the City's discretion, any area within fifty feet of the easterly boundary of the Stock Lane right-of-way as it runs parallel to the westerly boundary of the Project Property (such area, the "**Western Buffer Zone**"). As used herein, "**Buffer Zone**" means an area of common open space within the Project Property, which area may not be subdivided or used for single family homes, but may be improved with paths, trails, drainageways, landscaping berms, or other subdivision improvements.

(2) Each single-family residential lot that shares a common boundary line with the Southern Buffer Zone or the Western Buffer Zone, or for which no other single-family residential lot is located between it and the Southern Buffer Zone or the Western Buffer Zone, shall be not less than 15,000 square feet in total area, and the primary residence on each such lot (each, a "**Transition Lot**") shall be located at least twenty feet from any common boundary line between such Transition Lot and the Southern Buffer Zone or Western Buffer Zone, as applicable.

(3) The City will not issue a building permit for any residence, outbuilding, or accessory structure on a Transition Lot unless, in addition to satisfying all other conditions and requirements of the Code, the proposed residence, outbuilding, or accessory structure is single-story in height. Any right to a structure of any greater height on a Transition Lot is hereby waived.

(4) As to that portion of the Project Property zoned SF6 (Residential Single Family 6,000 square feet) following the City's approval of the Map Amendment, the total density on such portion of the Project Property shall not exceed three and sixth tenths (3.6) dwelling units per acre.

Section 3.3 No Further Requirements

Provided the requirements of Section 3.2 are met and/or satisfied, the City shall not require any further exaction, condition, mitigation, or standard of Developer, the Project, or the Project Property in satisfaction of the Adjacency Rule.

Section 3.4 Limitation.

The provisions of NRS 278.0201 apply to this Agreement.

Article 4. General Terms.

Section 4.1 Effective Date; approved by ordinance.

This Agreement is not effective until it has been approved by ordinance by the City Council and recorded in the Official Records of Lyon County, Nevada.

Section 4.2 Term; Cancellation.

This Agreement shall continue in full force and effect in perpetuity, unless cancelled in accordance with the terms NRS 278.0205. A cancellation of this Agreement is not effective or binding until approved by ordinance of the City Council and recorded in accordance with NRS 278.0205.

Section 4.3 Modifications and Amendments.

Modifications and amendments to this Agreement are not effective or binding until approved by ordinance of the City Council and recorded in accordance with NRS 278.0205. Without limiting any other notice required by applicable law, notice of the hearing on an ordinance amending or otherwise modifying this Agreement shall be provided by mail, consistent with Code Chapter 32.03.030, at least ten days in advance of such hearing to owners of property within 750 feet of the exterior limits of the Project Property.

Section 4.4 Breach.

A violation of this Agreement by a party shall be a breach of this Agreement by that party if, within 60 days after receipt of notice of such violation delivered in accordance with Section 4.7 below by the non-violating party, the party in violation fails to cure such violation.

Section 4.5 Entire Agreement.

With respect to the matters addressed herein (including the recitals), this Agreement integrates all of the terms and conditions mentioned herein or incidental hereto, and supersedes all negotiations or previous agreements between the parties.

Section 4.6 Assignments; Transfer of rights.

Developer shall have the right to assign all or any portion of its rights and delegate any obligations under this Agreement to third parties who acquire fee simple absolute ownership to any portion of the Project Property.

Section 4.7 Notices; when deemed sufficiently given.

- A. Formal notices, demands and communications between the City and Developer must be in writing and must be sent to the addresses or facsimile numbers stated in Article 1 above and to each successor or assign of Developer to the address given by such party in writing and if no written notice is given, then to the address stated in the transfer agreement, and/or to any address or number subsequently communicated to the sending party in writing.
- B. If notice is sent by registered or certified mail to the correct address, postage prepaid, it will be deemed sufficiently given the earlier of when actually received by the addressee or three business days after it is received by the U.S. Post Office as indicated on the receipt.

- C. If notice is sent by courier, or overnight delivery service (Federal Express, UPS Overnight, U.S. Postal Priority Mail), and is properly addressed, it will be deemed sufficiently given when delivered as indicated in the records of the courier or service.
- D. If notice is sent by facsimile, properly addressed to the addressee specified in Article 1 above and is actually sent to the correct facsimile number, it will be deemed sufficiently given when receipt is confirmed by either the receiving or sending facsimile machine, provided that that confirmation is in writing and sufficiently identifies the document, and indicates the time and date that the document was received by the receiving facsimile machine.

Section 4.8 Further documents.

Each party agrees to honor any reasonable requests by the other party to complete, execute, and deliver any document necessary to accomplish the purposes hereof.

Section 4.9 Reserved.

Section 4.10 Time of Essence.

Time is of the essence in the performance of this Agreement.

Section 4.11 Governing law.

The laws of the State of Nevada, without regard to conflicts of law principles, shall govern the interpretation and enforcement of this Agreement.

Section 4.12 Severability of invalid or unenforceable provisions.

If any provision If any provision contained in Agreement is held to be unenforceable by a court of law or equity, this Agreement shall be construed as if such provision did not exist and the non-enforceability of such provision shall not be held to render any other provision or provisions of this Agreement unenforceable.

Section 4.13 Binding effect; successors and assigns; assignment/delegation.

This Agreement shall be binding upon and inure to the benefit of the heirs, executors, administrators, and permitted successors and assigns of the parties hereto. To the extent that any assignment of any right under this Agreement changes the duty of either party, increases the burden or risk involved, impairs the chances of obtaining the performance of this Agreement, attempts to operate as novation, or includes a waiver or abrogation of any defense to payment by Fernley, such offending portion of the assignment shall be void, and shall be a breach of this Agreement.

Section 4.14 No third-party beneficiaries intended.

Unless otherwise specifically identified in this Agreement, there are no third-party beneficiaries intended by this Agreement and no third parties have any standing to enforce any of the provisions of this Agreement.

Section 4.15 Representation and warranties by persons who sign this Agreement.

Each person who signs this Agreement represents and warrants to each other person who signs this Agreement that he or she is an authorized agent of and has actual authority to execute this Agreement on behalf of the party for whom he or she is signing, and that all required approvals and actions have been taken to authorize the execution of this Agreement with the intent and effect of binding the party to this Agreement.

[Signature Page Follows]

EXECUTED on the dates indicated:

City:

CITY OF FERNLEY,
a Nevada municipal corporation

Dated 3/9, 2021

By: [Signature]
Its: Mayor

Attest:
[Signature]
City Clerk

Developer:

RELIEF SPRINGS, LLC,
a Nevada limited liability company-- Series 3

Dated 3/3, 2021

By: [Signature]
Name: Todd Pardula
Its: Manager

STATE OF NEVADA)
)
COUNTY OF WASHOE)

This instrument was acknowledged before me on March 3, 2021 by Todd Pardula as Manager of RELIEF SPRINGS, LLC, a Nevada limited liability company – Series 3.

Notary Stamp Here 

[Signature]
Notary Public

My Commission Expires: 6/19/2022

EXHIBIT A

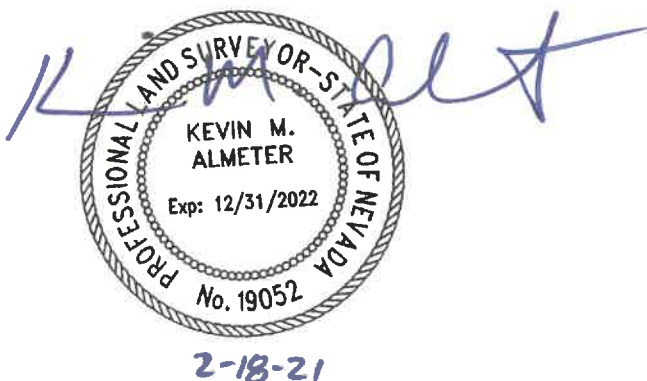
LEGAL DESCRIPTION

[SEE FOLLOWING PAGES]

**PROJECT
LEGAL DESCRIPTION**

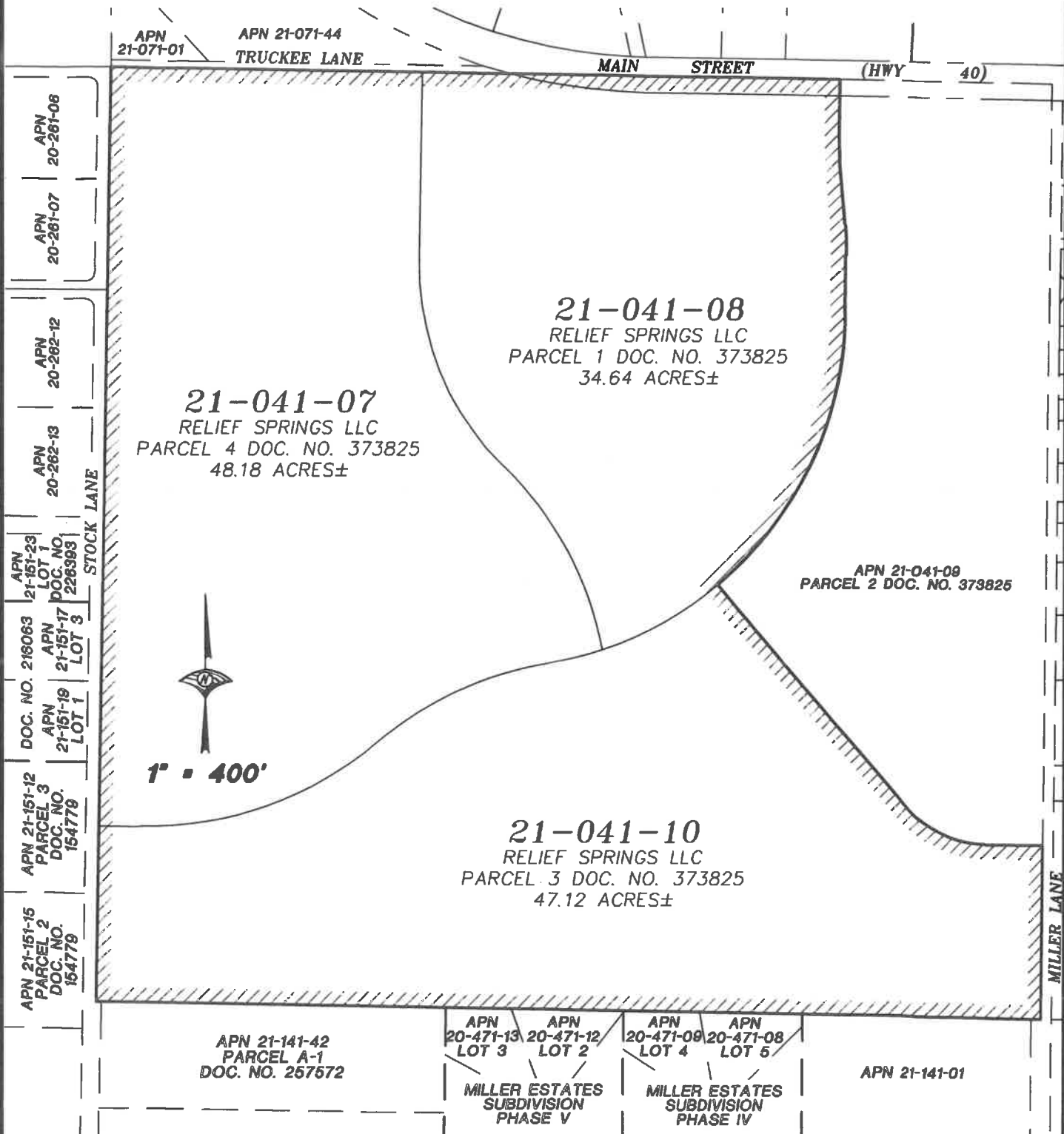
All that certain real property situate within a portion of the Northwest One-Quarter (NW 1/4) of Section Fourteen (14), Township North (20) North, Range Twenty-Four (24) East, Mount Diablo Meridian, City of Fernley, County of Lyon, State of Nevada. Being Parcels 1, 3, and 4 as shown on the Parcel Map for SCC-Canyon II, LLC, filed in the official record of Lyon County, State of Nevada, on January 27, 2006, as Document Number 373825.

Prepared by:
Wood Rodgers, Inc.
1361 Corporate Blvd.
Reno, NV 89502



Kevin M. Almeter, P.L.S.
Nevada Certificate No. 19052

BOUNDARY MAP FOR ZONE CHANGE
 BEING A PORTION OF THE NORTHWEST 1/4 OF SECTION 14
 TOWNSHIP 20 NORTH, RANGE 24 EAST, M.D.M.
 FERNLEY LYON COUNTY NEVADA



JOB NO. 1557016
 SHEET 1 OF 1



WOOD RODGERS
 BUILDING RELATIONSHIPS ONE PROJECT AT A TIME
 1361 Corporate Blvd Reno, NV 89502
 Tel 775.823.4068 Fax 775.823.4066

EXECUTIVE SUMMARY

Project Name:	Redhawk Ranch Development Agreement Amendment
Site Location:	Four subject parcels with a combined size of ±161 acres located southwest of the intersection of Miller Lane and Main Street in Fernley, NV.
APN Numbers:	021-041-07, 021-041-08, 021-041-10, & 021-041-09
Applicant:	Red Hawk Ranch LLC Series B & DB-BB Investments I LLC
Applicant's Representative:	Wood Rodgers, Inc.; Derek Kirkland, AICP
Owner:	Red Hawk Ranch LLC Series B & DB-BB Investments I LLC
Proposed Action:	This is a request for a Development Agreement Amendment to add the following items: 1) Incorporate both property owners in the agreement 2) Extend the active Tentative Subdivision Maps (TSM) for a period of 10 years to 12/31/2032 a. TSM21004 (Red Hawk Ranch Subdivision) Approved 1/19/22 b. TSM22007 (Duets at Red Hawk Ranch) Approved 12/7/22 3) Establish the framework for the Red Hawk Ranch Special Assessment District (SAD) to include a. Offsite roadway and associated improvements including Main Street, Stock Lane, and Miller Lane (Conditioned in the TSMs) b. Off-site sewer and other utility connections c. Backbone roadways and utilities d. Mass grading for the overall site including drainage channel and retention basin e. Community park improvements in the retention basin 4) Allow the density that is encompassed by the drainage channel and retention basin to be shifted to other developable areas within Red Hawk Ranch 5) Shift the Community Park from the southeast corner of Red Hawk Ranch to the retention basin.
Land Use Classification:	Single-Family Residential (APNs 021-041-07 & 021-041-10) and Mixed Residential (APN 021-041-08 & 021-041-09).
Current Zoning:	SF6 (APNs 021-041-07 & 021-041-10) and MDR14 (APN 021-041-08 & 021-041-09).
Flood Zone Designation:	Zone AE & X
Gross Site Area	±161 acres

Surrounding properties and uses	Current Zoning District	Comprehensive Plan Land Use Designation
North Commercial buildings and Fernley RV Park	C1, C2 Split Zoning- C2/SF6, I/TC, C1/MF30	SMU, PF & SFR
West Existing single-family residences	RR1	RR
East Existing single-family residences, commercial buildings	C1, MF30, SF6, RR1	SMU & MR
South Existing single-family residences and agricultural uses	RR1, SF6	RR & SFR

ANALYSIS

Background

Development Agreement (DA) #20002 was approved by the City of Fernley on January 19, 2022 and was associated with Bill #289 - ZMA20001 and TSM #21004. The City of Fernley also approved a second tentative map TSM22007 for the Duets at Red Hawk Ranch on December 7, 2022. As part of the two tentative subdivision maps the City of Fernley included several conditions for off-site roadway and infrastructure improvements. The overall Red Hawk Ranch development also includes joint improvements for a drainage channel and retention basin, a collector roadway, and backbone utilities. The overall backbone infrastructure and off-site development costs are estimated to exceed \$14 Million which have created financial challenges for the property owners to move Red Hawk Ranch forward. Both property owners have worked with City of Fernley staff on options for financing including exploring a possible Special Assessment District (SAD). On June 4, 2025 the City of Fernley Council adopted resolution #25-005 establishing guidelines and procedures for the creation of private property owner requested SAD pursuant to NRS 271.

Justification for Request

In order to fund the backbone infrastructure and off-site development costs to move the project forward the Applicants are proposing to establish an SAD for the overall Red Hawk Ranch properties. Amending the original Red Hawk Ranch DA would allow both property owners and the City to agree on the framework for what is included in the SAD, extend the tentative subdivision maps to allow time for implementing the SAD, and provide an opportunity to recapture residential units given the extent of drainage and retention improvements required. These proposed amendments are outlined as follows and are included in the attached Development Agreement Amendment:

- 1) Incorporate both property owners in the agreement
- 2) Extend the active Tentative Subdivision Maps (TSM) for a period of 10 years to 12/31/2032
 - a. TSM21004 (Red Hawk Ranch Subdivision) Approved 1/19/22
 - b. TSM22007 (Duets at Red Hawk Ranch) Approved 12/7/22
- 3) Establish the framework for the Red Hawk Ranch Special Assessment District (SAD) to include

- a. Offsite roadway and associated improvements including Main Street, Stock Lane, and Miller Lane (Conditioned in the TSMs)
 - b. Off-site sewer and other utility connections
 - c. Backbone roadways and utilities
 - d. Mass grading for the overall site including drainage channel and retention basin
 - e. Community park improvements in the retention basin
- 4) Allow the density, ± 191 units, that is encompassed by the drainage channel and retention basin to be shifted to other areas setting a max unit count of within the Red Hawk Ranch property.
 - 5) Shift the proposed Community Park from the southeast corner of Red Hawk Ranch to the retention basin to provide a larger community amenity.

Pursuant to NRS 278.0201 through 278.0207, inclusive, and Code §32.03.100(a), the City of Fernley is allowed to enter into development agreements, and per NRS 271 and the recently adopted City of Fernley SAD guidelines the City of Fernley may establish SADs. The purpose of the Development Agreement Amendment is to allow both property owners and the City of Fernley to agree to items that would be covered under the SAD and extend project approvals that are currently a part of the Development Agreement.

The proposed amendment will also provide an update to the overall development plan to ensure the current density allowed on the property will remain given the extent of the drainage channel and retention basin required to remove the developable areas from the flood zone. The amendment will also provide an enhanced community element by allowing a larger community park to be constructed in the retention basin. A conceptual map of the proposed drainage channel, retention basin, and the density within the drainage channel and retention basin are provided in Section 2 of this application packet. A community park concept is also included in section 2 of this application packet.

All other elements of the Red Hawk Ranch Development Agreement and conditions of approval associated with the two tentative subdivision maps will remain in effect. This Development Agreement Amendment is necessary to move the Red Hawk Ranch Project forward, which will provide a variety of housing types to support the growth in employment and population in the City of Fernley. The Red Hawk Ranch Project will also provide a redevelopment opportunity along Fernley's Main Street and the western Gateway.

Development Agreement Findings

- 1) **The proposed development agreement conforms to the maps and policies of the master plan.**

Response: *The proposed development agreement amendment will conform to the underlying master plan and policies and remains in conformance with the approved tentative subdivision maps. The development agreement amendment will allow the applicants to move the Red Hawk Ranch Project forward and to fulfill the conditions associated with the previous approvals.*

Applicable Master Plan Policies

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.

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

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

LU.1.5 Promote infill development.

2) The proposed development agreement complies with the requirements of NRS.

Response: *The City is authorized, pursuant to NRS 278.0201 through 278.0207, inclusive, and Code §32.03.100(a), to enter into binding development agreements with any person having a legal or equitable interest in land concerning the development of that land provided that such agreement is consistent with the City of Fernley Comprehensive Master Plan August 2018. The proposed development agreement amendment would allow the Red Hawk Ranch Project to remain consistent with the City of Fernley Master Plan. Furthermore, NRS 271 allows the City of Fernley to establish a Special Assessment District, and the City Council recently adopted SAD guidelines on June 4, 2025.*

3) The proposed development agreement is consistent with this development code and all other applicable codes and ordinances.

Response: *The proposed development agreement amendment would not change any of the tentative subdivision maps or the conditions of approval and would remain consistent with all applicable development codes. The proposed density transfer would remain consistent with allowed density as set by the current zoning and master plan of the overall Red Hawk Ranch properties.*

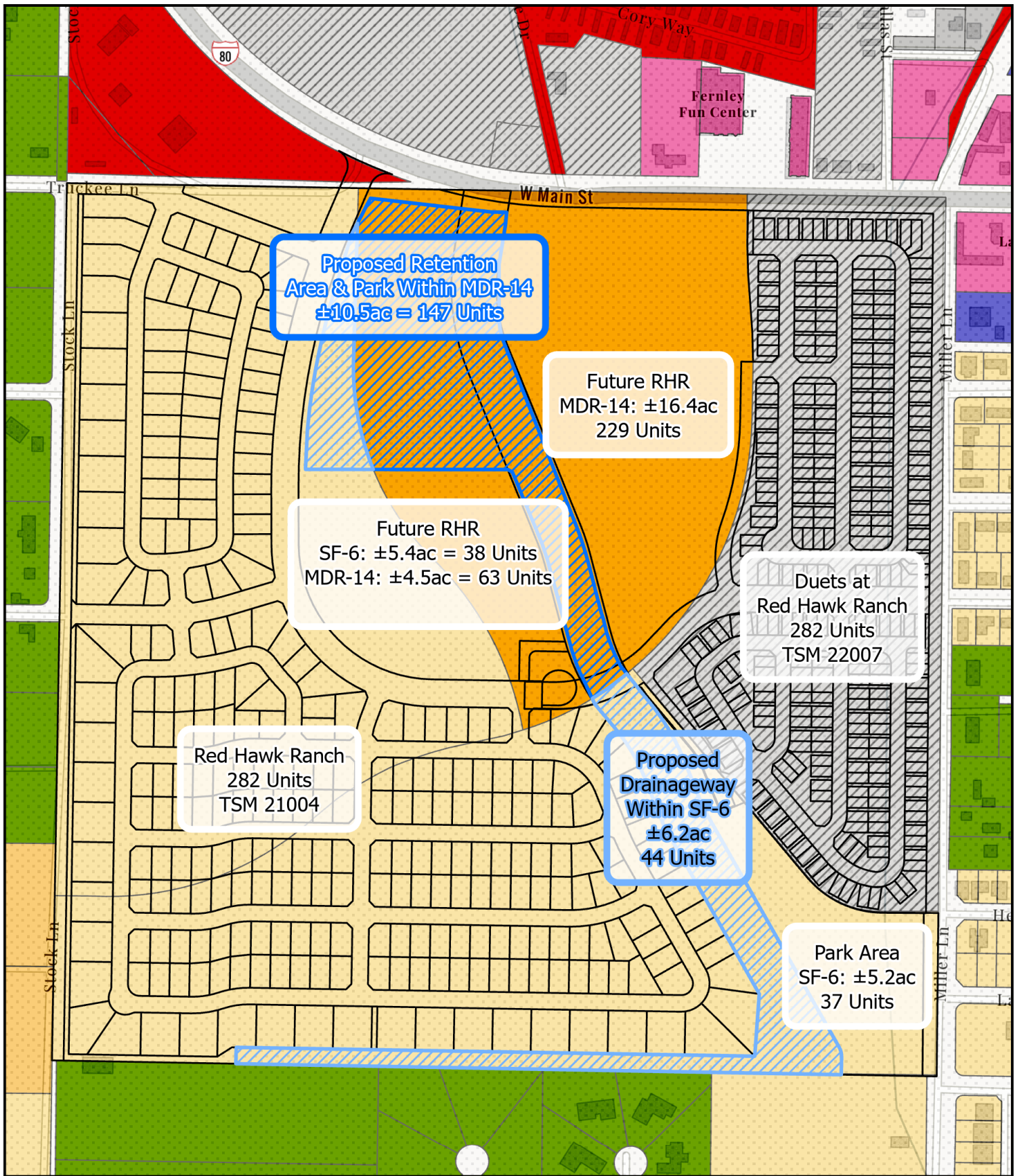
4) The proposed development agreement will not be detrimental to or cause adverse effects to adjacent property owners, residents, or the general public, and conditions must be included to address the completion or phasing of improvements as well as provisions to address abandonment of the project. Conditions and assurance measures shall address dust control, vandalism, weed control, traffic, community blight, safety and maintenance issues resulting in the case of partial development or abandonment. All such conditions and assurance measures shall match the duration of the development agreement.

Response: *The Red Hawk Ranch development agreement has been designed to reduce and mitigate any effects to adjacent residents and property owners. Any conditions agreed upon with the applicant and the governing bodies will be integrated into future development plans as required by the original development agreement. The added elements will provide additional benefits for the surrounding areas as described below in Finding #5 responses.*

- 5) The proposed development agreement provides clear and substantial benefit to the residents of the city.

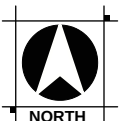
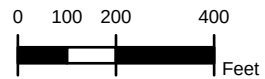
Response: *The proposed development agreement amendment provides the following benefits to the residents of Fernley:*

- ❖ Incorporate both property owners in the agreement
Benefit: *Adding both property owners to the development agreement will allow all 161 acres including all the off-site improvements to be implemented as a single project opposed to segmented improvements. The joint effort will also help expedite off-site improvements.*
- ❖ Extend the active Tentative Subdivision Maps (TSM) for a period of 10 years to 12/31/2032
Benefit: *Both tentative maps include conditions for off-site improvements that will greatly benefit surrounding neighborhoods. The time extension will allow the developers more time to setup the needed SAD and project funding to move these improvements forward.*
- ❖ Establish the framework for the Red Hawk Ranch Special Assessment District (SAD) to include: Offsite roadway and associated improvements, Off-site sewer and other utility connections, Backbone roadways and utilities, Mass grading for the overall site including drainage channel and retention basin, and Community park improvements.
Benefit: *The backbone infrastructure required for the project is expected to exceed \$14 million, which is a substantial cost and has delayed the project from starting. The DA amendment will allow both property owners to work together with the City of Fernley on establishing an SAD to finance these improvements which will provide major benefits for the surrounding communities. The SAD will also allow Red Hawk Ranch to move forward providing much needed housing for Fernley while also enhancing the western gateway to Main Street. Establishing the SAD framework through the DA amendment is the first step in the process.*
- ❖ Allow the density, ±191 units, that is encompassed by the drainage channel and retention basin to be shifted to other areas within the Red Hawk Ranch property.
Benefit: *The retention basin and drainage channel will provide a major flood mitigation project for the surrounding area. The necessary drainage improvements were much larger than originally anticipated. Gaining back the lost units will help offset the cost of the backbone infrastructure and drainage improvements while also adding much needed housing to support Fernley's employment growth. The units were already allowed based on the underlying zoning, the request is simply to shift the units to developable areas.*
- ❖ Shift the proposed Community Park from the southeast corner of Red Hawk Ranch to the retention basin to provide a larger community amenity.
Benefit: *The retention basin is much larger than originally anticipated. Opposed to leaving that as a large 10+ acre open area, the developer is proposing to shift the 5-acre park originally planned for the southeast corner along Miller Lane to the retention basin to provide a larger community amenity. Shifting the park will enhance the retention basin with landscaping and a community amenity, while also increasing the size of the park providing opportunity for sports fields or other larger community amenities.*



UNIT ALLOCATION
RED HAWK RANCH
FERNLEY, NV
JULY 2025

Zoning		Split Zoning
 C1 - Neighborhood Commercial	 RR1 - Rural Residential (1 acre)	 Split Zoning
 C2 - General Commercial	 RR5 - Rural Residential (5-acre)	 MDR 14
 I - Industrial	 SF6 - Single Family (6,000 sf)	
 MF30 - Multiple Family (30 du/ac)		





W. MAIN ST.

PROPOSED BASIN
PARK BOUNDARY
~12.65 AC

TURF WITHIN BASIN CAN SUPPORT THREE
(3) MULTI-USE FIELDS SIZED FOR HIGH
SCHOOL COMPETITION (330' x 195')

TURF CAN BE RESTRIPTED TO ALSO
SUPPORT EITHER:
(1) CHAMPIONSHIP FIELD (360' x 225')
or
(6) YOUTH FIELDS (210' x 135')

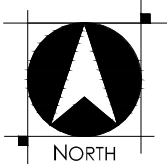
OPTIONAL PLAYGROUND
(1) PLAY STRUCTURE
(2) SWINGSETS

PARKING
(~200 STALLS)

FUTURE
DEVELOPMENT
(~ 16.6 AC)

FUTURE
DEVELOPMENT
(~ 7.3 AC)

CURRENT PROPOSED
PARK LOCATION
(~ 5.5 AC)



SCALE: 1" = 200'

BASIN PARK - AMENITY LAYOUT
REDHAWK RANCH
FERNLEY, NEVADA | APRIL 14, 2025

WOOD RODGERS
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME
1361 Corporate Boulevard Tel 775.823.4068
Reno, NV 89502 Fax 775.823.4068



CITY OF FERNLEY

Planning Commission AGENDA REPORT

Meeting Date: September 10, 2025

REPORT TO: Fernley Planning Commission

REPORT FROM: Alisa Johansson

FINANCIAL IMPACT:

Yes: No: X

CURRENTLY BUDGETED:

Yes: No: X

FUND/ACCOUNT:

N/A

ACTION REQUESTED: Motion
Ordinance

AGENDA ITEM:

(For Possible Action) Discussion and possible action regarding concurrent requests for a Zoning Map Amendment (ZMA25001) and Tentative Subdivision Map (TSM25001) from Wood Rodgers, Inc. on behalf of Genica Clover Ranch, LLC, rezoning six (6) parcels containing approximately 24.72 acres from RR½ (Rural Residential, ½-acre minimum) and RR5 (Rural Residential, 5-acre minimum) to SF6 (Single Family, 6000-square foot minimum) and creating a 105-lot single-family residential subdivision generally located between Farm District Road to the south, Langdon Street to the north, Winnie Lane to the west, and Nevada Pacific Boulevard to the east (APNs 021-331-15, -19, -20, -22, -29, and -38).

AGENDA ITEM BRIEF:

An application to rezone, merge, and resubdivide six (6) parcels containing approximately 24.72 acres into 105 single-family lots. This item was continued from the August 13th Planning Commission meeting.

RECOMMENDED MOTION:

“Considering the information contained in the applicant’s submittal package and based on the analysis presented in the staff report, I move to recommend approval of Bill 365 and ZMA25001 rezoning the subject parcels from RR½ and RR5 to SF6 and recommend approval of TSM25001 subdividing 24.72 acres into 105 single-family residential lots.”

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

"I move to recommend denial of Chaparral Estates associated with ZMA25001, Bill 365, and TSM25001. I cannot recommend approval of this Zoning Map Amendment and Tentative Subdivision Map because I have determined the proposed changes to be detrimental to the public's health, safety, and general welfare and I am unable to make the following required findings:

(State finding and supporting analysis—repeat for each applicable finding)"

No further alternatives are provided, however, any other motions comporting with Planning Commission parliamentary procedures are appropriate.

BACKGROUND:

Site & Vicinity

Generally located between Farm District Road to the south, Langdon Street to the north, Winnie Lane to the west and Nevada Pacific Boulevard to the east, the site comprises 24.72 acres and is split-zoned. Five of the subject parcels are zoned RR½ with one parcel (021-331-15) zoned RR5. Abutting sites are zoned RR5, RR½, and SF20 (Single Family, 20,000-square foot minimum). The underlying Comprehensive Master Plan Land Use across all parcels and in the immediate vicinity is Single Family Residential (SFR). The surrounding context to the east, west, and south is characterized by large-lot residential development consisting of single-family residences on parcels ranging in size from 1.12 acres to over 5 acres. Denser residential developments are present to the immediate north, where single-family lot sizes range from 7,500 square feet to 12,000 square feet along the perimeters of the subdivisions. Staff notes that these subdivisions were approved before the City adopted development standards pertaining to adjacency and no meaningful buffers or transition are present. Largely vacant, the site's topography is gently sloped, ascending roughly ten feet in elevation from northwest to east-southeast. Vegetation largely consists of scrub grasses and small native shrubs. Trees are present and proposed to be removed along the east and west boundaries of the site where private irrigation ditches demarcate the site.

Analysis: Zoning Map Amendment

Zoning map amendments are committed to the City Council's legislative discretion. A zoning map amendment may be approved when the following findings can be made.

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

The underlying Comprehensive Master Plan Land Use for the site is Single Family Residential (SFR). The corresponding zoning districts associated with this land use are the Single Family (SF) zoning districts, with minimum lot sizes ranging from 6,000 to 20,000 square feet. The requested zoning district of SF6 (Single Family, 6,000-square foot minimum) is consistent with this Master Plan land use.

Furthermore, the Comprehensive Plan goals and action strategies directly supported by this requested zone change are:

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.

If approved, the proposed zoning map amendment will increase the available maximum density on the site from approximately 39 units to approximately 179 units. Although the current proposal does not seek to achieve this

maximum density, once constructed, the proposed smaller lot sizes still provide a more affordable alternative to large-lot developments, thereby adding to the variety of housing stock available in the City.

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.

If approved, the requested zoning map amendment would facilitate housing development within the established City core where easy access to services and public facilities is available. By concentrating development on undeveloped or underdeveloped land in this part of the City, conservation of land and resources in the more remote portions of the City can be realized.

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

Centrally located, the project site has easy access to utility infrastructure within adjoining or nearby developments. This allows efficient extension of infrastructure to the project site. Public services and facilities, such as an established roadway network, a fire station, schools, and recreational opportunities already serve neighboring developments, ensuring efficient access for the project's future residents.

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

The proposed zoning designation of SF6 is consistent with the site's mapped Comprehensive Master Plan land use category of Single Family Residential. If the zoning map amendment request is approved, future development of the site would inherently be in conformance with the Comprehensive Master Plan land use category.

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

The proposed project will consist of single-family residential development. This land use is compatible with existing established residential land uses in the vicinity. Further compatibility will be achieved through application of adjacency standards to provide appropriate transition between adjoining large-lot developments and the subject project.

LU.1.5 - Promote infill development

The project is considered infill development as defined by the City: vacant land surrounded by existing development served by public services and infrastructure.

2. Consistent with the surrounding land uses.

Surrounding parcels in the immediate vicinity are mapped Single Family Residential (SFR) in the City's Comprehensive Master Plan. The requested zoning district is consistent with this land use designation. Existing land uses in the vicinity are predominantly residential—the only exception to this pattern being a pre-school established on an adjoining lot zoned SF20 (Single Family, 20,000-square foot minimum). If approved, the requested zoning district of SF6 would allow a limited range of residential uses, including single-family detached dwellings and accessory uses. These land uses would be compatible with the established land uses in the vicinity.

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

A public hearing will be held in accordance with Fernley Municipal Code and Nevada Revised Statutes. Legal notice was provided on July 28, 2025 via US Mail to all property owners within 300' of the site, to all manufactured home residents in manufactured home parks within 300' of the site, and to all owners, residents, and applicants for the proposed action. Legal notice was published in the Reno-Gazette Journal on July 29, 2025.

Analysis: Tentative Subdivision Map

Recommendations and decisions on tentative maps shall be based on consideration of all of 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;

The subdivision has been designed to conform to applicable environmental and health laws and regulations. On-site drainage and public sewage disposal will address any ongoing water pollution risk resulting from the development. Significant air pollution resulting from the proposed residential development is not anticipated. Temporary measures to control dust, spills, and sediment will be required as part of any approvals for construction of improvements. Solid waste disposal will be provided by Waste Management.

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

Water supply meeting applicable health standards will be provided by the City of Fernley. Public water is available in Fort Sutter Boulevard to the immediate north of the site. As a condition of approval, the project proponent will be required to dedicate 1.12 acre-feet per lot to the City of Fernley. If dedicating groundwater rights, the amount of water to be dedicated will be calculated by the State Engineer. Dedication of water rights must occur prior to recordation of the final map.

3. Availability and accessibility of utilities;

Public and private utilities are available in the immediate vicinity of the proposed development. Public water is available in Fort Sutter Boulevard; public sewer is available in Westward Lane to the east. Both utilities will be extended to serve the project. A preliminary sewer modeling report was provided as part of the application package indicating that the City's sewer system has adequate capacity to serve the demand generated by the proposed project. Southwest Gas will provide natural gas services to the site. Communications utilities are also available nearby.

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

The subject subdivision is proposed in an area already served by public services such as schools, police and fire protection, recreation facilities, and parks. In 2016, Lyon County School District anticipated that schools in Fernley would remain at adequate utilization until 2025 when some schools may approach inadequacy (Master Facilities Planning Report, MGT of America, Inc., April 19, 2016). Although the Lyon County School Board heard a presentation related to an updated facilities management plan earlier this year, those updates have not yet been released for public review. Students residing in the proposed development would attend Cottonwood

Elementary School, Silverland Middle School, and Fernley High School. The Lyon County Sheriff's Office and North Lyon County Fire Protection District already serve the community surrounding the proposed subdivision and no changes to operations are anticipated to be needed to support this development. Picetti Park, Ponderosa Park, Green Valley Park, and Out of Town Park are all nearby, with travel distances ranging from just over one-half mile to just over two miles. Transportation network connectivity will be provided through construction and dedication of roadway improvements within and connecting to the development.

5. Consistency with the zoning district regulations;

The proposed subdivision has been examined for consistency with the SF6 zoning district dimensional standards and no apparent correction items were found. This includes, but is not limited to, lot width, minimum lot size, and a conceptual evaluation of setbacks.

6. Conformity with the master streets and highways plan;

As designed and conditioned, the project will conform to the City's Design Standards and to the successor document to the Master Streets and Highways Plan, the Transportation Master Plan (2020). Impacts to the transportation network resulting from this development are anticipated to be minimal.

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

A traffic impact study (Traffic Impact Study, GCW Engineers & Surveyors, July 21, 2025) was provided for review. The report indicates that total trips generated by the development would not create adverse Level of Service impacts at surrounding intersections. The report recommends installation of an eastbound left-turn lane on Farm District Road as an improvement required with or without project impacts—this recommendation was confirmed by Nevada Department of Transportation staff and incorporated into the conditions of approval for the project. Local streets Fort Sutter Boulevard to the north, Clover Lane to the south, and Westward Lane to the east will be extended to serve the subdivision with appropriate dedication of rights-of-way or granting of easements to the City of Fernley. All roadway extensions and all new roads within the subdivision will be designed and constructed to meet City of Fernley standards. Pedestrian infrastructure will be provided within the subdivision, south of the subdivision along reconstructed and extended Clover Lane, and at the intersection of Clover Lane and Farm District Road, where a new crosswalk will be installed to connect the subdivision's pedestrian network with the existing multi-use path along Farm District Road.

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

The site is not mapped within any FEMA floodplain zones. The site slopes gently upgradient from northwest to east-southeast, rising approximately ten feet in elevation from site boundary to site boundary. There are no significant elevation changes between this site and adjoining sites, though private irrigation ditches are present along the east and west property boundaries, forming an informal barrier. Per the soils report provided as part of this application, the on-site soils consist of Swingler sandy loam (23.2 acres), Swingler clay loam (0.9 acres), and Biddleman-Mazuma association (0.7 acres). These soils vary in their suitability for construction but do not appear to pose any hazard to development, nor are any adverse impacts to neighboring properties anticipated.

9. Recommendations and comments of review bodies;

At the time of this report, there are no outstanding comments from review bodies. Comments from reviewing departments and agencies not addressed through corrected plans have been incorporated into the conditions of

approval attached hereto.

10. Conformity to the master sewer and water utility plan; and

As conditioned, the project is designed to conform to the City's master sewer and water utility plans. Final improvement plans for the project will be required to adhere to City and state regulations regarding sanitary sewer and public water supply and installation of all infrastructure will be inspected to ensure compliance.

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

As conditioned, the project is anticipated to meet all applicable requirements contained in Fernley Municipal Code and state law.

RELEVANT LAWS, STATUTES, AND REGULATIONS:

General References

Nevada Revised Statutes (NRS) Chapter 278 – Planning and Zoning
Fernley Municipal Code (FMC) Title 32 – Development Code
City of Fernley Comprehensive Master Plan

Specific References

NRS 278.260 – Determination, establishment, enforcement and amendment of zoning regulations
NRS 278.330-278.353 – Subdivision of Land: Tentative Maps

FMC 32.03.040(e) – Zoning map amendments (rezoning)
FMC 32.03.060(f)(1) – Tentative subdivision maps
FMC 32.06.060 – General rural (GR20) and residential rural (RR5, RR1, and RR½)
FMC 32.06.070 – Residential – Single-family (SF20, SF12, SF9, SF6)
FMC 32.09 – Development Standards

FINANCIAL IMPLICATIONS:

None.

ATTACHMENTS:

1. Exhibit 1 - Bill 365
2. Exhibit 2 - Conditions of Approval
3. Exhibit 3 - Tentative Map Set
4. Exhibit 4 - Project Narrative - Applicant
5. Exhibit 5 - Traffic Impact Study

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

BILL #365
CITY OF FERNLEY
ORDINANCE # _____

A GENERAL ORDINANCE FOR A ZONING MAP AMENDMENT, ASSOCIATED WITH CASE NUMBER ZMA25001, TO CHANGE THE ZONING OF A ±24.72-ACRE SITE COMPRISED OF SIX (6) PARCELS GNERALLY LOCATED BETWEEN FARM DISTRICT ROAD, WESTWARD LANE, LANGDON STREET, AND WINNIE LANE FROM RR5 (RURAL RESIDENTIAL, 5-ACRE MINIMUM) AND RR½ (RURAL RESIDENTIAL, ONE-HALF-ACRE MINIMUM) TO SF6 (SINGLE-FAMILY RESIDENTIAL, 6,000-SQUARE FOOT MINIMUM) (APNS 021-331-15, -19, -20, -22, -29, AND -38)

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

Section 1: The zoning of that certain real property totaling ±24.72 acres, more or less, situated in the City of Fernley, Nevada, and owned by Genica Clover Ranch, LLC and Shawna Tibbals, being more particularly described on Exhibit “A” attached hereto and depicted on “Exhibit B” attached hereto is hereby reclassified from RR5 (Rural Residential, 5-acre minimum) and RR½ (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 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 #365 BEING HEREBY PROPOSED this 13th day of August 2025.

BILL #365 BEING HEREBY PASSED, APPROVED, AND ADOPTED this 17th day of September 2025, by the following vote of the Council:

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

FERNLEY CITY COUNCIL

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

Attest By: _____
Kimberly Swanson, City Clerk

Date: _____

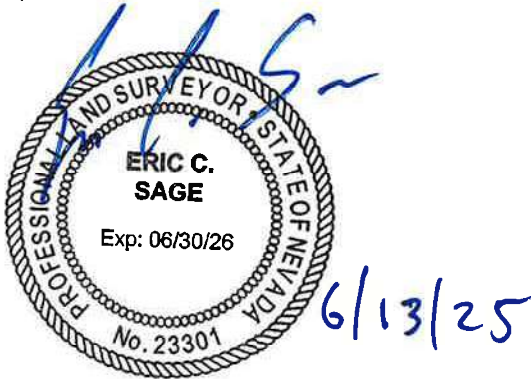
**LEGAL DESCRIPTION
CHAPARRAL ESTATES
TENTATIVE MAP BOUNDARY**

All that certain real property situate within the Northwest One-Quarter (NW 1/4) of Section 20, Township 20 North, Range 25 East, M.D.M., City of Fernley, County of Lyon, State of Nevada, being more particularly described as follows:

BEING Parcel 3 per Parcel Map File No. 100090 recorded June 11, 1986, Parcel 1, Parcel 3, and Parcel 4 per Parcel Map File No. 105269 recorded February 3, 1987, Parcel 2-A per Parcel Map File No. 142350 recorded June 25, 1991, and Parcel 2-B-1 per Boundary Line Adjustment Quitclaim Deed Document No. 554364 and shown on Record of Survey Document No. 554363 both recorded August 22, 2016, all of the above in the Official Records of Lyon County, State of Nevada.

APNs: 021-331-15, 021-331-19, 021-331-20, 021-331-22, 021-331-29, & 021-331-38

Prepared by:
Wood Rodgers, Inc.
1361 Corporate Blvd.
Reno, NV 89502
(775) 823-4068

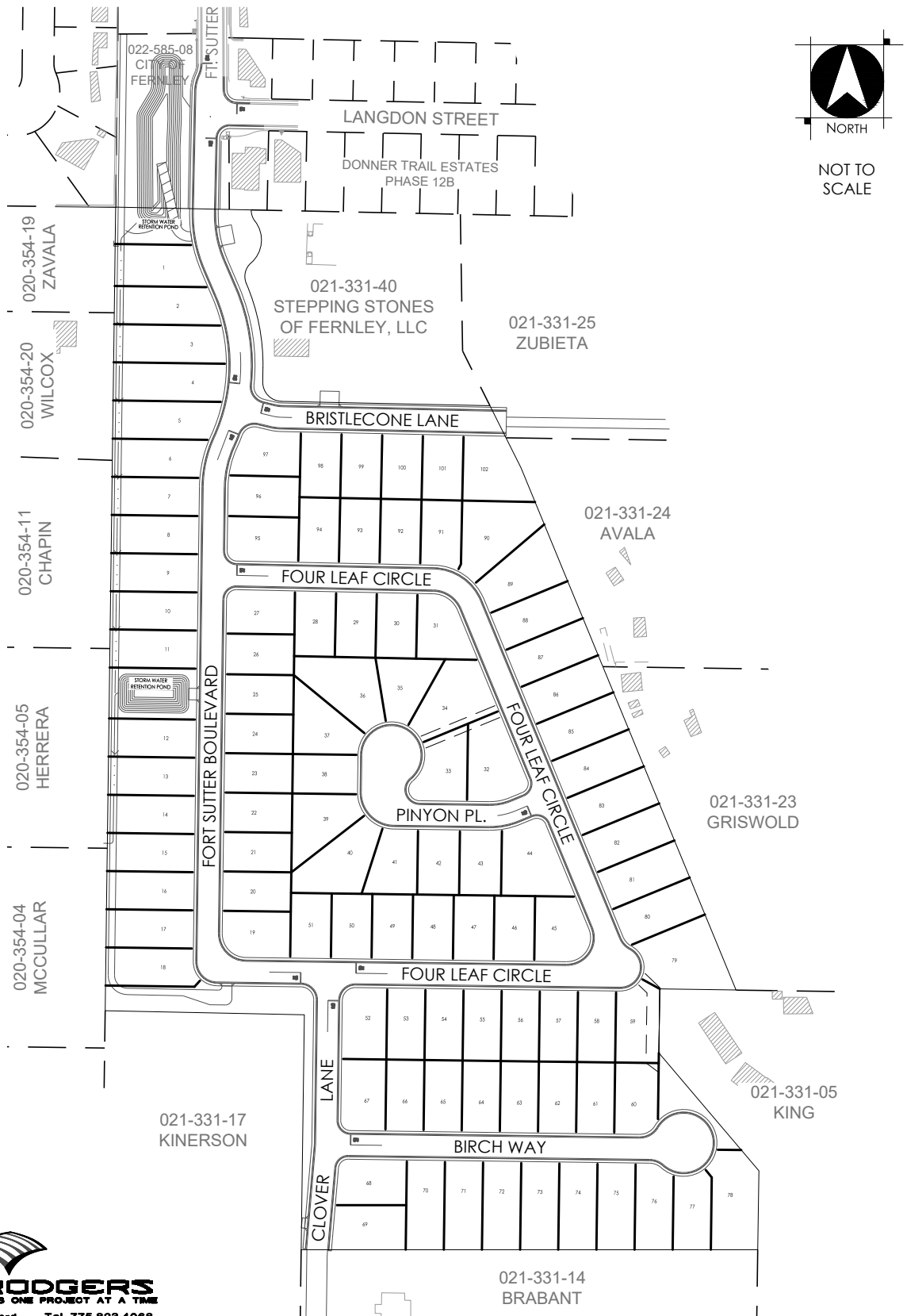


Eric C. Sage, P.L.S.
Nevada Certificate No. 23301

CHAPARRAL ESTATES SUBDIVISION PRELIMINARY SITE PLAN

FERNLEY, NEVADA

AUGUST 2025



WOOD RODGERS
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME
1361 Corporate Boulevard Tel 775.823.4068
Reno, NV 89502 Fax 775.823.4066

Conditions of Approval for ZMA25001 and TSM25001
ZONING MAP AMENDMENT
TENTATIVE SUBDIVISION MAP

SCOPE AND DURATION OF APPROVAL

1. APPROVAL:

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

2. PROJECT DESCRIPTION:

THE PROJECT APPROVAL IS LIMITED TO THE FOLLOWING:

- A. A ZONING MAP AMENDMENT CHANGING THE ZONING OF SIX (6) PARCELS COMPRISING ±24.72 ACRES FROM RR½ (RURAL RESIDENTIAL, ONE-HALF ACRE MINIMUM) AND RR5 (RURAL RESIDENTIAL, 5-ACRE MINIMUM) TO SF6 (SINGLE FAMILY, 6,000 SQUARE FOOT MINIMUM), AND
- B. TENTATIVE SUBDIVISION OF ±24.72 ACRES INTO 105 RESIDENTIAL LOTS, INCLUDING THREE LOTS FOR COMMON AREA AND STORMWATER DETENTION, GENERALLY LOCATED BETWEEN FARM DISTRICT ROAD TO THE SOUTH, LANGDON STREET TO THE NORTH, WINNIE LANE TO THE WEST, AND NEVADA PACIFIC BOULEVARD TO THE EAST (APNS 021-331-15, -19, -20, -22, -29, and -38).

3. EXPIRATION DATE:

THE TENTATIVE SUBDIVISION MAP SHALL EXPIRE WITHIN FOUR (4) YEARS OF THE DATE OF CITY COUNCIL APPROVAL, UNLESS AN EXTENSION OF TIME OF UP TO TWO (2) YEARS HAS BEEN APPROVED BY THE PLANNING COMMISSION OR THE FINAL SUBDIVISION MAP OR A PHASE OF THE FINAL SUBDIVISION MAP HAS BEEN RECORDED.

THE ZONING MAP AMENDMENT DOES NOT EXPIRE.

4. GOVERNING DOCUMENTS:

ALL CITY OF FERNLEY MUNICIPAL CODE (FMC) REFERENCES HEREIN PERTAIN TO THE VERSION OF THE CODE ESTABLISHED BY ORDINANCE NUMBER 2023-008, UNLESS OTHERWISE NOTED. 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 "CITY OF FERNLEY COMPREHENSIVE MASTER PLAN" AS UPDATED APRIL 2024.

FINAL MAP REQUIREMENTS

5. DESIGN STANDARDS:

THE DEVELOPER SHALL COMPLY WITH THE DESIGN STANDARDS AND REGULATION AS SET FORTH IN THE CITY OF FERNLEY'S DEVELOPMENT CODE AND PUBLIC WORKS MANUAL UNLESS IN CONFLICT WITH LOCAL, STATE, OR FEDERAL REGULATIONS, IN WHICH CASE THE MORE STRINGENT REGULATION WILL TAKE PRECEDENCE.

6. ADJACENCY:

PRIOR TO RECORDING ANY FINAL MAP FOR THE PROPOSED SUBDIVISION, THE DEVELOPER SHALL DEMONSTRATE COMPLIANCE WITH THE ADJACENCY STANDARDS CONTAINED IN FERNLEY MUNICIPAL CODE TITLE 32 SECTION 9 TO THE APPROVAL OF THE ADMINISTRATOR.

Conditions of Approval for ZMA25001 and TSM25001
ZONING MAP AMENDMENT
TENTATIVE SUBDIVISION MAP

7. ENGINEERING DEPARTMENT:

THE DEVELOPER SHALL COMPLY WITH ALL ENGINEERING REQUIREMENTS WITHIN FERNLEY MUNICIPAL CODE TITLE 32, INCLUDING BUT NOT LIMITED TO, COMPLIANCE WITH SITE DEVELOPMENT STANDARDS, FLOODPLAIN MANAGEMENT, ROADWAYS, UNDERGROUNDING OF UTILITIES, AND WATER AND WASTEWATER FACILITIES TO THE APPROVAL OF THE ADMINISTRATOR, CITY ENGINEER, AND PUBLIC WORKS DIRECTOR PRIOR TO THE RECORDATION OF ANY FINAL MAP FOR THE PROJECT.

8. LEGAL ACCESS:

THE DEVELOPER SHALL DEMONSTRATE THAT LEGAL ACCESS IS PROVIDED TO EACH PROPOSED PARCEL TO THE APPROVAL OF THE ADMINISTRATOR, CITY ENGINEER, AND PUBLIC WORKS DIRECTOR PRIOR TO THE RECORDATION OF THE FINAL PARCEL MAP FOR THE PROJECT.

9. IRRIGATION EASEMENTS:

ALL ABANDONMENTS AND/OR REALIGNMENTS OF TRUCKEE-CARSON IRRIGATION DISTRICT (TCID) OR UNITED STATES BUREAU OF RECLAMATION (USBR) EASEMENTS SHALL BE FINALIZED AND ACCEPTED BY TCID/USBR AND THE CITY OF FERNLEY PRIOR TO RECORDATION OF ANY FINAL MAP FOR THE PROJECT.

10. MAINTENANCE EASEMENTS:

THE DEVELOPER SHALL PROVIDE EASEMENTS TO 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. THE MINIMUM WIDTH IS 20 FEET FOR A SINGLE UTILITY AND 30 FEET FOR TWO UTILITIES OR DEEP SEWER.

11. 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 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 THE APPROVAL OF THE ADMINISTRATOR, CITY ATTORNEY, CITY ENGINEER, FINANCE DIRECTOR, AND PUBLIC WORKS DIRECTOR.

12. FINAL HYDROLOGICAL REPORT:

PRIOR TO APPROVAL OF A SUBDIVISION MAP FOR ANY PORTION OF THE PROJECT, THE DEVELOPER SHALL PROVIDE A FINAL HYDROLOGICAL REPORT FOR THE PROJECT IN CONFORMANCE WITH THE FERNLEY MUNICIPAL CODE AND THE PUBLIC WORKS DESIGN MANUAL FOR REVIEW AND APPROVAL BY THE CITY ENGINEER.

13. WATER RIGHTS:

PRIOR TO RECORDING A FINAL SUBDIVISION MAP, IN ORDER TO BE SERVED BY THE CITY'S 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 THE APPROVAL OF THE PUBLIC WORKS DIRECTOR, THE CITY ENGINEER, AND THE ADMINISTRATOR

Conditions of Approval for ZMA25001 and TSM25001
ZONING MAP AMENDMENT
TENTATIVE SUBDIVISION MAP

14. WATER AND SEWER SYSTEM MODELING:

PRIOR TO APPROVAL OF A FINAL SUBDIVISION MAP, THE DEVELOPER SHALL COMPLETE WATER AND SEWER MODELING AND CONSTRUCT ANY IMPROVEMENTS IDENTIFIED AS NECESSARY TO SERVE THE PROJECT IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS. THIS REQUIREMENT IS SUBJECT TO APPROVAL OF THE CITY ENGINEER AND PUBLIC WORKS DIRECTOR.

15. WATER SYSTEM LOOPING:

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.

16. OFF-SITE WATER LOOPING:

OFF-SITE WATER LOOPING IS REQUIRED TO THE SOUTH ALONG CLOVER LANE TO FARM DISTRICT ROAD AND NORTH TO DONNER TRAILS. TYPICAL FIRE HYDRANT SPACING PER NORTH LYON FIRE PROTECTION DISTRICT SHALL BE INCLUDED WITH OFF-SITE WATER MAINS.

17. WATER AND SEWER SYSTEM DESIGN AND APPROVAL:

THE DEVELOPER SHALL COMPLY WITH ALL CITY OF FERNLEY MUNICIPAL CODES REGARDING CONNECTIONS AND DEMANDS TO THE CITY'S SANITARY SEWER AND POTABLE WATER SYSTEMS, INCLUDING, BUT NOT LIMITED TO, ASSOCIATED FEES, DESIGN STANDARDS, DEVELOPMENT CODE REQUIREMENTS, AND STATE REQUIREMENTS.

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

18. WATER AND SEWER SYSTEM MAINS AND SERVICES:

PRIOR TO RECORDING A FINAL SUBDIVISION MAP, THE DEVELOPER SHALL BE RESPONSIBLE FOR CONSTRUCTING 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. THE DEVELOPER SHALL COMPLY WITH THE CITY OF FERNLEY MUNICIPAL CODE REGARDING THE SANITARY SEWER AND WATER SYSTEMS, INCLUDING ASSOCIATED CONNECTION FEES, PRIOR TO ISSUING A PERMIT FOR THE CIVIL IMPROVEMENTS FOR THIS PROJECT.

19. PHASING:

IF THE FINAL SUBDIVISION MAP IS PHASED, EACH 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 1. CHANGES TO THE PHASING PLAN WILL REQUIRE REVIEW AND APPROVAL BY THE ADMINISTRATOR, CITY ENGINEER, AND PUBLIC WORKS DIRECTOR, PRIOR TO IMPLEMENTATION.

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.

Conditions of Approval for ZMA25001 and TSM25001
ZONING MAP AMENDMENT
TENTATIVE SUBDIVISION MAP

FINAL IMPROVEMENT PLANS

21. IMPROVEMENT PLANS REQUIRED:

WITH SUBMITTAL OF ANY FINAL SUBDIVISION MAP APPLICATION, THE DEVELOPER SHALL SUBMIT THE ASSOCIATED CIVIL IMPROVEMENT PLANS FOR REVIEW AND APPROVAL. THE IMPROVEMENT PLANS SHALL BE APPROVED PRIOR TO RECORDING THE FINAL SUBDIVISION MAP. THE UTILITIES AND INFRASTRUCTURE FOR EACH PHASE MUST OPERATE INDEPENDENTLY OF FUTURE PHASES YET TO BE CONSTRUCTED.

22. GENERAL:

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

23. GEOTECHNICAL REPORT:

A FINAL GEOTECHNICAL INVESTIGATION SHALL BE SUBMITTED WITH THE FINAL IMPROVEMENT PLAN SUBMITTALS.

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

24. TRANSITIONS:

FINAL IMPROVEMENT PLANS SHALL REQUIRE REMOVAL AND REPLACEMENT OF EXISTING PAVEMENT, SIDEWALKS, AND CURB AND GUTTER WHERE NEW ROADS TIE IN TO EXISTING ROADS TO ENSURE SMOOTH TRANSITIONS BETWEEN EXISTING AND NEW ROADS.

25. PEDESTRIAN RAMPS:

PEDESTRIAN RAMPS SHALL BE PROVIDED AT THE SOUTHWEST AND SOUTHEAST CORNERS OF FORT SUTTER BOULEVARD AND LANGDON STREET.

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

26. SIDEWALKS:

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

27. T-INTERSECTIONS:

THE FINAL IMPROVEMENT PLANS WILL NEED TO REVISE THE CURB LINES OF ALL THREE LEGS OF THE EXISTING FORT SUTTER BOULEVARD AND LANGDON STREET INTERSECTION. TO CONVERT THIS BULB TO A T-INTERSECTION AS PROPOSED, THE ASPHALT WIDTHS AND CURB LINES NEED TO BE ADJUSTED TO MATCH A T- INTERSECTION.

28. GUTTERS:

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

29. ACCESS TO ADJOINING SITES:

THE FINAL IMPROVEMENT PLANS SHALL COORDINATE THE EXISTING CLOVER LANE ACCESS IN FRONT OF THE SCHOOL AND PROVIDE CONNECTIVITY OFF OF BRISTLECONE LANE AS

Conditions of Approval for ZMA25001 and TSM25001
ZONING MAP AMENDMENT
TENTATIVE SUBDIVISION MAP

REQUIRED FOR THE SECONDARY DRIVEWAY ACCESS TO THE SCHOOL.

30. OFF-SITE IMPROVEMENTS – CLOVER LANE:

THE OFF-SITE PORTION OF CLOVER LANE TO THE SOUTH OF THE DEVELOPMENT SHALL BE RECONSTRUCTED TO MATCH THE IMPROVED 50-FOOT RIGHT-OF-WAY ROADWAY SECTION WHICH INCLUDES CURB, GUTTER, AND SIDEWALK. SIDEWALK ON AT LEAST ONE SIDE OF CLOVER LANE SHALL BE PROVIDED TO FARM DISTRICT ROAD. ON THE FINAL IMPROVEMENT PLANS, CLOVER LANE SHALL BE REFERENCED AS BEING OFFERED FOR DEDICATION TO THE CITY.

IF ANY OF THE UNDERLYING FEE PROPERTY OWNERS ARE UNWILLING TO APPROVE DEDICATION OF THE RIGHT-OF-WAY, SUFFICIENT EASEMENT RIGHTS FOR CITY ROADWAY AND CITY WATER, SEWER, AND STORM DRAIN UTILITIES SHALL BE DOCUMENTED AND VERIFIED PRIOR TO RECORDATION OF THE FINAL MAP.

31. OFF-SITE IMPROVEMENTS – FARM DISTRICT ROAD CROSSWALK:

THE FARM DISTRICT ROAD/CLOVER LANE INTERSECTION IMPROVEMENTS SHALL INCLUDE A NEW CROSSWALK ACROSS FARM DISTRICT ROAD TO CONNECT TO THE EXISTING MULTI-USE PATH. THE CROSS WALK SHALL BE EQUIPPED WITH RAPID FLASHING BEACONS MEETING CITY AND NDOT REQUIREMENTS.

32. OFF-SITE IMPROVEMENTS – TRAFFIC MITIGATION:

THE FINAL IMPROVEMENT PLANS SHALL INCLUDE THE ADDITION OF AN EASTBOUND LEFT-TURN LANE ON FARM DISTRICT ROAD AS RECOMMENDED BY THE TRAFFIC STUDY AND NEVADA DEPARTMENT OF TRANSPORTATION.

STORM WATER TREATMENT AND DRAINAGE

33. FINAL DRAINAGE REPORT:

AS PART OF THE FINAL IMPROVEMENT PLANS, THE DEVELOPER SHALL PROVIDE A FINAL DRAINAGE REPORT FOR THE PROJECT IN CONFORMANCE WITH FERNLEY MUNICIPAL CODE AND THE PUBLIC WORKS DESIGN MANUAL FOR REVIEW AND APPROVAL BY THE CITY ENGINEER. THE REPORT SHALL INCLUDE PERCOLATION RATES AT THE DEPTH PROPOSED FOR THE NEW STORMWATER BASIN, PROVIDE A REVIEW OF THE SOILS BELOW THE PROPOSED BASIN, AND VERIFY SIZING AND PIPE ELEVATIONS OF THE RECONFIGURED BASIN IN DONNER TRAILS PH 12B.

34. RETENTION BASIN VOLUME:

THE PROPOSED RETENTION BASIN SHALL HAVE SUFFICIENT VOLUME STORAGE TO RETAIN THE PRE- VS. POST-100-YEAR, 24-HOUR STORM RUNOFF WITH ONE FOOT OF FREEBOARD.

35. RETENTION BASIN DESIGN:

FLAT BOTTOMS SHALL BE PROVIDED IN ALL PROPOSED RETENTION BASINS TO ALLOW MAINTENANCE ACCESS BY VEHICLE TO REMOVE ACCUMULATED SEDIMENT. THE SURFACE FOR THE ACCESS TO THE BOTTOM OF THE BASIN SHALL BE PAVEMENT OR ARTICULATING CONCRETE BLOCKS AT 15% MAX SLOPE. THE BASIN SHALL BE COMPLETELY FENCED.

36. OVERFLOW LOCATION AND DESIGN:

THE NEW STORMWATER RETENTION POND HAS AN OVERFLOW ROUTED THROUGH AN OVERHEAD HIGH-VOLTAGE POWER LINE EASEMENT. RELOCATE THE STORM WATER POND, RELOCATE THE OVERFLOW OUTSIDE OF THE EASEMENT, OR PROVIDE VERIFICATION FROM NV ENERGY THAT THE OVERFLOW DITCH CAN BE INSTALLED WITHIN THE EASEMENT. IF A

Conditions of Approval for ZMA25001 and TSM25001
ZONING MAP AMENDMENT
TENTATIVE SUBDIVISION MAP

PUBLIC REAR-LOT DITCH REMAINS FOR OVERFLOW PURPOSES, IT SHALL BE LINED AND BE DESIGNED TO BE ACCESSIBLE FOR LONG-TERM MAINTENANCE PER THE PUBLIC WORKS DESIGN MANUAL.

37. EXISTING POND OVERFLOW:

FINAL IMPROVEMENT PLANS SHALL INCLUDE AN OVERFLOW ROUTE FROM THE EXISTING DONNER TRAILS PH 12B STORMWATER POND TO THE NEW CHAPPARAL ESTATES POND OR OVERFLOW DITCH. THE POND SHALL HAVE A SAFE OVERFLOW PATH TO ENSURE THE NORTHERLY LOTS OF CHAPPARAL ESTATES ARE NOT SUBJECT TO INUNDATION FROM OVERFLOWS FROM THE EXISTING POND.

38. MAINTENANCE ACCESS AND DESIGN:

FINAL IMPROVEMENT PLANS SHALL PROVIDE A PAVED OR GRAVEL ACCESS ROAD FOR MAINTENANCE AROUND THE DETENTION BASIN TO THE SATISFACTION OF THE CITY ENGINEER.

BUILDING PERMIT REQUIREMENTS

39. CONSTRUCTION TIMELINE:

PRIOR TO ISSUANCE OF A BUILDING PERMIT FOR ANY PHASE OF THE PROJECT, DRAINAGE CONVEYANCE FACILITIES AND OTHER IMPROVEMENTS MUST BE CONSTRUCTED AND FUNCTIONAL. DESIGN AND CONSTRUCTION OF ALL DRAINAGE CONVEYANCE FACILITIES IS SUBJECT TO APPROVAL OF THE ADMINISTRATOR, CITY ENGINEER, AND PUBLIC WORKS DIRECTOR.

40. PUBLIC AND PRIVATE INFRASTRUCTURE:

PRIOR TO ISSUANCE OF ANY BUILDING PERMIT FOR THE PROJECT, THE DEVELOPER SHALL COMPLY WITH ALL THE REQUIREMENTS OF THE CITY OF FERNLEY MUNICIPAL CODE 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

REGULATORY AGENCIES

41. 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.

42. 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: BUREAU OF RECLAMATION (BOR), 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 STATE ENVIRONMENTAL COMMISSION, TRUCKEE CARSON IRRIGATION DISTRICT (TCID), THE CITY OF FERNLEY BUILDING OFFICIAL, THE CITY OF FERNLEY ENGINEER, CITY OF FERNLEY PLANNING DEPARTMENT, AND CITY OF FERNLEY PUBLIC WORKS DEPARTMENT.

Conditions of Approval for ZMA25001 and TSM25001
ZONING MAP AMENDMENT
TENTATIVE SUBDIVISION MAP

43. POSTAL SERVICE:

PRIOR TO ISSUANCE OF ANY BUILDING PERMIT FOR ANY PHASE OF THE PROJECT, THE DEVELOPER SHALL COMPLY WITH ALL REQUIREMENTS OF THE UNITED STATES POSTAL SERVICE FOR MAIL DELIVERY, MAILBOX DESIGN, AND MAILBOX LOCATION FOR THAT PHASE. THIS REQUIREMENT IS SUBJECT TO APPROVAL OF THE ADMINISTRATOR, CITY ENGINEER, FERNLEY POSTMASTER, AND PUBLIC WORKS DIRECTOR.

44. ADDRESSING:

THE DEVELOPER SHALL SUBMIT A REQUEST FOR ADDRESS FORM TO THE CITY OF FERNLEY ENGINEERING DEPARTMENT FOR REVIEW AND APPROVAL. ALL ADDRESSING SHALL BE COMPLETED BY THE CITY PRIOR TO ISSUANCE OF A BUILDING PERMIT.

45. 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, PUBLIC WORKS DIRECTOR, AND CITY ENGINEER.

46. NEVADA REVISED STATUTES 278 COMPLIANCE:

THE FINAL MAP SHALL CONFORM TO THE FORM AND CONTENTS OF A FINAL PARCEL MAP AS REQUIRED BY NRS 278.

47. 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.

CHAPARRAL ESTATES
TENTATIVE SUBDIVISION MAP
TITLE SHEET

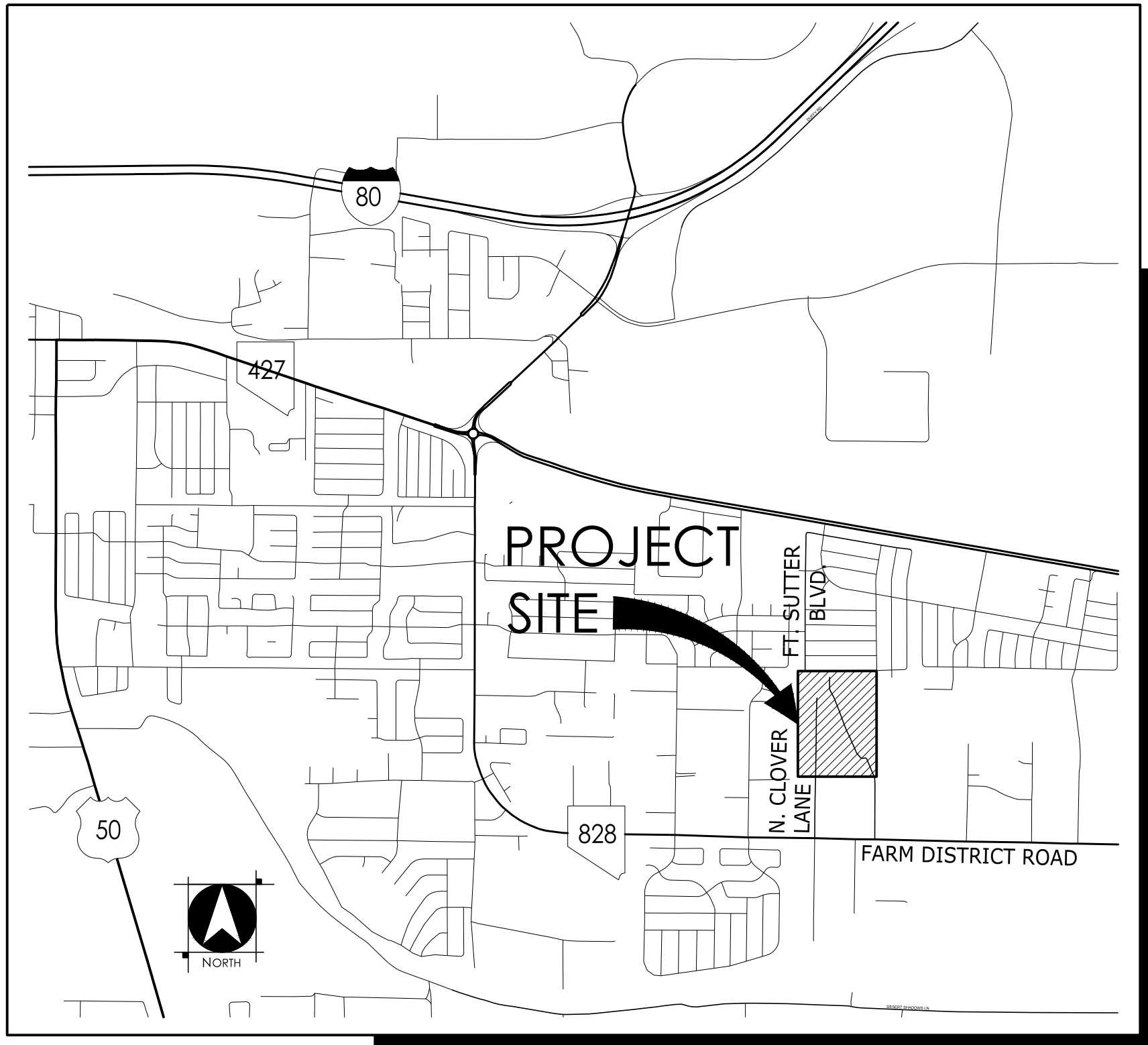
OWNER / DEVELOPER
GENICA CLOVER RANCH, LLC
POST OFFICE BOX 2267
CHILLIWACK, BRITISH COLUMBIA
CANADA V2R 1A6
253.380.3054

BASIS OF BEARINGS

NEVADA STATE PLANE COORDINATE SYSTEM, WEST ZONE, NORTH
AMERICAN DATUM OF 1983/1994, AS DETERMINED USING RTK GPS
CORRECTIONS FROM NATIONAL GEODETIC SURVEY BENCHMARK THE
BEARING BETWEEN NGS BENCHMARKS 'B 340' TAKEN AS NORTH 73°13'02"
EAST. ALL DIMENSIONS SHOWN ARE GROUND DISTANCES, COMBINED
GRID-TO-GROUND FACTOR = 1.000245

BASIS OF ELEVATION

THE BASIS OF ELEVATION IS BASED ON THE NORTH AMERICAN VERTICAL
DATUM OF 1988 (NAVD 88) AS TAKEN FROM NGS BENCHMARK WITH A
PUBLISHED ELEVATION OF 4155.00 FT. BENCHMARK DESCRIBED AS BEING
A 3-1/4-INCH DIAMETER DISK SET IN THE TOP OF A CONCRETE MONUMENT
STAMPED B 340 1953.



VICINITY MAP
NOT TO SCALE

SITE INFORMATION:

OVERALL SITE STATISTICS
TOTAL PROJECT AREA: 24.72 AC
TOTAL LOT AREA: 18.04 AC
TOTAL AREA, DEDICATED LOTS (2): 0.40 AC (TO CITY OF FERNLEY)
TOTAL COMMON AREAS: 0.65 AC
TOTAL RIGHTS-OF-WAY: 5.63 AC

RESIDENTIAL LOT STATISTICS

TOTAL NUMBER OF LOTS: 102
AVERAGE LOT SIZE: 7,702 SF
MINIMUM LOT SIZE: 6,200 SF
MAXIMUM LOT SIZE: 12,249 SF

PROJECT DENSITY

GROSS DENSITY = 4.1 DU / AC
NET DENSITY = 5.7 DU / AC
PROPOSED ZONING: SF6

ASSESSOR PARCEL NUMBERS

021-331-15, -19, -20, -22, -29, -38

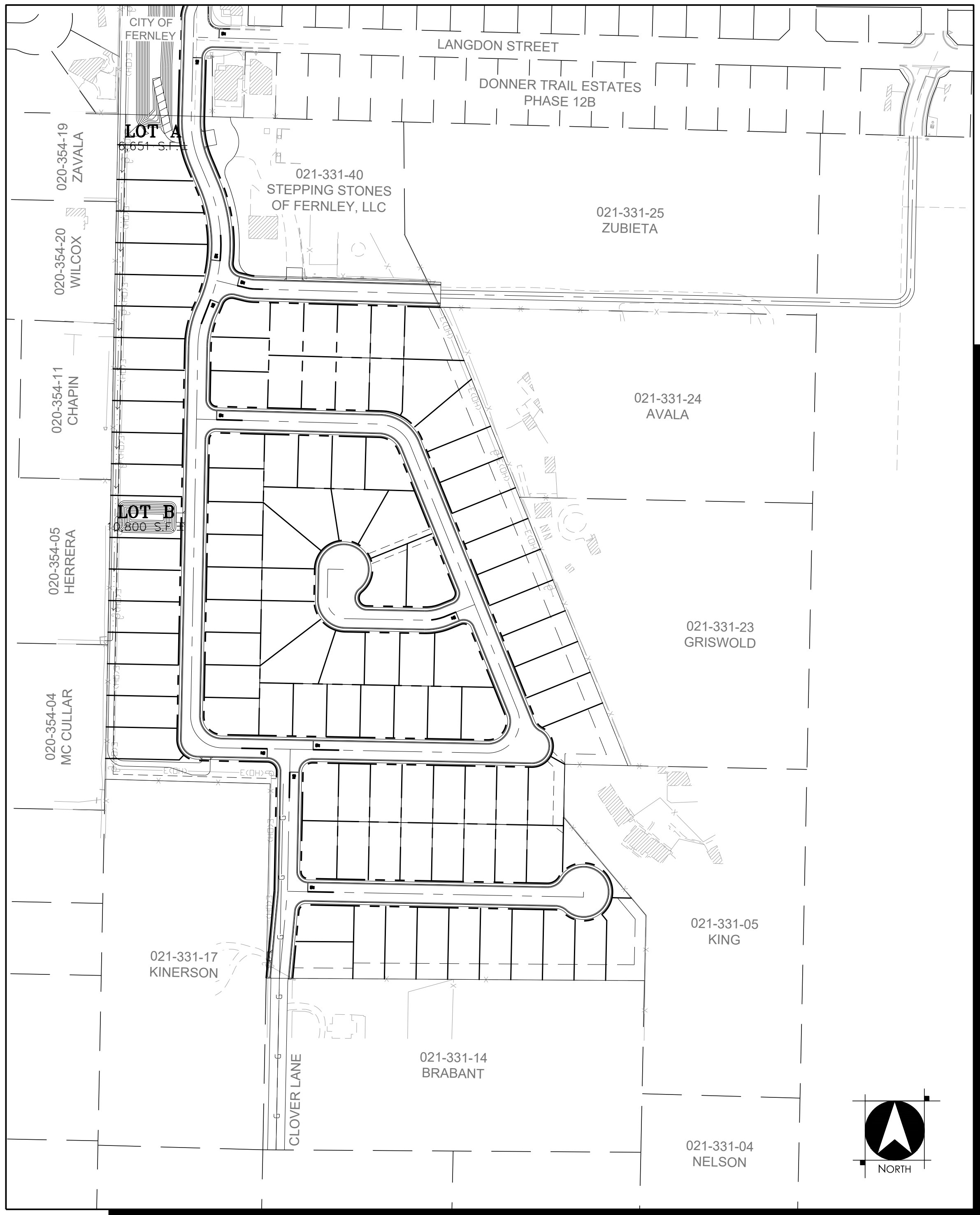
ENGINEER'S STATEMENT:

I, EVAN NIKIRK, DO HEREBY CERTIFY THAT THIS PLAN SET HAS BEEN
PREPARED BY ME OR UNDER MY SUPERVISION AND WAS COMPLETED ON
THE 23rd DAY OF JULY, 2025.

Evan Nikirk
EVAN NIKIRK, P.E. #11466

SHEET INDEX

SHEET	DWG	DRAWING DESCRIPTION
1	T-1	TITLE SHEET
2	DE-1	EXISTING CONDITIONS AND DEMOLITION PLAN
3	LB-1	PRELIMINARY LOT AND BLOCK PLAN, NORTH
4	LB-2	PRELIMINARY LOT AND BLOCK PLAN, SOUTH
5	U-1	PRELIMINARY UTILITY PLAN, NORTH
6	U-2	PRELIMINARY UTILITY PLAN, SOUTH
7	G-1	PRELIMINARY GRADING PLAN, NORTH
8	G-2	PRELIMINARY GRADING PLAN, SOUTH
9	F-1	PRELIMINARY FENCING PLAN, NORTH
10	F-2	PRELIMINARY FENCING PLAN, SOUTH
11	LS-1	PRELIMINARY LANDSCAPING PLAN



SITE PLAN
1" = 150'



CHAPARRAL ESTATES
TITLE SHEET

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Reno, NV 89502 Fax 775.823.4066

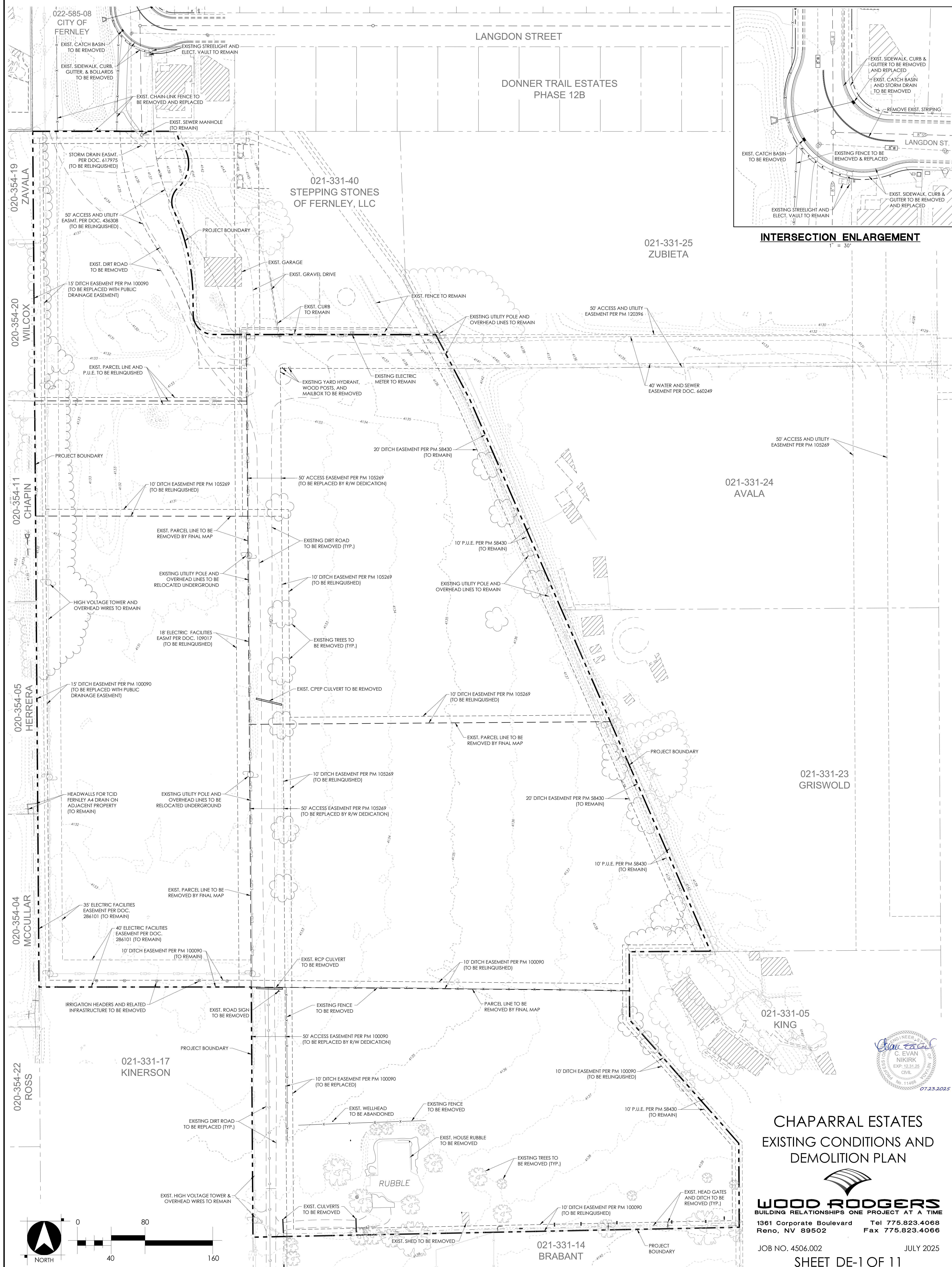
JOB NO. 4506.002 JULY 2025

SHEET T-1 OF 11

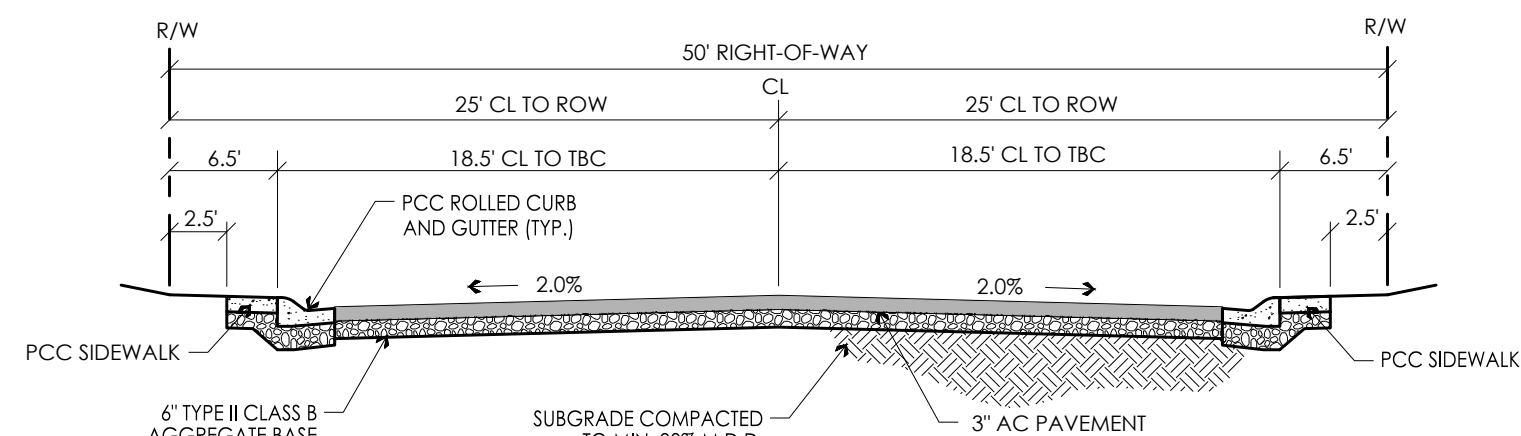
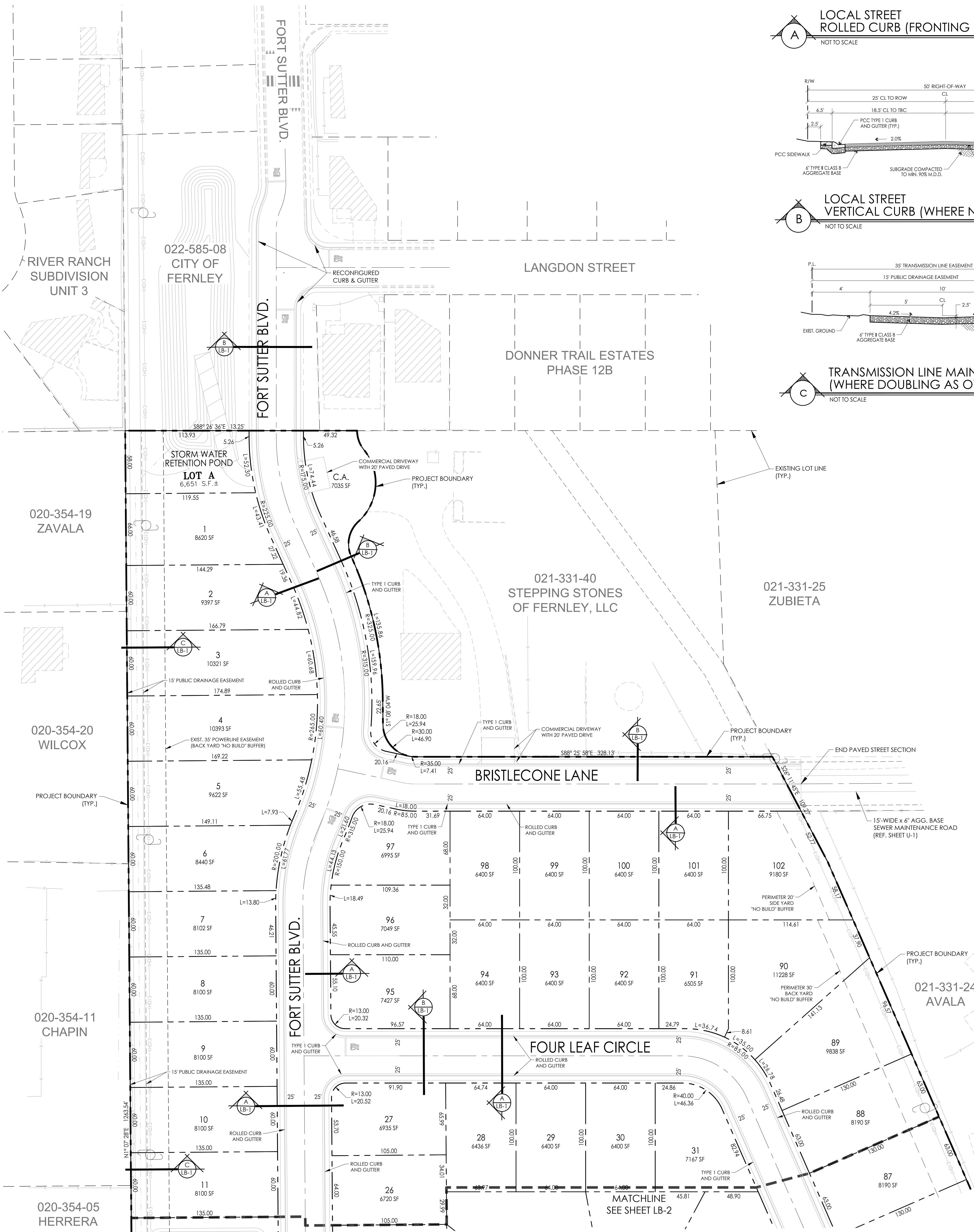
CHAPARRAL ESTATES

TENTATIVE SUBDIVISION MAP

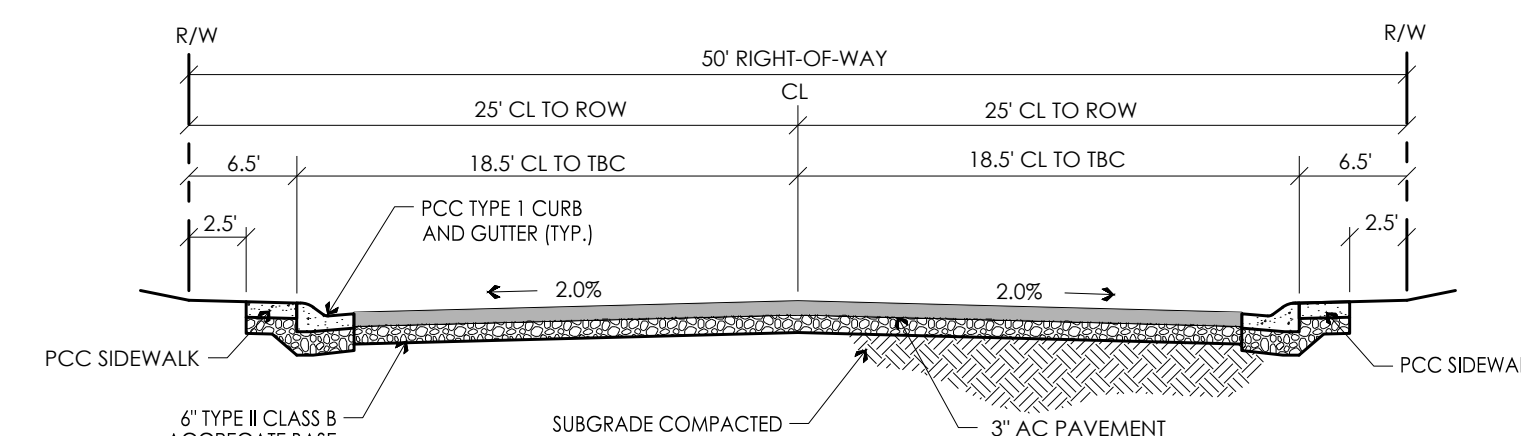
EXISTING CONDITIONS AND DEMOLITION PLAN



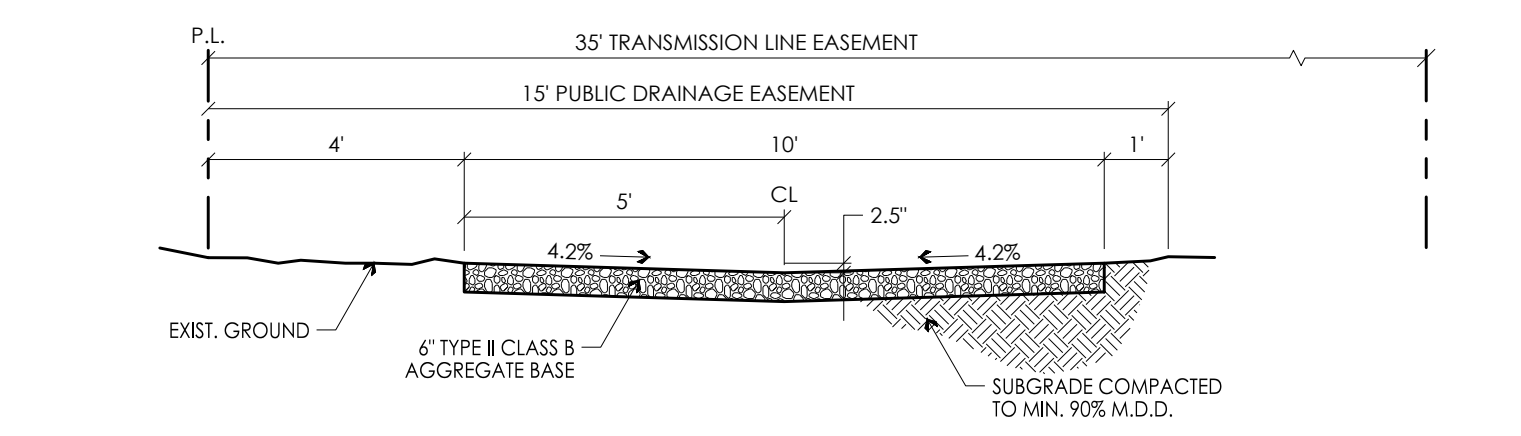
CHAPARRAL ESTATES
TENTATIVE SUBDIVISION MAP
PRELIMINARY LOT AND BLOCK PLAN, NORTH



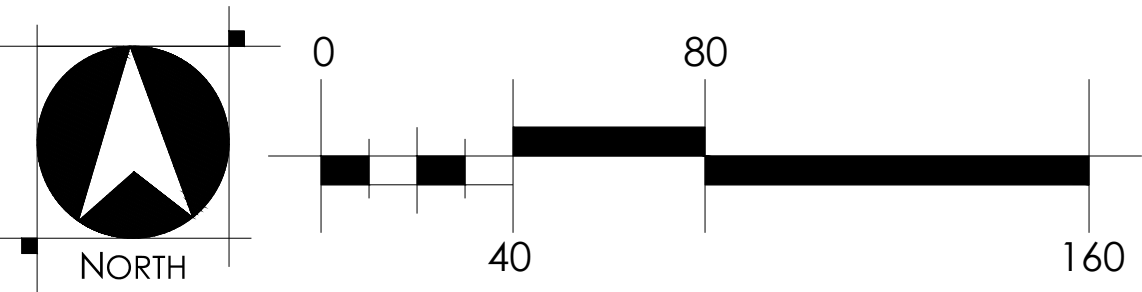
LOCAL STREET
ROLLED CURB (FRONTING LOTS)
NOT TO SCALE



LOCAL STREET
VERTICAL CURB (WHERE NO LOT FRONT)
NOT TO SCALE



TRANSMISSION LINE MAINTENANCE ROAD
(WHERE DOUBLING AS OVERFLOW DITCH)
NOT TO SCALE

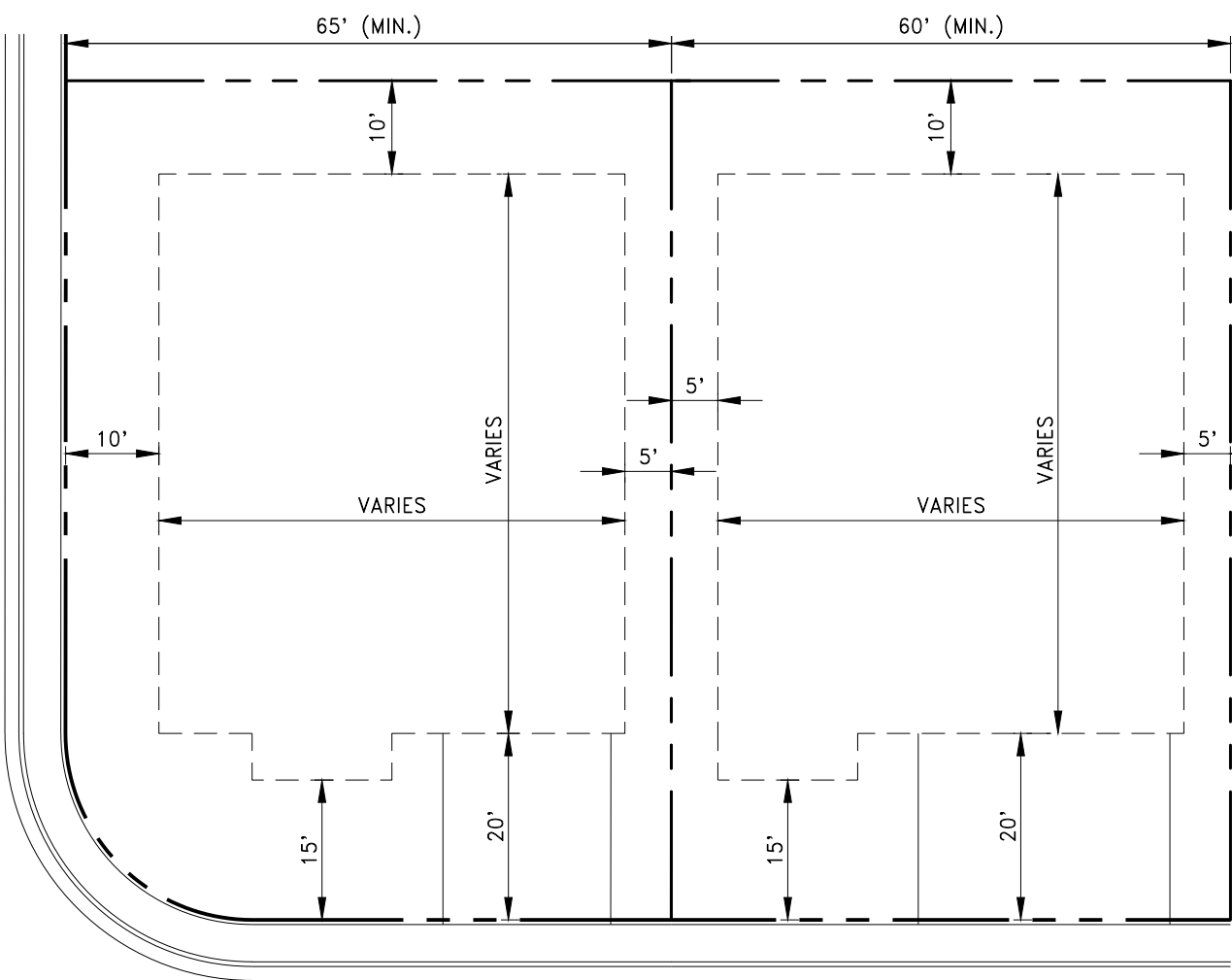
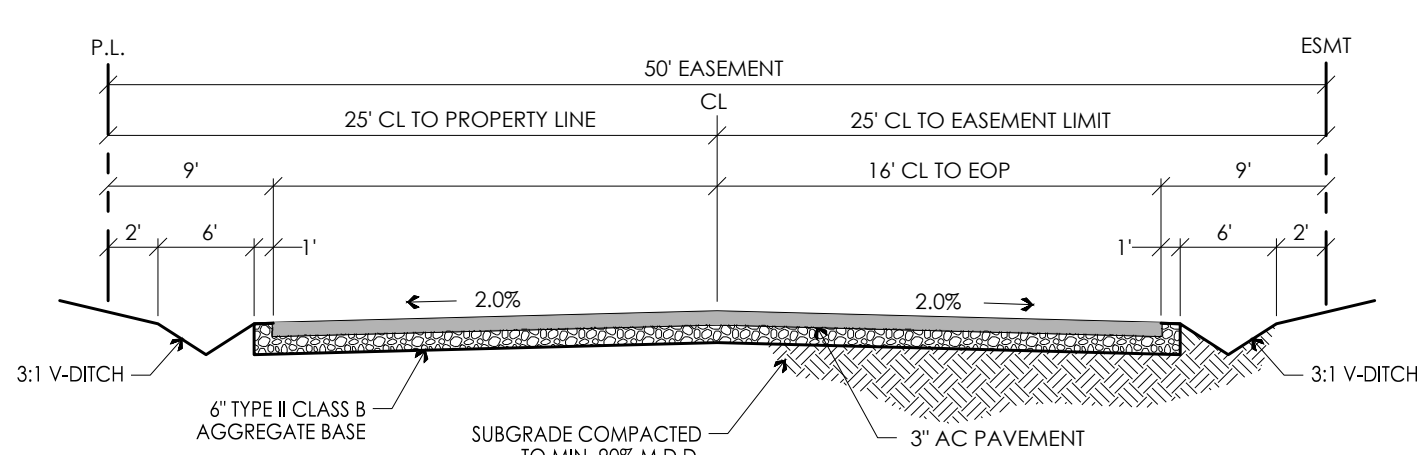


CHAPARRAL ESTATES
PRELIMINARY LOT AND
BLOCK PLAN, NORTH

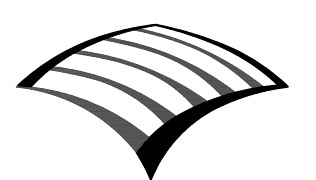
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JOB NO. 4506.002 JULY 2025
SHEET LB-1 OF 11

CHAPARRAL ESTATES
TENTATIVE SUBDIVISION MAP
PRELIMINARY LOT AND BLOCK PLAN, SOUTH



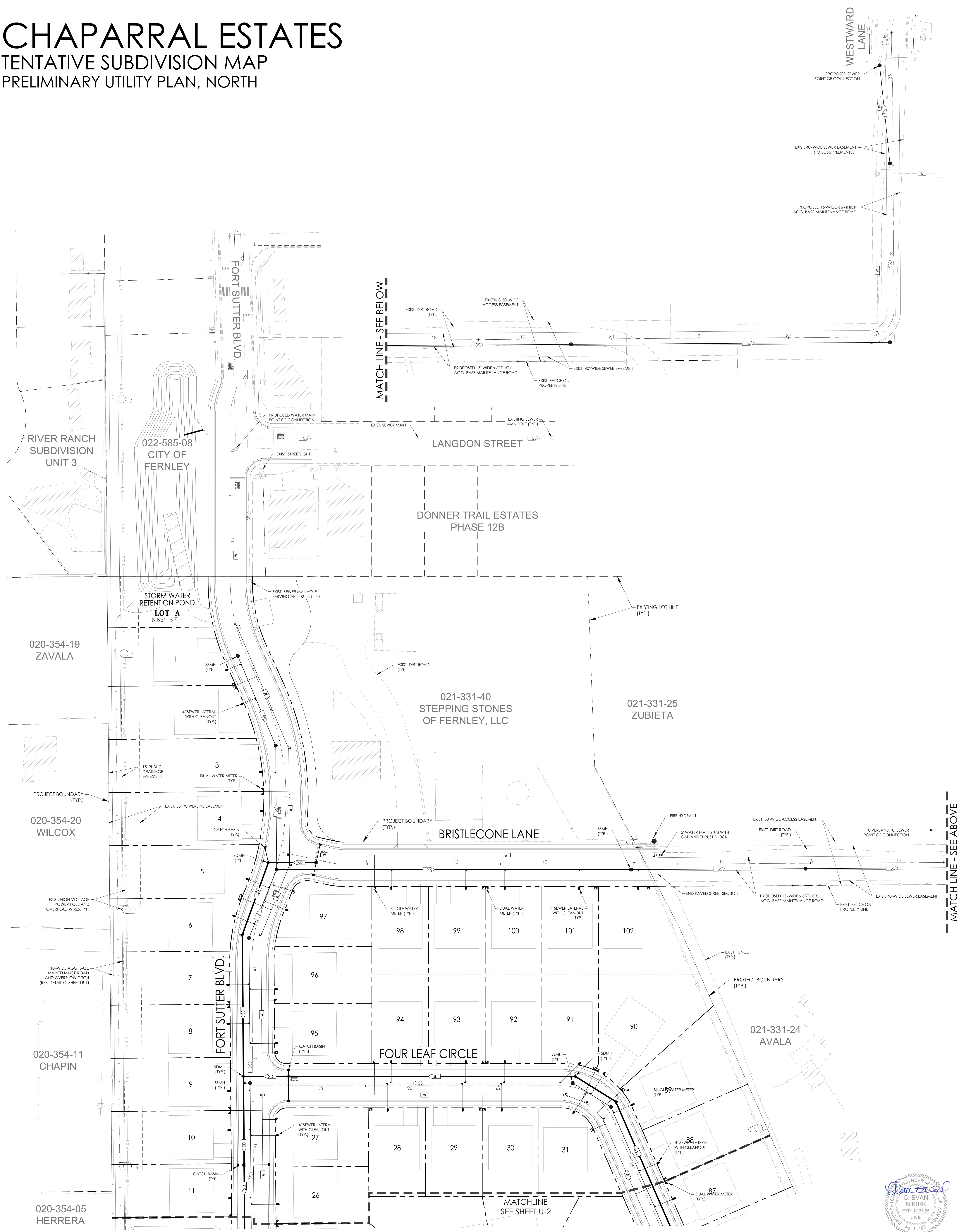
CHAPARRAL ESTATES
PRELIMINARY LOT AND
BLOCK PLAN, SOUTH



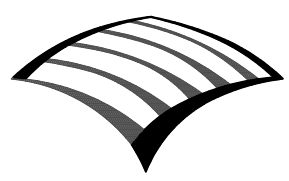
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SHEET LB-2 OF 11

CHAPARRAL ESTATES
TENTATIVE SUBDIVISION MAP
PRELIMINARY UTILITY PLAN, NORTH



CHAPARRAL ESTATES
PRELIMINARY
UTILITY PLAN, NORTH

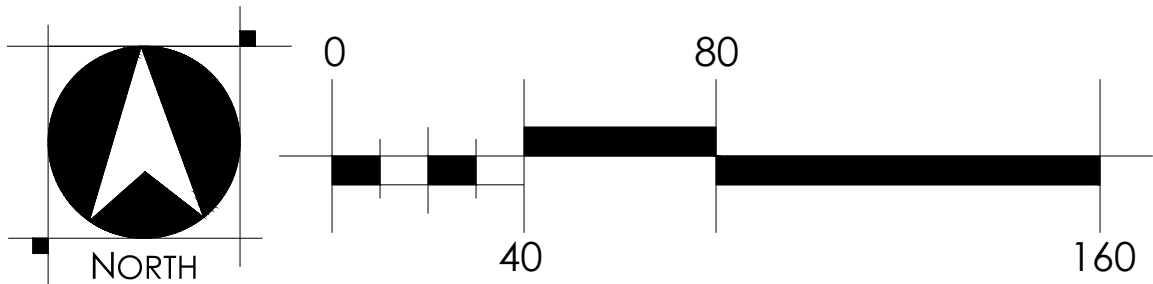
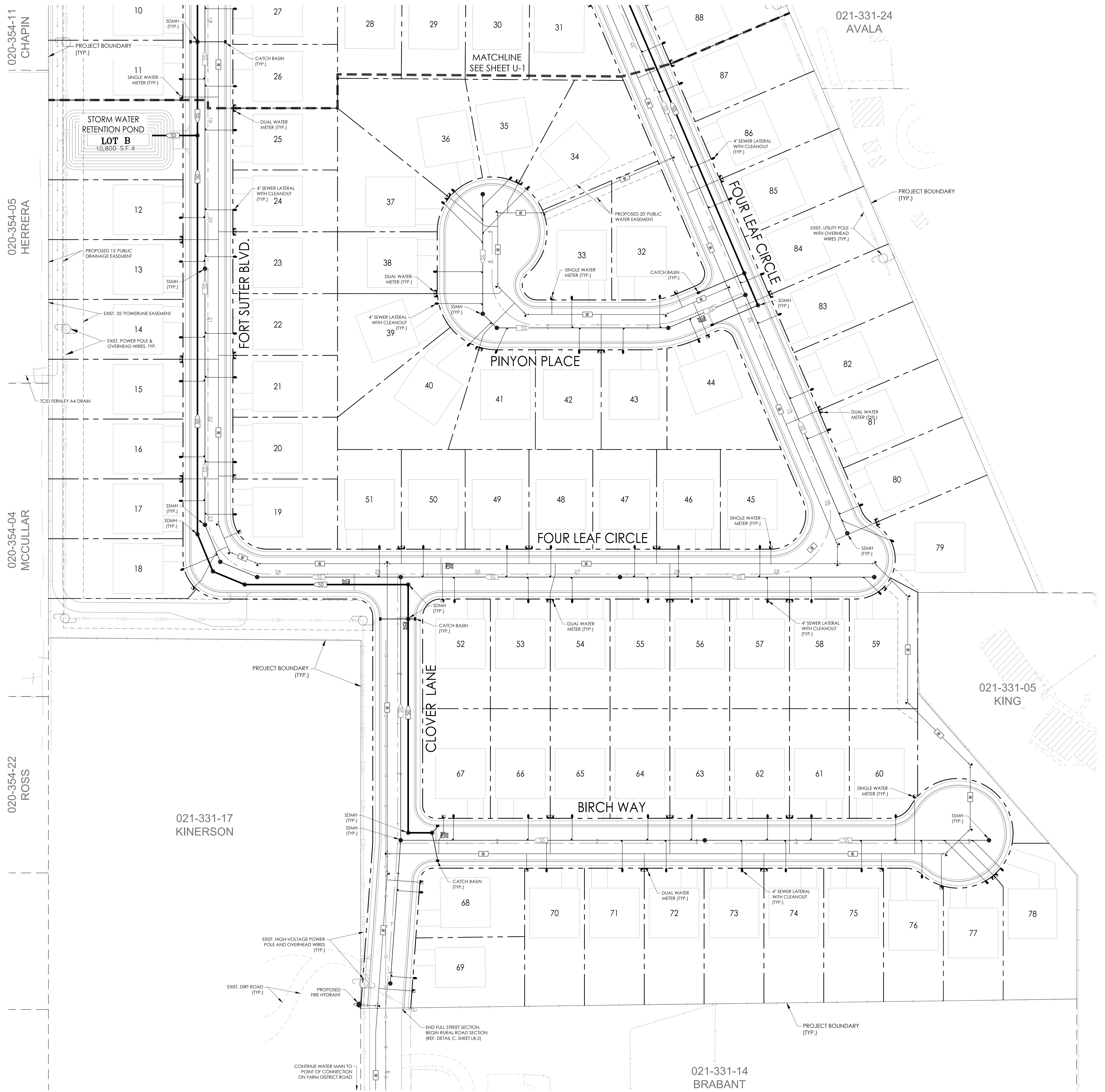


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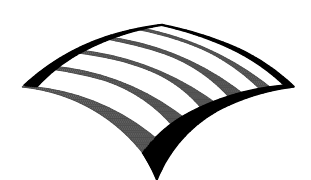
JOB NO. 4506.002 JULY 2025

SHEET U-1 OF 11

PRELIMINARY UTILITY PLAN, SOUTH



CHAPARRAL ESTATES
PRELIMINARY
UTILITY PLAN, SOUTH



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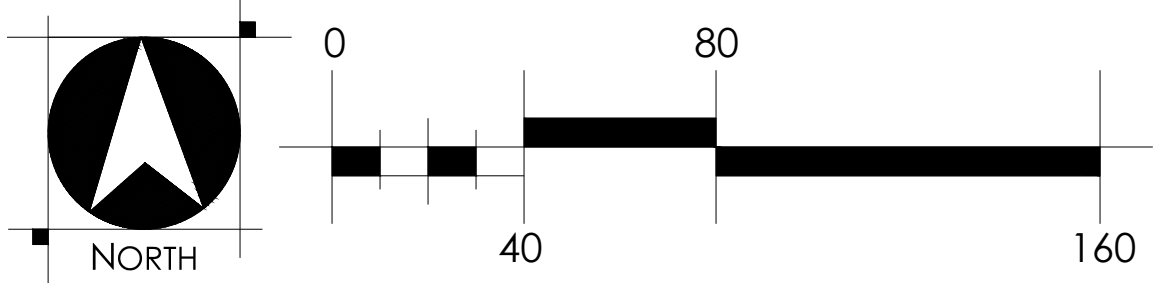
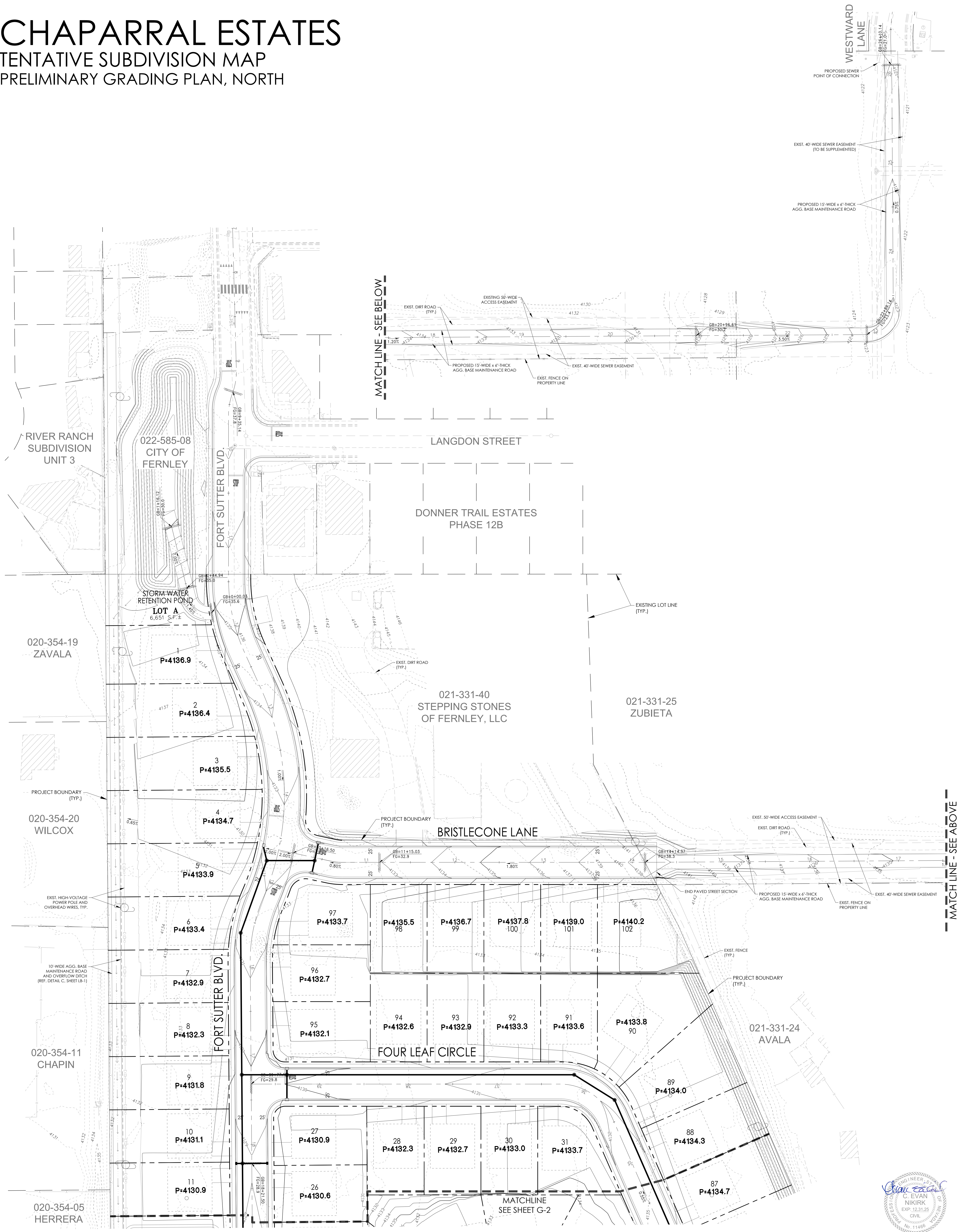
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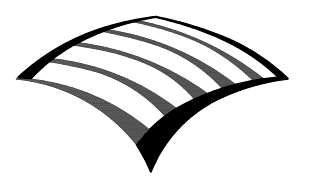
SHEET U-2 OF 11

CHAPARRAL ESTATES

TENTATIVE SUBDIVISION MAP
PRELIMINARY GRADING PLAN, NORTH



CHAPARRAL ESTATES
PRELIMINARY
GRADING PLAN, NORTH



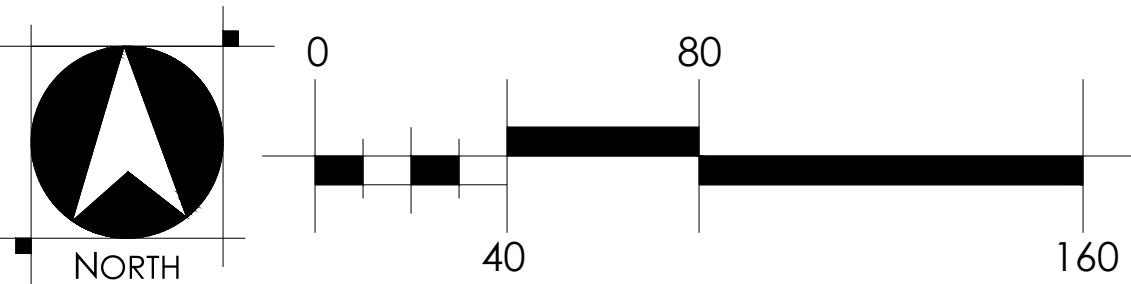
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SHEET G-1 OF 11

CHAPARRAL ESTATES
TENTATIVE SUBDIVISION MAP
PRELIMINARY GRADING PLAN, SOUTH

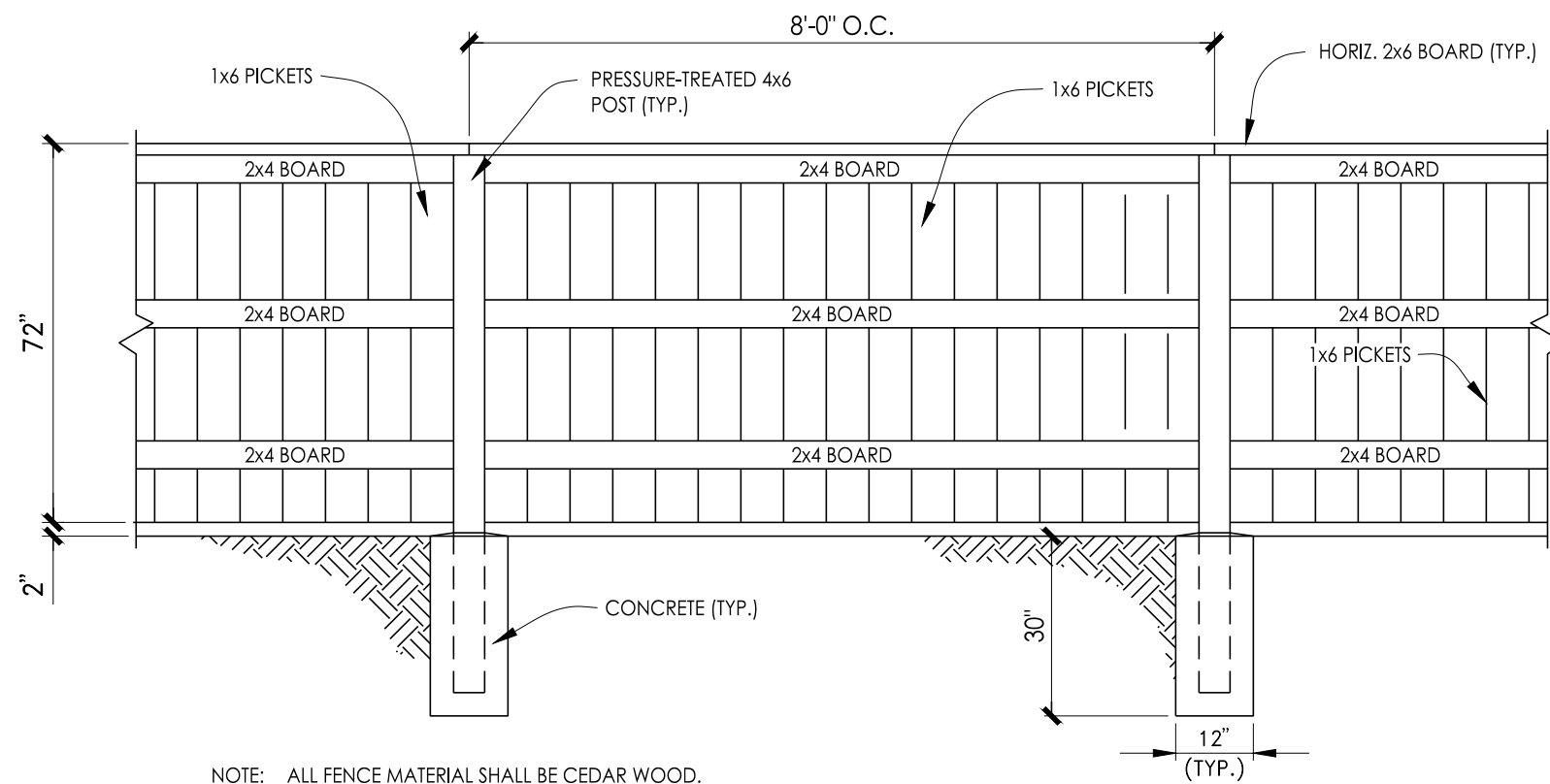
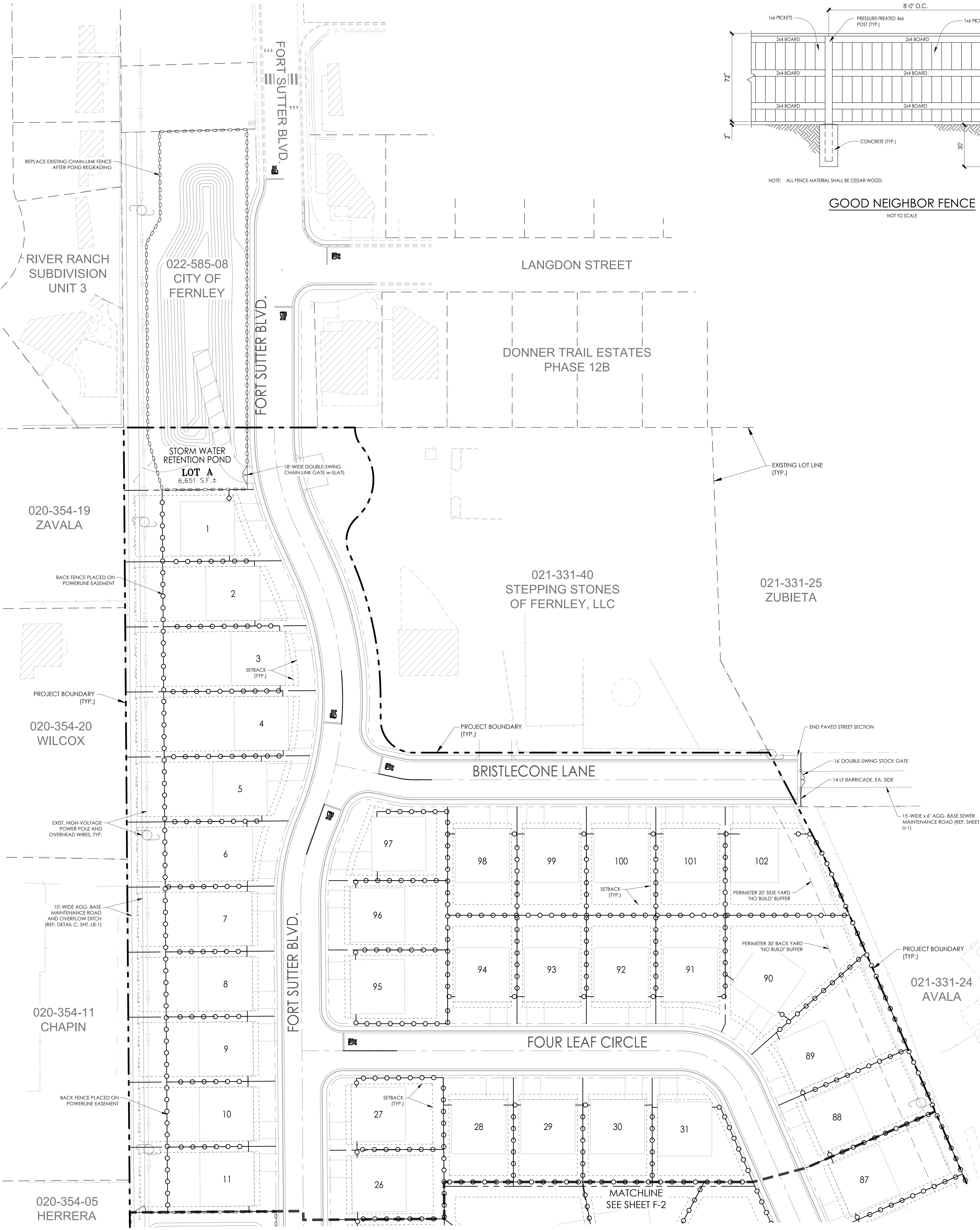


CHAPARRAL ESTATES
PRELIMINARY
GRADING PLAN, SOUTH



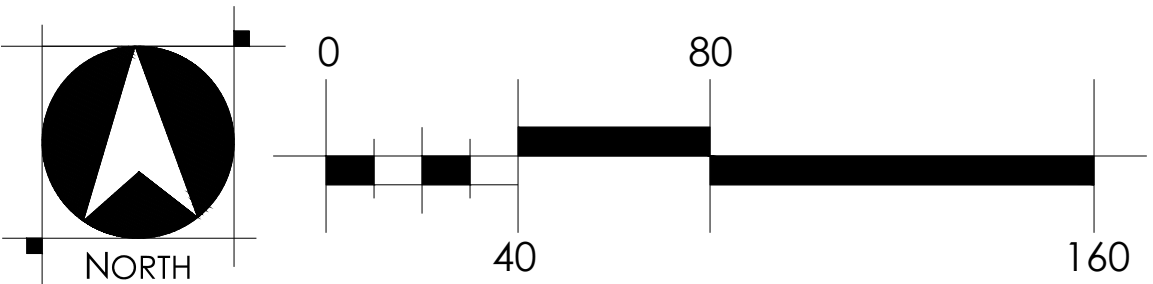
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SHEET G-2 OF 11

CHAPARRAL ESTATES
TENTATIVE SUBDIVISION MAP
PRELIMINARY FENCING PLAN, NORTH



LEGEND

- 6" SOLID WOOD PRIVACY FENCE PER DETAIL THIS SHEET
- |—|—|—|— 6" CHAIN-LINK FENCE WITH PRIVACY SLATS (BROWN)



CHAPARRAL ESTATES
PRELIMINARY
FENCING PLAN, NORTH

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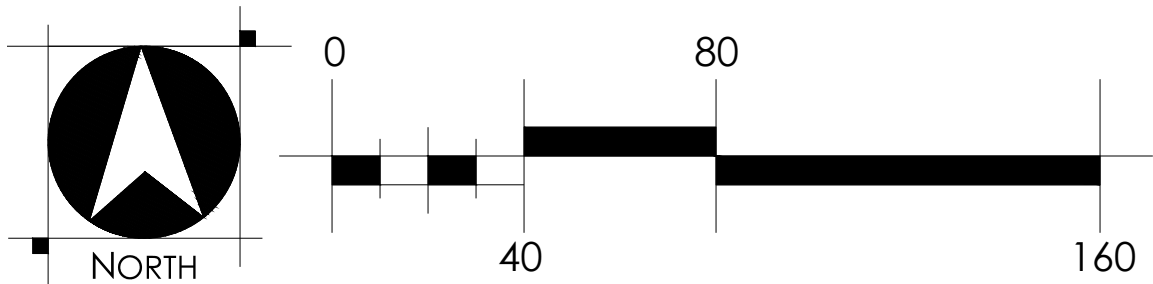
JOB NO. 4506.002 JULY 2025
SHEET F-1 OF 11

PRELIMINARY FENCING PLAN, SOUTH

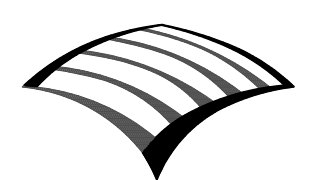


LEGEND

- 6' SOLID WOOD PRIVACY FENCE PER DETAIL SHEET F-1
- 6' CHAIN-LINK FENCE WITH PRIVACY SLATS (BROWN)



CHAPARRAL ESTATES
PRELIMINARY
FENCING PLAN, SOUTH



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JULY 2025

SHEET F-2 OF 11

CHAPARRAL ESTATES
TENTATIVE SUBDIVISION MAP
PRELIMINARY LANDSCAPE PLAN



CITY OF FERNLEY LANDSCAPE NOTES

CITY OF FERNLEY MUNICIPAL CODE - SEC. 32.09.090 (c)
GENERAL LANDSCAPING STANDARDS:

- 1) LANDSCAPE ELEMENTS SHALL PROVIDE A VERTICAL DIMENSION. TREES AND TALL SHRUBS SHALL BE USED IN ADDITION TO GRASS AND GROUND COVER.
- 2) LANDSCAPING SHALL BE USED TO ENHANCE THE QUALITY OF THE RESIDENTIAL ENVIRONMENT, TO BUFFER THE UNITS FROM NOISE OR UNDESIRABLE VIEWS, AND TO SEPARATE ROADS WITHIN THE DEVELOPMENT.
- 3) LANDSCAPING AROUND THE ENTIRE FOUNDATION BASE OF BUILDINGS IS REQUIRED TO ENHANCE THE EDGE BETWEEN THE PARKING LOT AND THE STRUCTURE.
- 4) LANDSCAPING SHALL BE PROTECTED FROM VEHICULAR AND PEDESTRIAN ENCROACHMENT BY BASED PLANTERS OR THE USE OF CURBS. STEPPING STONES SHALL BE PROVIDED AS ACCESS THROUGH A LANDSCAPE PLANTER(S) WHEN ADJACENT TO PARKING SPACES.
- 5) ALL LANDSCAPE PLANTERS SHALL BE PROTECTED BY A MINIMUM SIX-INCH HIGH CONCRETE CURB.
- 6) ALL GROUND SURFACES SHALL HAVE ONE OR MORE OF THE FOLLOWING TREATMENTS:
A. PAVING
B. TURF
C. FOUR-INCH ROUNDED RIVER ROCK
D. DECOMPOSED GRANITE WITH A PRE-EMERGENT HERBICIDE USING WEED BARRIER UNDERNEATH
E. OTHER SIMILAR GROUND SURFACE AS APPROVED BY THE ADMINISTRATOR
- 7) LANDSCAPING SHALL BE SITED SO THAT AT MATURITY THE PLANTS DO NOT INHIBIT VISIBILITY IN ANY SIGHT TRIANGLE.
- 8) PLANTING ISLANDS IN PARKING LOTS SHALL HAVE A MINIMUM WIDTH OF EIGHT FEET INTERIOR, PROTECTED BY SIX-INCH HIGH CURBS.
- 9) ARTIFICIAL TURF IS PERMITTED AS A LANDSCAPE COVER IN SIDE AND REAR YARDS THAT ARE NOT ADJACENT TO STREETS.

PLANTING & IRRIGATION NOTES

- 1) ALL PLANTING AND IRRIGATION SHALL BE INSTALLED PER CITY OF FERNLEY CODES.
- 2) FINAL PLANT SELECTION AND LAYOUT WILL BE BASED ON SOUND HORTICULTURE PRACTICES RELATING TO MICRO-CLIMATE, SOIL, AND WATER REGIMES. ALL TREES WILL BE STAKED SO AS TO REMAIN UPRIGHT AND PLUMB FOLLOWING INSTALLATION. PLANT SIZE AND QUALITY AT THE TIME OF PLANTING WILL BE PER THE AMERICAN STANDARD FOR NURSERY STOCK.
- 3) ALL PLANTER BEDS WILL RECEIVE 4" TOP-DRESSING OF MULCH (RIVER ROCK, DECOMPOSED GRANITE, ETC.).
- 4) ALL LANDSCAPING WILL BE AUTOMATICALLY IRRIGATED. TURF GRASS (IF PRESENT) WILL BE IRRIGATED USING LOW ANGLE SPRAY, ROTARY, AND/ OR IMPACT HEADS TO REDUCE WIND DRIFT. CONTAINER PLANTINGS WILL BE DRIP IRRIGATED BASED ON THE SPECIFIC HORTICULTURE REQUIREMENTS OF EACH SPECIES. THE IRRIGATION SYSTEM WILL BE DESIGNED TO ALLOW FULL IRRIGATION OF THE SITE BASED ON A THREE-DAY WEEKLY WATERING SCHEDULE. A REDUCED-PRESSURE-TYPE BACKFLOW PREVENTER (RPB) WILL BE PROVIDED ON THE IRRIGATION SYSTEM AS REQUIRED PER CODE.

LEGEND

LOTS	ROCK MULCH
HOUSE PADS	MAINTENANCE ROAD
STREETS	COMMON AREA

FRONT LOT TREE
- (1) PER LOT
- TOTAL: 102

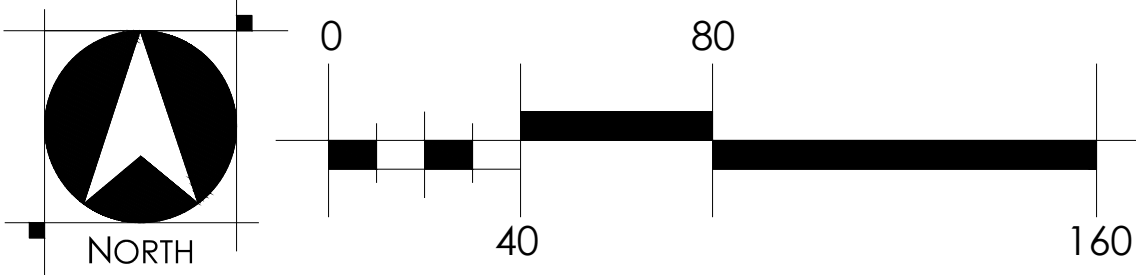
ACCENT / SITE TREE
- 1/500 SQ.FT. OF LS
- REQUIRED: 60
- PROVIDED: 61



CHAPARRAL ESTATES
PRELIMINARY
LANDSCAPE PLAN

WOOD RODGERS
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME
1361 Corporate Boulevard Tel 775.823.4068
Reno, NV 89502 Fax 775.823.4066

JOB NO. 4506.002 JULY 2025
SHEET LS-1 OF 11



EXECUTIVE SUMMARY

- Project Name:** Chaparral Estates Zoning Map Amendment and Tentative Subdivision Map
- Site Location:** The project site is a six-parcel site, which when combined totals approximately 24.72 acres, situated within the city limits of Fernley, Nevada, approximately 0.46 miles south of the intersection of U.S. Highway 50 and Emigrant Way. The site lies at the southern terminus of Fort Sutter Boulevard, where the roadway intersects Langdon Street at a 90-degree angle. Farm District Road is located approximately 0.18 miles south of the site's southern boundary. The site will be accessible via two proposed access points: one from the north through Fort Sutter Boulevard and another from the south via Clover Lane.
- APN Numbers:** 021-331-15, -19, -20, -22, -29, and -38
- Applicant:** Genica Development, LLC
- Applicant's Representative:** Wood Rodgers, Inc., Attention: Eric Hasty
- Owners:** Genica Clover Ranch, LLC (APNs 021-331-19, -20, -22, -29 and -38)
Shawna J. Tibbals (APN 021-331-15)
- Proposed Action:** This application packet includes requests for:
- 1) **Zoning Map Amendment** on the entire 24.72-acre portion of land from Residential – Rural (½-acre minimum) (RR- ½) and Residential – Rural (5 acre minimum) (RR5) to Residential – Single-Family (6,000 sf minimum)(SF6);
 - 2) **Tentative Subdivision Map** to develop a 102-lot single-family detached subdivision with three common-area parcels, for a total of 105 parcels.
- Current Land Use:** Single-Family Residential (SFR)
- Current Zoning:** ±19.3 acres: Residential – Rural (½-acre minimum) (RR- ½)
±5.42 acres: Residential – Rural (5 acre minimum) (RR5)
- Proposed Zoning:** ±24.72 acres: Residential – Single-Family (6,000 sf minimum) (SF6)
- Flood Zone Designation:** Zone X
- Gross Site Area:** ±24.72 acres

Background / Existing Conditions

The project site (Site) is generally located along Clover Lane and Browne Lane approximately 0.5 miles (mi) south of U.S. Highway 50 and south of the terminus of Fort Sutter Boulevard, where the roadway intersects Langdon Street at a 90-degree angle. Farm District Road is located approximately 0.18 mi south of the site's southern boundary. Specifically, the project site includes six parcels identified with APNs 021-331-15, -19, -20, -22, -29, and -38 that when combined total 24.72 acres.

The site has direct access to Farm District Road to the south via Clover Lane. Clover Lane traverses the site north to south and is an unimproved roadway within the site but is paved south of the site to Farm District Road. A *Step Ahead Preschool* is located to the north of the site as well as existing and newer 6,000 square foot lots, with residential in varying lot sizes and vacant land to the east, west and south. In terms of site characteristics, the site is relatively flat. The site is undisturbed vacant land with primarily native vegetation consisting of native grasses.

Zoning Map Amendment and Tentative Subdivision Map

Project Description

The site has an existing Fernley Comprehensive Master Plan (Master Plan) land use designation of Single-Family Residential (SFR), with non-conforming zoning districts of Residential – Rural (½-acre minimum) (RR- ½) (19.3 acres) and Residential – Rural (5 acre minimum) (RR5) (5.42 acres) (*refer to Zoning and Master Plan maps in Section 2 of this submittal packet*). The SFR land use designation is intended to allow 2-7 dwelling units per acre/ (du/ac) in primarily single-family detached homes with varied lot sizes. It is important to note the entire project site is zoned RR½ or RR5, which is non-conforming to the current Master Plan designation of SFR. The site is an infill site and a logical expansion of the residential units to the north, which are zoned SF6.

It should be noted that a neighborhood meeting was held on April 24, 2025, to discuss the proposed zone change and tentative subdivision map with neighbors and stakeholders. Notice of the meeting was mailed directly to all surrounding neighbors within 750 feet of the project site. A conceptual site plan similar to the Tentative Map submitted with this request was presented. Concerns expressed by meeting attendees included site circulation and existing irrigation easements. These comments have been addressed, with mitigation measures incorporated into the proposed design and further described in the document below.

Project Requests

Included with this submittal is an application and associated materials for:

- 1) **Zoning Map Amendment.** The application requests to change the regulatory zoning of the site from 5.4 acres of Residential – Rural (5 acre minimum) (RR5) and 19.3 acres of Residential – Rural (½-acre minimum) (RR ½) to 24.72 acres of Single-Family Residential (6,000 sf minimum) (SF6). The proposed SF6 zoning designation will be in conformance with the existing Master Plan designation and will support proposed development of the site.
- 2) **Tentative Subdivision Map.** This application requests approval of a Tentative Subdivision Map (TSM) to develop a 102-lot single-family detached development, with three common area parcels, for a total of 105 parcels, a minimum lot size of 6,144 sf interior lots, and an average perimeter lot size of ±8,269 sf. The gross density proposed is 4.1 du/ac, which is in conformance with the proposed regulatory zoning and existing Master Plan land use designations.

Adjacent Land Use and Zoning

	Master Plan	Zoning	Current Use of Land
North	Single Family Residential (SFR)	SF6 SF20	single-family residential, detention basin pre-school
South	Single Family Residential (SFR)	RR5	single-family residential
East	Single Family Residential (SFR)	RR5 SF20	single-family residential
West	Single Family Residential (SFR)	RR1 RR5	vacant, single-family residential

North: The northern boundary of the site borders two parcels with a Master Plan land use designation of SFR and a zoning designation of SF6. The western of these two parcels bordering the site's northern boundary is owned by the City of Fernley and is occupied by the water detention basin for the adjacent single-family residential subdivision. The other parcel adjacent to the site's northern boundary is occupied by a single-family residence. Additionally, the site shares a portion of its northern and eastern boundaries with an adjacent parcel with a land use designation of SFR and a zoning designation of SF20 occupied by a preschool (*A Step Ahead Preschool*).

South: The site is bordered to the south by parcels with a land use designation of SFR, a zoning designation of RR5, and occupied with single-family residential dwelling units.

East: Directly adjacent to the site's eastern boundary are parcels with a SFR Master Plan land use designation, zoning designations of either SF20 or RR5, and occupied with single-family residential dwelling units. Further east is another single-family residential subdivision which surrounds the southern and western boundaries of Silverland Middle School.

West: Directly adjacent to the site's western boundary are five parcels with a master plan land use designation of SFR and zoning designations of either RR1 or RR5. These parcels are either vacant or occupied with single-family residential dwelling units.

In terms of surrounding land use compatibility, the site is uniquely positioned to provide an opportunity for a more desirable lot size in the current market conditions (6,400 to 8,000 square feet) for most buyers similar to the newer neighborhoods surrounding the site. The site also provides larger lots along the perimeter to provide a transition to the adjacent vary lot size parcels to the west, east, and south. The project allows for a wide range of lot sizes as envisioned in the City of Fernley master plan, helping the city provide an appropriate transition zone from the more rural development in the south and the higher density development in the north.

Zoning Map Amendment Justification

The zoning map amendment (ZMA) request to change the current zoning designations from RR5 and RR½ to SF6 is consistent with the adjacent zoning and lot sizes as it will allow for lot sizes similar to the newer single-family subdivisions to the north, east and southwest, but allow for flexibility in lot sizes along the perimeter to accommodate larger lots compatible with the adjacent lots. Larger lots have been incorporated into the overall site design to accommodate for increased perimeter buffers along the eastern and western site boundaries as well as internally at corner lots. This ZMA will facilitate the proposed subdivision and help support housing needs to accommodate anticipated population growth. Furthermore, the project is located within an area that has direct access to existing utilities and nearby paved roadways for connectivity and access, making this a logical extension of the existing surrounding neighborhoods and compatible with the land use pattern envisioned for this area of the community.

The proposed SF6 zoning would allow for a maximum density of 7.26 du/ac. The proposed SF6 zoning and resultant allowed density of 7.26 du/ac is consistent with the surrounding zoning designation of SF6 to the north and northwest and compatible with the single-family character envisioned for this part of the community and echoed by several other approved single-family residential developments to the east (*refer to Proposed Zoning Map in Section 2 of this submittal packet*).

The ZMA request to change the current designations of RR5 and RR ½ to SF6 is consistent with the adjacent zoning and lot sizes to the north and northwest and provide for an appropriate transition from the larger-lot rural-residential parcels to the south and east, as the design of the site incorporates larger perimeter lots in accordance with the purpose and intent of the adjacency standards in Fernley Development Code (FDC) § 32.09.030.

To further justify this amendment, the existing RR5 and RR½ zoning districts are non-conforming to the existing SFR Master Plan land use designation and the proposed ZMA will bring the site into compliance with the Master Plan.

The proposed ZMA supports the tentative subdivision map (TSM) request also included with this application for a 105-parcel subdivision (102 residential lots and three common area parcels) with lots ranging in size from 6,200 sf to 12,249 sf. The proposed tentative map would produce a density of approximately 4.1 du/ac, falling well below

the maximum density for the SF6 zoning and effectively providing a minimum density similar to the SF9 zone and is an appropriate density for compatibility with both surrounding rural residential and smaller-lot residential development (*refer to the Site Plan in the Map pocket of the submittal packet*).

Tentative Subdivision Map Analysis

Overview

The current request is to develop the site with 102 single family residential lots and three common area parcels for 105 parcels total, with two other dedicated areas to be offered to the city for storm water retention ponds. Pending the proposed ZMA the regulatory zoning for the site will be SF6, with the maximum number of dwelling units allowed in this zoning district is 7.26 du/ac, and lots must be a minimum of 6,000 sf. Without considering allowances for roadways, landscaping, open space, or setbacks, a 24.72-acre site would be allowed a maximum of 173 separate lots, noting the site plan includes 102 residential lots and amounts to a density of 4.1 du/ac, far less than would be allowed under the proposed zoning district’s maximums. There are no existing structures on the site. Proposed improvements include site access, drainage and grading improvements, and the extension of utilities, including water, sewer, and electric, to the new lots.

The SF6 zoning district has the specific purpose and intent to preserve areas where the predominant dwelling type is single-family detached dwelling units at or below 7.26 du/ac, consistent with the tentative subdivision map being submitted for this site under this application.

The tentative subdivision map has been designed specifically to meet the intent and purpose of lot adjacency and transition standards for single-family residential development. FDC §32.09.030(d) includes specific requirements for transitions and buffers between development on lots with varying degrees of density. When considering this, it is worth noting the zoning code was last comprehensively update prior to the Master Plan’s most recent comprehensive update in 2019, with some portions of the existing zoning code including standards not reflective of the vision for the community seen in the updated Master Plan. Specifically, the transition and buffer adjacency standards, if adhered to strictly, would create possible “dead zones” of land within subdivisions where development or improvements are neither feasible nor required. Further, FDC allows deviation from these standards with approval by the Administrator.

In order to satisfy the purpose and intent of the lot adjacency and transition standards, the site plan for the proposed subdivision has incorporated 30-ft rear buffers on both the east and west perimeter boundaries of the subdivision, included on the submitted TSM. It is anticipated that the buffer will be recorded on the final map and reflected on all applicable deed documents. These buffers will satisfy the access needs for utility infrastructure, including power poles and lines which run along both the eastern and western perimeter boundaries, while also providing an adequate transition zone buffer from the density/intensity of the neighboring RR1 and RR5 parcels and the proposed adjacent SF6 parcels. This perimeter buffer is in addition to rear setback requirements, thus development (erection of structures) will be prohibited in the rear 40-ft of any eastern or western perimeter lot, as regulated by the future Homeowners Association (HOA) for the subdivision. This 40-ft no-build buffer is a minimum standard, with it anticipated most perimeter lots will have an even larger rear setback of the residence.

Development Statistics Summary

Total Site Area:.....	24.72± acres
Total Dwelling Units:	102 single-family detached dwelling units
Net Density:	4.1± dwelling units/acre
Total Lot Area:.....	18.01± acres (73%)
Average Lot Size:.....	7,691± square feet

Average Perimeter Lot Size:	8,269± square feet
Maximum Lot Size:.....	12,249± square feet
Minimum Interior Lot Size:.....	6,200± square feet
Total Right of Way Area:.....	5.64± acres (23%)
Total Common Area:	0.66± acres (2.7%)

Grading

The project site is mostly vacant. The site generally slopes from east to west. Approximately 100% of the site has slopes less than 10%, therefore *FDC §32.09.130 (Slopes, hilltops, and ridges)* is not applicable. Grading of the site is provided in the Preliminary Site Plan (*refer to the Preliminary Grading Plan [Sheets G-1 and G2] of the Tentative Map Plan Set in Section 4 and the Map Pocket of this submittal packet*).

Drainage

On site drainage will consist of directing onsite flows from the various portions of the site and allowing them to flow to curb and gutter facilities located within the proposed street network. This will convey the flows to the two proposed retention ponds. One retention pond is the existing pond adjacent to the site's northern boundary and located within the City of Fernley owned parcel. This will be reconfigured to allow for the extension of Fort Sutter Boulevard into the site. A second retention pond located between lots 11 and 12 will capture the remaining flows generated from the site (*refer to Preliminary Hydrology Report included in Section 4 of this submittal packet*).

Water, Sewer, and Utilities

Water is anticipated to be extended into the site via the extension of Fort Sutter Boulevard to the north. Water infrastructure serving the site will be located within the proposed road network and will be stubbed to each proposed lot. Sewer is anticipated to be extended from Westward Lane within an existing utility easement and brought into the site via the existing roadway Brown Lane, which is proposed to be Bristle Cone Lane within the proposed subdivision, as seen on the site plan. Other utilities including power and communications are adjacent to the site and will be brought in within the proposed right of ways. For detailed information regarding existing and proposed utility infrastructure refer to the *Preliminary Utility Plan (Sheets U-1 and U2)* in Section 4 and the *Map Pocket* of this submittal packet.

Site Access and Circulation

The site is currently accessed from the south via Clover Lane to Farm District Road. The TSM shows a new access proposed to the north via Fort Sutter Boulevard through the adjacent city-owned parcel, with slight reconfiguration of the existing stormwater retention pond to accommodate the roadway extension and encourage travel patterns north to Highway 50. A network of 50-ft-wide internal street rights-of-way, including sidewalks, cul-de-sacs, and turning radii will serve the site, all designed to meet City of Fernley roadway standards and international fire code.

Given the site's proximity to a preschool, and in response to feedback received from neighborhood stakeholders, the configuration of internal roadways was redesigned, incorporating elements to slow traffic around the preschool including a proposed three way stop at the intersection of Birch Street and Bristle Cone Lane and providing a 10-foot buffer from the preschool parcel and the right of way. Further, instead of grid style roadways running straight from north to south, the subdivision is designed with roadways with slight turns, bump outs, and cul-de-sacs. Sidewalks will be incorporated throughout which will bring pedestrian scale to the roadways.

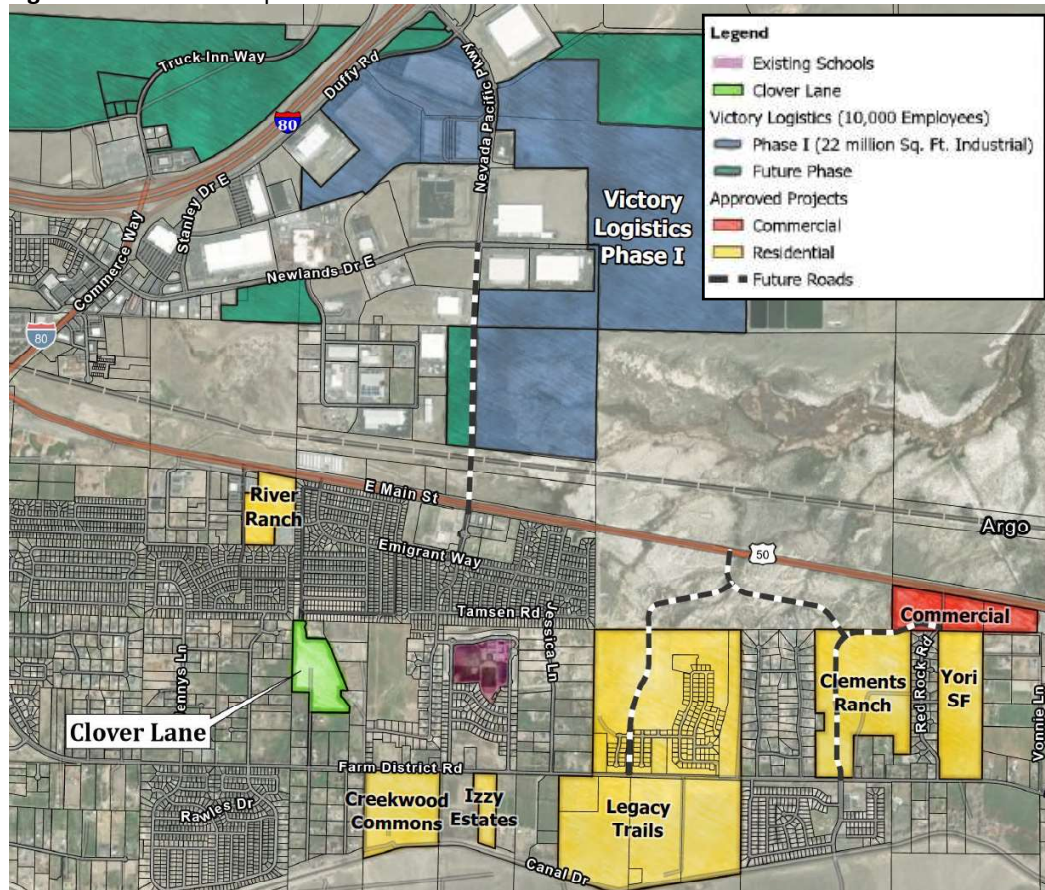
Although the site does draw existing access from Clover Lane which extends south to connect with Farm District Road, the traffic impact study conducted in tandem with this submittal indicates, under the current project design, a vast majority (80%) of trip generation would access the site via the north through the new connection

to Fort Sutter Boulevard (refer to *Traffic Impact Study in Section 4 of this submittal packet*). As this connection will bifurcate the adjacent city-owned parcel to the north, the new roadway will be constructed a minimum of 15-ft from the adjacent western parcel boundary of the privately owned parcel to the east, ensuring additional setback area for the adjacent property.

A key factor in traffic patterns for the Fernley community moving forward will be the completion of the Nevada Pacific Parkway connecting I-80 to Highway 50 which will provide necessary access to the Victory Logistics, a company anticipated to add approximately 10,000 jobs to the Fernley community over the next 10 of years which will contribute substantially to the need for housing and adequate traffic circulation in coming years (refer to **Figure 1** below).

The proposed subdivision located south of Highway 50 but north of Farm District Road, only a short distance from the future connection of Nevada Pacific Parkway and Highway 50, combined with the site's new access to the north, makes the site perfectly positioned to provide much a much needed housing product while not contributing negatively to traffic flow and likely helping to relieve traffic flow issues currently being experienced in Fernly due to the I-80 roundabout.

Figure 1: Future Development



Traffic

The Traffic Impact Study prepared by Headway Transportation (April 15, 2025) considered 100 single-family dwelling units (refer to *Traffic Impact Study in Section 4 of this submittal packet*). Based on this analysis a project of the analyzed size would generate approximately 943 daily trips, 70 AM peak hour trips, and 94 PM peak hour trips. The study concluded that all intersections studied are anticipated to operate within policy level of service

under all scenarios, with or without the project. The addition of project traffic had no significant impact on the study intersections. The TIS does not indicate any roadway improvements are needed for capacity based on the additions of project traffic. For specific details regarding traffic conditions and improvements, refer to the *Traffic Impact Study* in Section 4 of the submittal packet.

Landscaping

The proposed TSM is for 105 parcels (102 residential lots and three common area parcels) intended for development with single-family detached dwelling units and is not classified as a planned development under FDC. Although limited common area is anticipated at this time, all landscaping in any common areas will be owned and maintained by a HOA or an equivalent that will be established at final map. Beyond this, individual lots will not be held to any additional landscaping standards above and beyond the landscaping standards for the proposed underlying SF6 zoning district.

Public Services

Schools: According to the Lyon County School District's 2016 Facilities Plan, all Fernley schools are currently under capacity and are planned to be within adequate utilization through 2025. Students residing in this development will attend Cottonwood Elementary School, Silverland Middle School, and Fernley High School.

Police and Fire Services: The project site is located in an area already served by police and fire services. Police services will be provided by the Lyon County Sheriff's Department and fire service will be provided by the North Lyon County Fire Protection District. The closest fully staffed fire station is the North Lyon County Fire Protection District Main Office, located approximately 2.7 miles west near the intersection of State Route 95A and Main Street. The main access to the site where police and fire will enter the development is located on Fort Sutter Boulevard.

Parks: There are recreational amenities in the area of the subject site. Ponderosa Park is located 0.88 miles southwest of the site. Picetti Park, a small neighborhood serving park, is located 0.66 miles east. Green Valley Park is approximately 1.5 miles west from the site, with larger parks like Fernley out of Town Park (2.5 miles west) and Autumn Winds Park (2.2 miles east) further from the site.

Fiscal Impact Statement

The subject parcel is an infill parcel located in an area surrounded by existing older residential development adjacent to existing infrastructure. The current vacant use does not provide any fiscal benefit for the City of Fernley at this time. One of the issues the City of Fernley is facing is that larger-lot developments no longer cover the costs of required infrastructure, which has contributed to a continual increase in utility fees and roads left in poor shape. Developing the subject site with large lots consistent with the current non-conforming zoning could bring negative fiscal impact to the City of Fernley based on existing trends and would be an inefficient use of the land given the housing demand anticipated for the large employment center (Victory Logistics) currently under construction.

The proposed zoning will provide a mix of unit types that will take advantage of the existing infrastructure, helping provide fees that will support the city's ongoing utility and public service costs. The additional dwelling units facilitated by this request will provide additional impact fees and tax revenues that will fiscally support the city's schools, parks, roads, and public services while also providing more obtainable housing options that are appropriate to support the growing workforce.

Victory Logistics employment center, less than two miles northeast from the subject site, is anticipated to generate over 10 million square feet of new industrial space along with over 10,000 employees within the first phase (Northern Nevada Business Weekly <https://www.nnbw.com/news/2021/jul/27/playing-long-game-massive-fernley-development-sets/>). Utilizing the subject infill parcel to help support the adjacent employment

growth is a much more efficient use of the land and will help fill the gap in needed housing within the community. Housing products obtainable to average-incomed Fernley residents will help fill a crucial need in “missing-middle” housing products, which is critical to support the future employment centers already being constructed and, more broadly, the future economic growth of Fernley.

FINDINGS FOR APPROVAL

Pursuant to the City of Fernley Development Code §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.**

1) *Implementation and Consistency with the City of Fernley Master Plan*

Response: The ZMA and TSM will enable the development of 102 single-family dwelling units, offering a housing option that is highly desirable given current market conditions and employment coming to Fernley. This proposed zoning aligns with the site's current Master Plan land use designation, addressing the inconsistency between the existing zoning and the Fernley Master Plan. Furthermore, the ZMA and TSM support and advance several goals and policies outlined in the Master Plan. The following excerpts and accompanying analysis demonstrate the proposal's alignment with these planning objectives

Applicable Master Plan Goals and Policies

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.

Comment: The proposed ZMA and TSM will facilitate the development of 102 single-family dwelling units on the parcels, which will provide a slightly higher density housing option on the site than its present zoning would allow. With projected growth in Fernley and increased development in the area, offering a variety of housing types and costs will contribute to vitality and housing diversity in the community.

Goal 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.

Comment: The subject parcel is located in an area that is master planned for the size of lots proposed. The ZMA request is consistent with the surrounding area. The ZMA request would maintain conformance with the Master Plan and continue similar growth patterns of the surrounding area by allowing lot sizes similar to those in the neighborhood to the north and allow for larger lots along the perimeter. The potential for increased residential density conserves natural resources in the area by concentrating development in an area already being served by public services and amenities. Resource efficient design and construction will be incorporated into future stages of the project.

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

Comment:
Sewer, Water, and Utilities

Water is anticipated to be extended into the site via the extension of Fort Sutter Boulevard to the north. Water infrastructure serving the site will be located within the proposed road network and will be stubbed to each proposed lot. Sewer is anticipated to be extended from Westward Lane within an existing utility easement and brought into the site via the existing roadway Brown Lane, which is proposed to be Bristle Cone Lane within the proposed subdivision, as seen on the site plan. Other utilities including power and communications are adjacent to the site and will be brought in within the proposed right of ways. For detailed information regarding existing and proposed utility infrastructure refer to the *Preliminary Utility Plan (Sheets U-1 and U2)* in Section 4 and the *Map Pocket* of this submittal packet.

Schools

According to the Lyon County School District's 2016 Facilities Plan, all Fernley schools are currently under capacity and are planned to be within adequate utilization through 2025. Students residing in this development will attend Cottonwood Elementary School, Silverland Middle School, and Fernley High School.

Police and Fire Services

The project site is located in an area already served by police and fire services. Police services will be provided by the Lyon County Sheriff's Department and fire service will be provided by the North Lyon County Fire Protection District. The closest fully staffed fire station is the North Lyon County Fire Protection District Main Office, located approximately 2.7 miles west near the intersection of State Route 95A and Main Street. The main access to the site where police and fire will enter the development is located on Fort Sutter Boulevard.

Parks

There are recreational amenities in the area of the subject site. Ponderosa Park is located 0.88 miles southwest of the site. Picetti Park, a small neighborhood serving park, is located 0.66 miles east. Green Valley Park is approximately 1.5 miles west from the site, with larger parks like Fernley out of Town Park (2.5 miles west) and Autumn Winds Park (2.2 miles east) further from the site.

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

Comment: The subject parcel has an existing Master Plan designation of Single-Family Residential (SFR), and the existing RR5 and RR ½ zoning districts are non-conforming to this land use designation. The proposed ZMA will bring the site into compliance with the Master Plan as well as the intent for the character and density for this area of Fernley. Lots created will range in size from 6,200 sf to over 14,185 sf, with an **average lot size of 7,781 sf**. As designed the subdivision incorporates several lots above 10,000 sf. With a wide range of lot sizes this design allows for the site to comply with the current master plan.

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

Comment: The proposed lots are compatible with the existing 6,000 square foot lots to the north and will provide larger 8,000 square foot perimeter lots which are more compatible with the adjacent development to the west, east, and south.

Goal LU.1.5 Promote infill development

Comment: The proposed project is considered infill development.

2) Consistency and Compatibility with Surrounding Land Uses

Response: The proposed request is consistent and compatible with the surrounding land uses. As seen in the table below, the site is surrounded on all sides by residential development ranging from large-lot rural residential development to small-lot single-family denser subdivisions, making a residential subdivision with lots ranging in size from 6,144 sf to over 12,200 sf consistent with the transitional nature of this portion of the city.

Adjacent Land Uses

	Master Plan	Zoning	Current Use of Land
North	Single Family Residential (SFR)	SF6	Single-Family Residential, Detention Basin
		SF20	Pre-school
South	Single Family Residential (SFR)	RR5	Large-lot single-family residential
East	Single Family Residential (SFR)	RR5 SF20	Large-lot single-family residential
West	Single Family Residential (SFR)	RR1 RR5	Vacant, Large-lot single-family residential

North: The northern boundary of the site borders two parcels with a Master Plan land use designation of SFR and a zoning designation of SF6. The western of these two parcels bordering the site's northern boundary is owned by the City of Fernley and is occupied by the water detention basin for the adjacent single-family residential subdivision. The other parcel adjacent to the site's northern boundary is occupied by a single-family residence. Additionally, the site shares a portion of its northern and eastern boundaries with an adjacent parcel with a land use designation of SFR and a zoning designation of SF20 occupied by a preschool (*A Step Ahead Preschool*).

South: The site is bordered to the south by parcels with a land use designation of SFR, a zoning designation of RR5, and occupied with single-family residential dwelling units on large lots, typical to rural residential zoning districts.

East: Directly adjacent to the site's eastern boundary are parcels with a SFR Master Plan land use designation, zoning designations of either SF20 or RR5, and occupied with single-family residential dwelling units on large lots, typical to these zoning districts. Further east is another single-family residential subdivision which surrounds the southern and western boundaries of Silverland Middle School.

West: Directly adjacent to the site's western boundary are five parcels with a master plan land use designation of SFR and zoning designations of either RR1 or RR5. These parcels are either vacant or occupied with single-family residential dwelling units on large lots, typical to rural residential zoning districts.

From a land use compatibility perspective, the site is uniquely positioned to be able to provide a range of lot sizes larger than those typically offered in single-family residential subdivisions yet still maintain compatibility with adjacent rural residential land uses. The site is surrounded closely to the north, east, and southwest by smaller lot single-family residential uses, yet the site is neighbored by characteristically rural

parcels to the west and south, allowing for a subdivision with a wide range of lot sizes, as envisioned for the site, to provide an appropriate transition zone from the more rural development seen south and east and the higher density development north and west closer to the city center.

3) Public notice was given, and a public hearing held per the requirements of Nevada Revised Statutes and Fernley Development Code.

Response: Throughout the entitlement process, the applicant will follow all requirements of the development code and Nevada Revised Statutes for noticing the public, holding meetings, and attending public hearings.

Tentative Subdivision Map Approval Criteria

Pursuant to *Fernley Development Code §32.03.060 (Land Division Applications)* recommendations and decisions on tentative maps shall be based on consideration of all of 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;**

Response: This project has been designed to meet all environmental and health laws/regulations, as required by local, state, and federal regulations. Water and sewer will be provided and treated by the City of Fernley municipal water and wastewater systems (*refer to Preliminary Utility Plan [Sheets U-1 and U-2] in Section 4 and the Map Pocket of this submittal packet*). Solid waste disposal will be provided by Waste Management. This is a residential project, and this use is not anticipated to contribute significantly to air pollution.

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

Response: Water meeting applicable health standards is available for the future needs of this subdivision, provided by the City of Fernley. The required water is available and will be provided at final map. Actual demand will be calculated with the site improvement plans prior to recording the final subdivision map. A utility plan is included in the Map Pocket of this submittal packet indicating the location of existing City of Fernley utility infrastructure to serve the project.

- 3. Availability and accessibility of utilities;**

Response: All utilities necessary to serve the proposed subdivision currently exist in close proximity to the site. Sewer is anticipated to be extended into the site via Westward Lane and through an existing access and utility easement that will connect to the proposed Bristle Cone Lane. Water lines are planned to be extended to the site via the extension of Fort Sutter Blvd and within the proposed roadways. The proposed water and sewer systems will be operated by the City of Fernley. A preliminary sewer study is included in Section 4 of this submittal packet which indicates the City of Fernley has sufficient system capacity to serve the project. Gas will be operated by Southwest Gas and power and communications services will also be extended to the site (*refer to Preliminary Utility Plan [Sheets U-1 and U-2] in Section 4 and the Map Pocket of this submittal packet*).

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

Response:

Schools

According to the Lyon County School District's 2016 Facilities Plan, all Fernley schools are currently under capacity and are planned to be within adequate utilization through 2025 with the exception of one elementary school. The School District's 10-year capital program identifies a new elementary school planned to be built in the next four to six years, which would address any potential elementary school capacity issues. Students residing in this development will attend Cottonwood Elementary School, Silverland Middle School, and Fernley High School.

Police and Fire Services

The project site is located in an area already served by police and fire services. Police services will be provided by the Lyon County Sheriff's Department and fire service will be provided by the North Lyon County Fire Protection District. The closest fully staffed fire station is the North Lyon County Fire Protection District Main Office, located approximately 2.7 miles west near the intersection of State Route 95A and Main Street. The main access to the site where police and fire will enter the development is located on Fort Sutter Boulevard.

Parks

There are recreational amenities in the area of the subject site. Ponderosa Park is located 0.88 miles southwest of the site. Picetti Park, a small neighborhood serving park, is located 0.66 miles east. Green Valley Park is approximately 1.5 miles west from the site, with larger parks like Fernley out of Town Park (2.5 miles west) and Autumn Winds Park (2.2 miles east) further from the site.

5. Consistency with the zoning district regulations;

Response: The project site has an existing master plan land use designation of Single-Family Residential (SFR) and, upon approval of the proposed ZMA associated with this request, the project site will have a zoning designation of SF6. This zoning district allows for single-family residential lots that are a minimum of 6,000 sf. This tentative subdivision request seeks to create 105 parcels in total, with 102 single-family lots, ranging from 6,144 sf interior lots to 12,249 sf, with an average lot size of 7,691 sf. The proposed subdivision is entirely consistent with all standards of the proposed SF6 zoning district regulations.

6. Conformity with the master streets and highways plan;

Response: The request conforms with the Master Streets and Highways Plan. Currently the property is accessed via Clover Lane to the south. Proposed access to the site will be improved to provide a 50-ft wide roadway into the site from the north as an extension of Fort Sutter Boulevard. This extension of Fort Sutter Boulevard will connect to an internal network of 50-ft roadways, with curbs, gutters, and sidewalks all designed to meet FDC standards, providing access to driveways of all proposed lots. Two bulbs and two cul-de-sacs are included in site design which will provide adequate turnaround for fire trucks and compliance with international fire code. Additional compliance with the Master Street and Highways Plan would be demonstrated further with the proposed site access connection to the north via Fort Sutter Boulevard over the city owned parcel. It is not anticipated that his project will contribute negatively to traffic or congestion, as concerns regarding traffic at the I-80 roundabout and along Farm District Road were considered and project design elements incorporated to mitigate potential impacts.

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

Response: Traffic generated from the project is not anticipated to have a significant impact to the surrounding transportation infrastructure or Farm District Road, as the *Traffic Impact Study* concluded over 80% of trips generated to and from the site will utilize the new connection to the north and Highway 50, especially considering the sites proximity to the future development of Victory Logistics and Nevada Pacific Parkway just northeast of the site. The proposed subdivision will only generate approximately 94 PM peak hour trips. As concluded in the TIS, beyond what is proposed no additional improvements are needed to accommodate demand on surrounding roadways. Traffic generation is minimal, and the surrounding existing roadways, combined with the new internal roadway network, can adequately serve the proposed lots.

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

Response: This project is not within a floodplain. A grading plan is included in the Map Pocket of this submittal packet completed in compliance with all applicable grading, slope, soil and elevation differential standards of the City of Fernley (*refer to Preliminary Grading Plan [Sheets G-1 and G-2] in Section 4 and the Map Pocket of this submittal packet*).

9. Recommendations and comments of review bodies;

Response: Any comments received thus far have been incorporated into site design. Any recommendations and comments of review bodies moving forward will be considered in the project design and engineering processes.

10. Conformity to the master sewer and water utility plan;

Response: A *Preliminary Sewer Report* is included within *Section 4* of this submittal packet. The reports consulted with the Master Sewer and Water Utility Plans and include discussion of how the City of Fernley sewer and water infrastructure and supply has sufficient capacity to meet the projected demand of this project.

This project also conforms to the following Water/Wastewater Goals of the City of Fernley Comprehensive Master Plan:

- *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.*
 - **Comment:** This project will connect to the municipal water system. A utility plan is included within Section 4 of this submittal packet and modeling for demand will be done at final map.
- *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.*
 - **Comment:** Although there is minimal landscaping required with this plan, xeriscaping will be utilized where feasible to reduce water demand.
- *PSF.2.1.1 - All new development within the City limits with lot sizes equal to or smaller than 1.0 acre shall be required to connect to the municipal sewer system. New development with residential densities lower than one dwelling unit per acre shall be allowed to utilize individual septic systems with acceptable sub-surface disposal if sewer is not available.*
 - **Comment:** This project will connect to the municipal sewer system. A utility plan and a preliminary sewer report are included within Section 4 of this submittal packet.

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

Response: Beyond all typical development code sections applicable to development of this nature in this zoning district, additional standards of the development code are applicable, as outlined below, with

descriptions of mitigation strategies incorporated into site design to meet the purpose and intent of these standards:

Adjacency Standards (FDC §32.09.030)

The tentative subdivision map has been designed specifically to meet the intent and purpose of lot adjacency and transition standards for single-family residential development. FDC §32.09.030(d) includes specific requirements for transitions and buffers between development on lots with varying degrees of density. When considering this, it's worth noting the zoning code was last comprehensively update prior to the Master Plan which was comprehensively updated in 2019, with some portions of the existing zoning code including standards not reflective of the vision for the community seen in the updated Master Plan. Specifically, the transition and buffer adjacency standards, if adhered to strictly, would create possible "dead zones" of land within subdivisions where development or improvements are neither feasible nor required. Further, code allows deviation from these standards with approval by the Administrator.

In order to satisfy the purpose and intent of the lot adjacency and transition standards, the site plan for the proposed subdivision has incorporated 30-ft rear buffers on both the east and west perimeter boundaries of the subdivision. Along the east and west perimeter boundaries 30-ft wide buffers have been included on the tentative subdivision map. It is anticipated that the buffer will be recorded on the final map and reflected on all applicable deed documents. These buffers will satisfy the access needs for utility infrastructure, including power poles and lines which run along both the eastern and western perimeter boundaries, while also providing an adequate transition zone buffer from the density/intensity of the neighboring RR1 and RR5 parcels and the proposed adjacent SF6 parcels. This perimeter buffer is in addition to rear setback requirements, thus development (erection of structures) will be prohibited in the rear 40-ft of any eastern or western perimeter lot, as regulated by the future HOA for the subdivision.

TRAFFIC IMPACT STUDY

for

Chaparral Estates

July 21, 2025

PREPARED FOR:

Wood Rodgers, Inc.

PREPARED BY:



Lauren
T. Picou

Digitally signed
by Lauren T.
Picou
Date: 2025.07.21
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YOUR QUESTIONS ANSWERED QUICKLY

Why did you perform this study?

This Traffic Impact Study evaluates the potential traffic impacts associated with the proposed Chaparral Estates (formerly Clover Lane) residential development in Fernley, NV. This study was undertaken to determine the opening year and future year traffic conditions, quantify traffic volumes generated by the proposed project, identify potential impacts, and develop recommendations to mitigate impacts, if any are found.

What does the project consist of?

The project consists of 102 single-family dwelling units. The site is located north of Farm District Road, with proposed access via Clover Lane, Fort Sutter Boulevard and a planned connection to Westward Lane. The project location within the region is shown in **Figure 1** and the project site location is shown in **Figure 2**. The preliminary site plan is shown in **Figure 3**.

How much traffic will the project generate?

The development is anticipated to generate approximately 962 Daily trips, 71 AM peak hour trips, and 96 PM peak hour trips.

Are there any traffic impacts?

All intersections studied are anticipated to operate within policy level of service under all scenarios, with or without the project. The addition of project traffic had no significant impact on the study intersections.

Are any improvements proposed?

- No capacity improvements are needed at the study intersections based on the addition of project traffic. The project should construct an eastbound left turn lane at the Farm District Road / Clover Lane intersection; this is warranted by NDOT criteria based on the existing volumes (independent of the project). The project adds a small number of trips (10 in the PM peak hour) to the eastbound left turn movement.
- The project should construct the roadway connection to Fort Sutter Boulevard. This connection at Fort Sutter Boulevard/ Langdon Street should convert that intersection to a side-street stop (stop on Langdon Street) T-intersection.
- The project should construct the roadway connection to Clover Lane.
- All roadway connections and internal project roadways should be constructed to City of Fernley standards.

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7. Project Trip Distribution and Assignment
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- A. Crash Data
- B. Existing Conditions LOS Calculations
- C. Opening Year and Future Year LOS Calculations
- D. Opening Year Plus Project and Future Year Plus Project LOS Calculations

INTRODUCTION

This Traffic Impact Study evaluates the potential traffic impacts associated with the proposed Chaparral Estates (formerly Clover Lane) residential development in Fernley, NV. This study was undertaken to determine the existing, opening year and future year traffic conditions, quantify traffic volumes generated by the proposed project, identify potential impacts, and develop recommendations to mitigate impacts, if any are found.

Study Area and Evaluated Scenarios

The project consists of 102 single-family dwelling units. The site is located north of Farm District Road, with two proposed accesses – to the north via Fort Sutter Boulevard, and to the south via Clover Lane. An additional connection is planned via an extension to Westward Lane. The project location within the region is shown in **Figure 1** and the project site location is shown in **Figure 2**. The preliminary site plan is shown in **Figure 3**.

The following intersections are included in this study:

1. US 50A / River Ranch Road
2. River Ranch Road / Round Up Road
3. Round Up Road / Fort Sutter Blvd
4. Farm District Road / Clover Lane

This study includes analysis of both the weekday AM and PM peak hours as these are the periods of time in which peak traffic is anticipated to occur. The evaluated development scenarios are:

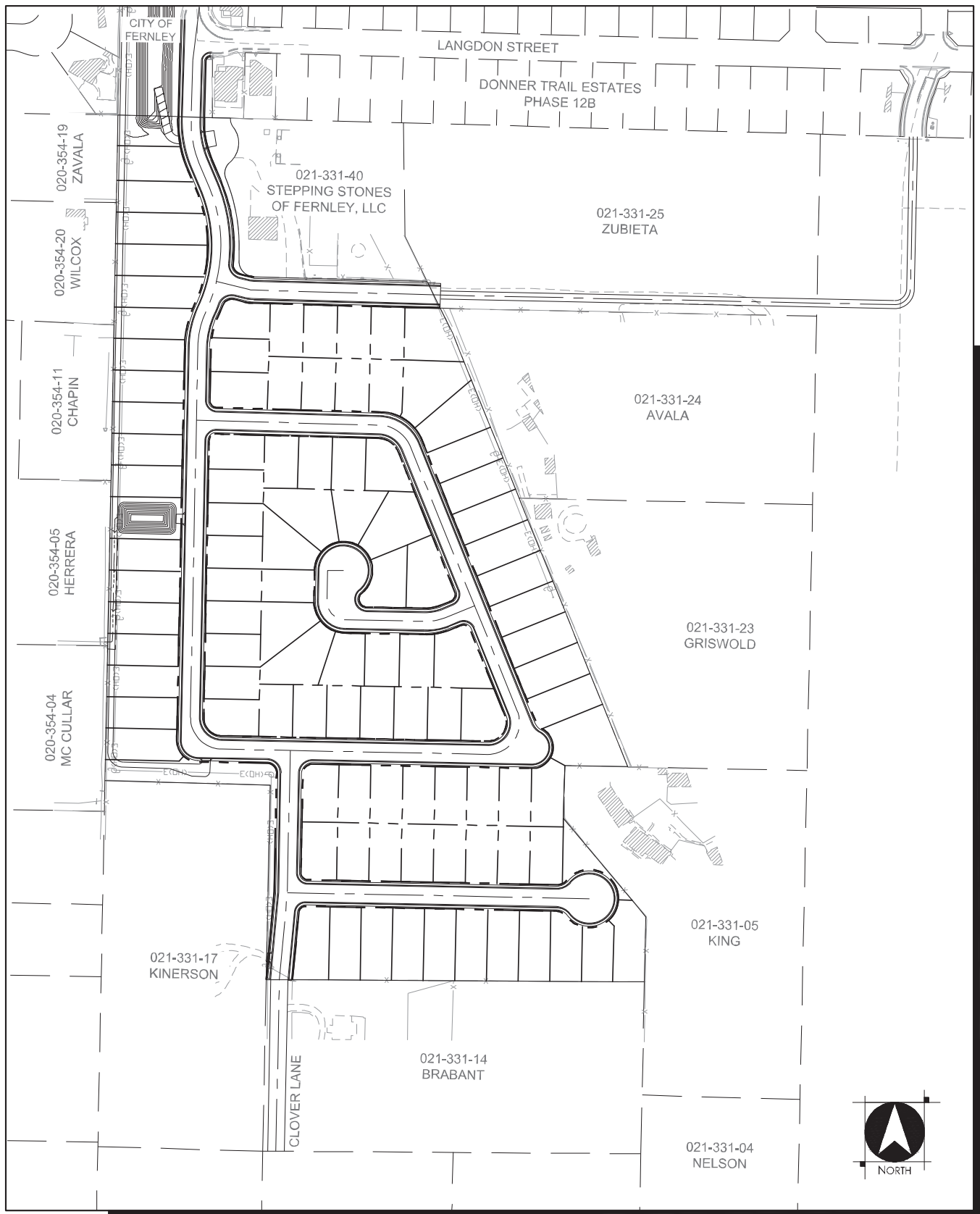
- Existing Conditions
- Opening Year Conditions (5 Year horizon, no project)
- Future Conditions (20 Years from Opening Year, no project)
- Opening Year Plus Project Conditions
- Future Year Plus Project Conditions



Study Intersections

- ① US 50A / River Ranch Rd
- ② River Ranch Rd / Round Up Rd
- ③ Round Up Rd / Fort Sutter Blvd
- ④ Farm District Rd / Clover Ln





SITE PLAN

1" = 150'

ANALYSIS METHODOLOGY

Level of service (LOS) is a term commonly used by transportation practitioners to measure and describe the operational characteristics of intersections, roadway segments, and other facilities. This term equates seconds of delay per vehicle at intersections to letter grades “A” through “F” with “A” representing optimum conditions and “F” representing breakdown or over capacity flows.

Intersections

The complete methodology for intersection level of service analysis is established in *the Highway Capacity Manual (HCM)*, 7th Edition published by the Transportation Research Board (TRB). **Table 1** presents the delay thresholds for each level of service grade at signalized and unsignalized intersections.

Table 1: Level of Service Definition for Intersections

Level of Service	Brief Description	Average Delay (seconds per vehicle)	
		Signalized Intersections	Unsignalized Intersections
A	Free flow conditions.	< 10	< 10
B	Stable conditions with some affect from other vehicles.	10 to 20	10 to 15
C	Stable conditions with significant affect from other vehicles.	20 to 35	15 to 25
D	High density traffic conditions still with stable flow.	35 to 55	25 to 35
E	At or near capacity flows.	55 to 80	35 to 50
F	Over capacity conditions.	> 80	> 50

Source: *Highway Capacity Manual, 7th Edition*

Level of service calculations were performed for the study intersections using the Synchro 12 software and Highway Capacity Software (HCS) package with analysis and results reported in accordance with *HCM* methodology.

Level of Service Policy

The *City of Fernley Comprehensive Master Plan* indicates that “the minimum Level of Service on all city-maintained roadways shall be LOS D.” This is consistent with Nevada Department of Transportation (NDOT) policies, which indicate that “Level of Service “C” will be the design objective for capacity and under no circumstances will less than Level of Service “D” be accepted for site and non-site traffic.”

Hence, LOS “D” was used as the threshold criteria for this analysis.

Traffic engineering practitioners recognize that LOS E/F conditions for the side street approach, during the peak hour(s), does not indicate an intersection failure or the need for mitigation. This condition (LOS E/F for a minor side-street approach) commonly exists throughout urban and suburban areas and is manageable in most cases.

EXISTING CONDITIONS

Roadway Facilities

A brief description of the key roadways in the study area is provided below:

US 50A is classified as a Principal Arterial that runs east-west and connects I-80 in Fernley to US 50 near Fallon. In the immediate project vicinity, US 50A has two lanes in each direction and has a posted speed limit of 65 MPH.

Farm District Road (SR 828) is an NDOT roadway classified as a Minor Arterial that runs east-west and connects to US 50A in Fernley and to the east of Fernley. In the immediate project vicinity, Farm District Road is two lanes with a posted speed limit of 45 MPH.

River Ranch Road is classified as a Minor Collector. *Fort Sutter Boulevard*, *Round Up Road* and *Clover Lane* are classified by NDOT as a Local Roads. These roadways have 2 lanes, one in each direction of travel. The posted speed limit is 25 mph on these roadways. A small preschool exists at the northern terminus of Clover Lane.

Bicycle, Pedestrian & Transit Facilities

Sidewalks are generally present on the local roads in the study area and a portion of River Ranch Road. Farm District Road and US 50A do not have sidewalks or bicycle lanes.

Crash History

Vehicle crash data was obtained from NDOT and includes information from:

- 2016 to 2020 – The most current five-year period available on the NDOT Crash Data website.
- 2021 and 2022 – Supplemental data request.

The available crash data is provided in **Appendix A**. Twenty-two crashes occurred in the area from 2016-2022, summarized as:

- Half (11) were Property Damage Only (PDO) and 11 were injury crashes. None were fatal.
- No recorded crashes involved pedestrians or bicyclists.
- The majority (15) occurred at US 50A/River Ranch Road. Six (6) were Property Damage Only (PDO) and 9 were injury crashes. Fourteen were angle-type crashes, one was a non-collision (single car incident). It is important to note that a traffic signal was installed at this intersection in 2021 as an operational and safety improvement.

- Three crashes occurred at Clover Lane / Farm District Road: one PDO and two injury crashes. Two were angle-type and one was rear-end.
- Two PDO crashes occurred at River Ranch Road / Round Up Road (one single car collision and one side-swipe).
- Two additional PDO crashes occurred along River Ranch Road – one angle, one non-collision (single car incident).

The crash data does not indicate any significant safety concerns in the area. The 2016-2020 crash map is shown in **Exhibit 1**.

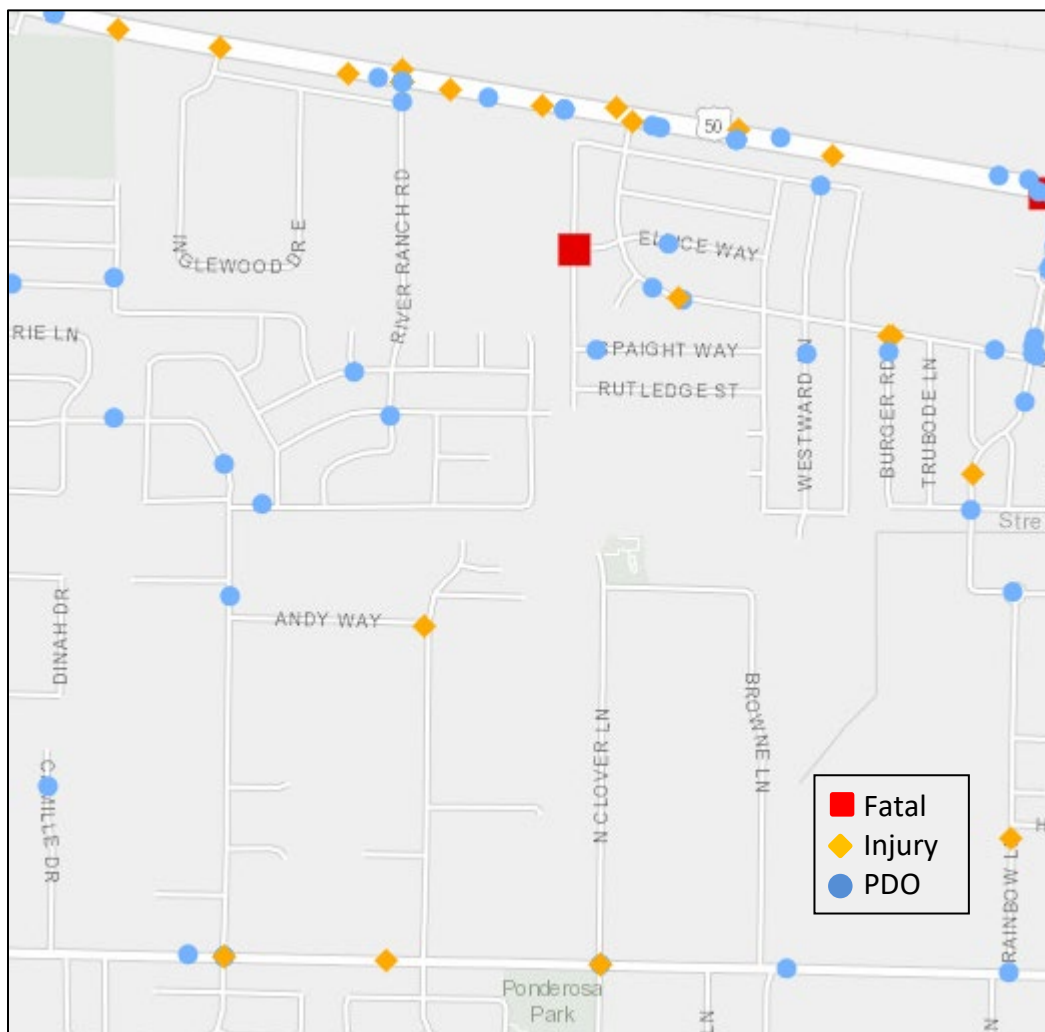


Exhibit 1: Study Intersection Crashes (2016-2020)

Source: NDOT

Traffic Volumes

AM and PM peak hour traffic volumes were collected at the study intersections on November 13-14, 2024 when school was in regular session. NDOT's 2022 Seasonal Growth Factors report was reviewed and November was found to be an average month of the year with a seasonal factor of approximately 1.0. Therefore, seasonal growth factors were not applied to the existing counts. The existing AM and PM peak hour intersection turning movement volumes are shown on **Figure 4**.

Intersection Level of Service Analysis

Existing weekday AM and PM peak hour intersection level of service analysis was performed for the study intersections using Synchro 12. The existing intersection lane configurations and controls are shown on **Figure 4**. **Table 2** shows the existing conditions level of service results, and the technical calculations are provided in **Appendix B**.

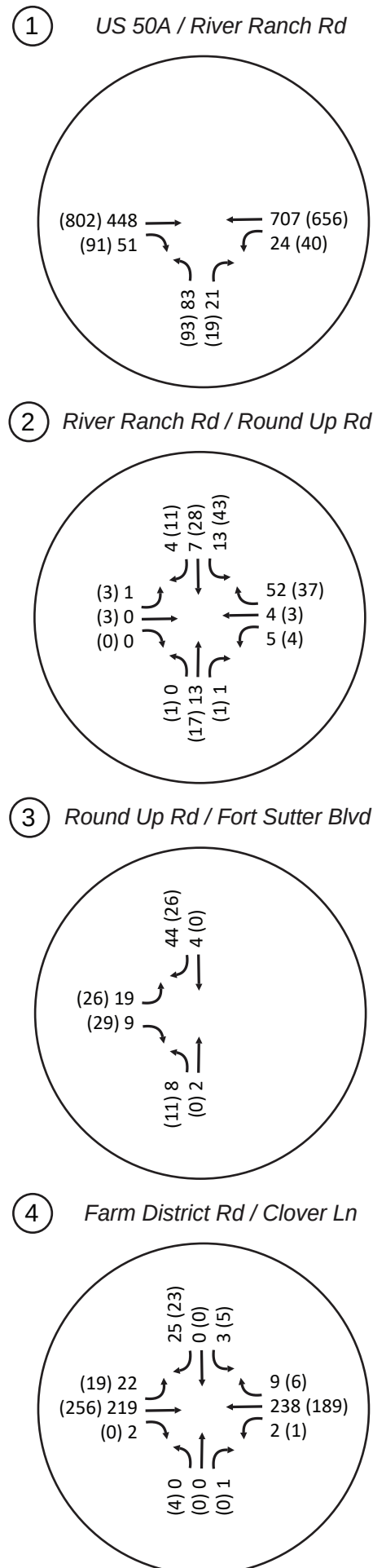
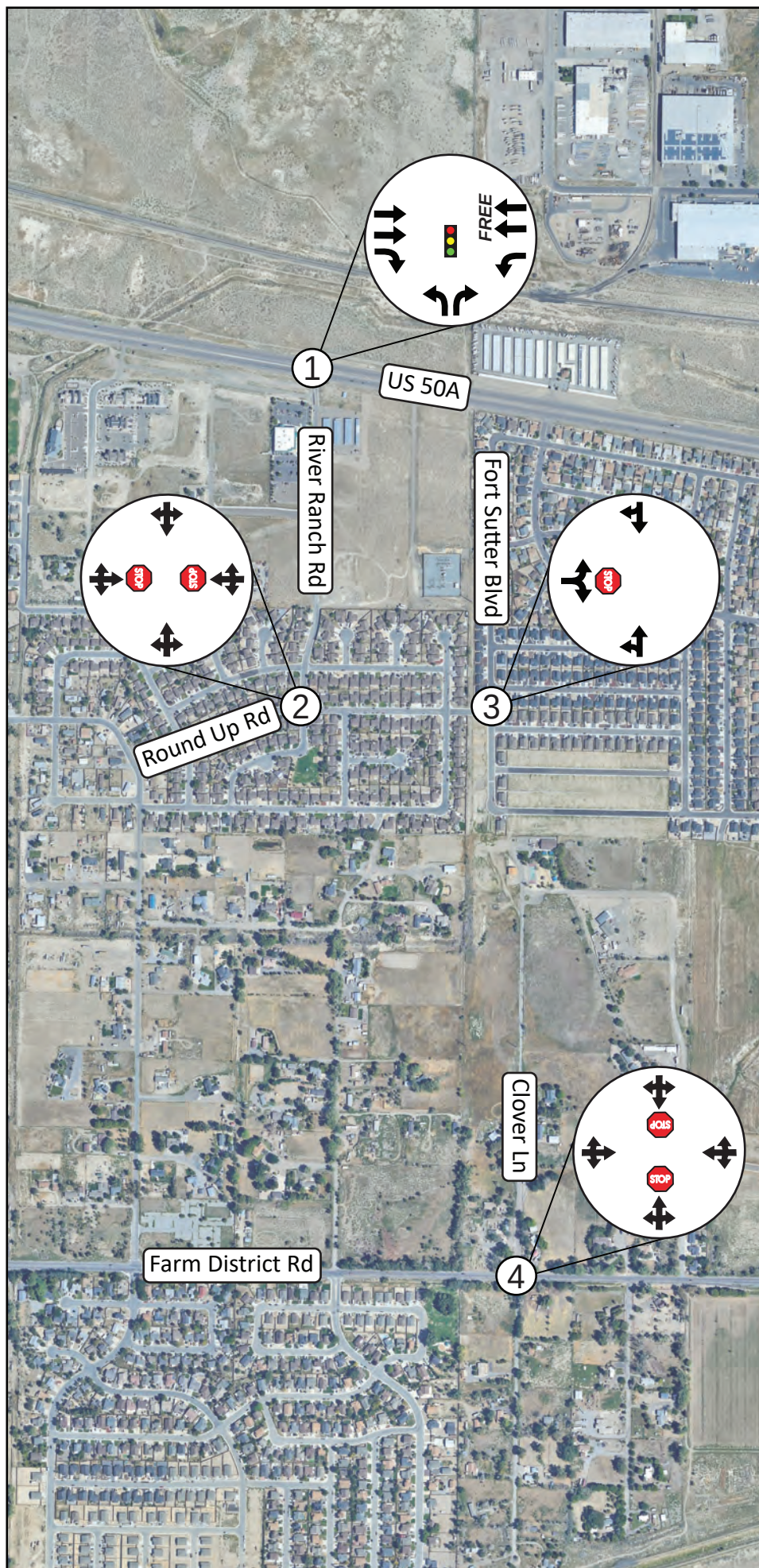
Table 2: Existing Intersection Level of Service

Int. ID	Intersection	Control	AM		PM	
			Delay ¹	LOS	Delay ¹	LOS
1	US 50A / River Ranch Road	Signalized High-T				
	Overall		7.0	A	7.5	A
	Northbound Left		15.4	B	20.3	C
	Northbound Right		12.8	B	16.4	B
	Eastbound Through		8.6	A	8.7	A
	Westbound Left		20.2	C	22.6	C
2	River Ranch Road / Round Up Road	Side Street Stop				
	Northbound Left		0.0	A	7.3	A
	Southbound Left		7.3	A	7.3	A
	Eastbound Approach		9.3	A	10.5	B
	Westbound Approach		8.9	A	8.8	A
3	Round Up Road / Fort Sutter Boulevard	Side Street Stop				
	Northbound Left		7.4	A	7.3	A
	Eastbound Approach		8.9	A	8.8	A
4	Farm District Road / Clover Lane	Side Street Stop				
	Northbound Approach		10.1	B	13.5	B
	Southbound Approach		11.3	B	10.3	B
	Eastbound Left		8.1	A	7.7	A
	Westbound Left		7.9	A	7.8	A

Notes: 1. Delay is reported in seconds per vehicle for the worst approach/movement for side street stop-controlled intersections, and overall and by movement for signalized intersections.

Source: GCW, 2025

The study intersections currently operate within the LOS policy.



OPENING AND FUTURE YEAR CONDITIONS

The project is expected to be constructed in approximately 5 years. This horizon is used to forecast traffic volumes for the Opening Year conditions, approximately 2029/2030. Future Year represents 20 years after the Opening Year (25 years from Existing Conditions).

Traffic Volume Forecasts

Projections for Opening Year and Future Year were developed to include background growth, planned roadway projects, and planned developments in the area. A growth rate of 2% per year was applied to the existing traffic volumes, consistent with the annual growth rate used in the City of Fernley *Comprehensive Master Plan*, the *Transportation Master Plan*, and previous approved traffic impact studies.

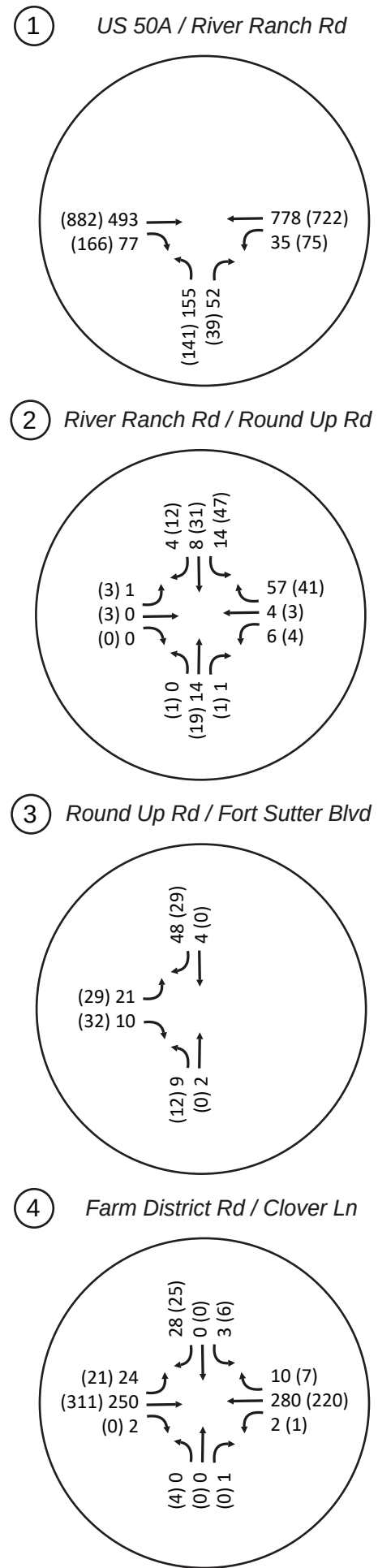
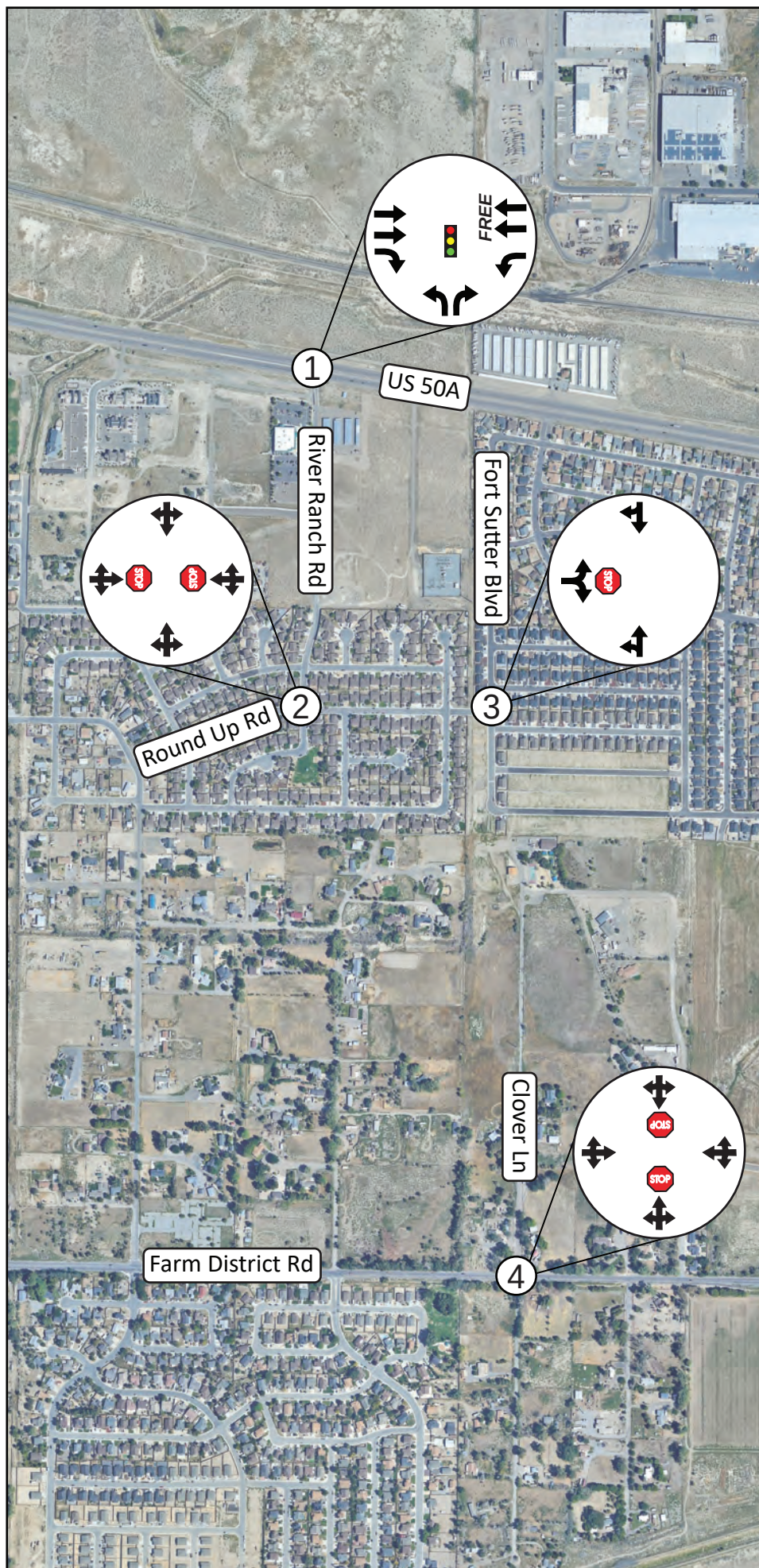
Opening Year and Future Year traffic volumes incorporate the Nevada Pacific Parkway extension to US 50A, which is planned to connect to US 50A opposite the existing Nevada Pacific Boulevard, as well as planned development in the area, including other development project traffic described in the:

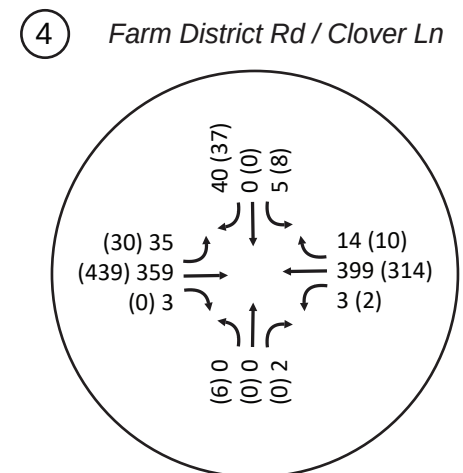
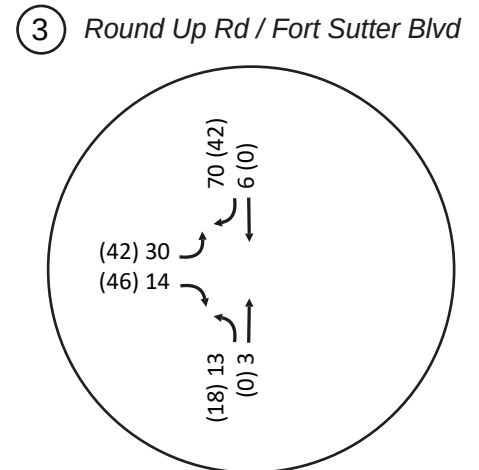
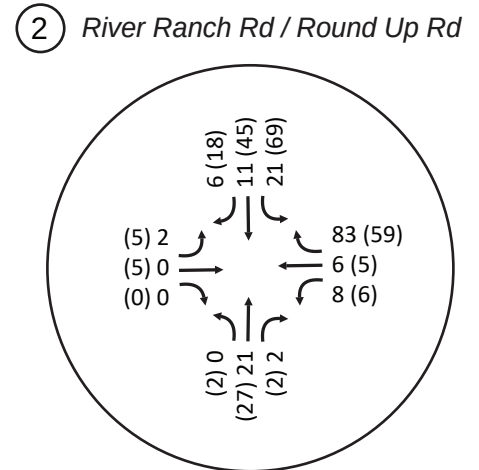
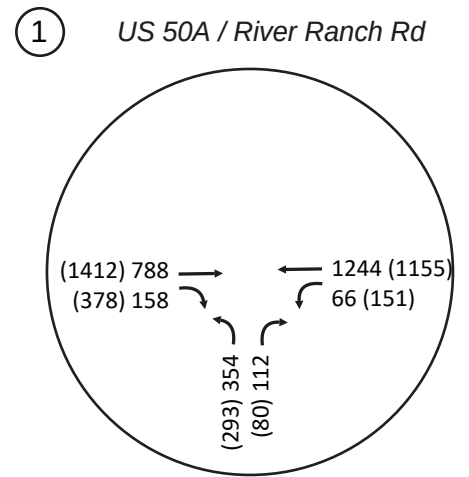
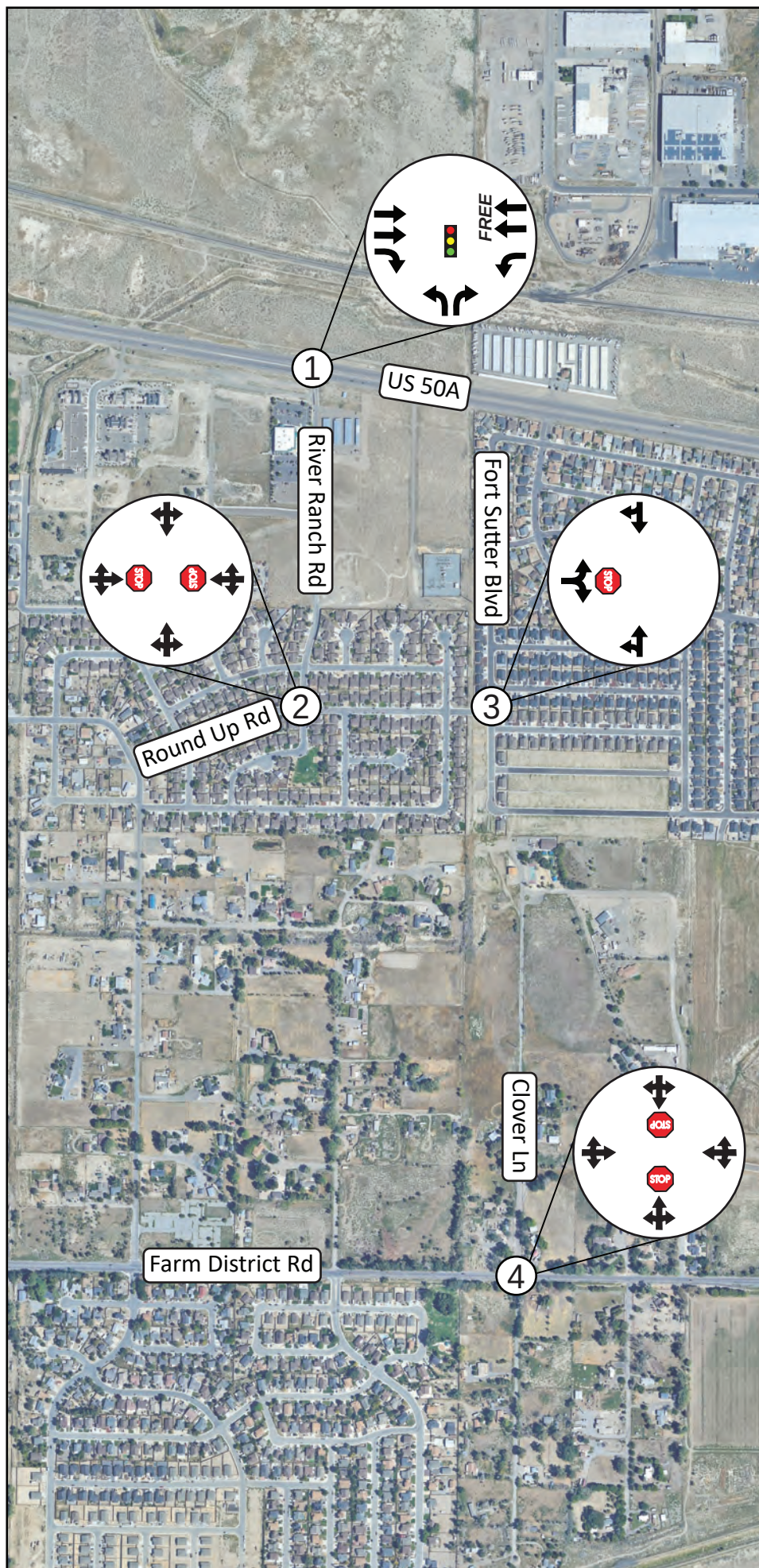
- Nevada Pacific Boulevard Development Traffic Impact Study (Headway, January 2022)
- River Ranch Apartments Traffic Impact Study (Headway, September 2022)
- Clements Ranch Traffic Impact Study (Headway, April 2023)
- Victory Traffic Impact Study (Headway, February 2022)

Ultimately, this resulted in background growth rates and factors of approximately:

- 2.3% per year
- Opening (5-Yr) growth factor of 1.1
- Future (20 years from Opening) growth factor of 1.6

Other projects in the area are assumed to be accounted for with the annual 2.3% per year growth rate. The Opening Year and Future Year (without Project) volumes are shown on **Figures 5 and 6**.





Intersection Level of Service Analysis

Opening Year and Future Year weekday AM and PM peak hour intersection level of service analysis was performed for the study intersections using Synchro 12. **Table 3** shows the level of service results, and the technical calculations are provided in **Appendix C**.

Table 3: Opening Year and Future Year Intersection Level of Service

Int. ID	Intersection	Control	Opening Yr AM		Opening Yr PM		Future Yr AM		Future Yr PM	
			Delay ¹	LOS	Delay ¹	LOS	Delay ¹	LOS	Delay ¹	LOS
1	US 50A / River Ranch Road	Signalized High-T								
	Overall		8.5	A	9.2	A	15.6	B	20.8	C
	Northbound Left		16.6	B	22.5	C	28.3	C	52.0	D
	Northbound Right		13.4	B	18.2	B	18.2	B	29.1	B
	Eastbound Through		9.9	A	10.2	A	15.9	B	24.9	C
	Westbound Left		21.2	C	26.1	C	40.1	D	57.8	E
2	River Ranch Road / Round Up Road	Side Street Stop								
	Northbound Left		0.0	A	7.3	A	0.0	A	7.3	A
	Southbound Left		7.3	A	7.3	A	7.3	A	7.4	A
	Eastbound Approach		9.4	A	10.2	B	9.9	B	11.3	B
	Westbound Approach		8.9	A	8.9	A	9.2	A	9.2	A
3	Round Up Road / Fort Sutter Boulevard	Side Street Stop								
	Northbound Left		7.4	A	7.3	A	7.5	A	7.3	A
	Eastbound Approach		9.0	A	8.8	A	9.2	A	9.0	A
4	Farm District Road / Clover Lane	Side Street Stop								
	Northbound Approach		10.3	B	15.1	B	11.6	B	21.3	C
	Southbound Approach		12.0	B	10.9	B	15.9	C	12.7	B
	Eastbound Left		8.3	A	7.8	A	8.9	A	8.1	A
	Westbound Left		8.0	A	8.0	A	8.5	A	8.4	A

Notes:

1. Delay is reported in seconds per vehicle for the worst approach/movement for side street stop-controlled intersections, and overall and by movement for signalized intersections.

Source: GCW, 2025

Table 3 indicates that the studied intersections are expected to operate acceptably in the Opening and Future Year Conditions (without the project).

PROJECT CONDITIONS

Trip generation rates from the *Trip Generation Manual, 11th Edition* published by the Institute of Transportation Engineers (ITE) were used to develop trip generation estimates for the proposed project based on the Single-Family Detached (ITE 210) for 102 dwelling units. **Table 4** shows the Daily, AM peak hour, and PM peak hour trip generation estimates.

Table 4: Trip Generation Estimates

Land Use (ITE Code)	Size ¹	Trips ²				
		Daily	AM In/Out	Total AM	PM In/Out	Total PM
Single-Family Detached (210)	102 du	962	18 / 53	71	60 / 36	96

Notes: 1. du = dwelling units

2. Trips were calculated based on the following rates per du:

Single-Family Detached: Daily – 9.43; AM – 0.70 (25% in / 75% out); PM – 0.94 (63% in / 37% out)

Source: GCW, 2025

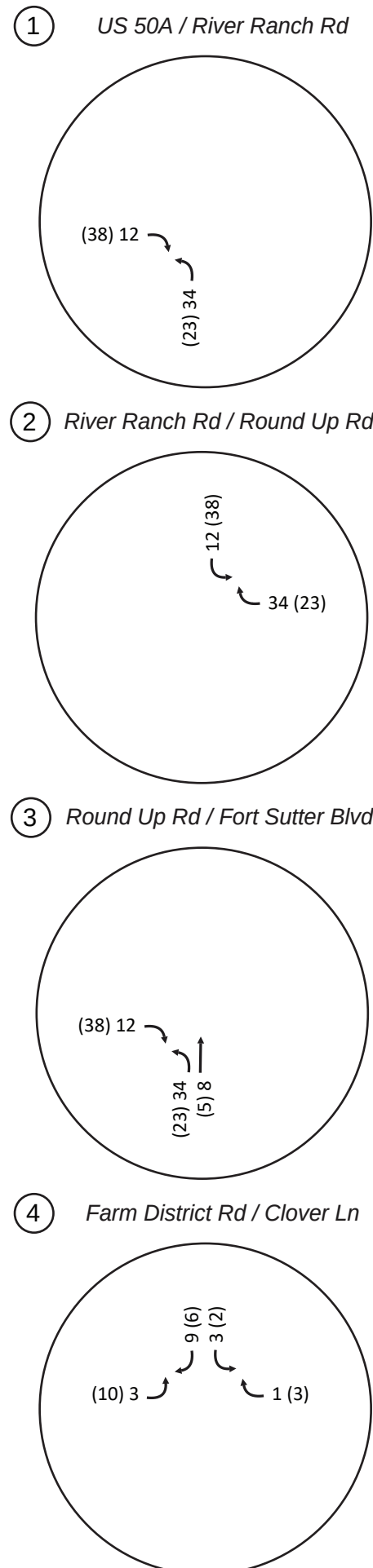
As shown in the table, the project is expected to generate 962 Daily, 71 AM peak hour, and 96 PM peak hour trips to the external roadway network.

Project Access and Trip Distribution

Access is proposed as shown in the preliminary site plan (**Figure 3**); the project will extend and connect to Fort Sutter Boulevard and connect to Clover Lane. Project trips were distributed to the adjacent roadway network based on existing traffic volumes, the locations of complimentary land uses, and anticipated travel patterns. Project trips were distributed based on the following:

- 65% to/from the west via US 50A
- 15% to/from the east via US 50A (in via Nevada Pacific Boulevard and out via Fort Sutter Boulevard)
- 15% to/from the west via Farm District Road
- 5% to/from the east via Farm District Road

Figure 7 shows the project trip distribution and assignment.



Access Management

The project access intersections of US 50A / River Ranch Road and US 50A / Nevada Pacific Boulevard have both left and right turn lanes. Turn lanes do not exist on Farm District Road (SR 828) / Clover Lane. The requirements for left and right turn lanes per the *NDOT Access Management System and Standards (AMSS 2017)* indicate that:

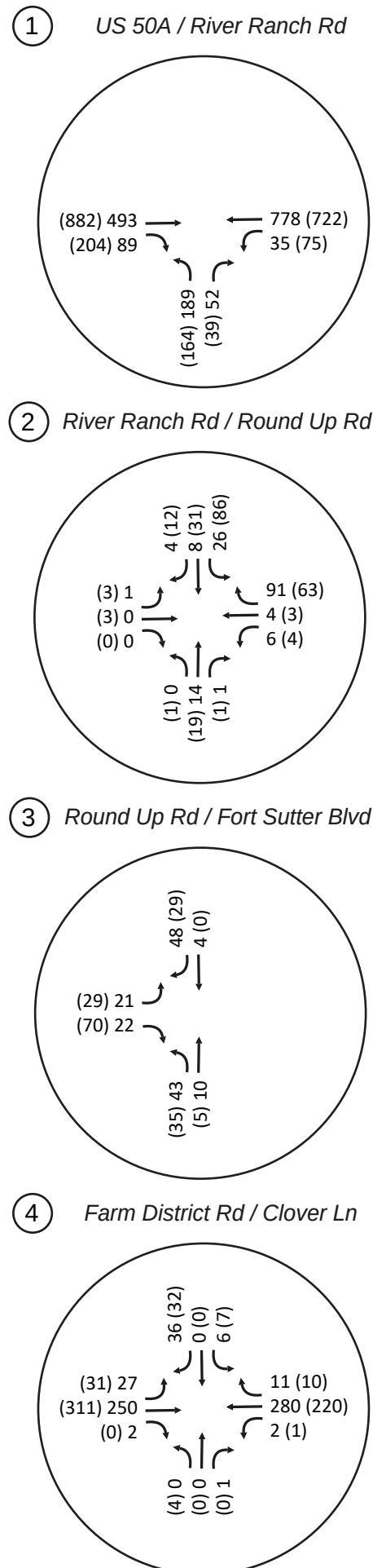
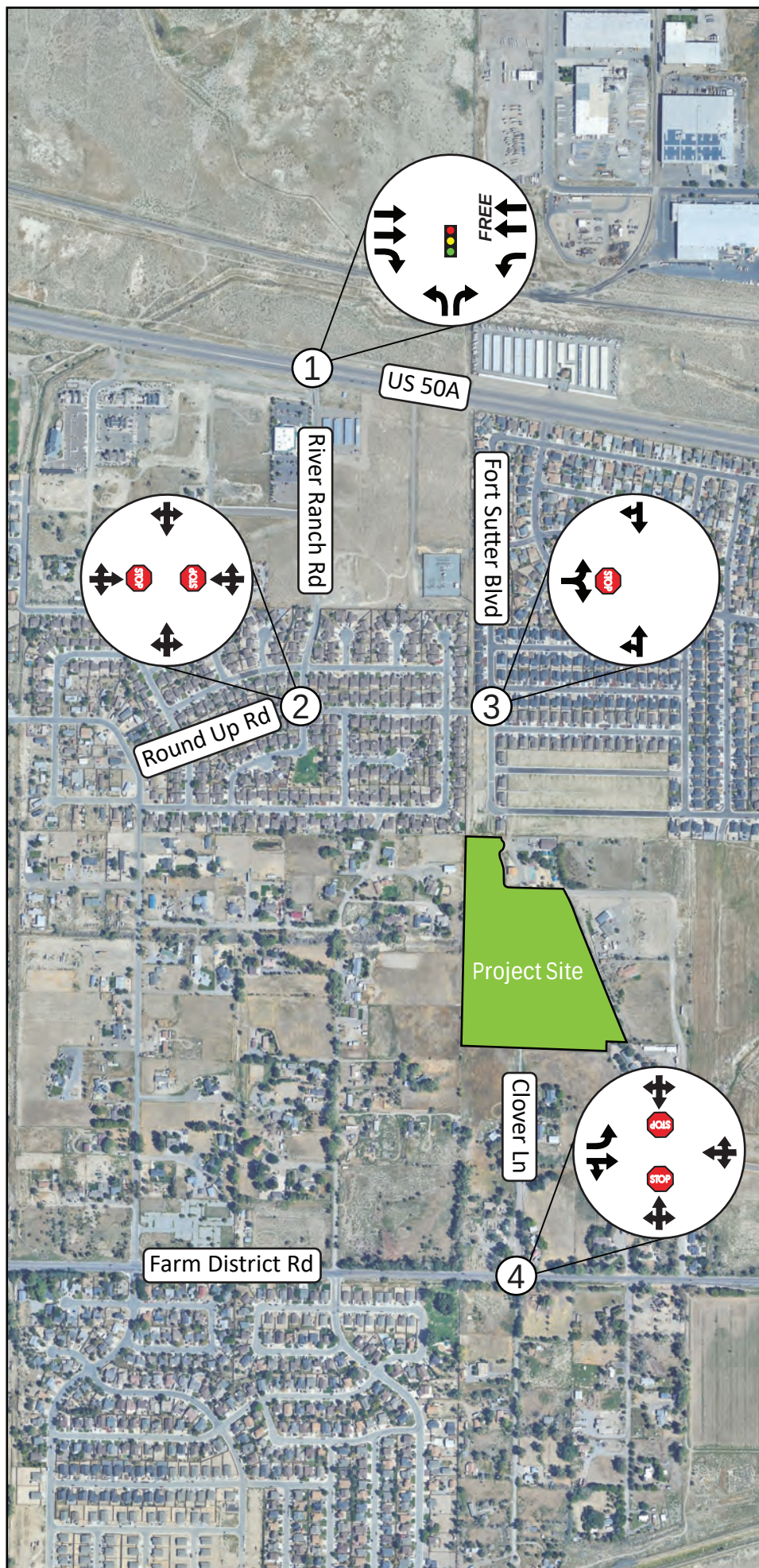
- Per *AMSS Table 4-12: Left-Turn Lane Warrants at Unsignalized Intersections, Two-Lane Roadways in Urban Areas* for 45 mph, left turn lanes are currently warranted based on the existing AM and PM peak hour volumes. The project adds 3 AM and 10 PM peak hour trips to the eastbound left turn movement on Farm District Road.
- Per *AMSS Table 4-16: Right-Turn Lane Warrants at Unsignalized Intersections, Two-Lane Roadways in Urban Areas* for 45 mph, right turn lanes are not currently warranted but are nearing thresholds. The project adds 1 AM and 3 PM peak hour trips to the westbound right turn movement on Farm District Road.

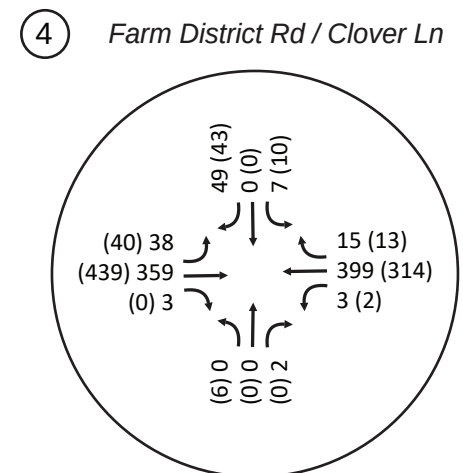
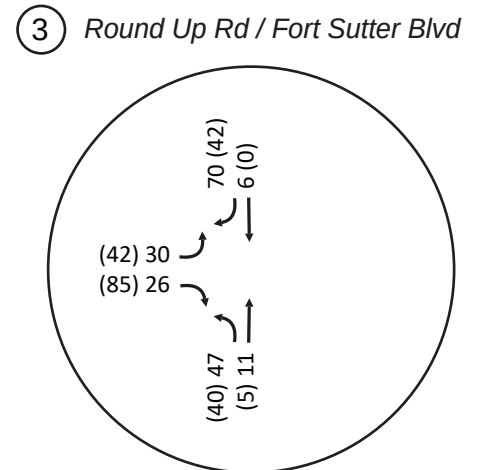
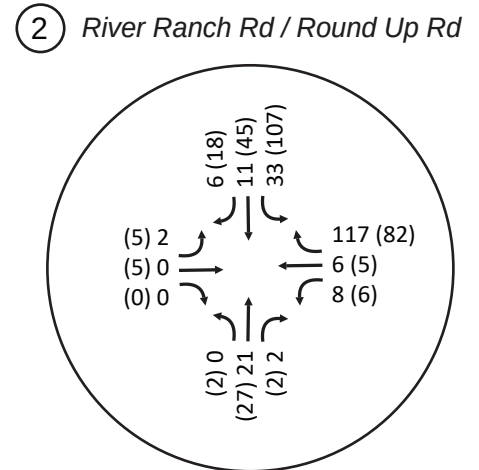
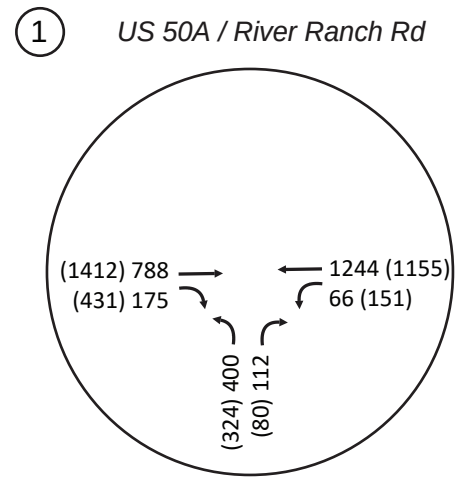
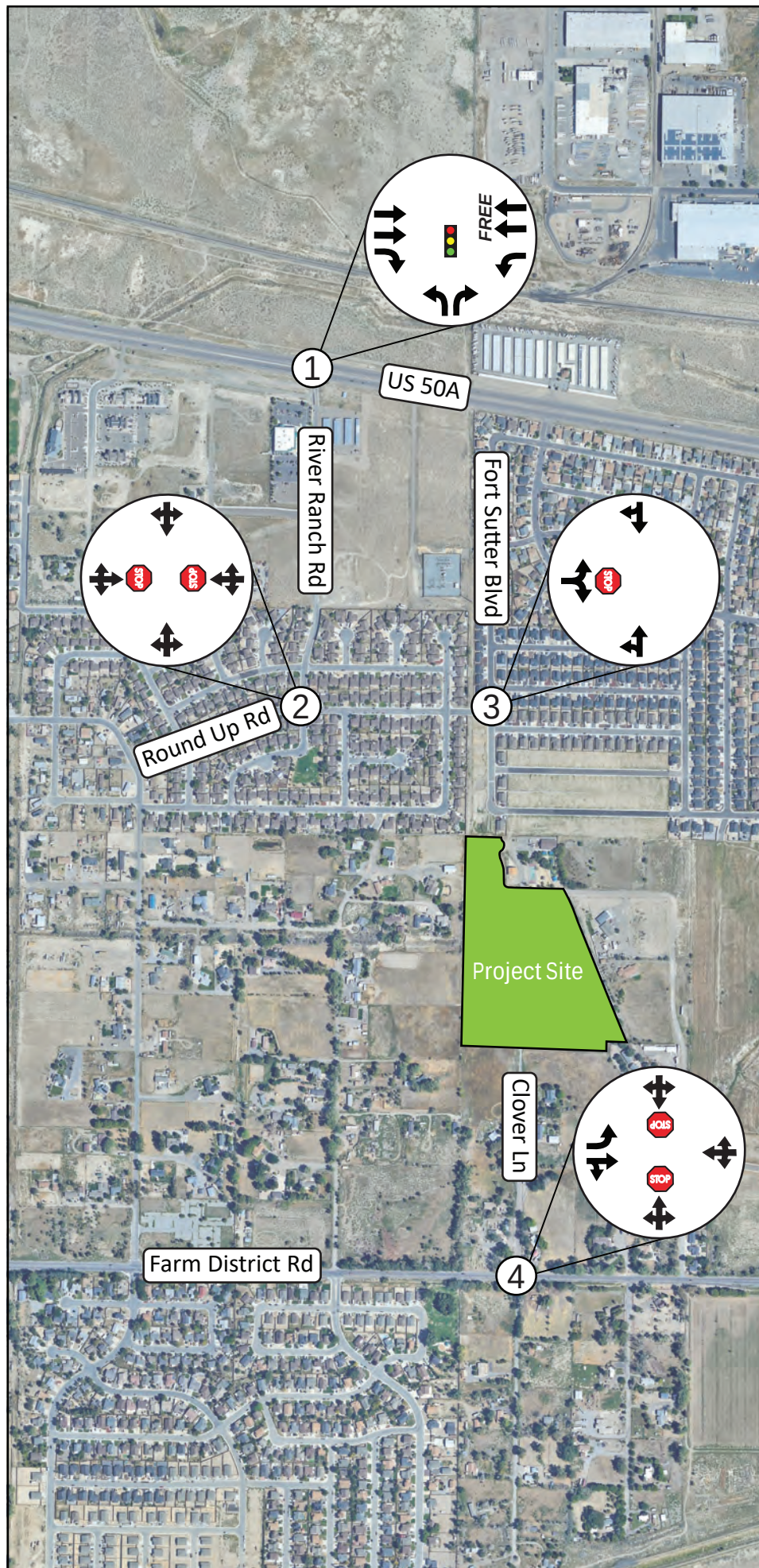
An eastbound left turn lane is recommended to be constructed with the project as a reasonable mitigation. It is noted that the left turn lane is warranted based on existing volumes, not due to the addition of project traffic. A right turn lane is not recommended as the project adds 1-3 trips per peak hour.

OPENING YEAR AND FUTURE YEAR PLUS PROJECT CONDITIONS

Traffic Volumes

Project trips (**Figure 7**) were added to the Opening Year traffic volumes (**Figure 5**) to develop the Opening Plus Project conditions traffic volumes, shown on **Figure 8**. Project trips (**Figure 7**) were added to the Future Year traffic volumes (**Figure 6**) to develop the Future Plus Project conditions traffic volumes, shown on **Figure 9**.





Intersection Level of Service

AM and PM peak hour intersection level of service analysis was performed for the study intersections for the Opening Year Plus Project and Future Year Plus Project conditions. **Tables 5 and 6** show the level of service results, and the technical calculations are provided in **Appendix D**.

Table 5: Opening Year Plus Project Intersection Level of Service

Int. ID	Intersection	Control	Opening Yr AM		Opening Yr PM		Opening Yr Plus Project AM		Opening Yr Plus Project PM	
			Delay ¹	LOS	Delay ¹	LOS	Delay ¹	LOS	Delay ¹	LOS
1	US 50A / River Ranch Road	Signalized High-T								
	Overall		8.5	A	9.2	A	9.1	A	9.6	A
	Northbound Left		16.6	B	22.5	C	16.6	B	22.7	C
	Northbound Right		13.4	B	18.2	B	13.0	B	18.0	B
	Eastbound Through		9.9	A	10.2	A	10.6	B	10.7	A
	Westbound Left		21.2	C	26.1	C	22.1	C	27.2	C
2	River Ranch Road / Round Up Road	Side Street Stop								
	Northbound Left		0.0	A	7.3	A	0.0	A	7.3	A
	Southbound Left		7.3	A	7.3	A	7.3	A	7.4	A
	Eastbound Approach		9.4	A	10.2	B	10.5	B	11.3	B
	Westbound Approach		8.9	A	8.9	A	9.1	A	9.0	A
3	Round Up Road / Fort Sutter Boulevard	Side Street Stop								
	Northbound Left		7.4	A	7.3	A	7.5	A	7.3	A
	Eastbound Approach		9.0	A	8.8	A	9.4	A	9.1	A
4	Farm District Road / Clover Lane	Side Street Stop							(includes eastbound left turn lane)	
	Northbound Approach		10.3	B	15.1	B	10.3	B	15.9	C
	Southbound Approach		12.0	B	10.9	B	12.7	B	11.0	B
	Eastbound Left ²		8.3	A	7.8	A	8.3	A	7.8	A
	Westbound Left		8.0	A	8.0	A	8.0	A	8.0	A

Notes:

1. Delay is reported in seconds per vehicle for the worst approach/movement for side street stop-controlled intersections, and overall and by movement for signalized intersections.
2. Plus Project conditions adds an eastbound left turn lane.

Source: GCW, 2025

Table 6: Future Year Plus Project Intersection Level of Service

Int. ID	Intersection	Control	Future Yr AM		Future Yr PM		Future Yr Plus Project AM		Future Yr Plus Project PM	
			Delay ¹	LOS	Delay ¹	LOS	Delay ¹	LOS	Delay ¹	LOS
1	US 50A / River Ranch Road	Signalized High-T								
	Overall		15.6	B	20.8	C	17.9	B	22.8	C
	Northbound Left		28.3	C	52.0	D	34.4	C	58.4	E
	Northbound Right		18.2	B	29.1	B	18.2	B	28.8	C
	Eastbound Through		15.9	B	24.9	C	17.4	B	27.4	C
	Westbound Left		40.1	D	57.8	E	44.4	D	60.5	E
2	River Ranch Road / Round Up Road	Side Street Stop								
	Northbound Left		0.0	A	7.3	A	0.0	A	7.3	A
	Southbound Left		7.3	A	7.4	A	7.3	A	7.4	A
	Eastbound Approach		9.9	B	11.3	B	11.4	B	12.5	B
	Westbound Approach		9.2	A	9.2	A	9.5	A	9.4	A
3	Round Up Road / Fort Sutter Boulevard	Side Street Stop								
	Northbound Left		7.5	A	7.3	A	7.6	A	7.4	A
	Eastbound Approach		9.2	A	9.0	A	9.7	A	9.3	A
4	Farm District Road / Clover Lane	Side Street Stop							(includes eastbound left turn lane)	
	Northbound Approach		11.6	B	21.3	C	11.5	B	22.8	C
	Southbound Approach		15.9	C	12.7	B	16.8	C	13.1	B
	Eastbound Left		8.9	A	8.1	A	8.9	A	8.1	A
	Westbound Left		8.5	A	8.4	A	8.5	A	8.4	A

Notes:

1. Delay is reported in seconds per vehicle for the worst approach/movement for side street stop-controlled intersections, and overall and by movement for signalized intersections.
2. Plus Project conditions adds an eastbound left turn lane.

Source: GCW, 2025

As shown in **Tables 5 and 6**, the study intersections are anticipated to operate within the LOS policy in the Opening Year and Future Year Plus Project Conditions. The addition of project trips had no significant impact on the operation, and the level of service is similar with or without the project.

CONCLUSIONS & RECOMMENDATIONS

- The project consists of 102 single-family dwelling units.
- The site is located north of Farm District Road, with proposed access via Clover Lane and Fort Sutter Boulevard.
- The project is anticipated to generate approximately 962 Daily trips, 71 AM peak hour trips, and 96 PM peak hour trips.
- All intersections studied operate within policy level of service under all scenarios, with or without the project. No impacts were identified requiring mitigations or improvements.

- The project should construct an eastbound left turn lane at the Farm District Road / Clover Lane intersection; this is warranted based on the existing volumes independent of the project. The project adds a small number of trips (10 in the PM peak hour) to the eastbound left turn movement.
- The project should construct the connection to Fort Sutter Boulevard. This connection at Fort Sutter Boulevard/ Langdon Street should convert that intersection to a side-street stop (stop on Langdon Street) T-intersection.
- The project should construct the connection to Clover Lane.
- All roadway connections and internal project roadways should be constructed to City of Fernley standards.

Appendix A

Crash Data

	OBJECTID	Crash Severity	Crash Date	Injury Type	Crash Type
River Ranch/ US 50A	1668617	PROPERTY DAMAGE ONLY	1/31/2016, 12:57 PM	No Data	ANGLE
River Ranch/ US 50A	1674863	INJURY CRASH	3/18/2016, 1:34 PM	A	ANGLE
River Ranch/ US 50A	1678169	PROPERTY DAMAGE ONLY	4/11/2016, 8:40 AM	No Data	ANGLE
River Ranch/ US 50A	1704114	INJURY CRASH	10/20/2016, 7:00 AM	A	ANGLE
River Ranch/ US 50A	1708986	INJURY CRASH	11/23/2016, 4:00 AM	C	ANGLE
River Ranch/ US 50A	1715793	INJURY CRASH	1/7/2017, 4:02 PM	B	NON-COLLISION
River Ranch/ US 50A	1731774	INJURY CRASH	4/29/2017, 5:10 AM	A	ANGLE
River Ranch/ US 50A	1745453	INJURY CRASH	8/7/2017, 9:17 AM	B	ANGLE
River Ranch/ US 50A	1767004	PROPERTY DAMAGE ONLY	1/5/2018, 3:26 AM	No Data	ANGLE
River Ranch/ US 50A	1769472	INJURY CRASH	1/22/2018, 3:45 AM	C	ANGLE
River Ranch/ US 50A	1773731	PROPERTY DAMAGE ONLY	2/20/2018, 10:20 AM	No Data	ANGLE
Clover Lane / Farm District	1776833	INJURY CRASH	3/12/2018, 10:40 AM	C	ANGLE
River Ranch/ US 50A	1781101	INJURY CRASH	4/13/2018, 6:05 AM	A	ANGLE
River Ranch/ US 50A	1786054	INJURY CRASH	5/23/2018, 11:17 AM	C	ANGLE
Clover Lane / Farm District	1795217	PROPERTY DAMAGE ONLY	8/5/2018, 6:21 AM	No Data	ANGLE
River Ranch/ Other intersection	1797476	PROPERTY DAMAGE ONLY	8/22/2018, 2:50 AM	No Data	ANGLE
River Ranch/ US 50A	1806797	PROPERTY DAMAGE ONLY	10/28/2018, 1:17 PM	No Data	ANGLE
Clover Lane / Farm District	1845330	INJURY CRASH	8/14/2019, 10:26 AM	C	REAR-END
River Ranch/ Round Up	1887633	PROPERTY DAMAGE ONLY	8/19/2020, 9:35 PM	No Data	SIDESWIPE, MEETING
River Ranch/ US 50A			9/15/2021		ANGLE
River Ranch Roadway			9/16/2022		Non-Collision
River Ranch/ Round Up			5/22/2022		Non-Collision

Appendix B

Existing Conditions LOS Calculations

HCM 7th Signalized Intersection Summary

1: River Ranch Road & US 50

11/18/2024

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↘	↑↑	↘	↑
Traffic Volume (veh/h)	448	51	24	707	83	21
Future Volume (veh/h)	448	51	24	707	83	21
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1796	1796	1796	1796	1796	1796
Adj Flow Rate, veh/h	515	59	28	813	95	24
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	7	7	7	7	7	7
Cap, veh/h	1088	644	59	1823	178	159
Arrive On Green	0.32	0.32	0.03	0.53	0.10	0.10
Sat Flow, veh/h	3503	1522	1711	3503	1711	1522
Grp Volume(v), veh/h	515	59	28	813	95	24
Grp Sat Flow(s),veh/h/ln	1706	1522	1711	1706	1711	1522
Q Serve(g_s), s	3.7	0.7	0.5	4.4	1.6	0.4
Cycle Q Clear(g_c), s	3.7	0.7	0.5	4.4	1.6	0.4
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1088	644	59	1823	178	159
V/C Ratio(X)	0.47	0.09	0.47	0.45	0.53	0.15
Avail Cap(c_a), veh/h	4095	1985	647	6002	1434	1276
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.3	5.3	14.4	4.3	12.9	12.4
Incr Delay (d2), s/veh	0.3	0.1	5.7	0.2	2.5	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.2	0.2	0.0	0.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	8.6	5.3	20.2	4.5	15.4	12.8
LnGrp LOS	A	A	C	A	B	B
Approach Vol, veh/h	574			841	119	
Approach Delay, s/veh	8.3			5.0	14.9	
Approach LOS	A			A	B	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		21.7		8.7	6.6	15.2
Change Period (Y+Rc), s		5.5		5.5	5.5	5.5
Max Green Setting (Gmax), s		53.5		25.5	11.5	36.5
Max Q Clear Time (g_c+I1), s		6.4		3.6	2.5	5.7
Green Ext Time (p_c), s		5.6		0.3	0.0	4.0
Intersection Summary						
HCM 7th Control Delay, s/veh			7.0			
HCM 7th LOS			A			

HCM 7th TWSC
2: Round Up Road & River Ranch Road

11/18/2024

Intersection												
Int Delay, s/veh	6.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	0	5	4	52	0	13	1	13	7	4
Future Vol, veh/h	1	0	0	5	4	52	0	13	1	13	7	4
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	66	66	66	66	66	66	66	66	66	66	66	66
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	0	0	8	6	79	0	20	2	20	11	6

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	76	74	14	70	77	20	17	0	0	21	0	0
Stage 1	53	53	-	20	20	-	-	-	-	-	-	-
Stage 2	23	21	-	50	56	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	919	820	1072	926	818	1063	1614	-	-	1608	-	-
Stage 1	965	855	-	1003	882	-	-	-	-	-	-	-
Stage 2	1001	882	-	968	852	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	834	810	1072	915	808	1063	1614	-	-	1608	-	-
Mov Cap-2 Maneuver	834	810	-	915	808	-	-	-	-	-	-	-
Stage 1	953	844	-	1003	882	-	-	-	-	-	-	-
Stage 2	920	882	-	956	842	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.32	8.85	0	3.94
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1614	-	-	834 1028	909	-	-
HCM Lane V/C Ratio	-	-	-	0.002 0.09	0.012	-	-
HCM Control Delay (s/veh)	0	-	-	9.3 8.8	7.3	0	-
HCM Lane LOS	A	-	-	A A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0 0.3	0	-	-

Intersection						
Int Delay, s/veh	3.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	19	9	8	2	4	44
Future Vol, veh/h	19	9	8	2	4	44
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	70	70	70	70	70	70
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	27	13	11	3	6	63

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	63	37	69
Stage 1	37	-	-
Stage 2	26	-	-
Critical Hdwy	6.44	6.24	4.14
Critical Hdwy Stg 1	5.44	-	-
Critical Hdwy Stg 2	5.44	-	-
Follow-up Hdwy	3.536	3.336	2.236
Pot Cap-1 Maneuver	938	1029	1520
Stage 1	980	-	-
Stage 2	992	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	931	1029	1520
Mov Cap-2 Maneuver	931	-	-
Stage 1	973	-	-
Stage 2	992	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	8.91	5.91	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1440	-	961	-	-
HCM Lane V/C Ratio	0.008	-	0.042	-	-
HCM Control Delay (s/veh)	7.4	0	8.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection

Int Delay, s/veh 1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	22	219	2	2	238	9	0	0	1	3	0	25
Future Vol, veh/h	22	219	2	2	238	9	0	0	1	3	0	25
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	69	69	69	69	69	69	69	69	69	69	69	69
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	32	317	3	3	345	13	0	0	1	4	0	36

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	358	0	0	320	0	0	733	746	319	738	741	351
Stage 1	-	-	-	-	-	-	383	383	-	357	357	-
Stage 2	-	-	-	-	-	-	351	364	-	381	384	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1195	-	-	1234	-	-	335	340	720	332	343	690
Stage 1	-	-	-	-	-	-	638	611	-	658	626	-
Stage 2	-	-	-	-	-	-	664	622	-	639	610	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1195	-	-	1234	-	-	306	328	720	320	331	690
Mov Cap-2 Maneuver	-	-	-	-	-	-	306	328	-	320	331	-
Stage 1	-	-	-	-	-	-	617	591	-	656	625	-
Stage 2	-	-	-	-	-	-	627	620	-	617	590	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v 0.73		0.06	10.01	11.28
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	720	163	-	-	14	-	-	614
HCM Lane V/C Ratio	0.002	0.027	-	-	0.002	-	-	0.066
HCM Control Delay (s/veh)	10	8.1	0	-	7.9	0	-	11.3
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.2

High-T; the westbound through movement is included although this is actually a free movement.

HCM 7th Signalized Intersection Summary

1: River Ranch Road & US 50

11/18/2024

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↘	↑↑	↘	↗
Traffic Volume (veh/h)	802	91	40	656	93	19
Future Volume (veh/h)	802	91	40	656	93	19
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	862	98	43	705	100	20
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	1498	815	84	2166	165	147
Arrive On Green	0.43	0.43	0.05	0.62	0.09	0.09
Sat Flow, veh/h	3589	1560	1753	3589	1753	1560
Grp Volume(v), veh/h	862	98	43	705	100	20
Grp Sat Flow(s),veh/h/ln	1749	1560	1753	1749	1753	1560
Q Serve(g_s), s	7.2	1.2	0.9	3.7	2.1	0.5
Cycle Q Clear(g_c), s	7.2	1.2	0.9	3.7	2.1	0.5
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1498	815	84	2166	165	147
V/C Ratio(X)	0.58	0.12	0.51	0.33	0.61	0.14
Avail Cap(c_a), veh/h	3326	1630	525	4875	1165	1036
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.3	4.7	17.8	3.5	16.7	16.0
Incr Delay (d2), s/veh	0.4	0.1	4.8	0.1	3.6	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.3	0.4	0.0	0.9	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	8.7	4.7	22.6	3.6	20.3	16.4
LnGrp LOS	A	A	C	A	C	B
Approach Vol, veh/h	960			748	120	
Approach Delay, s/veh	8.3			4.7	19.6	
Approach LOS	A			A	B	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		29.3		9.1	7.3	21.9
Change Period (Y+Rc), s		5.5		5.5	5.5	5.5
Max Green Setting (Gmax), s		53.5		25.5	11.5	36.5
Max Q Clear Time (g_c+I1), s		5.7		4.1	2.9	9.2
Green Ext Time (p_c), s		4.6		0.3	0.0	7.3
Intersection Summary						
HCM 7th Control Delay, s/veh			7.5			
HCM 7th LOS			A			

HCM 7th TWSC

2: Round Up Road & River Ranch Road

11/18/2024

Intersection												
Int Delay, s/veh	5.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	3	0	4	3	37	1	17	1	43	28	11
Future Vol, veh/h	3	3	0	4	3	37	1	17	1	43	28	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	-	-	-	-	-	-	-	-	-	-	-	-
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, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	4	0	5	4	45	1	20	1	52	34	13

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	169	168	40	163	174	21	47	0	0	22	0	0
Stage 1	144	144	-	23	23	-	-	-	-	-	-	-
Stage 2	25	24	-	139	151	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	800	728	1037	807	723	1062	1573	-	-	1607	-	-
Stage 1	864	782	-	1000	880	-	-	-	-	-	-	-
Stage 2	998	879	-	869	777	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	736	704	1037	776	698	1062	1573	-	-	1607	-	-
Mov Cap-2 Maneuver	736	704	-	776	698	-	-	-	-	-	-	-
Stage 1	835	756	-	999	879	-	-	-	-	-	-	-
Stage 2	952	878	-	836	751	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v10.05		8.83	0.38	3.84
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	94	-	-	720	994	893	-
HCM Lane V/C Ratio	0.001	-	-	0.01	0.053	0.032	-
HCM Control Delay (s/veh)	7.3	0	-	10.1	8.8	7.3	0
HCM Lane LOS	A	A	-	B	A	A	A
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0.1	-

HCM 7th TWSC
3: For Sutter Boulevard & Round Up Road

11/18/2024

Intersection						
Int Delay, s/veh	6.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	26	29	11	0	0	26
Future Vol, veh/h	26	29	11	0	0	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	31	34	13	0	0	31

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	41	15	31	0	-	0
Stage 1	15	-	-	-	-	-
Stage 2	26	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	975	1070	1595	-	-	-
Stage 1	1013	-	-	-	-	-
Stage 2	1002	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	967	1070	1595	-	-	-
Mov Cap-2 Maneuver	967	-	-	-	-	-
Stage 1	1005	-	-	-	-	-
Stage 2	1002	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	8.77	7.28	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1595	-	1019	-	-
HCM Lane V/C Ratio	0.008	-	0.064	-	-
HCM Control Delay (s/veh)	7.3	0	8.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection

Int Delay, s/veh 1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	19	256	0	1	189	6	4	0	0	5	0	23
Future Vol, veh/h	19	256	0	1	189	6	4	0	0	5	0	23
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	21	288	0	1	212	7	4	0	0	6	0	26

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	219	0	0	288	0	0	545	552	288	548	548	216
Stage 1	-	-	-	-	-	-	330	330	-	218	218	-
Stage 2	-	-	-	-	-	-	215	221	-	330	330	-
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	1350	-	-	1274	-	-	449	442	751	447	444	824
Stage 1	-	-	-	-	-	-	683	646	-	784	723	-
Stage 2	-	-	-	-	-	-	788	720	-	683	646	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1350	-	-	1274	-	-	427	433	751	438	435	824
Mov Cap-2 Maneuver	-	-	-	-	-	-	427	433	-	438	435	-
Stage 1	-	-	-	-	-	-	670	633	-	784	722	-
Stage 2	-	-	-	-	-	-	762	719	-	670	633	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v 0.53		0.04	13.53	10.29
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	427	124	-	-	9	-	-	712
HCM Lane V/C Ratio	0.011	0.016	-	-	0.001	-	-	0.044
HCM Control Delay (s/veh)	13.5	7.7	0	-	7.8	0	-	10.3
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Appendix C

Opening Year and Future Year LOS Calculations

High-T; the westbound through movement is included although this is actually a free movement.

HCM 7th Signalized Intersection Summary

1: River Ranch Road & US 50

11/18/2024

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↘	↑↑	↘	↑
Traffic Volume (veh/h)	493	77	35	778	155	52
Future Volume (veh/h)	493	77	35	778	155	52
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1796	1796	1796	1796	1796	1796
Adj Flow Rate, veh/h	567	89	40	894	178	60
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	7	7	7	7	7	7
Cap, veh/h	1103	731	79	1799	269	239
Arrive On Green	0.32	0.32	0.05	0.53	0.16	0.16
Sat Flow, veh/h	3503	1522	1711	3503	1711	1522
Grp Volume(v), veh/h	567	89	40	894	178	60
Grp Sat Flow(s),veh/h/ln	1706	1522	1711	1706	1711	1522
Q Serve(g_s), s	4.7	1.1	0.8	5.8	3.4	1.2
Cycle Q Clear(g_c), s	4.7	1.1	0.8	5.8	3.4	1.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1103	731	79	1799	269	239
V/C Ratio(X)	0.51	0.12	0.51	0.50	0.66	0.25
Avail Cap(c_a), veh/h	3576	1834	565	5241	1252	1114
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.6	5.0	16.2	5.3	13.8	12.9
Incr Delay (d2), s/veh	0.4	0.1	5.0	0.2	2.8	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.4	0.3	0.4	1.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	9.9	5.1	21.2	5.5	16.6	13.4
LnGrp LOS	A	A	C	A	B	B
Approach Vol, veh/h	656			934	238	
Approach Delay, s/veh	9.3			6.2	15.8	
Approach LOS	A			A	B	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		23.9		11.0	7.1	16.8
Change Period (Y+Rc), s		5.5		5.5	5.5	5.5
Max Green Setting (Gmax), s		53.5		25.5	11.5	36.5
Max Q Clear Time (g_c+l1), s		7.8		5.4	2.8	6.7
Green Ext Time (p_c), s		6.3		0.7	0.0	4.6
Intersection Summary						
HCM 7th Control Delay, s/veh			8.5			
HCM 7th LOS			A			

HCM 7th TWSC
2: Round Up Road & River Ranch Road

11/18/2024

Intersection												
Int Delay, s/veh	6.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	0	6	4	57	0	14	1	14	8	4
Future Vol, veh/h	1	0	0	6	4	57	0	14	1	14	8	4
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	66	66	66	66	66	66	66	66	66	66	66	66
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	0	0	9	6	86	0	21	2	21	12	6

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	82	80	15	77	83	22	18	0	0	23	0	0
Stage 1	58	58	-	22	22	-	-	-	-	-	-	-
Stage 2	24	23	-	55	61	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	911	814	1070	918	811	1061	1612	-	-	1606	-	-
Stage 1	959	851	-	1002	881	-	-	-	-	-	-	-
Stage 2	999	880	-	963	848	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	819	803	1070	906	801	1061	1612	-	-	1606	-	-
Mov Cap-2 Maneuver	819	803	-	906	801	-	-	-	-	-	-	-
Stage 1	947	839	-	1002	881	-	-	-	-	-	-	-
Stage 2	911	880	-	950	837	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.4	8.9	0	3.92
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1612	-	-	819 1025	909	-	-
HCM Lane V/C Ratio	-	-	-	0.002 0.099	0.013	-	-
HCM Control Delay (s/veh)	0	-	-	9.4 8.9	7.3	0	-
HCM Lane LOS	A	-	-	A A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0 0.3	0	-	-

Intersection

Int Delay, s/veh 3.7

Movement EBL EBR NBL NBT SBT SBRLane Configurations 

Traffic Vol, veh/h 21 10 9 2 4 48

Future Vol, veh/h 21 10 9 2 4 48

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

Sign Control Stop Stop Free Free Free Free

RT Channelized - None - None - None

Storage Length - - - - - -

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

Grade, % 0 - - 0 0 -

Peak Hour Factor 70 70 70 70 70 70

Heavy Vehicles, % 4 4 4 4 4 4

Mvmt Flow 30 14 13 3 6 69

Major/Minor Minor2 Major1 Major2

Conflicting Flow All 69 40 74 0 - 0

Stage 1 40 - - - - -

Stage 2 29 - - - - -

Critical Hdwy 6.44 6.24 4.14 - - -

Critical Hdwy Stg 1 5.44 - - - - -

Critical Hdwy Stg 2 5.44 - - - - -

Follow-up Hdwy 3.536 3.336 2.236 - - -

Pot Cap-1 Maneuver 931 1026 1513 - - -

Stage 1 977 - - - - -

Stage 2 989 - - - - -

Platoon blocked, % - - -

Mov Cap-1 Maneuver 923 1026 1513 - - -

Mov Cap-2 Maneuver 923 - - - - -

Stage 1 969 - - - - -

Stage 2 989 - - - - -

Approach EB NB SB

HCM Control Delay, s/v 8.96 6.05 0

HCM LOS A

Minor Lane/Major Mvmt NBL NBT EBLn1 SBT SBR

Capacity (veh/h) 1473 - 954 - -

HCM Lane V/C Ratio 0.009 - 0.046 - -

HCM Control Delay (s/veh) 7.4 0 9 - -

HCM Lane LOS A A A - -

HCM 95th %tile Q(veh) 0 - 0.1 - -

Intersection

Int Delay, s/veh 1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	24	250	2	2	280	10	0	0	1	3	0	28
Future Vol, veh/h	24	250	2	2	280	10	0	0	1	3	0	28
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	69	69	69	69	69	69	69	69	69	69	69	69
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	35	362	3	3	406	14	0	0	1	4	0	41

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	420	0	0	365	0	0	845	859	364	851	854	413
Stage 1	-	-	-	-	-	-	433	433	-	419	419	-
Stage 2	-	-	-	-	-	-	412	426	-	432	435	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1133	-	-	1188	-	-	282	293	679	279	295	637
Stage 1	-	-	-	-	-	-	599	580	-	610	588	-
Stage 2	-	-	-	-	-	-	615	584	-	600	579	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1133	-	-	1188	-	-	253	281	679	267	283	637
Mov Cap-2 Maneuver	-	-	-	-	-	-	253	281	-	267	283	-
Stage 1	-	-	-	-	-	-	576	557	-	608	587	-
Stage 2	-	-	-	-	-	-	574	582	-	576	557	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v 0.72		0.06	10.31	11.97
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	679	156	-	-	12	-	-	562
HCM Lane V/C Ratio	0.002	0.031	-	-	0.002	-	-	0.08
HCM Control Delay (s/veh)	10.3	8.3	0	-	8	0	-	12
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.3

HCM 7th Signalized Intersection Summary

1: River Ranch Road & US 50

11/18/2024

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↘	↑↑	↘	↑
Traffic Volume (veh/h)	882	166	75	722	141	39
Future Volume (veh/h)	882	166	75	722	141	39
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	948	178	81	776	152	42
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	1528	879	124	2202	222	198
Arrive On Green	0.44	0.44	0.07	0.63	0.13	0.13
Sat Flow, veh/h	3589	1560	1753	3589	1753	1560
Grp Volume(v), veh/h	948	178	81	776	152	42
Grp Sat Flow(s),veh/h/ln	1749	1560	1753	1749	1753	1560
Q Serve(g_s), s	9.4	2.5	2.0	4.8	3.7	1.1
Cycle Q Clear(g_c), s	9.4	2.5	2.0	4.8	3.7	1.1
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1528	879	124	2202	222	198
V/C Ratio(X)	0.62	0.20	0.65	0.35	0.68	0.21
Avail Cap(c_a), veh/h	2830	1460	447	4148	991	882
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.8	4.8	20.4	4.0	18.8	17.7
Incr Delay (d2), s/veh	0.4	0.1	5.7	0.1	3.7	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.9	0.8	0.3	1.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	10.2	5.0	26.1	4.1	22.5	18.2
LnGrp LOS	B	A	C	A	C	B
Approach Vol, veh/h	1126			857	194	
Approach Delay, s/veh	9.4			6.2	21.6	
Approach LOS	A			A	C	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		33.9		11.2	8.7	25.2
Change Period (Y+Rc), s		5.5		5.5	5.5	5.5
Max Green Setting (Gmax), s		53.5		25.5	11.5	36.5
Max Q Clear Time (g_c+I1), s		6.8		5.7	4.0	11.4
Green Ext Time (p_c), s		5.2		0.5	0.1	8.3
Intersection Summary						
HCM 7th Control Delay, s/veh			9.2			
HCM 7th LOS			A			

HCM 7th TWSC
2: Round Up Road & River Ranch Road

11/18/2024

Intersection												
Int Delay, s/veh	5.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	3	0	4	3	41	1	19	1	47	31	12
Future Vol, veh/h	3	3	0	4	3	41	1	19	1	47	31	12
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	-	-	-	-	-	-	-	-	-	-	-	-
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, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	4	0	5	4	49	1	23	1	57	37	14

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	185	184	45	178	191	23	52	0	0	24	0	0
Stage 1	158	158	-	26	26	-	-	-	-	-	-	-
Stage 2	27	27	-	152	165	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	780	714	1031	788	708	1059	1567	-	-	1604	-	-
Stage 1	849	771	-	997	878	-	-	-	-	-	-	-
Stage 2	995	877	-	855	765	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	713	687	1031	755	681	1059	1567	-	-	1604	-	-
Mov Cap-2 Maneuver	713	687	-	755	681	-	-	-	-	-	-	-
Stage 1	818	743	-	996	877	-	-	-	-	-	-	-
Stage 2	944	876	-	820	738	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	10.2	8.86	0.35	3.83
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	85	-	-	700	991	890	-
HCM Lane V/C Ratio	0.001	-	-	0.01	0.058	0.035	-
HCM Control Delay (s/veh)	7.3	0	-	10.2	8.9	7.3	0
HCM Lane LOS	A	A	-	B	A	A	A
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0.1	-

Intersection

Int Delay, s/veh 6.1

Movement EBL EBR NBL NBT SBT SBRLane Configurations 

Traffic Vol, veh/h 29 32 12 0 0 29

Future Vol, veh/h 29 32 12 0 0 29

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

Sign Control Stop Stop Free Free Free Free

RT Channelized - None - None - None

Storage Length - - - - - -

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

Grade, % 0 - - 0 0 -

Peak Hour Factor 85 85 85 85 85 85

Heavy Vehicles, % 0 0 0 0 0 0

Mvmt Flow 34 38 14 0 0 34

Major/Minor Minor2 Major1 Major2

Conflicting Flow All 45 17 34 0 - 0

Stage 1 17 - - - - -

Stage 2 28 - - - - -

Critical Hdwy 6.4 6.2 4.1 - - -

Critical Hdwy Stg 1 5.4 - - - - -

Critical Hdwy Stg 2 5.4 - - - - -

Follow-up Hdwy 3.5 3.3 2.2 - - -

Pot Cap-1 Maneuver 970 1068 1590 - - -

Stage 1 1011 - - - - -

Stage 2 1000 - - - - -

Platoon blocked, % - - -

Mov Cap-1 Maneuver 961 1068 1590 - - -

Mov Cap-2 Maneuver 961 - - - - -

Stage 1 1002 - - - - -

Stage 2 1000 - - - - -

Approach EB NB SB

HCM Control Delay, s/v 8.82 7.28 0

HCM LOS A

Minor Lane/Major Mvmt NBL NBT EBLn1 SBT SBR

Capacity (veh/h) 1590 - 1014 - -

HCM Lane V/C Ratio 0.009 - 0.071 - -

HCM Control Delay (s/veh) 7.3 0 8.8 - -

HCM Lane LOS A A A - -

HCM 95th %tile Q(veh) 0 - 0.2 - -

Intersection

Int Delay, s/veh 1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	21	311	0	1	220	7	4	0	0	6	0	25
Future Vol, veh/h	21	311	0	1	220	7	4	0	0	6	0	25
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	24	349	0	1	247	8	4	0	0	7	0	28

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	255	0	0	349	0	0	646	654	349	650	650	251
Stage 1	-	-	-	-	-	-	397	397	-	253	253	-
Stage 2	-	-	-	-	-	-	249	257	-	397	397	-
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	1310	-	-	1209	-	-	385	386	694	382	388	788
Stage 1	-	-	-	-	-	-	629	604	-	751	697	-
Stage 2	-	-	-	-	-	-	755	695	-	629	604	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1310	-	-	1209	-	-	362	377	694	373	379	788
Mov Cap-2 Maneuver	-	-	-	-	-	-	362	377	-	373	379	-
Stage 1	-	-	-	-	-	-	615	590	-	750	697	-
Stage 2	-	-	-	-	-	-	727	694	-	615	590	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.49	0.03	15.06	10.87
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	362	114	-	-	8	-	-	648
HCM Lane V/C Ratio	0.012	0.018	-	-	0.001	-	-	0.054
HCM Control Delay (s/veh)	15.1	7.8	0	-	8	0	-	10.9
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.2

HCM 7th Signalized Intersection Summary

1: River Ranch Road & US 50

11/19/2024

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↘	↑↑	↘	↗
Traffic Volume (veh/h)	788	158	66	1244	354	112
Future Volume (veh/h)	788	158	66	1244	354	112
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1796	1796	1796	1796	1796	1796
Adj Flow Rate, veh/h	906	182	76	1430	407	129
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	7	7	7	7	7	7
Cap, veh/h	1362	1032	100	1862	477	424
Arrive On Green	0.40	0.40	0.06	0.55	0.28	0.28
Sat Flow, veh/h	3503	1522	1711	3503	1711	1522
Grp Volume(v), veh/h	906	182	76	1430	407	129
Grp Sat Flow(s),veh/h/ln	1706	1522	1711	1706	1711	1522
Q Serve(g_s), s	13.6	2.7	2.7	20.5	14.1	4.2
Cycle Q Clear(g_c), s	13.6	2.7	2.7	20.5	14.1	4.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1362	1032	100	1862	477	424
V/C Ratio(X)	0.67	0.18	0.76	0.77	0.85	0.30
Avail Cap(c_a), veh/h	1991	1312	314	2919	697	621
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.4	3.7	29.0	11.1	21.4	17.8
Incr Delay (d2), s/veh	0.6	0.1	11.0	0.7	6.9	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	1.6	1.3	5.0	6.2	3.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	15.9	3.8	40.1	11.8	28.3	18.2
LnGrp LOS	B	A	D	B	C	B
Approach Vol, veh/h	1088			1506	536	
Approach Delay, s/veh	13.9			13.2	25.9	
Approach LOS	B			B	C	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		39.6		22.9	9.2	30.5
Change Period (Y+Rc), s		5.5		5.5	5.5	5.5
Max Green Setting (Gmax), s		53.5		25.5	11.5	36.5
Max Q Clear Time (g_c+I1), s		22.5		16.1	4.7	15.6
Green Ext Time (p_c), s		11.6		1.3	0.1	7.4
Intersection Summary						
HCM 7th Control Delay, s/veh			15.6			
HCM 7th LOS			B			

HCM 7th TWSC

2: Round Up Road & River Ranch Road

11/19/2024

Intersection												
Int Delay, s/veh	6.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	0	0	8	6	83	0	21	2	21	11	6
Future Vol, veh/h	2	0	0	8	6	83	0	21	2	21	11	6
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	66	66	66	66	66	66	66	66	66	66	66	66
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	0	0	12	9	126	0	32	3	32	17	9

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	121	120	21	114	123	33	26	0	0	35	0	0
Stage 1	85	85	-	33	33	-	-	-	-	-	-	-
Stage 2	36	35	-	80	89	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	859	774	1062	868	771	1046	1602	-	-	1589	-	-
Stage 1	928	828	-	988	871	-	-	-	-	-	-	-
Stage 2	984	870	-	933	825	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	731	759	1062	851	756	1046	1602	-	-	1589	-	-
Mov Cap-2 Maneuver	731	759	-	851	756	-	-	-	-	-	-	-
Stage 1	909	812	-	988	871	-	-	-	-	-	-	-
Stage 2	857	870	-	914	808	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.94	9.2	0	4.04
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1602	-	-	731 1003	929	-	-
HCM Lane V/C Ratio	-	-	-	0.004 0.147	0.02	-	-
HCM Control Delay (s/veh)	0	-	-	9.9 9.2	7.3	0	-
HCM Lane LOS	A	-	-	A A	A A	-	-
HCM 95th %tile Q(veh)	0	-	-	0 0.5	0.1	-	-

Intersection

Int Delay, s/veh 3.7

Movement EBL EBR NBL NBT SBT SBRLane Configurations 

Traffic Vol, veh/h 30 14 13 3 6 70

Future Vol, veh/h 30 14 13 3 6 70

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

Sign Control Stop Stop Free Free Free Free

RT Channelized - None - None - None

Storage Length - - - - - -

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

Grade, % 0 - - 0 0 -

Peak Hour Factor 70 70 70 70 70 70

Heavy Vehicles, % 4 4 4 4 4 4

Mvmt Flow 43 20 19 4 9 100

Major/Minor Minor2 Major1 Major2

Conflicting Flow All 100 59 109 0 - 0

Stage 1 59 - - - - -

Stage 2 41 - - - - -

Critical Hdwy 6.44 6.24 4.14 - - -

Critical Hdwy Stg 1 5.44 - - - - -

Critical Hdwy Stg 2 5.44 - - - - -

Follow-up Hdwy 3.536 3.336 2.236 - - -

Pot Cap-1 Maneuver 894 1002 1469 - - -

Stage 1 959 - - - - -

Stage 2 976 - - - - -

Platoon blocked, % - - -

Mov Cap-1 Maneuver 883 1002 1469 - - -

Mov Cap-2 Maneuver 883 - - - - -

Stage 1 947 - - - - -

Stage 2 976 - - - - -

Approach EB NB SB

HCM Control Delay, s/v 9.21 6.08 0

HCM LOS A

Minor Lane/Major Mvmt NBL NBT EBLn1 SBT SBR

Capacity (veh/h) 1463 - 917 - -

HCM Lane V/C Ratio 0.013 - 0.069 - -

HCM Control Delay (s/veh) 7.5 0 9.2 - -

HCM Lane LOS A A A - -

HCM 95th %tile Q(veh) 0 - 0.2 - -

Intersection

Int Delay, s/veh 1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	35	359	3	3	399	14	0	0	2	5	0	40
Future Vol, veh/h	35	359	3	3	399	14	0	0	2	5	0	40
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	69	69	69	69	69	69	69	69	69	69	69	69
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	51	520	4	4	578	20	0	0	3	7	0	58

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	599	0	0	525	0	0	1211	1231	522	1219	1223	588
Stage 1	-	-	-	-	-	-	624	624	-	597	597	-
Stage 2	-	-	-	-	-	-	587	607	-	622	626	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	973	-	-	1037	-	-	158	176	552	156	178	507
Stage 1	-	-	-	-	-	-	472	476	-	488	490	-
Stage 2	-	-	-	-	-	-	494	485	-	473	475	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	973	-	-	1037	-	-	129	162	552	143	164	507
Mov Cap-2 Maneuver	-	-	-	-	-	-	129	162	-	143	164	-
Stage 1	-	-	-	-	-	-	437	441	-	485	487	-
Stage 2	-	-	-	-	-	-	435	482	-	436	440	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v 0.78		0.06	11.55	15.9
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	552	158	-	-	13	-	-	395
HCM Lane V/C Ratio	0.005	0.052	-	-	0.004	-	-	0.165
HCM Control Delay (s/veh)	11.6	8.9	0	-	8.5	0	-	15.9
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0	0.2	-	-	0	-	-	0.6

High-T; the westbound through movement is included although this is actually a free movement.

HCM 7th Signalized Intersection Summary

1: River Ranch Road & US 50

11/18/2024

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↵	↑↑	↵	↑
Traffic Volume (veh/h)	1412	378	151	1155	293	80
Future Volume (veh/h)	1412	378	151	1155	293	80
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	1518	406	162	1242	315	86
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	1719	1083	196	2336	355	316
Arrive On Green	0.49	0.49	0.11	0.67	0.20	0.20
Sat Flow, veh/h	3589	1560	1753	3589	1753	1560
Grp Volume(v), veh/h	1518	406	162	1242	315	86
Grp Sat Flow(s),veh/h/ln	1749	1560	1753	1749	1753	1560
Q Serve(g_s), s	33.2	9.2	7.7	15.5	14.9	4.0
Cycle Q Clear(g_c), s	33.2	9.2	7.7	15.5	14.9	4.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1719	1083	196	2336	355	316
V/C Ratio(X)	0.88	0.37	0.83	0.53	0.89	0.27
Avail Cap(c_a), veh/h	1789	1114	216	2447	402	358
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.4	5.4	37.0	7.3	32.9	28.6
Incr Delay (d2), s/veh	5.5	0.2	20.9	0.2	19.1	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.6	5.1	4.2	3.8	8.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	24.9	5.6	57.8	7.5	52.0	29.1
LnGrp LOS	C	A	E	A	D	C
Approach Vol, veh/h	1924			1404	401	
Approach Delay, s/veh	20.8			13.3	47.1	
Approach LOS	C			B	D	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		62.3		22.7	15.0	47.3
Change Period (Y+Rc), s		5.5		5.5	5.5	5.5
Max Green Setting (Gmax), s		59.5		19.5	10.5	43.5
Max Q Clear Time (g_c+l1), s		17.5		16.9	9.7	35.2
Green Ext Time (p_c), s		10.1		0.4	0.0	6.6
Intersection Summary						
HCM 7th Control Delay, s/veh			20.8			
HCM 7th LOS			C			

HCM 7th TWSC
2: Round Up Road & River Ranch Road

11/18/2024

Intersection												
Int Delay, s/veh	5.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	5	0	6	5	59	2	27	2	69	45	18
Future Vol, veh/h	5	5	0	6	5	59	2	27	2	69	45	18
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	-	-	-	-	-	-	-	-	-	-	-	-
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, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	6	6	0	7	6	71	2	33	2	83	54	22

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	272	271	65	262	281	34	76	0	0	35	0	0
Stage 1	231	231	-	39	39	-	-	-	-	-	-	-
Stage 2	40	40	-	223	242	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	685	639	1005	695	631	1045	1536	-	-	1589	-	-
Stage 1	776	717	-	982	867	-	-	-	-	-	-	-
Stage 2	980	866	-	784	709	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	597	603	1005	650	596	1045	1536	-	-	1589	-	-
Mov Cap-2 Maneuver	597	603	-	650	596	-	-	-	-	-	-	-
Stage 1	734	678	-	980	865	-	-	-	-	-	-	-
Stage 2	905	864	-	734	670	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v11.13		9.18	0.47	3.86
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	115	-	-	600	945	890	-
HCM Lane V/C Ratio	0.002	-	-	0.02	0.089	0.052	-
HCM Control Delay (s/veh)	7.3	0	-	11.1	9.2	7.4	0
HCM Lane LOS	A	A	-	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.3	0.2	-

Intersection						
Int Delay, s/veh	6.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	42	46	18	0	0	42
Future Vol, veh/h	42	46	18	0	0	42
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	49	54	21	0	0	49

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	67	25	49	0	-	0
Stage 1	25	-	-	-	-	-
Stage 2	42	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	943	1057	1570	-	-	-
Stage 1	1003	-	-	-	-	-
Stage 2	985	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	930	1057	1570	-	-	-
Mov Cap-2 Maneuver	930	-	-	-	-	-
Stage 1	990	-	-	-	-	-
Stage 2	985	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.05	7.32	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1570	-	993	-	-
HCM Lane V/C Ratio	0.013	-	0.104	-	-
HCM Control Delay (s/veh)	7.3	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	439	0	2	314	10	6	0	0	8	0	37
Future Vol, veh/h	30	439	0	2	314	10	6	0	0	8	0	37
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	34	493	0	2	353	11	7	0	0	9	0	42

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	364	0	0	493	0	0	918	929	493	924	924	358
Stage 1	-	-	-	-	-	-	561	561	-	363	363	-
Stage 2	-	-	-	-	-	-	357	369	-	561	561	-
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	1195	-	-	1070	-	-	252	268	576	250	270	686
Stage 1	-	-	-	-	-	-	512	510	-	656	625	-
Stage 2	-	-	-	-	-	-	660	621	-	512	510	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1195	-	-	1070	-	-	227	256	576	240	258	686
Mov Cap-2 Maneuver	-	-	-	-	-	-	227	256	-	240	258	-
Stage 1	-	-	-	-	-	-	492	490	-	654	623	-
Stage 2	-	-	-	-	-	-	619	619	-	492	490	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.52			0.05			21.33			12.74		
HCM LOS							C			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	227	115	-	-	11	-	-	515
HCM Lane V/C Ratio	0.03	0.028	-	-	0.002	-	-	0.098
HCM Control Delay (s/veh)	21.3	8.1	0	-	8.4	0	-	12.7
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	0.3

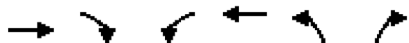
Appendix D

Opening Year and Future Year Plus Project LOS Calculations

HCM 7th Signalized Intersection Summary

1: River Ranch Road & US 50

04/03/2025



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑
Traffic Volume (veh/h)	493	89	35	778	189	52
Future Volume (veh/h)	493	89	35	778	189	52
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1796	1796	1796	1796	1796	1796
Adj Flow Rate, veh/h	567	102	40	894	217	60
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	7	7	7	7	7	7
Cap, veh/h	1083	763	78	1755	314	279
Arrive On Green	0.32	0.32	0.05	0.51	0.18	0.18
Sat Flow, veh/h	3503	1522	1711	3503	1711	1522
Grp Volume(v), veh/h	567	102	40	894	217	60
Grp Sat Flow(s), veh/h/ln	1706	1522	1711	1706	1711	1522
Q Serve(g_s), s	4.9	1.3	0.8	6.3	4.3	1.2
Cycle Q Clear(g_c), s	4.9	1.3	0.8	6.3	4.3	1.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1083	763	78	1755	314	279
V/C Ratio(X)	0.52	0.13	0.51	0.51	0.69	0.21
Avail Cap(c_a), veh/h	3423	1806	541	5017	1199	1067
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.2	4.9	17.0	5.8	13.9	12.6
Incr Delay (d2), s/veh	0.4	0.1	5.1	0.2	2.7	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4	0.5	0.3	0.6	1.6	1.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	10.6	4.9	22.1	6.0	16.6	13.0
LnGrp LOS	B	A	C	A	B	B
Approach Vol, veh/h	669			934	277	
Approach Delay, s/veh	9.7			6.7	15.8	
Approach LOS	A			A	B	
Timer - Assigned Phs	2			4	5	6
Phs Duration (G+Y+Rc), s	24.2			12.2	7.2	17.0
Change Period (Y+Rc), s	5.5			5.5	5.5	5.5
Max Green Setting (Gmax), s	53.5			25.5	11.5	36.5
Max Q Clear Time (g_c+l1), s	8.3			6.3	2.8	6.9
Green Ext Time (p_c), s	6.3			0.8	0.0	4.6
Intersection Summary						
HCM 7th Control Delay, s/veh			9.1			
HCM 7th LOS			A			

HCM 6th TWSC
2: Round Up Road & River Ranch Road

04/03/2025

Intersection												
Int Delay, s/veh	7.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	0	6	4	91	0	14	1	26	8	4
Future Vol, veh/h	1	0	0	6	4	91	0	14	1	26	8	4
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	66	66	66	66	66	66	66	66	66	66	66	66
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	0	0	9	6	138	0	21	2	39	12	6

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	187	116	15	115	118	22	18	0	0	23	0	0
Stage 1	93	93	-	22	22	-	-	-	-	-	-	-
Stage 2	94	23	-	93	96	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	778	778	1070	867	776	1061	1612	-	-	1605	-	-
Stage 1	919	822	-	1002	881	-	-	-	-	-	-	-
Stage 2	918	880	-	919	819	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	660	759	1070	851	757	1061	1612	-	-	1605	-	-
Mov Cap-2 Maneuver	660	759	-	851	757	-	-	-	-	-	-	-
Stage 1	919	801	-	1002	881	-	-	-	-	-	-	-
Stage 2	793	880	-	896	799	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	10.5	9.1	0	5
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1612	-	-	660 1030	1605	-	-
HCM Lane V/C Ratio	-	-	-	0.002 0.149	0.025	-	-
HCM Control Delay (s/veh)	0	-	-	10.5 9.1	7.3	0	-
HCM Lane LOS	A	-	-	B A	A	A	-
HCM 95th %tile Q (veh)	0	-	-	0 0.5	0.1	-	-

Intersection						
Int Delay, s/veh	4.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	21	22	43	10	4	48
Future Vol, veh/h	21	22	43	10	4	48
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	70	70	70	70	70	70
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	30	31	61	14	6	69

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	177	41	75
Stage 1	41	-	-
Stage 2	136	-	-
Critical Hdwy	6.44	6.24	4.14
Critical Hdwy Stg 1	5.44	-	-
Critical Hdwy Stg 2	5.44	-	-
Follow-up Hdwy	3.536	3.336	2.236
Pot Cap-1 Maneuver	808	1024	1512
Stage 1	976	-	-
Stage 2	886	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	775	1024	1512
Mov Cap-2 Maneuver	775	-	-
Stage 1	936	-	-
Stage 2	886	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.4	6.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1512	-	885	-	-
HCM Lane V/C Ratio	0.041	-	0.069	-	-
HCM Control Delay (s/veh)	7.5	0	9.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q (veh)	0.1	-	0.2	-	-

Intersection

Int Delay, s/veh 1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	27	250	2	2	280	11	0	0	1	6	0	36
Future Vol, veh/h	27	250	2	2	280	11	0	0	1	6	0	36
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	150	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	69	69	69	69	69	69	69	69	69	69	69	69
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	39	362	3	3	406	16	0	0	1	9	0	52

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	422	0	0	365	0	0	888	870	364	862	863	414
Stage 1	-	-	-	-	-	-	442	442	-	420	420	-
Stage 2	-	-	-	-	-	-	446	428	-	442	443	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1132	-	-	1188	-	-	263	289	679	274	291	636
Stage 1	-	-	-	-	-	-	592	575	-	609	588	-
Stage 2	-	-	-	-	-	-	590	583	-	592	574	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1132	-	-	1188	-	-	235	278	679	266	280	636
Mov Cap-2 Maneuver	-	-	-	-	-	-	235	278	-	266	280	-
Stage 1	-	-	-	-	-	-	572	555	-	588	586	-
Stage 2	-	-	-	-	-	-	540	581	-	570	554	-

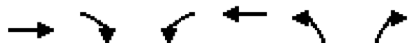
Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.8			0.1			10.3			12.7		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	679	1132	-	-	1188	-	-	531
HCM Lane V/C Ratio	0.002	0.035	-	-	0.002	-	-	0.115
HCM Control Delay (s/veh)	10.3	8.3	-	-	8	0	-	12.7
HCM Lane LOS	B	A	-	-	A	A	-	B
HCM 95th %tile Q (veh)	0	0.1	-	-	0	-	-	0.4

HCM 7th Signalized Intersection Summary

1: River Ranch Road & US 50

04/03/2025



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑
Traffic Volume (veh/h)	882	204	75	722	164	39
Future Volume (veh/h)	882	204	75	722	164	39
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	948	219	81	776	176	42
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	1518	899	122	2174	250	222
Arrive On Green	0.43	0.43	0.07	0.62	0.14	0.14
Sat Flow, veh/h	3589	1560	1753	3589	1753	1560
Grp Volume(v), veh/h	948	219	81	776	176	42
Grp Sat Flow(s), veh/h/ln	1749	1560	1753	1749	1753	1560
Q Serve(g_s), s	9.8	3.2	2.1	5.0	4.5	1.1
Cycle Q Clear(g_c), s	9.8	3.2	2.1	5.0	4.5	1.1
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1518	899	122	2174	250	222
V/C Ratio(X)	0.62	0.24	0.66	0.36	0.71	0.19
Avail Cap(c_a), veh/h	2739	1444	433	4015	959	854
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.2	4.9	21.1	4.3	19.1	17.6
Incr Delay (d2), s/veh	0.4	0.1	6.0	0.1	3.6	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	1.2	0.9	0.5	1.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	10.7	5.0	27.2	4.4	22.7	18.0
LnGrp LOS	B	A	C	A	C	B
Approach Vol, veh/h	1167			857	218	
Approach Delay, s/veh	9.6			6.5	21.8	
Approach LOS	A			A	C	
Timer - Assigned Phs	2			4	5	6
Phs Duration (G+Y+Rc), s	34.5			12.1	8.7	25.7
Change Period (Y+Rc), s	5.5			5.5	5.5	5.5
Max Green Setting (Gmax), s	53.5			25.5	11.5	36.5
Max Q Clear Time (g_c+l1), s	7.0			6.5	4.1	11.8
Green Ext Time (p_c), s	5.2			0.6	0.1	8.4
Intersection Summary						
HCM 7th Control Delay, s/veh			9.6			
HCM 7th LOS			A			

HCM 6th TWSC
2: Round Up Road & River Ranch Road

04/03/2025

Intersection												
Int Delay, s/veh	5.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	3	0	4	3	63	1	19	1	86	31	12
Future Vol, veh/h	3	3	0	4	3	63	1	19	1	86	31	12
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	-	-	-	-	-	-	-	-	-	-	-	-
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, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	4	0	5	4	76	1	23	1	104	37	14

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	318	278	44	280	285	24	51	0	0	24	0	0
Stage 1	252	252	-	26	26	-	-	-	-	-	-	-
Stage 2	66	26	-	254	259	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	639	633	1032	676	628	1058	1568	-	-	1604	-	-
Stage 1	757	702	-	997	878	-	-	-	-	-	-	-
Stage 2	950	878	-	755	697	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	560	590	1032	638	585	1058	1568	-	-	1604	-	-
Mov Cap-2 Maneuver	560	590	-	638	585	-	-	-	-	-	-	-
Stage 1	756	655	-	996	877	-	-	-	-	-	-	-
Stage 2	877	877	-	701	650	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	11.3	9	0.3	4.9
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1568	-	-	575	987	1604	-
HCM Lane V/C Ratio	0.001	-	-	0.013	0.085	0.065	-
HCM Control Delay (s/veh)	7.3	0	-	11.3	9	7.4	0
HCM Lane LOS	A	A	-	B	A	A	A
HCM 95th %tile Q (veh)	0	-	-	0	0.3	0.2	-

Intersection

Int Delay, s/veh 6.9

Movement EBL EBR NBL NBT SBT SBRLane Configurations 

Traffic Vol, veh/h 29 70 35 5 0 29

Future Vol, veh/h 29 70 35 5 0 29

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

Sign Control Stop Stop Free Free Free Free

RT Channelized - None - None - None

Storage Length - - - - - -

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

Grade, % 0 - - 0 0 -

Peak Hour Factor 85 85 85 85 85 85

Heavy Vehicles, % 0 0 0 0 0 0

Mvmt Flow 34 82 41 6 0 34

Major/Minor Minor2 Major1 Major2

Conflicting Flow All 105 17 34 0 - 0

Stage 1 17 - - - - -

Stage 2 88 - - - - -

Critical Hdwy 6.4 6.2 4.1 - - -

Critical Hdwy Stg 1 5.4 - - - - -

Critical Hdwy Stg 2 5.4 - - - - -

Follow-up Hdwy 3.5 3.3 2.2 - - -

Pot Cap-1 Maneuver 898 1068 1591 - - -

Stage 1 1011 - - - - -

Stage 2 940 - - - - -

Platoon blocked, % - - -

Mov Cap-1 Maneuver 875 1068 1591 - - -

Mov Cap-2 Maneuver 875 - - - - -

Stage 1 985 - - - - -

Stage 2 940 - - - - -

Approach EB NB SB

HCM Control Delay, s/v 9.1 6.4 0

HCM LOS A

Minor Lane/Major Mvmt NBL NBT EBLn1 SBT SBR

Capacity (veh/h) 1591 - 1003 - -

HCM Lane V/C Ratio 0.026 - 0.116 - -

HCM Control Delay (s/veh) 7.3 0 9.1 - -

HCM Lane LOS A A A - -

HCM 95th %tile Q (veh) 0.1 - 0.4 - -

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	31	311	0	1	220	10	4	0	0	7	0	32
Future Vol, veh/h	31	311	0	1	220	10	4	0	0	7	0	32
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	150	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	35	349	0	1	247	11	4	0	0	8	0	36

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	258	0	0	349	0	0	692	679	349	674	674	253
Stage 1	-	-	-	-	-	-	419	419	-	255	255	-
Stage 2	-	-	-	-	-	-	273	260	-	419	419	-
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	1307	-	-	1210	-	-	358	374	694	368	376	786
Stage 1	-	-	-	-	-	-	612	590	-	749	696	-
Stage 2	-	-	-	-	-	-	733	693	-	612	590	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1307	-	-	1210	-	-	334	364	694	360	365	786
Mov Cap-2 Maneuver	-	-	-	-	-	-	334	364	-	360	365	-
Stage 1	-	-	-	-	-	-	595	574	-	729	695	-
Stage 2	-	-	-	-	-	-	699	692	-	596	574	-

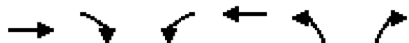
Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.7	0	15.9	11
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	334	1307	-	-	1210	-	-	648
HCM Lane V/C Ratio	0.013	0.027	-	-	0.001	-	-	0.068
HCM Control Delay (s/veh)	15.9	7.8	-	-	8	0	-	11
HCM Lane LOS	C	A	-	-	A	A	-	B
HCM 95th %tile Q (veh)	0	0.1	-	-	0	-	-	0.2

HCM 7th Signalized Intersection Summary

1: River Ranch Road & US 50

04/03/2025



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑
Traffic Volume (veh/h)	788	175	66	1244	400	112
Future Volume (veh/h)	788	175	66	1244	400	112
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1796	1796	1796	1796	1796	1796
Adj Flow Rate, veh/h	906	201	76	1430	460	129
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	7	7	7	7	7	7
Cap, veh/h	1350	1064	97	1821	519	462
Arrive On Green	0.40	0.40	0.06	0.53	0.30	0.30
Sat Flow, veh/h	3503	1522	1711	3503	1711	1522
Grp Volume(v), veh/h	906	201	76	1430	460	129
Grp Sat Flow(s), veh/h/ln	1706	1522	1711	1706	1711	1522
Q Serve(g_s), s	14.7	3.1	3.0	22.7	17.3	4.4
Cycle Q Clear(g_c), s	14.7	3.1	3.0	22.7	17.3	4.4
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1350	1064	97	1821	519	462
V/C Ratio(X)	0.67	0.19	0.79	0.79	0.89	0.28
Avail Cap(c_a), veh/h	1846	1285	291	2705	646	575
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.8	3.5	31.4	12.6	22.4	17.9
Incr Delay (d2), s/veh	0.6	0.1	13.0	0.9	12.0	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	2.0	1.4	6.1	8.3	4.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	17.4	3.6	44.4	13.6	34.4	18.2
LnGrp LOS	B	A	D	B	C	B
Approach Vol, veh/h	1107			1506	589	
Approach Delay, s/veh	14.9			15.1	30.8	
Approach LOS	B			B	C	
Timer - Assigned Phs	2			4	5	6
Phs Duration (G+Y+Rc), s	41.5			26.0	9.3	32.2
Change Period (Y+Rc), s	5.5			5.5	5.5	5.5
Max Green Setting (Gmax), s	53.5			25.5	11.5	36.5
Max Q Clear Time (g_c+l1), s	24.7			19.3	5.0	16.7
Green Ext Time (p_c), s	11.3			1.2	0.1	7.3
Intersection Summary						
HCM 7th Control Delay, s/veh			17.9			
HCM 7th LOS			B			

HCM 6th TWSC
2: Round Up Road & River Ranch Road

04/03/2025

Intersection												
Int Delay, s/veh	7.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	0	0	8	6	117	0	21	2	33	11	6
Future Vol, veh/h	2	0	0	8	6	117	0	21	2	33	11	6
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	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	66	66	66	66	66	66	66	66	66	66	66	66
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	0	0	12	9	177	0	32	3	50	17	9

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	249	157	22	156	160	34	26	0	0	35	0	0
Stage 1	122	122	-	34	34	-	-	-	-	-	-	-
Stage 2	127	35	-	122	126	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	709	739	1061	815	736	1045	1601	-	-	1589	-	-
Stage 1	887	799	-	987	871	-	-	-	-	-	-	-
Stage 2	882	870	-	887	796	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	569	715	1061	795	712	1045	1601	-	-	1589	-	-
Mov Cap-2 Maneuver	569	715	-	795	712	-	-	-	-	-	-	-
Stage 1	887	773	-	987	871	-	-	-	-	-	-	-
Stage 2	725	870	-	859	771	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	11.4	9.5	0	4.8
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1601	-	-	569 1004	1589	-	-
HCM Lane V/C Ratio	-	-	-	0.005 0.198	0.031	-	-
HCM Control Delay (s/veh)	0	-	-	11.4 9.5	7.3	0	-
HCM Lane LOS	A	-	-	B A	A	A	-
HCM 95th %tile Q (veh)	0	-	-	0 0.7	0.1	-	-

HCM 6th TWSC
3: For Sutter Boulevard & Round Up Road

04/03/2025

Intersection						
Int Delay, s/veh	4.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	30	26	47	11	6	70
Future Vol, veh/h	30	26	47	11	6	70
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	70	70	70	70	70	70
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	43	37	67	16	9	100

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	209	59	109
Stage 1	59	-	-
Stage 2	150	-	-
Critical Hdwy	6.44	6.24	4.14
Critical Hdwy Stg 1	5.44	-	-
Critical Hdwy Stg 2	5.44	-	-
Follow-up Hdwy	3.536	3.336	2.236
Pot Cap-1 Maneuver	775	1001	1469
Stage 1	959	-	-
Stage 2	873	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	739	1001	1469
Mov Cap-2 Maneuver	739	-	-
Stage 1	915	-	-
Stage 2	873	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.7	6.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1469	-	841	-	-
HCM Lane V/C Ratio	0.046	-	0.095	-	-
HCM Control Delay (s/veh)	7.6	0	9.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q (veh)	0.1	-	0.3	-	-

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	38	359	3	3	399	15	0	0	2	7	0	49
Future Vol, veh/h	38	359	3	3	399	15	0	0	2	7	0	49
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	150	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	69	69	69	69	69	69	69	69	69	69	69	69
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	55	520	4	4	578	22	0	0	3	10	0	71

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	600	0	0	524	0	0	1265	1240	522	1231	1231	589
Stage 1	-	-	-	-	-	-	632	632	-	597	597	-
Stage 2	-	-	-	-	-	-	633	608	-	634	634	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	972	-	-	1038	-	-	145	174	553	153	177	506
Stage 1	-	-	-	-	-	-	467	472	-	488	490	-
Stage 2	-	-	-	-	-	-	466	484	-	466	471	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	972	-	-	1038	-	-	119	163	553	145	166	506
Mov Cap-2 Maneuver	-	-	-	-	-	-	119	163	-	145	166	-
Stage 1	-	-	-	-	-	-	440	445	-	460	487	-
Stage 2	-	-	-	-	-	-	398	481	-	437	444	-

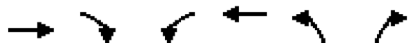
Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.8			0.1			11.5			16.8		
HCM LOS							B			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	553	972	-	-	1038	-	-	386
HCM Lane V/C Ratio	0.005	0.057	-	-	0.004	-	-	0.21
HCM Control Delay (s/veh)	11.5	8.9	-	-	8.5	0	-	16.8
HCM Lane LOS	B	A	-	-	A	A	-	C
HCM 95th %tile Q (veh)	0	0.2	-	-	0	-	-	0.8

HCM 7th Signalized Intersection Summary

1: River Ranch Road & US 50

04/03/2025



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑
Traffic Volume (veh/h)	1412	431	151	1155	324	80
Future Volume (veh/h)	1412	431	151	1155	324	80
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	1518	463	162	1242	348	86
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	1688	1093	195	2297	382	340
Arrive On Green	0.48	0.48	0.11	0.66	0.22	0.22
Sat Flow, veh/h	3589	1560	1753	3589	1753	1560
Grp Volume(v), veh/h	1518	463	162	1242	348	86
Grp Sat Flow(s), veh/h/ln	1749	1560	1753	1749	1753	1560
Q Serve(g_s), s	34.8	11.1	7.9	16.6	17.0	4.0
Cycle Q Clear(g_c), s	34.8	11.1	7.9	16.6	17.0	4.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1688	1093	195	2297	382	340
V/C Ratio(X)	0.90	0.42	0.83	0.54	0.91	0.25
Avail Cap(c_a), veh/h	1736	1114	210	2374	390	347
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.7	5.6	38.1	8.0	33.5	28.4
Incr Delay (d2), s/veh	6.7	0.3	22.3	0.2	24.9	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	6.5	4.4	4.2	9.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	27.4	5.9	60.5	8.2	58.4	28.8
LnGrp LOS	C	A	E	A	E	C
Approach Vol, veh/h	1981			1404	434	
Approach Delay, s/veh	22.3			14.3	52.5	
Approach LOS	C			B	D	
Timer - Assigned Phs	2			4	5	6
Phs Duration (G+Y+Rc), s	63.1			24.6	15.3	47.8
Change Period (Y+Rc), s	5.5			5.5	5.5	5.5
Max Green Setting (Gmax), s	59.5			19.5	10.5	43.5
Max Q Clear Time (g_c+l1), s	18.6			19.0	9.9	36.8
Green Ext Time (p_c), s	10.1			0.1	0.0	5.5
Intersection Summary						
HCM 7th Control Delay, s/veh			22.8			
HCM 7th LOS			C			

HCM 6th TWSC
2: Round Up Road & River Ranch Road

04/03/2025

Intersection												
Int Delay, s/veh	6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	5	0	6	5	82	2	27	2	107	45	18
Future Vol, veh/h	5	5	0	6	5	82	2	27	2	107	45	18
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	-	-	-	-	-	-	-	-	-	-	-	-
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, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	6	6	0	7	6	99	2	33	2	129	54	22

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	414	362	65	364	372	34	76	0	0	35	0	0
Stage 1	323	323	-	38	38	-	-	-	-	-	-	-
Stage 2	91	39	-	326	334	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	552	569	1005	596	561	1045	1536	-	-	1589	-	-
Stage 1	693	654	-	982	867	-	-	-	-	-	-	-
Stage 2	921	866	-	691	647	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	463	520	1005	552	513	1045	1536	-	-	1589	-	-
Mov Cap-2 Maneuver	463	520	-	552	513	-	-	-	-	-	-	-
Stage 1	692	598	-	981	866	-	-	-	-	-	-	-
Stage 2	827	865	-	626	592	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	12.5	9.4	0.5	4.7
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1536	-	-	490	939	1589	-
HCM Lane V/C Ratio	0.002	-	-	0.025	0.119	0.081	-
HCM Control Delay (s/veh)	7.3	0	-	12.5	9.4	7.5	0
HCM Lane LOS	A	A	-	B	A	A	A
HCM 95th %tile Q (veh)	0	-	-	0.1	0.4	0.3	-

HCM 6th TWSC
3: For Sutter Boulevard & Round Up Road

04/03/2025

Intersection						
Int Delay, s/veh	6.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	42	85	40	5	0	42
Future Vol, veh/h	42	85	40	5	0	42
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	49	100	47	6	0	49

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	125	25	49	0	-	0
Stage 1	25	-	-	-	-	-
Stage 2	100	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	875	1057	1571	-	-	-
Stage 1	1003	-	-	-	-	-
Stage 2	929	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	849	1057	1571	-	-	-
Mov Cap-2 Maneuver	849	-	-	-	-	-
Stage 1	973	-	-	-	-	-
Stage 2	929	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.3	6.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1571	-	978	-	-
HCM Lane V/C Ratio	0.03	-	0.153	-	-
HCM Control Delay (s/veh)	7.4	0	9.3	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q (veh)	0.1	-	0.5	-	-

Intersection

Int Delay, s/veh 1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	439	0	2	314	13	6	0	0	10	0	43
Future Vol, veh/h	40	439	0	2	314	13	6	0	0	10	0	43
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	150	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	45	493	0	2	353	15	7	0	0	11	0	48

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	368	0	0	493	0	0	972	955	493	948	948	361
Stage 1	-	-	-	-	-	-	583	583	-	365	365	-
Stage 2	-	-	-	-	-	-	389	372	-	583	583	-
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	1191	-	-	1071	-	-	232	258	576	241	261	684
Stage 1	-	-	-	-	-	-	498	499	-	654	623	-
Stage 2	-	-	-	-	-	-	635	619	-	498	499	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1191	-	-	1071	-	-	209	248	576	234	251	684
Mov Cap-2 Maneuver	-	-	-	-	-	-	209	248	-	234	251	-
Stage 1	-	-	-	-	-	-	479	480	-	629	622	-
Stage 2	-	-	-	-	-	-	589	618	-	479	480	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.7			0.1			22.8			13.1		
HCM LOS							C			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	209	1191	-	-	1071	-	-	502
HCM Lane V/C Ratio	0.032	0.038	-	-	0.002	-	-	0.119
HCM Control Delay (s/veh)	22.8	8.1	-	-	8.4	0	-	13.1
HCM Lane LOS	C	A	-	-	A	A	-	B
HCM 95th %tile Q (veh)	0.1	0.1	-	-	0	-	-	0.4



CITY OF FERNLEY

Planning Commission AGENDA REPORT

Meeting Date: September 10, 2025

REPORT TO: Fernley Planning Commission

REPORT FROM: Alisa Johansson

FINANCIAL IMPACT:

Yes: No: X

CURRENTLY BUDGETED:

Yes: No: X

FUND/ACCOUNT:

N/A

ACTION REQUESTED: Motion
Ordinance

AGENDA ITEM:

(For Possible Action) Discussion and possible action regarding Bill #367 associated with a Zoning Map Amendment request (ZMA25002) from the City of Fernley rezoning one parcel containing approximately 23.19 acres generally located at 2305 Farm District Road from SF20 (Single Family, 20,000-square foot minimum) to OSP (Open Space and Parks) to bring the site into conformance with the Comprehensive Master Plan land use designation of Open Space and Parks (OSP) (APN 021-303-16).

AGENDA ITEM BRIEF:

An application to rezone one parcel containing approximately 23.19 acres from SF20 to OSP.

RECOMMENDED MOTION:

"Based on the analysis presented in the staff report, I move to recommend approval of Bill #367 and ZMA25002 rezoning the subject parcel from SF20 to OSP."

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

"I move to recommend denial of ZMA25002 and Bill #367. I cannot recommend approval of this Zoning Map

Amendment because I have determined the proposed changes to be detrimental to the public's health, safety, and general welfare and I am unable to make the following required findings:
(*State finding and supporting analysis—repeat for each applicable finding*)."

No further alternatives are provided, however, any other motions comporting with Planning Commission parliamentary procedures are appropriate.

BACKGROUND:

Site & Vicinity

Located in central Fernley, the site is bounded by Farm District Road to the north and the Truckee Canal to the south. Private roads Barker Lane and Canal Drive extend south and west along the west and south property lines, respectively. A portion of the site extends east from the property's rectangular core, forming an irregular "dog leg" shape. The property is not mapped within any FEMA floodplain zones and is gently sloped upgradient, ascending roughly 35 feet in elevation from north to south. Due to the property's size, the property is generally perceived as flat. Access is currently provided from Barker Lane abutting Truckee Canal Lateral #6.

Presently undeveloped, the property is located in a portion of Fernley characterized by rural residential development and agricultural uses, though evidence of denser redevelopment can be seen to the north, east, and west, where newer subdivisions have converted agricultural land to housing developments. Despite these pressures, the properties in the immediate vicinity of the site south of Farm District Road are large, generally exceeding 10 acres in size, and open fields planted with alfalfa or lying fallow predominate. This pastoral pattern is interrupted only by the residences and accessory structures belonging to the caretakers of the surrounding fields. This bucolic setting continues across the Truckee Canal, with uninterrupted views to the Virginia Range to the south available from the southern portion of the site.

Analysis: Zoning Map Amendment

Zoning map amendments are committed to the City Council's legislative discretion. A zoning map amendment may be approved when the following findings can be made.

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

The proposed zoning designation of Open Space and Parks is consistent with the site's Comprehensive Master Plan land use of Open Space and Parks (OSP). The zoning map amendment is further supported by the following Master Plan goals and policies:

LU.1.2 Encourage new development to be in the accordance with the Comprehensive Master Plan land use category, and other land use controls to accomplish community principles.

If approved, the proposed zoning map amendment would bring the site's zoning designation into conformance with the underlying Master Plan land use. Development on the site would inherently be in accordance with the Comprehensive Master Plan.

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

The subject property is located south of Farm District Road along the Truckee Canal. The surrounding context is rural residential and agricultural uses are prevalent in this part of the City. The site's proposed zoning designation would support an extremely limited range of uses, primarily public uses such as parks, open space, and recreation facilities (both passive and active). These uses are compatible with and complementary to the adjoining residential and agricultural land uses. As adjoining parcels are redeveloped, it is anticipated that

denser residential uses may become more common. Such residential uses would also be compatible with the proposed zoning designation of Open Space and Parks and the limited range of uses allowed in the proposed zone.

LU.1.7 Retain or enhance the aesthetic value of Fernley's natural and built environment.

If approved, the proposed zoning designation of Open Space and Parks would allow the City to develop the site with a recreation facility. Located along the Truckee Canal, the site's scenic location is particularly well-suited to open space and park uses. By preserving land for enjoyment by the community, the cited goal relating to Fernley's natural environment is met.

LU.1.8 Ensure that future growth is sensitive to the existing agricultural/farming uses.

As noted, the site is located in a rural residential portion of the City, where large-lot residential developments and agricultural uses are present. The site's present zoning designation of SF20 (Single-Family, 20,000-square foot minimum) would allow development of up to 50 dwelling units. By updating the zoning designation to Open Space and Parks, the City preserves the rural and agricultural character along this segment of Farm District Road.

2. Consistent with the surrounding land uses.

The surrounding Master Plan land use is predominantly Single Family Residential (SFR) with select parcels, including the subject site, mapped Open Space and Parks (OSP). The limited range of uses allowed in the proposed zone would be compatible with the residential uses contemplated in the SFR land use category. The OSP land use is generally considered compatible with all other land use designations as a complement to the more active uses allowed in the equivalent zones, particularly when appropriate screening or buffering from higher intensity uses is provided.

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

A public hearing will be held in accordance with Fernley Municipal Code and Nevada Revised Statutes. Legal notice was provided on August 27, 2025 via US Mail to all property owners within 300' of the site, to all manufactured home residents in manufactured home parks within 300' of the site, and to all owners, residents, and applicants for the proposed action. Legal notice was published in the Reno-Gazette Journal on August 27, 2025.

RELEVANT LAWS, STATUTES, AND REGULATIONS:

General References

Nevada Revised Statutes (NRS) Chapter 278 – Planning and Zoning
Fernley Municipal Code (FMC) Title 32 – Development Code
City of Fernley Comprehensive Master Plan

Specific References

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 32.06.130 – Open space and parks (OSP)

FINANCIAL IMPLICATIONS:

None.

ATTACHMENTS:

1. Exhibit 1 - Bill 367
2. Exhibit 2 - Vicinity Map
3. Exhibit 3 - Land Use and Zoning Maps

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

**BILL #367
CITY OF FERNLEY
ORDINANCE # _____**

A GENERAL ORDINANCE FOR A ZONING MAP AMENDMENT, ASSOCIATED WITH CASE NUMBER ZMA25002, TO CHANGE THE ZONING OF A ±23.19-ACRE PARCEL GENERALLY LOCATED AT 2305 FARM DISTRICT ROAD FROM SF20 (SINGLE FAMILY, 20,000-SQUARE FOOT MINIMUM) TO OSP (OPEN SPACE AND PARKS) (APN 021-303-16)

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

Section 1: The zoning of that certain real property totaling ±23.19 acres, more or less, situated in the City of Fernley, Nevada, and owned by City of Fernley, being more particularly described on Exhibit “A” attached hereto and depicted on “Exhibit B” attached hereto is hereby reclassified from SF20 (Single Family, 20,000-square foot minimum) to OSP (Open Space and Parks).

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 ordinance 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 #365 BEING HEREBY PROPOSED this 10th day of September 2025.

BILL #365 BEING HEREBY PASSED, APPROVED, AND ADOPTED this 15th day of October 2025, by the following vote of the Council:

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

FERNLEY CITY COUNCIL

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

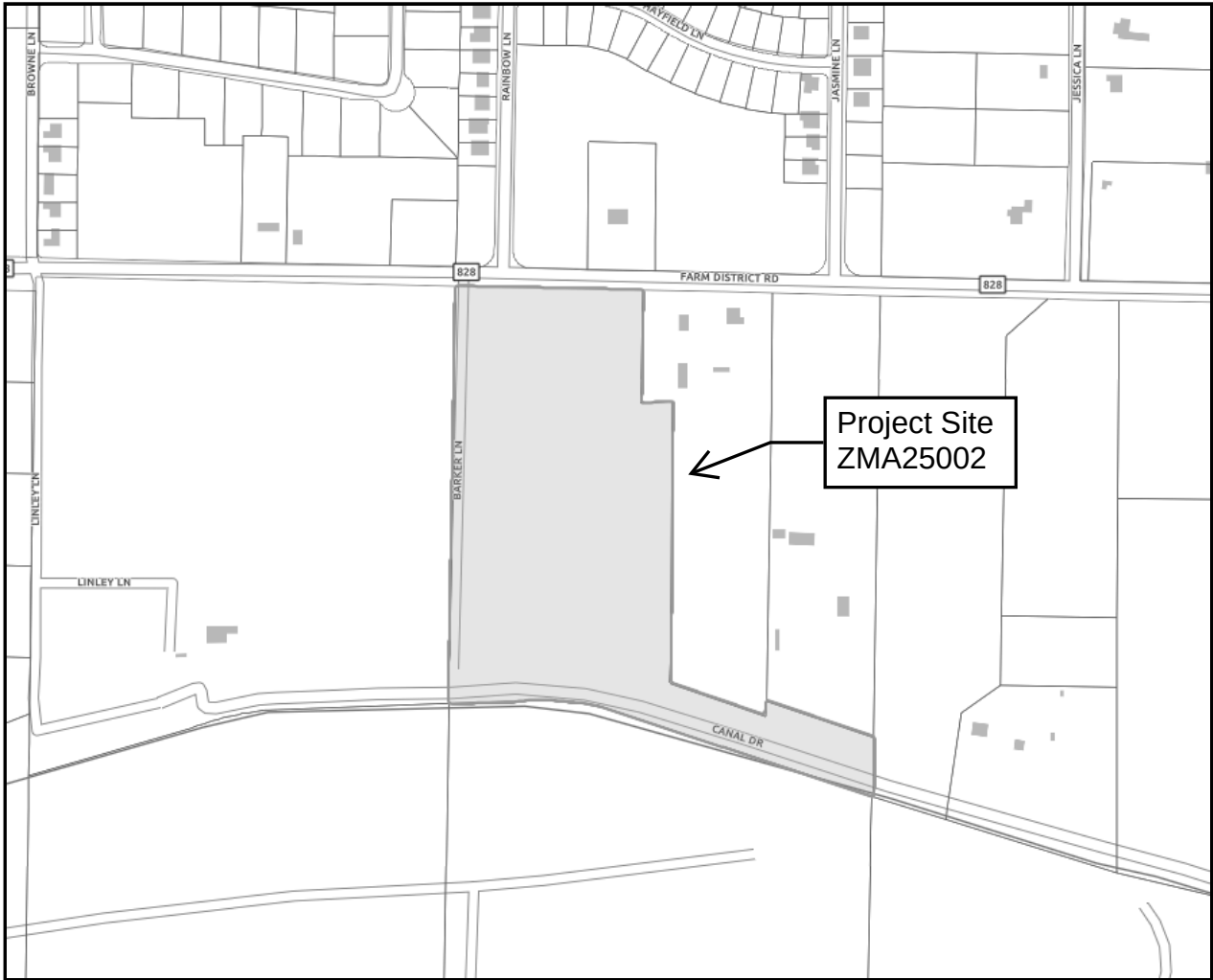
Attest By: _____ Date: _____
Kimberly Swanson, City Clerk

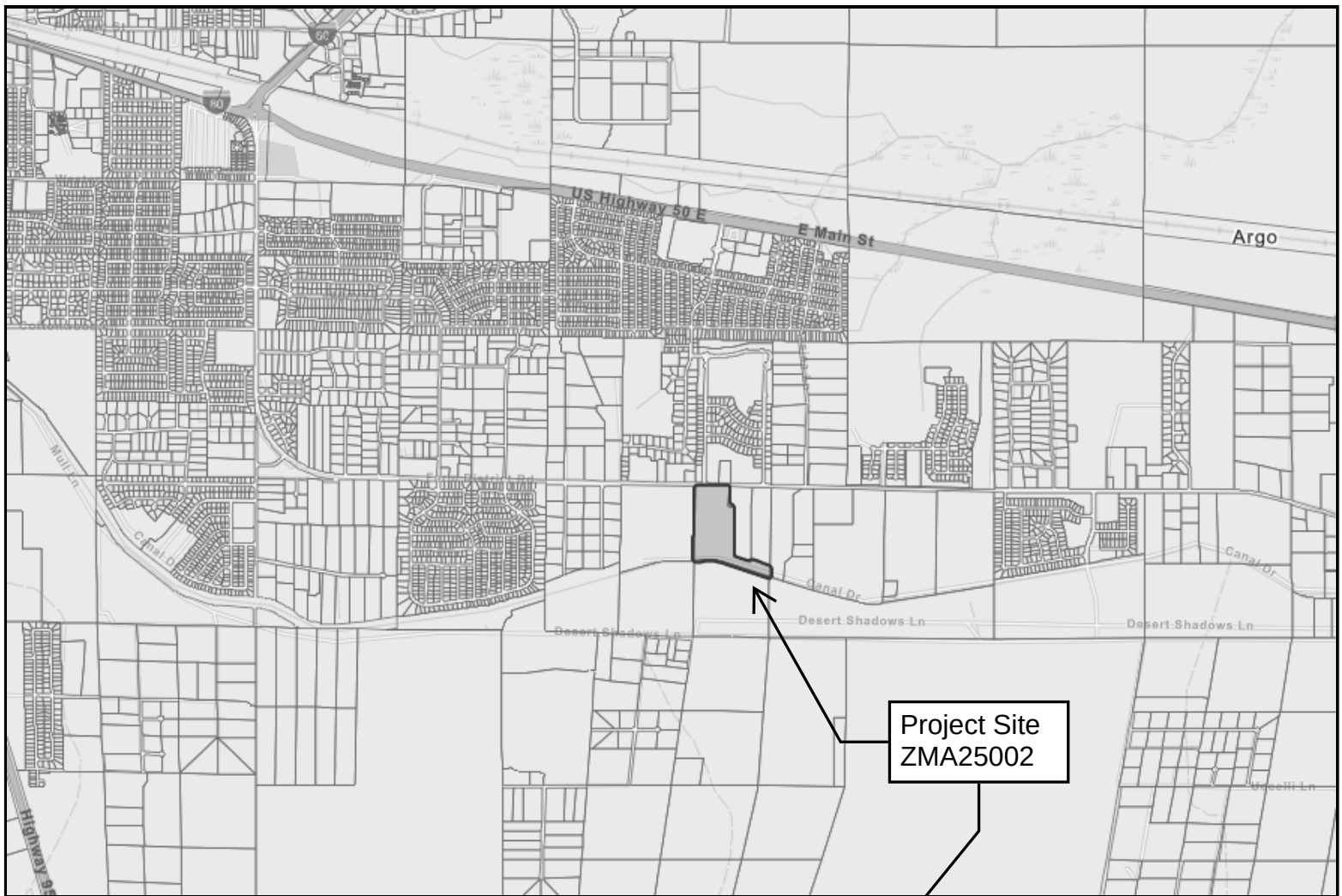
EXHIBIT "A"
Legal Description for Parcel 021-303-16

That parcel, located within Section 20, Township 20 North, Range 25 East, M.D.M., City of Fernley, Lyon County, Nevada, more particularly described as follows:

Parcel 3 as defined on the Parcel Map for Grant T. and Mark H. Naderson, File Number 110352 of the Official Records of Lyon County, Nevada.

EXHIBIT "B"







CITY OF FERNLEY

Planning Commission AGENDA REPORT

Meeting Date: September 10, 2025

REPORT TO: Fernley Planning Commission

REPORT FROM: Alisa Johansson

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 Comprehensive Master Plan Amendment request (MPA25003) from the City of Fernley to adjust the Comprehensive Master Plan land use designation for an approximately 2.29-acre parcel located at 60 Sage Street from Low Density Residential (LDR) to Commercial (C) for consistency with the existing zoning designation of C2 (General Commercial) and for consistency with past Master Plan Amendments for this site (APN 020-272-01).

AGENDA ITEM BRIEF:

An application to adjust the Comprehensive Master Plan land use designation for parcel 020-272-01 containing approximately 2.29 acres and located at 60 Sage Street from Low Density Residential to Commercial.

RECOMMENDED MOTION:

"Based on the analysis presented in the staff report, I move to approve Bill #366 and MPA25003 and recommend that the City Council certify said approval, adjusting the Comprehensive Master Plan land use designation for parcel 020-272-01 containing approximately 2.29 acres and located at 60 Sage Street from Low Density Residential to Commercial."

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

"I move to deny MPA25003 and Bill #366. I cannot recommend approval of this Master Plan Amendment because I have determined the proposed changes to be detrimental to the public's health, safety, and general welfare and I am unable to make the following required findings:

(State finding and supporting analysis—repeat for each applicable finding)."

No further alternatives are provided, however, any other motions comporting with Planning Commission parliamentary procedures are appropriate.

BACKGROUND:

Site, Vicinity, & History

Located in Southwest Fernley, the rectangular property comprises approximately 2.29 acres and is currently undeveloped. Sage Street and Highway 95A bound the site along the south and east property lines. The Truckee Canal lies north of the site, delimiting the site as well as the southwest portion of the City. The property is mapped within FEMA flood zone A and is sparsely vegetated. The site's topography is generally flat. Access is provided from Sage Street.

Once contained within the Southwest Fernley Future Development Area, the property is now subject to the newly-adopted Southwest Fernley Area Plan. The Southwest Fernley Area Plan establishes a Low Density Residential land use for this site and for adjoining sites to the west. The Commercial land use has been adopted for other neighboring sites to the immediate south across Sage Street.

Prior to the adoption of this plan, the underlying Master Plan land use was Commercial. The property owner, Marti Allison, pursued and received approval for a Master Plan Amendment in the late 2000s (MPA08-05) updating the Master Plan land use for the property from Low Density Residential to Commercial. The current request from the Planning Department seeks to rectify the adopted master plan land use for consistency with this past approval and for consistency with the site's zoning designation of C2.

Analysis: Comprehensive Master Plan Amendment

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 committee. In order to adopt an amendment to the master plan, the Planning Commission shall find that a change is justified based on the following findings.

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 amendment would implement the following goals and policies from the Comprehensive Master Plan:

LU.1.4 Ensure existing and future land use are compatible.

The proposed Master Plan Amendment seeks to enhance compatibility by aligning the site's master plan land use with adjoining commercial and industrial land uses along Highway 95A. This land use mapping provides the framework for a non-residential corridor encapsulating the highway as it travels south—a framework that is consistent with development patterns elsewhere in the City.

LU.1.4.3 Prevent future suburban or urban residential subdivision 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.

Although the adjoining residential sites to the west are already platted, the siting of a commercial use on the subject property provides an effective buffer and transition between Highway 95A and current and future residential developments on those lots.

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

While not in a truly remote portion of the City, the site is located on the perimeter of the established community core. Located across the Truckee Canal in the southwest portion of Fernley, the property is at the edge of newly master planned land, largely vacant and ripe for further growth and development. Despite this peripheral locale, the property can still be effectively and efficiently served by public services and utility infrastructure thanks to the existing facilities that abut the site. The proposed master plan amendment would allow commercial uses to expand south along Highway 95A in a manner that ensures their efficient service by utility and other public infrastructure.

LU.1.6 Create a growth pattern that assures flexible, feasible, and efficient projects.

The proposed master plan amendment supports flexible, feasible, and efficient projects on the subject site by mapping a land use that is compatible with the site's current zoning designation and more suited to the site's location. Due to the adjoining transportation corridor, non-residential uses are more likely to be successful on this corner site. Enhanced feasibility creates flexibility for both land owners and developers.

2. The master plan amendment would be compatible with surrounding land uses.

The Southwest Fernley Area Plan establishes a strong non-residential presence along Highway 95A with commercial, mixed, and industrial uses sited along the west side of the road. A major north-south transportation corridor for the Southwest Area of Fernley and for the City and region in general, this land use mapping along Highway 95A provides additional visible and accessible opportunities for businesses and services to serve the new residential areas envisioned by this Plan. By reverting the master plan land use for the subject property to Commercial, the Southwest Fernley Area Plan's non-residential edge is extended north to the Truckee Canal. Although it is clear that the Southwest Area Plan authors intended to provide a transition from the proposed non-residential land uses to the south to the established and developed residential neighborhoods to the north, staff feels the Truckee Canal provides a sufficient buffer and informal boundary between these uses, reducing the need for a more overt north-south transition in the City's land use maps.

Furthermore, siting commercial or mixed uses along transportation corridors provides, in-and-of-itself, an effective buffer between the transportation facility and surrounding residential neighborhoods. Such sites become informal neighborhood gateways, where appropriately-scaled businesses and services can be both easily served by infrastructure and conveniently utilized by residents. Thus, although the context to the immediate west of the subject property is mapped for and developed with low density residential uses, the proposed amendment would be compatible with these uses as the Commercial land use designation creates an appropriate transition or gateway site.

3. Public notice was given, and a public hearing held per the requirements of Nevada Revised Statutes and Fernley Development Code.

A public hearing will be held in accordance with Fernley Municipal Code and Nevada Revised Statutes. Legal notice was published in the Reno-Gazette Journal on August 27, 2025.

RELEVANT LAWS, STATUTES, AND REGULATIONS:

General References

Nevada Revised Statutes (NRS) Chapter 278 – Planning and Zoning
Fernley Municipal Code (FMC) Title 32 – Development Code
City of Fernley Comprehensive Master Plan

Specific References

NRS 278.030 – Creation of Planning Commission by cities and counties; number of members
NRS 278.150 – Master plan: Preparation and adoption by planning commission; adoption by governing body of city or county
NRS 278.210 – Adoption of master plan and amendments by commission: Notice, hearing; neighborhood meeting; resolution; frequency of certain amendments; attested copies; certification by electronic means

FMC 32.03.040(b) – Comprehensive master plan amendments

FINANCIAL IMPLICATIONS:

None.

ATTACHMENTS:

1. Exhibit 1 - Bill 366
2. Exhibit 2 - Vicinity Map
3. Exhibit 3 - Land Use and Zoning Maps
4. Exhibit 4 - MPA-08-05

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

BILL #366
CITY OF FERNLEY
ORDINANCE # _____

A GENERAL ORDINANCE FOR A MASTER PLAN AMENDMENT, ASSOCIATED WITH CASE NUMBER MPA25003, TO CHANGE THE MASTER PLAN LAND USE DESIGNATION OF A ±2.29-ACRE PARCEL GENERALLY LOCATED AT 60 SAGE STREET FROM LOW DENSITY RESIDENTIAL TO COMMERCIAL (APN 020-272-01).

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

Section 1: The master plan land use designation of that certain real property totaling ±2.29 acres, more or less, situated in the City of Fernley, Nevada, and owned by Tranquil Land, LLC, being more particularly described on Exhibit "A" attached hereto and depicted on "Exhibit B" attached hereto is hereby reclassified from Low Density Residential to 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 ordinance 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 #365 BEING HEREBY PROPOSED this 10th day of September 2025.

BILL #365 BEING HEREBY PASSED, APPROVED, AND ADOPTED this 15th day of October 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 Parcel 020-272-01

All that real property situate in the County of Lyon, State of Nevada, described as follows:

A portion of the North $\frac{1}{2}$ of the Northeast $\frac{1}{4}$ of Section 23, Township 20 North, Range 24 East, MD.B.&M., which is described as follows:

Commencing at the Northeast corner of said Section 23; thence South $0^{\circ}40'27''$ East 1315.60 feet to the $\frac{1}{16}^{\text{th}}$ corner; thence North $89^{\circ}46'47''$ West 892.28 feet to a point on the Westerly right of way line of U.S. Highway Alternate 95; thence along said Westerly right of way line North $16^{\circ}53'30''$ West 52.32 feet to the point of beginning; thence continuing on said line, North $16^{\circ}53'30''$ West 417.25 feet; thence South $80^{\circ}23'15''$ West 207.39 feet; thence on a curve to the right having a radius of 1211.44 feet, through a central angle of $02^{\circ}09'02''$ for an arc length of 45.47 feet; thence South $0^{\circ}13'13''$ West 356.44 feet; thence South $89^{\circ}46'47''$ East 372.06 feet to the point of beginning.

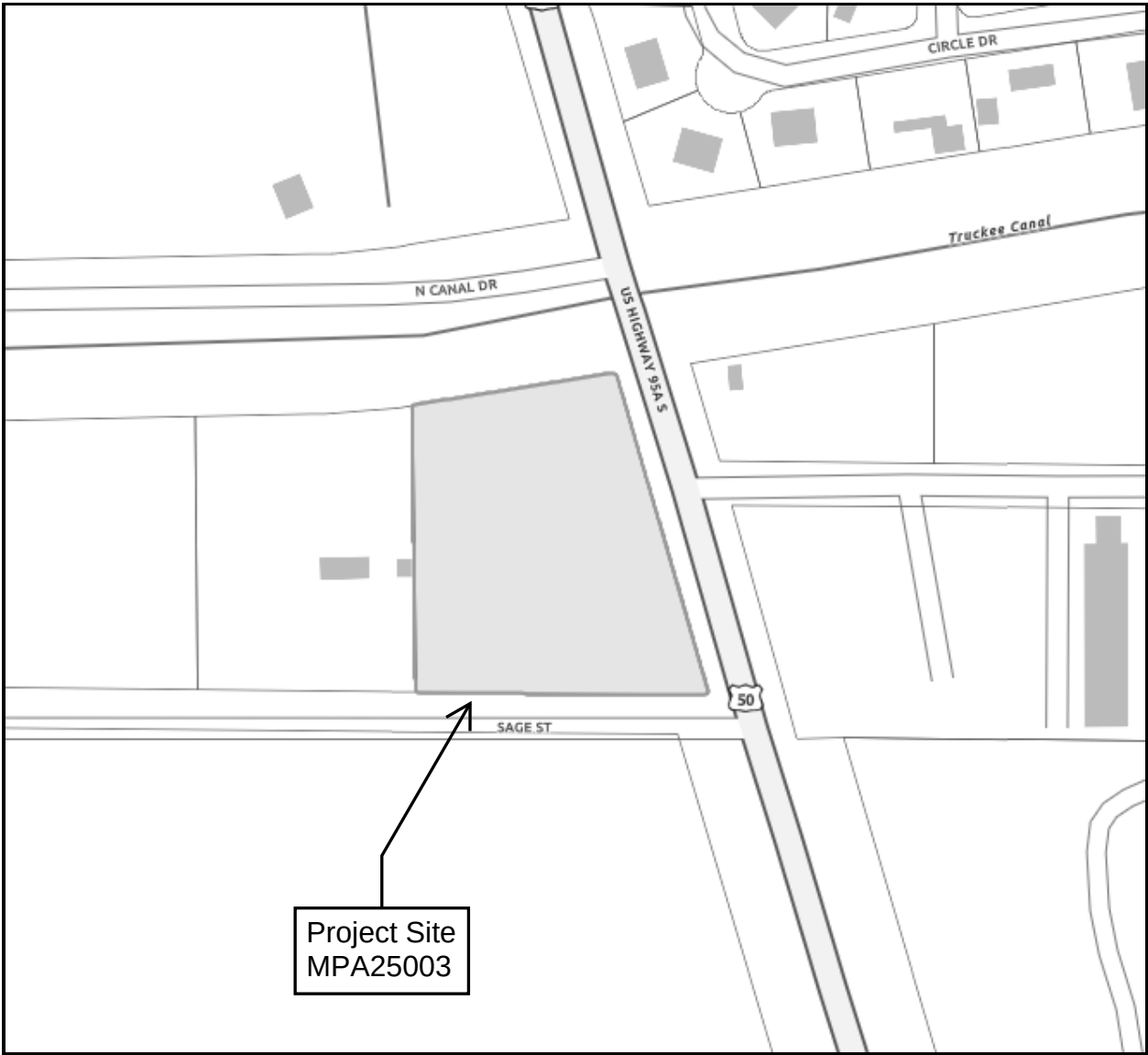
EXCEPTING THEREFROM the real property conveyed to the State of Nevada by Deed recorded August 11, 2004, as Document No. 328210, Official Records, Lyon County, Nevada.

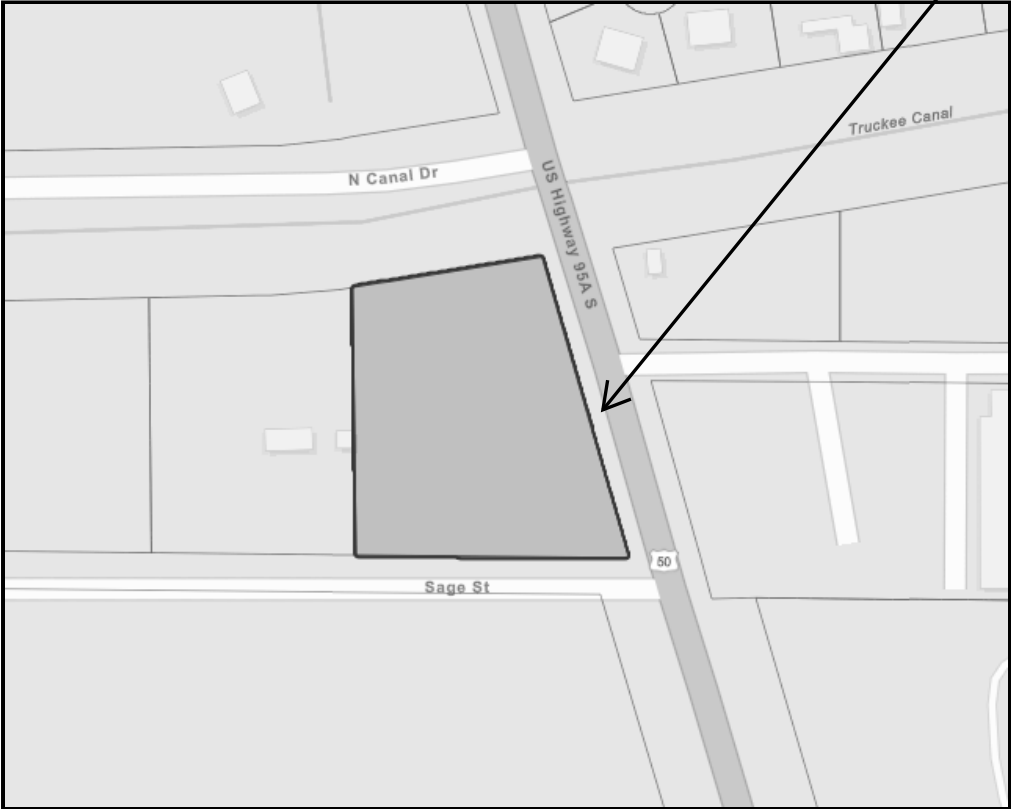
Together with a 50 foot wide road for the ingress and egress, the center line being described as follows:

Commencing at the Northwest corner of said Section 23; thence South $0^{\circ}17'17''$ West 1296.89 feet to the point of beginning; thence South $89^{\circ}46'47''$ East 4440.09 feet to a point on the Westerly right of way line of U.S. Highway Alternate 95, and the point of ending.

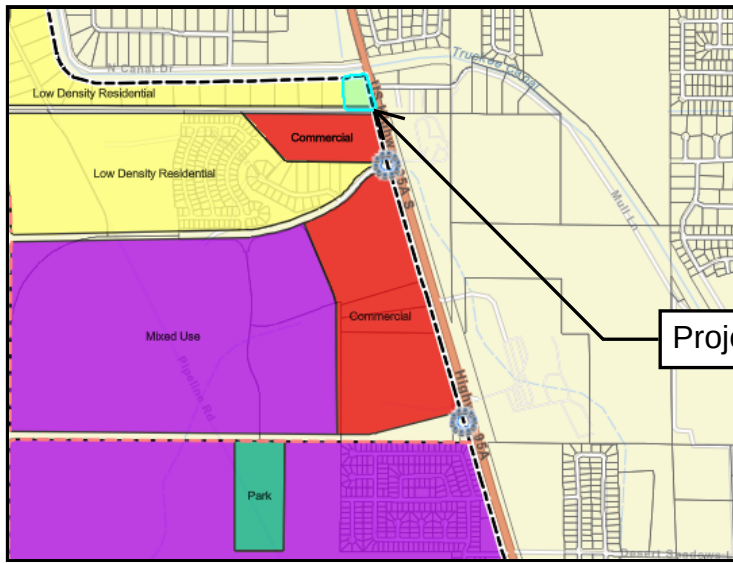
NOTE (NRS 111.312): The above metes and bounds description appeared previously in that certain Grant, Bargain, Sale Deed, recorded in the office of the County Recorder of Lyon County, Nevada on July 10, 1989, as Document No. 125672, of Official Records.

EXHIBIT "B"

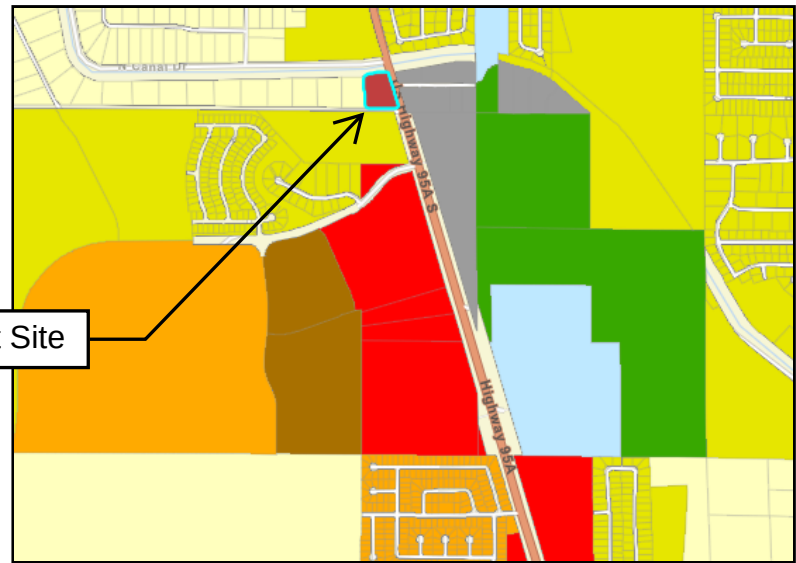




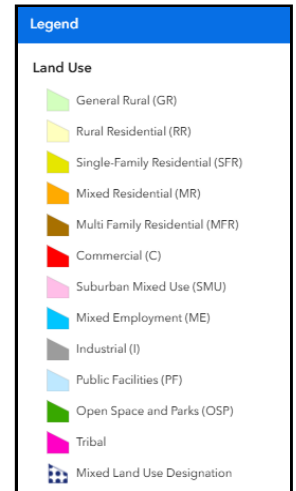
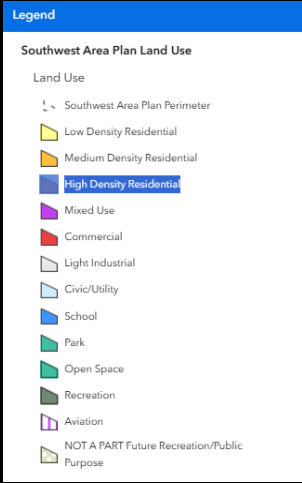
Southwest Area Plan Land Use Map (cropped)



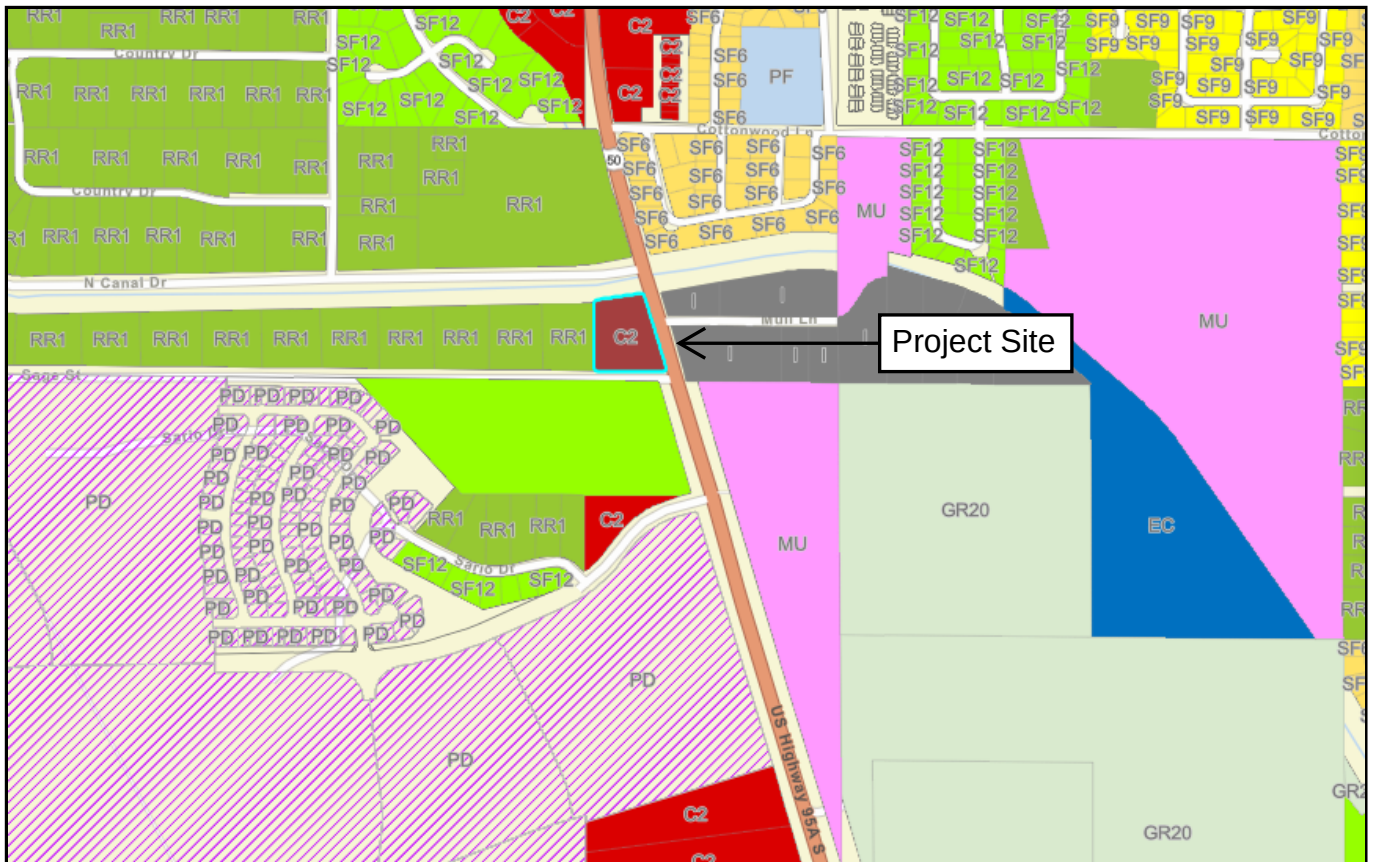
Prior Adopted Land Use Map (cropped)



Project Site



Current Zoning Map (cropped)



Project Site

MPA 08-05

Sage Street Commercial

Planning Case Information Record Archive

Cabinet:	Planning
Drawer: Administrative, Entitlements, Mapping	Entitlements
Folder: Case Type	MPA
Folder: Year	2008
Folder & File Name: Case Number	08-05
Retention	Permanent
Special Instructions:	
Project Name:	Sage Street Commercial
Planning Case Number:	N/A
Case File Number:	MPA 08-05
Parcel Number(s):	020-272-01
Parcel Address(es):	
Property Owner(s) Name(s):	
Applicant/Developer(s) Name(s):	
Submitted Date:	N/A
Approved Date:	N/A

Name and Address of Sender
 APPLICATION # MPA 08-05
 MARTIE ALISON

Check type of mail:
☐ Express
☐ Registered
☐ Insured
☐ COD
☐ Return Receipt (RR) for Merchandise
☐ Certified
☐ Intl Rec. Del.
☐ Del. Confirmation (DC)

If Registered Mail, check below:
☐ Insured
☐ Not Insured
 Affix stamp here if issued as certificate of mailing, or for additional copies of this bill.
 Postmark and Date of Receipt

Line	Article Number	Addressee Name, Street, and PO Address	Postage	Fee	Handling Charge	Actual Value (If Reg.)	Insured Value	Due Sender If COD	RR Fee	DC Fee	SC Fee	SH Fee	SD Fee	RD Fee	Remarks
1	N/A	SEE ATTACHED													SEE ATTACHED
2	"	"													"
3	"	"													"
4	"	"													"
5	"	"													"
6	"	"													"
7	"	"													"
8	"	"													"
9	"	"													"
10	"	"													"
11	"	"													"
12	"	"													"
13	"	"													"
14	"	"													"
15	"	"													"



Total Number of Pieces Listed by Sender 15
Total Number of Pieces Received at Post Office 15
 Postmaster, Per (Name of receiving employee) [Signature]

The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstruction insurance is \$50,000 per piece subject to a limit of \$500,000 per occurrence. The maximum indemnity payable on Express Mail merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See Domestic Mail Manual R900, S913, and S921 for limitations of coverage on insured and COD mail. See International Mail Manual for limitations of coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.

Name and Address of Sender **Application # MPA 08-05**
MARTI ALISON

Check type of mail:
☐ Express
☐ Registered
☐ Insured
☐ COD
☐ Return Receipt (RR) for Merchandise
☐ Certified
☐ Int'l Rec. Del.
☐ Del. Confirmation (DC)

If Registered Mail, check below:
☐ Insured
☐ Not Insured
Affix stamp here if issued as certificate of mailing, or for additional copies of this bill.
Postmark and Date of Receipt

Line	Article Number	Addressee Name, Street, and PO Address	Postage	Fee	Handling Charge	Actual Value (If Reg.)	Insured Value	Due Sender If COD	RR Fee	DC Fee	SC Fee	SH Fee	SD Fee	RD Fee	Remarks
1	N/A	SEE ATTACHED													SEE ATTACHED
2	"	"													"
3	"	"													"
4	"	"													"
5	"	"													"
6	"	"													"
7	"	"													"
8	"	"													"
9	"	"													"
10	"	"													"
11	"	"													"
12	"	"													"
13	"	"													"
14	"	"													"
15	"	"													"



U.S. POSTAGE
PAID
FARMLEY, WV
JUN 8 2008
\$10.50
00034330-08

Total Number of Pieces Listed by Sender **15**
Total Number of Pieces Received at Post Office **15**
Postmaster, Per (Name of receiving employee) **Done**

The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstruction insurance is \$50,000 per piece subject to a limit of \$500,000 per occurrence. The maximum indemnity payable on Express Mail merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See Domestic Mail Manual R900, S913, and S921 for limitations of coverage on insured and COD mail. See International Mail Manual for limitations of coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.

Line	Article Number	Addressee Name, Street and PO Box Address	
1	N/A	TRUCKEE CARSON IRRIGATION DISTRICT PO BOX 1356 FALLON, NV 89407	
2	N/A		MOFFETT, NANNETTE TR 2135 BRISTOL PL CARSON CITY, NV 89703
3	N/A	MOFFETT, NANNETTE TR 2135 BRISTOL PL CARSON CITY, NV 89703	
4	N/A		SHAWWE, IKE PO BOX 3271 RENO, NV 89505
5	N/A	MOFFETT, NANNETTE TR 2135 BRISTOL PL CARSON CITY, NV 89703	
6	N/A		TOTH, RUTH G ET AL PO BOX 131 FERNLEY, NV 89408
7	N/A	ALLEN, SHANNON L & JACQUIE C PO BOX 879 FERNLEY, NV 89408	
8	N/A		FARRIS, JOE D & DE ANNA H PO BOX 224 FERNLEY, NV 89408
9	N/A	FROSSARD, PAUL DAVID ET AL % RANDOLPH & JANICE FROSSARD 965 VILLA WAY FERNLEY, NV 89408	
10	N/A		MOFFETT, NANNETTE TR 2135 BRISTOL PL CARSON CITY, NV 89703
11	N/A	MC CLURG, WENDELL E PO BOX 1364 FERNLEY, NV 89408	
12	N/A		ELLISON, MARYANN E PO BOX 346 FERNLEY, NV 89408
13	N/A	SHAWWE, IKE PO BOX 3271 RENO, NV 89505	
14	N/A		MOFFETT, NANNETTE TR 2135 BRISTOL PL CARSON CITY, NV 89703
15	N/A	RMCC NEVADA INC 333 GALLETTI WAY RENO, NV 89512	

Remarks
020-285-04
020-281-05
020-281-06
020-282-03
020-282-04
020-282-06
020-281-01
020-281-02
020-271-06
020-281-03
020-281-07
020-281-08
020-282-02
020-282-05
020-285-03

Line	Article Number	Addressee Name, Street and PO Box Address	
1	N/A	MULL LANE, LLC 3170 HWY 50 STE 10 SO LAKE TAHOE, CA 96150	
2	N/A		FERNLEY HILLS ENTERPRISES LLC PO BOX 1259 FERNLEY, NV 89408
3	N/A	FERNLEY HILLS ENTERPRISES LLC PO BOX 1259 FERNLEY, NV 89408	
4	N/A		PIONEER WEST INVESTMENT CO LLC 601 S 15 TH ST SPARKS, NV 89431
5	N/A	HANSEN, JOY / DENISON, GLORIA 280 CRESTVIEW DRIVE SANA CLARA, CA 95050	
6	N/A		BARNEY, LANCE ALLEN ET AL 104 SARJO DR FERNLEY, NV 89408
7	N/A	WHITWORTH, TERRY L & NEIL A JR 108 SARJO DR FERNLEY, NV 89408	
8	N/A		REFUSE INC C/O WASTE MANAGEMENT PO BOX 1450 CHICAGO, IL 60690-1450
9	N/A	WELLS, ROBERT W JR & BESSIE U/C PO BOX 1836 FERNLEY, NV 89408	
10	N/A		CAREY, RONALD L & HELEN JANIS 100 SARJO DR FERNLEY, NV 89408
11	N/A	MOFFETT, NANNETTE TR 2135 BRISTOL PL CARSON CITY, NV 89703	
12	N/A		CRAIG, JAMES & MARY A TRS PO BOX 662 FERNLEY, NV 89408
13	N/A	FLODMAN, ERIC 1215 CAMILLE DR FERNLEY, NV 89408	
14	N/A		USA - BUREAU OF RECLAMATION LAHONTAN BASIN AREA OFFICE 705 NORTH PLAZA ST, ROOM 320 CARSON CITY, NV 89701
15	N/A	KENISON, RUSSELL & SUSAN TRS 9505 BUFFALO RD WINNEMUCCA, NV 89445	

Remarks
020-285-05
021-531-03
021-531-02
020-285-01
020-272-03
020-621-02
020-621-03
021-532-01
020-272-02
020-621-01
020-281-04
020-282-01
020-282-07
021-171-16
020-272-04



Community Development Department
595 Silver Lace Blvd, Fernley, NV 89408
DEVELOPMENT APPLICATION

City File Number

MPA 08-05

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. Applications will be accepted prior to 4 pm Monday thru Friday, by appointment only. (Temporary Use Permits may be submitted without appointment.) Intake appointments may be made by phone, fax, or email.

Phone: 775-784-9900 ■ Fax: 775-784-9828 Attn: Application Intake ■ Email: planning@cityoffernley.org

Please read/review the entire application, print clearly, and sign the application form.

☐ DESIGN REVIEW (DR)		☒ COMPREHENSIVE PLAN AMENDMENT (CPA)	
☐ SPECIAL USE PERMIT (SUP)		☐ ZONING MAP AMENDMENT (ZMA)	
☐ MAJOR VARIANCE (VAR)		☐ APPEAL (APL)	

RECEIVED

MAY 27 2008

Applicant's Name <u>MARTI ALLISON</u>		Signature <u>Marti Allison</u>		Primary Contact?	
Company Name:					
Address: <u>110 PLEASANT VALLEY DRIVE</u>					
City: <u>RENO</u>		State: <u>NV</u>		Zip Code: <u>89521</u>	
Phone No.: <u>(775) 850-7000</u>		Cell No.: <u>(775) 742-5430</u>		Fax No.: <u>(775) 849-1068</u>	
Email: <u>maca002@aol.com</u>					
Property Owners Name <u>SAME AS ABOVE!</u>					
Primary Contact?					
Company Name:					
Address:					
City:		State: <u>NV</u>		Zip Code:	
Phone No.:		Cell No.:		Fax No.:	
Engineer / Representative <u>TYSON JOHNSON</u>					
Primary Contact? <u>YES</u>					
Company Name: <u>BIGHORN CONSULTING</u>					
Address: <u>3675 LAKESIDE DRIVE SUITE B</u>					
City: <u>RENO</u>		State: <u>NV</u>		Zip Code: <u>89509</u>	
Phone No.: <u>(775) 827-6900</u>		Cell No.: <u>(775) 750-8035</u>		Fax No.: <u>(775) 825-6166</u>	
Email: <u>tjohnson@bighornconsulting.net</u>					
Brief Project Type/Description (Attach Detailed Project Type / Description):					
<u>SEE ATTACHED</u>					
Subdivision/Project Name And/Or Phase: <u>SAGE STREET COMMERCIAL</u>					
Project Location (Street Address): <u>60 SAGE STREET FERNLEY, NV</u>					
Assessor's Parcel Number(s): <u>020 - 272 - 01</u>					
Current Zoning: <u>C2</u>		Comprehensive Plan Land Use Designation <u>RES. LOW DENSITY</u>			
Total Project Acreage: <u>2.72 AC</u>		% Commercial: <u>100%</u>		CITY UTILITIES	
Number of Parcels Proposed: <u>1</u>		% Open Space: <u>N/A</u>		Water:	
				☐ Currently Served	
				☒ Proposed	
				Sewer	
				☐ Currently Served	
				☒ Proposed	
Previous Applications For This Site? ☐ Yes ☒ No					
List Previous Application No(s) And Names:					
1998 Flood Zone Designation: ☐ A ☐ AE ☐ AH ☐ AO ☐ A99 ☐ X ☐ D					
FEMA Map No.: <u>NOT MAPED</u> Incl. Photocopy					
Application Filing Date: <u>5/28/08</u>		Project Review Committee:		Application Fee: <u>1,100 -</u>	
Application No.: <u>MPA 08-05</u>		☒ Yes ☐ No		Notification/GIS Fees	
Application Intake By: <u>SD</u>		Appt. Date: <u>6-5-08</u>		Initial Balance Due: <u>1,100 -</u>	
Planner: <u>Bill Cadwallader</u>		Appt. Time: <u>2:00</u>		Final Balance Paid:	

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.

RECEIVED
MAY 27 2008

OWNER(S) OF RECORD: *(Include all signatures-provide extra sheets if necessary)*

Marti Allison Marti Allison
(Print Name) (Signature) (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:

Marti Allison Marti Allison
(Print Name) (Signature) (Date)

APPLICANT'S ENGINEER/REPRESENTATIVE:

Tyson Johnson
(Print Name) (Signature) (Date) MAY 21, 2008

City of Fernley Development Code, Chapter 3, Section 3.020, Determination of complete application: The Director or his designee shall determine the completeness of a zoning or land division application at the time of submittal of the application to the community development department. Acceptance of application fee shall constitute a determination that the application is complete. A determination of completeness shall not constitute a determination of compliance with substantive requirements of this development code.

Note: Some projects may not be required to submit everything on the suggested submittal, e.g., if there are no trees on your parcel(s), then you do not need to submit a Tree Survey and Conservation Plan. However, you will be required to justify why you are exempt from submitting any information on the submittal checklist in written format. Grading reports are now required with civil improvements unless otherwise determined at PRC. Project Review Committee meetings are conceptual in nature and comments expressed by staff should not be construed as being Conditions of Approval for any project application.

Submittal Requirements

**All items must be LABELED, GROUPED and in the ORDER STATED BELOW.
ACCEPTANCE OF AN APPLICATION IS NOT AN APPROVAL OR TECHNICAL REVIEW.**

NUMBER OF COPIES REQUIRED	APPLICANT:	STAFF:	DR	SUP	VAR	CPA	ZMA	APL
SUBMITTAL	# Submitted	# Received	Number of Copies Required					
1. Application Form	#	# 1	1	1	1	1	1	1
2. Full Size Site Plan Copies (Folded to 9" x 12")	#	#	5	17	12			1
3. Full Size Building Elevations (Folded to 9" x 12")	#	#	2	2	2			
4. Full Size Floor Plan (Folded to 9" x 12")	#	#	2	4	2			
5. Reduced Copies 8 1/2 x 11 (Site Plan, Building Elevations, and Floor Plan ONLY if required)	#	# 1	2	2	2	1 SITE ONLY	1 SITE ONLY	1
6. Vicinity Map	#	# 1	1	1	1	1	1	
7. Property Tax Receipt	#	# 1	1	1	1	1	1	
8. Personal Notification	#	# 1		1	1	1	1	1
9. Project Findings	#	# 1	1	1	1	1	1	1
10. Geotechnical Investigation	#	#	4	4				
11. Drainage Report	#	#	3	3				
12. Percolation Test (Septic Only)	#	#	3	3				
13. Traffic Report	#	#	4	4				
14. Sewer Impact Report	#	#	2	2				
15. Miscellaneous	#	#						
16. Title Reports a) Current b) Preliminary	#	#	1	1	1			

Note: Request for continuance by applicant-50% of original application fee. ♦After Technical Review and/or Before City Council Meeting ▲By Certified Mail

RECEIVED
MAY 27 2008



[Assessor Home](#)

[Personal Property](#)

[Sales Data](#)

[Secured Tax Inquiry](#)

[Back to Search List](#)

Parcel Detail for Parcel # 020-272-01

Location

Property Location 60 SAGE ST

Town FERNLEY

Subdivision SAGE STREET

PARCEL Lot 16 Block

Property Name

[Add'l Addresses](#)

[Assessor Maps](#)

[Legal Description](#)

Description

Total Acres 2.720 Ag Acres .000 W/R Acres .000

Improvements

Single-fam Detached 0 Non-dwell Units 0 Bdrm/Bath 0/.00

Single-fam Attached 0 MH Hookups 1 Stories .0

Multi-fam Units 0 Wells 1

Mobile Homes 1 Septic Tanks 1

Total Dwelling Units 1 Bldg Sq Ft 0

[Improvement Detail](#) Garage Sq Ft 0 Attch/Detch
Basement Sq Ft 0 Finished 0

Ownership

Assessed Owner Name ALLISON, MARTHA

Mailing Address 110 PLEASANT VALLEY DR
RENO, NV 89521-0000

Legal Owner Name ALLISON, MARTHA

Vesting Doc#, Date 341624 01/28/05 Book/Page /

Map Document #s RS350659

[Ownership History](#)

[Document History](#)

Appraisal Classifications

Current Land Use Code 230

[Code Table](#)

Zoning C2

Re-appraisal Group 4

Orig Constr Year 1980

Re-appraisal Year 2007

Weighted Year

	Valuation		
	Working Year 2009-10	Closed/Reopened Year 2008-09	Prior Year 2007-08
Land	29,750	29,750	28,840
Improvements	1,914	1,914	2,069
Personal Property	0	0	0
Ag Land	0	0	0
Exemptions	0	0	0
Net Assessed	31,664	31,664	30,909

RECEIVED
MAY 27 2008



[Treasurer Home](#)

[Assessor Data Inquiry](#)

[Back to Last Page](#)

Secured Tax Inquiry Detail for Parcel # 020-272-01

Property Location: 60 SAGE ST 23-20-24 FR N2 N2, FERNLEY
Billed to: ALLISON, MARTHA
110 PLEASANT VALLEY DR
RENO, NV 89521-0000

Roll #: 000473
Tax Year: 2008
District: 6.0
Tax Service:
Land Use Code: 230

Outstanding Taxes:

Prior Year	Tax	Penalty/Interest	Total	Amount Paid	Total Due
------------	-----	------------------	-------	-------------	-----------

Current Year	(Unsecured Taxes exist)	No Taxes Owing
08/20	114.27	114.27
10/01	112.00	112.00
01/07	112.00	112.00
03/03	112.00	112.00
Totals:	450.27	450.27

[History](#)

CITY OF FERNLEY
595 SILVER LAKE BLVD.
www.cityoffernley.org
FERNLEY, NV 89408
775-784-9800

Receipt No: 68.005553 Jun 05, 2008

Marti Allison

Community Development Dept.
Planning/Zoning Fees 1,100.00
100-328-210
Planning and Zoning Fees
MPA 08-01
Sage Street Co
Commercial
60 Sage Street

APN 20-272-01
SJD

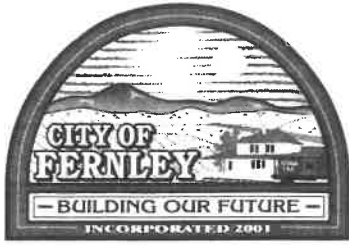
Total: 1,100.00

Check
Check No: 2009 1,100.00
Payor:
Marti Allison
Total Applied: 1,100.00

Change Tendered: .00

Duplicate Copy

06/05/08 02:32pm



COMMUNITY DEVELOPMENT DEPARTMENT

Robert "Terry" Gilbert, AICP
Director

Comprehensive Planning
Zoning
Development Review
Building and Safety
Economic Development
Code Enforcement

NOTICE OF APPLICATION AND HEARING

Description of Proposed Project: MPA 08-05 – A master plan amendment for Sage Street Commercial to change the existing Land Classification of a 2.72-acre parcel from Low Density Residential to Commercial. **The Planning Commission and/or City Council may approve, deny, or modify the request.**

Location of Subject Parcel: 60 Sage Street
APN 20-272-01

Applicant: Marti Allison

Dear Affected Property Owner:

An application for the above-referenced project is on file at the City of Fernley Community Development Department, Planning Division, at 595 Silver Lace Blvd., in Fernley, Nevada, and may be reviewed during regular office hours (8:00 a.m. to 5:00 p.m.), Monday through Friday, except legal holidays. The staff summary for this project will be available for review at the City of Fernley Community Development Department prior to the meeting.

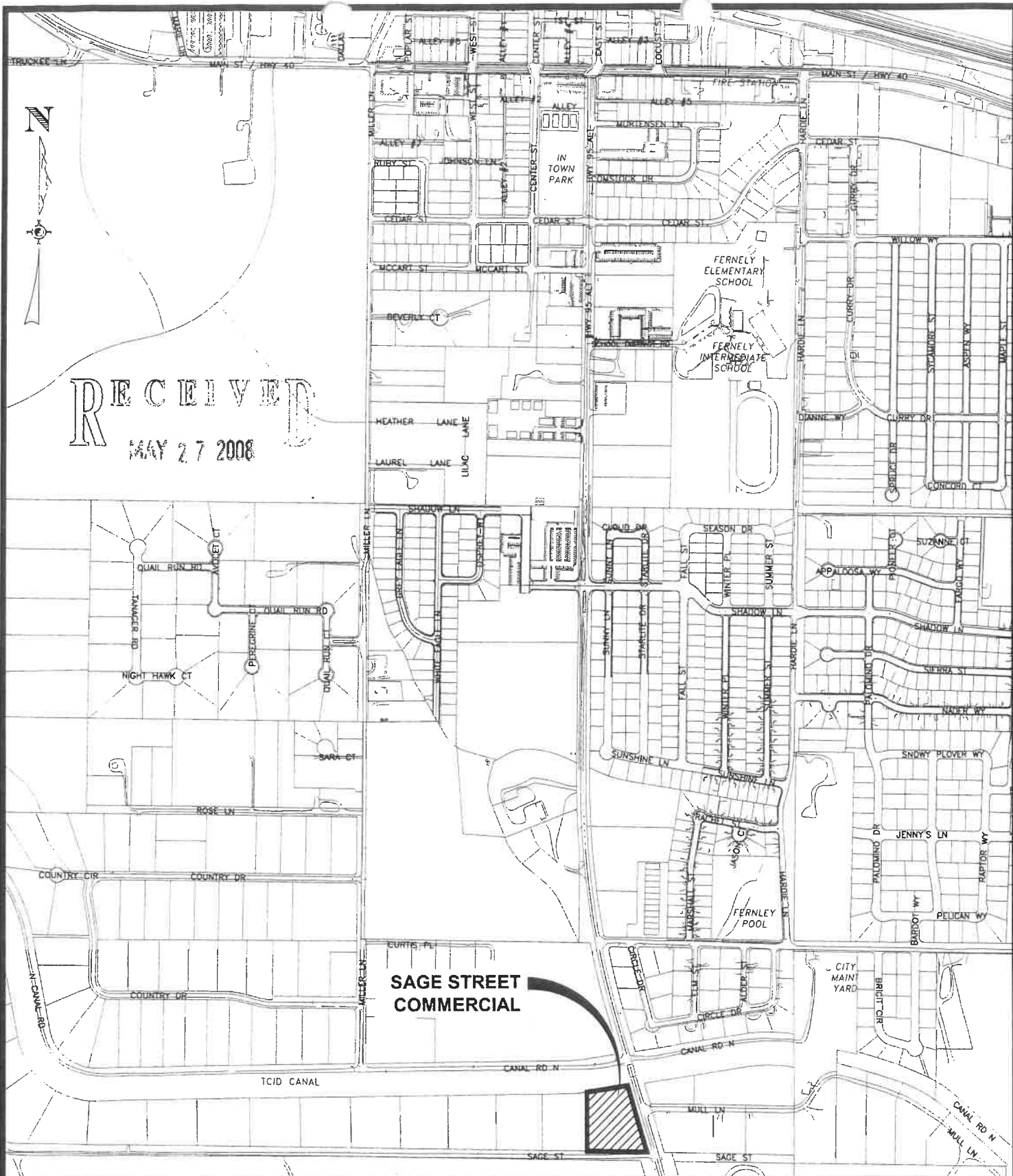
This item has been placed on the Planning Commission agenda to provide recommendation to City Council on:

Date: Wednesday – July 9, 2008
Time: The meeting commences at 6:00 p.m. This matter may be continued to another meeting without additional notice.
Location: City Council Chamber of the Fernley City Hall
595 Silver Lace Blvd., Fernley, NV

The requests have also been placed on the City Council agenda for final action on:

Date: Wednesday – August 20, 2008
Time: The meeting commences at 6:00 p.m. This matter may be continued to another meeting without additional notice.
Location: City Council Chamber of the Fernley City Hall
595 Silver Lace Blvd., Fernley, NV

Interested persons may appear at these meetings to present oral comments to the Planning Commission and City Council, or may submit written comments, in the area below, by mail to **City of Fernley Community Development Department, 595 Silver Lace Blvd., Fernley, NV 89408**. If written comments are not received prior to the date of the meeting, the Planning Commission or City Council may not consider them. For further information please contact Bill Cadwallader, Senior Planner at (775) 784-9905. **Comments (additional comments may be provided separately):**



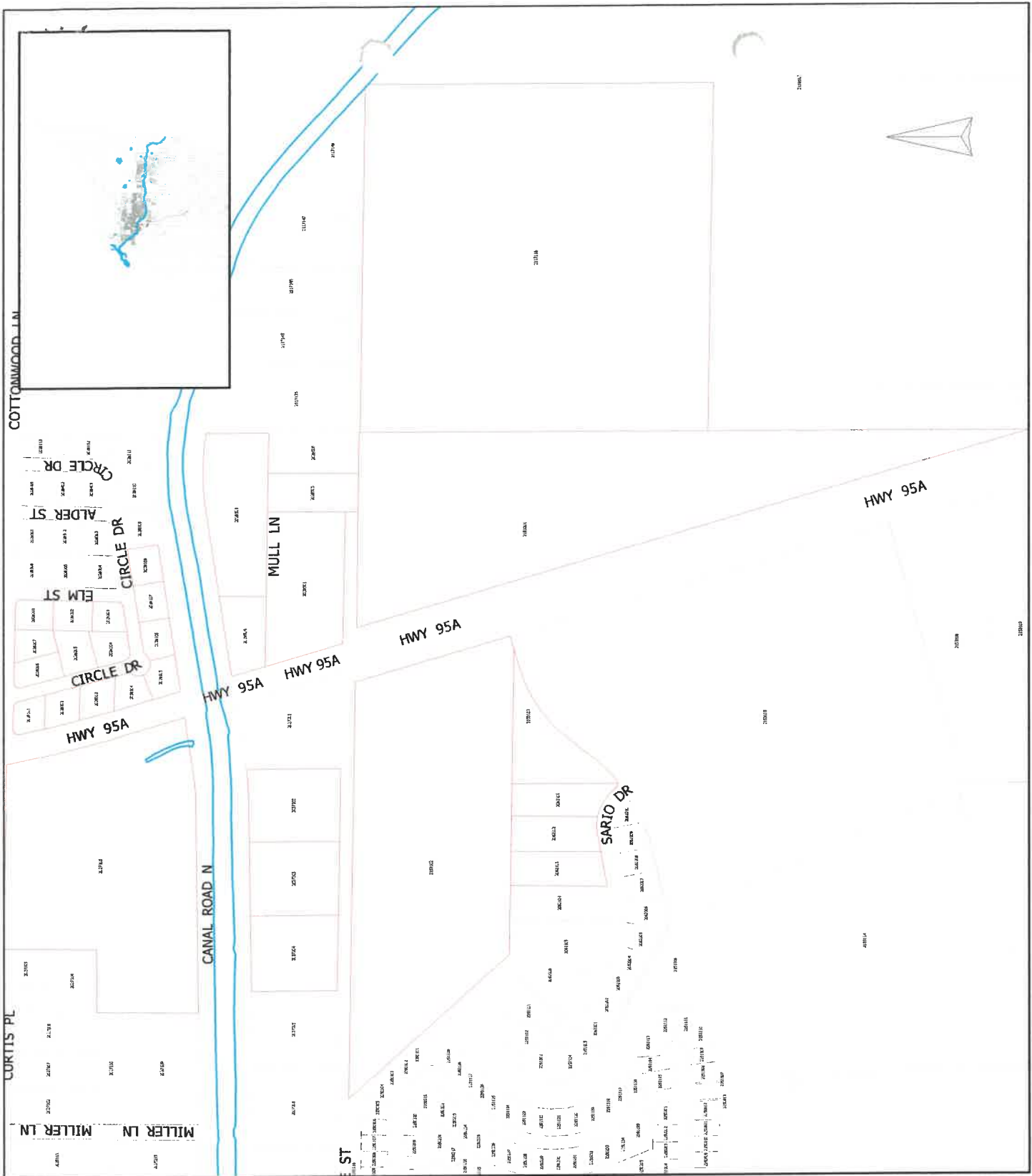
**SAGE STREET
COMMERCIAL
VICINITY MAP**

SCALE: 1"=800'
FERNLEY
NEVADA
5.19.2008

BIGHORN
CONSULTING
3675 LAKESIDE DRIVE, SUITE B, RENO, NEVADA 89509
OFFICE (775) 827-6900 FAX (775) 825-6166

SHEET
1
OF
1

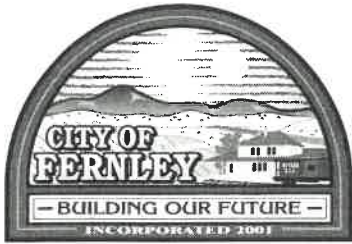
YPNO
2028505
2153103
2153102
2028501
2027203
2062102
2062103
2153201
2027202
2062101
2028104
2028201
2028207
2117116
2027204
2028504
2028105
2028106
2028203
2028204
2028206
2028101
2028102
2027106
2028103
2028107
2028108
2028202
2028205
2028503



MPA 08-05 Sage Street commercial, Notification

APN: 20-272-01 (Count=30 parcels)

State Plane - Nevada West
(NAD 83, feet)
Lon: 119°14.915' W
Lat: 39°35.275' N
Printed on: 6/2/2008



COMMUNITY DEVELOPMENT DEPARTMENT

Robert "Terry" Gilbert, AICP
Director

Current Planning
Comprehensive Planning
Development Review
Economic Development Zoning
Code Enforcement
Community Enhancement

Date: May 27, 2008

To: Interested Parties

From: City of Fernley Community Development Department

Project Review Committee (PRC) Date: June 5, 2008 - Beginning @ 8:30 am

Subject: Request for Comments

Project File No.: MPA 08-05

The following application has been submitted to the Community Development Department:

A master plan amendment for sage street Commercial
to change the existing land Classification of a 2.72-
acre parcel from Residential low Density to
Commercial.

Previous applications: None

Subject address and location: 60 Sage Street

Assessor's Parcel Number: APN(s) 20-272-01

The following information is provided for your review and comments, which will be considered during the review of the above referenced project. Your comments should be provided to the Community Development Department by **June 10, 2008 or for PRC**. Should you have any questions or need additional information, please call Bill Cadwallader, Case Planner, Community Development Department at 775-784-9905.

Comments: _____



COMMUNITY DEVELOPMENT DEPARTMENT

Robert "Terry" Gilbert, AICP
Director

Current Planning
Comprehensive Planning
Development Review
Economic Development Zoning
Code Enforcement
Community Enhancement

Date: May 27, 2008

To: Interested Parties

From: City of Fernley Community Development Department

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Subject: Request for Comments
Project File No.: MPA 08-05

The following application has been submitted to the Community Development Department:

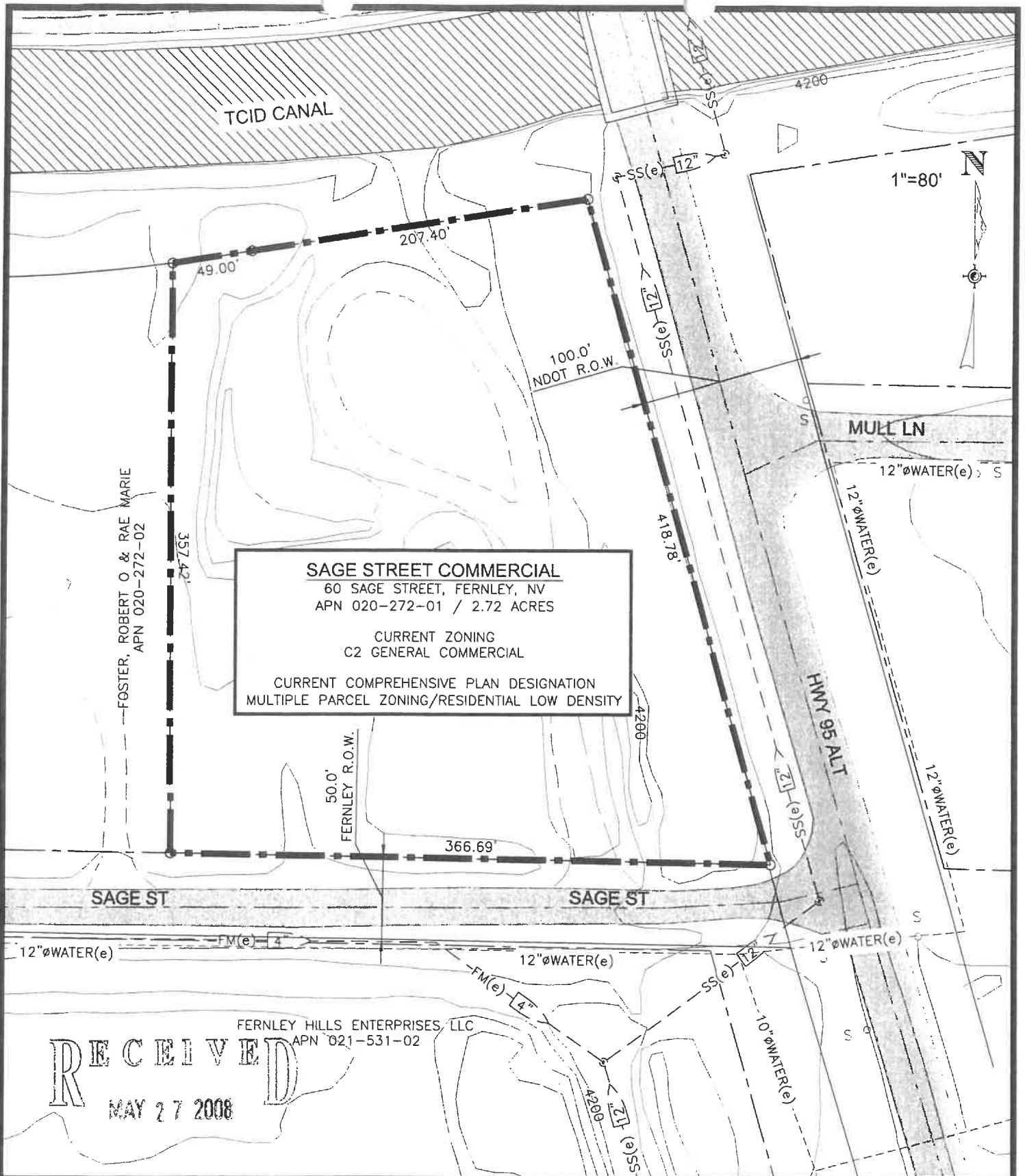
A master plan amendment for sage street Commercial
to change the existing land Classification of a 2.72-
acre parcel from Residential Low Density to
Commercial.

Previous applications: None

Subject address and location: 60 Sage Street

Assessor's Parcel Number: APN(s) 20-272-01

The following information is provided for your review and comments, which will be considered during the review of the above referenced project. Your comments should be provided to the Community Development Department by **June 10, 2008** or for PRC. Should you have any questions or need additional information, please call Bill Cadwallader, Case Planner, Community Development Department at 775-784-9905.
Comments: _____



SAGE STREET COMMERCIAL

60 SAGE STREET, FERNLEY, NV
APN 020-272-01 / 2.72 ACRES

CURRENT ZONING
C2 GENERAL COMMERCIAL

CURRENT COMPREHENSIVE PLAN DESIGNATION
MULTIPLE PARCEL ZONING/RESIDENTIAL LOW DENSITY

RECEIVED
MAY 27 2008

FERNLEY HILLS ENTERPRISES, LLC
APN 021-531-02

**SAGE STREET
COMMERCIAL
SITE PLAN**

SCALE: 1"=80'

FERNLEY

NEVADA

5.20.2008



SHEET

1

OF

1

PROJECT DISTRIBUTION LIST

Full Size Maps with Comment Memo:

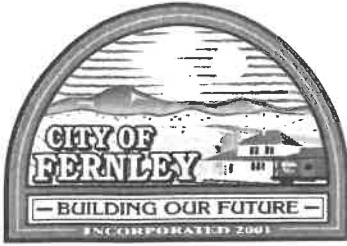
1. Public Works Dept.
2. City Engineer
3. North Lyon County Fire District
4. Building Department

Reduced Maps with Comment Memo:

5. School District
6. TCID
7. Nevada Division of Environmental Protection
8. Bureau of Health Protection Services
9. Nevada Department of Transportation
10. Bureau of Reclamation
11. Lyon County Community Development Department
12. Water Resources
13. Army Corps of Engineers
14. Lyon County Assessors
15. Lyon County School Board
16. Parks
17. Southwest Gas
18. Us
19. Public Utilities Commission of Nevada
20. Jo Moore – Disc for TPM

Applicants Appointment Schedule:

1. Community Development Director
2. Public Works Department
3. Lyon County Fire District
4. Planners & Assistants



COMMUNITY DEVELOPMENT DEPARTMENT

Lowell Patton
Acting Director

Comprehensive Planning
Zoning
Development Review
Economic Development
Code Enforcement

August 22, 2008

Marti Allison
110 Pleasant Valley Drive
Reno NV 89521

RE: Notice of Approval – MPA 08-05 (Sage Street Commercial)

MASTER PLAN AMENDMENT APPLICATION MPA 08-05 FOR SAGE STREET COMMERCIAL TO CHANGE THE EXISTING LAND CLASSIFICATION OF A 2.72-ACRE PARCEL FROM LOW DENSITY RESIDENTIAL TO COMMERCIAL; OWNER MARTI ALLISON; LOCATED AT 60 SAGE STREET; APN 20-272-01.

Dear Mr. Allison,

On August 20, 2008 the Fernley City Council reviewed and approved your master plan amendment request, changing the land use designation of the above referenced parcel.

Should you have any questions or need additional information, please feel free to call me at 784-9905.

Sincerely,

Bill Cadwallader, AICP
Senior Planner

CC: Tyson Johnson, Bighorn Consulting, 3675 Lakeside Drive, Suite B, Reno NV 89509
Lyon County Assessor's Office – Fax 463-6599
GIS
Engineering
Public Works
NLCFPD
File

TX Result Report

P 1
08/22/2008 14:16
Serial No. A00J010003706
TC: 420468

Destination	Start Time	Time	Prints	Result	Note
817754636599	08-22 14:16	00:00:19	001/001	OK	

Note TMR: Timer TX, POL: Polling, ORG: Original Size Setting, FME: Frame Erase TX,
MIX: Mixed Original TX, CALL: Manual TX, CSRC: CSRC, FWD: Forward, PC: PC Fax,
BND: Double-Sided Binding Direction, SP: Special original, FCODE: F-code, RTX: Re-TX,
RLY: Relay, MBX: Confidential, BUL: Bulletin, SIP: SIP Fax, IPADR: IP Address Fax,
I-FAX: Internet Fax

Result OK: Communication OK, S-OK: Stop Communication, PW-OFF: Power Switch OFF,
TEL: RX from TEL, NG: Other Error, Cont: Continue, No Ans: No Answer,
Refuse: Receipt Refused, Busy: Busy, M-Full: Memory Full,
LOVR: Receiving length Over, POVER: Receiving page Over, FIL: File Error,
DC: Decode Error, MDN: MDN Response Error, DSN: DSN Response Error.



COMMUNITY DEVELOPMENT DEPARTMENT

Lowell Patton
Acting Director

Comprehensive Planning
Zoning
Development Review
Economic Development
Code Enforcement

August 22, 2008

Marti Allison
110 Pleasant Valley Drive
Reno NV 89521

RE: Notice of Approval – MPA 08-05 (Sage Street Commercial)

MASTER PLAN AMENDMENT APPLICATION MPA 08-05 FOR SAGE STREET COMMERCIAL TO CHANGE THE EXISTING LAND CLASSIFICATION OF A 2.72-ACRE PARCEL FROM LOW DENSITY RESIDENTIAL TO COMMERCIAL; OWNER MARTI ALLISON; LOCATED AT 60 SAGE STREET; APN 20-272-01.

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Should you have any questions or need additional information, please feel free to call me at 784-9905.

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Bill Cadwallader, AICP
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CC: Tyson Johnson, Bighorn Consulting, 3675 Lakeside Drive, Suite B, Reno NV 89509
Lyon County Assessor's Office – Fax 463-6599
GIS
Engineering
Public Works
NLCFPD
File

Item 15 D

**MINUTES OF THE
FERNLEY PLANNING COMMISSION MEETING
July 9, 2008**

ADDRESS MASTER PLAN AMENDMENT APPLICATION MPA 08-05 FOR SAGE STREET COMMERCIAL TO CHANGE THE EXISTING LAND CLASSIFICATION OF A 2.72-ACRE PARCEL FROM LOW DENSITY RESIDENTIAL TO COMMERCIAL; OWNER MARTI ALLISON; LOCATED AT 60 SAGE STREET; APN 20-272-01. (Authorize the Planning Commission Chairman to sign a resolution in support of this request). (Provide recommendations to City Council).

Senior Planner Bill Cadwallader presented the Master Plan Amendment (MPA) application. The request was to change the existing land classification of the property which lined up with Highway 95A. Senior Planner Cadwallader explained there were access issues. The only access to the west was Sage Street. Mull Lane/Desert Shadows was the only access to the east. He said both accesses had the potential to become minor (if not major) arterials. When BC Ranch conducted their traffic study, they noted that Sage Street would have to be realigned in the future to meet NDOT requirements. The access issues did not necessarily affect the MPA, but should be addressed in the future.

Mr. Tyson Johnson, Bighorn Consulting, represented the applicant. They had been in contact with BC Ranch, their traffic consultant, and NDOT and their traffic engineers. There were no set plans yet for the intersections on Sage Street and Mull Lane. The primary access would be Sage Street until it was closed due to realignment across Highway 95A. The applicant was currently out performing market research to determine what would be appropriate for the parcel, once determined trips counts, the intersections, and the alignment could be evaluated. Commissioner McCoy asked the applicant to keep in mind the property's location within the designated flood zone. Chairman Smith called for public input. There was none; public input was closed.

Commissioner Burleson MOVED TO RECOMMEND APPROVAL OF MASTER PLAN AMENDMENT APPLICATION MPA 08-05 TO THE CITY COUNCIL, BASED ON THE FINDINGS AND ANALYSIS PROVIDED IN THE STAFF REPORT. Commissioner Maxwell seconded the motion. The motion carried as follows: Approved 7-0-0.

TX Result Report

P 1
08/15/2008 11:07
Serial No. A00J010003706
TC: 417238

Destination	Start Time	Time	Prints	Result	Note
88491068	08-15 10:43	00:23:34	020/020	OK	

Note TMR: Timer TX, POL: Polling, ORG: Original Size Setting, FME: Frame Erase TX,
MIX: Mixed Original TX, CALL: Manual TX, CSRC: CSRC, FWD: Forward, PC: PC-Fax,
BND: Double-Sided Binding Direction, SP: Special Original, FCODE: F-code, RTX: Re-TX,
RLY: Relay, MBX: Confidential, BUL: Bulletin, SIP: SIP Fax, IPADR: IP Address Fax,
I-FAX: Internet Fax

Result OK: Communication OK, S-OK: Stop Communication, PW-OFF: Power Switch OFF,
TEL: RX from TEL, NG: Other Error, Cont: Continue, No Ans: No Answer,
Refuse: Receipt Refused, Busy: Busy, M-Full: Memory Full,
LOVR: Receiving length Over, POVER: Receiving page Over, FIL: File Error,
DC: Decode Error, MDN: MDN Response Error, DSN: DSN Response Error.

CITY OF FERNLEY AGENDA REPORT

DATE PREPARED: 08/14/08 DATE OF MEETING: 08/20/08 ITEM #: 14.D.

SUBJECT: MPA 08-05 (SAGE STREET COMMERCIAL)

ADDRESS MASTER PLAN AMENDMENT APPLICATION MPA 08-05 FOR SAGE STREET COMMERCIAL TO CHANGE THE EXISTING LAND CLASSIFICATION OF A 2.72-ACRE PARCEL FROM LOW DENSITY RESIDENTIAL TO COMMERCIAL; OWNER MARTI ALLISON; LOCATED AT 60 SAGE STREET; APN 20-272-01.

RECOMMENDATIONS:

"Move to approve Master Plan Amendment application MPA 08-05, which meets the City Development Code, based on the findings and analysis provided in the staff report and authorize the Mayor to sign a resolution in support of this request."

SUMMARY:

Applicant:	Marti Allison
Owners:	Marti Allison
Site location	60 Sage Street
Current zoning:	C-2 (General Commercial)
Current Comprehensive Plan Classification:	Residential Low Density
Proposed Comprehensive Plan Classification:	Commercial
Flood Zone Designation:	ZONE A - No base flood elevations determined. (Community Panel Number 320029 0055 C rev. OCT 7, 2004).

FISCAL IMPACT:

Review of this application utilized the \$1,100 application fee paid by the applicant and the general operating budget of the Community Development Department (Receipt 60.005553).

PREPARED BY: Bill Cadwallader, AICP, Senior Planner

REVIEWED BY: Fred Turner, AICP, Acting Community Development Director

FINANCIAL REVIEW: (Initials and date)

LEGAL REVIEW: (Initials and date)

REVIEWED BY: Gary A. Bacock, City Manager

TX Result Report

P 1
08/15/2008 10:43
Serial No. A00J010003706
TC: 416662

Destination	Start Time	Time	Prints	Result	Note
08256166	08-15 10:34	00:08:22	020/020	OK	

Note TMR: Timer TX, POL: Polling, ORG: Original Size Setting, FME: Frame Erase TX,
MIX: Mixed Original TX, CALL: Manual TX, CSRC: CSRC, FWD: Forward, PC: PC-Fax,
BND: Double-Sided Binding Direction, SD: Special original, FCODE: F-code, RTX: Re-TX,
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Result OK: Communication OK, S-OK: Stop Communication, PW-OFF: Power Switch OFF,
TEL: RX from TEL, NG: Other Error, Cont: Continue, No Ans: No Answer,
Refuse: Receipt Refused, Busy: Busy, M-Full: Memory Full,
LOVR: Receiving length Over, POVER: Receiving page Over, FIL: File Error,
DC: Decode Error, MDN: MDN Response Error, DSN: DSN Response Error.

CITY OF FERNLEY AGENDA REPORT

DATE PREPARED: 08/14/08 DATE OF MEETING: 08/20/08 ITEM #: 14.D.

SUBJECT: MPA 08-05 (SAGE STREET COMMERCIAL)

ADDRESS MASTER PLAN AMENDMENT APPLICATION MPA 08-05 FOR SAGE STREET COMMERCIAL TO CHANGE THE EXISTING LAND CLASSIFICATION OF A 2.72-ACRE PARCEL FROM LOW DENSITY RESIDENTIAL TO COMMERCIAL; OWNER MARTI ALLISON; LOCATED AT 60 SAGE STREET; APN 20-272-01.

RECOMMENDATIONS:

"Move to approve Master Plan Amendment application MPA 08-05, which meets the City Development Code, based on the findings and analysis provided in the staff report and authorize the Mayor to sign a resolution in support of this request."

SUMMARY:

Applicant:	Marti Allison
Owners:	Marti Allison
Site location	60 Sage Street
Current zoning:	C-2 (General Commercial)
Current Comprehensive Plan Classification:	Residential Low Density
Proposed Comprehensive Plan Classification:	Commercial
Flood Zone Designation:	ZONE A - No base flood elevations determined. (Community Panel Number 320029 0055 C rev. OCT 7, 2004).

FISCAL IMPACT:

Review of this application utilized the \$1,100 application fee paid by the applicant and the general operating budget of the Community Development Department (Receipt 60.005553).

PREPARED BY: Bill Cadwallader, AICP, Senior Planner *CE*
REVIEWED BY: Fred Turnier, AICP, Acting Community Development Director *FT*
FINANCIAL REVIEW: (initials and date) *BP*
LEGAL REVIEW: (initials and date) *AM*
REVIEWED BY: Gary A. Bacock, City Manager *AB*

**CITY OF FERNLEY
AGENDA REPORT**

DATE PREPARED: 08/14/08 **DATE OF MEETING:** 08/20/08 **ITEM #:** 14.D.

SUBJECT: MPA 08-05 (SAGE STREET COMMERCIAL)

ADDRESS MASTER PLAN AMENDMENT APPLICATION MPA 08-05 FOR SAGE STREET COMMERCIAL TO CHANGE THE EXISTING LAND CLASSIFICATION OF A 2.72-ACRE PARCEL FROM LOW DENSITY RESIDENTIAL TO COMMERCIAL; OWNER MARTI ALLISON; LOCATED AT 60 SAGE STREET; APN 20-272-01.

RECOMMENDATIONS:

"Move to approve Master Plan Amendment application MPA 08-05, which meets the City Development Code, based on the findings and analysis provided in the staff report and authorize the Mayor to sign a resolution in support of this request."

SUMMARY:

Applicant:	Marti Allison
Owners:	Marti Allison
Site location	60 Sage Street
Current zoning:	C-2 (General Commercial)
Current Comprehensive Plan Classification:	Residential Low Density
Proposed Comprehensive Plan Classification:	Commercial
Flood Zone Designation:	ZONE A - No base flood elevations determined. (Community Panel Number 320029 0055 C rev. OCT 7, 2004).

FISCAL IMPACT:

Review of this application utilized the \$1,100 application fee paid by the applicant and the general operating budget of the Community Development Department (Receipt 60.005553).

PREPARED BY: Bill Cadwallader, AICP, Senior Planner GC

REVIEWED BY: Fred Turnier, AICP, Acting Community Development Director FT

FINANCIAL REVIEW: (initials and date) BP

LEGAL REVIEW: (initials and date) JM

REVIEWED BY: Gary A. Bacock, City Manager AB

BACKGROUND:

There are no previous applications associated with this parcel. The Planning Commission, at its July 9th, 2008 meeting, recommended approval of this request by a vote of 7-0-0.

**CITY OF FERNLEY
PLANNING COMMISSION
AGENDA REPORT**

DATE PREPARED: 07/02/08 DATE OF MEETING: 07/09/08

ITEM#:

46

SUBJECT: MPA 08-05 (SAGE STREET COMMERCIAL)

ADDRESS MASTER PLAN AMENDMENT APPLICATION MPA 08-05 FOR SAGE STREET COMMERCIAL TO CHANGE THE EXISTING LAND CLASSIFICATION OF A 2.72-ACRE PARCEL FROM LOW DENSITY RESIDENTIAL TO COMMERCIAL; OWNER MARTI ALLISON; LOCATED AT 60 SAGE STREET; APN 20-272-01. (Provide recommendations to City Council).

RECOMMENDATIONS:

“Move to recommend approval of Master Plan Amendment application MPA 08-05 to the City Council, based on the findings and analysis provided in the staff report”.

FISCAL IMPACT:

Review of this application utilized the \$1,100 application fee paid by the applicant and the general operating budget of the Community Development Department.

SUMMARY/BACKGROUND:

Applicant:	Marti Allison
Owners:	Marti Allison
Site location	60 Sage Street
Current zoning:	C-2 (General Commercial)
Current Comprehensive Plan Classification:	Residential Low Density
Proposed Comprehensive Plan Classification:	Commercial
Flood Zone Designation:	<i>ZONE A - No base flood elevations determined. (Community Panel Number 320029 0055 C rev. OCT 7, 2004).</i>

BACKGROUND:

There are no previous application associated with this parcel.

APPLICABLE CITY CODE REFERENCE:

PREPARED BY: Bill Cadwallader, A.I.C.P., Senior Planner 

REVIEWED BY: Fred Turnier, AICP, Acting Community Development Director 

REVIEWED BY: Gary A. Bacock, City Manager 

Chapter 23, Amendments to Master Plan

Comprehensive Plan map amendments must be reviewed by both the Planning Commission and the City Council. The Planning Commission's actions are forwarded to the City Council as recommendations. For Comprehensive Plan amendments, a recommendation for approval requires a super majority vote (five in favor) of the Planning Commission. There is a zoning conformance issue with this application in that the Zoning is C-2 (General Commercial) and the Comprehensive Plan designation is Residential Low Density. Approval of this request will bring the zoning into conformance with the Master Plan.

Note: All references to the phrase "Master Plan" are equivalent to "Comprehensive Plan". All references to the phrase "Comprehensive Plan" are equivalent to "Master Plan".

STAFF ANALYSIS AND COMMENTS:

Surrounding Uses

The parcel is just South of the Truckee Carson Irrigation District (TCID) canal with Industrial uses across US 95A to the East. Residential Medium density uses are to the South. The solid waster transfer station is on the opposite corner from this parcel.

Traffic and Roadway Improvements

The BC Ranch traffic study states the following:

At phase 1, project access will be provided by Sario Drive on U.S. Highway 95A. It is anticipated that the Sage Drive access on U.S. Highway 95A north of Sario Drive will be closed due to driveway spacing issues with Mull Lane.

Since there is the possibility of Sage Drive being closed to traffic, the applicant is advised to work with the Nevada Department of Transportation (NDOT) to resolve any issues.

Water Service

The project will be served by City water.

Sewer Service

The project will be served by City sewer.

Bureau of Reclamation comments

The north boundary line of this proposed commercial site is adjacent to Reclamation's right-of-way for the Canal. The status of drainage on this proposed commercial area is of concern to Reclamation due to its proximity to the Canal. Please have the applicant contact Reclamation and our operation and maintenance contractor, the Truckee-

Carson Irrigation District, if any Newlands Project features or easements may be affected or if any questions should arise regarding the Canal itself.

FINDINGS FOR MASTER PLAN AMENDMENT:

Pursuant to Development Code Section 23.030, in order to approve a Comprehensive Plan Amendment, the findings listed below must be made in the affirmative.

A. That the proposed amendment is consistent with the goals and policies of the adopted master plan;

Staff Response: This proposal is consistent with the Comprehensive Plan Goals and Strategies:

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

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

B. That the proposed land use can be served by minimum public facilities required by this development code;

Staff Response: The proposal meets all the service standards set forth in the Comprehensive Plan:

1. Fire, EMS 6 minute response time; facilities beyond the six minute response time must include supplemental fire suppression measures.
2. Police 10-20 minute response time
3. Water The requirement will vary by individual development; for planning purposes a figure of 4,000 gallons/day/acre shall be used; connection to community water system required
3. Sewer Requirement will vary by individual development type; for planning purposes a figure of 1,000 gals/day/acre will be used; connection to community sewage disposal system required.

C. That the proposed amendment will provide for land uses compatible with the existing and master planned adjacent land uses, and will not adversely impact the public health, safety or welfare.

Staff Response: US 95A is a commercial corridor with parcels master planned Commercial from below the airport to the interstate. This request is consistent with this pattern fo development.

- D. That the proposed amendment addresses changed conditions that have occurred since the plan was adopted by the City and the requested amendment represents a more desirable use of the land.*

Staff Response: There are access issues with NDOT and potential drainage issues with the Bureau of Reclamation. It is appropriate that these issues be worked out before the applicant approaches the City for a Design Review.

- E. That the proposed amendment will promote the desired pattern for the orderly physical growth of the City based on efficient extension of infrastructure and services, and compact development pattern.*

Staff Response: This request will not impact the orderly extension of public infrastructure.

ALTERNATIVES/OPTIONS

The Planning Commission's options for reviewing this proposal are as follows:

1. Recommend denial of Master Plan Amendment application 08-05 to the City Council, based on a factual finding of denial:

Advantages:

The Council could deny the application due to the NDOT access issues that would impact Findings B and C.

Disadvantages:

Staff is of the opinion that these issues should be resolved before Design Review and they should not impact the Master Plan Approval.

2. Recommend approval of Master Plan Amendment application 06-06, as requested by the applicant:

Advantages:

The applicant would be able to move forward and have the time to address all the issues with developing the parcel.

Disadvantages:

There are still issues with development of this parcel that need to be addressed.

3. Continue this request with the applicant's consent to address other items that may arise as a result of the public hearing that need to be addressed prior to granting approval or denial.

Advantages:

If other issues are brought up in the meeting that were not addressed by staff or the applicant and the Planning Commission would like further review or professional consideration of the project, with the concurrence of the applicant, the Commission should continue the item to a time certain in order for the issue to be explored and possibly resolved. This may result in a more informed decision by the Commission.

Disadvantages:

Unless the applicant agrees to a continuance, the Commission is required by City Code to render a recommendation on this application at this meeting.

Note: All references to the phrase "Master Plan" are equivalent to "Comprehensive Plan". All references to the phrase "Comprehensive Plan" are equivalent to "Master Plan".

Attachments:

- 1 – Vicinity Map
- 2 – Project Findings

TCID CANAL

1"=80'



SAGE STREET COMMERCIAL

60 SAGE STREET, FERNLEY, NV
APN 020-272-01 / 2.72 ACRES

CURRENT ZONING
C2 GENERAL COMMERCIAL

CURRENT COMPREHENSIVE PLAN DESIGNATION
MULTIPLE PARCEL ZONING/RESIDENTIAL LOW DENSITY

FOSTER, ROBERT O & RAE MARIE
APN 020-272-02

100.0'
NDOT R.O.W.

MULL LN

12"ØWATER(e) S

12"ØWATER(e)

HNW 96 ALT

12"ØWATER(e)

50.0'
FERNLEY R.O.W.

366.69'

SAGE ST

SAGE ST

12"ØWATER(e)

FM(e) 4"

12"ØWATER(e)

12"ØWATER(e)

FERNLEY HILLS ENTERPRISES LLC
APN 021-531-02

RECEIVED
MAY 27 2008

**SAGE STREET
COMMERCIAL
SITE PLAN**

SCALE: 1"=80'

FERNLEY

NEVADA

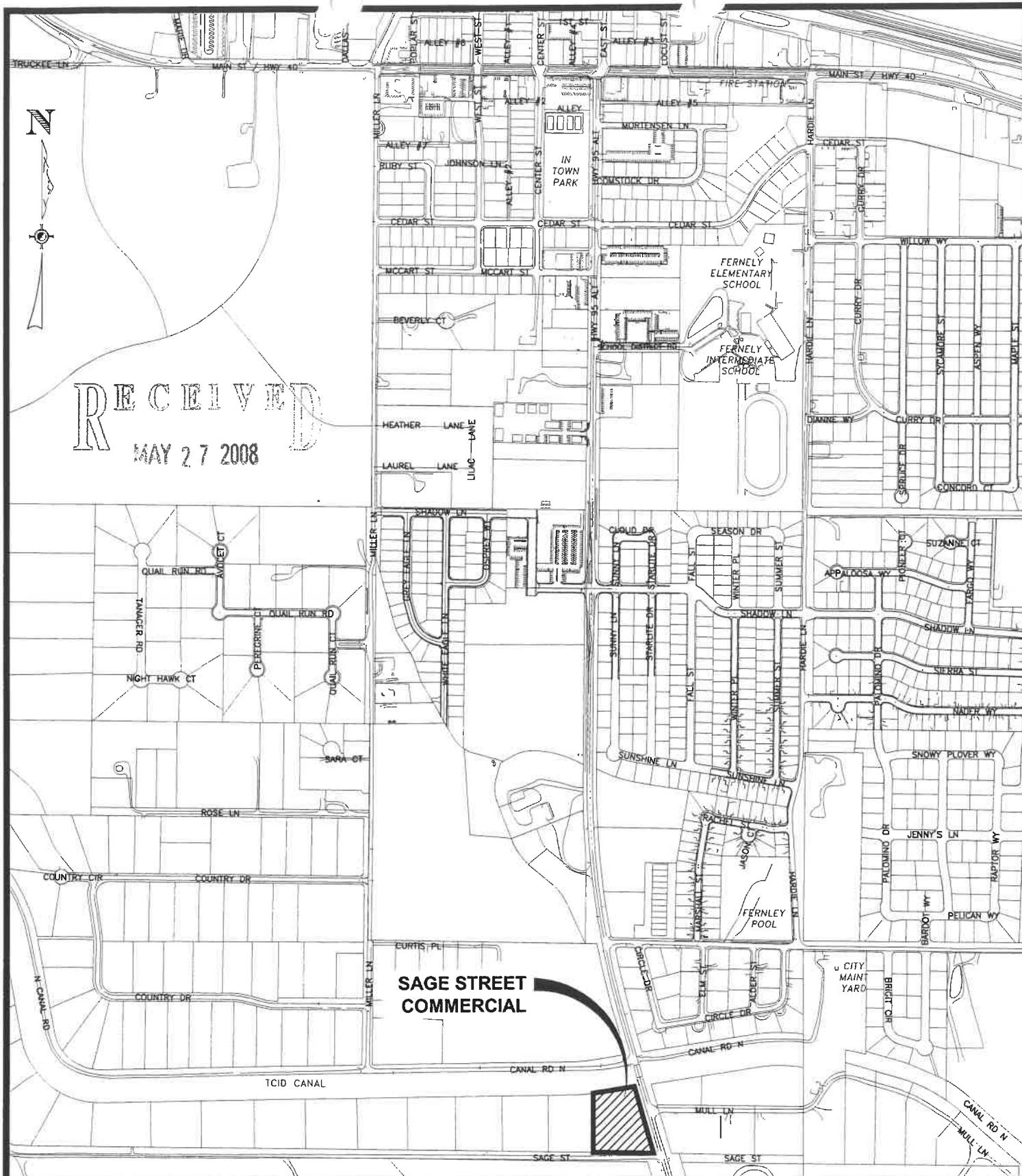
5.20.2008



3675 LAKESIDE DRIVE, SUITE B, RENO, NEVADA 89509
OFFICE (775) 827-6900 FAX (775) 825-6166

SHEET
1

OF
1



RECEIVED
MAY 27 2008

**SAGE STREET
COMMERCIAL**

**SAGE STREET
COMMERCIAL
VICINITY MAP**

SCALE: 1"=800'
FERNLEY
NEVADA
5.19.2008



3675 LAKESIDE DRIVE, SUITE B, RENO, NEVADA 89509
OFFICE (775) 827-6900 FAX (775) 825-6166

**SHEET
1**

**OF
1**



3675 Lakeside Drive, Suite B Reno, NV 89509 (775) 827-6900 Office (775) 825-6166 Fax

May 21, 2008

**RE: COMPREHENSIVE PLAN AMENDMENT DESCRIPTION FOR:
SAGE STREET COMMERCIAL**

RECEIVED
MAY 27 2008

To Whom It May Concern:

The property located at 60 Sage Street, Fernley, Nevada 89408, further defined as APN 020-272-01, is currently zoned *C2, General Commercial*. Currently the Comprehensive Plan has the property defined as *C2, Multiple Parcel Zoning*, shaded as *Residential Low Density*.

The applicant/property owner wishes to amend the Comprehensive Plan to reflect the land use designation of *Commercial*.

Currently the applicant/property owner is not proposing to develop the property.

If the Comprehensive Plan Amendment is approved, the applicant/property owner will retain the right to propose future development that will conform to *C2, General Commercial* zoning and the City of Fernley Development Code.

Sincerely,
Bighorn Consulting

A handwritten signature in black ink, appearing to read 'Tyson Johnson', is written over a horizontal line.

Tyson Johnson
Applicant Representative



3675 Lakeside Drive, Suite B Reno, NV 89509 (775) 827-6900 Office (775) 825-6166 Fax

May 28, 2008

City of Fernley Community Development Department
595 Silver Lace Blvd.
Fernley, NV 89408

RECEIVED
MAY 27 2008

**RE: COMPREHENSIVE PLAN AMENDMENT FINDINGS FOR:
SAGE STREET COMMERCIAL**

To Whom It May Concern:

Bighorn Consulting, on behalf of the applicant/property owner, appreciates your consideration of the enclosed Comprehensive Plan Amendment Project Findings for Sage Street Commercial. The property consists of one (1) parcel located adjacent to Highway 95A at Sage Street in the City of Fernley. The approval of the Comprehensive Plan Amendment application will allow for future commercial development on the subject parcel in conformance with the City of Fernley Development Code and Criteria.

PROJECT FINDINGS:

The Planning Commission and the City Council shall, in approving amendment to the master plan use map or text, make the following findings:

A. That the proposed amendment is consistent with the goals and policies of the adopted master plan;

The property located at 60 Sage Street, Fernley, Nevada 89408, further defined as APN 020-272-01, is currently zoned C2, *General Commercial*. The current Comprehensive Plan reflects the property's land use designation as C2, *Multiple Parcel Zoning*, shaded as *Residential Low Density*. The proposed amendment, if approved, will reflect a Comprehensive Plan designation of *Commercial* land use.

Currently, the applicant is not proposing a commercial development for the subject parcel. Market research, development feasibility, and public input are still being gathered to ensure that when a future development plan is created, it will be as beneficial to the community as economically possible.

The applicant feels as though the amendment request meets the goals and policies as outlined in the City of Fernley Comprehensive Plan Land Use Element, *Goals and Action Strategies*.

B. That the proposed land use can be served by minimum public facilities required by this development code;

As shown on the site plan, the subject property is bordered by Sage Street to the south and Highway 95A to the east. Currently, Sage Street is a 50 foot wide City of Fernley right-of-way, and has both public potable water and sewer located within the right-of-way. Per discussions with City of Fernley Engineering Department, the subject property can be accessed by Sage Street and the existing public utilities.

C. That the proposed amendment will provide for land uses compatible with the existing and master planned adjacent land uses, and will not adversely impact the public health, safety or welfare.

The majority of the Highway 95A corridor is designated in the master plan and currently being developed as General Commercial with some parcels remaining as industrial and residential. Immediate adjacent property land use designations are as follows:

West	-	Residential
East	-	Commercial / (Highway 95A)
North	-	Residential / (TCID Canal)
South	-	Residential

Given the size, current development code regulations and physical limitations of the subject property, a commercial designation would allow for, but is not limited to, a typical neighborhood commercial development such as a convenient store / gas station, bank, general retail or restaurant. As mentioned above, the applicant is still in the process of performing market research and gathering public input to determine the most viable commercial occupancy use.

When a commercial development plan is proposed on the subject parcel, general engineering practices and standards will require that public safety and health standards are met and accomplished with standard design review procedures with the City of Fernley and the State of Nevada.

D. That the proposed amendment addresses changed conditions that have occurred since the plan was adopted by the City and the requested amendment represents a more desirable use of land.

As mentioned above, the current zoning on the subject property is *C2 General Commercial* and the existing Comprehensive Plan designation is *C2, Multiple Parcel Zoning*, shaded as *Residential Low Density*. Given that the property is bordered by a major highway to the east, the applicant believes that the residential designation and use is not desirable for a homeowner. Any proposed commercial development plan will be required to make improvements to Sage Street and the intersection of Sage Street and Highway 95A. This will create a more safe and desirable travel way for existing residents west of the subject property. A residential land use of the subject property would not require such improvements to Sage Street.

- E. That the proposed amendment will promote the desired pattern for the orderly physical growth of the City based on efficient extension of infrastructure and services, and compact development pattern.**

As mentioned above, the majority of the Highway 95A corridor is being developed as general commercial, thus the proposed amendment is in conformance with the existing growth pattern as being commercial land use adjacent to Highway 95A. A future commercial development will require improvements to the property frontage such as non-potable water main infrastructure, A.D.A. compliant curb & gutter, sidewalks and the widening of Sage Street.

SUMMARY OF PUBLIC UTILITIES, FACILITIES, AND EMERGENCY SERVICES

WATER AVAILABILITY:

The City of Fernley will be the water purveyor for the subject parcel. There is adequate availability for future potable water main connections, which will be made on the existing water main located in Sage Street. The City of Fernley Engineering Department will determine the connection requirements and assist in the modeling of the existing potable water system.

ELECTRICAL AVAILABILITY:

Sierra Pacific Power Company will provide the electric service for the subject parcel. A power source already exists in the form of overhead poles or underground facilities along Sage Street. There is adequate availability for future electric service and connections will be made at this location.

TELEPHONE AVAILABILITY:

AT&T will provide the telephone service for the subject parcel. A telephone source already exists in the form of overhead poles or underground facilities along Sage Street. There is adequate availability for future telephone service and connections will be made at this location.

NATURAL GAS AVAILABILITY:

Southwest Gas will provide the natural gas service for the subject parcel. Future gas main connections will be made with existing gas mains located in Sage Street. There is adequate availability for future gas service and connections will be made at this location.

CABLE AVAILABILITY:

Charter Communications will provide the cable service for the subject parcel. A cable source already exists in the form of overhead poles or underground facilities along Sage Street. There is adequate availability for future cable service and connections will be made at this location.

SEWAGE DISPOSAL AVAILABILITY:

The City of Fernley will provide sanitary sewer service for the subject parcel. There is adequate availability for future sanitary sewer connections, which will be made on the existing sanitary sewer main located in Sage Street. The City of Fernley Engineering Department will determine the connection requirements and assist in the modeling of the existing sanitary sewer system.

STORM DRAINAGE:

The site topography on the subject parcel is very flat with the majority of the site located just below or at-grade with the adjacent Sage Street, Highway 95A, and the TCID canal embankment. All storm water produced from the future development of the subject parcel will utilize on-site retention/detention facilities to the standards and requirements set forth in the City of Fernley Development Code and the Engineering Department.

FIRE PROTECTION and EMERGENCY SERVICES:

The North Lyon County Fire Protection District station is located approximately 1.33 miles north of the subject parcel. The fire and ambulance emergency vehicle travel time is suitable due to the ability to travel south on Highway 95A to the subject parcel. The fire department chief will locate the required fire hydrants for a future development on the subject parcel. The Lyon County Sheriff Substation is located on Main Street, less than 1.5 miles north of the subject parcel.

LEGAL ACCESS:

Per discussions with the City of Fernley Engineering Department, the primary legal access to the subject parcel will be from Sage Street. This access location is from the existing 50-foot City of Fernley right-of-way and will provide sufficient traffic and emergency vehicle access and circulation.

NEIGHBORHOOD PARKS AND RECREATION AREAS:

Within the City of Fernley city limits, there are ten public parks for recreation. The In-Town Park is located just less than 1 mile north of the subject parcel, which also includes the Fernley Skate Park, a baseball diamond, children's play area and picnic area, and tennis courts. Millennium Park is located less than 2.0 miles from the subject parcel, across from City Hall. Green Valley Park is located to the east on Ricci Lane, approximately 1.25 miles from the subject parcel. The Fernley Out-of-Town Park is located to the east less than 2.0 miles from the subject parcel, where softball, baseball, and soccer fields are available for school and league play and several of the fields have lights for night play.

SCHOOLS AND PUBLIC FACILITIES:

The City of Fernley Elementary and Intermediate Schools are located to the north less than 1.5 miles from the subject parcel. Cottonwood Elementary School is located to the east less than 1 mile from the subject parcel. Fernley High School is located to the south less than 0.5 mile from the subject parcel. The City of Fernley swimming pool is located east less than 0.5 mile from the subject parcel.

As the applicant's representative, we feel as though the project findings listed above support the requested action of the City of Fernley to amend the Comprehensive Plan to reflect a land use designation of *Commercial*. The subject parcel is situated along the Highway 95A commercial corridor and the potential for future commercial use in this particular location is justified and applicable per the above project findings. We look forward to working with you and your staff on this application and future development plans for the subject parcel. If you have any questions or require additional information, please feel free to contact us at your convenience.

Sincerely,
Bighorn Consulting



Tyson Johnson
Applicant Representative

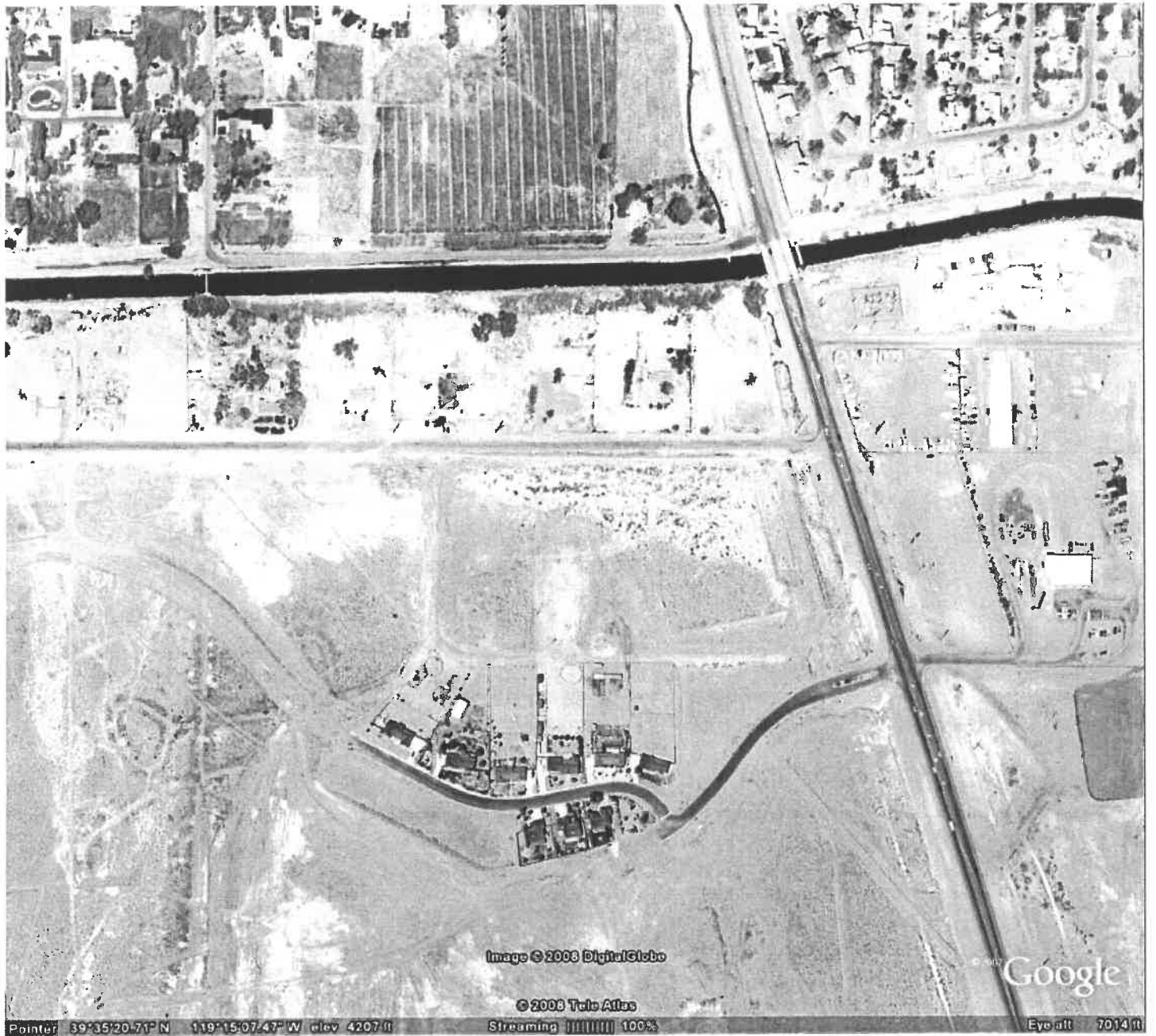


Image © 2008 DigitalGlobe

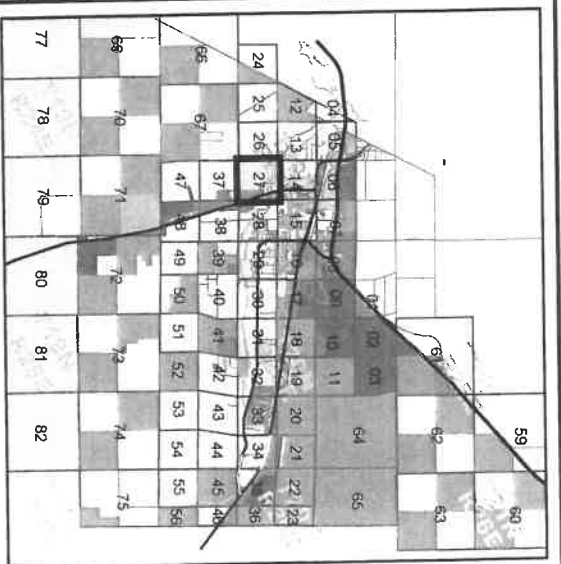
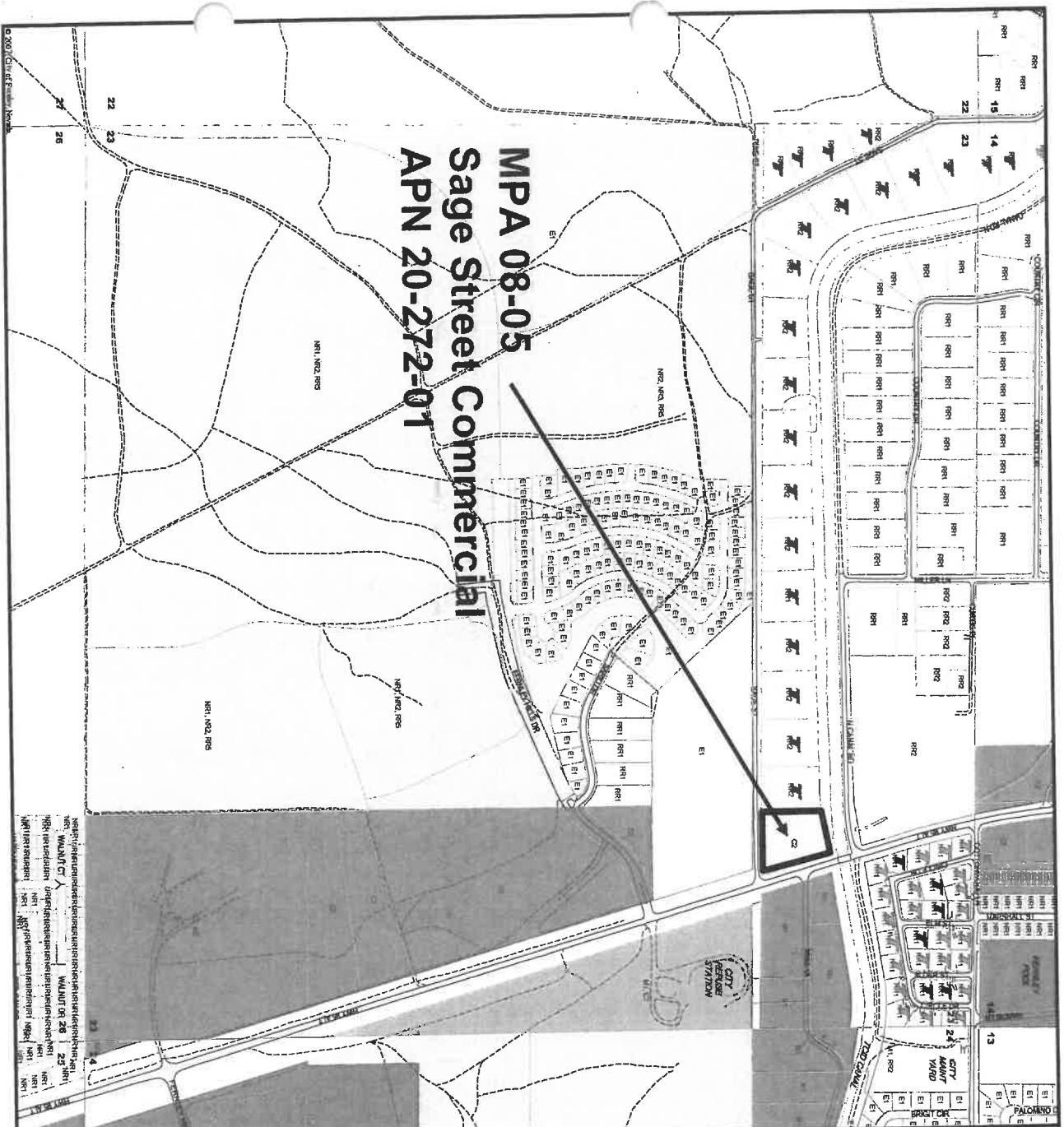
© 2008 Tele Atlas

Google

Pointer 39°35'20.71" N 119°15'07.47" W elev 4207 ft

Streaming ||||| 100%

Eye alt 7014 ft



MAP PAGE LOCATOR
(Grid numbers reference detailed map pages.)

- COMPREHENSIVE PLANNED LAND USE**
- RESIDENTIAL RURAL
 - RESIDENTIAL LOW DENSITY
 - RESIDENTIAL MEDIUM DENSITY
 - RESIDENTIAL HIGH DENSITY
 - RESIDENTIAL 1200SOF MIN
 - MULTI-FAMILY RESIDENTIAL
 - COMMERCIAL
 - TOURIST COMMERCIAL
 - LIGHT INDUSTRIAL
 - INDUSTRIAL
 - PUBLIC FACILITIES
 - PARKS
 - GENERAL RURAL
 - OPEN SPACE RESERVE
 - WILDLIFE MANAGEMENT AREA
- ZONING**
- M1 PARCEL ZONING
 - C2 M1 MULTIPLE PARCEL ZONING
- ZONING MAP OVERLAY**
- PLANNED DEVELOPMENT
 - TRAILER
 - COUNTY ISLAND
 - PATENT CLAIM



DISCLAIMER: This map was created with the most accurate information available to its originator. The data presented on this map is subject to change and its accuracy cannot be guaranteed. The City of Fernley makes no claim as to the accuracy or completeness of the data presented on this map, the City of Fernley disclaims all responsibility for errors and/or omissions inherent in the information presented on this map.



CITY OF FERNEY **Land Use & Zoning**

595 Silverace Blvd. • Fernley, NV 89408

Location: T20N, R24E
Section: 23
Revised: Apr 2008
Page: 27

TX Result Report

P 1

07/07/2008 08:59

Serial No. A00J010003706

TC: 369839

Destination	Start Time	Time	Prints	Result	Note
88491068	07-07 08:33	00:19:49	015/016	Cont	
88491068	07-07 08:58	00:01:03	001/016	OK	

Note TMR: Timer TX, POL: Polling, ORG: Original Size Setting, FME: Frame Erase TX,
 MIX: Mixed Original TX, CALL: Manual TX, CSRC: CSRC, FWD: Forward, PC: PC-Fax,
 BND: Double-Sided Binding Direction, SP: Special Original, FCODE: F-code, RTX: Re-TX,
 RLY: Relay, MBX: Confidential, BUL: Bulletin, SIP: SIP Fax, IPADR: IP Address Fax,
 I-FAX: Internet Fax

Result OK: Communication OK, S-OK: Stop Communication, PW-OFF: Power Switch OFF,
 TEL: RX from TEL, NG: Other Error, Cont: Continue, No Ans: No Answer,
 Refuse: Receipt Refused, Busy: Busy, M-Full: Memory Full,
 LOVR: Receiving length Over, POVER: Receiving page Over, FIL: File Error,
 DC: Decode Error, MDN: MDN Response Error, DSN: DSN Response Error.

**CITY OF FERNLEY
 PLANNING COMMISSION
 AGENDA REPORT**

DATE PREPARED: 07/02/08 DATE OF MEETING: 07/09/08

ITEM#: 46

SUBJECT: MPA 08-05 (SAGE STREET COMMERCIAL)

ADDRESS MASTER PLAN AMENDMENT APPLICATION MPA 08-05 FOR SAGE STREET COMMERCIAL TO CHANGE THE EXISTING LAND CLASSIFICATION OF A 2.72-ACRE PARCEL FROM LOW DENSITY RESIDENTIAL TO COMMERCIAL; OWNER MARTI ALLISON; LOCATED AT 60 SAGE STREET; APN 20-272-01. (Provide recommendations to City Council).

RECOMMENDATIONS:

"Move to recommend approval of Master Plan Amendment application MPA 08-05 to the City Council, based on the findings and analysis provided in the staff report".

FISCAL IMPACT:

Review of this application utilized the \$1,100 application fee paid by the applicant and the general operating budget of the Community Development Department.

SUMMARY/BACKGROUND:

Applicant:	Marti Allison
Owners:	Marti Allison
Site location	60 Sage Street
Current zoning:	C-2 (General Commercial)
Current Comprehensive Plan Classification:	Residential Low Density
Proposed Comprehensive Plan Classification:	Commercial
Flood Zone Designation:	ZONE A - No base flood elevations determined. (Community Panel Number 320029 0055 C rev. OCT 7, 2004).

BACKGROUND:

There are no previous application associated with this parcel.

APPLICABLE CITY CODE REFERENCE:

PREPARED BY: Bill Cadwallader, A.I.C.P., Senior Planner

REVIEWED BY: Fred Turnier, AICP, Acting Community Development Director

REVIEWED BY: Gary A. Bacock, City Manager

**CITY OF FERNLEY
PLANNING COMMISSION
AGENDA REPORT**

DATE PREPARED: 07/02/08 DATE OF MEETING: 07/09/08

ITEM#:

46

SUBJECT: MPA 08-05 (SAGE STREET COMMERCIAL)

ADDRESS MASTER PLAN AMENDMENT APPLICATION MPA 08-05 FOR SAGE STREET COMMERCIAL TO CHANGE THE EXISTING LAND CLASSIFICATION OF A 2.72-ACRE PARCEL FROM LOW DENSITY RESIDENTIAL TO COMMERCIAL; OWNER MARTI ALLISON; LOCATED AT 60 SAGE STREET; APN 20-272-01. (Provide recommendations to City Council).

RECOMMENDATIONS:

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FISCAL IMPACT:

Review of this application utilized the \$1,100 application fee paid by the applicant and the general operating budget of the Community Development Department.

SUMMARY/BACKGROUND:

Applicant:	Marti Allison
Owners:	Marti Allison
Site location	60 Sage Street
Current zoning:	C-2 (General Commercial)
Current Comprehensive Plan Classification:	Residential Low Density
Proposed Comprehensive Plan Classification:	Commercial
Flood Zone Designation:	<i>ZONE A - No base flood elevations determined. (Community Panel Number 320029 0055 C rev. OCT 7, 2004).</i>

BACKGROUND:

There are no previous application associated with this parcel.

APPLICABLE CITY CODE REFERENCE:

PREPARED BY: Bill Cadwallader, A.I.C.P., Senior Planner 

REVIEWED BY: Fred Turnier, AICP, Acting Community Development Director 

REVIEWED BY: Gary A. Bacock, City Manager 

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Comprehensive Plan map amendments must be reviewed by both the Planning Commission and the City Council. The Planning Commission's actions are forwarded to the City Council as recommendations. For Comprehensive Plan amendments, a recommendation for approval requires a super majority vote (five in favor) of the Planning Commission. There is a zoning conformance issue with this application in that the Zoning is C-2 (General Commercial) and the Comprehensive Plan designation is Residential Low Density. Approval of this request will bring the zoning into conformance with the Master Plan.

Note: All references to the phrase "Master Plan" are equivalent to "Comprehensive Plan". All references to the phrase "Comprehensive Plan" are equivalent to "Master Plan".

STAFF ANALYSIS AND COMMENTS:

Surrounding Uses

The parcel is just South of the Truckee Carson Irrigation District (TCID) canal with Industrial uses across US 95A to the East. Residential Medium density uses are to the South. The solid waster transfer station is on the opposite corner from this parcel.

Traffic and Roadway Improvements

The BC Ranch traffic study states the following:

At phase 1, project access will be provided by Sario Drive on U.S. Highway 95A. It is anticipated that the Sage Drive access on U.S. Highway 95A north of Sario Drive will be closed due to driveway spacing issues with Mull Lane.

Since there is the possibility of Sage Drive being closed to traffic, the applicant is advised to work with the Nevada Department of Transportation (NDOT) to resolve any issues.

Water Service

The project will be served by City water.

Sewer Service

The project will be served by City sewer.

Bureau of Reclamation comments

The north boundary line of this proposed commercial site is adjacent to Reclamation's right-of-way for the Canal. The status of drainage on this proposed commercial area is of concern to Reclamation due to its proximity to the Canal. Please have the applicant contact Reclamation and our operation and maintenance contractor, the Truckee-

Carson Irrigation District, if any Newlands Project features or easements may be affected or if any questions should arise regarding the Canal itself.

FINDINGS FOR MASTER PLAN AMENDMENT:

Pursuant to Development Code Section 23.030, in order to approve a Comprehensive Plan Amendment, the findings listed below must be made in the affirmative.

A. That the proposed amendment is consistent with the goals and policies of the adopted master plan;

Staff Response: This proposal is consistent with the Comprehensive Plan Goals and Strategies:

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

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

B. That the proposed land use can be served by minimum public facilities required by this development code;

Staff Response: The proposal meets all the service standards set forth in the Comprehensive Plan:

1. Fire, EMS 6 minute response time; facilities beyond the six minute response time must include supplemental fire suppression measures.
2. Police 10-20 minute response time
3. Water The requirement will vary by individual development; for planning purposes a figure of 4,000 gallons/day/acre shall be used; connection to community water system required
3. Sewer Requirement will vary by individual development type; for planning purposes a figure of 1,000 gals/day/acre will be used; connection to community sewage disposal system required.

C. That the proposed amendment will provide for land uses compatible with the existing and master planned adjacent land uses, and will not adversely impact the public health, safety or welfare.

Staff Response: US 95A is a commercial corridor with parcels master planned Commercial from below the airport to the interstate. This request is consistent with this pattern fo development.

- D. That the proposed amendment addresses changed conditions that have occurred since the plan was adopted by the City and the requested amendment represents a more desirable use of the land.*

Staff Response: There are access issues with NDOT and potential drainage issues with the Bureau of Reclamation. It is appropriate that these issues be worked out before the applicant approaches the City for a Design Review.

- E. That the proposed amendment will promote the desired pattern for the orderly physical growth of the City based on efficient extension of infrastructure and services, and compact development pattern.*

Staff Response: This request will not impact the orderly extension of public infrastructure.

ALTERNATIVES/OPTIONS

The Planning Commission's options for reviewing this proposal are as follows:

1. Recommend denial of Master Plan Amendment application 08-05 to the City Council, based on a factual finding of denial:

Advantages:

The Council could deny the application due to the NDOT access issues that would impact Findings B and C.

Disadvantages:

Staff is of the opinion that these issues should be resolved before Design Review and they should not impact the Master Plan Approval.

2. Recommend approval of Master Plan Amendment application 06-06, as requested by the applicant:

Advantages:

The applicant would be able to move forward and have the time to address all the issues with developing the parcel.

Disadvantages:

There are still issues with development of this parcel that need to be addressed.

3. Continue this request with the applicant's consent to address other items that may arise as a result of the public hearing that need to be addressed prior to granting approval or denial.

Advantages:

If other issues are brought up in the meeting that were not addressed by staff or the applicant and the Planning Commission would like further review or professional consideration of the project, with the concurrence of the applicant, the Commission should continue the item to a time certain in order for the issue to be explored and possibly resolved. This may result in a more informed decision by the Commission.

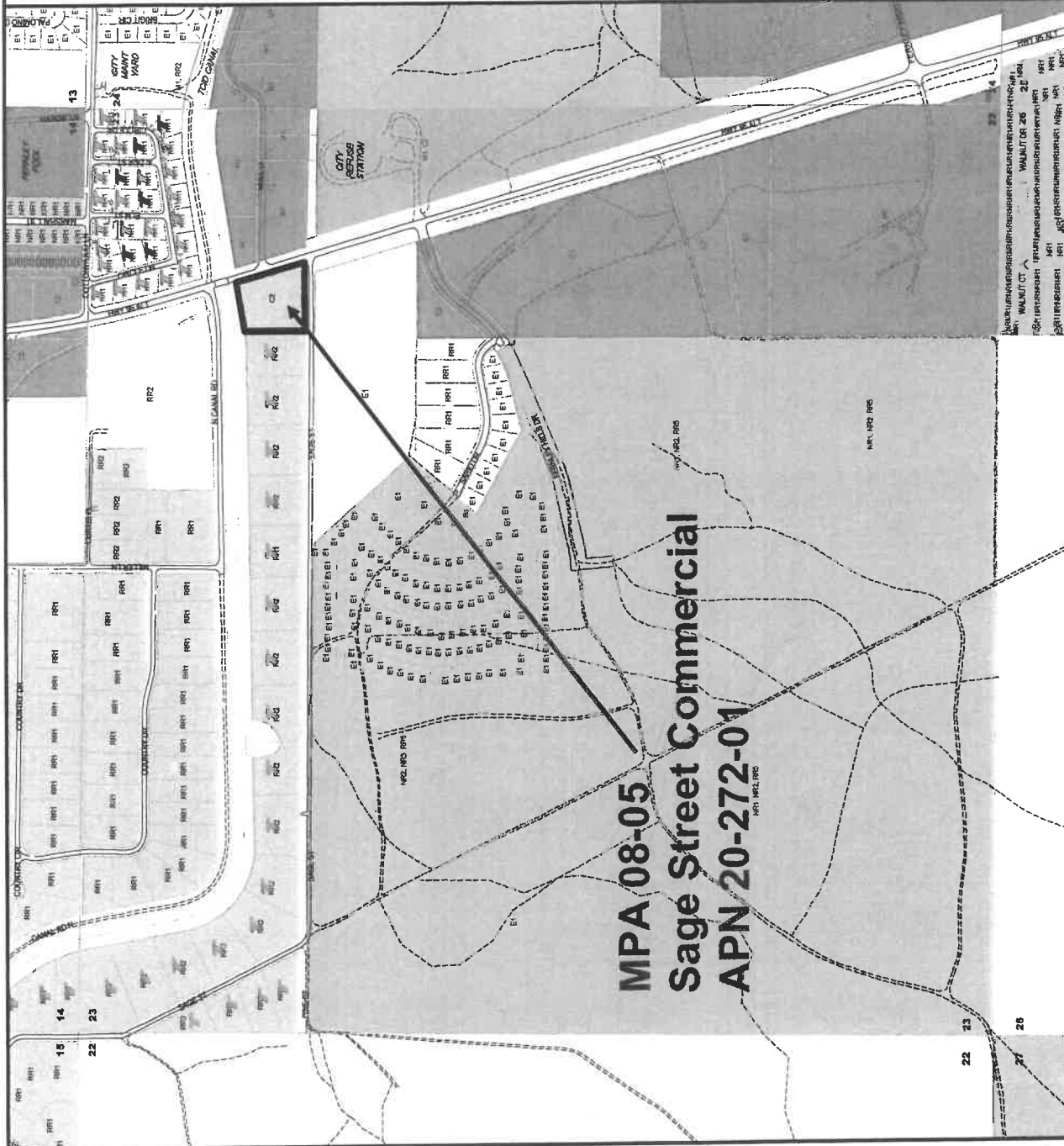
Disadvantages:

Unless the applicant agrees to a continuance, the Commission is required by City Code to render a recommendation on this application at this meeting.

Note: All references to the phrase "Master Plan" are equivalent to "Comprehensive Plan". All references to the phrase "Comprehensive Plan" are equivalent to "Master Plan".

Attachments:

- 1 – Vicinity Map
- 2 – Project Findings

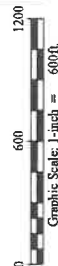


MPA 08-05
Sage Street Commercial
APN 20-272-01

MAP PAGE LOCATOR
 (Grid numbers reference detailed map pages.)



- COMPREHENSIVE PLAN LAND USE**
- RESIDENTIAL RURAL
 - RESIDENTIAL LOW DENSITY
 - RESIDENTIAL MEDIUM DENSITY
 - RESIDENTIAL HIGH DENSITY
 - RESIDENTIAL 12000SQF MIN
 - MULTI-FAMILY RESIDENTIAL
 - COMMERCIAL
 - TOURIST COMMERCIAL
 - LIGHT INDUSTRIAL
 - INDUSTRIAL
 - PUBLIC FACILITIES
 - PARKS
 - GENERAL RURAL
 - OPEN SPACE RESERVE
 - WILDLIFE MANAGEMENT AREA
- ZONING**
- M1 PARCEL ZONING
 - C2, M1 MULTIPLE PARCEL ZONING
- ZONING MAP OVERLAY**
- PLANNED DEVELOPMENT
 - TRAILER
 - COUNTY ISLAND
 - PATENT CLAIM



DISCLAIMER: This map was created with the most accurate information available to its originator. The data presented on this map is subject to change and its accuracy cannot be guaranteed. The City of Fernley disclaims all responsibility for errors and/or omissions inherent in the information presented on this map.

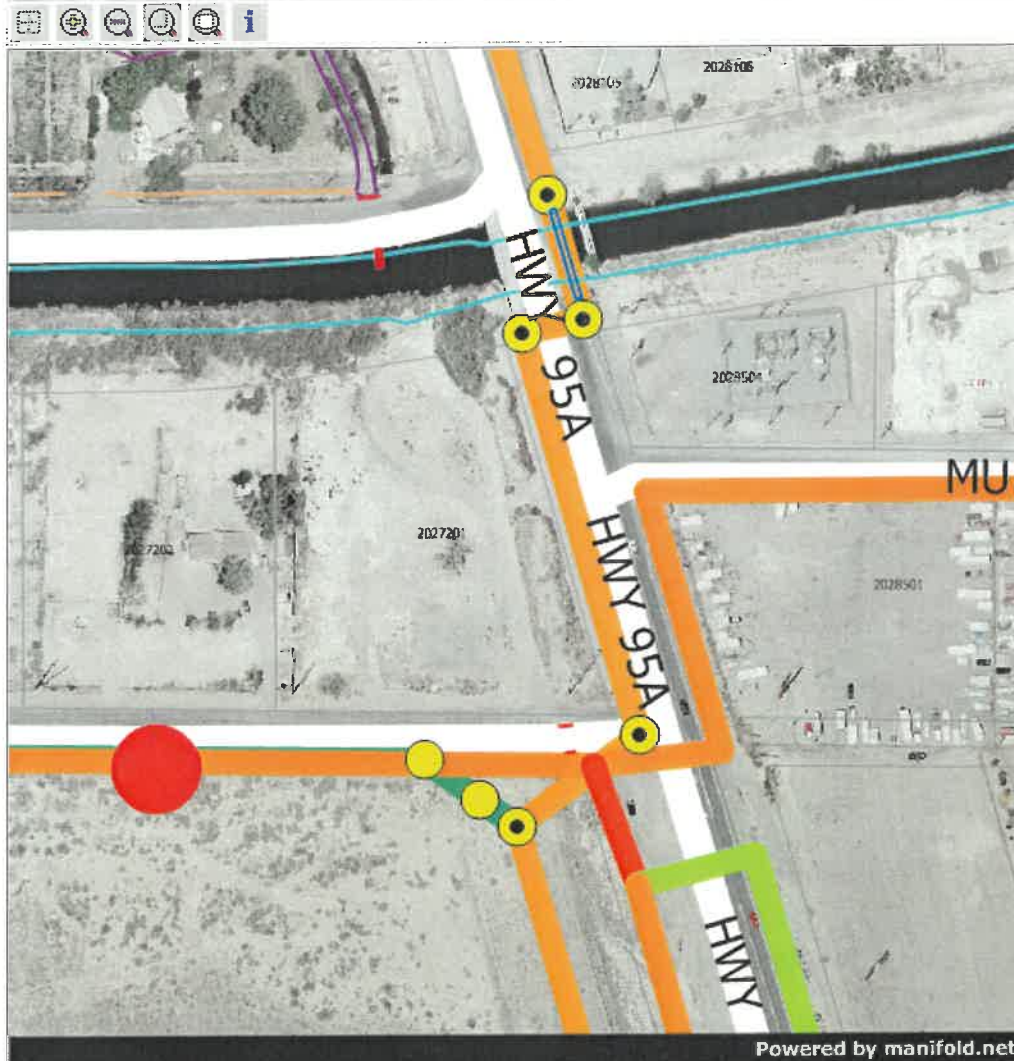


CITY OF FERNLEY
Land Use & Zoning

595 Silverlace Blvd. • Fernley, NV 89408
 Location: 120N, R24E
 Section: 23

Page: 27

CITY OF FERNLEY



Zoom Box 119°15.003' W:39°35.411' N

1:2100

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Layers

- ☐ ZONING LABELS
- ☒ APN LABELS
- ☒ STREET NAMES
- ☒ FIRE_HYDRANTS
- ☒ X-BOR PnS Drawing
- ☒ SANITARY SEWER MANHOLES
- ☒ MUNICIPAL_WATER
- ☒ SANITARY SEWER PIPES
- ☒ STREETS
- ☒ PARCELS
- ☒ RIVERS AND STREAMS
- ☐ LAND USE
- ☒ HAZEN-NW-NW
- ☒ HAZEN-NW-NE
- ☒ FERNLEY WEST-SE-NW
- ☒ FERNLEY WEST-SE-NE
- ☒ FERNLEY WEST-NE-SW
- ☒ FERNLEY WEST-NE-SE
- ☒ FERNLEY WEST-NE-NW
- ☒ FERNLEY WEST-NE-NE
- ☒ FERNLEY EAST-SW-NW
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- ☒ FERNLEY EAST-NE-SE
- ☒ FERNLEY EAST-NE-NW
- ☒ FERNLEY EAST-NE-NE
- ☒ EAGLE ROCK-SW-SW

Apply

Queries

Find Assessed Owner
Owner

Query

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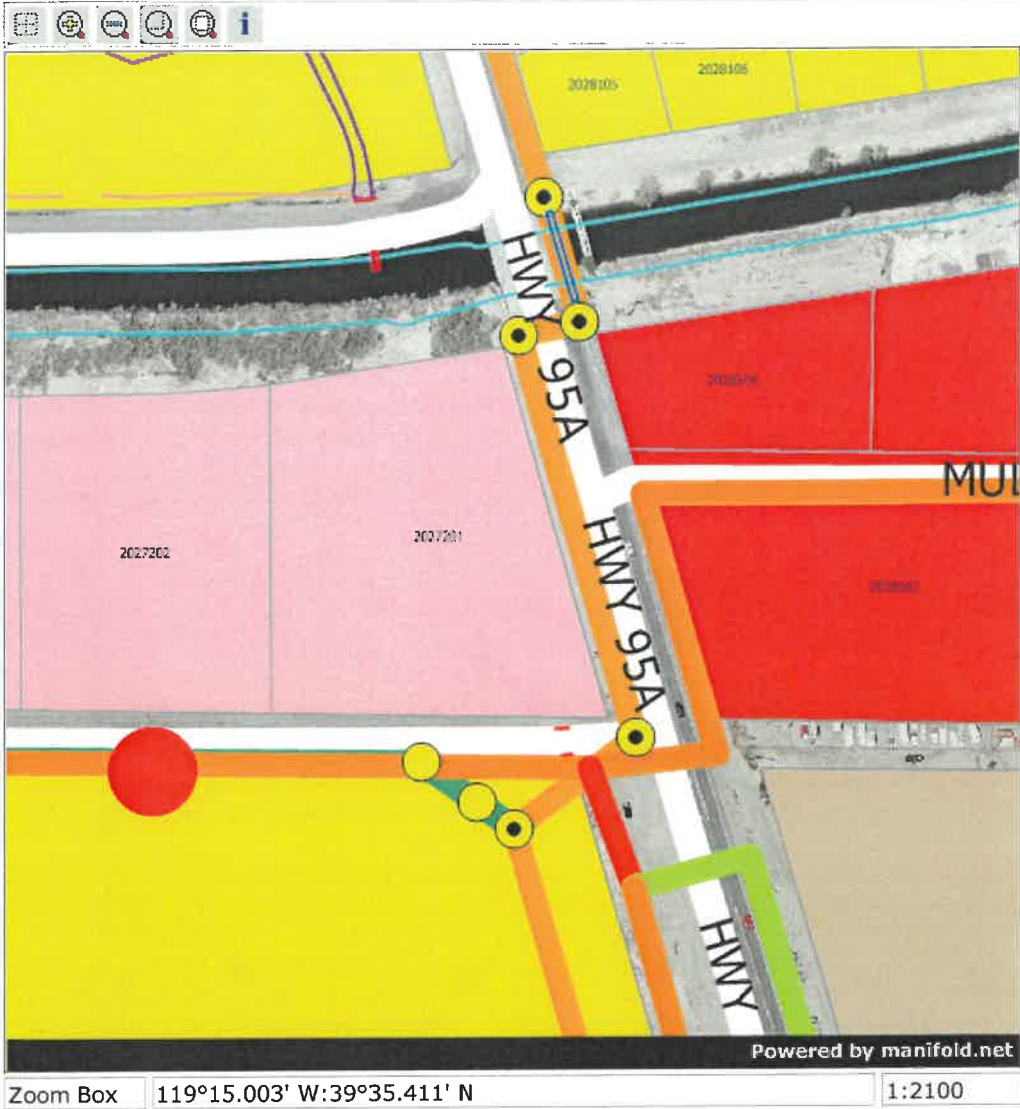
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Queries

Find Assessed Owner
Owner

Query

CITY OF FERNLEY



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☐ ZONING LABELS

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☒ FERNLEY WEST-SE-NW

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☒ FERNLEY EAST-NE-SE

☒ FERNLEY EAST-NE-NW

☒ FERNLEY EAST-NE-NE

☒ EAGLE ROCK-SW-SW

Apply

Queries

Find Assessed Owner

Owner

Query



JIM GIBBONS, Governor

STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION
District II
310 Galletti Way
Sparks, Nevada 89431
(775) 834-8300 FAX (775) 834-8390
June 5, 2008

SUSAN MARTINOVICH, P.E., Director

City of Fernley Community Development Department
595 Silver Lace Boulevard
Fernley, Nevada 89408

Sage Street commercial

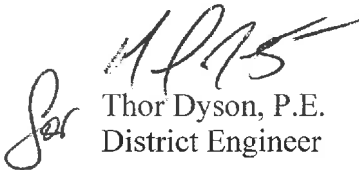
MPA 08-05

Staff has reviewed the above referenced application for a master plan amendment to change the existing land use classification of a 2.72 acre parcel from low density residential to commercial, located at 60 Sage Street and the following comments apply:

1. The Department prefers that all access to the commercial property be via Sage Street. Direct access to US 95A is strongly discouraged. Please contact Debra Starnes at 775-834-8307 to discuss access issues.
2. A traffic impact study should be completed to determine the impact to State and County roadways. For more information please contact Debra Starnes.
3. The Nevada Department of Transportation will require an occupancy permit should any work be performed within the State's right-of-way. Please contact the Permit Office at 775-834-8330 for questions regarding the occupancy permit process.
4. The Department requires the use of only legal, permitted accesses onto State roadways. A change or an increase in the function of this property served by an existing access or street may require a new right-of-way occupancy permit application and approval.

The Department reserves the right to incorporate further changes and/or comments as this application advances. Thank you for the opportunity to review this case.

Sincerely,


Thor Dyson, P.E.
District Engineer

TD:DS:ds

CC: Mike Fuess, P.E.
Debra Starnes, Traffic
Janet Reck, Permits
Tom Moore, P.E.
Dennis Taylor
Eric Glick

F:\TRAFFIC\Project Review 2008\Fernley\Sage Street commercial MPA.wpd



United States Department of the Interior

BUREAU OF RECLAMATION
Lahontan Basin Area Office
705 N. Plaza Street, Rm 320
Carson City, NV 89701

IN REPLY REFER TO:

June 5, 2008

LO-680
LND-6.00

RECEIVED
JUN 06 2008

Mr. Bill Cadwallader, A.I.C.P.
Senior Planner
City of Fernley
595 Silver Lace Boulevard
Fernley, Nevada 89408

Subject: Request for Comments, Fernley, Newlands Project, Nevada

Dear Mr. Cadwallader:

This letter is a follow up to your memorandum, dated May 27, 2008 regarding the Project File No. **MPA 08-05**, Request for Comments. As land in Fernley is urbanized, the Bureau of Reclamation (Reclamation) the manager of United States owned rights-of-way and easements for the Newlands Project, welcomes the opportunity to review land action items that may affect Newlands Project features, including the Truckee Canal (Canal).

Specific comments directed to Project File No. **MPA 08-05** are as follows:

The north boundary line of this proposed commercial site is adjacent to Reclamation's right-of-way for the Canal. The status of drainage on this proposed commercial area is of concern to Reclamation due to its proximity to the Canal. Please have the applicant contact Reclamation and our operation and maintenance contractor, the Truckee-Carson Irrigation District, if any Newlands Project features or easements may be affected or if any questions should arise regarding the Canal itself.

Reclamation is willing to work with the City of Fernley and developers/property owners to ensure that storm water runoff is channeled into the correct facilities and that the water meets the criteria and standards of the Clean Water Act. Reclamation would like to reiterate the fact that there shall be no-point discharges of water, including storm water runoff, into Newlands Project delivery features. Reclamation is willing to work with all involved to find workable solutions.

We appreciate the opportunity to review these actions. If you have any questions, please contact B.C. Deshler at (775) 884-8349.

Sincerely,

Terri Edwards
Resource Division Manager

cc: Ms. Kate Rutan
Truckee-Carson Irrigation District
P. O. Box 1356
Fallon, Nevada 89407-1356

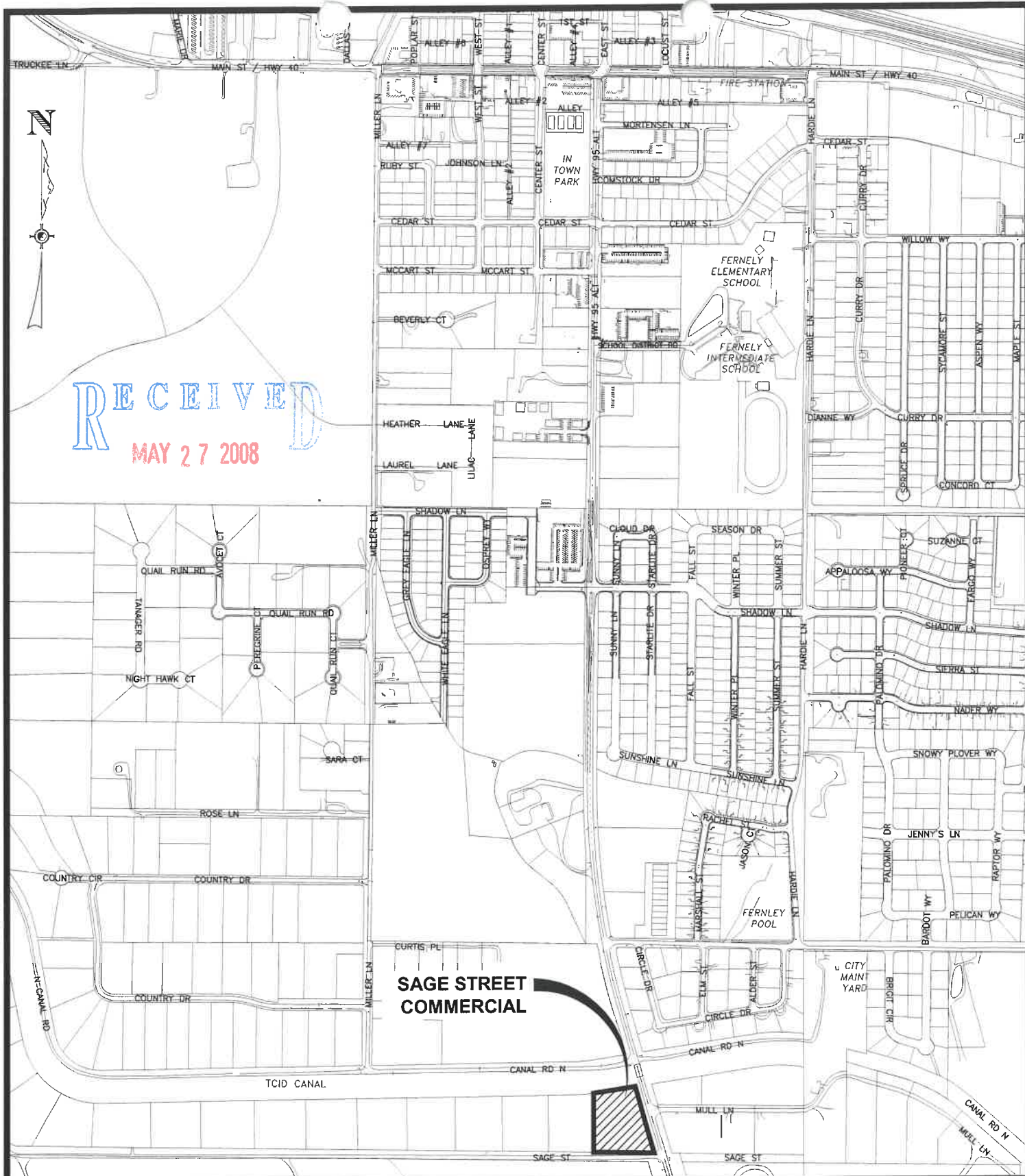
PRC
MPA 08-05

June 3, 2008

1. No comments

Jeff Purchase
Development Project Manager
City of Fernley Engineering Division

H:\Engineering bkup\@ENG\@ENGINEERING\@Reviews\PRC MPA 08-05.doc



**SAGE STREET
COMMERCIAL
VICINITY MAP**

SCALE: 1"=800'

FERNLEY

NEVADA

5.19.2008

**BIGHORN**
CONSULTING
3675 LAKESIDE DRIVE, SUITE B, RENO, NEVADA 89509
OFFICE (775) 827-6900 FAX (775) 825-6166

SHEET

1

OF

1



3675 Lakeside Drive, Suite B Reno, NV 89509 (775) 827-6900 Office (775) 825-6166 Fax

May 21, 2008

**RE: COMPREHENSIVE PLAN AMENDMENT DESCRIPTION FOR:
SAGE STREET COMMERCIAL**

RECEIVED
MAY 27 2008

To Whom It May Concern:

The property located at 60 Sage Street, Fernley, Nevada 89408, further defined as APN 020-272-01, is currently zoned *C2, General Commercial*. Currently the Comprehensive Plan has the property defined as *C2, Multiple Parcel Zoning*, shaded as *Residential Low Density*.

The applicant/property owner wishes to amend the Comprehensive Plan to reflect the land use designation of *Commercial*.

Currently the applicant/property owner is not proposing to develop the property.

If the Comprehensive Plan Amendment is approved, the applicant/property owner will retain the right to propose future development that will conform to *C2, General Commercial* zoning and the City of Fernley Development Code.

Sincerely,
Bighorn Consulting

Tyson Johnson
Applicant Representative



3675 Lakeside Drive, Suite B Reno, NV 89509 (775) 827-6900 Office (775) 825-6166 Fax

May 28, 2008

City of Fernley Community Development Department
595 Silver Lace Blvd.
Fernley, NV 89408

RECEIVED
MAY 27 2008

**RE: COMPREHENSIVE PLAN AMENDMENT FINDINGS FOR:
SAGE STREET COMMERCIAL**

To Whom It May Concern:

Bighorn Consulting, on behalf of the applicant/property owner, appreciates your consideration of the enclosed Comprehensive Plan Amendment Project Findings for Sage Street Commercial. The property consists of one (1) parcel located adjacent to Highway 95A at Sage Street in the City of Fernley. The approval of the Comprehensive Plan Amendment application will allow for future commercial development on the subject parcel in conformance with the City of Fernley Development Code and Criteria.

PROJECT FINDINGS:

The Planning Commission and the City Council shall, in approving amendment to the master plan use map or text, make the following findings:

A. That the proposed amendment is consistent with the goals and policies of the adopted master plan;

The property located at 60 Sage Street, Fernley, Nevada 89408, further defined as APN 020-272-01, is currently zoned *C2, General Commercial*. The current Comprehensive Plan reflects the property's land use designation as *C2, Multiple Parcel Zoning*, shaded as *Residential Low Density*. The proposed amendment, if approved, will reflect a Comprehensive Plan designation of *Commercial* land use.

Currently, the applicant is not proposing a commercial development for the subject parcel. Market research, development feasibility, and public input are still being gathered to ensure that when a future development plan is created, it will be as beneficial to the community as economically possible.

The applicant feels as though the amendment request meets the goals and policies as outlined in the City of Fernley Comprehensive Plan Land Use Element, *Goals and Action Strategies*.

B. That the proposed land use can be served by minimum public facilities required by this development code;

As shown on the site plan, the subject property is bordered by Sage Street to the south and Highway 95A to the east. Currently, Sage Street is a 50 foot wide City of Fernley right-of-way, and has both public potable water and sewer located within the right-of-way. Per discussions with City of Fernley Engineering Department, the subject property can be accessed by Sage Street and the existing public utilities.

C. That the proposed amendment will provide for land uses compatible with the existing and master planned adjacent land uses, and will not adversely impact the public health, safety or welfare.

The majority of the Highway 95A corridor is designated in the master plan and currently being developed as General Commercial with some parcels remaining as industrial and residential. Immediate adjacent property land use designations are as follows:

West	-	Residential
East	-	Commercial / (Highway 95A)
North	-	Residential / (TCID Canal)
South	-	Residential

Given the size, current development code regulations and physical limitations of the subject property, a commercial designation would allow for, but is not limited to, a typical neighborhood commercial development such as a convenient store / gas station, bank, general retail or restaurant. As mentioned above, the applicant is still in the process of performing market research and gathering public input to determine the most viable commercial occupancy use.

When a commercial development plan is proposed on the subject parcel, general engineering practices and standards will require that public safety and health standards are met and accomplished with standard design review procedures with the City of Fernley and the State of Nevada.

D. That the proposed amendment addresses changed conditions that have occurred since the plan was adopted by the City and the requested amendment represents a more desirable use of land.

As mentioned above, the current zoning on the subject property is *C2 General Commercial* and the existing Comprehensive Plan designation is *C2, Multiple Parcel Zoning*, shaded as *Residential Low Density*. Given that the property is bordered by a major highway to the east, the applicant believes that the residential designation and use is not desirable for a homeowner. Any proposed commercial development plan will be required to make improvements to Sage Street and the intersection of Sage Street and Highway 95A. This will create a more safe and desirable travel way for existing residents west of the subject property. A residential land use of the subject property would not require such improvements to Sage Street.

- 11
- E. That the proposed amendment will promote the desired pattern for the orderly physical growth of the City based on efficient extension of infrastructure and services, and compact development pattern.**

As mentioned above, the majority of the Highway 95A corridor is being developed as general commercial, thus the proposed amendment is in conformance with the existing growth pattern as being commercial land use adjacent to Highway 95A. A future commercial development will require improvements to the property frontage such as non-potable water main infrastructure, A.D.A. compliant curb & gutter, sidewalks and the widening of Sage Street.

SUMMARY OF PUBLIC UTILITIES, FACILITIES, AND EMERGENCY SERVICES

WATER AVAILABILITY:

The City of Fernley will be the water purveyor for the subject parcel. There is adequate availability for future potable water main connections, which will be made on the existing water main located in Sage Street. The City of Fernley Engineering Department will determine the connection requirements and assist in the modeling of the existing potable water system.

ELECTRICAL AVAILABILITY:

Sierra Pacific Power Company will provide the electric service for the subject parcel. A power source already exists in the form of overhead poles or underground facilities along Sage Street. There is adequate availability for future electric service and connections will be made at this location.

TELEPHONE AVAILABILITY:

AT&T will provide the telephone service for the subject parcel. A telephone source already exists in the form of overhead poles or underground facilities along Sage Street. There is adequate availability for future telephone service and connections will be made at this location.

NATURAL GAS AVAILABILITY:

Southwest Gas will provide the natural gas service for the subject parcel. Future gas main connections will be made with existing gas mains located in Sage Street. There is adequate availability for future gas service and connections will be made at this location.

CABLE AVAILABILITY:

Charter Communications will provide the cable service for the subject parcel. A cable source already exists in the form of overhead poles or underground facilities along Sage Street. There is adequate availability for future cable service and connections will be made at this location.

SEWAGE DISPOSAL AVAILABILITY:

The City of Fernley will provide sanitary sewer service for the subject parcel. There is adequate availability for future sanitary sewer connections, which will be made on the existing sanitary sewer main located in Sage Street. The City of Fernley Engineering Department will determine the connection requirements and assist in the modeling of the existing sanitary sewer system.

STORM DRAINAGE:

The site topography on the subject parcel is very flat with the majority of the site located just below or at-grade with the adjacent Sage Street, Highway 95A, and the TCID canal embankment. All storm water produced from the future development of the subject parcel will utilize on-site retention/detention facilities to the standards and requirements set forth in the City of Fernley Development Code and the Engineering Department.

FIRE PROTECTION and EMERGENCY SERVICES:

The North Lyon County Fire Protection District station is located approximately 1.33 miles north of the subject parcel. The fire and ambulance emergency vehicle travel time is suitable due to the ability to travel south on Highway 95A to the subject parcel. The fire department chief will locate the required fire hydrants for a future development on the subject parcel. The Lyon County Sheriff Substation is located on Main Street, less than 1.5 miles north of the subject parcel.

LEGAL ACCESS:

Per discussions with the City of Fernley Engineering Department, the primary legal access to the subject parcel will be from Sage Street. This access location is from the existing 50-foot City of Fernley right-of-way and will provide sufficient traffic and emergency vehicle access and circulation.

NEIGHBORHOOD PARKS AND RECREATION AREAS:

Within the City of Fernley city limits, there are ten public parks for recreation. The In-Town Park is located just less than 1 mile north of the subject parcel, which also includes the Fernley Skate Park, a baseball diamond, children's play area and picnic area, and tennis courts. Millennium Park is located less than 2.0 miles from the subject parcel, across from City Hall. Green Valley Park is located to the east on Ricci Lane, approximately 1.25 miles from the subject parcel. The Fernley Out-of-Town Park is located to the east less than 2.0 miles from the subject parcel, where softball, baseball, and soccer fields are available for school and league play and several of the fields have lights for night play.

SCHOOLS AND PUBLIC FACILITIES:

The City of Fernley Elementary and Intermediate Schools are located to the north less than 1.5 miles from the subject parcel. Cottonwood Elementary School is located to the east less than 1 mile from the subject parcel. Fernley High School is located to the south less than 0.5 mile from the subject parcel. The City of Fernley swimming pool is located east less than 0.5 mile from the subject parcel.

As the applicant's representative, we feel as though the project findings listed above support the requested action of the City of Fernley to amend the Comprehensive Plan to reflect a land use designation of *Commercial*. The subject parcel is situated along the Highway 95A commercial corridor and the potential for future commercial use in this particular location is justified and applicable per the above project findings. We look forward to working with you and your staff on this application and future development plans for the subject parcel. If you have any questions or require additional information, please feel free to contact us at your convenience.

Sincerely,
Bighorn Consulting



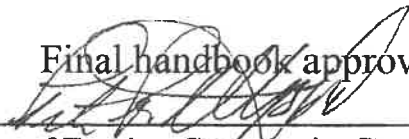
Tyson Johnson
 Applicant Representative





PLANNED DEVELOPMENT DESIGN HANDBOOK

Approved by Fernley City Council
on July 6, 2005

Final handbook approved by

City of Fernley Community Development Director
on June 28, 2006.

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APPENDIX

Conditions of Approval

I. PURPOSE

The purpose of the BC Ranch Design Handbook is to provide design standards to establish the identity, character and expected quality of development throughout the entire community. The standards as identified in this handbook are minimums that must be met for all projects within the BC Ranch community. Standards will be incorporated into Covenants, Conditions and Restrictions (CC&R's) in order to provide an additional mechanism for enforcement.

There shall be no third party beneficiaries to these design standards and no rights to enforcement of this Handbook by anyone other than the master developer or City of Fernley. It is envisioned that the master developer and/or individual residential builders or developers will create separate CC&R's providing additional provisions that will apply to the individual homeowners, tenants and other property owners. After completion of construction of any projects within the community, any modifications by homeowners, tenants or subsequent owners shall be reviewed and enforced by other mechanisms such as homeowners' or property owners' associations and the City of Fernley. Subsequent CC&Rs, however, shall not be less restrictive than these design requirements.

II. CITY REVIEW

Projects requiring tentative maps or special use permits, final maps, improvement plans, grading permits and building permits shall be in accordance with the permitted land uses and standards outlined in this Design Handbook and shall be reviewed and approved separately by the City of Fernley.

Each project in the community must be approved by the Design Review Committee (DRC) as outlined below for design related items required in this Handbook prior to the issuance of the first building permit within a village or project site. However, maps, special use permits, improvement plans and grading permits, in compliance with the Design Handbook, shall be reviewed and approved by the City prior to DRC review.

III. DESIGN REVIEW

A. Design Review Committee (DRC)

A DRC will be formed in accordance with the CC&R's to review design related items such as architectural elements, landscaping and screening, signage, lighting and fencing for all projects within the community to ensure compliance with the Design Handbook. This committee will consist of five individuals who will have the authority to interpret all design related

criteria outlined in this handbook. The members of the DRC will include two members appointed by the City of Fernley City Council and three members appointed by the master developer. Once the DRC is established, the members shall develop and approve a checklist that applicants shall use for design review submittals.

B. Review Process

The steps involved in the design review process are outlined as follows:

1. Pre-Submittal Conference

Builders and developers are encouraged to request a pre-submittal conference with the DRC to discuss any design ideas, issues and concerns relating to the standards outlined in this Design Handbook. The DRC shall make every effort to schedule a conference within two weeks of receiving a request.

2. Design Submittal

The design submittal shall include five sets of plans and materials as outlined in the Checklist for Design Review (to be developed by the DRC upon formation and included as an Appendix to this handbook).

The DRC shall review the design plans and information and contact the builder or developer within 30 days of receipt of a complete submittal. A submittal is not deemed complete until all items listed on the Checklist for Design Review are received by the DRC. If necessary, an informal meeting will be scheduled to review the final design review submittal. The DRC may require modifications to design elements in the plans or materials provided by the builders or developers. Upon final approval, the DRC will provide the builder or developer with a letter to the City of Fernley. Design approval by the DRC must be received prior to the issuance of the first building permit within each village or project within the community from the City of Fernley.

3. Construction Completion

Upon completion of all construction, a DRC final site inspection may be required. Builders and developers shall remain responsible for full compliance with the DRC approved drawings, as well as any remediation to correct deficiencies or omissions discovered as a result of DRC inspection of completed construction. Where applicable, no further approval submissions will be accepted by DRC until all deficiencies or omissions are rectified.

C. Variances, Adjustments and Interpretations

Interpretation of these standards, and permissible variances, will be the responsibility of the DRC. Where these design standards are silent, the City of Fernley Development Code shall apply. Minor deviations in the Design Handbook may be approved by the DRC if the following criteria are met:

1. The request is minor in nature and does not increase the total number of anticipated units *(as depicted in the table in Figure 1, General Development Plan)* in the individual single family residential villages or multi-family developments by more than 15%.
2. The request is for a deviation of up to 10% to one or more of the following measurable design or site conditions:
 - Lot sizes and/or dimensions
 - Setbacks
 - Structure height
 - Lot dimensions
3. The request is for a compatible retail commercial or office use not specifically identified as a permitted use on commercial sites.

Any modifications to the handbook itself shall be reviewed and approved by City Staff. Major modifications to the handbook are subject to review and approval by the Fernley Planning Commission and/or City Council.

D. Fees

The DRC may impose reasonable charges on builders and developers for reviews and approval of plans throughout the design review process in accordance with a fee schedule to be established by the DRC.

IV. DESIGN STANDARDS

Land uses within the BC Ranch community include single family residential villages; multi-family residential sites; commercial properties; an elementary school site; parks and common open space *(Refer to Figure 1, General Development Plan)*. The design standards establish the regulatory requirements for land uses and community amenities throughout the BC Ranch development. The handbook also includes standards to be upheld during construction. All development in the BC Ranch community shall comply with the text, policies and standards provided in the Design Handbook.

A. Design Standards for Various Land Uses

The following section addresses design standards for single family residential; multi-family residential, commercial uses and parks and common open space. Design standards have not been provided for the planned 11.74 acre elementary school site as it will be designed and constructed in accordance with Lyon County School District standards and policies. Design standards for other community-wide features and amenities are provided in Section B, Design Standards for Community Features and Amenities of this Handbook.

1. Single Family Residential

A total of 13 individual single family residential villages with varying lot sizes are planned within the BC Ranch community. A full build-out, approximately 2,174 single family dwelling units are anticipated. Individual villages will be sold to various builders who may reconfigure lots during final design to accommodate specific product types. Builders, however, must comply with the standards set forth herein.

a. Permitted Uses

The following uses shall be permitted outright subject to review and approval by the DRC and previous, subsequent or concurrent review and approval of final maps, grading and building permits by the City of Fernley as applicable:

- Detached single family residences of a permanent nature.
- Attached single family residences of a permanent nature (duplexes).
- Gated communities with private streets.
- Accessory buildings and structures
- Temporary sales centers including sales trailers and model home complexes.
- Temporary construction yards.
- Home occupations in accordance with City of Fernley codes.
- In-home child care in accordance with City of Fernley/Lyon County codes.
- Public utilities necessary to serve the community.
- Parks and associated recreational facilities.

b. Uses Requiring a Special Use Permit

The following uses are permitted subject to review and approval of a Special Use Permit by the City of Fernley and subsequent review

and approval by the DRC, as well as approval of final maps and building permits by the City of Fernley, as applicable:

- Attached single family residences of a permanent nature (other than duplexes)
- Projects in conformance with density limits with lots smaller than the minimum requirements (projects utilizing small lot provisions as defined in Table 1, Lot Standards on page 6).

c. Prohibited Uses

Prohibited uses include all uses not specifically listed as permitted uses plus the following:

- Mobile home subdivisions
- Mobile home parks.
- Outside RV/boat or trailer storage
- Oversized RV garages
- Telecommunication facility sites and towers

These restrictions shall be provided in the CC&R's for BC Ranch and disclosed at the time of sale of each home.

d. Lot Standards

Homes and builder provided accessory structures, if any, shall be sited on lots to conform to the minimum standards as outlined in Table 1, Lot Standards on page 6.

Table 1 – Lot Standards

Applicable Village	Villages III; IV; IX	Villages I; V; VI; VII; VIII;	Villages II; XI	Villages X; XII; XIII
Maximum Building Height*	35 ft.	35 ft.	35 ft.	35 ft.
Lot Sizes				
Minimum Lot Area Interior/Corners	5,000/6,000 sq. ft.**	6,000/7,000 sq. ft.**	7,000/7,000 sq. ft.	9,000/9,000 sq. ft.
Minimum Lot Width ***	50 ft.	60 ft.	70 ft.	70 ft.
Yard & Setback Dimensions				
Front Yard to garage/structure ****	20/10 ft.	20/10 ft.	20/10 ft.	20/10 ft.
Side Yard (feet) Interior/Corner	5/20 ft.	5/20 ft.	5/20 ft.	10/20 ft.
Rear Yard	20 ft.	20 ft.	20 ft.	20 ft.
Duplexes Interior/Exterior	0/5 ft.	0/5 ft.	0/5 ft.	0/10 ft.
Minimum Useable rear yard	400 s.f.	400 s.f.	400 s.f.	400 s.f.

* Building height is measured from the average finish grade to the mid-point of the ridge of the structure.

** Small lot provisions are permitted to modify the minimum lot size, however, the density of the underlying village may not change. The minimum lot size for small lot projects is 2,000 square feet. Minimum setbacks are as follows: front and rear - 10 feet; sides - 0 feet (interior), 5 feet exterior).

***Can be reduced to a minimum of 15 feet only to accommodate driveways in cul-de-sacs, on curves, or for irregularly shaped lots.

**** Varied front yard setbacks are required at a minimum of 2 feet on all tangents

e. Architectural Elements

i. Exterior Materials

Exterior materials shall include one or a combination of more than one of the following: stucco, concrete fiber board, wood or composite wood siding, masonite siding products with stone and masonry accents. Sample material boards shall be reviewed and approved by the DRC.

Siding materials shall be continued down to within eight inches of finished grade on all elevations to eliminate large areas of exposed foundation. Building materials shall be compatible in scale with the design of the residences. Materials must also be compatible throughout each village.

ii. Exterior Colors

All exterior color schemes, shall be provided on sample color boards or colored sheets and shall be reviewed and approved by the DRC. Exterior colors shall be in harmony with the natural setting. Permitted colors of the main structure include earth tones, cream, beige and similar muted colors. Complementary trim and special accent colors for entry and garage doors shall be provided. Color intensity shall be kept low for large surfaces. Exterior palette materials shall not have high gloss or reflective/glare finishes. Bright primary colors are not permitted.

iii. Facades and Articulation

Architectural features such as varying window sizes and shapes, shutters, broken planes and pitched roofs, covered entries and porches, porch rails, columns and trim detailing to help define the fronts of the homes and garages, shall be incorporated into the design of the residences. Doors and windows shall be compatible throughout each house design.

Large blank walls, roofs, non-articulated garage doors, and three (or more) car garages, with garage doors in the same plane, are not permitted. Side entry garages are encouraged in villages with large lots. Building materials and architectural features, compatible with the front of the houses, shall be provided on all sides of the homes.

iv. Roofs

Roof colors shall be rich, medium to dark tones such as slate, dark brown and dark gray. Light colors are not permitted. The DRC shall review and approve the color palette of roofing within each village.

A variety of pitched roofs are encouraged. Roof pitches under 5/12 including flat roofs are not permitted.

Roof materials shall be applied to comply with snow load and high wind standards. Materials may include:

- Concrete or clay tile (flat or barrel)
- Non-reflective architectural metal
- 40- year architectural-grade composition shingles
- 40-year fiberglass composition shingles

Roof materials, however, must be consistent throughout each village.

v. House Plans

Each village shall have a minimum of four distinct house plans with a minimum of three elevations each. House design shall vary throughout each village with no one elevation repeated for abutting homes, or mirrored across the street. Adjacent lots may share the same floor plan, but must have different elevations.

vi. Height Restrictions

A mix of one and two stories homes are encouraged throughout each village. The maximum allowable height of all structures shall be 35 feet as measured from average finish grade to the mid-point of the ridge of the structure. In special circumstances relating to topography, height limits may be waived by the DRC to allow for walkout basement designs.

vii. Exterior Lighting

House lighting shall be integrated with the architectural design of the individual residences. Exterior lighting fixtures mounted on the homes shall be no higher than the line of the first story eave or, where no eave exists, no higher than 15 feet above finished grade. Lights shall be shielded to prevent light spillage onto adjacent properties or streets.

Flood lights are not permitted. Motion detector actuators are permitted with designer fixtures only.

viii. Rear Yard Areas

Rear yard areas shall include a minimum useable area of 400 square feet.

f. Miscellaneous Design Elements

i. Antennas

Homes shall be pre-wired to accommodate cable reception, telephone and DSL lines, where feasible. Builders may not install exterior antennas. However, one, 18-inch satellite dish discretely placed on the side or rear wall elevations, beneath the eaves and soffits of the structure will be permitted.

ii. Awnings, Trellises, Patio Covers, Decks and Other Attached or Detached Accessory or Ancillary Structures

Awnings, trellises, patio covers, second story decks, fireplaces, playhouses and other accessory or ancillary structures including granny flats and casitas, provided by builders, shall be consistent in materials; color and architectural character as the main structure and must be reviewed and approved by the DRC. Structures must meet the setback requirements of the main structure. Projecting features, if unenclosed, however, may extend into required side yards for a distance of two feet and may extend into required rear yards for a distance of four feet.

iii. Fireplace Chimneys

Fireplace chimney pipes shall not be exposed and shall be "boxed-in". Exterior materials shall be compatible with the exterior materials and colors used on the house.

iv. Driveways, Parking Areas and Walkways

Driveways shall be a minimum of 20 feet in length to allow for off-street parking. Driveways shall be Portland Cement Concrete (PCC) or traffic rated concrete decorative pavers. Asphalt or decomposed granite is not permitted. Walkways leading from driveways to the front door of the residences shall be the same material as the driveways.

v. Gutters and Downspouts

Gutters and downspouts shall be painted to match the surface of the structure to which they attach.

vi. Mailboxes

Individual mailboxes, if allowed by the United States Postal Service (USPS), shall be paired at driveways to serve

adjacent homes. The style of the mailboxes, including address numbers shall be compatible with the architectural style of the homes and shall be compatible throughout each village. Mailboxes shall be provided and installed by the builder prior to the issuance of certificates of occupancy for the individual homes.

If individual mailboxes are not permitted, clustered boxes shall be located in convenient areas conducive to temporary parking. Placement of cluster boxes shall not be near intersections and shall not conflict with individual driveways or utilities. Locations shall be approved by the USPS and the DRC.

vii. Landscaping

The builders of each individual village shall install front yard landscaping and irrigation and provide an irrigation stub to all rear yards for each lot prior to the issuance of certificates of occupancy. Landscaping and irrigation shall also be installed on corner lots in the five foot area between the sidewalk and the fence and on trail access parcels between lots (Refer to Figure 9, Corner Lot Fencing Standards).

Minimum landscaping for front yards shall include the following:

- Two, 1½ inch caliper deciduous trees or two, six foot high evergreen trees;
- Twelve, five gallon mix of evergreen and deciduous shrubs;
- turf and/or ground cover.

On corner lots, an additional tree and five shrubs shall be provided. A minimum of three typical landscape schemes for front yards (with corner lot options) for each individual village shall be reviewed and approved by the DRC.

viii. Home Addresses

Home address numbers shall be placed on mailboxes and adjacent to the front doors of homes. Addresses shall be softly lit. Address numbers shall be individual brass or metal letters or an illuminated address fixture and shall be consistent in type, style, size, color, and placement throughout each individual village. Address materials and placement shall be reviewed and approved by the DRC.

g. Sales Standards

i. Sales Centers

Sales centers within single family model home complexes or located in temporary sales trailers shall be reviewed and approved by the DRC. Temporary sales trailers must be removed from the sales center as soon as possible after model home complexes are open or sales are complete.

ii. Model Home Complexes

The location of model home complexes and details regarding parking and hours of operation shall be reviewed and approved by the DRC. Temporary lighting, fencing and signage shall be in accordance with the standards outlined in this Handbook and shall also be reviewed and approved by the DRC.

iii. Landscaping

Landscaping in the front, rear, and side yards of model homes is required and is the responsibility of the builder of each single family residential village. Residential subdivision builders shall install landscaping in conformance with the DRC approved front yard landscape schemes for each village as required and outlined in this Handbook.

2. Multi-Family Residential

There are three areas designated for multi-family development within the community. These areas are designated for a maximum density of 20 units per acre. At full build-out, approximately 1,010 multi-family units are anticipated. Individual sites will be sold to various builders or developers who may divide or reconfigure the properties during final design to accommodate specific product types and densities. Builders and developers, however, must comply with the standards set forth herein.

a. Permitted Uses

The following uses shall be permitted outright subject to review and approval by the DRC and subsequent (or concurrent) review and approval of applicable applications including design review by the City of Fernley Staff.

- Multi-family projects intended to be offered as rentals including apartments and senior housing complexes not to exceed a density of 20 units per acre.
- Accessory buildings and structures
- Temporary sales centers including sales trailers and model home complexes.

- Temporary construction yards.
- Home occupations in accordance with City of Fernley codes.
- In home child care in accordance with City of Fernley/Lyon County codes.
- Public utilities necessary to serve the community.
- Parks and recreational facilities.

b. Permitted Uses Requiring Tentative Map Approval

The following uses are permitted, however, will require approval of a tentative map from the City of Fernley. In addition, these projects will require review and approval by the DRC and subsequent (or concurrent) review and approval of final maps and building permits by the City of Fernley.

- Multi-family projects intended to be offered for sale including townhouses and condominiums not to exceed a density of 20 units per acre.
- Attached and detached single family residences of a permanent nature (Projects in conformance with single family residential design standards or projects utilizing small lot provisions) not to exceed 15 units per acre.

c. Uses Requiring a Special Use Permit

The following uses are permitted subject to review and approval of the Special Use Permit by the City of Fernley and subsequent review and approval by the DRC, as well as approval of building permits by the City of Fernley, as applicable.

- Assisted living facilities
- Nursing homes
- Child care facilities
- Gated communities with private streets.
- Churches, clubs, lodges, social halls and community centers

d. Prohibited Uses

Prohibited uses include all uses not specifically listed as permitted uses plus the following:

- Mobile home subdivisions
- Mobile home parks
- Outside RV/boat storage or trailer storage
- Telecommunication facility sites and towers

These restrictions shall be provided in the CC&R's for BC Ranch and disclosed at the time of sale of each multi-family project site.

e. Density

The maximum density for any project, with the exception of assisted living facilities and nursing homes, within a multi-family area is 20 dwelling units per acre. The number of units in assisted living facilities and nursing homes will be reviewed on a case by case basis and may exceed 20 units per acre due to the nature of such facilities. Assisted living facilities and nursing homes are subject to approval of a Special Use Permit by the City of Fernley, as well as design review by the DRC.

f. Building Setbacks/Lot Sizes

Minimum building setbacks and lot sizes for multi-family projects shall be as follows:

- Front: 25 feet
- Exterior Side: 10 feet
- Rear: 20 feet
- Lot size: 5 acres (project site)

All buildings shall be separated by a minimum of 20 feet. Setbacks and minimum lot sizes for townhouse and condominium projects, however, may be reduced to accommodate sales of individual units/lots and are subject to review and approval by the DRC.

g. Architectural Elements

The following architectural standards shall be followed when sites are developed with multi-family residential housing (or assisted living or nursing home projects). If the sites are developed with attached (duplexes) or detached single family residences, the design standards for Single Family Residential design standards shall apply.

i. Exterior Materials

Exterior materials shall include one or a combination of more than one of the following: stucco, concrete fiber board, wood or composite wood siding, masonite siding products with stone and masonry accents. Sample material boards shall be reviewed and approved by the DRC.

Siding materials shall be continued down to within eight inches of finished grade on all elevations to eliminate large areas of exposed foundation. Building materials shall be compatible in scale with the design of the structures. Materials must also be compatible throughout each multi-family development area.

ii. Exterior Colors

All exterior color schemes shall be provided on sample color boards or colored sheets and shall be reviewed and approved by the DRC. Exterior colors shall be in harmony with the natural setting. Permitted colors of the main structures shall include earth tones, cream, beige and similar muted colors and will include complementary trim and special accent colors. Color intensity shall be kept low for large surfaces. Exterior palette materials shall not have high gloss or reflective/glare finishes. Bright primary colors are not permitted.

iii. Articulation

Large blank walls and roofs are not permitted. Design features to ensure articulation such as the provision of covered entries, porches, exterior stairways, decks, detailing around windows and doors, etc. shall be provided. Building materials and architectural features, compatible with the front of the buildings, shall be provided on all sides of the buildings.

iv. Roofs

Roof colors shall be rich, medium to dark tones such as slate, dark brown and dark gray. Light colors are not permitted. The DRC shall review and approve the color palette of roofing within each multi-family site.

Varying pitched roofs are encouraged. A variety of pitched roofs may be provided. Roof pitches under 5/12 are discouraged and flat roofs are prohibited.

Roof materials shall be applied to comply with snow load and high wind standards. Materials may include:

- Concrete or clay tile (flat or barrel)
- Non-reflective architectural metal
- 40-year architectural-grade composition shingles
- 40-year fiberglass composition shingles

Roof materials, however, must be consistent throughout each project site.

v. Height Restrictions

Multi-family developments within the community should generally contain buildings of two and three stories in height.

Where appropriate, a mix of heights including up to four stories may be provided. The maximum allowable height of all structures shall be 45 feet as measured from average finish grade to the mid-point of the ridge of the structure. Church spires and free standing flag poles, however, may exceed height limits, if necessary, with DRC approval.

vi. Exterior Lighting

Building and site lighting shall be integrated with the architectural design of the buildings. Lights shall be shielded to prevent light spillage onto adjacent properties or streets. Light fixtures in parking areas shall be restricted to 15 feet in height and shall include "shoe-box" style design.

Flood lights are not permitted. Motion detector actuators are permitted with designer fixtures only and subject to approval by the DRC.

h. Miscellaneous Design Elements

i. Antennas

All multi-family units shall be pre-wired to accommodate cable reception, telephone and DSL lines, where feasible. Exterior antennas and satellite dishes are discouraged and are subject to the review and approval of the DRC.

ii. Parking and Walkways

Parking must be provided on-site and may include a combination of covered carports, garages and open parking lots. The number of parking spaces provided and landscaping within parking areas shall be in conformance with the City of Fernley Development Code. Walkways and sidewalks leading from parking areas to the front doors of the units, offices or recreational facilities shall be a minimum of four feet in width and constructed with Portland Concrete Cement. Walkway connections shall be provided to sidewalks along the public streets and community wide pathways and trails, where appropriate.

iii. Gutters and Downspouts

Gutters and downspouts shall be painted to match the surface of the structures to which they attach.

iv. Trash Enclosures

Trash enclosures, constructed of masonry block or similar materials shall be provided to screen dumpsters in multi-family developments. Gates shall be hung on steel posts embedded in concrete. The design of the enclosures shall be reviewed and approved by the DRC.

i. Private open space, Recreational Areas and Landscaping

Private open space, recreational amenities and landscaping shall be in conformance with the City of Fernley Development Code.

3. Commercial Development

There are two commercial sites provided in the BC Ranch community. Commercial properties consist of approximately 39.69 acres. The commercial areas are intended to provide services, as well as employment opportunities for the residents of the community and the City of Fernley.

The commercial sites will be sold to various developers or users who may divide or reconfigure the properties during final design to accommodate specific projects. Developers and builders, however, must comply with the standards set forth herein.

a. Permitted Uses

The following uses shall be permitted outright subject to review and approval by the DRC and subsequent (or concurrent) review and approval of applicable applications including design review by the City of Fernley:

- Retail and wholesale establishments
- Convenience stores
- Clinics and medical/dental offices
- Professional offices (real estate, insurance, law, etc)
- Banking establishments
- Personal services establishments (dry cleaning, hair salons, etc.)
- Sit down restaurants with and without bars
- Fast food establishments
- Drive through establishments
- Bars, brew-pubs and taverns
- Accessory buildings and structures
- Temporary construction yards
- Public utilities necessary to serve the community

- Churches, clubs, lodges, social halls, community centers
- Automobile service establishments (tires, oil change, tune-up facilities)
- Gasoline stations
- Recreation facilities and fitness centers
- Veterinarian offices with inside kennel facilities
- Home improvement centers
- Theatres
- Car wash
- Governmental or quasi-governmental offices and facilities (library, museum, post office, etc.)
- Other similar uses subject to DRC interpretation

b. Uses Requiring a Special Use Permit

The following uses are permitted subject to review and approval of a Special Use Permit by the City of Fernley and subsequent review and approval by the DRC, as well as approval of building permits by the City of Fernley, as applicable.

- Hospitals
- Assisted living facilities
- Nursing Homes
- Child care facilities
- Outside RV/boat storage or trailer storage.
- Self storage facilities
- Outside storage of nursery stock, building materials and garden accessories associated with retail establishments
- Telecommunication facility sites and towers

c. Prohibited Uses

Prohibited uses include all uses not specifically listed as permitted uses plus the following:

- Mobile home subdivisions
- Mobile home parks
- Single family and multi-family residences
- Outside kennels
- Tattoo parlors
- Funeral parlors
- Hotels/Motels
- Casinos
- Adult businesses
- Call centers
- Billboards

- **Roof signs**

These restrictions shall be provided in the CC&R's for BC Ranch and disclosed at the time of sale of each home.

d. Commercial Setbacks

Building setbacks for the exterior perimeters of all commercial properties shall be as follows:

- Front, sides or rear yards of properties facing U.S. 95A, shall have a minimum setback of 25 feet and shall be fully landscaped with at least 1 tree per 30 lineal foot of highway frontage and 1 shrub per 40 square feet of landscape area provided. Trees may be placed in clusters, provided that traffic safety sight areas are not blocked.
- Front, sides or rear yards adjacent to major arterials, collector streets, common open space or any residentially zoned property, not separated by a public street, shall have a minimum setback of 15 feet and shall be fully landscaped with at least 1 tree per 30 lineal foot of street frontage and 1 shrub per 40 square feet of landscape area provided.

Setbacks for interior parcels for front, side and rear yards may be 0 feet provided landscaping and parking requirements as outlined in the City of Fernley Development Code are met.

e. Minimum Lot Size/Width

The minimum lot size in the commercial areas shall be 5,000 square feet. The average lot width shall be 50 feet.

f. Parking

Parking may include covered carports, garages and open parking. The number and size of parking spaces provided and landscaping within parking areas shall be in conformance with City of Fernley Development Code. Consideration of shared parking and reciprocal parking agreements are permitted and shall be reviewed on a case by case basis by the DRC.

Walkways and sidewalks leading from parking areas to the front doors of the commercial establishments, offices or other permitted uses shall be a minimum of 4 feet in width and constructed with Portland Concrete Cement. Walkway connections shall be provided to sidewalks along the public streets and community wide pathways and trails, where appropriate.

g. Service Areas and Loading Facilities

Service areas and loading facilities including docks shall be located in the rear or sides of the structures, screened from view from public streets and adjacent properties. Screening may include the use of walls, fences, berms and landscaping. Additional landscaping shall be required if loading and service areas are proposed adjacent to residential properties.

h. Landscaping

Landscaping on commercial properties and within parking areas shall be in accordance with the City of Fernley Development Code.

i. Architectural Elements

The following architectural standards shall apply to development on the commercial properties:

i. Exterior Materials

Exterior materials shall include one or a combination of more than one of the following: stucco, concrete fiber board, wood or composite wood siding, masonite siding products with stone and masonry accents. Metal buildings are not permitted. Sample material boards shall be reviewed and approved by the DRC.

Siding materials shall be continued down to within eight inches of finished grade on all elevations to eliminate large areas of exposed foundation. Building materials shall be compatible in scale with the design of the buildings. Materials must also be compatible throughout each commercial development area.

ii. Exterior Color

All exterior color schemes, as shown on sample color boards, shall be reviewed and approved by the DRC. Exterior colors shall be in harmony with the natural setting. Permitted colors will include earth tones, cream, beige and similar muted colors and will include trim and special accent colors for entry and garage doors. Color intensity shall be kept low for large surfaces. Exterior palette materials shall not have high gloss or reflective/glare finishes. Bright primary colors are not permitted.

iii. Articulation

Large blank walls and roofs are not permitted. Facades shall be articulated by varying building mass, form and texture.

Design features to ensure articulation such as the provision of covered entries, the use of columns, posts and projections, detailing around windows and doors, etc. shall be provided. Building materials and architectural features, compatible with the front of the buildings, shall be provided on all sides of the buildings.

iv. Roofs

Roof colors shall be rich, medium to dark tones such as slate, dark brown and dark gray. Light colors are not permitted. The DRC shall review and approve the color palette of roofing within each multi-family site.

Varying pitched roofs are encouraged. Flat roofs are permitted, however, must be enhanced through the use of parapets and other architectural features as to not appear flat.

Roof materials shall be applied to comply with snow load and high wind standards. Materials may include:

- Concrete or clay tile (flat or barrel)
- Non-reflective architectural metal
- 40 year architectural-grade composition shingles
- 40-year fiberglass composition shingles

Roof materials, however, must be consistent throughout each commercial site.

v. Height Restrictions

The maximum allowable height of all buildings with the exception of hospitals shall be 45 feet as measured from average finish grade to the mid-point of the ridge of the building. Hospitals, due to the nature of the facilities, may exceed the height limits with DRC approval. Church spires and free standing flag poles may also exceed height limits, if necessary, with DRC approval.

vi. Exterior Lighting

Building and site lighting shall be integrated with the architectural design of the buildings. Lights shall be shielded to prevent light spillage onto adjacent properties or streets. Light fixtures in parking areas that are adjacent to residentially designated properties or common open space that are not separated by collector or arterial streets, or a distance of at least 100 feet, shall be restricted to 15 feet in

height. Light fixtures in parking areas that are not adjacent to residentially designated properties are restricted to 35 feet in height. Parking lot lighting shall be "shoe-box" style design.

Flood lights are not permitted. Motion detector actuators are permitted with designer fixtures only and subject to approval by the DRC.

j. Miscellaneous Design Elements

i. Antennas

Exterior antennas and satellite dishes are discouraged and are subject to the review and approval of the DRC.

ii. Gutters and Downspouts

Gutters and downspouts shall be painted to match the surface of the structures to which they attach.

iii. Trash Enclosures

Trash enclosures, constructed of masonry block or similar materials shall be provided to screen dumpsters within commercial sites. Gates shall be hung on steel posts embedded in concrete. The design of the enclosures shall be reviewed and approved by the DRC.

4. Parks and Common Open Space Standards

Common open spaces include parks, drainage channels, detention/retention basins, pathways, project entrances and landscaped medians, landscape areas adjacent to major and minor arterial and collector streets, trail access parcels to open space and other open land within the BC Ranch community. Common open space, consisting of approximately 180.91 acres, will be dedicated to either the City of Fernley, or a Homeowner's Association, Property Owner's Association or a combination thereof. Maintenance responsibilities will be determined based on future ownership, as appropriate.

Improvements to open spaces will be provided by the master developer or, at the master developer's discretion, the builders or developers of the villages or project sites abutting common open space areas.

Park improvements will be designed and constructed by the City of Fernley unless the master developer or individual builders enter into a Residential Construction Tax Agreement (RTC) to design, construct and dedicate parks to the City of Fernley.

Builders and developers, however, must comply with the standards set forth herein.

a. Permitted Uses

The following uses shall be permitted outright subject to review and approval by the DRC and subsequent (or concurrent) review and approval of grading and building permits by the City of Fernley as applicable:

- Parks and associated recreational facilities and parking areas
- Pathways and trails and associated amenities
- Public utilities necessary to serve the community including water tanks
- Restroom facilities
- Lighted sports fields

b. Prohibited Uses

Prohibited uses include all uses not specifically listed as permitted uses plus the following:

- Large, trash dumpsters
- Telecommunication facility sites and towers

These restrictions shall be provided in the CC&R's for BC Ranch and disclosed at the time of sale of each home and project site within the community.

c. Development Standards

Project entrances, landscape medians and landscape areas adjacent to streets are discussed in other portions of this document. Common open spaces including parks, pathways, trail access parcels and other open land are discussed below:

i. Parks

Anticipated park features may include gazebos, picnic structures and facilities, small parking areas, pathways, tot lots, children's play structures, basketball courts, tennis courts, restroom facilities, landscape areas and small grassy play areas. Evergreen massing is encouraged where parks are adjacent to residential lots or projects for screening purposes. Large sports fields included lighted play fields are not planned. Parks will be designed to the approval of the City of Fernley. All parks will be dedicated to the City of Fernley.

ii. Pathways

Multiple access points will link the parks to the sidewalks and trail system with the open space network (*Refer to Figure 2, Sidewalk and Trail Plan*). Pathways within parks shall connect to sidewalks within the individual villages, sidewalks within trail access areas, open space trail pathways, and sidewalks along major and minor arterials and collector streets as appropriate. Pathways may meander, where possible. Pathways to and from individual lots are not permitted.

Pathways within the common open space shall be decomposed granite, a minimum of eight feet in width. Pathways will be constructed by the master builder, or at the master builder's discretion, the builders of each individual abutting village. Village builders shall ensure that pathways connect to sidewalks within the individual villages, pathways within trail access areas, and sidewalks along major and minor arterials and collector streets, as appropriate. Pathways shall meander, where possible.

iii. Trail Access Parcels

Trail access parcels shall be provided between lots within villages and within multi-family project sites to provide access to the parks, school and community trail network. Conceptual trail access points are shown on *Figure 2, Sidewalk and Trail Plan*. Trail access parcels shall be created in abutting final maps by the builder.

Trail access parcels shall be a minimum of 20 feet in width. Improvements within trail access parcels shall include irrigated landscaping in accordance with landscape criteria outlined in this Handbook. A minimum of 1 tree per 30 lineal feet and 1 shrub per 40 square feet of total landscape area provided shall be planted. Construction of all improvements within trail access easements shall be the responsibility of the builders of each village.

Pathways within trail access parcels shall be concrete sidewalks, four feet in width. Pathways may meander. Trail access pathways shall connect to concrete sidewalks within the individual villages, along major and minor arterials and collector streets and other decomposed granite pathways within parks and other common open spaces.

B. Design Standards for Community Features and Amenities

1. Streets

Streets within BC Ranch include major and minor arterials, collectors, and local residential streets. All streets in the community include sidewalks on both sides of the streets. Major arterials, minor arterials and collector streets are identified on *Figure 3, Circulation Plan*. All other streets shown on the Circulation Plan are local residential streets within the individual villages.

a. Major and Minor Arterials and Collector Streets

Construction of major and minor arterials, collector streets and associated improvements will be provided by the master developer or, at the master developer's discretion, the builders of each individual abutting village or project site.

Major and minor arterial streets and collector streets shall be improved with paving, curb, gutter, sidewalk, landscaping, and striped bike lanes in accordance with *Figure 3, Circulation Plan*, *Figure 4, Street Cross Sections* and landscaping criteria outlined in this Handbook. Left turn lanes shall be provided in lieu of center medians where necessary along major arterials. A minimum of 1 tree per 30 lineal feet of street frontage and median area, where applicable, plus 1 shrub per 40 square feet of total landscape area provided shall be planted. Trees may be placed in clusters, provided that traffic safety sight areas are not blocked.

Sidewalks along the various streets shall be transitioned and connected to other sidewalks, pathways and trails within the community, as appropriate. All sidewalks along streets shall be 4 feet in width, include vertical curb and shall be constructed of Portland Cement Concrete. Sidewalks may meander, where feasible. Sidewalks shall meet ADA standards set forth by the City Public Works Design Standards.

On street parking and/or direct residential driveway access is not permitted on major and minor arterial streets or collector streets. This restriction shall be provided in the CC&R's for BC Ranch.

b. Local Residential Streets

Local residential streets are defined as streets within individual single family residential villages including project entry streets, cul-

de-sacs and loop streets. Construction of local streets shall be provided by the builders of each individual village.

Local residential streets shall be improved with paving, curb, gutter and sidewalk in accordance with *Figure 3, Circulation Plan and Figure 4, Street Cross Sections*. All sidewalks along streets shall be 4 feet in width, include vertical curb and shall be constructed of Portland Cement Concrete (PCC). Sidewalks within villages shall be transitioned and connected to sidewalks along major and minor arterial streets, collector streets and pedestrian pathways and trails within the community, as appropriate. Sidewalks and private driveway approaches shall meet ADA standards set forth by the City Public Works Design Standards.

On street parking and/or direct residential driveway access within villages is permitted except where adjacent to landscaped areas and corner lots associated with village entrances.

Medians, 10 feet in width, shall be provided at each entrance to each single family village and multi-family project site. Modifications to the local residential street standards may be made at project entrances to accommodate the medians.

c. Private Streets

Gated or non-gated private streets with alternate street sections including reduced widths, rolled curb and/or landscaped parkways may be provided subject to DRC review and Special Use Permit approval by the City of Fernley. Each gated village, however, shall comply with City of Fernley specific requirements for connectivity to other villages to ensure access for fire and emergency service vehicles.

d. Emergency Access

Permanent and temporary emergency access roads, if necessary, shall be provided as required by the North Lyon County Fire Protection District.

2. Walls and Fences

A variety of permanent walls and fences will be provided within the community. Materials, color schemes and styles shall be compatible and consistent throughout the entire community. Prior to issuance of building permits in BC Ranch, final wall and fence design package(s), in general conformance with the wall and fence requirements and exhibits provided in this handbook, shall be approved by the DRC. Design packages may be submitted for all

walls and fences within the community at one time or incrementally for the various land uses as wall and fence types are determined.

In general, masonry walls are required along major and minor arterials and between commercial and multi-family sites when not separated by a collector street. Decorative fences are generally allowed along collector streets if next to a landscaped park strip, drainageways or when building pads are significantly higher or lower than the street elevation. Walls and fences, however, shall not encroach into corner line of sight requirements. To maintain vistas and an open feeling to the community, however, there are some locations along the major and minor arterials and collectors that are adjacent to common open space, multi-family sites and commercial areas, where walls and fencing are either not required or, if desired, are restricted to certain styles of open view fencing.

Individual fencing of residential lots will include solid wood fences. Various types of open view fencing will be permitted within multi-family developments, parks and common open space areas. Wall and fence locations are depicted in *Figure 5, Locations of Fences and Walls*.

In addition to permanent walls and fences, temporary fences associated with construction and model home complexes will be permitted.

Descriptions of the various permanent and temporary wall and fence types are outlined below:

a. Permanent Walls and Fences

i. Masonry Walls

Solid, masonry walls, six (6) feet in height shall be consistent in the required locations throughout the entire community. Walls shall be masonry block with a decorative accent such as a split face decorative colored band and shall be in general compliance with the typical masonry wall photographs shown in *Figure 6, Masonry Walls, Typical Design*.

Walls shall be provided at the rear property lines of single family lots along all major and minor arterials. Walls are also required between commercial and multi-family sites when not separated by a collector street (*Refer to Figure 5, Location of Walls and Fences*). Walls will either be constructed by the master developer or, at the master developer's discretion, the builders of each individual

abutting village or project site. Walls may be constructed incrementally, on a village by village basis, prior to the first certificate of occupancy for the first home abutting a major or minor arterial.

When changes in elevations occur, walls shall be stepped in equal intervals, rather than sloped. Cuts in the masonry walls for gates to backyards for RV or vehicular access, access to schools, parks or open space areas will not be permitted. This restriction shall be provided in the CC&R's for BC Ranch.

ii. Decorative Fencing

Solid wood or vinyl fencing, six (6) feet in height shall be consistent in the required locations throughout the entire community. Fencing along collector streets shall include pilasters with minimum uniform spacing of approximately 60 feet and shall be in general conformance with the typical decorative fencing photographs shown in *Figure 7, Decorative Fencing, Typical Design*. Pilasters shall be placed at the beginning and end points of all expanses of decorative fencing, at change of direction points, and at transition points to masonry walls, residential lot fences or open view fences. Pilaster spacing may be increased if permitted by the Director to accommodate placing of pilasters evenly or to achieve adequate safety sight areas.

Decorative fencing shall be provided at the rear property lines of single family lots along all collector streets (*Refer to Figure 5, Location of Walls and Fences*). Decorative fencing will either be constructed by the master developer or, at the master developer's discretion, the builders of each individual abutting village or project site. Decorative fencing may be constructed incrementally, on a village by village basis, prior to the first certificate of occupancy for the first home abutting a collector street.

Cuts in the decorative fencing for gates to backyards for RV or vehicular access, access to schools, parks or open space areas will not be permitted. This restriction shall be provided in the CC&R's for BC Ranch.

All decorative wood fences, throughout the community, shall be stained the same color as approved by the DRC. Individual homeowner's will not be allowed to alter the

original stain or color of the decorative fences. This restriction shall be provided in the CC&R's for BC Ranch.

iii. Residential Lot Fencing

Solid wood fencing, six (6) feet in height shall be consistent in the individual villages throughout the entire community. Fence tops in individual villages may include caps or may be "dog-eared" and shall be designed with a "good neighbor" appearance on both sides. Cuts in the rear yard residential lot fencing for gates for RV or vehicular access, access to schools, parks or open space areas will not be permitted. This restriction shall be provided in the CC&R's for BC Ranch.

Solid wood fencing shall be provided along all rear and side property lines of single family lots. Corner lot fencing shall be located a minimum of five feet from the back of the sidewalk. Landscaping and irrigation shall be installed, from the back of the curb to the fence line area by the builder in accordance with the landscape requirements in this Handbook (*Refer to Figure 9, Corner Lot Fencing Standard*). Side yard return fencing may extend to a point within a minimum of five feet behind the front of the house or garage. Front yard fencing and fencing in front of the front yard setback is prohibited. In no cases shall fences encroach into street line of sight requirements.

Rear and side yard fencing of individual lots in the villages shall be installed by the builders of each individual village prior to the issuance of certificates of occupancy for each home.

All fences, within a village, shall be stained the same color as approved by the DRC. Individual homeowner's will not be allowed to alter the original stain or color of residential lot fences. This restriction shall be provided in the CC&R's for BC Ranch.

iv. Open View Fencing

Various types of open view fencing styles will be permitted within the community based on land use.

1. Park Sites

Open view fencing is permitted, but not required within park sites to delineate boundaries or activity areas. (*Refer to Figure 5, Location of Walls and Fences*). Open

view fencing may include split rail or decorative metal as typically depicted in *Figure 8, Open View Fencing, Typical Options*. Park fencing may also include vinyl coated brown or black chain link fencing, if associated with sports fields or courts.

2. Common Open Space

Open view fencing is also permitted, but not required in common open space areas to delineate boundaries along roadways or drainage channels (*Refer to Figure 5, Location of Walls and Fences*). Open view fencing in common open space areas, however, may only include two or three rail, wood or vinyl split rail styles as typically depicted in *Figure 8, Open View Fencing, Typical Options*. Common area fencing, however, must be consistent throughout the community.

3. Commercial Sites

Open view fencing is permitted, but not required along property lines of commercial parcels to delineate boundaries (*Refer to Figure 5, Location of Walls and Fences*). Open view fencing may include two or three rail, wood or vinyl split rail or decorative metal styles as depicted in *Figure 8, Open View Fencing Typical Options*. Commercial fencing, however, must be consistent throughout the commercial sites.

4. Multi-Family Projects

Fencing for multi-family projects including sites along major and minor arterials and collectors shall include open view fencing to maintain visibility and to delineate boundaries (*Refer to Figure 5, Location of Walls and Fences*). Open view, however, is restricted to the use of 6 foot high, decorative metal styles as depicted in *Figure 8, Open View Fencing Typical Options*. Fencing in multi-family areas, however, must be consistent throughout the community.

Cuts or openings fencing to allow vehicular access are prohibited. This restriction shall be provided in the CC&R's for BC Ranch. Cuts or openings in fencing to allow pedestrian access to schools, parks, open space areas or commercial properties, must be reviewed and approved by the DRC.

b. Temporary Fencing

Security fencing associated with temporary structures and construction is permitted. Fencing shall not exceed 6 feet in height. Fencing materials for construction yards and trailers may include chain link and wood and must be kept in good repair. Barbed wire may not be used. Upon termination of the temporary use, fencing shall be removed.

Fencing for model homes may include wood or decorative metal. Front yard fencing and fencing that is not a part of the permanent house-fencing scheme for the village shall be removed upon termination of the model home complex use.

3. Signs

A variety of permanent and temporary signs will be provided within the community. Materials, color schemes, styles and lighting shall be compatible and consistent throughout the entire community. Prior to issuance of building permits in BC Ranch, final sign design package(s) depicting size height, materials and lighting, in general conformance with the sign requirements and exhibits provided in this Handbook, shall be approved by the DRC. Design packages may be submitted for all signs within the community at one time or incrementally for the various land uses as sign types are determined.

a. Permanent Signs

i. Community Entrances

Monument signs identifying the BC Ranch community may be provided on each side of the major arterial streets at the northeast, northwest and southeast entrance points to the project and on each side of the minor arterial street at the north entrance point to the project at the discretion of the master developer. Signs shall not exceed ten feet in height.

Signage materials may include decorative masonry block, stucco, brick, natural or manufactured stone, wood, tile or decorative metal. Lettering may consist of inset or painted designs or individual or attached raised letters. Signage may include a logo for the BC Ranch or an artistic feature.

Signage shall be complemented with irrigated landscaping, in proportion and scale with the selected sign. A minimum of 1 tree per 400 square feet and 1 shrub per 40 square feet of total landscape are provided shall be planted. Lighting may be provided to illuminate the sign and landscape areas. Lighting shall be through the use of ground mounted or other

indirect lighting sources. No internal illumination of the signs shall be permitted.

Community entrance signs shall be consistent at all provided locations. Details regarding the size and style of the signs and amount of landscaping provided shall be approved by the DRC. The construction of community entrance signs shall be the responsibility of the master developer.

ii. Single Family Village and Multi-Family Project Entrances

Entrance areas that include irrigated landscaping and signage shall be provided on both sides of the main entrance streets to each single family residential village and multi-family development.

Entrance areas shall be generally triangular in shape and shall include a minimum of 300 square feet on each side. In addition, entrance areas shall include irrigated and landscaped medians, a minimum of 10 feet in width and 25 feet in length. A minimum of 1 tree per 400 square feet and 1 shrub per 40 square feet of total landscape area provided shall be planted.

Signs may be placed on walls or monuments, not to exceed six feet in height, within the established entrance areas. Signs shall be similar to the project entry sign photographs shown in *Figure 10, Project Entry Signs, Typical*.

Signage materials may include decorative masonry block, stucco, brick, natural or manufactured stone, wood, tile or decorative metal. Lettering may consist of inset or painted designs or individual or attached raised letters. Signage may include the name of the individual village or project and a logo for the BC Ranch. Builder names, however, may not be listed on the signs.

Signage shall be complemented with irrigated landscaping, in proportion and scale with the selected sign. A minimum of 1 tree per 400 square feet and 1 shrub per 40 square feet of total landscape area provided shall be planted. Lighting may be provided to illuminate the sign and landscape areas. Lighting shall be through the use of ground mounted or other indirect lighting sources. No internal illumination of the signs shall be permitted.

All single family village and multi-family entrance signs shall be consistent throughout the BC Ranch community. Details regarding the size and style of the signs shall be approved by the DRC. The construction of entrance signs shall be the responsibility of the builders of the individual villages or multi-family projects.

iii. Ladder Signs

Ladder signs, to provide direction to individual villages, multi-family sites, commercial areas and parks, are permitted in landscaped planting areas along both sides of major and minor arterial streets. Ladder signs, however, are not permitted along collector or local residential streets.

Signage materials may include decorative masonry block, stucco, brick, natural or manufactured stone, wood, tile or decorative metal. Lettering may consist of inset or painted designs or individual or attached raised letters. Ladder signs shall be consistent throughout the entire BC Ranch community and may include a logo for the BC Ranch. Sign locations shall be reviewed and approved by the DRC.

Ladder signs shall not be internally illuminated. Lighting may include non-intrusive exterior spot lighting. Sign text shall only include the name of the individual village, multi-family project, park or open space feature.

iv. Signage for Parks and Open Space

Park signage shall be compatible with City of Fernley park sign standards and is subject to DRC review and approval.

Signs may be provided along pathways in the common open space areas and along trail access parcels to provide information and direction to users. Signs shall be limited to six square feet in size and shall include the BC Ranch logo. All pedestrian oriented signs shall be consistent throughout the entire BC Ranch residential community.

iv. Commercial Signs

Signs in commercial areas may include free standing signs, monument signs, building and wall signs and shall be in general conformance with the City of Fernley Development Code. Prior to the issuance of the first building permit in a commercial area, a signage package for commercial developments addressing height, size, styles, materials and illumination shall be reviewed and approved by the DRC.

b. Temporary Signs

Temporary signs and flags associated with model home complexes are permitted. The size, type and location shall be submitted to the DRC for review and approval. Upon termination of the model home complex use by the builder, all signs shall be removed.

4. Lighting

A variety of lighting including parking lot illumination, building, structure and sign lighting will be associated with the various uses in the community and has been discussed in other sections of this Handbook. Other permanent and temporary lighting standards are provided as follows:

a. Permanent Lighting

i. Street Lighting

Street lighting along major and minor arterials, collector streets and along local residential streets may include either standard City of Fernley lights or decorative street lights. If decorative street lights are selected, however, styles shall be consistent as follows:

- Along all major and minor arterials throughout the entire community
- Along all collector streets throughout the entire community
- Along local residential streets within each individual residential village

All decorative street lights shall be approved by SPPCo and the DRC.

ii. Park Lighting

Lighting in parks should be minimized where possible but may include the following, if appropriate:

- “Shoebox” style lights or decorative street lights may be provided in parking lots and shall not exceed 15 feet in height.
- Entrance signs may be lighted with ground mounted indirect lighting sources. No internal illumination of signs shall be permitted.
- Low level, bollard lights, a maximum of 3 ½ feet in height may be used to illuminate pathways
- Subdued exterior lights may be used on restroom structures and utility buildings.

- Lighting of sports fields in the community will be allowed as part of City approved improvements.

b. Temporary Lighting

Temporary security lighting for construction trailers and yards will be permitted. Temporary lighting shall be removed upon termination of the temporary use.

Site lighting for the model home complex is encouraged for security and safety purposes. This lighting may consist of low-level building mounted lights, motion detection lights, interior lighting left on within the model home, and/or low voltage landscape lighting. Temporary parking lot lighting, if desired by the individual builders, will be allowed. Upon termination of the model home complex use, any site lighting not in conformance with residential lighting throughout the village shall be removed by the builder.

5. Landscaping

Landscaping and irrigation shall be provided in the various developments, along major and minor arterials and collectors, in parks and within trail access parcels throughout the community. Specific requirements associated with the various land uses have been discussed in other sections of this Handbook. In addition to requirements previously outlined, the following general standards shall apply:

a. Landscape Criteria

i. Plant Use and Quality

A balanced use of evergreen and deciduous plants shall be included within the landscape areas provided. Generally, trees and shrubs shall be placed in locations that do not block sight lines or impair the visibility requirements for motorists, pedestrians, and other users. All plants used shall comply with the American National Standards Institute for Nursery SI Z60.1) and the handbook standards listed below. Compliance with the stated handbook standards for trees and shrubs must be made at the time of planting.

ii. Plant Quantities

Landscape areas shall include trees and shrubs that are provided at the following rates, subject to the size standards listed below. Where quantities provided exceed the minimum quantities required, the minimum plant sizes for the excess quantities shall be at Small Tree or Small Shrub size. Trees in landscape areas shall be provided at a minimum rate of 1-Tree per 400-Square Feet of landscape

area. Trees along major and minor arterials and collectors, as well as medians where applicable, shall be provided at a minimum rate of 1 tree per 30 lineal feet of street frontage. Trees in parking lots shall be provided at a minimum rate of 1-Tree per 10-Spaces. Shrubs shall be provided at a minimum rate of 1-Shrub per 40 Square Feet of landscape area. Tree counts are not cumulative meaning that quantities determined on a linear basis for streetscape areas, or on a per 10 parking spaces basis for parking lots, are not added to quantities determined on a square foot basis. However, in all cases, the higher number of trees required by either calculation method shall prevail.

iii. Tree Sizes

A minimum of 70-percent of all trees used shall meet the requirements of Large Trees, with a maximum of 30-percent meeting the requirements of Small Trees. Large Trees shall be a minimum of 2"-Caliper (Deciduous), or 8-Foot Height (Evergreen). Small Trees shall be a minimum of 1"-Caliper (Deciduous), or 5-Foot Height (Evergreen).

iv. Shrubs and Other Plant Sizes

A minimum of 70-percent of all shrubs used shall meet the requirements of Large Shrub category, with a maximum of 30-percent meeting the requirements of Small Shrub. Large Shrubs shall be a minimum of 5-Gallon container size. Small Shrubs shall be a minimum of 1-Gallon container size. Ornamental Grasses may be classified in either the Large Shrub or Small Shrub categories. Perennial Plants, Groundcovers, Vines and Hybrid Tea Roses shall be classified under Small Shrub category and their use shall be limited to those quantities. Groundcovers or Perennials, provided that the substitution ratio is 3 (4" or 6" Pots) for 1 (1-Gallon). Annual Plants, Bulbs, and other ornamental plants smaller than 1-Gallon in size are allowed, but do not qualify towards fulfillment of the standards in this section.

v. Turf Areas

Turf grasses may be included within landscape areas provided that the use of turf is balanced within the overall project. Turf areas shall be a minimum of 5-feet in width with a maximum slope that is not steeper than 4:1(H:V).

Turf shall not be placed within 3-Feet of a fence or wall. Turf areas shall not constitute more than 70-percent of the total landscape area provided. All turf shall be installed in the

form of sod. Seeding, hydroseeding, plugging and sprigging are not acceptable installation techniques for turf areas.

vi. Site Preparation for Turf and Planter Bed Areas

A minimum 3" deep layer of topsoil shall be provided under all turf areas. Planting pits for trees and shrubs shall be amended only as needed at the time of plant installation. Amending entire planter bed areas with organic materials is not required unless a soils analysis indicates specific deficiencies that can be improved through their use.

vii. Mulches and Weed Growth Prevention

All planter bed areas shall receive a minimum 4-inch deep layer of rock mulch, decomposed granite, or bark mulch. Weed growth mitigation practices for planter bed areas shall include either a water permeable weed barrier fabric installed under the mulch, or routine seasonal applications of a pre-emergent herbicide in the spring and fall. Weeds shall not be allowed to grow in planter bed or turf areas.

viii. Prohibited Plant Materials

Artificial turf is not a permitted plant material. Trees, shrubs, perennials, groundcovers and other plants that are environmentally adapted for use in Fernley Nevada are acceptable for use on this project. However, trees of the following genus shall not be used on this project: Betula (Birch), Populus (Poplar, Cottonwood & Aspen), Salix (Willow), and Ulmus (Elm). Other trees that may be prohibited by the City of Fernley shall not be used on this project. Trees and shrubs that have increasing cases of insect infestations, or disease, or that are known to become environmentally invasive shall not be used.

b. Landscape Irrigation

All turf areas, trees, shrubs, and other plants shall be irrigated with a permanent automatic irrigation system. Turf areas shall be irrigated using pop-up spray or pop-up rotor heads suitable for the size, shape and condition of each turf area. Trees, shrubs and other required plants shall be irrigated using a drip irrigation system with drip tubing and related devices firmly secured beneath the planter bed mulch layer. Other irrigation systems for turf or planter bed areas, including sub-surface watering systems, may be allowed provided that their capacity to save water and water more effectively can be demonstrated.

6. Utilities and Equipment

To the extent possible, utilities, appurtenances and equipment shall be screened from public view. The following standards shall apply to development within the entire BC Ranch Community:

a. Ground Mounted

To the extent possible, above ground utility appurtenances and other equipment including AC compressors and evaporative coolers, shall be screened from public view. Screening shall be accomplished solely with the use of blending colors and/or vegetation.

Utility appurtenances shall be located in planter areas and not in turf areas, where feasible.

b. Roof Mounted

Roof mounted mechanical equipment and solar panels are not permitted on homes in the single family residential villages. Roof mounted equipment in multi-family and commercial developments shall be screened from view of public streets and common open space areas. Screening may include the use of parapets or facades. The use of chain link fences with slats or wood fences for screening purposes is not permitted.

c. Structure Mounted

To the extent possible, all mechanical and electrical utilities and equipment including meters shall be integrated into the structures and screened from public view. Screening may be accomplished solely through the use of blending colors or "boxing-in" equipment with the same materials provided on the structures.

d. Water Tanks

To the extent possible, water tanks shall be screened. Screening may be accomplished with the use of berms, fences, walls, blending colors, or vegetation.

e. Overhead Power Lines

All new power lines required to serve the BC Ranch Community shall be placed underground (with the exception of major transmission lines over 25 kV). Existing overhead power lines or new major transmission lines may remain or be placed overhead. Locations of new transmission lines, if required shall be reviewed and approved by the DRC.

7. Slope and Drainage Channel Treatment Guidelines

Slopes on the site may include 2:1 designs with rip rap or re-vegetated slopes. Rockery walls or keystone walls are also permitted. The maximum height of the walls will be 8 feet. Where multiple walls are planned, benches will be landscaped and will include permanent irrigation.

Slopes shall be designed to blend into the natural topography. Benches and terraces are permitted. At the intersection of a manufactured cut or fill slope and a natural slope, a gradual transition, rounding or contour shall be provided. Manufactured slope banks intersecting at or near right angles shall be rounded with a radius at the building pad. Slopes will be stabilized to prevent erosion.

Drainage channels may be rock lined, natural or concrete lined or re-vegetated with native material as necessary to convey drainage through the site.

8. Construction Standards

a. Construction Yards

The location of all construction yards shall be reviewed and approved by the DRC. To the extent possible, construction yards and temporary nurseries shall be located away from major and minor arterials collector streets and shall be fenced.

b. Temporary Structure, Uses and Signs

The location and type of temporary structures, uses and construction signs shall be reviewed and approved by the DRC. All temporary structures and uses shall be kept in good repair. To the extent possible, construction trailers shall be located away from major and minor arterials and collector streets. Temporary structures, uses and signs shall be removed immediately upon completion of construction.

c. Construction Site Maintenance

Builders and developers shall maintain construction sites in a neat and orderly manner. Adequate dumpsters shall be provided and emptied in order to prevent construction materials from littering the site. The area around all construction sites shall be regularly maintained to ensure all construction trash is properly picked up and removed.

d. Dust Control

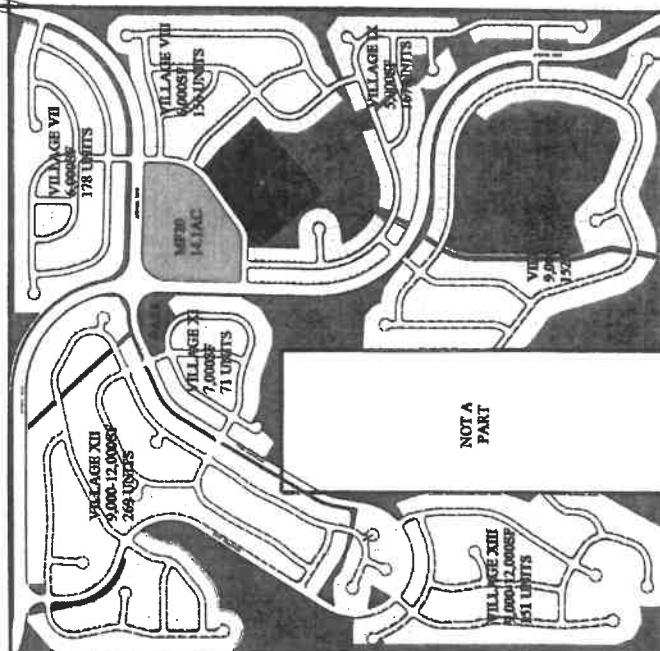
Builders and developers shall control dust during construction at all times in accordance with City of Fernley requirements and obtain all necessary permits.

e. Street Cleaning

Builders and developers shall regularly keep streets clean and free from dirt, construction materials and debris during construction.

f. Construction Hours

Construction hours shall be limited to 7:00 am to 7:00 pm, Monday through Saturday.



USE	# OF SITES	# OF UNITS	ACRES
SPB-5, 000007	5	407	206.62
SPB-6, 000007	4	940	200.38
SPB-7, 000007	2	940	91.20
SPB-9, 0000-12, 000007	2	570	200.40
SPB 20, 0012/C CRA 2000	1	1010	50.00
SPB 21, 0012/C CRA 2000	1	1010	50.00
SPB 22, 0012/C CRA 2000	1	1010	50.00
ARTISANS / COLLECTORS RESIDENCE	1	-	60.32
SPB 24	1	2100	500.00

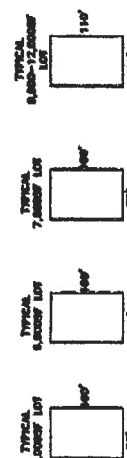
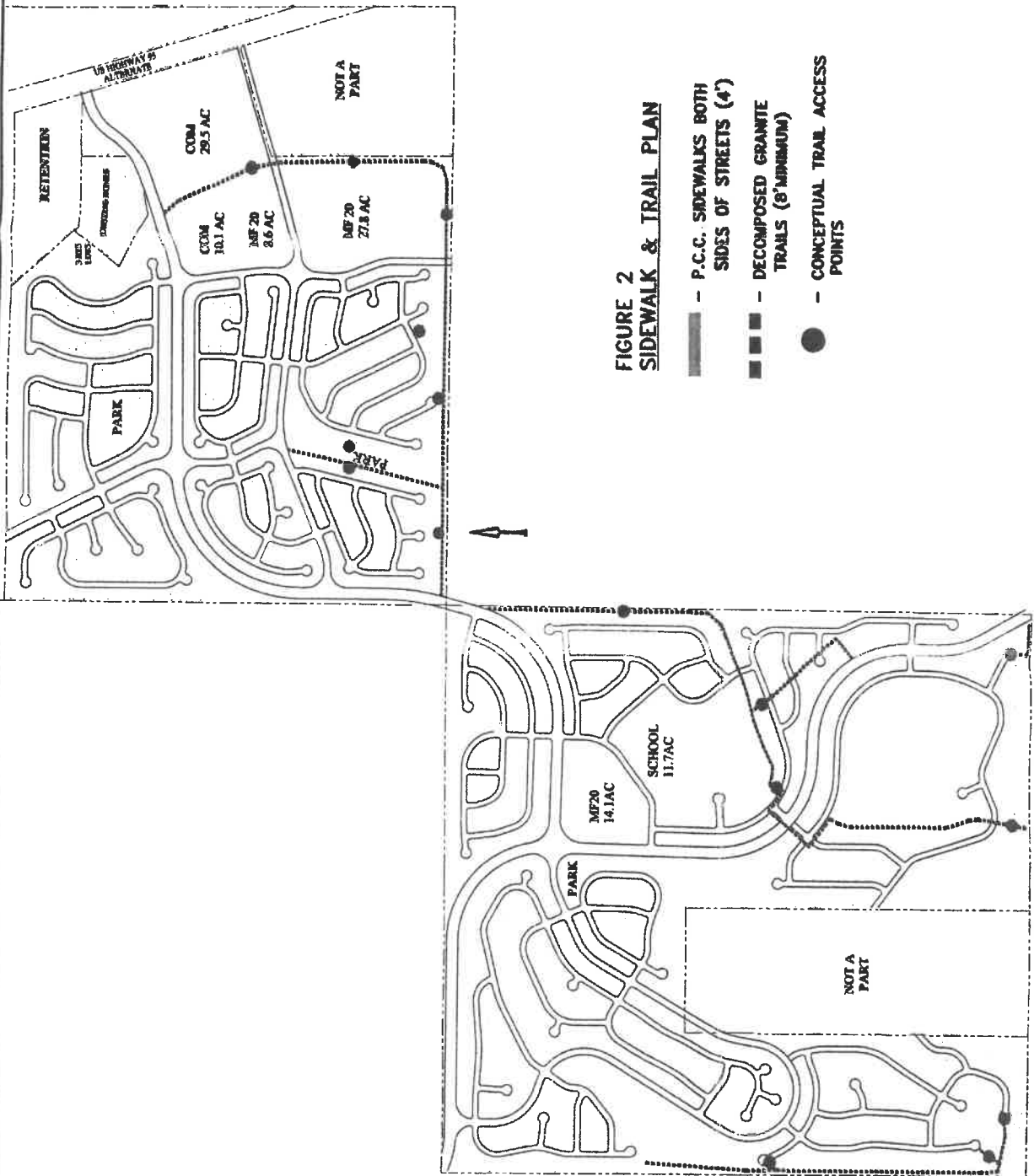
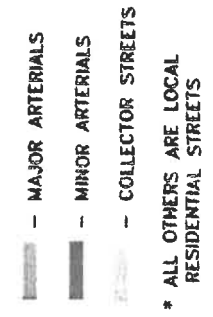
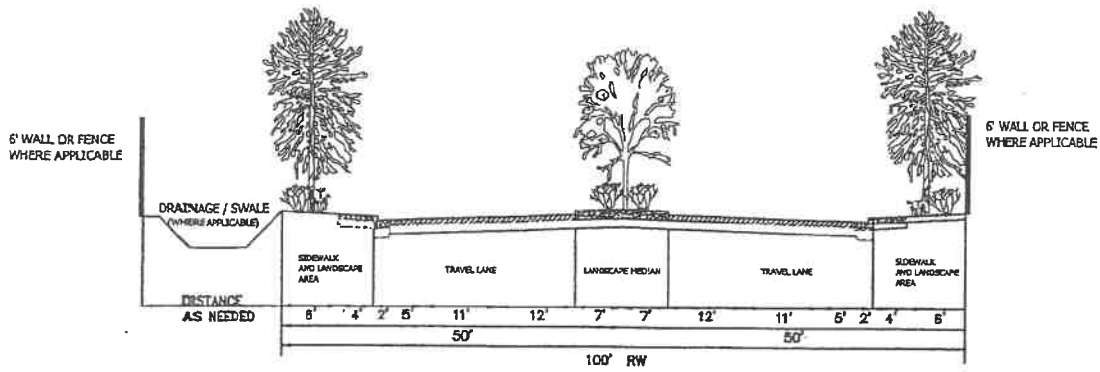
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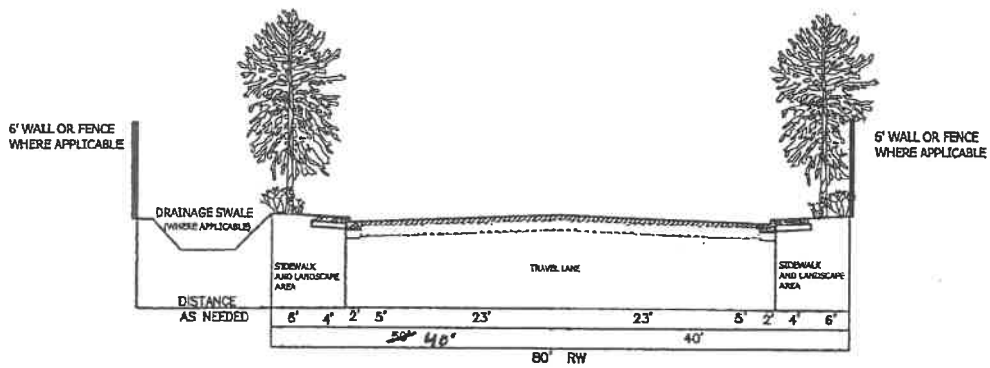
FIGURE 1
GENERAL DEVELOPMENT PLAN



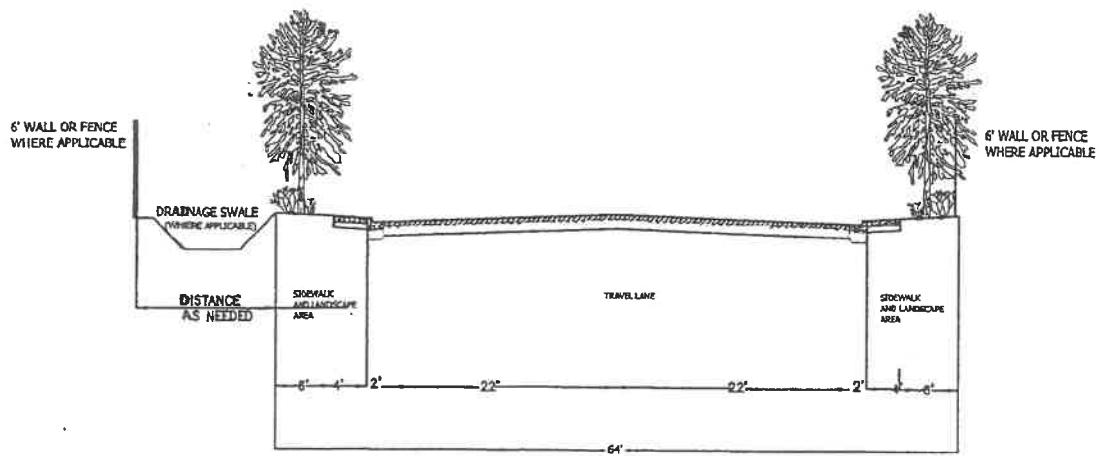




MAJOR ARTERIAL STREETSCAPE CONCEPT

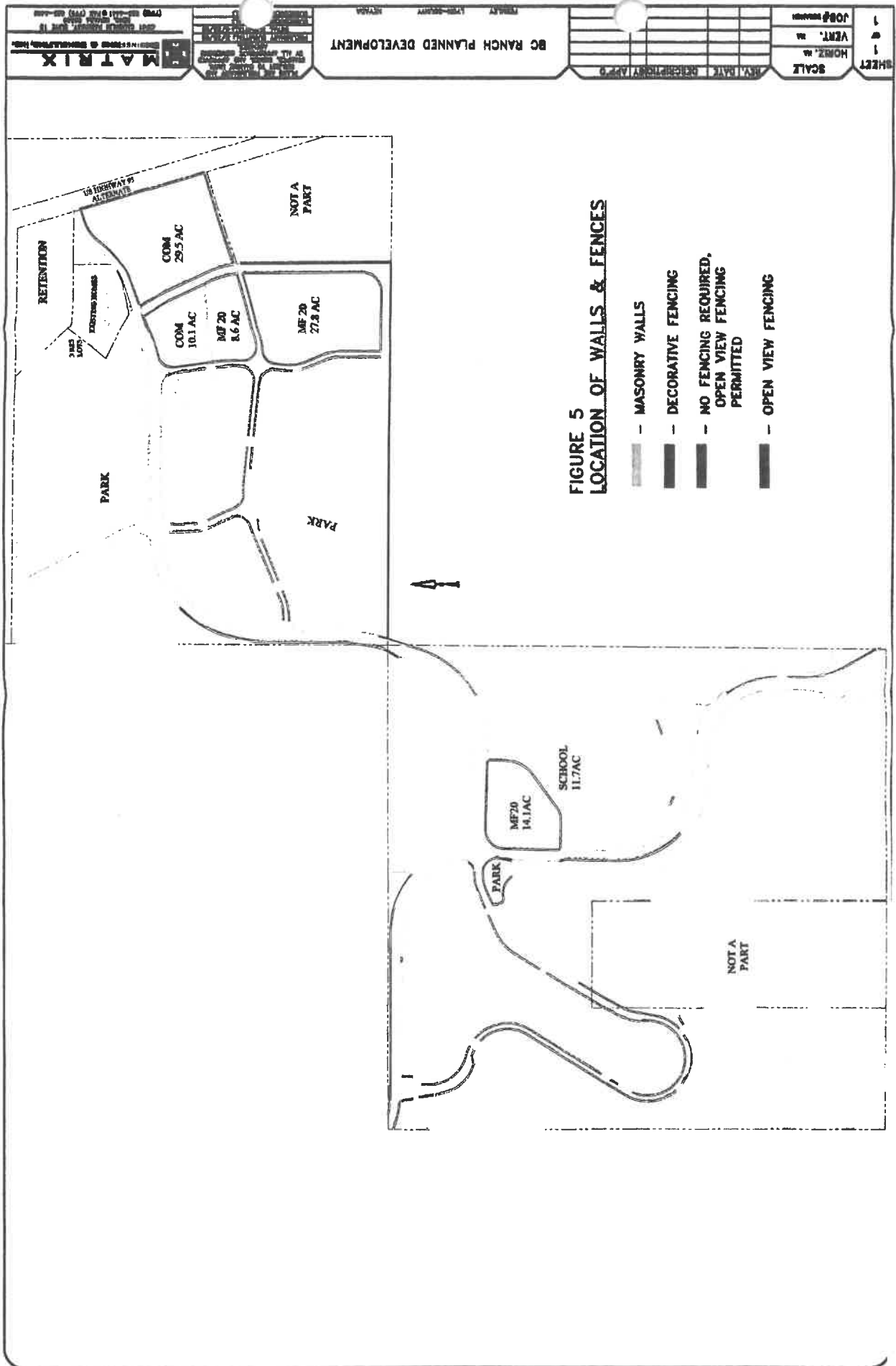


MINOR ARTERIAL STREETSCAPE CONCEPT



COLLECTOR STREETSCAPE CONCEPT

FIGURE 4
STREET CROSS SECTION



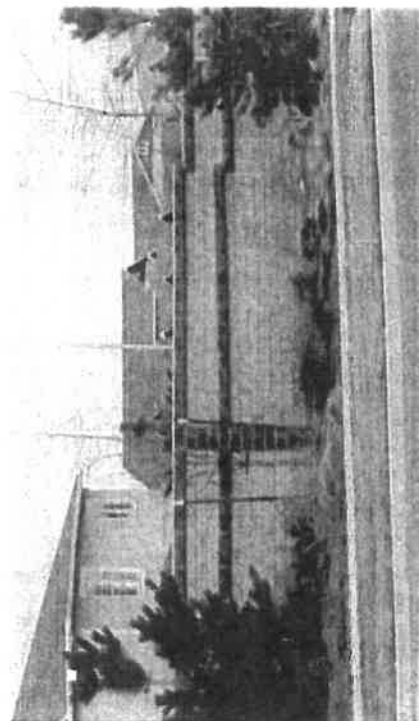
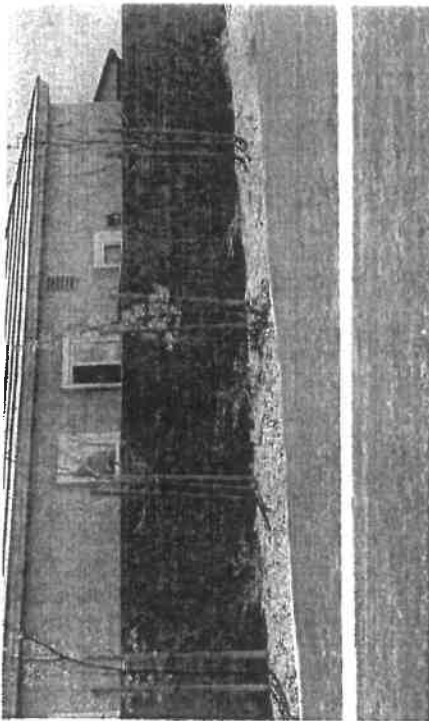
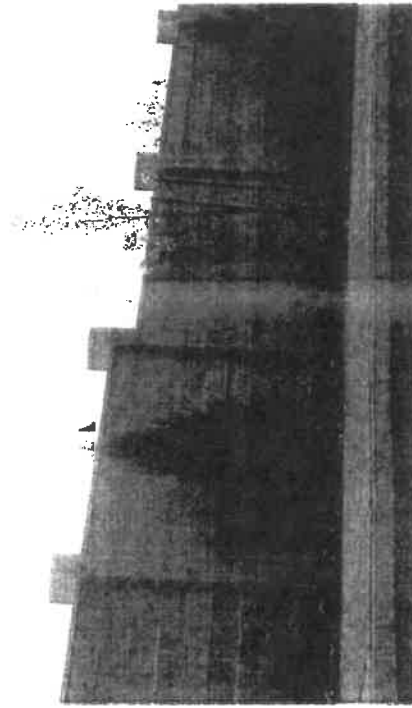
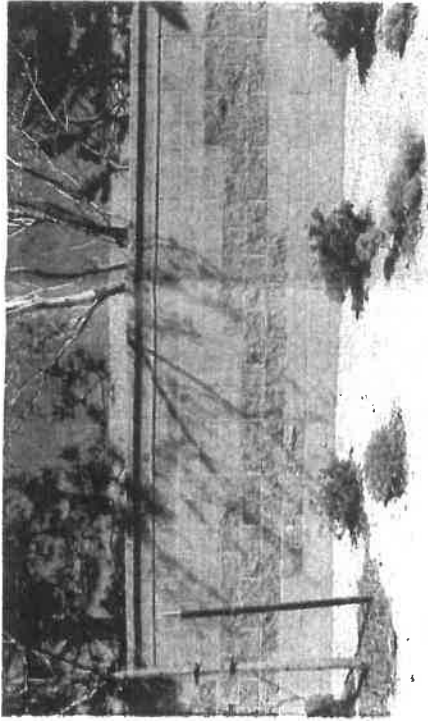


Figure 6
Masonry Walls, Typical Design

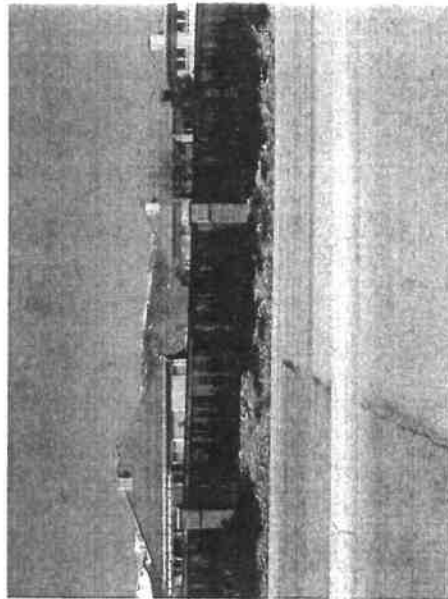
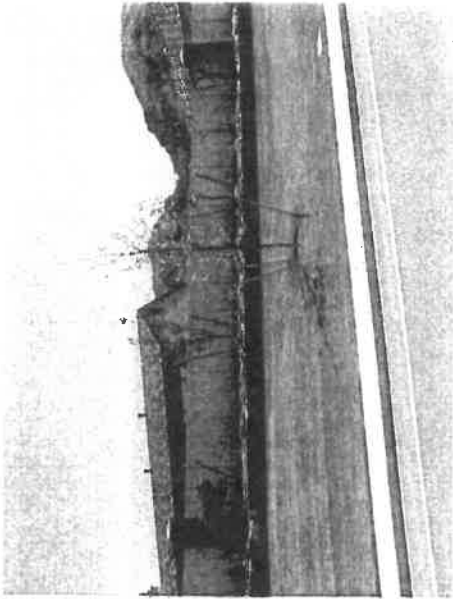
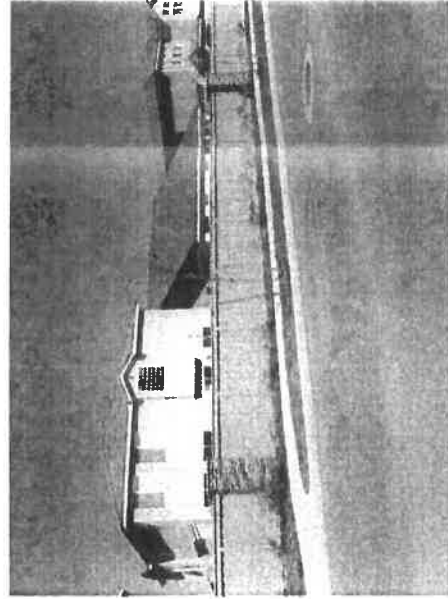
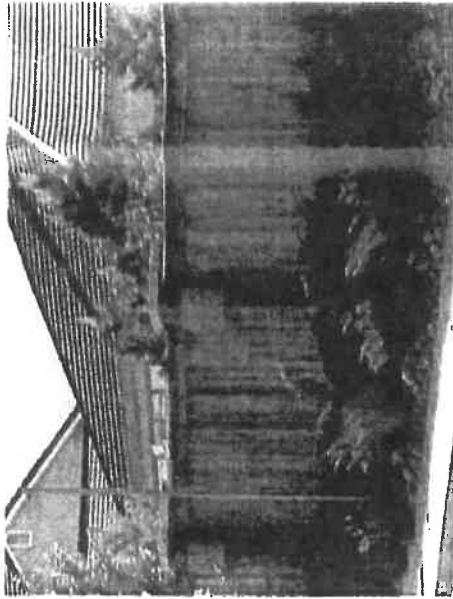


Figure 7
Decorative Fencing, Typical Design

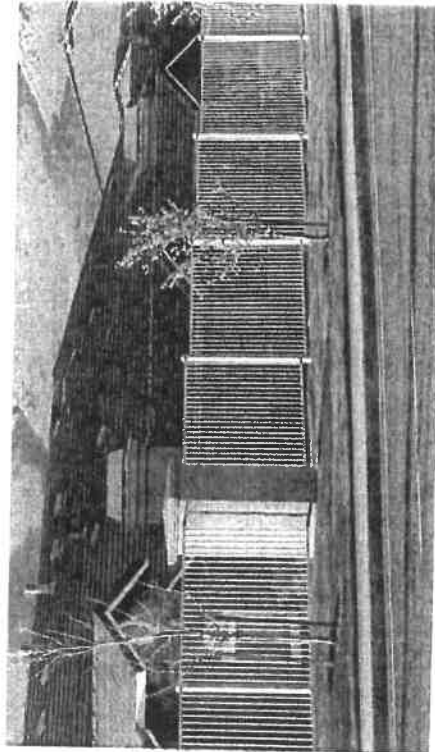
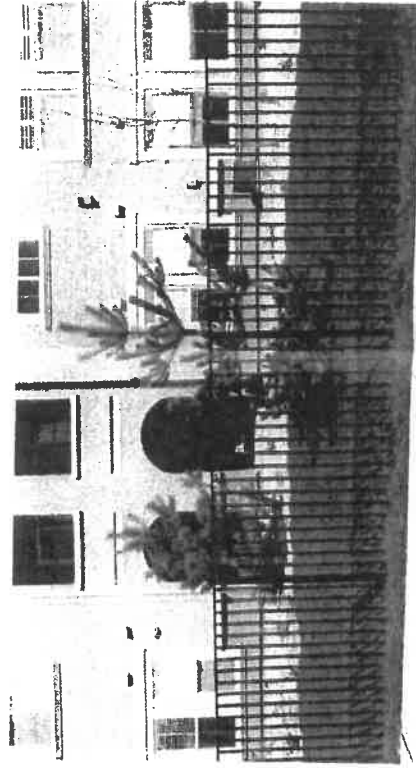
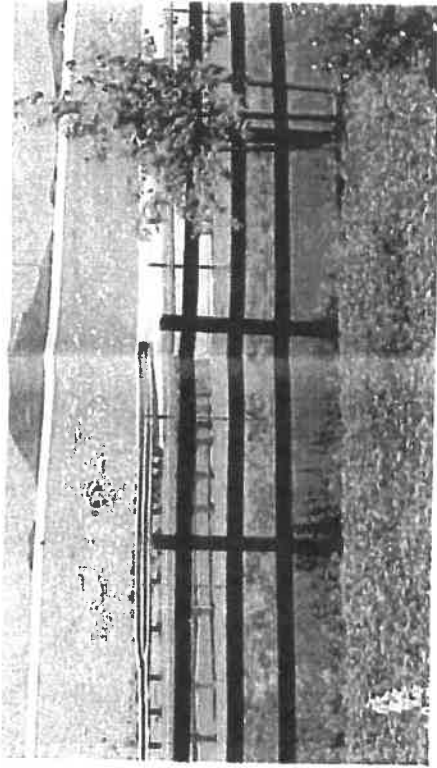


Figure 8
Open View Fencing, Typical Options

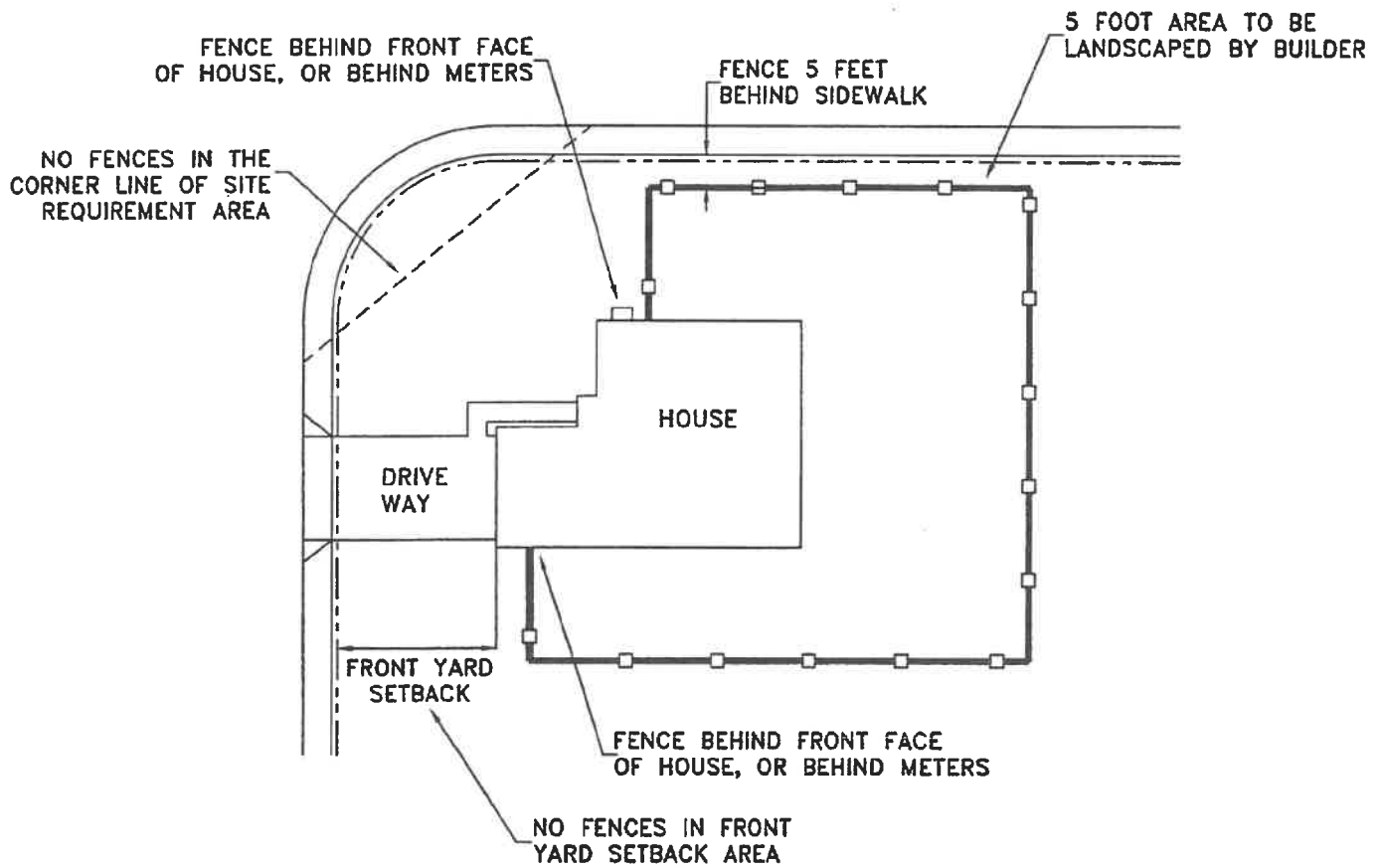


Figure 9
Corner Lot Fencing Standard

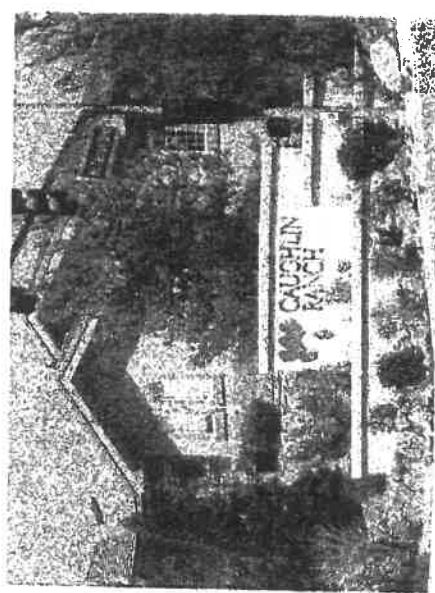
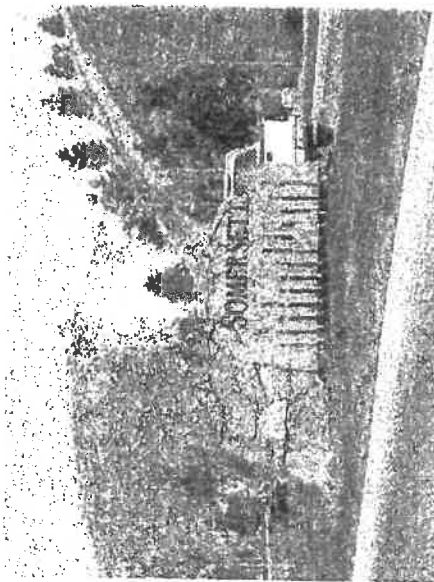
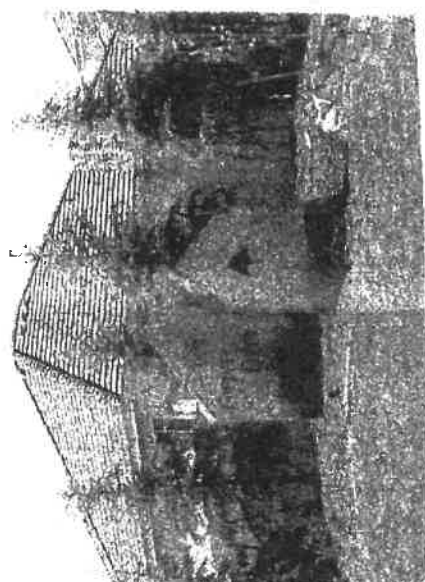
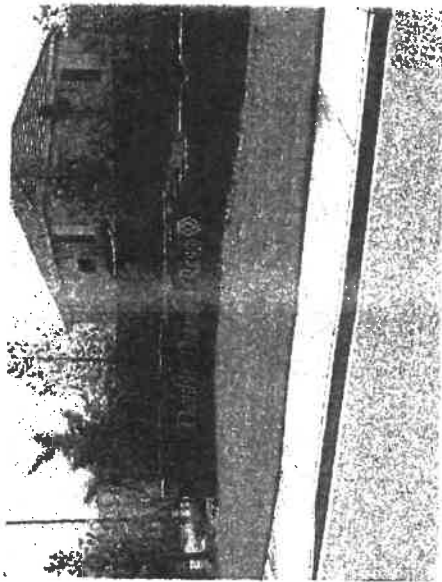
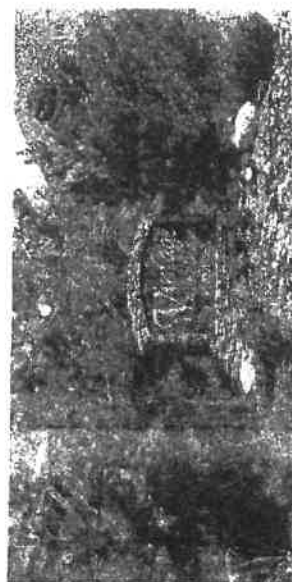
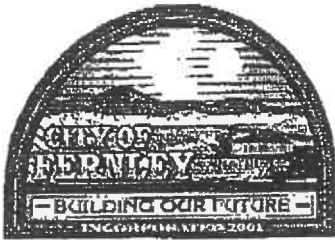


Figure 10
Project Entry Signs, Typical



**COMMUNITY DEVELOPMENT
DEPARTMENT**

Pete Wysocki, AICP
Director

Comprehensive Planning
Zoning
Development Review
Building and Safety

July 18, 2005

Rob Winkel
Barker-Coleman Development, LLC.
4741 Caughlin Parkway, Ste. 4
Reno, NV 89509

RE: Approval Notice for BC Ranch Planned Development.
PD 05-02; APNs 021-531-001, 004, 005, 006, 007, 021-161-011, 022-081-001 & 002,
022-082-001, 002 & 003.

Dear Mr. Winkel:

On July 6, 2005, the Fernley City Council reviewed and approved your Planned Development application to develop 908 acres into 2179 single-family parcels, ranging in size from 5,000 +/- square feet to 12,000 +/- square feet, 1010 multi-family units, an approximate 39.68-acre commercial site, an approximate 11.74-acre school site, and approximately 180.91 acres of open space. The approval included a tentative subdivision map and a zone change, changing the zoning of the project area to 806.11 acres of NR-3PD (Single-Family Residential, 9,000 square feet with Planned Development Overlay), 50.56 acres of NR-2 (Multi-Family Residential, 21 units per acre with Planned Development Overlay), 39.68 acres of C-2PD (General Commercial with Planned Development Overlay) and 11.74 acres of PF (Public Facilities). The approval is based on the application materials submitted on April 25, 2005, including the Planned Development Design Standards, and is subject to the following conditions:

THE FOLLOWING CONDITIONS MUST BE MET PRIOR TO THE SUBMITTAL OF THE FIRST PHASE FINAL MAP APPLICATION:

1. The developer shall submit revised BC Ranch Planned Development Design Standards manual (hereinafter "Manual") with the following modifications:
 - A. The Commercial and Multi-Family Residential Review Process shall be modified to require all applicable City applications and approvals, including design review. A private Development Review Committee may be established. If so, the City shall not accept any applications unless the private Development Review Committee has reviewed and approved the plans. Uses not requiring special use permits as stated in the Manual will be reviewed administratively and approved by staff.
 - B. Page 6 (Table 1), include minimum rear-yard setback for single-family lots.

- C. Page 20 ("Prohibited Uses") shall be modified to allow restrooms and lighted ball fields within parks and open space areas as part of City approved improvements.
 - D. Page 23 ("Emergency Access"), emergency access shall be provided as required by the North Lyon County Fire Protection District.
 - E. Page 25 ("Decorative Fencing"), pilasters shall be provided every ~~32~~ 60 feet and change of direction, not 120 feet. Increases in the distance may be permitted by the Director to accommodate placing of pilasters evenly or to achieve adequate safety sight areas.
 - F. Page 31 ("Park Lighting"), lighting of ball fields shall be allowed as part of City approved improvements.
 - G. The north-south major arterial in Section 27 shall have four lanes of travel and left-turn lanes.
 - H. All major and minor arterial and collector roads shall have striped bike lanes.
 - I. Figure 5, decorative fencing can be only used next to a landscaped park strip, drainage ways or when building pads are significantly higher or lower than the street elevation. Otherwise, masonry walls are required.
 - J. Details shall be included for sidewalks. All sidewalk curbs shall be vertical. Sidewalks and private driveway approaches shall meet ADA standards set forth by the City Public Works Design Standards.
 - K. Any modifications to the Manual shall be reviewed and approved by the City.
 - L. Part B of Tab 4 shall be amended to state that any private roads shall require special use permit approval by the City.
2. The Developer shall submit improvement plans for construction of Sario Drive (also referenced as Fernley Hills Drive), and the minor arterial road connecting to Sage Street. These roads shall be constructed to full improvements as approved in the Manual. The following intersection improvements shall be included:
- A. An eastbound left turn lane on Sario Drive at Highway 95A.
 - B. A southbound right-turn deceleration lane on Highway 95A at Sario Drive, as approved by NDOT.
 - C. In the event the minor arterial connecting to Sage Street is not part of Phase 1 final map, a temporary second access shall be provided to Sage Street. The location of this second access shall be approved by the City and the Fire District.
3. The developer shall submit a master park and open space development plan for review and approval by the City. The development plan shall be incorporated into the Manual. The park sites shall be improved to urban park standards, including but not limited to lawn area, playgrounds and picnic areas. The park plan shall establish phasing of park and open space improvements based on the relative Residential Construction Tax fees collected with each phase of the development.
4. A traffic signal warrant study shall be prepared and submitted to NDOT and the City to determine if a traffic signal is warranted at Sario Drive and Highway 95A.
5. Concurrently with filing of the final map, the developer shall file a maintenance district agreement for the entire project pursuant to Chapter 37 of the Fernley Development Code.

THE FOLLOWING CONDITIONS MUST BE MET PRIOR TO THE SUBMITTAL OF EACH FINAL MAP APPLICATION:

6. The developer shall submit on-site improvement plans for review and approval. Water and sewer improvements shall comply with City standards. The improvement plans shall include the following:

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- A. Construction of all interior roads and intersections pursuant to the Manual. All internal roads shall meet City's structural standards.
 - B. Sewer feasibility report identifying sewage flows generated by each phase, required pipe sizes and appurtenances, downstream capacity of existing infrastructure and any necessary downstream improvements. Oversizing of any improvements is subject to reimbursement by the City pursuant to City Code.
 - C. Each phase shall connect to City sewer, install necessary on-site sewer lines and other appurtenances as identified in the sewer feasibility report.
 - D. Each phase shall connect to City water and install necessary water lines and construct water tank(s) necessary to meet the standards of NAC 445A. Water tank locations and other water facility improvements shall be constructed as identified by the water model prepared by the City.
 - E. Temporary drainage basins (if required) necessary for each phase.
 - F. Utilities (cable, telephone, power, etc) must be installed underground and stubbed to service each parcel.
 - G. All streetlights must meet City of Fernley standards. Streetlights may be located only at intersections and at the end of cul-de-sacs.
 - H. Non-potable water supply system for irrigation of individual parcels and open space areas. The system shall include all necessary appurtenances to irrigate each parcel. The final design of the system shall be approved by the City.
7. The developer shall obtain will serves for water and sewer service. The developer shall comply with policies and regulations in affect at the time an application is filed for the will serves. Upon approval of this project, the developer is allowed to pay in-lieu fees for 276 single-family homes (ERCs) at the amount charged at the time the will serves are obtained.
8. All final maps shall be reviewed and signed by federal and state agencies, and utility providers.
9. The developer shall submit traffic reports updating existing traffic conditions. Each report shall include the following:
- A. Volume to Capacity Ratios, Levels of Service of Highway 95A and Main Street,
 - B. Traffic signal warrant analysis for the Sario Drive/Highway 95A intersection.
 - C. Recommendations to roadway and intersection improvements.
10. When warranted, the developer shall pay for and install a traffic signal at Sario Drive and Highway 95A.

THE FOLLOWING CONDITIONS ARE TO BE MET CONCURRENTLY WITH THE SUBMITTAL OF EACH FINAL MAP APPLICATION:

11. Each phase of the project, except for the commercial area, shall provide the open space applicable to the phase being recorded as shown and approved in the Manual. The value of the land and improvements will be reimbursed toward the Residential Construction Tax paid by the developer for the project, upon completion of the improvements and submittal of invoices.
12. On-site and off-site improvements must be constructed or secured. If the applicant proposes to secure for any of the required improvements, the applicant shall file a financial security pursuant to City Code.

13. The applicant shall comply with the final map requirements as prescribed by NRS 278 and City Code. Additionally, the final map shall show:
- A. A 10-foot public utility easement along all road frontages and 5-foot public utility easement along the side and rear lot lines.
 - B. City certificate shall reject the offer of dedication for the public roads with the reservation to accept the offer later upon the issuance of certificate of completion.
 - C. An easement for any new cluster mailbox location, if required by the postal service.
 - D. A note stating that the maintenance of any drainage basins and related appurtenances is the responsibility of the developer, homeowners association or successors in interest, unless dedicated and accepted by the City.
 - E. A note stating the Right to Farm ordinance of City Code.
 - F. Retention areas as required by the drainage report. Retention areas shall be either within a separate parcel or within drainage easements.
14. Concurrently with the recordation of the each final map, the applicant shall record a deed restriction for the open space areas stating that the open space areas have no associated residential development rights and residential construction is prohibited.

THE FOLLOWING GENERAL CONDITIONS SHALL APPLY THROUGHOUT THE DEVELOPMENT OF THE PROJECT:

15. The developer shall prepare an engineer's cost estimate and determine pro-rata cost contribution per residential dwelling unit for the following improvements:
- A. A bridge across the Truckee Canal. The bridge shall accommodate 4 travel lanes, curb, gutter and sidewalk on both sides.
 - B. Extension Stock Lane to the new bridge. Stock Lane shall be improved to an urban collector road standard from the bridge to Jackson Ranch Road.
 - C. Improvements to Sage Street from the project to the new bridge. The extension shall be built to urban collector road pavement section, excluding curb gutter and sidewalk.

The improvement benefit area shall include the following developments: BC Ranch, Sage Ranch Estates and Foothills of Fernley.

Upon acceptance by the City of a new road known as Jackson Ranch Road and with the recordation of the 1200th parcel, the developer shall construct the above referenced improvements. The development shall receive credit for its pro-rata contribution and reimbursement from other developments within the benefit area. If the necessary right-of-way cannot be obtained by the developer to construct the above referenced improvements, the development shall pay its pro-rata fees and not be required to construct the improvements.

16. Prior to submittal of the first final map in Section 27 or any other development proposal, legal secondary access within a public right-of-way shall be constructed connecting the development area in Section 27 to Highway 95A or other constructed public roadway that can adequately convey the traffic. The road shall be constructed to a minimum of paved rural collector road standard.
17. The school site shall be offered to the Lyon County School District no later than with the first final map filed within Section 27.
18. The developer shall enter into an agreement with the City agreeing to pay any impact fees or special assessments that may be established by the City. The cost of improvements constructed by the developer that are identified in a capital improvement plan for which the

impact fees or special assessments are collected, shall be credited/reimbursed to the developer.

19. If the commercial properties are developed prior to the filing of final tentative maps, Sario Drive and the southerly collector road shall be constructed pursuant to the Manual, including the following:
 - A. An eastbound left turn lane on Sario Drive at Highway 95A.
 - B. A southbound right-turn deceleration lane on Highway 95A at Sario Drive, as approved by NDOT.
 - C. Right-in/right-out Intersection approaches on Highway 95A at the southerly entrance road, as approved by NDOT.
20. Construction of roadways, intersections and turn lanes shall comply with recommendations of approved traffic reports, unless modified by the City.
21. The major north-south arterial in Section 27 shall be constructed no later than at the time the southerly extension of the major arterial is constructed in the Tierra Development project located in Section 35 or when the northerly extension is developed to Interstate 80.
22. Arterial and collector roads may be constructed in phases with each corresponding final map, provided that adequate circulation is provided to the satisfaction of the City and the Fire District.
23. All roadways shall be built to full-width standards, unless otherwise approved by the City.
24. Approval of this project supersedes the approval of the Country Greens subdivision.

The tentative subdivision map component of the project will expire on July 6, 2007, unless a final subdivision map is approved by the City. All subsequent final maps must be approved within one-year of the approval of each preceding phase. Extensions of time may be permitted pursuant to City Development Code.

Thank you for your cooperation in working on this project. Should you have any questions or need additional information, please feel free to call me at 775-784-9902.

Sincerely,



Peter Wysocki, AICP
Community Development Director

C: Matrix Engineering, 4741 Caughlin Parkway, Ste. 1-B, Reno, NV 89509
Public Works Department
File

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SOLAEGUI
ENGINEERS, LTD

FERNLEY BC RANCH

TRAFFIC ANALYSIS

APRIL, 2005



Prepared by:
Solaegui Engineers, Ltd.
715 H Street
Sparks, Nevada 89431
(775) 358-1004

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FERNLEY BC RANCH

TRAFFIC ANALYSIS

EXECUTIVE SUMMARY

The Fernley BC Ranch development is located in the City of Fernley, Nevada. The project site is located south of Sage Drive and west of U.S. Highway 95A. The site is currently undeveloped land. The purpose of this study is to address the project's impact upon the adjacent street network. The U.S. Highway 95A intersections with Sario Drive, the project's proposed access south of Sario Drive, the proposed Parker access south of Desert Shadows Lane and the proposed Jackson Ranch access intersection with Main Street (U.S. Highway 50A) have been identified for intersection capacity analysis.

The Fernley BC Ranch development will be constructed in phases. Phase 1-A will consist of the construction of 570 single family dwelling units and phase 1-B will include 454 additional single family dwellings resulting in a total of 1,024 single family dwelling units in Phase 1. Phase 1-A is the number of single family dwelling units that can be constructed without the need for dual left turn lanes at the existing U.S. Highway 95A/Sario Drive intersection. Phase 2 will consist of the construction of 1,159 additional single family dwelling units, resulting in a total of 2,183 single family dwellings, which is the buildout of the single family dwellings. Project buildout will consist of the additional construction of 1,010 apartments and approximately 346,000 square feet of commercial development. At buildout, the development is expected to generate 38,813 average daily trips with 2,392 trips occurring during the AM peak hour and 3,591 trips occurring during the PM peak hour. The project is anticipated to build out in ten to fifteen years.

Traffic generated by the Fernley BC Ranch Development will have some impact on the adjacent street network. The following recommendations are made to mitigate project traffic impacts.

It is recommended that any required signing, striping or traffic control improvements comply with City of Fernley and Nevada Department of Transportation requirements.

It is recommended that the project developers participate in the cost of off-site regional roadway improvements by paying traffic impact fees or special assessment district fees. It is proposed that the developers receive credit for any off-site regional road improvements they construct.

- ① It is recommended that the U.S. Highway 95A/Sario Drive intersection initial improvements for phase 1-A to consist of one left turn lane with 350 feet of left turn storage and one shared through-right turn lane at the Sario Drive west approach and one left turn lane at the south approach. NDOT's roadway improvement project on U.S. Highway 95A will provide left turn lanes at the north and south approaches of the U.S. Highway 95A/Sario Drive intersection.

It is recommended that a traffic signal be constructed at the U.S. Highway 95A/Sario Drive intersection when warranted.

It is recommended that the U.S. Highway 95A/Sario Drive intersection improvements for the phase 1-B and phase 2 project consist of one left turn lane and one shared through-right turn lane at the public disposal center east approach, dual left turn lanes each with a storage length of 350 feet at the west approach, one exclusive right turn lane at the north approach, and one through lane and one shared through-right turn lane at the south approach. The dual left turn lanes at the west approach will require two receiving lanes for a distance on northbound U.S. Highway 95A.

It is recommended that the U.S. Highway 95A/Sario Drive intersection improvements for project buildout consist of one left turn lane, two through lanes and one exclusive right turn lane at the north approach, and one left turn lane, one through lane and one shared through-right turn lane at the south approach.

It is recommended ultimately for the phase 2 and buildout project that the Main Street (U.S. Highway 50A)/Jackson Ranch access intersection contain one left turn lane with a minimum storage length of 350 feet, one through lane and one shared through-right turn lane at the east approach; one left turn lane, two through lanes and one exclusive right turn lane at the west approach; one left turn lane, one through lane and one right turn lane at the north approach; and dual left turn lanes each with a minimum storage length of 350 feet, one through lane and one right turn lane at the south approach. The dual left turn lanes at the west approach will require two receiving lanes for a distance on westbound U.S. Highway 50A. The updated Jackson Ranch Traffic Analysis dated April, 2005, recommended initially that the Main Street (U.S. Highway 50A)/Jackson Ranch access intersection be constructed to contain one left turn lane with a minimum 200 feet of storage and one shared through-right turn lane at the east approach; one left turn lane, one through lane and one exclusive right turn lane at the west approach; one left turn lane, one through lane and one right turn lane at the north approach; and one left turn lane and provision for a future second left turn lane with a minimum storage/deceleration length of 215 feet, one through lane and one right turn lane at the south approach.

It is recommended that a traffic signal be constructed at the Main Street (U.S. Highway 50A)/Jackson Ranch access intersection when warranted. A traffic signal was recommended at the Main Street/Jackson Ranch access intersection in the updated Jackson Ranch study.

It is recommended that the U.S. Highway 95A/Parker access intersection be constructed as recommended by the Foothills of Fernley Development Traffic Analysis dated July, 2004, to ultimately contain dual left turn lanes and one exclusive right turn lane at the west approach; one through lane and one exclusive right turn lane at the north approach; and one left turn lane and one through lane at the south approach. The dual left turn lanes at the west approach will require two receiving lanes for a distance on northbound U.S. Highway 95A.

It is recommended that a traffic signal be constructed at the U.S. Highway 95A/Parker access intersection when warranted. A traffic signal was previously recommended at the U.S. Highway 95A/Parker access intersection in the Foothills of Fernley Development study.

It is recommended that a dual left turn length of a minimum 250 feet per lane be provided at the west leg and left turn storage of a minimum 100 feet be provided at the south leg of the U.S. Highway 95A/Parker access intersection.

It is recommended that the U.S. Highway 95A/project south access (south of Sario Drive) intersection be constructed to contain one right-in/right-out only driveway at the east approach and one exclusive right turn lane at the north approach.

It is recommended that the Sario Drive arterial be designed per Lyon County four-lane minor arterial street standards. It is recommended that the beltway be initially designed per Lyon County two-lane arterial standards but be expandable to four lanes in the future.

It is recommended that the project developer participate fairly in the future regional roadway requirements or impact fees that may include US-95A widening to as many as six lanes, a new I-80 interchange at the US-95A extension and a regional roadway network being extended to the existing I-80 Wadsworth interchange and the future I-80 Nevada Pacific interchange.

INTRODUCTION

STUDY AREA

The Fernley BC Ranch development is located in the City of Fernley, Nevada. The project site is located south of Sage Drive and west of U.S. Highway 95A. The location of the site is shown in Figure 1. The purpose of this study is to address the project's impact upon the adjacent street network. The U.S. Highway 95A intersections with Sario Drive, the project's proposed access south of Sario Drive, the proposed Parker access south of Desert Shadows Lane and the proposed Jackson Ranch access intersection with Main Street (U.S. Highway 50A) have been identified for intersection capacity analysis.

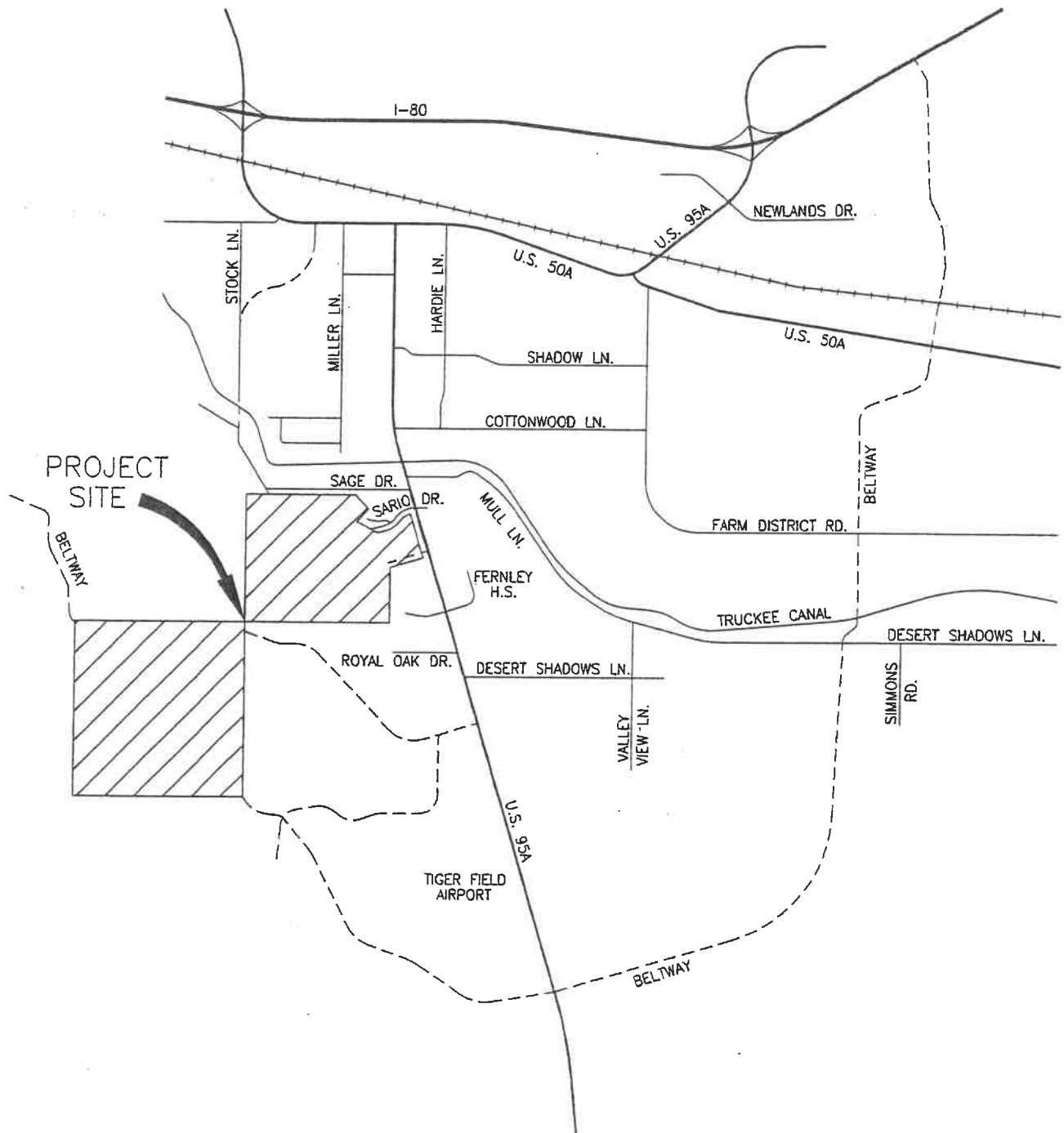
EXISTING AND PROPOSED LAND USES

The site is currently undeveloped land. Adjacent development includes single family dwellings to the north and a public disposal center to the east. The Fernley BC Ranch development will be constructed in phases Phase 1-A will consist of the construction of 570 single family dwelling units and phase 1-B will include 454 additional single family dwellings resulting in a total of 1,024 single family dwelling units in Phase 1. Phase 2 will consist of the construction of 1,159 additional single family dwelling units, resulting in a total of 2,183 single family dwellings, which is the buildout of the single family dwellings. Project buildout will consist of the additional construction of 1,010 apartments and approximately 346,000 square feet of commercial development. The project is anticipated to build out in ten to fifteen years.

EXISTING AND PROPOSED ROADWAYS AND INTERSECTIONS

U.S. Highway 95A is a two-lane roadway with one lane in each direction south of Main Street. The speed limit is posted for 25 miles per hour south of U.S. Highway 50A with a 15 mile per hour speed limit zone near the Fernley Middle School. The speed limit increases to 45 miles per hour south of Shadow Lane, 55 miles per hour south of Sage Drive and 65 miles per hour south of Desert Shadows Lane. Roadway improvements include graded shoulders. Left turn pockets exist at some intersections. The Nevada Department of Transportation (NDOT) is currently designing a roadway improvement project that will provide a two-way left turn lane from north of Cottonwood Lane to Sario Drive and a left turn lane at the south approach of the Sario Drive intersection with U.S. Highway 95A. The Truckee Canal Irrigation District (TCID) canal bridge will be widened to a five-lane deck width.

Sario Drive is a two-lane roadway with one lane in each direction west of U.S. Highway 95A. The speed limit is not posted. Roadway improvements include graded shoulders and a landscaped center median at the west approach to the intersection with U.S. Highway 95A.



FERNLEY BC RANCH
VICINITY MAP
FIGURE 1

Main Street (U.S. Highway 50A) is a two lane roadway with one lane in each direction east and west of the planned Jackson Ranch access, which is west of Miller Lane. The speed limit is posted 35 and 25 miles per hour, respectively, west and east of the planned Jackson Ranch access. West of Miller Lane, roadway improvements include graded shoulders and a raised center median with protected left turn pockets at the I-80 ramps. East of Miller Lane, roadway improvements include curb, gutter and sidewalk and a center two-way left turn lane.

The U.S. Highway 95A/Sario Drive intersection is an unsignalized four-leg intersection with stop sign control on the driveway east approach which serves a public disposal center and the Sario Drive west approach. All approaches contain one lane from which all movements are made.

At phase 1, project access will be provided by Sario Drive on U.S. Highway 95A. It is anticipated that the Sage Drive access on U.S. Highway 95A north of Sario Drive will be closed due to driveway spacing issues with Mull Lane. Consequently, Sario Drive will provide access for traffic currently served by Sage Drive. The other project access roadways and their intersections with U.S. Highways 50A and 95A do not currently exist, but are generally identified in the master plan roadway network. In the future, a bridge will be constructed over the TCID canal and a roadway will be extended north from Sage Drive, which currently has no outlet, to connect to the planned Jackson Ranch access roadway, which will intersect U.S. Highway 50A. At phase 2, project access will be provided by Sario Drive, the Jackson Ranch access on Main Street and the Parker access on U.S. Highway 95A, which is south of Desert Shadows Lane. Ultimately at project buildout, it is anticipated that the proposed beltway, which will connect with U.S. Highway 50A and I-80 to the east and the I-80 Wadsworth interchange to the west, and a right-in and right-out only access south of Sario Drive will provide additional project access.

TRIP GENERATION

In order to assess the magnitude of traffic impacts of the proposed development on the key roadways and intersections, trip generation rates and peak hours had to be determined. Trip generation rates were obtained from the Seventh Edition of *ITE Trip Generation* (2003) for Land Use 210: Single Family Detached Housing, Land Use 220: Apartments and Land Use 820: Shopping Center.

The conceptual site plan shows 39.68 acres of commercial development. A floor area to land area ratio of 20% was applied to the commercial acreage to estimate the square footage of the shopping center land use. ITE indicates that internal capture is appropriate for multiple-use developments containing distinct land uses. An internal capture rate of 8% was applied to the residential land uses and 15% to the shopping center land use to account for trips occurring within the Fernley BC Ranch multiple-use development.

ITE provides data for pass-by trips based upon the size of the applicable land use. Pass-by trips are made as intermediate stops on trips from an origin to a primary destination and are attracted directly from the adjacent street traffic stream. Pass-by trips, which occur from U.S. Highway 95A adjacent

the project site, were taken for the shopping center. ITE does not provide pass-by data for the shopping center land use during the AM peak hour. The entering and exiting pass-by reductions during the PM peak hour were averaged and the average pass-by reductions were applied to both the entering and exiting trips. The pass-by average daily traffic (ADT) volume was estimated by prorating the ADT volumes of the shopping center trip generation. Trips generated by the project were calculated for the peak hours between 7:00 and 9:00 AM and between 4:00 and 6:00 PM, which correspond to the peak hours of adjacent street traffic. Table 1 shows a summary of the average daily traffic volumes and peak hour volumes generated by the development.

TABLE 1
TRIP GENERATION

LAND USE	ADT	AM PEAK HOUR			PM PEAK HOUR		
		IN	OUT	TOTAL	IN	OUT	TOTAL
PHASE 1-A							
Single Family Housing							
570 Dwelling Units	4,631	100	301	401	283	166	449
PHASES 1-A, 1-B and 2							
Single Family Housing							
2,183 Dwelling Units	17,736	384	1,153	1,537	1,083	636	1,719
BUILDOUT							
Single Family Housing							
2,183 Dwelling Units	17,736	384	1,153	1,537	1,083	636	1,719
Apartments							
1,010 Dwelling Units	6,220	100	399	499	373	201	574
Shopping Center							
346,000 Square Feet	<u>14,857</u>	<u>218</u>	<u>138</u>	<u>356</u>	<u>623</u>	<u>675</u>	<u>1,298</u>
TOTAL TRIP GENERATION	38,813	702	1,690	2,392	2,079	1,512	3,591
INTERNAL CAPTURE	-4,146	-72	-145	-216	-210	-168	-379
PASS-BY REDUCTION							
Shopping Center	-3,162	0	0	0	-176	-176	-352
TOTAL NEW TRIPS	31,505	630	1,545	2,176	1,693	1,168	2,860

TRIP DISTRIBUTION AND ASSIGNMENT

The distribution of the project traffic to the key roadways and intersections was based upon existing peak hour traffic patterns and the locations of attractions and productions in the area. The directions of approach for new trips are shown in Figure 2. The pass-by directions of approach are 45% for northbound traffic and 55% for southbound traffic during the PM peak hour. The project trips were subsequently assigned to the key intersections based on these directions of approach. Figure 3 shows the phase 1-A AM and PM peak hour trip assignment at the key intersections. Figure 4 shows the phase 2 peak hour trip assignment at the key intersections. Figure 5 shows the peak hour trip assignment at the key intersections with the beltway in place for the project buildout. Use of the beltway by project traffic reduces some of the turning volumes at the key intersections.

EXISTING AND PROJECTED TRAFFIC VOLUMES

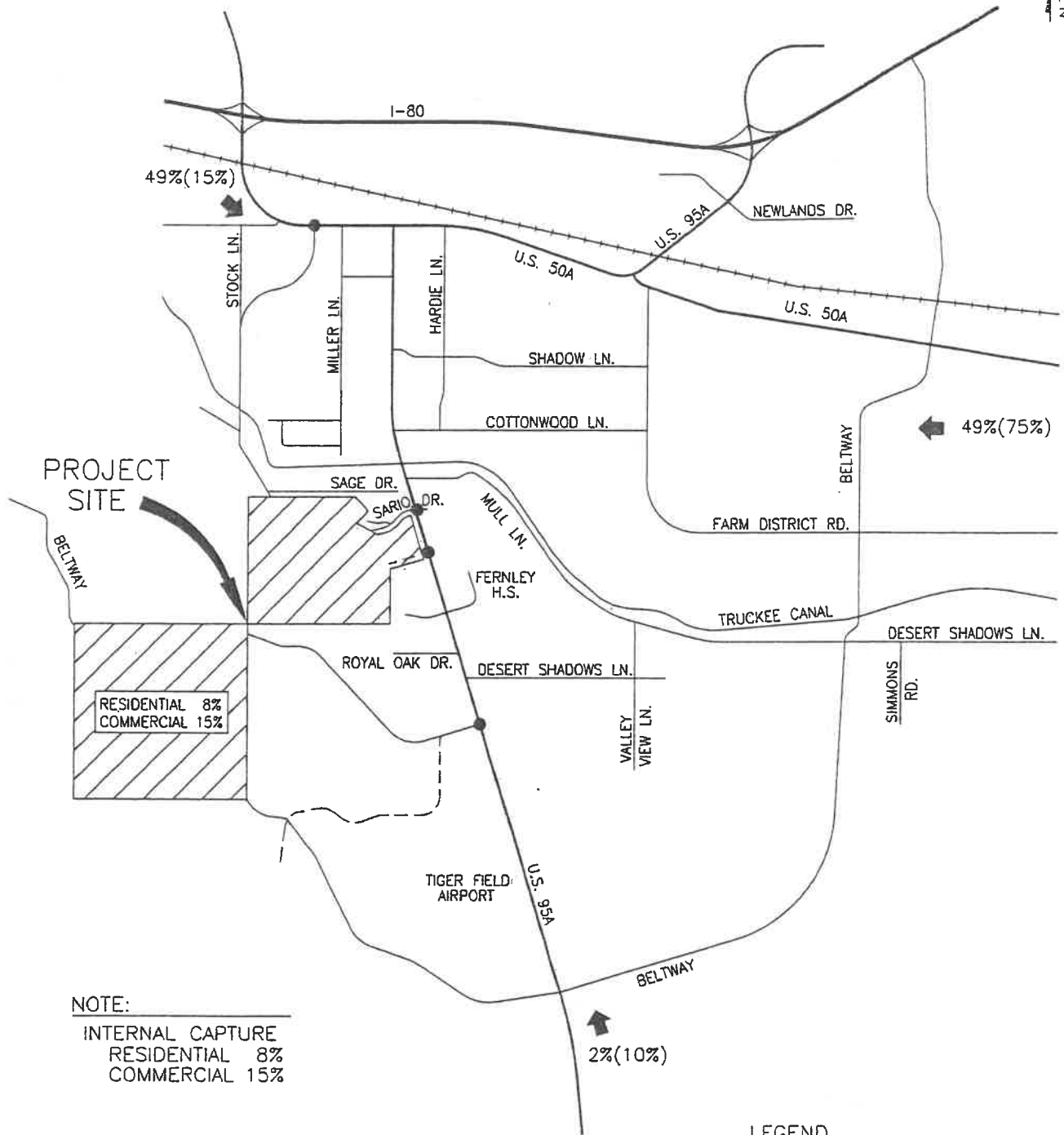
The existing AM and PM peak hour traffic volumes at the key intersections were obtained from traffic counts taken during May and June, 2004 and March 2005. The existing AM and PM peak hour traffic volumes at the key intersections are shown in Figure 6. Figure 7 shows the existing plus phase 1-A traffic volumes at the key intersections during the AM and PM peak hours. Figure 8 shows the existing plus phase 2 plus other traffic volumes. Figure 9 shows the existing plus buildout plus other traffic volumes. The other traffic volumes are generated by the Jackson Ranch and Lahontan Main Towne developments which utilize the Jackson Ranch access intersection with Main Street and the Foothills of Fernley development which utilizes the Parker access intersection with U.S. Highway 95A. The other traffic volumes are included in the phase 2 and buildout conditions with construction of the Jackson Ranch and Parker accesses for the other projects.

The existing plus phase A-1 plus phase A-2 (phase 1) traffic volumes were not analyzed since the existing plus phase 2 traffic volumes were higher at the U.S. Highway 95A/Sario Drive intersection. Consequently, the phase 2 recommendations cover the phase 1 project conditions.

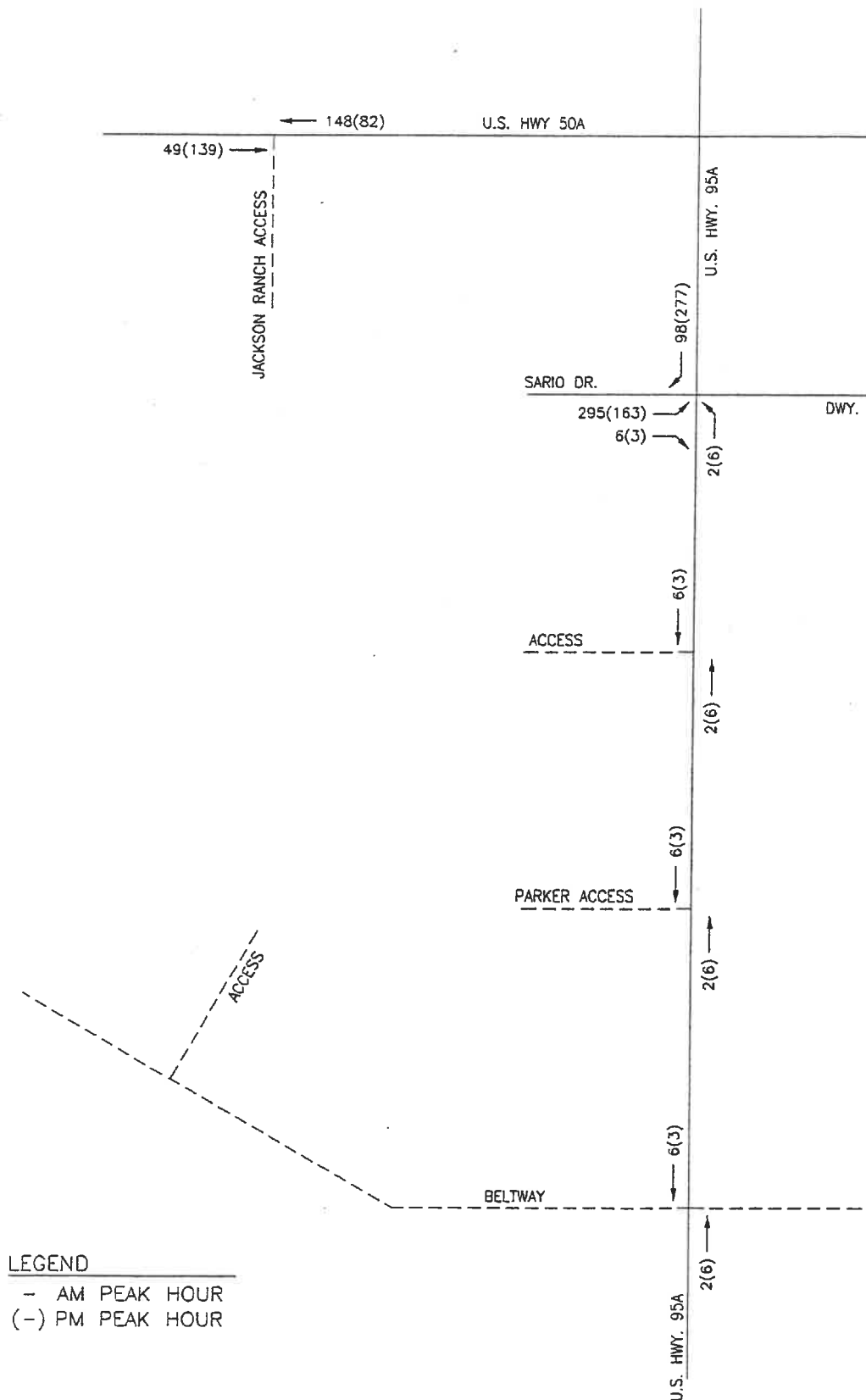
INTERSECTION CAPACITY ANALYSIS

The key intersections were analyzed for capacity based on procedures presented in the *Highway Capacity Manual* (2000), prepared by the Transportation Research Board, for signalized and unsignalized intersections.

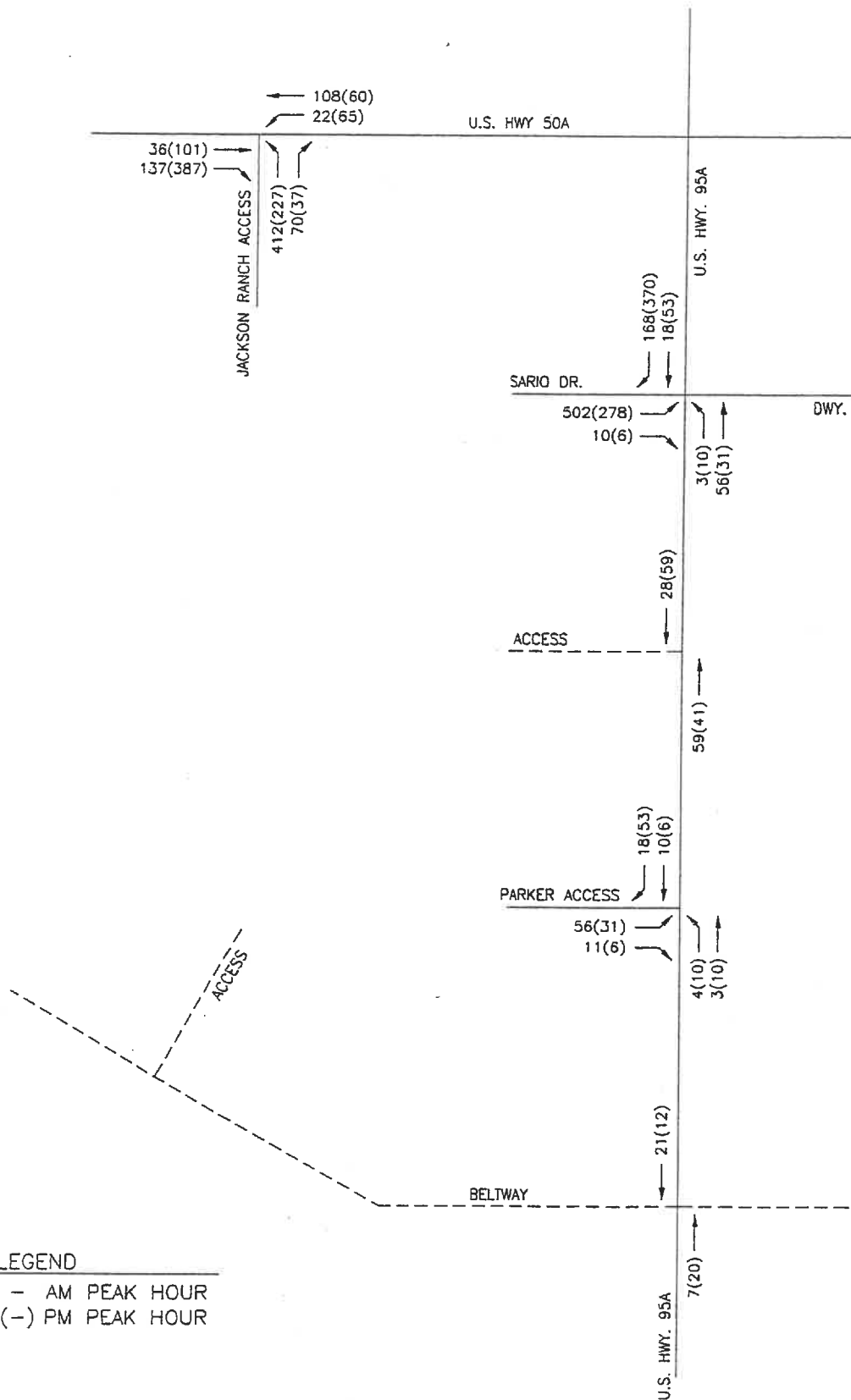
The result of capacity analysis is a "level of service" rating for each signalized intersection and unsignalized intersection minor movement. "Level of Service" is a qualitative measure of traffic operating conditions where a letter grade "A" through "F", corresponding to progressively worsening traffic operation, is assigned to the intersection.



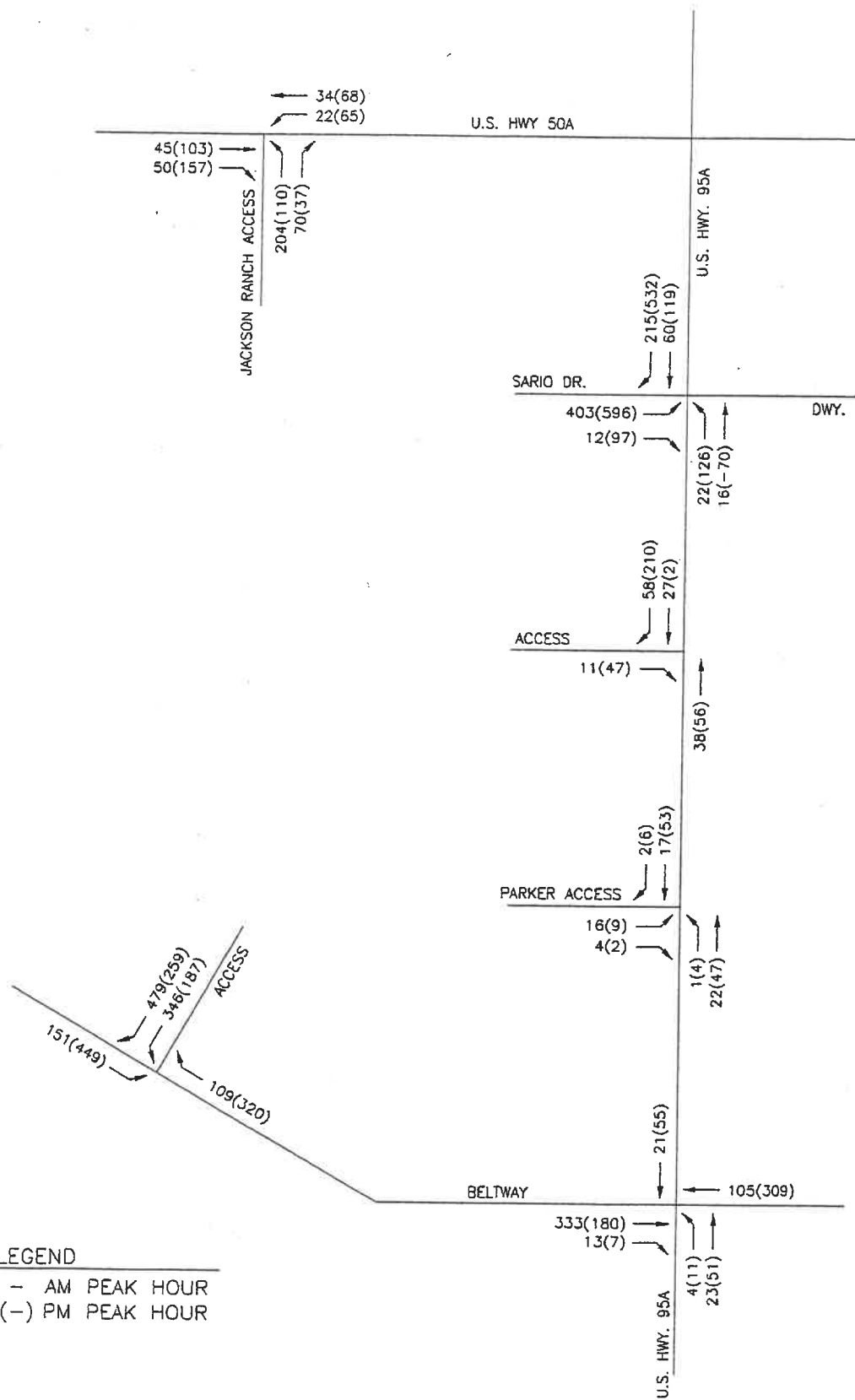
FERNLEY BC RANCH
DIRECTIONS OF APPROACH
FIGURE 2



FERNLEY BC RANCH
PHASE 1-A PEAK HOUR TRIP ASSIGNMENT
FIGURE 3



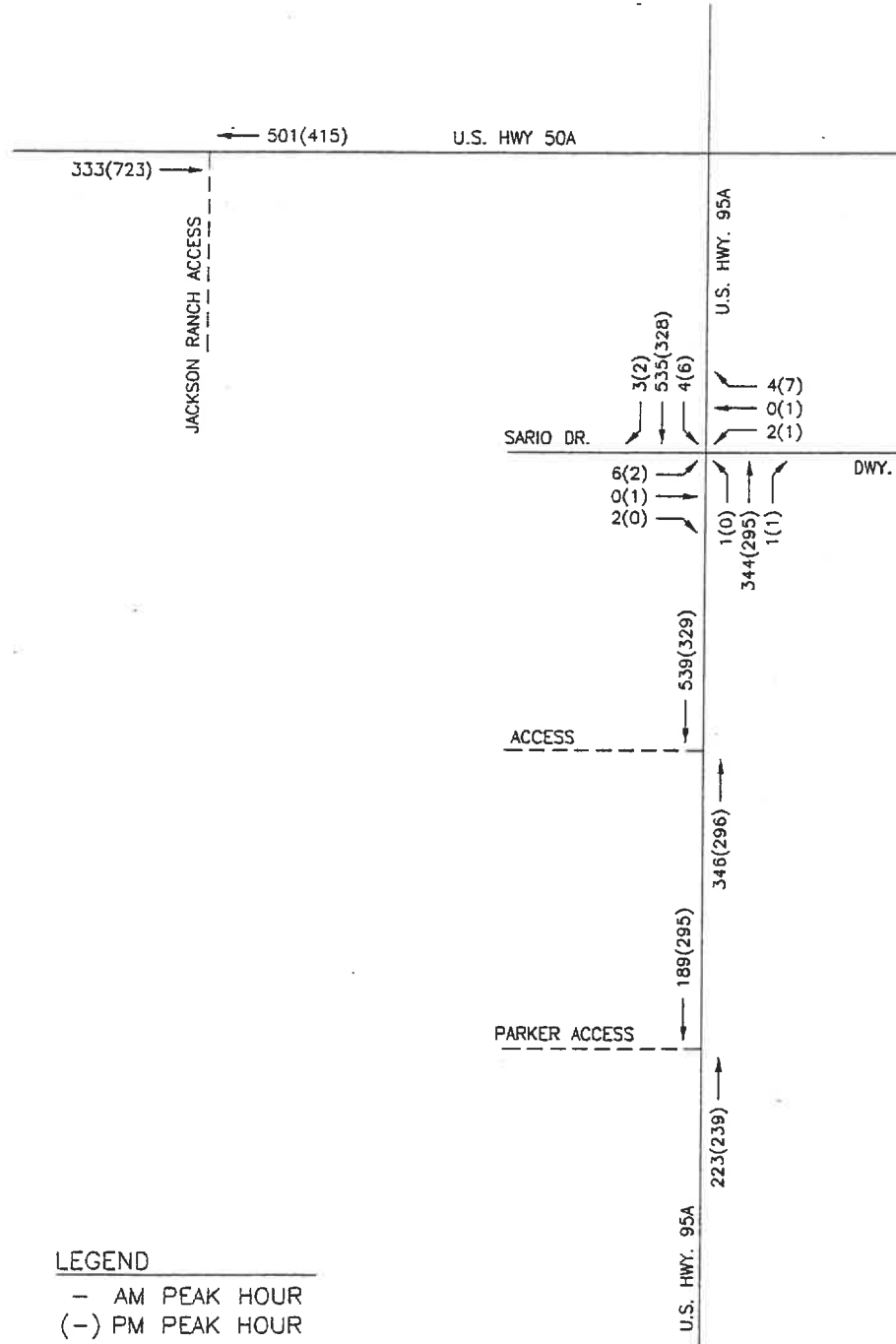
FERNLEY BC RANCH
PHASE 2 PEAK HOUR TRIP ASSIGNMENT
FIGURE 4



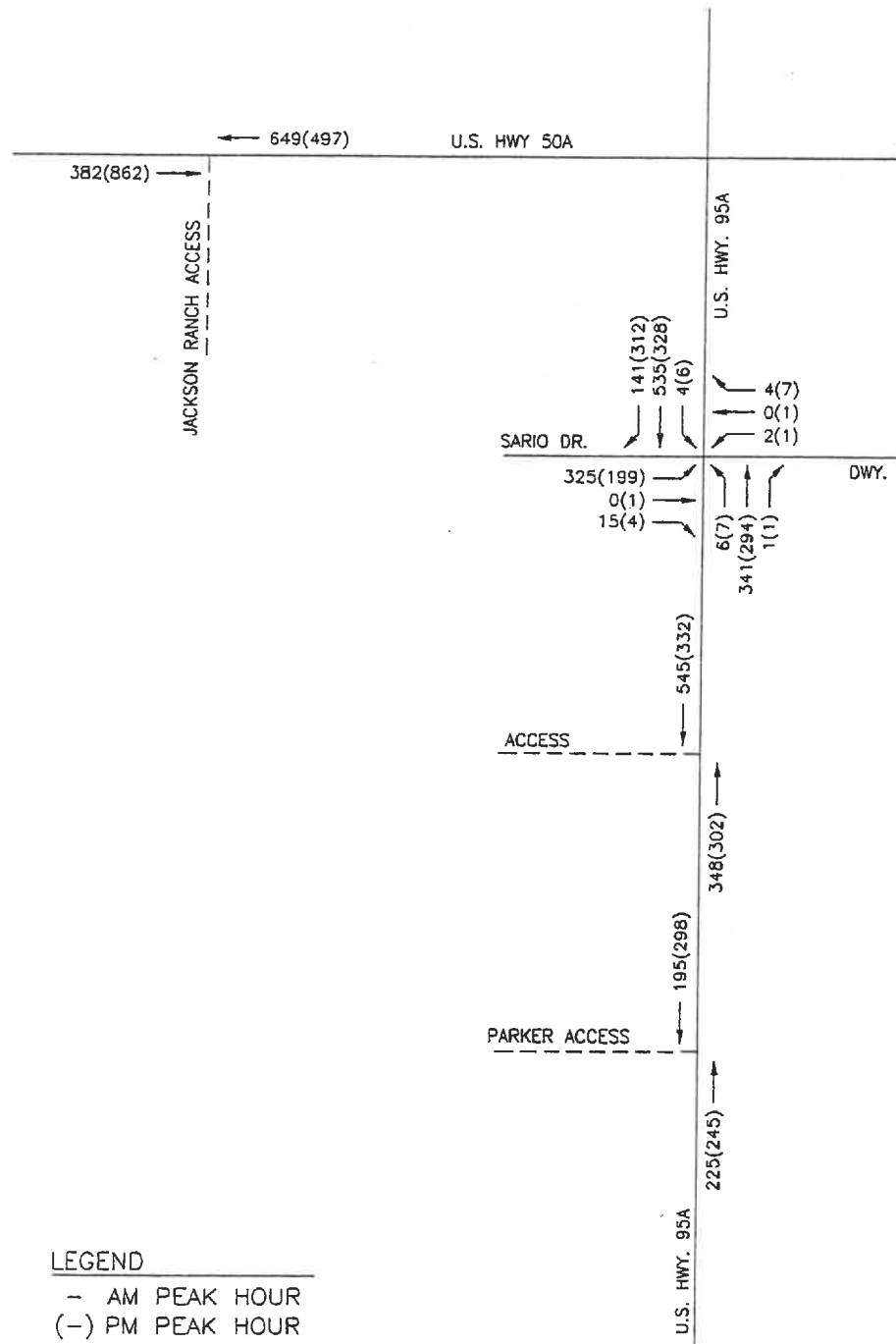
LEGEND

- AM PEAK HOUR
 (-) PM PEAK HOUR

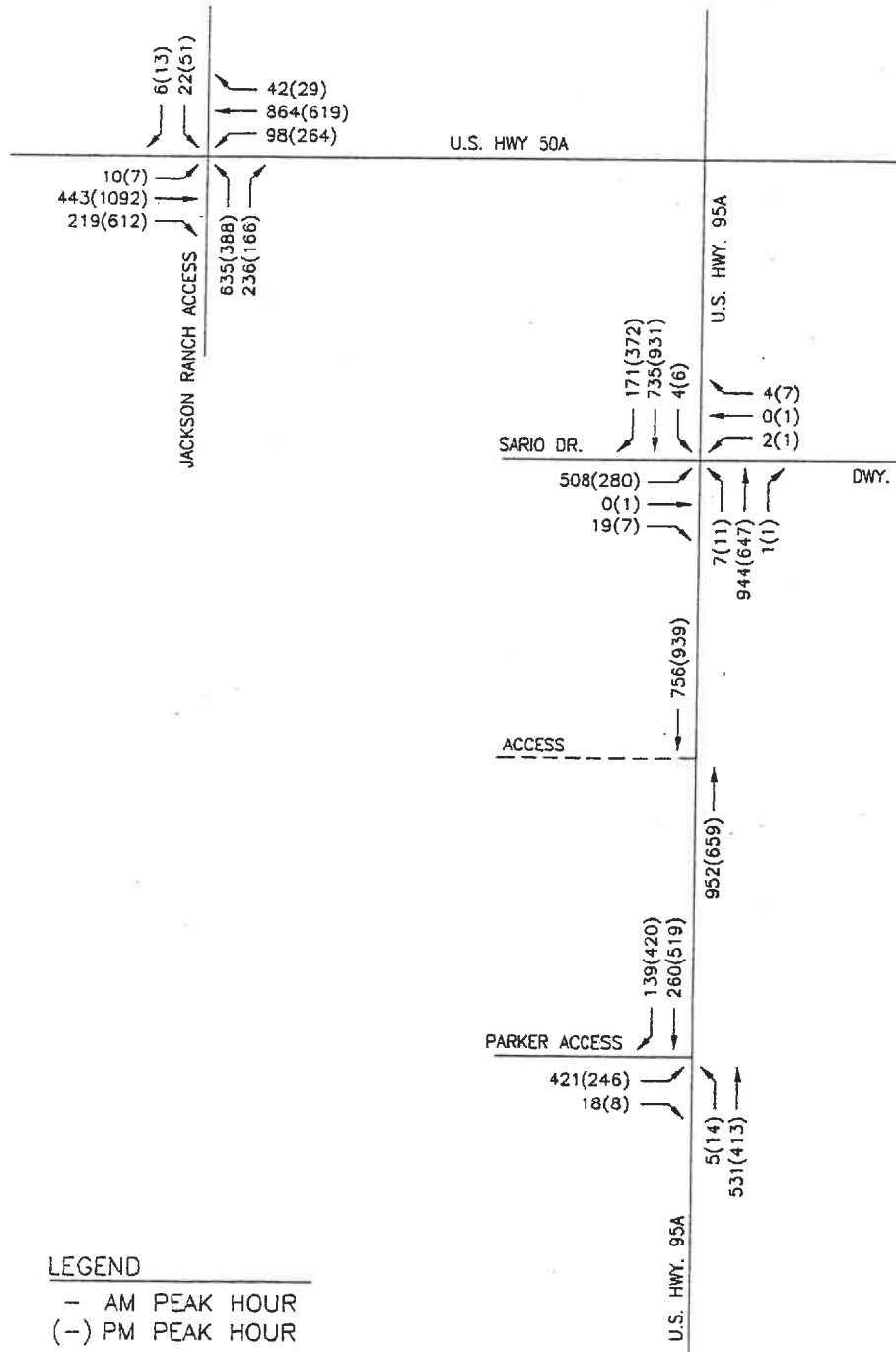
FERNELY BC RANCH
BUILDOUT PEAK HOUR TRIP ASSIGNMENT
FIGURE 5



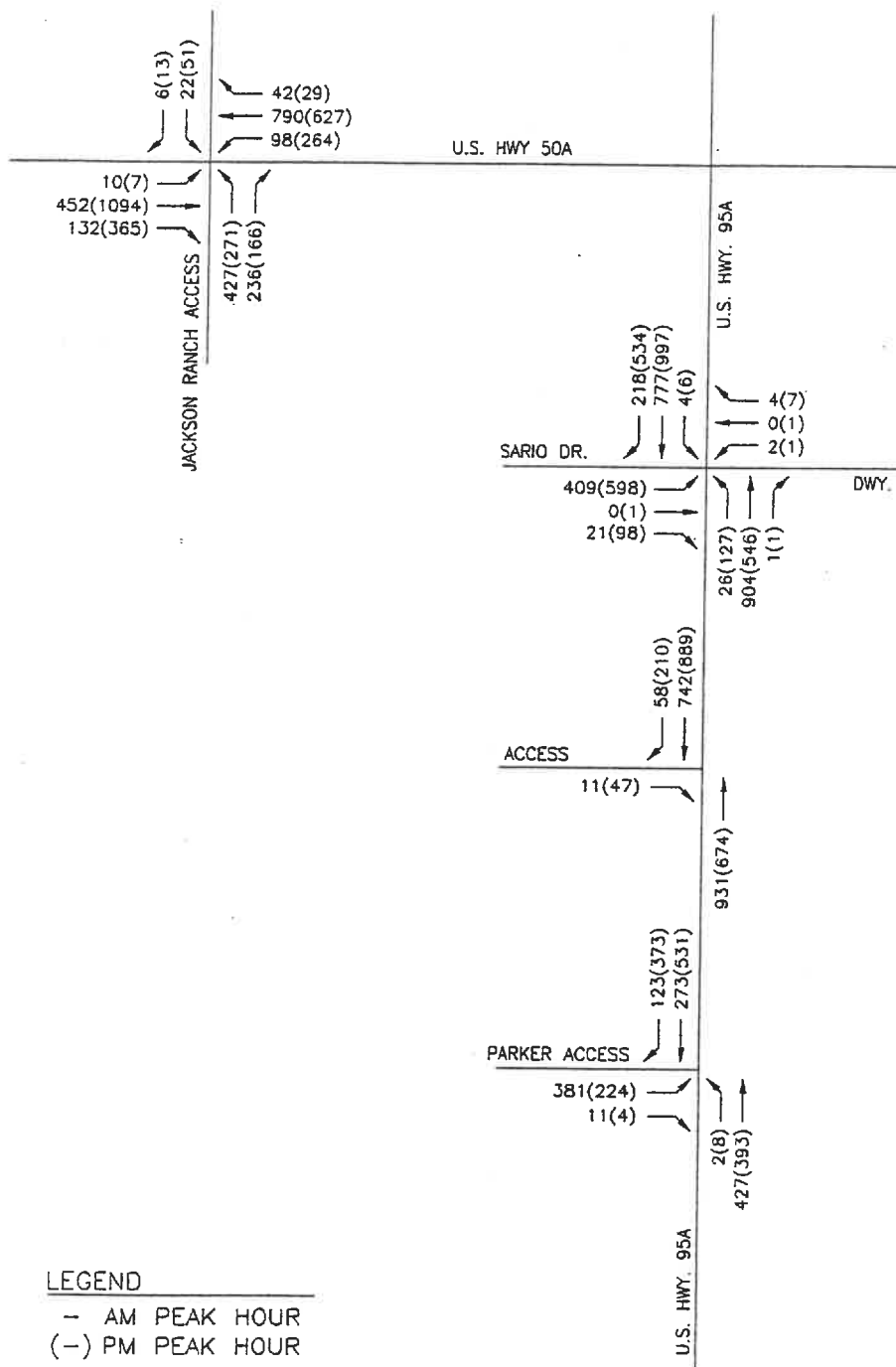
FERNLEY BC RANCH
EXISTING PEAK HOUR TRAFFIC VOLUMES
FIGURE 6



FERNLEY BC RANCH
EXISTING PLUS PHASE 1-A TRAFFIC VOLUMES
FIGURE 7



FERNELY BC RANCH
 EXISTING + PHASE 2 + OTHER TRAFFIC VOLUMES
 FIGURE 8



FERNELY BC RANCH
EXISTING + BUILDOUT + OTHER TRAFFIC VOLUMES
FIGURE 9

The Highway Capacity Manual defines "level of service" for stop controlled intersections in terms of computed or measured control delay for each minor movement. Level of service is not defined for the intersection as a whole. The unsignalized intersection LOS criteria are shown in Table 2.

TABLE 2
LOS CRITERIA FOR UNSIGNALIZED INTERSECTIONS

<u>LEVEL OF SERVICE</u>	<u>DELAY RANGE (SEC/VEH)</u>
A	≤ 10
B	> 10 and ≤ 15
C	> 15 and ≤ 25
D	> 25 and ≤ 35
E	> 35 and ≤ 50
F	> 50

The "level of service" for signalized intersections is stated in terms of the average control delay per vehicle for a peak 15 minute analysis period. The signalized intersection LOS criteria are shown in Table 3.

TABLE 3
LOS CRITERIA FOR SIGNALIZED INTERSECTIONS

<u>LEVEL OF SERVICE</u>	<u>CONTROL DELAY PER VEHICLE (SEC)</u>
A	≤ 10
B	> 10 and ≤ 20
C	> 20 and ≤ 35
D	> 35 and ≤ 55
E	> 55 and ≤ 80
F	> 80

A summary of "level of service" (LOS) operation for the key intersections in this analysis is shown in Table 4.

TABLE 4
INTERSECTION LEVEL OF SERVICE AND DELAY RESULTS

INTERSECTION	EXISTING		EXISTING + PHASE 1-A		EXISTING + PHASE 2		EXISTING + BUILDOUT	
	AM	PM	AM	PM	AM	PM	AM	PM
US 95A/Sario								
Unsignalized								
NB Left/Through/Right	A8.7	A8.0	A9.2	A9.1	N/A	N/A	N/A	N/A
SB Left/Through/Right	A8.1	A7.9	A8.1	A7.9	N/A	N/A	N/A	N/A
WB Left/Through/Right	B14.1	B11.1	C15.2	B12.3	N/A	N/A	N/A	N/A
EB Left/Through/Right	C19.3	B14.9	F456	F56.1	N/A	N/A	N/A	N/A
Signalized								
Intersection Delay	N/A	N/A	B19.6	B12.5	C26.8	C22.6	C22.0	C30.2
Main/Jackson Ranch Access								
Signalized								
Intersection Delay	N/A	N/A	N/A	N/A	C27.8	C27.2	C25.3	C30.2
Parker Access								
Signalized								
Intersection Delay	N/A	N/A	N/A	N/A	B13.2	A9.7	B12.2	A9.3
US 95A/South Project Access								
Unsignalized								
EB Right	N/A	N/A	N/A	N/A	N/A	N/A	B14.4	B18.2

U.S. Highway 95A/Sario Drive

The U.S. Highway 95A/Sario Drive intersection was analyzed for capacity as a unsignalized intersection with stop sign control on the Sario Drive west approach and public disposal center driveway east approach for the existing and existing plus phase 1-A traffic volumes. Currently, the critical intersection movements operate at level of service C or better during the AM and PM peak hours. The intersection was analyzed with the existing approach lanes. For the existing plus phase 1-A traffic volumes, the critical intersection movements are expected to operate at level of service C or better with the exception of the eastbound left movement which operates at level of service F during both the AM and PM peak hours. The intersection was analyzed with one left turn lane and one shared through-right turn lane at the Sario Drive west approach and the existing lanes at the other approaches.

Peak hour traffic signal warrant #3 per Figure 4C-4 (for speeds above 40 miles per hour) of the *Manual on Uniform Traffic Control Devices, 2003 Edition* (MUTCD) was subsequently reviewed at the U.S. Highway 95A/Sario Drive intersection for the existing plus phase 1-A traffic volumes. The warrant review was based on one lane on the U.S. Highway 95A (major street) approaches and two lanes on the Sario Drive (minor street) east approach. The results of the warrant review indicate that it appears the peak hour signal warrant is met for the existing plus phase 1-A traffic volumes during both the AM and PM peak hour. It is recommended that a traffic signal be constructed at the U.S. Highway 95A/Sario Drive intersection when warranted.

Subsequently, the U.S. Highway 95A/Sario Drive intersection was analyzed as a signalized intersection. For the existing plus phase 1-A traffic volumes, the intersection is expected to operate at level of service B with a delay of 19.6 and 12.5 seconds per vehicle during the AM and PM peak hours, respectively. The intersection was analyzed with one left turn lane and one shared through/right turn lane at the Sario Drive west approach and the existing lanes at the other approaches.

For the existing plus phase 2 plus other traffic volumes, the intersection is expected to operate at level of service C with a delay of 26.8 and 22.6 seconds per vehicle during the AM and PM peak hours, respectively. For the existing plus buildout plus other traffic volumes, the intersection is expected to operate at level of service C with a delay of 22.0 and 30.2 seconds per vehicle during the AM and PM peak hours, respectively. For the phase 2 conditions, the intersection was analyzed with one left turn lane and one shared through-right turn lane at the east approach; dual left turn lanes and one shared through-right turn lane at the west approach; one left turn lane, one through lane and one right turn lane at the north approach; and one left turn lane, one through lane and one shared through-right turn lane at the south approach. Two northbound lanes on U.S. Highway 95A are needed to receive the eastbound dual left turn lanes. For project buildout conditions, an additional through lane was analyzed at the north approach.

Left turn storage requirements were reviewed at the west and south legs of the U.S. Highway 95/Sario Drive intersection based on the Poisson Method for signalized intersections, a 95% confidence level and 120-second cycle length for the existing plus buildout plus other traffic volumes. Dual left turn storage length of a minimum 350 feet is required at the west leg and left turn storage of a minimum 190 feet is required at the south leg of the U.S. Highway 95/Sario Drive intersection. The NDOT plans show the south leg with approximately 450 feet of left turn storage length, which is adequate to serve project traffic. It is recommended that 350 feet of left turn storage be provided for phase 1-A conditions and dual left turn storage length of 350 feet be provided for buildout conditions at the west leg of the U.S. Highway 95/Sario Drive intersection.

It is recommended that the U.S. Highway 95A/Sario Drive intersection improvements for the phase 1-B and phase 2 project consist of one left turn lane and one shared through-right turn lane at the public disposal center east approach, dual left turn lanes each with a storage length of 350 feet at the west approach, one exclusive right turn lane at the north approach, and one through lane and one shared through-right turn lane at the south approach. The dual left turn lanes at the west approach will require two receiving lanes for a distance on northbound U.S. Highway 95A. It is

recommended that the U.S. Highway 95A/Sario Drive intersection improvements for project buildout consist of one left turn lane, two through lanes and one exclusive right turn lane at the north approach, and one left turn lane, one through lane and one shared through-right turn lane at the south approach.

Main Street (U.S. Highway 50A)/Jackson Ranch Access

Peak hour traffic signal warrant #3 per Figure 4C-3 of the *Manual on Uniform Traffic Control Devices, 2003 Edition* (MUTCD) was reviewed at the Main Street/Jackson Ranch access intersection for the existing plus phase 2 plus other traffic volumes. The results of the warrant review indicate that the peak hour signal warrant is met for the existing plus phase 2 plus other traffic volumes during both the AM and PM peak hours. It is recommended that a traffic signal be constructed at the Main Street (U.S. Highway 50A)/Jackson Ranch access intersection when warranted. A traffic signal was previously recommended at the Main Street/Jackson Ranch access intersection in the updated Jackson Ranch Traffic Analysis dated April, 2005.

The Main Street/Jackson Ranch access intersection was analyzed as a signalized intersection for the existing plus phase 2 and existing plus buildout traffic volumes. For the existing plus phase 2 traffic volumes, the intersection is expected to operate at level of service C with a delay of 27.8 and 27.2 seconds per vehicle during the AM and PM peak hours, respectively. For the existing plus buildout traffic volumes, the intersection is expected to operate at level of service C with a delay of 25.3 and 26.3 seconds per vehicle during the AM and PM peak hours, respectively. For the phase 2 and buildout conditions, the intersection was analyzed with one left turn lane, one through lane and one shared through-right turn lane at the east approach; one left turn lane, two through lanes and one right turn lane at the west approach; one left turn lane, one through lane and one right turn lane at the north approach; and dual left turn lanes, one through lane and one right turn lane at the south approach. The dual left turn lanes at the south approach will require two receiving lanes for a distance on westbound U.S. Highway 50A. The update of the Jackson Ranch study recommended one left turn lane and one shared through-right turn lane at the east approach; one left turn lane, one through lane, one right turn lane at the north and west approaches; and one left turn lane, provision for a future second left turn lane, one through lane and one right turn lane at the south approach. In addition, the update recommended a continuous center two-way left turn lane between the Jackson Ranch access and Miller Lane intersections on Main Street.

It is recommended that initially the Main Street (U.S. Highway 50A)/Jackson Ranch access intersection be constructed to contain one left turn lane, one through lane and one shared through-right turn lane at the east approach; one left turn lane, two through lanes and one exclusive right turn lane at the west approach; one left turn lane, one through lane and one right turn lane at the north approach; and one left turn, provision for a second left turn lane, one through lane and one right turn lane at the south approach. It is recommended that ultimately the Main Street (U.S. Highway 50A)/Jackson Ranch access intersection contain dual left turn lanes at the south approach.

Left turn storage requirements were reviewed at the east and south legs of the Main Street/Jackson Ranch access intersection based on the Poisson Method for signalized intersections, a 120-second cycle length, and 95% confidence level. For the existing plus phase 2 conditions, left turn storage of 350 feet is required at the east leg and dual left turn storage length of 350 feet is required at the south leg of the Main Street/Jackson Ranch access intersection. It is recommended that left turn storage of 350 feet be provided at the east leg and dual left turn storage length of 350 feet be provided at the south leg of the Main Street/Jackson Ranch access intersection.

U.S. Highway 95A/Parker Access

Peak hour traffic signal warrant #3 per Figure 4C-4 of the *Manual on Uniform Traffic Control Devices, 2003 Edition* (MUTCD) was reviewed at the U.S. Highway 95A/Parker access intersection for the existing plus phase 2 plus other traffic volumes. The results of the warrant review indicate that the peak hour signal warrant is met for the existing plus phase 2 plus other traffic volumes during the AM peak hour. It is recommended that a traffic signal be constructed at the U.S. Highway 95A/Parker access intersection when warranted. A traffic signal was previously recommended at the U.S. Highway 95A/Parker access intersection in the Foothills of Fernley Development Traffic Analysis dated July, 2004.

The U.S. Highway 95A/Parker access (Foothills of Fernley north access) intersection was analyzed as a signalized intersection for the existing plus phase 2 plus other and existing plus buildout traffic volumes. For the phase 2 conditions, the intersection is expected to operate at level of service B or better with a delay of 13.2 and 9.7 seconds per vehicle during the AM and PM peak hours, respectively. For the buildout conditions, the intersection is expected to operate at level of service B or better with a delay of 12.2 and 9.3 seconds per vehicle during the AM and PM peak hours, respectively. The intersection was analyzed with dual left turn lanes and one right turn lane at the west approach, one through lane and one exclusive right turn lane at the north approach, and one left turn lane and one through lane at the south approach. It is recommended that the U.S. Highway 95A/Parker access intersection be constructed as recommended by the Foothills of Fernley Development Traffic Analysis dated July, 2004, to ultimately contain dual left turn lanes and one exclusive right turn lane at the west approach; one through lane and one exclusive right turn lane at the north approach; and one left turn lane and one through lane at the south approach. The dual left turn lanes at the west approach will require two receiving lanes for a distance on northbound U.S. Highway 95A.

Left turn storage requirements were reviewed at the west and south legs of the U.S. Highway 95A/Parker access intersection based on the Poisson Method for signalized intersections, a 120-second cycle length, and 95% confidence level. For the existing plus phase 2 plus other conditions, left turn storage of 350 feet is required at the east leg and dual left turn storage length of 350 feet is required at the south leg of the Main Street/Jackson Ranch access intersection. It is recommended that dual left turn storage of a minimum 250 feet be provided at the west leg and left turn storage of a minimum 100 feet be provided at the south leg of the U.S. Highway 95A/Parker access intersection.

U.S. Highway 95A/Project South Access

The U.S. Highway 95A/project south access (south of Sario Drive) intersection was analyzed as an unsignalized right-in/right-out only driveway with stop sign control on west approach for the existing plus buildout plus other traffic volumes. The critical eastbound right movement is expected to operate at level of service B during the AM peak hour and level of service C during the PM peak hour. The intersection was analyzed with one through lane and one exclusive right turn lane at the north approach, one through lane at the south approach and one lane at the west approach. It is recommended that the U.S. Highway 95A/project south access (south of Sario Drive) intersection be constructed to contain one right-in/right-out only driveway at the east approach and one exclusive right turn lane at the north approach.

ROADWAY CAPACITY ANALYSIS

U.S. Highway 95A was reviewed for capacity based on daily level of service thresholds obtained from the most widely accepted roadway capacity criteria used in Northern Nevada. These values were prepared by the Washoe County Regional Transportation Commission (RTC) and adopted by Reno, Sparks and Washoe County. Table 5 shows the daily level of service thresholds for high and moderate access control arterials.

TABLE 5
ROADWAY LEVEL OF SERVICE CRITERIA

<u>FACILITY/LANES</u>	<u>LOS A-C</u>	<u>AVERAGE DAILY TRAFFIC VOLUME</u>			<u>LOS F</u>
		<u>LOS D</u>	<u>LOS E</u>		
High Access Control Arterial					
2 Lanes	≤18,250	18,251-19,500	18,501-20,700		>20,700
4 Lanes	≤36,500	36,501-39,000	39,001-41,400		>41,400
6 Lanes	≤56,000	56,001-58,900	58,901-62,200		>62,200
8 Lanes	≤74,600	74,601-78,600	78,601-82,900		>82,900
Moderate Access Control Arterial					
2 Lanes	≤14,350	14,351-16,750	16,751-18,050		>18,050
4 Lanes	≤28,700	28,701-33,500	33,501-36,100		>36,100
6 Lanes	≤44,400	44,401-51,400	51,401-54,600		>54,600
8 Lanes	≤59,200	59,201-68,600	68,601-72,700		>72,700

The functional classification of U.S. 95A is a minor arterial. Annual average daily traffic volumes obtained from NDOT's Annual Traffic Report indicate that U.S. 95A currently serves 7,600 vehicles per day south of U.S. 50A. As shown in Table 5, a two-lane moderate access control arterial can carry 14,350 ADT while maintaining level of service C operation. The two-lane section

of U.S. 95A currently operates at an acceptable level of service.

Traffic volumes will increase on U.S. 95A and the Jackson Ranch access with construction of the Fernley BC Ranch development. The increase in traffic on U.S. 95A was compared to the capacity of a two-lane high access control arterial roadway. The added traffic to the Jackson Ranch access was compared to the capacity of a two-lane moderate access control arterial. Phase 1 is anticipated to add approximately 4,200 vehicles per day on U.S. 95A between U.S. 50A and Sario Drive. This is approximately 23% of the roadway capacity of a high access control two-lane roadway. Phase 1 is anticipated to add approximately 100 vehicles per day south of Sario Drive. This is approximately 1% of the roadway capacity of a two-lane roadway. The following roadway capacity percentages are for a two-lane roadway.

Phase 2 is anticipated to add approximately 16,000 vehicles per day (88% roadway capacity) on U.S. 95A between U.S. 50A and Sario Drive, 1,000 vehicles per day (5% roadway capacity) on U.S. 95A south of Sario Drive and 7,400 vehicles per day (52% roadway capacity) on the Jackson Ranch access.

At project buildout, some reduction occurs at the project accesses due to the construction of the beltway as an alternate route. Project buildout is anticipated to add approximately 14,200 vehicles per day (78% roadway capacity) on U.S. 95A between U.S. 50A and Sario Drive, 2,300 vehicles per day (13% roadway capacity) on U.S. 95A south of Sario Drive, 3,900 vehicles per day (27% roadway capacity) on the Jackson Ranch access, 7,500 vehicles per day (41% roadway capacity) to the west on the beltway and 5,300 (29% roadway capacity) vehicles per day to the east on the beltway.

Roadway capacity analysis indicate that U.S. Highway 95A will ultimately need to be widened to four-lanes from U.S. Highway 50A to Sario Drive in order to maintain level of service C operation. A Master Plan Concept has been discussed that shows U.S. 95A extending north of U.S. 50A to a future I-80 interchange. This improvement will provide a direct connection to I-80 and will eliminate the need for widening U.S. 50A west of U.S. 95A.

SITE PLAN REVIEW

A copy of the conceptual site plan for the Fernley BC Ranch Development is included in this submittal. The site plan shows north and south portions of the project site. The north and south sites are connected at the southwest corner of the north site and northeast corner of the south site.

The site plan shows that project access will be provided from two proposed north site accesses, Sario Drive and the south access (south of Sario Drive), intersecting U.S. 95A. Additional accesses include a connection to the Jackson Ranch access intersecting U.S. 50A, a connection to the Parker access intersecting U.S. 95A and the future beltway which passes through the south site. The site plan shows the Sario Drive roadway as an arterial roadway passing through the north site into the south site at the adjoining north and south site corners and intersecting the south site's roadway

segment of the future beltway. The on-site segment of the beltway, shown as an arterial roadway on the site plan, extends from the northwest corner to the southeast corner of the south site. The City of Fernley's Master Plan roadway network plan identifies these access roadways as proposed future routes.

The connection to the Jackson Ranch access requires a new section of roadway connecting Sage Drive to the Jackson Ranch access roadway including a bridge over the Truckee Canal. A site roadway in the northwest corner of the north site intersects Sario Drive and will connect to Sage Drive. This connection will provide access to Sario Drive for traffic currently served by the Sage Drive access, which will be closed at U.S. 95A due to spacing issues with Mull Lane. A new roadway, which will intersect Sario Drive near the north and south site adjoining corners, will pass through BLM land to the east of the south site and connect to the Parker access (Foothills of Fernley north access) intersecting U.S. 95A.

Average daily traffic volumes on the project access roadways were subsequently reviewed in order to determine the general internal size of the streets. Assigning the trip generation volumes to the access roadways results in approximately 13,000 vehicles per day on the Sario Drive arterial roadway. Lyon County standards do not contain capacity thresholds for the various classifications of streets. Washoe County street capacity thresholds were subsequently reviewed. Washoe County street standards indicate that two-lane collector streets can carry up to 9,600 ADT and minor arterials can carry up to 10,800 ADT per two travel lanes. Based on these capacity thresholds, the Sario Drive arterial roadway will need to be constructed as a four-lane minor arterial in order to serve project traffic volumes. It is recommended that the Sario Drive arterial be designed per Lyon County four-lane minor arterial street standards. It is recommended that the beltway be initially designed per Lyon County two-lane arterial standards but be expandable to six lanes in the future.

U.S. HIGHWAY 95A CORRIDOR REVIEW

The U.S. Highway 95A corridor from U.S. Highway 50A to the project's south access roadway was reviewed in order to determine future traffic signal locations and full movement intersections. U.S. 95A is classified as a minor arterial. The location of future signalized intersections was reviewed based on NDOT's access management standards. The access management standards indicate that signalized intersections will be allowed on minor arterials only where the signalized spacing requirements are met or the two-way signal progression will allow a minimum 40% bandwidth through the signal network. The signalized spacing requirements are based on operating speed and cycle length which generally result in a minimum signalized intersection spacing of one-half mile.

The access management standards indicate minimum requirements for private access spacing is 250 feet for speeds of 35-45 miles per hour and 450 feet for speeds of 50-55 miles per hour. However, these private access spacing requirements will permit only right turn movements. The access management standards specify that left turns to and from minor arterials will be considered if (1)

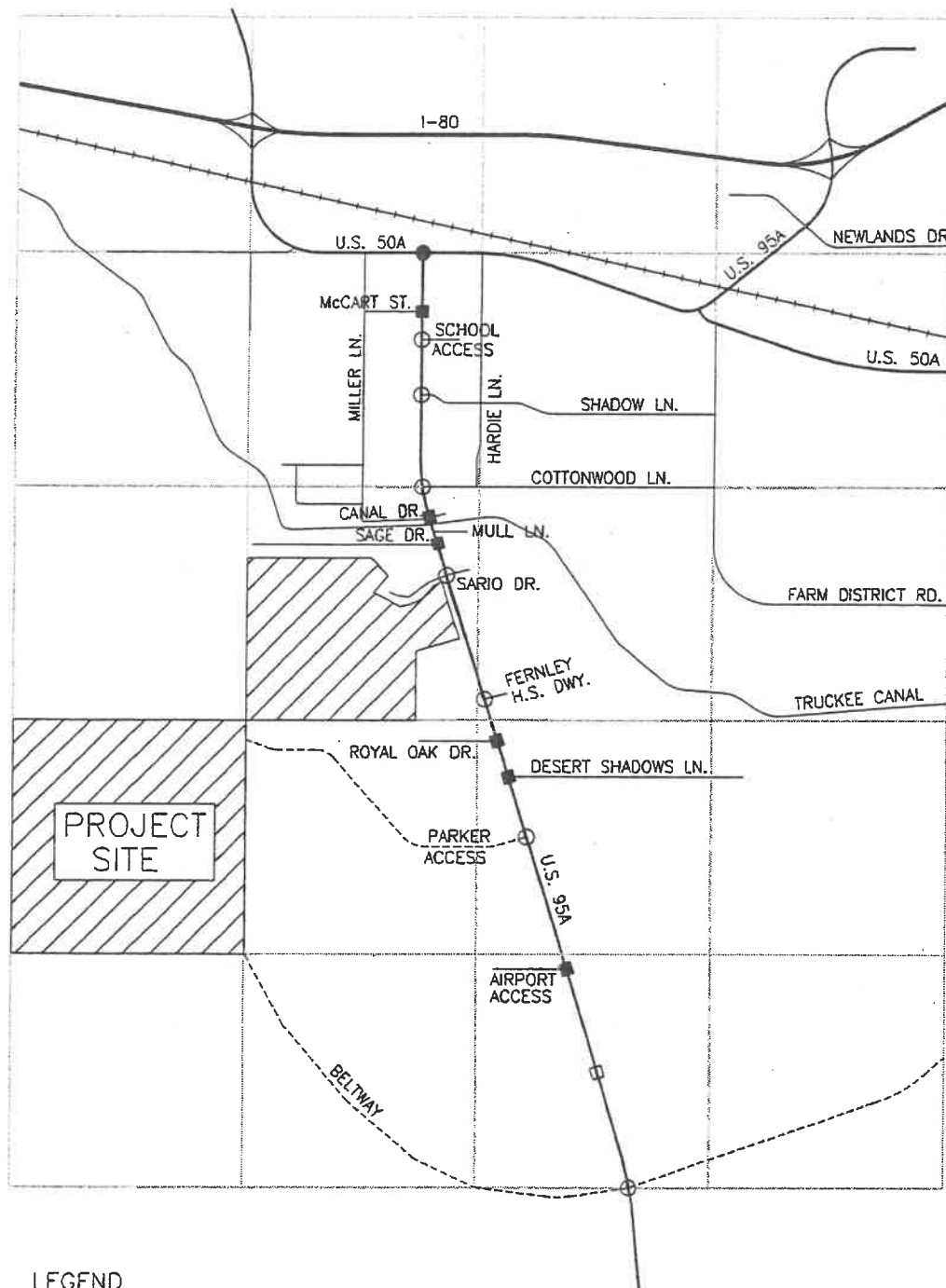
the access intersections do not have the potential for signalization, (2) the left turns will not create unreasonable congestion and safety problems; and (3) alternatives to the left turns would cause unacceptable traffic operations and safety problems on the general street system, or (4) the access meets spacing criteria for a public access.

The spacing requirement for public roads is one-quarter mile for speeds of 35-45 miles per hour and one-half mile for speeds of 50-55 miles per hour. Based on this criteria, full movement intersections will be allowed at one-quarter mile spacing where speeds are between 35-45 miles per hour. Full movement intersections that do not have the potential for signalization at less than one-quarter mile spacing or on sections with speeds greater than 45 miles per hour may be permitted based on level of service results. Currently, there are several existing full movement intersections on U.S. 95A which do not meet NDOT's access management spacing requirements. Table 6 on the following page shows the approximate distances between intersections on U.S. 95A from U.S. 50A to the project's south access with possible operation options.

As indicated in Table 6, quarter-mile minimum spacing for traffic signals is obtained between the intersections of U.S. 50A, the access for the Fernley elementary and intermediate schools, Shadow Lane, Cottonwood Lane and Sario Drive or Sage Drive as a possible alternate location. Spacing greater than one half-mile is obtained between Sario Drive or Sage Drive and the Fernley High School access, the proposed Parker access and the proposed beltway access. As shown, several of the existing full movement intersections do not meet NDOT's access management spacing requirements. Ultimately, based on further review, movements at these intersections may be restricted or the street network reconfigured to accommodate access to U.S. 95A. It is anticipated that the Sage Drive access will be closed. Figure 10 shows the existing traffic signals, recommended locations of future traffic signals, and the existing and potential locations of full movement unsignalized intersections on U.S. 95A.

TABLE 6
U.S. 95A ROADWAY SPACING

<u>ROADWAY</u>	<u>OPERATION</u>	<u>DISTANCE (FT)</u>
U.S. 50A	Existing Signal	1,200
McCart Street	Full Movement	600
School Access	Potential Signal	1,500
Shadow Lane	Potential Signal	2,100
Cottonwood Lane	Potential Signal	725
Canal Drive-Circle Drive	Full Movement	325
Mull Lane	Full Movement (Alternate)	290
Sage Drive	Potential Signal (Alternate)	665
Sario Drive-Waste Transfer Station Access	Potential Signal	2,700
High School Driveway	Potential Signal	800
Royal Oak Drive	Full Movement	1,000
Desert Shadows Lane	Full movement	1800
Proposed Project North Access	Potential Signal	2,300
Airport Access	Full Movement	5,600
Proposed Project South Access	Potential Signal	



LEGEND

- EXISTING TRAFFIC SIGNAL
- POTENTIAL TRAFFIC SIGNAL
- EXISTING FULL MOVEMENT INTERSECTION
- POTENTIAL FULL MOVEMENT INTERSECTION

FERNELY BC RANCH
SIGNAL AND FULL MOVEMENT INTERSECTION LOCATIONS
FIGURE 10

TRAFFIC PLANNING REVIEW

A macro scale traffic planning review was performed. The City of Fernley Master Plan Land Use Map was reviewed in order to determine the total number of dwelling units and the total acreage of the non-residential land uses. Based on the land use map, it is estimated that the undeveloped land in the vicinity, including the project, will yield a maximum total 17,000 dwelling units; 350 acres of commercial land; 225 acres of industrial land; and 450 acres of parks.

The traffic generated by this undeveloped land was subsequently calculated based on trip generation rates for ITE Land Uses 210: Single Family Detached Housing, 110: General Light Industrial, 820: Shopping Center and 770: Business Park. Table 7 shows a summary of the average daily traffic volumes and peak hour volumes generated by the undeveloped land.

TABLE 7
MASTER PLAN LAND USES TRIP GENERATION

LAND USE	ADT	AM PEAK HOUR			PM PEAK HOUR		
		IN	OUT	TOTAL	IN	OUT	TOTAL
Single Family Housing 17,000 Dwelling Units	117,206	2,977	8,932	11,909	6,869	4,034	10,903
General Light Industrial 225 Acres	11,655	1,402	288	1,690	360	1,274	1,634
Shopping Center 1,500,000 Square Feet	39,482	485	310	795	1,795	1,945	3,740
Business Park 1,500,000 Square Feet	<u>19,140</u>	<u>1,800</u>	<u>345</u>	<u>2,145</u>	<u>450</u>	<u>1,485</u>	<u>1,935</u>
TOTAL	187,483	6,664	9,875	16,539	9,474	8,738	18,212

It was assumed that the commercial land use will contain both retail and office uses. The square footage for these land uses were estimated by applying a 20% floor area ratio to the acreage. As shown in Table 7, the undeveloped land generally located south of the canal and west of U.S. 395A will generate significant traffic volumes. It is anticipated that a portion of these trips will be internal to the site and will not travel onto the existing roadway system. It was assumed that 25% of the traffic generated by the residential land uses will be to and from the commercial and industrial land uses in the area.

The off-site trip generation volumes were subsequently assigned to the existing and proposed roadways as shown on the FPE roadway network map. This roadway network map shows an extensive roadway system within the undeveloped land areas with a proposed beltway connection to the I-80/Wadsworth interchange to the west and a proposed roadway running from U.S. 95A, through Nevada Pacific Industrial Park, to a future I-80 interchange to the east. The road network map also shows U.S. 395A extending north to a future I-80 interchange. Table 8 shows the estimated traffic distribution and resulting average daily traffic volumes on the three roadways.

TABLE 8
DISTRIBUTION AND AVERAGE DAILY TRAFFIC VOLUMES
MASTER PLAN LAND USES

<u>ROADWAY</u>	<u>DISTRIBUTION</u>	<u>PROJECTED ADT</u>
I-80/Wadsworth Interchange Connection	30%	38,600
U.S. 95A	40%	51,500
I-80/Nevada Pacific Interchange Connection	30%	38,600

The daily level of service thresholds shown in Table 5 indicate that the I-80/Wadsworth interchange connection will need to be constructed as a four-lane high access control arterial in order to operate at level of service C/D. U.S. 95A will need to be improved as a six-lane high access control arterial in order to maintain level of service C/D operation. The I-80/Nevada Pacific Industrial Park interchange connection will need to be constructed as a four-lane high access control arterial in order to operate at level of service C/D. The on-site beltway arterial from the south U.S. 95A project access intersection through the Fernley BC Ranch development will likely also need to be a four-lane roadway. It is important to note that these suggested roadway sections are adequate only if the non-residential land uses build out concurrently with the residential land uses.

RECOMMENDATIONS

Traffic generated by the Fernley BC Ranch Development will have some impact over the ten to fifteen year build out on the adjacent street network. The following recommendations are made to mitigate project traffic impacts.

It is recommended that any required signing, striping or traffic control improvements comply with City of Fernley and Nevada Department of Transportation requirements.

It is recommended that the project developers participate in the cost of off-site regional roadway improvements by paying traffic impact fees or special assessment district fees. It is proposed that the developers receive credit for any off-site regional road improvements they construct.

It is recommended that the U.S. Highway 95A/Sario Drive intersection initial improvements for phase 1-A to consist of one left turn lane with 350 feet of left turn storage and one shared through-right turn lane at the Sario Drive west approach and one left turn lane at the south approach. NDOT's roadway improvement project on U.S. Highway 95A will provide left turn lanes at the north and south approaches of the U.S. Highway 95A/Sario Drive intersection.

It is recommended that a traffic signal be constructed at the U.S. Highway 95A/Sario Drive intersection when warranted.

It is recommended that the U.S. Highway 95A/Sario Drive intersection improvements for the phase 1-B and phase 2 project consist of one left turn lane and one shared through-right turn lane at the public disposal center east approach, dual left turn lanes each with a storage length of 350 feet at the west approach, one exclusive right turn lane at the north approach, and one through lane and one shared through-right turn lane at the south approach. The dual left turn lanes at the west approach will require two receiving lanes for a distance on northbound U.S. Highway 95A.

It is recommended that the U.S. Highway 95A/Sario Drive intersection improvements for project buildout consist of one left turn lane, two through lanes and one exclusive right turn lane at the north approach, and one left turn lane, one through lane and one shared through-right turn lane at the south approach.

It is recommended ultimately for the phase 2 and buildout project that the Main Street (U.S. Highway 50A)/Jackson Ranch access intersection contain one left turn lane with a minimum storage length of 350 feet, one through lane and one shared through-right turn lane at the east approach; one left turn lane, two through lanes and one exclusive right turn lane at the west approach; one left turn lane, one through lane and one right turn lane at the north approach; and dual left turn lanes each with a minimum storage length of 350 feet, one through lane and one right turn lane at the south approach. The dual left turn lanes at the west approach will require two receiving lanes for a distance on westbound U.S. Highway 50A. The updated Jackson Ranch Traffic Analysis dated April, 2005, recommended initially that the Main Street (U.S. Highway 50A)/Jackson Ranch access intersection be constructed to contain one left turn lane with a minimum 200 feet of storage and one shared through-right turn lane at the east approach; one left turn lane, one through lane and one exclusive right turn lane at the west approach; one left turn lane, one through lane and one right turn lane at the north approach; and one left turn lane and provision for a future second left turn lane with a minimum storage/deceleration length of 215 feet, one through lane and one right turn lane at the south approach.

It is recommended that a traffic signal be constructed at the Main Street (U.S. Highway 50A)/Jackson Ranch access intersection when warranted. A traffic signal was recommended at the Main Street/Jackson Ranch access intersection in the updated Jackson Ranch study.

It is recommended that the U.S. Highway 95A/Parker access intersection be constructed as recommended by the Foothills of Fernley Development Traffic Analysis dated July, 2004, to ultimately contain dual left turn lanes and one exclusive right turn lane at the west approach; one through lane and one exclusive right turn lane at the north approach; and one left turn lane and one through lane at the south approach. The dual left turn lanes at the west approach will require two receiving lanes for a distance on northbound U.S. Highway 95A.

It is recommended that a traffic signal be constructed at the U.S. Highway 95A/Parker access intersection when warranted. A traffic signal was previously recommended at the U.S. Highway 95A/Parker access intersection in the Foothills of Fernley Development study.

It is recommended that a dual left turn length of a minimum 250 feet per lane be provided at the west leg and left turn storage of a minimum 100 feet be provided at the south leg of the U.S. Highway 95A/Parker access intersection.

It is recommended that the U.S. Highway 95A/project south access (south of Sario Drive) intersection be constructed to contain one right-in/right-out only driveway at the east approach and one exclusive right turn lane at the north approach.

It is recommended that the Sario Drive arterial be designed per Lyon County four-lane minor arterial street standards. It is recommended that the beltway be initially designed per Lyon County two-lane arterial standards but be expandable to four lanes in the future.

It is recommended that the project developer participate fairly in the future regional roadway requirements or impact fees that may include US-95A widening to as many as six lanes, a new I-80 interchange at the US-95A extension and a regional roadway network being extended to the existing I-80 Wadsworth interchange and the future I-80 Nevada Pacific interchange.

APPENDIX

BC Ranch, Fernley
Summary of Average Vehicle Trip Generation
For 2183 Dwelling Units of Single Family Detached Housing
March 31, 2005

	24 Hour Two-Way Volume	7-9 AM Pk Hour		4-6 PM Pk Hour	
		Enter	Exit	Enter	Exit
Average Weekday	17736	384	1153	1083	636

	24 hour Two-Way Volume	Peak Hour	
		Enter	Exit
Saturday	19094	1055	899
Sunday	19266	771	684

Note: A zero indicates no data available.
The above rates were calculated from these equations:

24-Hr. 2-Way Volume: $LN(T) = .92LN(X) + 2.71$, $R^2 = 0.96$
7-9 AM Peak Hr. Total: $T = .7(X) + 9.43$
 $R^2 = 0.89$, 0.25 Enter, 0.75 Exit
4-6 PM Peak Hr. Total: $LN(T) = .9LN(X) + .53$
 $R^2 = 0.91$, 0.63 Enter, 0.37 Exit
AM Gen Pk Hr. Total: $T = .7(X) + 12.05$
 $R^2 = 0.89$, 0.26 Enter, 0.74 Exit
PM Gen Pk Hr. Total: $LN(T) = .89LN(X) + .61$
 $R^2 = 0.91$, 0.64 Enter, 0.36 Exit
Sat. 2-Way Volume: $LN(T) = .94LN(X) + 2.63$, $R^2 = 0.93$
Sat. Pk Hr. Total: $T = .89(X) + 10.93$
 $R^2 = 0.9$, 0.54 Enter, 0.46 Exit
Sun. 2-Way Volume: $T = 8.83(X) + -9.76$, $R^2 = 0.94$
Sun. Pk Hr. Total: $LN(T) = .89LN(X) + .44$
 $R^2 = 0.88$, 0.53 Enter, 0.47 Exit

Source: Institute of Transportation Engineers
Trip Generation, 7th Edition, 2003.

TRIP GENERATION BY MICROTRANS

BC Ranch, Fernley
Summary of Average Vehicle Trip Generation
For 1010 Dwelling Units of Apartments
March 30, 2005

	24 Hour Two-Way Volume	7-9 AM Pk Hour		4-6 PM Pk Hour	
		Enter	Exit	Enter	Exit
Average Weekday	6220	100	399	373	201

	24 hour Two-Way Volume	Peak Hour	
		Enter	Exit
Saturday	7672	0	0
Sunday	6383	0	0

Note: A zero indicates no data available.

The above rates were calculated from these equations:

24-Hr. 2-Way Volume: $T = 6.01(X) + 150.35$, $R^2 = 0.88$
7-9 AM Peak Hr. Total: $T = .49(X) + 3.73$
 $R^2 = 0.83$, 0.2 Enter, 0.8 Exit
4-6 PM Peak Hr. Total: $T = .55(X) + 17.65$
 $R^2 = 0.77$, 0.65 Enter, 0.35 Exit
AM Gen Pk Hr. Total: $T = .53(X) + 4.21$
 $R^2 = 0.82$, 0.29 Enter, 0.71 Exit
PM Gen Pk Hr. Total: $T = .6(X) + 17.52$
 $R^2 = 0.8$, 0.61 Enter, 0.39 Exit
Sat. 2-Way Volume: $T = 7.85(X) + -256.19$, $R^2 = 0.85$
Sat. Pk Hr. Total: $T = .41(X) + 19.23$
 $R^2 = 0.56$, 0 Enter, 0 Exit
Sun. 2-Way Volume: $T = 6.42(X) + -101.12$, $R^2 = 0.82$
Sun. Pk Hr. Total: 0
 $R^2 = 0$, 0 Enter, 0 Exit

Source: Institute of Transportation Engineers
Trip Generation, 7th Edition, 2003.

TRIP GENERATION BY MICROTRANS

BC Ranch, Fernley
 Summary of Average Vehicle Trip Generation
 For 346.0 T.G.L.A. of Shopping Center
 March 30, 2005

	24 Hour Two-Way Volume	7-9 AM Pk Hour		4-6 PM Pk Hour	
		Enter	Exit	Enter	Exit
Average Weekday	14857	218	138	623	675
	24 hour Two-Way Volume	Peak Hour			
		Enter	Exit		
Saturday	17290	893	827		
Sunday	8733	529	550		

Note: A zero indicates no data available.
 Source: Institute of Transportation Engineers
 Trip Generation, 7th Edition, 2003.

TRIP GENERATION BY MICROTRANS

BC Ranch, Fernley
 Summary of Pass-By Trips
 For 346.0 T.G.L.A. of Shopping Center
 March 30, 2005

	Driveway Volume	Pass-By Trips	Volume Added to Adjacent Streets
Average Weekday			
7-9 AM Peak Hour Enter	218	0	218
7-9 AM Peak Hour Exit	138	0	138
7-9 AM Peak Hour Total	356	0	356
4-6 PM Peak Hour Enter	623	169	454
4-6 PM Peak Hour Exit	675	183	492
4-6 PM Peak Hour Total	1298	352	946
Saturday			
Saturday Peak Hour Enter	893	270	623
Saturday Peak Hour Exit	827	250	577
Saturday Peak Hour Total	1720	521	1199

Note: A zero indicates no data available.
 Source: Institute of Transportation Engineers
 Trip Generation Handbook, March, 2001

TRIP GENERATION BY MICROTRANS

TWO-WAY STOP CONTROL SUMMARY

Analyst: DAL
 Agency/Co.: Solaegui Engineers
 Date Performed: 4/5/2005
 Analysis Time Period: AM Peak Hour
 Intersection: U.S Hwy 95A & Sario
 Jurisdiction: City of Fernley/NDOT
 Units: U. S. Customary
 Analysis Year: Existing
 Project ID: Fernley BC Ranch
 East/West Street: Sario Drive-Driveway
 North/South Street: U.S. Highway 95A
 Intersection Orientation: NS

Study period (hrs): 0.25

		Vehicle Volumes and Adjustments						
Major Street:	Approach Movement	Northbound				Southbound		
		1	2	3		4	5	6
		L	T	R		L	T	R
Volume		1	344	1		4	535	3
Peak-Hour Factor, PHF		0.90	0.90	0.90		0.90	0.90	0.90
Hourly Flow Rate, HFR		1	382	1		4	594	3
Percent Heavy Vehicles		2	--	--		2	--	--
Median Type/Storage		Undivided				/		
RT Channelized?								
Lanes		0	1	0		0	1	0
Configuration		LTR				LTR		
Upstream Signal?		No				No		

Minor Street:	Approach Movement	Westbound				Eastbound	
		7	8	9	10	11	12
		L	T	R	L	T	R
Volume		2	0	4	6	0	2
Peak Hour Factor, PHF		0.90	0.90	0.90	0.90	0.90	0.90
Hourly Flow Rate, HFR		2	0	4	6	0	2
Percent Heavy Vehicles		2	2	2	2	2	2
Percent Grade (%)		0				0	
Flared Approach: Exists?/Storage				No	/	No	
Lanes		0	1	0		0	1
Configuration		LTR		LTR			

Delay, Queue Length, and Level of Service							
Approach Movement Lane Config	NB	SB	Westbound			Eastbound	
	1	4	7	8	9	10	11
	LTR	LTR	LTR	LTR	LTR	LTR	12
v (vph)	1	4		6			8
C(m) (vph)	980	1175		402			259
v/c	0.00	0.00		0.01			0.03
95% queue length	0.00	0.01		0.05			0.10
Control Delay	8.7	8.1		14.1			19.3
OS	A	A		B			C
Approach Delay				14.1			19.3
Approach LOS				B			C

TWO-WAY STOP CONTROL SUMMARY

Analyst: DAL
 Agency/Co.: Solaegui Engineers
 Date Performed: 4/5/2005
 Analysis Time Period: PM Peak Hour
 Intersection: U.S Hwy 95A & Sario
 Jurisdiction: City of Fernley/NDOT
 Units: U. S. Customary
 Analysis Year: Existing
 Project ID: Fernley BC Ranch
 East/West Street: Sario Drive-Driveway
 North/South Street: U.S. Highway 95A
 Intersection Orientation: NS

Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Vehicle Volumes and Adjustments								
Major Street:	Approach Movement	Northbound			Southbound			
		1	2	3		4	5	6
		L	T	R		L	T	R
Volume		0	295	1		6	328	2
Peak-Hour Factor, PHF		0.95	0.95	0.95		0.95	0.95	0.95
Hourly Flow Rate, HFR		0	310	1		6	345	2
Percent Heavy Vehicles		2	--	--		2	--	--
Median Type/Storage		Undivided			/			
RT Channelized?								
Lanes		0	1	0		0	1	0
Configuration		LTR				LTR		
Upstream Signal?		No				No		

Minor Street: Approach Movement	Westbound				Eastbound		
	7 L	8 T	9 R	10 L	11 T	12 R	
Volume	1	1	7	2	1	0	
Peak Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	
Hourly Flow Rate, HFR	1	1	7	2	1	0	
Percent Heavy Vehicles	2	2	2	2	2	2	
Percent Grade (%)	0				0		
Flared Approach: Exists?/Storage				No /			
Lanes	0	1	0		0	1	0
Configuration	LTR				LTR		

Delay, Queue Length, and Level of Service

Approach Movement Lane Config	NB 1 LTR	SB 4 LTR	Westbound 7 LTR			Eastbound 10 LTR			12
v (vph)	0	6	9			3			
C(m) (vph)	1212	1249	602			368			
v/c	0.00	0.00	0.01			0.01			
95% queue length	0.00	0.01	0.05			0.02			
Control Delay	8.0	7.9	11.1			14.9			
OS	A	A	B			B			
Approach Delay				11.1			14.9		
Approach LOS				B			B		

TWO-WAY STOP CONTROL SUMMARY

Analyst: DAL
 Agency/Co.: Solaegui Engineers
 Date Performed: 4/5/2005
 Analysis Time Period: AM Peak Hour
 Intersection: U.S Hwy 95A & Sario
 Jurisdiction: City of Fernley/NDOT
 Units: U. S. Customary
 Analysis Year: Existing + Phase 1
 Project ID: Fernley BC Ranch
 East/West Street: Sario Drive-Driveway
 North/South Street: U.S. Highway 95A
 Intersection Orientation: NS

Study period (hrs): 0.25

		Vehicle Volumes and Adjustments					
Major Street:	Approach Movement	Northbound			Southbound		
		1 L	2 T	3 R	4 L	5 T	6 R
Volume		6	341	1	4	535	141
Peak-Hour Factor, PHF		0.90	0.90	0.90	0.90	0.90	0.90
Hourly Flow Rate, HFR		6	378	1	4	594	156
Percent Heavy Vehicles		2	--	--	2	--	--
Median Type/Storage		TWLTL			/ 0		
RT Channelized?							
Lanes		0	1	0	0	1	0
Configuration		LTR			LTR		
Upstream Signal?		No			No		
Minor Street:	Approach Movement	Westbound			Eastbound		
		7 L	8 T	9 R	10 L	11 T	12 R
Volume		2	0	4	325	0	15
Peak Hour Factor, PHF		0.90	0.90	0.90	0.90	0.90	0.90
Hourly Flow Rate, HFR		2	0	4	361	0	16
Percent Heavy Vehicles		2	2	2	2	2	2
Percent Grade (%)			0			0	
Flared Approach: Exists?/Storage				No	/		No
Lanes		0	1	0	1	1	0
Configuration		LTR			L TR		

		Delay, Queue Length, and Level of Service					
Approach Movement		NB 1 LTR	SB 4 LTR	Westbound 7 LTR		Eastbound 10 L	
				8 LTR	9 L	11 TR	12 TR
v (vph)		6	4	6		361	16
C(m) (vph)		859	1179	360		195	456
v/c		0.01	0.00	0.02		1.85	0.04
95% queue length		0.02	0.01	0.05		25.96	0.11
Control Delay		9.2	8.1	15.2		443.2	13.2
OS		A	A	C		F	B
Approach Delay				15.2		424.9	
Approach LOS				C		F	

TWO-WAY STOP CONTROL SUMMARY

Analyst: DAL
 Agency/Co.: Solaegui Engineers
 Date Performed: 4/5/2005
 Analysis Time Period: PM Peak Hour
 Intersection: U.S Hwy 95A & Sario
 Jurisdiction: City of Fernley/NDOT
 Units: U. S. Customary
 Analysis Year: Existing + Phase 1
 Project ID: Fernley BC Ranch
 East/West Street: Sario Drive-Driveway
 North/South Street: U.S. Highway 95A
 Intersection Orientation: NS

Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach Movement	Northbound				Southbound		
	1 L	2 T	3 R	4 L	5 T	6 R	
Volume	7	294	1	6	327	352	
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	
Hourly Flow Rate, HFR	7	309	1	6	344	370	
Percent Heavy Vehicles	2	--	--	2	--	--	
Median Type/Storage	TWLTL			/ 0			
RT Channelized?							
Lanes	0	1	0	0	1	0	
Configuration	LTR			LTR			
Jpstream Signal?	No			No			

Minor Street: Approach Movement	Westbound				Eastbound		
	7 L	8 T	9 R	10 L	11 T	12 R	
Volume	1	1	7	199	1	4	
Peak Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	
Hourly Flow Rate, HFR	1	1	7	209	1	4	
Percent Heavy Vehicles	2	2	2	2	2	2	
Percent Grade (%)		0			0		
Flared Approach: Exists?/Storage			No	/		No	/
Lanes	0	1	0	1	1	0	
Configuration		LTR		L		TR	

Delay, Queue Length, and Level of Service

Approach Movement	NB		SB		Westbound		Eastbound	
	1	4	7	8	9	10	11	12
Lane Config	LTR	LTR	LTR	LTR	L	L	TR	TR
v (vph)	7	6		9		209		5
C(m) (vph)	886	1250		505		265		465
v/c	0.01	0.00		0.02		0.79		0.01
95% queue length	0.02	0.01		0.05		6.02		0.03
Control Delay	9.1	7.9		12.3		55.2		12.8
LOS	A	A		B		F		B
Approach Delay				12.3			54.2	
Approach LOS				B			F	

HCS2000: Signalized Intersections Release 4.1e

Analyst:
 Agency: Solaegui Engineers
 Date: 4/5/2005
 Period: AM Peak Hour
 Project ID: Fernley BC Ranch
 E/W St: Sario Drive-Driveway

Inter.: U.S. Highway 95A & Sario
 Area Type: All other areas
 Jurisd: City of Fernley/NDOT
 Year : Existing + Phase 1
 N/S St: U.S. Highway 95A

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	0	0	1	0	1	1	0	1	1	1
LGConfig	L	TR			LTR		L	TR		L	T	R
Volume	325	0	15	2	0	4	6	341	1	4	535	141
Lane Width	12.0	12.0			12.0		12.0	12.0		12.0	12.0	12.0
RTOR Vol			3			1			0			35

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination		1	2	3	4	5	6	7	8
EB	Left	A				NB	Left	A	A
	Thru	A					Thru	A	
	Right	A					Right	A	
	Peds	X					Peds		
WB	Left	A				SB	Left	A	A
	Thru	A					Thru	A	
	Right	A					Right	A	
	Peds	X					Peds		
B	Right					EB	Right		
SB	Right					WB	Right		
Green		19.0					1.0	25.0	
Yellow		4.0					4.0	4.0	
All Red		1.0					1.0	1.0	

Cycle Length: 60.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
L	445	1405	0.81	0.32	29.7	C		
TR	501	1583	0.03	0.32	14.1	B	29.2	C
Westbound								
LTR	517	1633	0.01	0.32	14.1	B	14.1	B
Northbound								
L	205	1770	0.03	0.52	9.6	A		
TR	776	1862	0.49	0.42	13.3	B	13.2	B
Southbound								
L	374	1770	0.01	0.52	7.8	A		
T	776	1863	0.77	0.42	19.6	B	18.1	B
	660	1583	0.18	0.42	11.2	B		
Intersection Delay = 19.6 (sec/veh) Intersection LOS = B								

HCS2000: Signalized Intersections Release 4.1e

Analyst: DAL
 Agency: Solaegui Engineers
 Date: 4/5/2005
 Period: PM Peak Hour
 Project ID: Fernley BC Ranch
 E/W St: Sario Drive-Driveway
 Inter.: U.S. Highway 95A & Sario
 Area Type: All other areas
 Jurisd: City of Fernley/NDOT
 Year : Existing + Phase 1
 N/S St: U.S. Highway 95A

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	0	0	1	0	1	1	0	1	1	1
LGConfig	L	TR			LTR		L	TR		L	T	R
Volume	199	1	4	1	1	7	7	294	1	6	328	312
Lane Width	12.0	12.0			12.0		12.0	12.0		12.0	12.0	12.0
RTOR Vol			1			1			0			78

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	A				NB Left	A	A	
Thru	A				Thru	A		
Right	A				Right	A		
Peds	X				Peds			
WB Left	A				SB Left	A	A	
Thru	A				Thru	A		
Right	A				Right	A		
Peds	X				Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	16.0				1.0	28.0		
Yellow	4.0				4.0	4.0		
All Red	1.0				1.0	1.0		

Cycle Length: 60.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
L	374	1402	0.56	0.27	20.8	C		
TR	441	1653	0.01	0.27	16.2	B	20.8	C
Westbound								
LTR	439	1647	0.02	0.27	16.2	B	16.2	B
Northbound								
L	467	1770	0.01	0.57	6.2	A		
TR	869	1862	0.36	0.47	10.5	B	10.4	B
Southbound								
L	498	1770	0.01	0.57	6.0	A		
T	869	1863	0.40	0.47	10.8	B	10.6	B
R	739	1583	0.33	0.47	10.4	B		
Intersection Delay = 12.5 (sec/veh) Intersection LOS = B								

Analyst: DAL
 Agency: Solaegui Engineers
 Date: 4/5/2005
 Period: PM Peak Hour
 Project ID: Fernley BC Ranch
 E/W St: Sario Drive-Driveway

Inter.: U.S. Highway 95A & Sario
 Area Type: All other areas
 Jurisd: City of Fernley/NDOT
 Year : Existing + Phase 2 + Other
 N/S St: U.S. Highway 95A

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	2	1	0	1	1	0	1	2	0	1	1	1
LGConfig	L	TR		L	TR		L	TR		L	T	R
Volume	280	1	7	1	1	7	11	647	1	6	931	372
Lane Width	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	12.0
RTOR Vol			1			1			0			93

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	A				NB Left	A	A	
Thru		A			Thru		A	
Right		A			Right		A	
Peds		X			Peds			
WB Left	A				SB Left	A	A	
Thru		A			Thru		A	
Right		A			Right		A	
Peds		X			Peds			
EB Right					EB Right			
SB Right					WB Right			
Green	10.0	4.0			1.0	45.0		
Yellow	4.0	4.0			4.0	4.0		
All Red	1.0	1.0			1.0	1.0		

Cycle Length: 80.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
L	430	3437	0.69	0.13	38.0	D		
TR	81	1623	0.09	0.05	36.7	D	38.0	D
Westbound								
L	221	1770	0.00	0.13	30.7	C		
TR	81	1623	0.09	0.05	36.7	D	36.0	D
Northbound								
L	115	1770	0.10	0.64	16.8	B		
TR	1995	3546	0.34	0.56	9.6	A	9.7	A
Southbound								
L	400	1770	0.01	0.64	5.8	A		
T	1048	1863	0.94	0.56	30.9	C	25.9	C
	890	1583	0.33	0.56	9.6	A		
Intersection Delay = 22.6 (sec/veh) Intersection LOS = C								

HCS2000: Signalized Intersections Release 4.1e

Analyst: DAL
 Agency: Solaegui Engineers
 Date: 4/5/2005
 Period: AM Peak Hour
 Project ID: Fernley BC Ranch
 E/W St: Sario Drive-Driveway

Inter.: U.S. Highway 95A & Sario
 Area Type: All other areas
 Jurisd: City of Fernley/NDOT
 Year : Existing + Phase 2 + Other
 N/S St: U.S. Highway 95A

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	2	1	0	1	1	0	1	2	0	1	1	1
LGConfig	L		TR	L		TR	L		TR	L	T	R
Volume	508	0	19	2	0	4	7	944	1	4	735	171
Lane Width	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	12.0
RTOR Vol			4			1			0			42

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	A				NB Left	A	A	
Thru		A			Thru		A	
Right		A			Right		A	
Peds		X			Peds		X	
WB Left	A				SB Left	A	A	
Thru		A			Thru		A	
Right		A			Right		A	
Peds		X			Peds		X	
NB Right					EB Right			
SB Right					WB Right			
Green	16.0	5.0			1.0	38.0		
Yellow	4.0	4.0			4.0	4.0		
All Red	1.0	1.0			1.0	1.0		

Cycle Length: 80.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
L	687	3437	0.82	0.20	38.5	D		
TR	99	1583	0.17	0.06	36.4	D	38.5	D
Westbound								
L	354	1770	0.01	0.20	25.6	C		
TR	99	1583	0.03	0.06	35.3	D	31.5	C
Northbound								
L	115	1770	0.07	0.55	16.1	B		
TR	1684	3546	0.62	0.47	16.4	B	16.4	B
Southbound								
L	177	1770	0.02	0.55	10.3	B		
T	885	1863	0.92	0.47	34.6	C	31.2	C
R	752	1583	0.19	0.47	12.2	B		
Intersection Delay = 26.8 (sec/veh) Intersection LOS = C								

HCS2000: Signalized Intersections Release 4.1e

Analyst:
 Agency: Solaegui Engineers
 Date: 4/5/2005
 Period: AM Peak Hour
 Project ID: Fernley BC Ranch
 E/W St: Sario Drive-Driveway

Inter.: U.S. Highway 95A & Sario
 Area Type: All other areas
 Jurisd: City of Fernley/NDOT
 Year : Existing + Buildout + Other
 N/S St: U.S. Highway 95A

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	2	1	0	1	1	1	1	2	0	1	2	1
LGConfig	L	TR		L	TR	R	L	TR		L	T	R
Volume	409	0	21	2	0	4	26	904	1	4	777	218
Lane Width	12.0	12.0		12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0
RTOR Vol			5			1			0			54

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	A				NB Left	A	A	
Thru		A			Thru		A	
Right		A			Right		A	
Peds		X			Peds			
WB Left	A				SB Left	A	A	
Thru		A			Thru		A	
Right		A			Right		A	
Peds		X			Peds			
EB Right					WB Right			
SB Right								
Green	15.0	10.0			2.0	33.0		
Yellow	4.0	4.0			4.0	4.0		
All Red	1.0	1.0			1.0	1.0		

Cycle Length: 80.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
L	644	3437	0.70	0.19	33.9	C		
TR	198	1583	0.09	0.13	31.2	C	33.8	C
Westbound								
L	332	1770	0.01	0.19	26.4	C		
TR	233	1863	0.00	0.13	30.6	C	29.0	C
R	198	1583	0.02	0.13	30.7	C		
Northbound								
L	214	1770	0.14	0.50	12.1	B		
TR	1463	3546	0.69	0.41	20.6	C	20.4	C
Southbound								
L	167	1770	0.02	0.50	12.5	B		
T	1463	3547	0.59	0.41	18.9	B	18.3	B
	653	1583	0.28	0.41	15.8	B		
Intersection Delay = 22.0 (sec/veh) Intersection LOS = C								

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: U.S. Highway 95A & Sario
 Agency: Solaegui Engineers Area Type: All other areas
 Date: 4/5/2005 Jurisd: City of Fernley/NDOT
 Period: PM Peak Hour Year : Existing + Buildout + Other
 Project ID: Fernley BC Ranch
 E/W St: Sario Drive-Driveway N/S St: U.S. Highway 95A

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	2	1	0	1	1	0	1	2	0	1	2	1
LGConfig	L	TR		L	TR		L	TR		L	T	R
Volume	598	1	101	1	1	7	127	546	1	6	997	534
Lane Width	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	12.0
RTOR Vol			25			1			0			133

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination		1	2	3	4	5	6	7	8
EB	Left	A				NB Left	A	A	
	Thru		A			Thru	A		
	Right		A			Right	A		
	Peds		X			Peds			
WB	Left	A				SB Left	A	A	
	Thru		A			Thru	A		
	Right		A			Right	A		
	Peds		X			Peds			
NB	Right					EB Right			
SB	Right					WB Right			
Green		19.0	10.0				4.0	27.0	
Yellow		4.0	4.0				4.0	4.0	
All Red		1.0	1.0				1.0	1.0	

Cycle Length: 80.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
L	816	3437	0.77	0.24	33.0	C		
TR	198	1587	0.41	0.13	33.7	C	33.1	C
Westbound								
L	420	1770	0.00	0.24	23.3	C		
TR	203	1623	0.03	0.13	30.8	C	29.9	C
Northbound								
L	182	1770	0.74	0.45	31.6	C		
TR	1197	3546	0.48	0.34	21.3	C	23.2	C
Southbound								
L	305	1770	0.02	0.45	12.9	B		
T	1197	3547	0.88	0.34	32.5	C	32.2	C
.	534	1583	0.79	0.34	31.8	C		
Intersection Delay = 30.2 (sec/veh) Intersection LOS = C								

HCS2000: Signalized Intersections Release 4.1e

Analyst: DAL
 Agency: Solaegui Engineers
 Date: 4/6/2005
 Period: AM Peak Hour
 Project ID: Fernley BC Ranch
 E/W St: Main Street (U.S. Hwy. 50A) Inter.: Main & Jackson Ranch Access
 Area Type: All other areas
 Jurisd: City of Fernley/NDOT
 Year : Existing + Phase 2 + Other
 N/S St: Jackson Ranch Access

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	2	1	1	2	1	2	1	1	1	1	1
LGConfig	L	T	R	L	T	R	L	T	R	L	T	R
Volume	10	443	219	98	864	42	635	0	236	22	0	6
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
RTOR Vol			54			10			59			1

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	A				A	A		
Thru			A			A	A	
Right			A			A	A	
Peds							X	
WB Left	A	A			SB Left	A		
Thru		A	A		Thru		A	
Right		A	A		Right		A	
Peds		X			Peds		X	
EB Right					EB Right			
SB Right					WB Right			
Green	5.0	4.0	23.0		6.0	10.0	12.0	
Yellow	4.0	0.0	4.0		4.0	0.0	4.0	
All Red	1.0	0.0	1.0		1.0	0.0	1.0	

Cycle Length: 80.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
L	111	1770	0.10	0.06	35.8	D		
T	1020	3547	0.48	0.29	23.9	C	24.0	C
R	455	1583	0.40	0.29	23.5	C		
Westbound								
L	310	1770	0.35	0.17	29.7	C		
T	1197	3547	0.80	0.34	28.1	C	27.9	C
R	534	1583	0.07	0.34	18.0	B		
Northbound								
L	902	3437	0.78	0.26	31.9	C		
T	512	1863	0.00	0.28	21.0	C	30.4	C
R	435	1583	0.45	0.28	24.8	C		
Southbound								
L	133	1770	0.18	0.08	35.3	D		
T	279	1863	0.00	0.15	28.9	C	34.1	C
	237	1583	0.03	0.15	29.1	C		
Intersection Delay = 27.8 (sec/veh) Intersection LOS = C								

HCS2000: Signalized Intersections Release 4.1e

Analyst: DAL
 Agency: Solaegui Engineers
 Date: 4/6/2005
 Period: PM Peak Hour
 Project ID: Fernley BC Ranch
 E/W St: Main Street (U.S. Hwy. 50A)

Inter.: Main & Jackson Ranch Access
 Area Type: All other areas
 Jurisd: City of Fernley/NDOT
 Year : Existing + Phase 2 + Other
 N/S St: Jackson Ranch Access

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	2	1	1	2	1	2	1	1	1	1	1
LGConfig	L	T	R	L	T	R	L	T	R	L	T	R
Volume	7	1092	612	264	619	29	388	0	166	51	0	13
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
RTOR Vol			153			7			41			3

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	A				NB Left	A	A	
Thru			A		Thru	A	A	
Right			A		Right	A	A	
Peds					Peds			
WB Left	A	A			SB Left	A		
Thru		A	A		Thru		A	
Right		A	A		Right		A	
Peds		X			Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	4.0	8.0	30.0		5.0	7.0	6.0	
Yellow	4.0	0.0	4.0		4.0	0.0	4.0	
All Red	1.0	0.0	1.0		1.0	0.0	1.0	

Cycle Length: 80.0 secs

Intersection Performance Summary

Appr/Lane	Lane Group	Adj Sat Flow Rate	Ratios		Lane Group		Approach	
Grp	Capacity	(s)	v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
L	89	1770	0.08	0.05	36.6	D		
T	1330	3547	0.86	0.38	29.3	C	29.8	C
R	594	1583	0.81	0.38	31.0	C		
Westbound								
L	376	1770	0.74	0.21	37.0	D		
T	1685	3547	0.39	0.47	13.7	B	20.4	C
R	752	1583	0.03	0.47	11.2	B		
Northbound								
L	730	3437	0.56	0.21	29.1	C		
T	303	1863	0.00	0.16	28.1	C	29.9	C
R	257	1583	0.51	0.16	32.4	C		
Southbound								
L	111	1770	0.49	0.06	39.6	D		
T	140	1863	0.00	0.08	34.2	C	38.8	D
	119	1583	0.09	0.08	34.8	C		
Intersection Delay = 27.2 (sec/veh) Intersection LOS = C								

HCS2000: Signalized Intersections Release 4.1e

Analyst: DAL
 Agency: Solaequi Engineers
 Date: 4/6/2005
 Period: AM Peak Hour
 Project ID: Fernley BC Ranch
 E/W St: Main Street (U.S. Hwy. 50A) N/S St: Jackson Ranch Access

Inter.: Main & Jackson Ranch Access
 Area Type: All other areas
 Jurisd: City of Fernley/NDOT
 Year : Existing + Buildout + Other

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	2	1	1	2	1	2	1	1	1	1	1
LGConfig	L	T	R	L	T	R	L	T	R	L	T	R
Volume	10	452	132	98	790	42	427	0	236	22	0	6
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
RTOR Vol			33			10			59			1

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination		1	2	3	4	5	6	7	8
EB	Left	A				NB Left	A	A	
	Thru			A		Thru	A	A	
	Right			A		Right	A	A	
	Peds			X		Peds		X	
WB	Left	A	A			SB Left	A		
	Thru		A	A		Thru		A	
	Right		A	A		Right		A	
	Peds			X		Peds		X	
B	Right					EB Right			
SB	Right					WB Right			
Green		6.0	7.0	21.0			7.0	7.0	7.0
Yellow		4.0	0.0	4.0			4.0	4.0	4.0
All Red		1.0	0.0	1.0			1.0	1.0	1.0

Cycle Length: 80.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
L	133	1770	0.08	0.08	34.7	C		
T	931	3547	0.51	0.26	25.6	C	25.4	C
R	416	1583	0.25	0.26	23.6	C		
Westbound								
L	398	1770	0.26	0.22	25.9	C		
T	1241	3547	0.67	0.35	23.5	C	23.5	C
R	554	1583	0.06	0.35	17.3	B		
Northbound								
L	816	3437	0.55	0.24	27.6	C		
T	442	1863	0.00	0.24	23.3	C	27.5	C
R	376	1583	0.49	0.24	27.4	C		
Southbound								
L	155	1770	0.15	0.09	34.2	C		
T	163	1863	0.00	0.09	33.3	C	34.1	C
R	139	1583	0.04	0.09	33.5	C		
Intersection Delay = 25.3 (sec/veh) Intersection LOS = C								

HCS2000: Signalized Intersections Release 4.1e

Analyst: DAL
 Agency: Solaegui Engineers
 Date: 4/6/2005
 Period: PM Peak Hour
 Project ID: Fernley BC Ranch
 E/W St: Main Street (U.S. Hwy. 50A)

Inter.: Main & Jackson Ranch Access
 Area Type: All other areas
 Jurisd: City of Fernley/NDOT
 Year : Existing + Buildout + Other
 N/S St: Jackson Ranch Access

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	2	1	1	2	1	2	1	1	1	1	1
LGConfig	L	T	R	L	T	R	L	T	R	L	T	R
Volume	7	1094	365	264	627	29	271	0	166	51	0	13
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
RTOR Vol			121			7			55			3

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	A				NB Left	A	A	
Thru			A		Thru	A	A	
Right			A		Right	A	A	
Peds			X		Peds		X	
WB Left	A	A			SB Left	A		
Thru		A	A		Thru		A	
Right		A	A		Right		A	
Peds			X		Peds		X	
NB Right					EB Right			
SB Right					WB Right			
Green	5.0	6.0	30.0		7.0	5.0	7.0	
Yellow	4.0	0.0	4.0		4.0	0.0	4.0	
All Red	1.0	0.0	1.0		1.0	0.0	1.0	

Cycle Length: 80.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
L	111	1770	0.06	0.06	35.5	D		
T	1330	3547	0.87	0.38	29.4	C	27.6	C
R	594	1583	0.43	0.38	19.2	B		
Westbound								
L	354	1770	0.79	0.20	41.5	D		
T	1596	3547	0.41	0.45	15.0	B	22.6	C
R	712	1583	0.03	0.45	12.3	B		
Northbound								
L	730	3437	0.39	0.21	27.4	C		
T	279	1863	0.00	0.15	28.9	C	29.0	C
R	237	1583	0.49	0.15	32.8	C		
Southbound								
L	155	1770	0.35	0.09	35.7	D		
T	163	1863	0.00	0.09	33.3	C	35.4	D
R	139	1583	0.08	0.09	33.8	C		
Intersection Delay = 26.3 (sec/veh) Intersection LOS = C								

Analyst: DAL
 Agency: Solaegui Engineers
 Date: 4/8/2005
 Period: AM Peak Hour
 Project ID: Fernley BC Ranch
 E/W St: Parker North Access

Inter.: US 95A & Parker North Access
 Area Type: All other areas
 Jurisd: City of Fernley/NDOT
 Year : Existing + Phase 2 + Other
 N/S St: U.S. Highway 95A

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	2	0	1	0	0	0	1	1	0	0	1	1
LGConfig	L		R				L	T			T	R
Volume	421		18				5	531			260	139
Lane Width	12.0		12.0				12.0	12.0			12.0	12.0
RTOR Vol			4									34

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination		1	2	3	4	5	6	7	8
EB	Left	A				NB Left	A	A	
	Thru					Thru	A		
	Right	A				Right			
	Peds	X				Peds			
WB	Left					SB Left			
	Thru					Thru	A		
	Right					Right	A		
	Peds	X				Peds			
EB	Right					EB Right			
SB	Right					WB Right			
Green		10.0					1.0	24.0	
Yellow		4.0					4.0	4.0	
All Red		1.0					1.0	1.0	

Cycle Length: 50.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
L	687	3437	0.64	0.20	20.5	C	20.3	C
R	317	1583	0.05	0.20	16.2	B		
Westbound								
Northbound								
L	563	1770	0.01	0.60	4.3	A	11.0	B
T	894	1863	0.63	0.48	11.0	B		
Southbound								
T	894	1863	0.31	0.48	8.1	A	7.9	A
	760	1583	0.15	0.48	7.4	A		
Intersection Delay = 13.2 (sec/veh) Intersection LOS = B								

HCS2000: Signalized Intersections Release 4.1e

Analyst: Inter.: US 95A & Parker North Access
 Agency: Solaegui Engineers Area Type: All other areas
 Date: 4/8/2005 Jurisd: City of Fernley/NDOT
 Period: PM Peak Hour Year : Existing + Phase 2 + Other
 Project ID: Fernley BC Ranch
 E/W St: Parker North Access N/S St: U.S. Highway 95A

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	2	0	1	0	0	0	1	1	0	0	1	1
LGConfig	L		R				L	T			T	R
Volume	246		8				14	413			519	420
Lane Width	12.0		12.0				12.0	12.0			12.0	12.0
RTOR Vol			2									105

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination		1	2	3	4	5	6	7	8
EB	Left	A				NB Left	A	A	
	Thru					Thru		A	
	Right	A				Right			
	Peds	X				Peds			
WB	Left					SB Left			
	Thru					Thru		A	
	Right					Right		A	
	Peds	X				Peds			
EB	Right					EB Right			
SB	Right					WB Right			
Green		6.0					1.0	28.0	
Yellow		4.0					4.0	4.0	
All Red		1.0					1.0	1.0	

Cycle Length: 50.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
L	412	3437	0.63	0.12	24.0	C	23.9	C
R	190	1583	0.03	0.12	19.5	B		
Westbound								
Northbound								
L	436	1770	0.03	0.68	3.5	A		
T	1043	1863	0.42	0.56	6.6	A	6.5	A
Southbound								
T	1043	1863	0.52	0.56	7.3	A	7.0	A
	886	1583	0.37	0.56	6.4	A		
Intersection Delay = 9.7					(sec/veh)	Intersection LOS = A		

HCS2000: Signalized Intersections Release 4.1e

Analyst: DAL
 Agency: Solaegui Engineers
 Date: 4/8/2005
 Period: AM Peak Hour
 Project ID: Fernley BC Ranch
 E/W St: Parker North Access

Inter.: US 95A & Parker North Access
 Area Type: All other areas
 Jurisd: City of Fernley/NDOT
 Year : Existing + Buildout + Other
 N/S St: U.S. Highway 95A

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	2	0	1	0	0	0	1	1	0	0	1	1
LGConfig	L		R				L	T			T	R
Volume	381		11				2	427			273	123
Lane Width	12.0		12.0				12.0	12.0			12.0	12.0
RTOR Vol			2									30

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination		1	2	3	4	5	6	7	8
EB	Left		A			NB	Left	A	A
	Thru						Thru		A
	Right		A				Right		
	Peds		X				Peds		
WB	Left					SB	Left		
	Thru						Thru	A	
	Right						Right	A	
	Peds		X				Peds		
NB	Right					EB	Right		
SB	Right					WB	Right		
Green		10.0					1.0	24.0	
Yellow		4.0					4.0	4.0	
All Red		1.0					1.0	1.0	

Cycle Length: 50.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
L	687	3437	0.58	0.20	19.4	B	19.3	B
R	317	1583	0.03	0.20	16.1	B		
Westbound								
Northbound								
L	557	1770	0.00	0.60	4.3	A	9.3	A
T	894	1863	0.50	0.48	9.4	A		
Southbound								
T	894	1863	0.32	0.48	8.2	A	8.0	A
L	760	1583	0.13	0.48	7.3	A		
Intersection Delay = 12.2 (sec/veh) Intersection LOS = B								

HCS2000: Signalized Intersections Release 4.1e

Analyst: DAL
 Agency: Solaegui Engineers
 Date: 4/8/2005
 Period: PM Peak Hour
 Project ID: Fernley BC Ranch
 E/W St: Parker North Access

Inter.: US 95A & Parker North Access
 Area Type: All other areas
 Jurisd: City of Fernley/NDOT
 Year : Existing + Buildout + Other
 N/S St: U.S. Highway 95A

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	2	0	1	0	0	0	1	1	0	0	1	1
LGConfig	L		R				L	T			T	R
Volume	224		4				8	393			531	373
Lane Width	12.0		12.0				12.0	12.0			12.0	12.0
RTOR Vol			1									93

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination		1	2	3	4	5	6	7	8
EB	Left	A				NB Left	A	A	
	Thru					Thru		A	
	Right	A				Right			
	Peds	X				Peds			
WB	Left					SB Left			
	Thru					Thru	A		
	Right					Right	A		
	Peds	X				Peds			
B	Right					EB Right			
SB	Right					WB Right			
Green		6.0					1.0	28.0	
Yellow		4.0					4.0	4.0	
All Red		1.0					1.0	1.0	

Cycle Length: 50.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
L	412	3437	0.57	0.12	22.7	C	22.7	C
R	190	1583	0.02	0.12	19.4	B		
Westbound								
Northbound								
L	426	1770	0.02	0.68	3.6	A		
T	1043	1863	0.40	0.56	6.5	A	6.4	A
Southbound								
T	1043	1863	0.54	0.56	7.5	A	7.0	A
	886	1583	0.33	0.56	6.2	A		
Intersection Delay = 9.3					(sec/veh) Intersection LOS = A			

TWO-WAY STOP CONTROL SUMMARY

Analyst: DAL
 Agency/Co.: Solaegui Engineers
 Date Performed: 4/6/2005
 Analysis Time Period: AM Peak Hour
 Intersection: U.S 95A & South Access
 Jurisdiction: City of Fernley/NDOT
 Units: U. S. Customary
 Analysis Year: Existing + Buildout + Other
 Project ID: Fernley BC Ranch
 East/West Street: South Access
 North/South Street: U.S. Highway 95A
 Intersection Orientation: NS Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach Movement	Northbound				Southbound		
	1 L	2 T	3 R	4 L	5 T	6 R	
Volume		931			742	58	
Peak-Hour Factor, PHF		0.95			0.95	0.95	
Hourly Flow Rate, HFR		980			781	61	
Percent Heavy Vehicles		--	--		--	--	
Median Type/Storage	Undivided				/		
RT Channelized?						No	
Lanes		1			1	1	
Configuration		T			T	R	
Upstream Signal?		No			No		

Minor Street: Approach Movement	Westbound				Eastbound		
	7 L	8 T	9 R	10 L	11 T	12 R	
Volume						11	
Peak Hour Factor, PHF						0.95	
Hourly Flow Rate, HFR						11	
Percent Heavy Vehicles						2	
Percent Grade (%)		0			0		
Flared Approach: Exists?/Storage				/		/	
Lanes						1	
Configuration						R	

Delay, Queue Length, and Level of Service

Approach Movement Lane Config	NB		SB		Westbound			Eastbound		
	1	4	7	8	9	10	11	12		
v (vph)								11		
C(m) (vph)								395		
v/c								0.03		
95% queue length								0.09		
Control Delay								14.4		
LOS								B		
Approach Delay								14.4		
Approach LOS								B		

TWO-WAY STOP CONTROL SUMMARY

Analyst: DAL
 Agency/Co.: Solaegui Engineers
 Date Performed: 4/6/2005
 Analysis Time Period: PM Peak Hour
 Intersection: U.S 95A & South Access
 Jurisdiction: City of Fernley/NDOT
 Units: U. S. Customary
 Analysis Year: Existing + Buildout + Other
 Project ID: Fernley BC Ranch
 East/West Street: South Access
 North/South Street: U.S. Highway 95A
 Intersection Orientation: NS Study period (hrs): 0.25

		Vehicle Volumes and Adjustments					
Major Street:	Approach	Northbound			Southbound		
	Movement	1	2	3	4	5	6
		L	T	R	L	T	R
Volume			671			889	210
Peak-Hour Factor, PHF			0.95			0.95	0.95
Hourly Flow Rate, HFR			706			935	221
Percent Heavy Vehicles			--	--		--	--
Median Type/Storage		Undivided			/		
RT Channelized?						No	
Lanes			1			1	1
Configuration			T			T	R
Upstream Signal?			No			No	

Minor Street:	Approach	Westbound			Eastbound		
	Movement	7	8	9	10	11	12
		L	T	R	L	T	R
Volume							47
Peak Hour Factor, PHF							0.95
Hourly Flow Rate, HFR							49
Percent Heavy Vehicles							2
Percent Grade (%)			0			0	
Flared Approach: Exists?/Storage					/		/
Lanes							1
Configuration							R

		Delay, Queue Length, and Level of Service						
Approach		NB	SB	Westbound			Eastbound	
Movement		1	4	7	8	9	10	11 12
Lane Config								R
v (vph)								49
C(m) (vph)								322
v/c								0.15
95% queue length								0.53
Control Delay								18.2
LOS								C
Approach Delay							18.2	
Approach LOS							C	

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