



## ALPINE CITY PLANNING COMMISSION MEETING

**NOTICE** is hereby given that the **PLANNING COMMISSION** of Alpine City, Utah will hold a **Public Hearing and a Regular Meeting at Alpine City Hall, 20 North Main, Alpine, Utah on Tuesday, July 7, 2015 at 7:00 pm** as follows:

### I. GENERAL BUSINESS

- A. Welcome and Roll Call: Steve Cosper
- B. Prayer/Opening Comments: Jane Griener
- C. Pledge of Allegiance: By Invitation

### II. PUBLIC COMMENT

Any person wishing to comment on any item not on the agenda may address the Planning Commission at this point by stepping to the microphone and giving his or her name and address for the record.

### III. ACTION ITEMS

#### A. PUBLIC HEARING - Condominium Ordinance Amendment Request - Larry Hilton

The Planning Commission will discuss an amendment to the Condominium Ordinance which would eliminate language related to fire separation standards.

#### B. Condominium Ordinance Amendment Request: The Planning Commission will consider making a recommendation on proposed amendments to the Condominium Ordinance.

#### C. PUBLIC HEARING - Wadsworth Meadows Concept Plan - Approximately 1350 E 900 N - Autumn View Properties

The Planning Commission will review the concept plan for the proposed subdivision which was formerly known as East Bench Estates. It consists of 11 lots on 15 acres located at approximately 1350 East 900 North in the CR-40,000 zone.

#### D. Wadsworth Meadows Concept Plan and Variance Request

The Planning Commission will review the concept plan for the proposed subdivision which was formerly known as East Bench Estates, and make a recommendation to the City Council on the request that there be an exception to the requirement for a secondary access for subdivisions in the Urban Wildland Interface Overlay zone.

#### E. Olde Towne Centre Lot "D" - Cooper Building, 363 S. Main - Gary & April Cooper

The Planning Commission will review and give direction on the design of the building located in the Historic Gateway Zone.

#### F. River Meadows Senior Living Phase 4 - Revised Site Plan

This phase consists of 8 units and has been previously approved but the developer is requesting approval for modification of the building pad locations.

#### G. River Meadows PRD - Plat Amendment

Two of the units in this previously approved development were discovered to be located in the flood plain. The developer is seeking approval of a plat amendment to adjust the lots.

### IV. COMMUNICATIONS

#### V. APPROVAL OF PLANNING COMMISSION MINUTES: June 2, 2015

### ADJOURN

Chairman Steve Cosper  
July 2, 2015

**THE PUBLIC IS INVITED TO ATTEND ALL PLANNING COMMISSION MEETINGS.** If you need a special accommodation to participate in the meeting, please call the City Recorder's Office at 801-756-6347 ext. 5.

CERTIFICATION OF POSTING. The undersigned duly appointed recorder does hereby certify that the above agenda notice was posted at Alpine City Hall, 20 North Main, Alpine, UT. It was also sent by e-mail to The Daily Herald located in Provo, UT a local newspaper circulated in Alpine, UT. This agenda is also available on the City's web site at [www.alpinecity.org](http://www.alpinecity.org) and on the Utah Public Meeting Notices website at [www.utah.gov/pmn/index.html](http://www.utah.gov/pmn/index.html).

# PUBLIC MEETING AND PUBLIC HEARING ETIQUETTE

**Please remember all public meetings and public hearings are now recorded.**

- All comments **must** be recognized by the Chairperson and addressed through the microphone.
- When speaking to the Planning Commission, please stand, speak slowly and clearly into the microphone, and state your name and address for the recorded record.
- Be respectful to others and refrain from disruptions during the meeting. Please refrain from conversation with others in the audience as the microphones are very sensitive and can pick up whispers in the back of the room.
- Keep comments constructive and not disruptive.
- Avoid verbal approval or dissatisfaction of the ongoing discussion (i.e., booing or applauding).
- Exhibits (photos, petitions, etc.) given to the City become the property of the City.
- Please silence all cellular phones, beepers, pagers or other noise making devices.
- Be considerate of others who wish to speak by limiting your comments to a reasonable length, and avoiding repetition of what has already been said. Individuals may be limited to two minutes and group representatives may be limited to five minutes.
- Refrain from congregating near the doors or in the lobby area outside the council room to talk as it can be very noisy and disruptive. If you must carry on conversation in this area, please be as quiet as possible. (The doors must remain open during a public meeting/hearing.)

## **Public Hearing v. Public Meeting**

If the meeting is a **public hearing**, the public may participate during that time and may present opinions and evidence for the issue for which the hearing is being held. In a public hearing there may be some restrictions on participation such as time limits.

Anyone can observe a **public meeting**, but there is no right to speak or be heard there - the public participates in presenting opinions and evidence at the pleasure of the body conducting the meeting.

## **ALPINE PLANNING COMMISSION AGENDA**

**SUBJECT: Condominium Conversion Ordinance**

**FOR CONSIDERATION ON: July 7 2015**

**PETITIONER: Larry Hilton**

**ACTION REQUESTED BY PETITIONER: Review and make a recommendation on the proposed amendment.**

**APPLICABLE STATUTE OR ORDINANCE: Sections 6.4 (2) and 6.4 (3)**

**PETITION IN COMPLIANCE WITH ORDINANCE: Yes**

### **BACKGROUND INFORMATION:**

Larry Hilton has requested that the city amend the Condominium Conversion Ordinance No. 85-07 and strike Section 6.4 (2) and part of 6.4. (3) which relates to fire wall separation requirements in condominiums. Mr. Hilton said it is his understanding that the standards imposed by the ordinance are significantly more stringent than those required by other municipalities in the area, and are more costly that would be required by the International Building Code.

### **STAFF RECOMMENDATION:**

That the Planning Commission discuss the proposed ordinance and make a recommendation to the City Council.

**From:** Larry Hilton [ldhilton@gmail.com]  
**Sent:** Friday, June 05, 2015 4:01 PM  
**To:** Jason Bond  
**Subject:** Request for Amendment to City Ordinance

Jason:

I am writing to follow up on our conversations regarding Alpine's condominium conversion policy. We respectfully request that section 6.4(2) in its entirety, as well as the phrase "or fire separation standards" in section 6.4(3) be stricken from ordinance 85-07. We understand that these standards are significantly more stringent than those required by any other municipality in the area, and that they would entail much greater cost beyond that required by the International Building Code.

Please do not hesitate to contact me should you have any questions regarding our concerns. Thank you for your consideration.

--

Best regards,  
Larry Hilton  
(801) 367-0067

## Charmayne Warnock

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**From:** Roger Evans [revans@sunrise-eng.com]  
**Sent:** Thursday, July 02, 2015 11:47 AM  
**To:** Charmayne Warnock  
**Subject:** RE: Condo - firewal requirement

After reviewing the proposed ordinance change, I agree with Larry Hilton that paragraph two (2) should be deleted in Section 6.4 of the Alpine ordinance. The current adopted codes require only a one (1) hour separation between condo units.

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**From:** Charmayne Warnock [cwarnock@alpinecity.org]  
**Sent:** Thursday, July 02, 2015 10:59 AM  
**To:** Roger Evans  
**Subject:** Condo - firewal requirement

Roger,

Attached is Alpine City's current ordinance on condominium conversion. The part the applicant wants taken out is in red. I'm also attaching a copy of his email requesting it.

Charmayne G. Warnock

Alpine City Recorder/Building Dept.

Office # 801-756-6241

Fax # 801-756-1189

[cwarnock@alpinecity.org](mailto:cwarnock@alpinecity.org)



## CHAPTER 6

### CONDOMINIUM CONVERSION POLICY (ORDINANCE 85-07, Amended by Ord. 2009-17, 10/27/09)

#### 6.1 Intent

The intent of this section is to establish guidelines and minimum requirements relating to the conversion of existing commercial structures to condominium ownership and the maintenance and operation of such projects. These provisions shall be supplemental and in addition to the general requirements for major subdivisions contained under existing City ordinances, and also the requirements of Title 57 Chapter 8 of the Utah Code Annotated, 1953, as amended.

#### 6.2 Permitted Uses

Uses permitted within a condominium project shall be limited to those uses specifically permitted within the zone which underlies the area of the project and shall be subject to all conditions and restrictions required within the zone for the use.

#### 6.3 Layout and Improvement

1. Commercial Conversion Projects. Each project shall conform to the minimum City standards with regard to locations, parking, landscaping, access and similar issues which existed at the time the structure was established.

#### 6.4 Structural Quality - Fire Separation - Variance

1. All structures proposed for conversion shall conform to all applicable provisions of the International Building Code in effect at the time of application.

~~2. Regardless of any other provision to the contrary, each separate unit within a multi-unit structure shall be separate from each adjacent unit by walls and/or ceilings having a fire rating of two (2) hours or more.~~

3. Variances to the building code ~~or fire separation standards~~, as required above, may be granted by the City Council as a condition of approval of the conversion project, following the prior recommendation of the Planning Commission and upon the finding that said requirements are impractical because of unique circumstances associated with the structure, and that the gravity of said variance will not result in the creation or perpetuation a health or safety problem or a reduction in structural quality which is significantly less than would be achieved by full compliance with said requirements. In making its recommendation the Council on any such request for variance, the Planning Commission shall give due consideration to the recommendations of the Building Inspector, City Engineer, Fire Department or other affected agency.

#### 6.5 Utility and Facility Requirements

1. All units shall be separately metered for water, gas, electricity, and sewer, unless the covenants, conditions and restrictions provide for the Association to pay the costs of services.
2. Each unit shall be provided with readily accessible individual shut-off valves.
3. All storage and solid waste receptacles outside of units must be housed in a closed structure compatible with the design of the development.

## **6.6 Approval Procedure**

The procedure to be followed shall be the same as set forth in City ordinances dealing with major subdivisions.

## **6.7 Required Documents**

The following documents shall be prepared and submitted by the developer for each condominium conversion project:

1. Articles of Incorporation
2. Corporation By-Laws
3. Declaration of Covenants, Conditions, Restrictions and Management Policies/Declaration of Condominium
4. Management Agreement
5. Open Space Easement
6. Sales Brochure
7. Record of Survey or Final Subdivision Plat
8. Property Report

Where, in the opinion of the City Council, a particular document required under this Section is inapplicable for the particular project proposed, the City may waive the requirement for submitting said document.

## **6.8 Special Provisions**

1. Property Report (as required under Section 6.7 above). The developer shall submit two (2) copies of a property report describing the condition, useful life, and capacity of the roof, foundations, mechanical, electrical, heating, plumbing, and structural elements of all existing buildings and structures or uses; and identifying existing or latent deficiencies, proposed repairs and/or renovations. Said report shall be prepared by a structural engineer or qualified licensed contractor(s) acceptable to the City. The report shall also contain a statement of disclosure identifying those aspects of the building and site area which do not meet the requirements of the building code or zoning ordinance as they currently exist.
2. Notification of Tenants. Developers of a condominium conversion project shall, at the time of submission for final approval, submit to the City the following:
  - (1) Certification that the present tenants of the project have been notified of the proposed conversion. All tenants who occupy the property after an application for conversion has been filed with the City shall be notified by the developer prior to occupancy by such tenant.
  - (2) The present tenant or tenants of any unit to be converted shall be given a nontransferable right of first refusal to purchase the unit occupied upon at least the same terms and conditions offered to the general public or other individuals. The right shall extend for at least sixty (60) days after beginning sales, provided that the tenant may cancel the purchase agreement if the unit is not conveyed to the tenant within six (6) months or unless the tenant gives prior written notice of his/her intention not to exercise such right.
3. Unlawful to Record Unapproved Documents. It shall be unlawful to record any record of survey map or declaration of a condominium project in the office of the County Recorder, unless the same shall bear thereon final approval of the Planning Commission and City Council as required by the terms of this Code, and any record of survey map or declaration

so recorded without such approval shall be null and void. Any owner, or agent of any owner, of land or units located within a purported condominium conversion project, who transfers or sells any land, structure, or condominium unit in such purported project, before obtaining the final approval by the Planning Commission and City Council on the record of survey map and declaration and recording the same in the office of the County Recorder, shall be guilty of a misdemeanor for each lot, parcel of land, structure or condominium unit so transferred or sold.

## ALPINE PLANNING COMMISSION AGENDA

**SUBJECT:** Wadsworth Meadows PRD - Concept Plan &  
Request for exception to the requirement for a second access  
road in the Urban Wildland Interface Overlay

**FOR CONSIDERATION ON:** July 7 2015

**PETITIONER:** Patterson Construction

**ACTION REQUESTED BY PETITIONER:** Review

**APPLICABLE STATUTE OR ORDINANCE:** Article 4.6 Major Subdivisions  
Article 3.9 PRD  
Section 3.12.7 Urban Wildland  
Interface Overlay

**PETITION IN COMPLIANCE WITH ORDINANCE:** Yes

**BACKGROUND INFORMATION:** The proposed subdivision came to the City in 2013 as East Bench Estates. Since that time the property was enlarged and the name changed. It is proposed to be a 11-lot subdivision is located on 14.97 acres in the CR-40,000 zone with 5.68 acres of open space.

Upon review of the geologic hazard maps, the Wadsworth Meadows property falls within the Geologic Hazards Overlay Zone. Potential hazards are debris flow, rockfall, and earthslide. It is also in the fault zone. Geotech reports were submitted with the first application in 2013 but since development boundaries have changed, staff recommends the reports be updated.

Also, the proposed development lies within the UrbanWildland Interface Overlay Zone. Section 3.12.7.4.1 of the Development Code addresses wildfire concerns and requires more than one access road in order to provide simultaneous evacuation for residents of the subdivision and access for emergency vehicles in the event of fire. The applicant is asking for an exception to this requirement. An exception may be granted by the City Council after obtaining a recommendation from the Fire Chief and the Planning Commission.

### **STAFF RECOMMENDATION:**

That concept approval be postponed until the following 12 issues are addressed.  
(See issues on the next page.)

1. The Developer work with Staff to figure the total correct density.
2. The Planning Commission recommend and the City Council approve the development as a PRD.
3. The Planning Commission review the proposed street plan, including the half-width road section and secondary access exception proposal to determine if it is acceptable.
4. The Planning Commission and City Council review and discuss the option of no sidewalk on the south side of East Bench Drive. (Jeppesen properties.)
5. The Developer provide details regarding the developed open space.
6. The Planning Commission review the proposed open space plans to determine if they are acceptable.
7. The developer coordinate with the City regarding construction of a pressurized irrigation main line to serve the development from the City's high pressure zone.
8. A storm water concept plan be proposed that is acceptable to the City.
9. The Planning Commission provide direction to the Developer regarding their trail expectations.
10. The Developer update/validate the geological and geotechnical reports for the entire development area.
11. The developer show how the requirements of the urban/wildland interface area will be met.
12. The redlined comments on the concept plan be addressed.



Date: June 30, 2015

By: Jed Muhlestein, P.E. *JM*  
Assistant City Engineer

**Subject: Wadsworth Meadows – CONCEPT REVIEW  
11 lots on 14.97 Acres**

### **Background**

Wadsworth Meadows, formerly known as East Bench Estates, consists of 11 lots on 14.97 acres. The development consists of three parcels of land within the CR-40,000 zone. On November 27, 2012, the City Council approved the property to be developed as a PRD. More property has since been added to the original concept plan; because of this a new **approval for the property to be developed as a PRD will be required.**

### **PRD Requirements**

The concept plans shows a total of 38% open space given. A slope analysis for the property has been performed by the developer and City. Using the provided open space, there are discrepancies between the two calculations for density. The City calculated the total density at 10 lots, rounded from 10.47. The developer calculated 11 lots, rounded from 10.53. Staff will work with the developer to determine where the differences are.

The proposed plan shows two types of open space; natural (5.42 acres) and developed (0.26 acres). The developed open space is a 50-foot wide corridor on the west side of the property. It is unknown at this time exactly how this area will be constructed as developed open space. There currently exists a dirt road that has been used for access to Lambert Park, even though it is on private property. The development code requires the Planning Commission to review and evaluate proposed developed open space for acceptance on a case-by-case basis. At this point, the developer needs to provide more details for a recommendation to occur.

### **Street System/Parking Areas**

The development shows extending the proposed High Mountain Drive in the Bennett Farms subdivision (East Bench Drive in Wadsworth Meadows) to the east to provide frontage and

access for the lots. The street will need to be renamed to High Mountain Drive to be consistent with the existing street. The street is shown as a partial width street since the properties to the south are under separate ownership and are not included in the development. Section 4.7.4.9 of the development code includes a provision where the City Council “may “ allow a partial width street to be constructed. However, the City has not allowed a partial width street to be constructed for years since the ones that were constructed in the past never gave us a satisfactory finished product. The provision requires a half width of pavement plus 12 feet to be constructed, which in this case would be 27 feet of pavement. This is 3 feet short of the total required pavement width for a complete road. Our recommendation is to continue the trend of requiring full width streets to be constructed. There are several developments within the last 5 years that have been required to construct full width streets in similar situations.

The plan also shows a potential intersection with the future extension of Bald Mountain Drive. The location of this intersection could vary with the development of the properties to the south. However, the intersection will need to be located such that the cul-de-sac meets our maximum length of 450 feet. This street connection is on the transportation master plan, however there is flexibility in how it can be accomplished. Another consideration related to streets in development of the properties to the south is how sewer and storm will service the area. These items will need to be considered when those properties are developed, since this development will not have a direct impact on those issues. As the design progresses for Wadsworth Meadows, we will have to consider the future utility needs of the southern properties.

All streets will require curb, gutter and sidewalk as per City Standards. We would recommend an exception for sidewalk on the south side of East Bench Drive where the plan shows Jeppesen property ownership as long as a full width street with sidewalk on the north side of the road were to be built.

Since this development is within the Urban Wildland Interface Area, a second access is required by code. The developer has provided a letter requesting an exception to the secondary access requirement. The access requirement is as follows per Section 3.12.7.4 of the development code:

#### **3.12.7.4 ROADS**

**3.12.7.4.1 Access.** *All developments in the Urban/Wildland Interface area shall have more than one access route which provides simultaneous access for emergency equipment and civilian evacuation. The design of access routes shall take into consideration traffic circulation and provide for looping of roads as required to ensure at least two access points. Looped roads with a single access are not allowed.*

**3.12.7.4.2 Exceptions.** *Where terrain features or other physical obstacles make provision of a second access impractical, a single access may be approved by the City Council after obtaining the recommendation of the Fire Chief and the Planning Commission.*

**3.12.7.4.3**                    *Specifications. All secondary access roads shall have a minimum paved width of not less than 20 feet and an unobstructed vertical clearance of not less than 13 feet 6 inches to permit two-way traffic. These provisions will apply in lieu of those provided in Article 9.02-2-1 of the Uniform Fire Code.*

The Planning Commission should make a recommendation on this issue after reviewing the recommendation from the Fire Chief which should be in the packet.

### **Sewer System**

There is an existing 8-inch sewer line in High Mountain Drive stubbed to the development that could eventually be extended to serve this development. 4-inch sewer laterals will be required for each lot.

### **Culinary Water System**

We have reviewed the elevations of this development to determine which water pressure zone will most efficiently provide water service. This development will need to be served by our Grove pressure zone, which will require the relocation of a PRV and construction of a new water line. The PRV relocation and extending the water line to the north property line of this development is part of our water master plan and should be able to be funded by impact fees. The water lines required within the development will be a development improvement.

We anticipate that 8-inch lines will be required throughout the development, but will verify the required sizes with the water model. ¾-inch water laterals will be required for each lot.

Fire hydrant locations will be reviewed on the preliminary plans. The location of the fire hydrants will need to be approved by the Fire Marshall.

### **Pressurized Irrigation System**

Due to the elevation of the development, pressurized irrigation service should be by connection to our high pressure zone. The point of connection for service from this zone is the filter building in Lambert Park. Details of connection to the system can be worked out prior to preliminary submittal.

### **Storm Water Drainage System**

Storm drain design and calculations are not required at Concept level and were not submitted. However, the Bennett Farms development has extended an 18-inch storm drain line to this development which drains to a detention basin within the Bennett Farms area. A storm drain system will need to be connected to this connection and calculations provided to shown sufficient capacity in the existing detention basin. If capacity does not exist, the developer will be required

to create capacity within the Wadsworth Meadows development. The system will need to include catch basins and onsite detention.

The plans also indicate that sumps would be constructed in each lot to take care of roof water. This could still be done if the developer desires.

### **General Subdivision Remarks**

The developer has water rights on file with the City that will be used to meet the City's water policy.

There are two trails on the City's master plan that run through this property. The Planning Commission will need to review the plan for trails and provide direction to the developer regarding what they expect to see.

Section 3.12 of the City's development codes outlines the requirements for areas considered as sensitive land. The applicability of this ordinance to lands is based on hazard maps that have been adopted by the City showing the location and extent of potential hazards with the City and other factors.

Upon reviewing the hazard maps, it appears that there are two issues that need to be addressed. First, the property falls within the Geologic Hazards Overlay Zone. The potential hazards identified on this property are debris flow, rockfall and slide hazards, as well as a fault zone that covers a portion of the property. The developer had previously submitted two reports for the former development called East Bench Estates. The submitted reports were a geological and a geotechnical investigation which addressed the potential hazards and soil conditions at the site. Because the development boundaries have changed we recommend the developer update or validate and verify the reports are still applicable for the project. We will review the reports once validated and be more prepared to discuss them at a later date.

The second issue deals with the development being located within the Urban/Wildland Interface Overlay area. Section 3.12.7 of the development code outlines the requirements for when property falls within this area. The issues outlined in this section of the code will need to be addressed. The access issue was previously discussed in the street system section of this review letter.

There are a couple minor redline comments on the concept plan that need to be addressed.

**We recommend that concept approval of the proposed development be postponed until the following issues are addressed:**

- **The Developer work with Staff to figure the correct total density.**
- **The Planning Commission recommend and the City Council approve the development as a PRD.**

- **The Planning Commission review the proposed street plan, including the half width road section and secondary access exception proposal to determine if it is acceptable.**
- **The Planning Commission and City Council review and discuss the option of no sidewalk on the south side of East Bench Drive (Jeppesen Properties).**
- **The Developer provide details regarding the developed open space.**
- **The Planning Commission review the proposed open space plans to determine if they are acceptable.**
- **The developer coordinates with the City regarding the construction of a pressurized irrigation main line to serve the development from the City's high pressure zone.**
- **A storm water concept plan be proposed that is acceptable to the City.**
- **The Planning Commission provide direction to the Developer regarding their trails expectations.**
- **The Developer update/validate the geological and geotechnical reports for the entire development area.**
- **The developer show how the requirements of the urban/wildland interface area will be met.**
- **The redlined comments on the concept plan be addressed.**

RECEIVED JUN 15 2015



11038 N Highland Blvd  
Suite 400  
Highland Ut, 84003  
office (801) 492-1277  
cell (801) 616-1677  
ken@bergcivil.com

**To:** Alpine City  
**From:** Ken R. Berg, PE  
**Date:** 6/15/2015  
**Re:** Wadsworth Meadows Subdivision – Urban Wildland Interface Exception Request.

The Wadsworth Meadows Subdivision requests that an exception be granted to the secondary access requirement of the Urban Wildland Interface Overlay based upon the information provided.

The proposed 11 lot subdivision follows the current Alpine City Master Transportation Plan by constructing the alignment of the shown local road connecting East Bench Drive and Bald Mountain Drive. The future extension and connection of Bald Mountain Drive is also shown through the Fitzgerald property, currently within Utah County.

The Fitzgerald property creates a physical obstacle of a planned roadway, by Alpine City, that is not within city limits. This roadway is the only road connection available in the area based upon surrounding developments following the transportation master plan and not providing other roadway stubs to surrounding properties. Additionally, Lambert Park to the north and Forest Service to the east also present physical obstacles to alternative roadway alignments, with no roadways allowed.

Based upon these physical obstacles, the Wadsworth Meadows Subdivision requests the exception. The exception will only apply until the Fitzgerald property is developed.

Regards,

Ken R. Berg, PE

A. Development Code (URBAN-WILDLAND INTERFACE OVERLAY)

3.12.7.4 ROADS

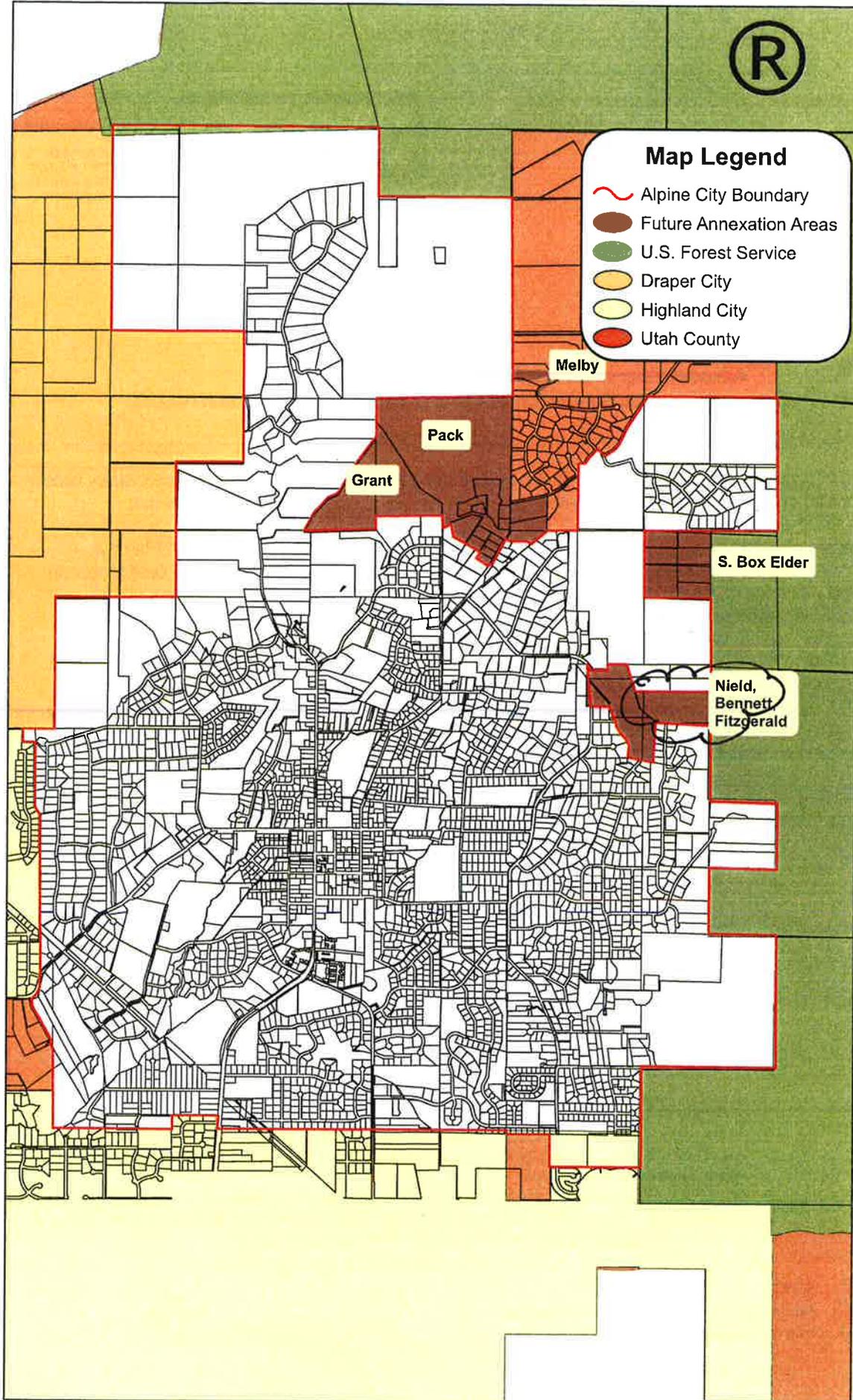
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3.12.7.4.2 Exceptions. Where terrain features or other physical obstacles make provision of a second access impractical, a single access may be approved by the City Council after obtaining the recommendation of the Fire Chief and the Planning Commission.

- B. Alpine City Annexation Map
- C. Alpine City Transportation Master Plan
- D. Fire Chief Review

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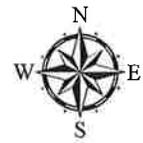
# EXHIBIT A



**Map Legend**

- Alpine City Boundary
- Future Annexation Areas
- U.S. Forest Service
- Draper City
- Highland City
- Utah County

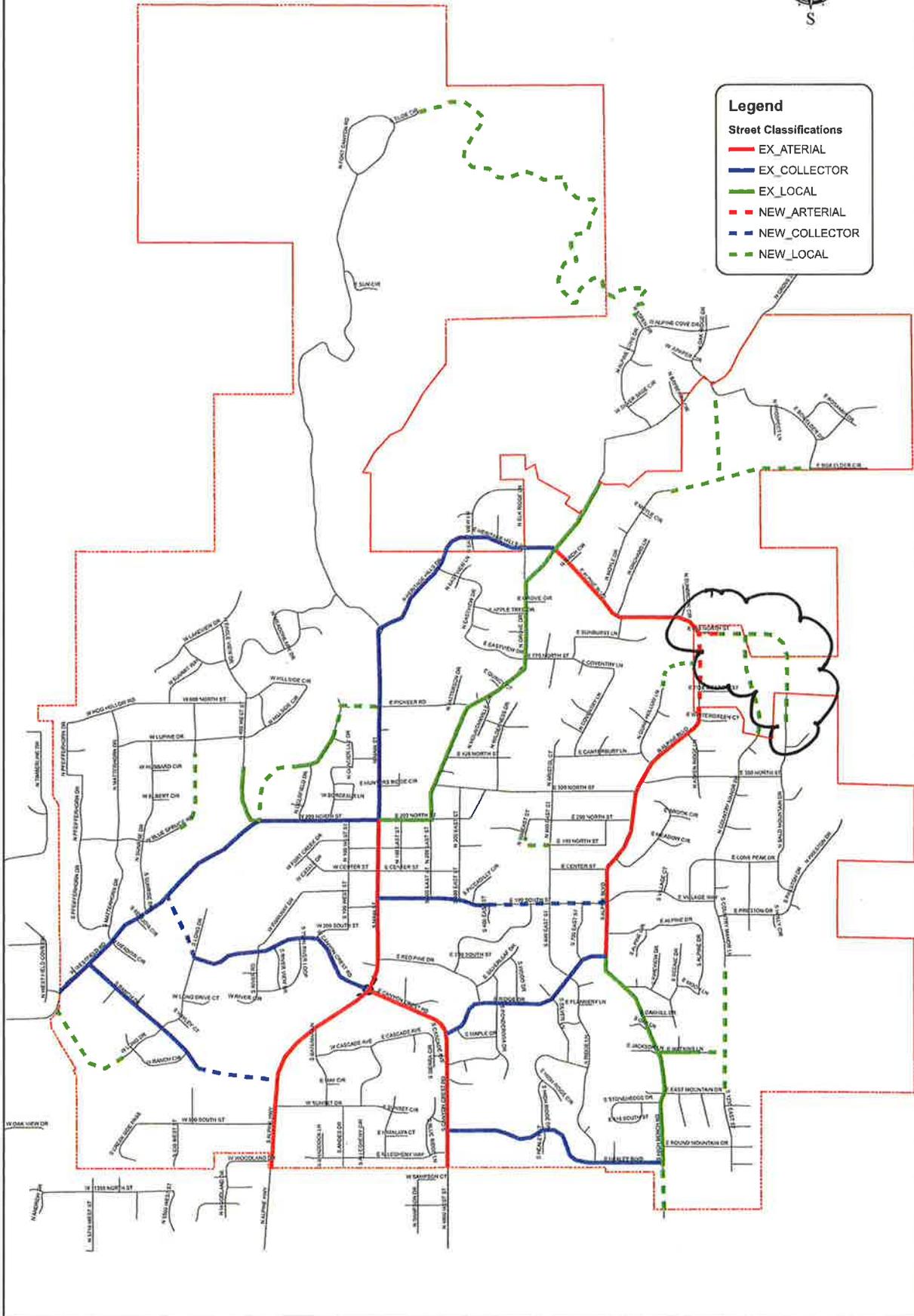




**Legend**

**Street Classifications**

- EX\_ARTERIAL (Red solid line)
- EX\_COLLECTOR (Blue solid line)
- EX\_LOCAL (Green solid line)
- NEW\_ARTERIAL (Red dashed line)
- NEW\_COLLECTOR (Blue dashed line)
- NEW\_LOCAL (Green dashed line)





Office of the Fire Marshal

**Benjamin D. Bailey, BS, EMTP**  
**Fire Marshal / Battalion Chief**

**Lone Peak Fire District**  
**5582 Parkway West**  
**Highland, UT 84003**  
**801-420-2529**  
**bbailey@lonepeakfire.com**

May 20, 2015

Berg Civil Engineering  
11038 N Highland BLVD  
Highland, UT 84003

RE: East Bench Subdivision

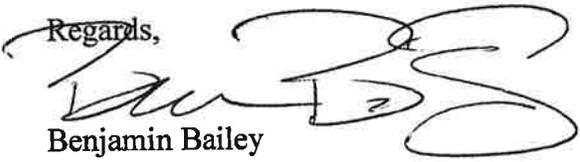
Berg Civil Engineering,

I have reviewed the CONCEPT PLAN 1 STANDARD SUBDIVISION, EAST BENCH SUBDIVISION that was submitted to Alpine City. At this time I am not approving these plans based on the following.

- 1) This property is located in a sensitive Wildland area of the city. With the realization of fire related incidents that have previously occurred on this and surrounding properties and the real risk of current and future fire emergencies, I believe that the IFC 2012 code supports the need for a second ingress/egress road to this property.
- 2) The submitted plans show for a single ingress/egress point originating from Alpine BLVD. The plans also show a second stubbed street, Bald Mountain Dr. west of Lot 9. The submitted plans that Bald Mountain Dr. within the EAST BENCH SUBDIVISION could potentially be tied in to a currently established street, Bald Mountain Dr., located south of this property. The stubbed road further impresses on me that a second access is not only viewed by me, but is actually designed for the property.

Please contact me with any questions you have.

Regards,

  
Benjamin Bailey

Cc Spencer Edwards, Deputy Fire Chief  
Alpine City

Resource  
IFC 2012; 503.1.2, D104.3

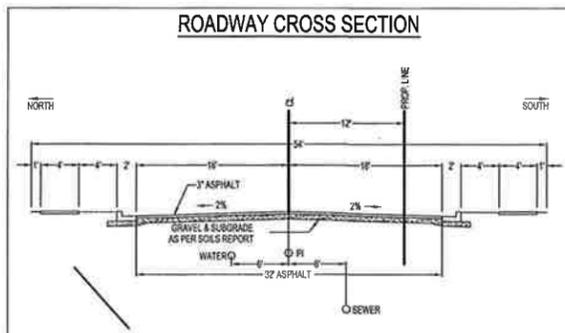
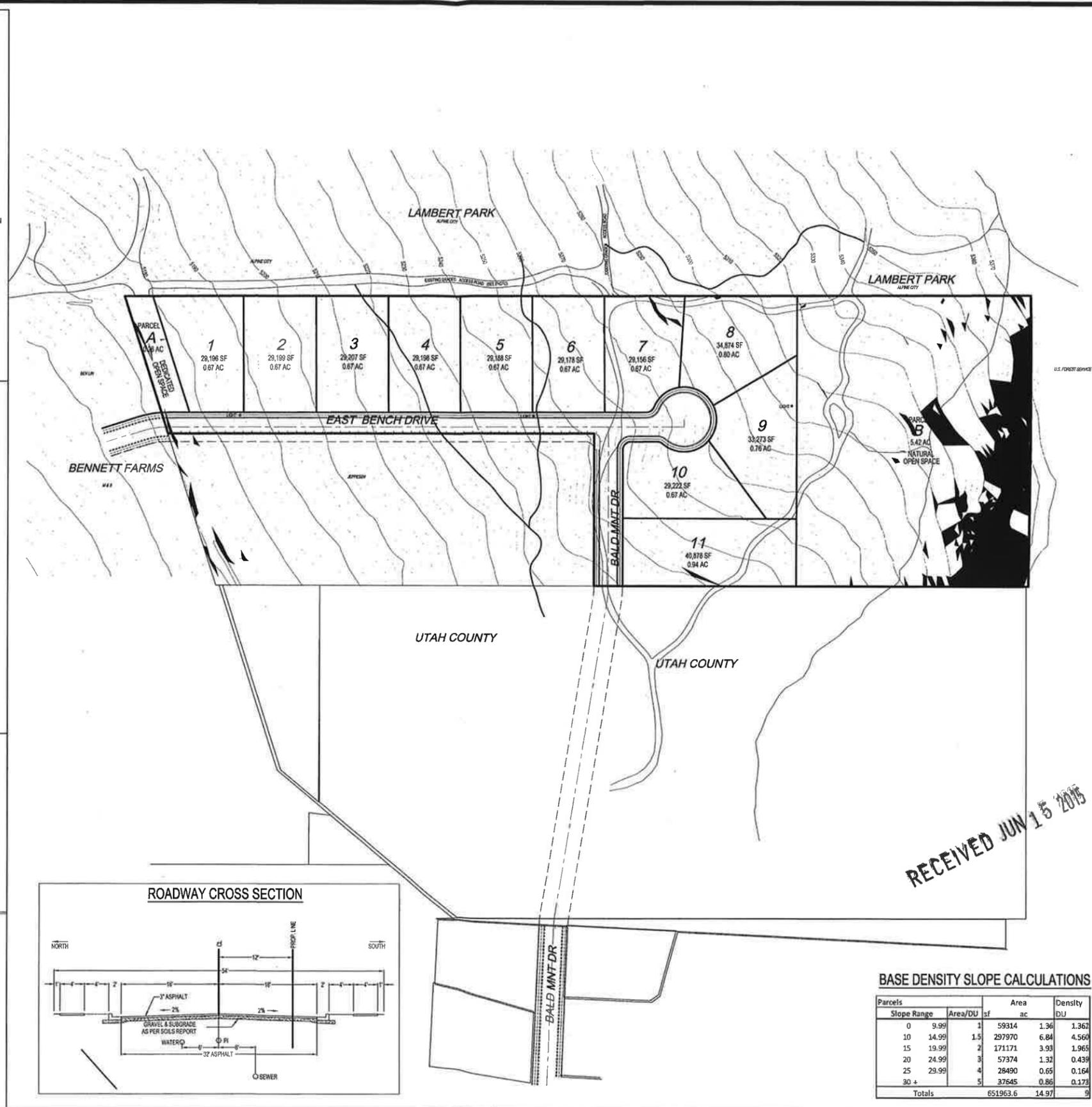
### GENERAL NOTES

1. SETBACKS = FRONT 30', REAR 20', SIDE 10' MIN/22' TOTAL, CORNER LOT SIDE YARD 30'.
2. ALL CONSTRUCTION TO CONFORM TO ALPINE CITY STANDARDS AND SPECIFICATIONS. ALPINE CITY USES APWA STANDARDS AND DETAILED DRAWINGS IN MOST CASES.
3. ALL ROADWAYS ARE PUBLIC ROADWAYS TO BE MAINTAINED BY ALPINE CITY.
4. P.U.E'S AS FOLLOWS = 10' FRONT, 5' REAR AND SIDES.
5. EAST BENCH DRIVE WILL BE CONSTRUCTED AS A HALF ROAD PLUS 12 FEET AS SHOWN ON ROADWAY CROSS SECTION.
6. ALL SEWER LATERALS TO BE 4" WITH MINIMUM 2% SLOPE WITH CLEANOUT BEHIND CURB.
7. ALL WATER SERVICE LINES TO BE 1" LINE WITH 3/4" METER AND STANDARD ALPINE CITY METER BOX AND SETTER.
8. ALL ROOF GUTTERS AND DRAINS TO DRAIN TO SEPARATE SUMP ON EACH LOT NEAR CORNERS OF PROPOSED HOMES, TWO SUMPS FOR EACH BUILDING AVERAGE. SUMP AND DRAINAGE DETAILS TO BE PREPARED WITH PRELIMINARY PLAT.
9. SEWER LATERALS TO BE PLACED 10 FEET FROM WATER LATERALS.
10. EXISTING CONTOURS FROM ALPINE CITY.
11. THERE ARE NO KNOWN WATERWAYS, WATER COURSES, WETLANDS, FLOOD ZONES, FAULT LINES, DEBRIS FLOWS, OR ROCKSLIDES LOCATED ON THIS PROPERTY.
12. THERE ARE NO IRRIGATION DITCHES ON THIS SITE THAT NEED TO BE MAINTAINED.

### TABULATIONS

TOTAL PROPERTY	15	AC	100%
REQUIRED 25% OPEN SPACE	3.75	AC	25%
PROVIDED OPEN SPACE			
DEVELOPED			
PARCEL A	0.26	AC	2%
NATURAL			
PARCEL B	5.42	AC	36%
TOTAL OPEN SPACE	5.68	AC	38%
ADDITIONAL OPEN SPACE			
DEVELOPED OPEN SPACE	0.26	AC	2%
NATURAL OPEN SPACE	1.67	AC	11%
BASE DENSITY	9	LOTS	
MAX 25% BONUS	2.25	LOTS	
TOTAL ALLOWABLE LOTS	11.25	LOTS	
BONUS DENSITY CALC			
DEVELOPED OPEN SPACE (9 x 3 x 2%)	0.54	LOTS	
NATURAL OPEN SPACE (9 x 1 x 11%)	0.99	LOTS	
TOTAL BONUS DENSITY	1.53	LOTS	
TOTAL BASE + BONUS	10.53	~ 11 LOTS	

### VICINITY SKETCH



### BASE DENSITY SLOPE CALCULATIONS

Parcels	Slope Range	Area/DU	Area	Density	DU
	0 - 9.99	1	59314	1.36	1.367
	10 - 14.99	1.5	297970	6.84	4.560
	15 - 19.99	2	171171	3.93	1.965
	20 - 24.99	3	57374	1.32	0.439
	25 - 29.99	4	28490	0.65	0.164
	30 +	5	37645	0.86	0.173
Totals			651963.6	14.97	9

DEVELOPMENT

## WADSWORTH MEADOWS SUBDIVISION

---

OWNER

### AUTUMN VIEW PROPERTIES

11038 N. Highland Blvd Suite 100  
Highland, UT 84003  
(801) 642-0119

---

SCALE: 1" = 30'

---

**CIVIL ENGINEERING**  
11038 N Highland Blvd Suite 400  
Highland Ut, 84003  
office (801) 492-1277  
cell (801) 616-1677

---

PROJECT STATUS		SEAL
NO.	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		
7		

---

ACTION	DATE
CONCEPT	6/15/2015

---

PROJECT

## WADSWORTH MEADOWS SUBDIVISION

---

DESCRIPTION

### CONCEPT PLAN PRD OPTION 1

---

SHEET NAME	SHEET NUMBER
COVER	C1

RECEIVED JUN 15 2015

SLOPE ANALYSIS (BASED ON PRD FORMULA 3.9.5)



Name: Wadsworth Meadows Concept

Date: June 30, 2015

Contours Used: 1999 Aerial flown contours

CR-40,000 Zone							
Acreage	Acres	Total Square Feet					
Property	14.98	652,525.83					
<b>Zone Total Acreage</b>	<b>14.98</b>						
Slope Percentages	Percent Acres W within that range	SF within slope range	Acres within slope range	Required Acres per Lot	Allowed Lots for this range		
0-9.99%	5.9%	38,381.11	0.88	1.00	0.88		
10-14.99%	49.7%	324,198.20	7.44	1.50	4.96		
15-19.99%	28.2%	184,047.61	4.23	2.00	2.11		
20-24.99%	8.7%	57,015.86	1.31	3.00	0.44		
25-29.99%	3.3%	21,841.85	0.50	4.00	0.13		
30%+	4.1%	27,041.20	0.62	5.00	0.12		
<b>Totals</b>	<b>100.0%</b>		<b>14.98</b>		<b>Density Rounded</b>		
					<b>Base Density, Non-PRD</b>	8.64	<b>9</b>
					<b>Private Open Space (10% Max Bonus), PRD</b>	9.90	<b>10</b>
					<b>Public Open Space (25% Max Bonus), PRD</b>	11.25	<b>11</b>

Bonus Density Provided (acreage)

Natural	5.42	acres
Private	0	acres
Developed	0.26	acres

Base Requirement (CR-40,000 Zone, 25%)	3.74	acres
<b>Total Provided</b>	<b>5.68</b>	<b>acres</b>

Open Space Bonus Acres

Natural	1.68	acres
Private	0	acres
Developed	0.26	acres

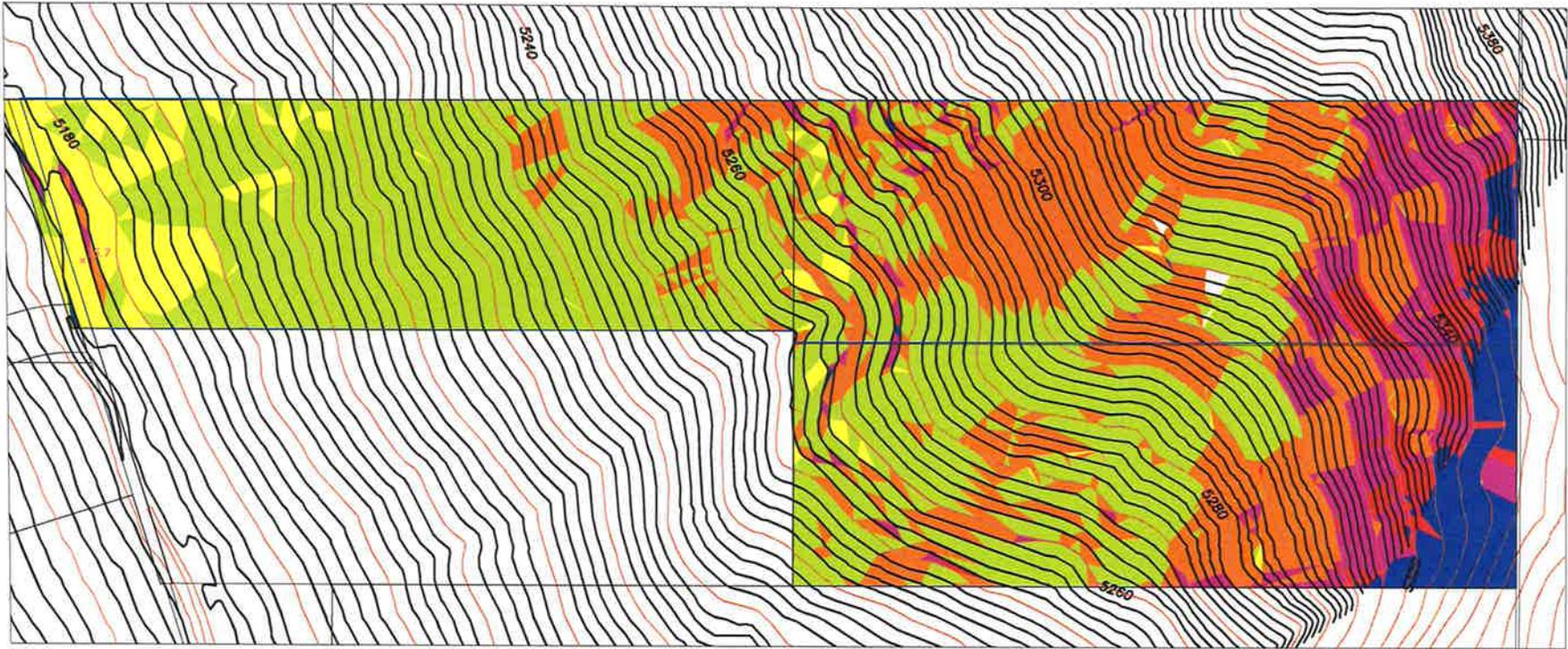
Bonus Given (%)

Natural	11.18%
Private (x0.5)	0.00%
Developed (x3)	5.21%
<b>Total</b>	<b>16.39%</b>

Bonus Lots (Base X Bonus)	1.47	lots*
<b>Total Denisty Allowed</b>	<b>10.47</b>	<b>10</b> lots

\* The ordinance calculates bonus density based off of a rounded base denisty, no other numbers are rounded tell the end

Number	Minimum Slope	Maximum Slope	Area	Color
1	0.00%	10.00%	38381.11	Yellow
2	10.00%	15.00%	324198.20	Light Green
3	15.00%	20.00%	184947.61	Orange
4	20.00%	25.00%	57015.86	Pink
5	25.00%	30.00%	21841.85	Red
6	30.00%	100.00%	27841.20	Blue



SCALE: 1" = 60'  
(24x36")

REMARKS

2015-06-30 Edited For Wadsworth Meadows Concept

Wadsworth Meadows  
Slope Analysis  
Based on PRD Formula  
PRD Slope Analysis

Engineering File  
Number

-

Drawing: 1  
Sheet: 1 of 1

## **ALPINE PLANNING COMMISSION AGENDA**

**SUBJECT:** Cooper Building

**FOR CONSIDERATION ON:** July 7 2015

**PETITIONER:** Gary and April Cooper

**ACTION REQUESTED BY PETITIONER:** Provide direction on architecture and design on the proposed building.

**APPLICABLE STATUTE OR ORDINANCE:** Sections 6.4 (2) and 6.4 (3)

**PETITION IN COMPLIANCE WITH ORDINANCE:** Yes

### **BACKGROUND INFORMATION:**

The proposed office building will be located in Olde Towne Centre Lot "D" which is located in the Historic Gateway Zone. The Planning Commission along with the City Council will determine if the design contributes to the zone, and make recommendations.

Included in the packet are the plans for the proposed building and Historic Gateway Guidelines that were drafted in 2007 but never formally adopted.

### **STAFF RECOMMENDATION:**

That the Planning Commission review the proposed building and determine if it meets the design goals of the Gateway Historic zone.

RECEIVED MAY 05 2015



# Site Plan Application

20 North Main Alpine, UT 84004 • 801-756-6347 (Phone) • 801-756-1189 (Fax) • [www.alpinecity.org](http://www.alpinecity.org)

**ALLENBOW**

## Contact Information

**Applicant** Gary Cooper  
**Address** 1136 Birch Circle **City** Alpine **State** UT **Zip** 84004  
**Phone** 801-772-0852 **Fax** \_\_\_\_\_ **Email** gary@alpineutahrealty.com

**Engineer** \_\_\_\_\_  
**Address** \_\_\_\_\_ **City** \_\_\_\_\_ **State** \_\_\_\_\_ **Zip** \_\_\_\_\_  
**Phone** \_\_\_\_\_ **Fax** \_\_\_\_\_ **Email** \_\_\_\_\_

**Representative** Olin Johnson  
 (Person who will be at City meetings to represent the proposed plan. If it is someone other than the applicant/engineer, please indicate his/her relationship to the project.)

**Address** 20 W. Main St Ct **City** Alpine **State** UT **Zip** 84004  
**Phone** 801-360-6996 **Fax** \_\_\_\_\_ **Email** olin@alpinecompaniesinc.com

Send City Engineer's review comments to:  Applicant  Engineer  Representative

## Project Information

**Name of Project** Olde Towne "D"  
**Project Address** 363 South Main Alpine UT **Current Use** UC - Vacant Commercial  
**Project Size (in acres)** .142 **Current Zoning** Business / Commercial

## Source of Water Rights

Alpine Irrigation Shares: # of Primary Shares \_\_\_\_\_ # of Secondary Shares \_\_\_\_\_

Other Water Rights: Source \_\_\_\_\_ # of Acreage Feet .142

Requesting Cash in lieu of Water Rights Option

**Site Plan Fee** Receipt # 4011 Check # 5998 **Amount Paid** \$250 **Date Paid** 5-5-15  
 (Actual cost of City Engineer's review + \$150.00 [\$250.00 for commercial site plans])

**Applicant Signature** [Signature] **Date** 4-14-15

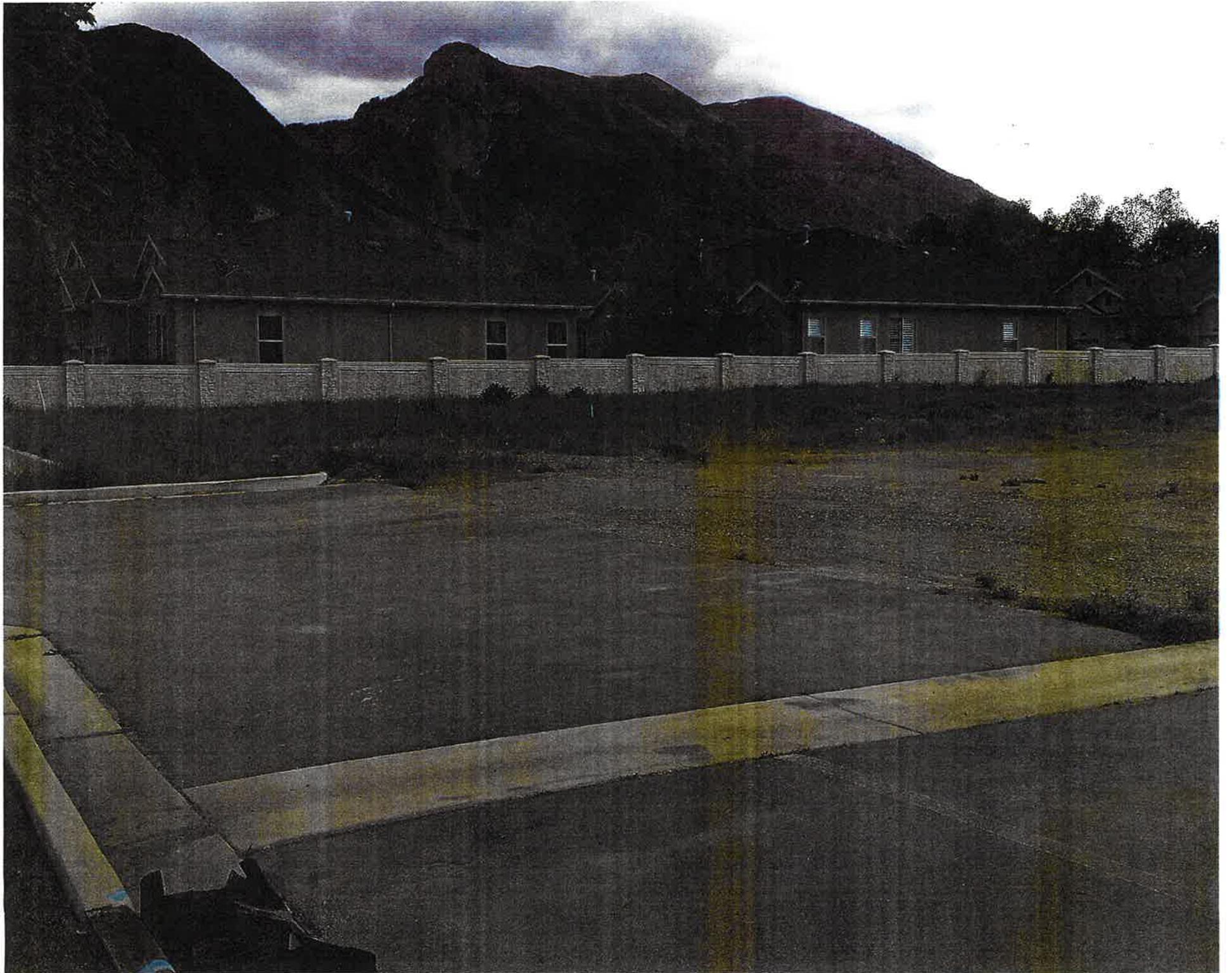
*already paid*











District Overlay so an exception to setbacks can be approved with a recommendation from the Planning Commission and Approval from the City Council.

Paul Anderson said his house is used as a second round-about because he has a circular driveway. He said he is looking for a solution for that problem. One purpose would be to upgrade the aesthetics and improve the look of the home and improve the look of Main Street. He said this same look will be incorporated across the street in the Main Street Village to cover sitting areas.

Judi Pickell asked if the roof would match the roof on his home. Mr. Anderson said the roof will be the same. Bryce Higbee asked who would monitor the building of this to make sure it matches what has been presented to us. Judi Pickell said it would be up to the Planning Commission to make sure it is built as shown.

**MOTION:** Bryce Higbee moved to recommend approval of a seven (7) foot exception to the thirty (30) foot front setback requirement for the Paul Anderson residence located at 255 South Main Street to allow for the construction of a pergola over the driveway. We recommend that the pergola be constructed to appear as has been proposed.

Steve Swanson seconded the motion. The motion passed and was unanimous with 7 Ayes 0 Nays. Bryce Higbee, Jason Thelin, David Fotheringham, Steve Cosper, Jane Griener, Steve Swanson and Judi Pickell all voted Aye.

### **C. Alpine Old Towne Centre Lot D building Design Discussion**

Ezra Lee has been hired to come up with a design for a proposed building to be located within the Alpine Old Towne Centre on lot D. Before getting too far with the design, he has asked that he be given some direction to help him understand what the City would like to see for the building that is located just off of Main Street but within the Gateway Historic District Overlay. Ezra Lee has been asked to bring some visuals to help facilitate some recommendations from the Planning Commission.

April Cooper said Plat D has 39 parking stalls and can have a 9000 square foot building. The building fits on the lot and can meet the setbacks and will be 2 stories with a possible storage room in a basement. She said they manage 2500 real estate contracts for the government and are in need of a new building. She said she wants a building that doesn't look dated and liked the timber, rock and metal architectural look.

April Cooper said she wants a building that everyone is excited about and doesn't want to have to come back multiple times to get it right. Steve Cosper said he thinks all the buildings in the square should be compatible. Ezra Lee said compatibility is difficult because there is going to be a mixture of structures. Judi Pickell read from the ordinance and said the architectural styles of the buildings should be consistent and harmonious and compatible with small town rural Alpine. She said we want to create a feel for Alpine and make Alpine feel like a place people want to be. She said she loves the materials that have been presented with the masonry, stone, and brick look. She said to work on the scale of the building to make sure it had a small town feel. Jason Thelin said this was a good presentation and he appreciated the work that went into it.

Steve Cosper asked about the roof line and Judi Pickell said the ordinance states pitched roofs are preferred. Ezra Lee said they would probably have a mix of a flat and a pitch roof. Judi Pickell said we have an identity crisis and we need to decide what we want Alpine to look like and stick with it. Ezra Lee said they would have a single story front door entrance with other single doors as well. They would like to have a lot of glass windows with some overhangs and architectural design elements.

Steve Cosper asked if there would be any exterior stairs on the building. Ezra Lee said all stairs will be within the building. Ezra Lee said April Cooper's business would be the primary business but she would lease out space and other offices to other businesses. April Cooper said her business has to occupy at least 51% of the building in order to get her loan and then she can lease out the remaining space. She said she would probably be in about 70% of the building.

### **D. Fence Ordinance amendment**

The Alpine City fence ordinance has been discussed at the last Planning Commission meeting. Residents have asked that the height restrictions be carefully readdressed particularly as it pertains to keeping deer off of their property and eating their gardens and flowers. The Planning Commission also discussed a process for granting an

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**Alpine Companies  
Office Building**  
363 South Main Street

Revisions

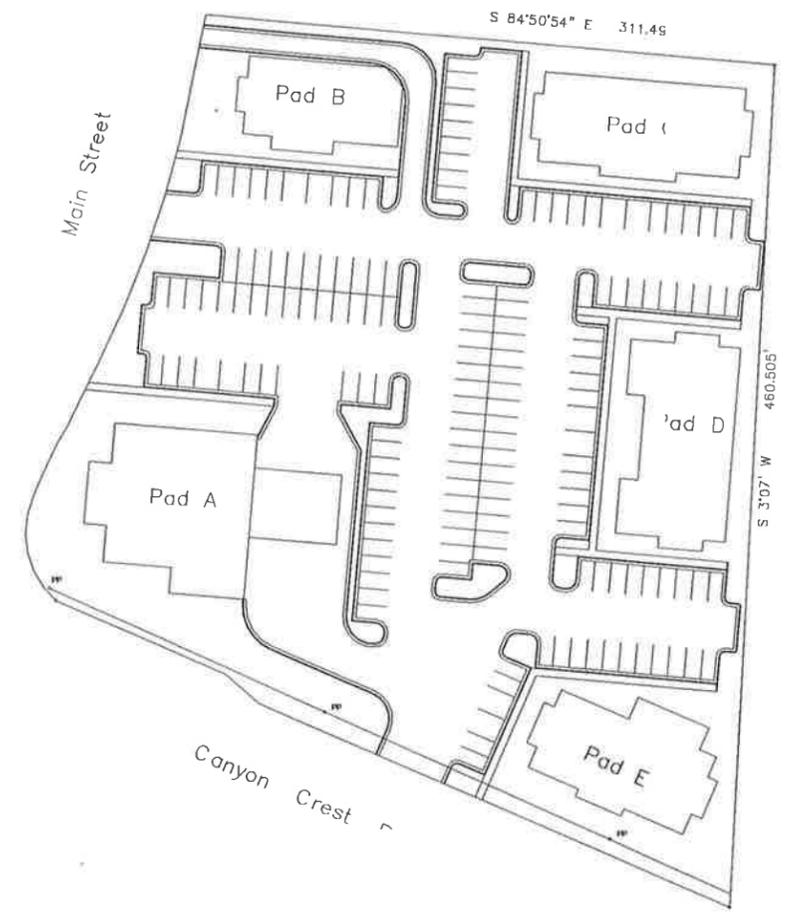
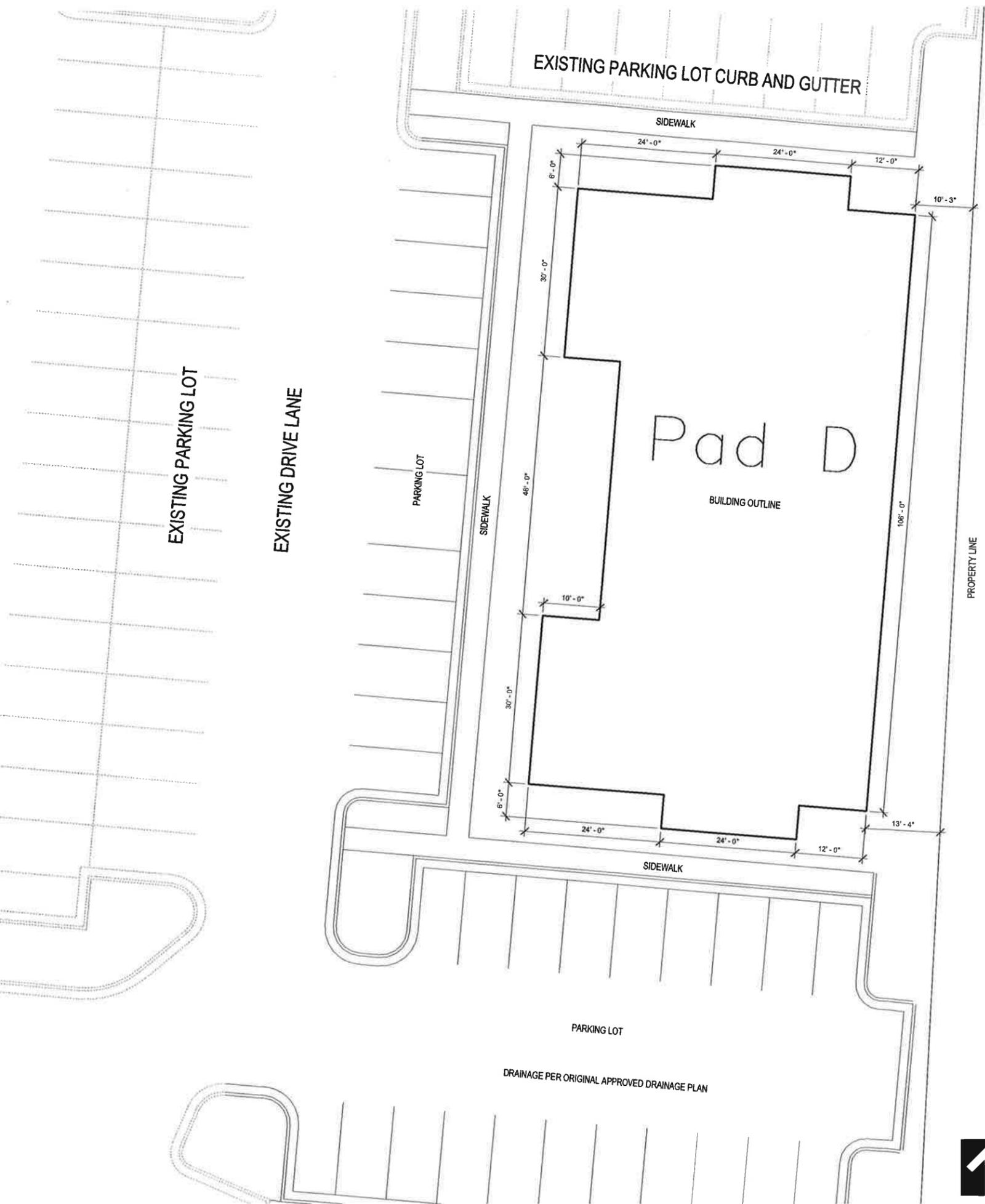
**Site Plan**

**Owner Information**

Alpine Companies  
Gary Cooper  
1136 Birch Circle

Date  
5 MAY 2015

Sheet

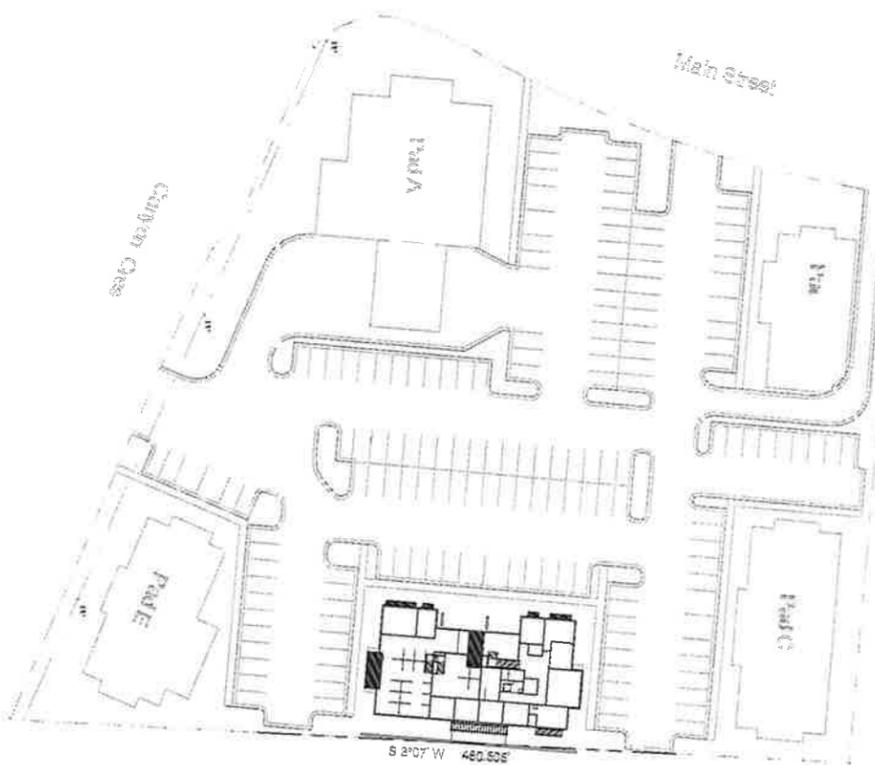


Vicinity Map  
1" = 50'-0"

NOTE: PARKING, VEHICULAR CIRCULATION, SIDEWALKS, DRAINAGE, AND BUILDING OUTLINE ARE UNCHANGED FROM THE ORIGINAL ALPINE CITY APPROVED PLAT.

GRAY LINEWORK INDICATES EXISTING ELEMENTS

Vicinity Map  
1" = 50'-0"



EXISTING DRIVE LANE

PARKING LOT

EXISTING PARKING LOT CURB AND GUTTER

SIDEWALK

SIDEWALK

PARKING LOT

DRAINAGE PER ORIGINAL APPROVED DRAINAGE PLAN

PROPERTY LINE

S 3°07' W 46

Site  
1" = 10'-0"



PRELIMINARY

A01

Shea

Date  
23 JUNE

Overall  
Plan

Revised

# Cooper Building

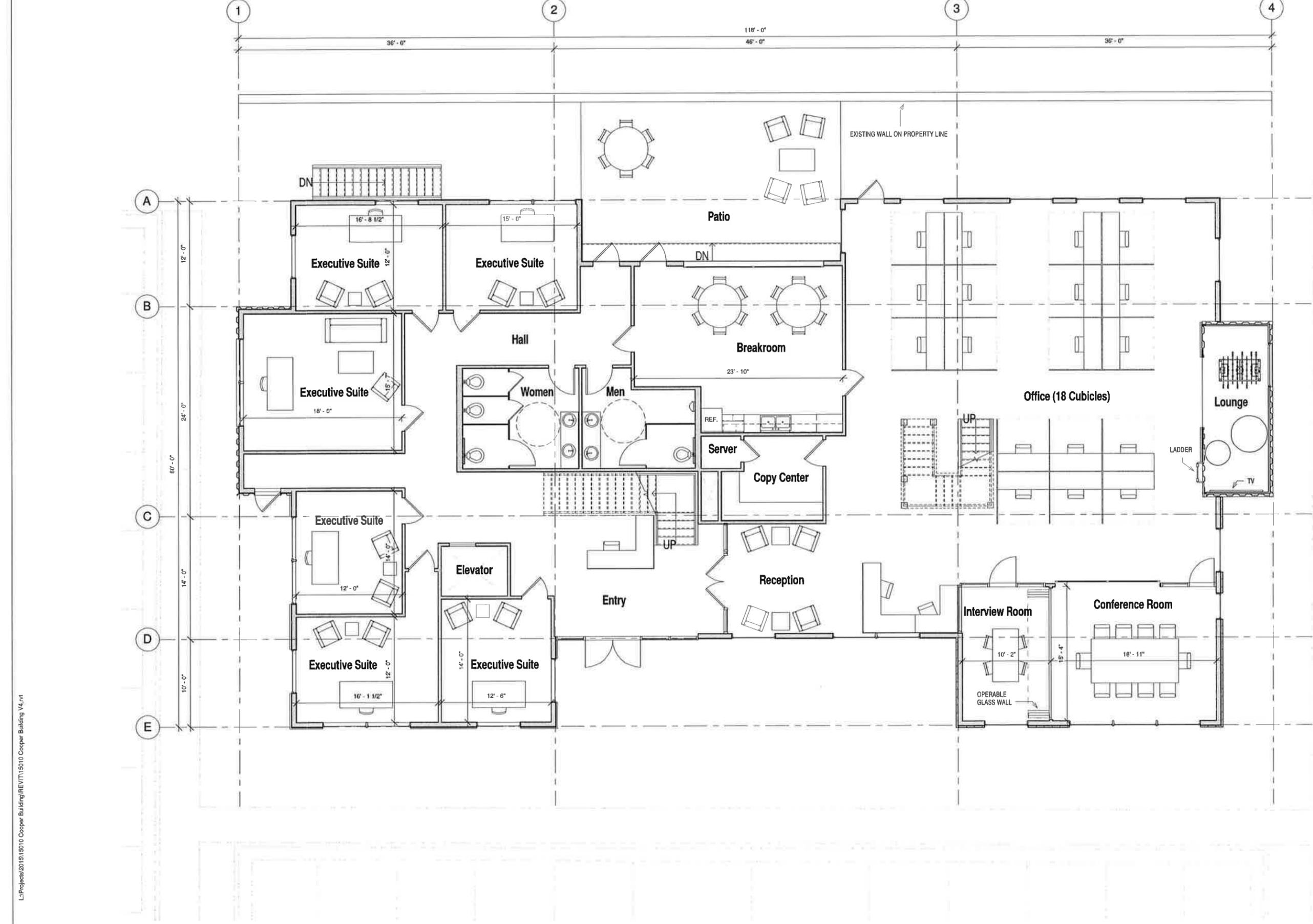
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EZRA LEE DESIGN + BUILD

801.448.6876



PRELIMINARY



**First Floor**  
3/16" = 1'-0"

L:\Projects\201515010 Cooper Building\REV\VT\15010 Cooper Building V4.rvt 3/16/2015 2:23:41 PM

**Cooper Building**

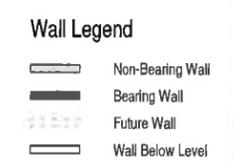
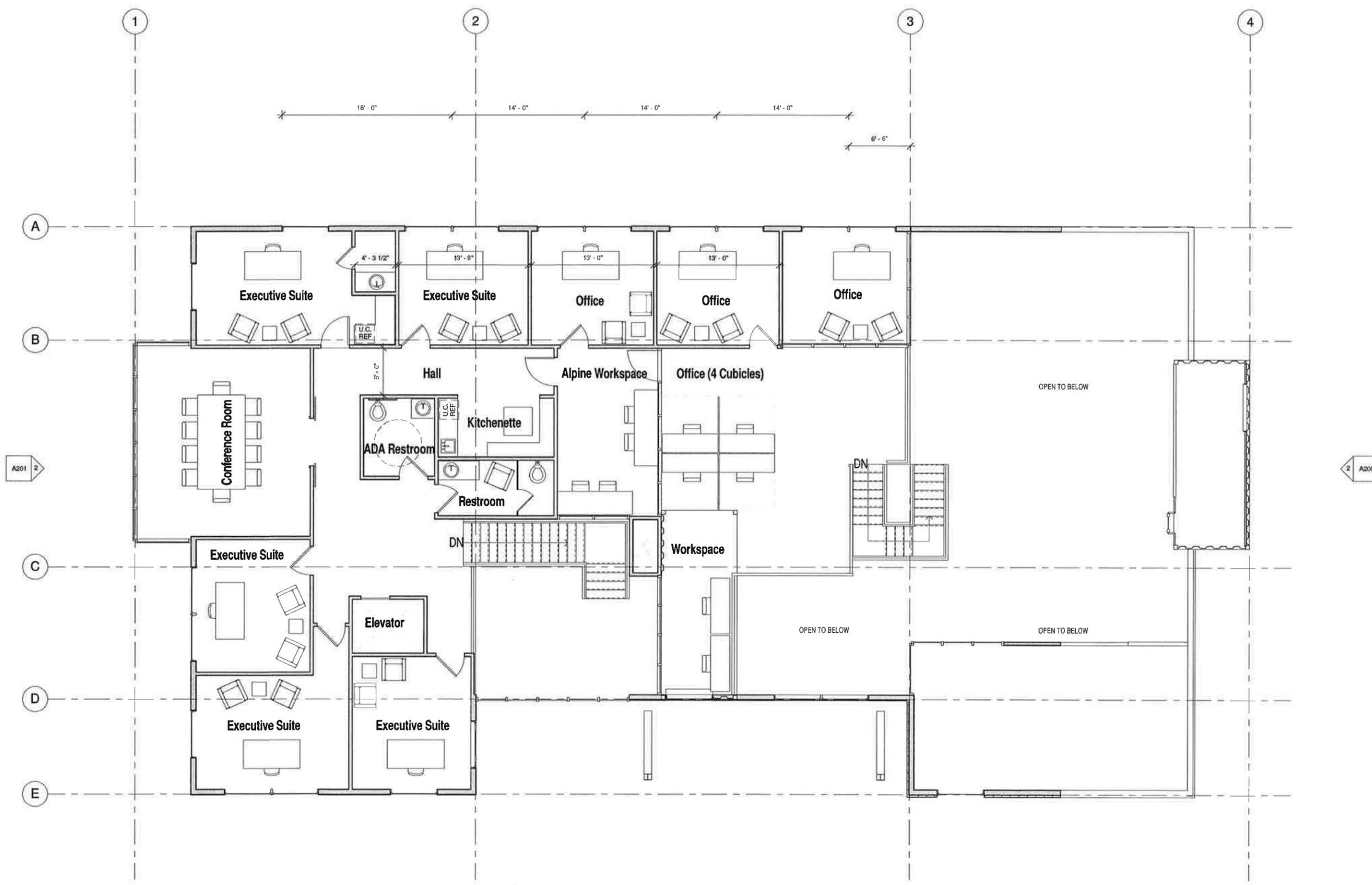
Revision #

Second Floor

Date: 23 JUNE

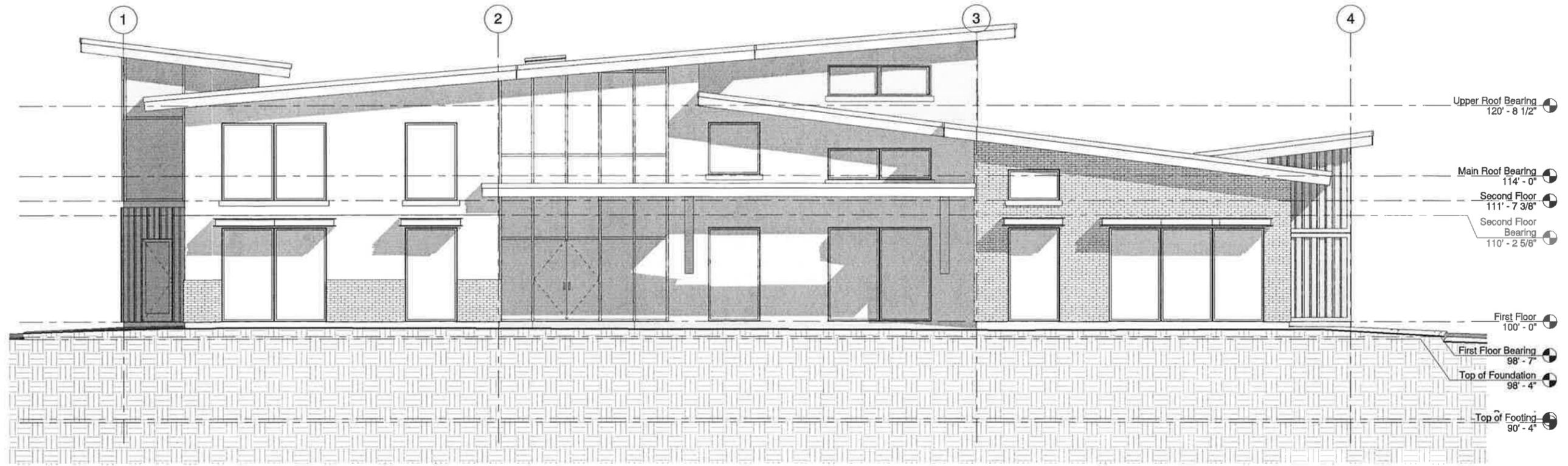
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**PRELIMINARY**

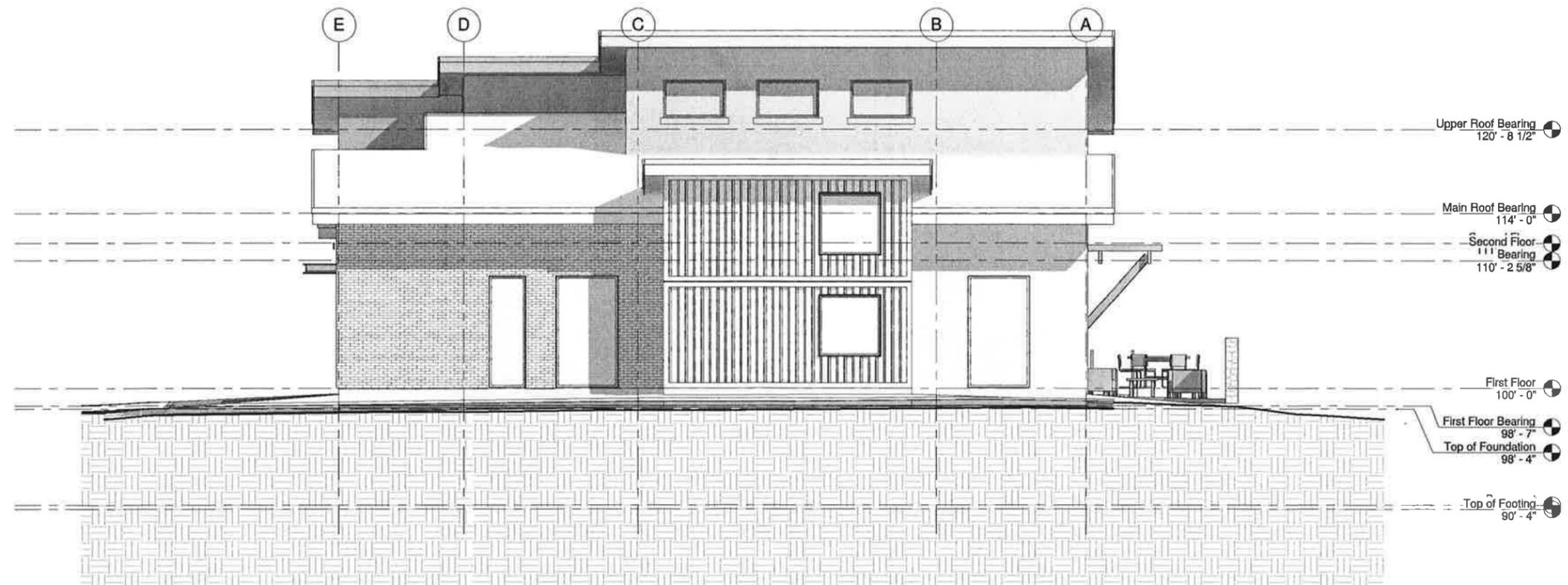


**Second Floor**  
3/16" = 1'-0"

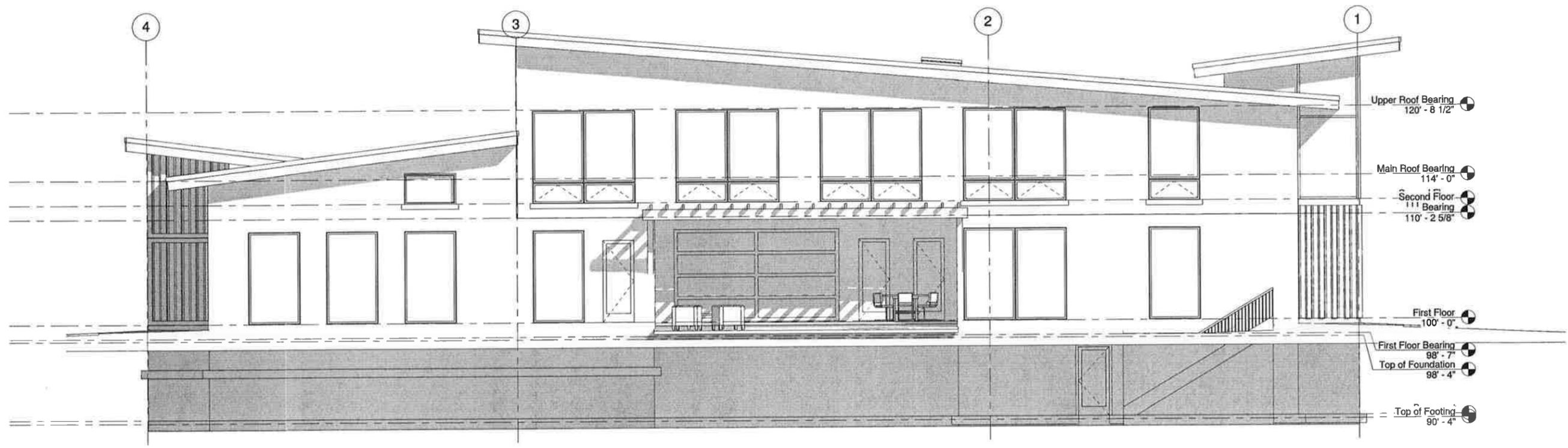
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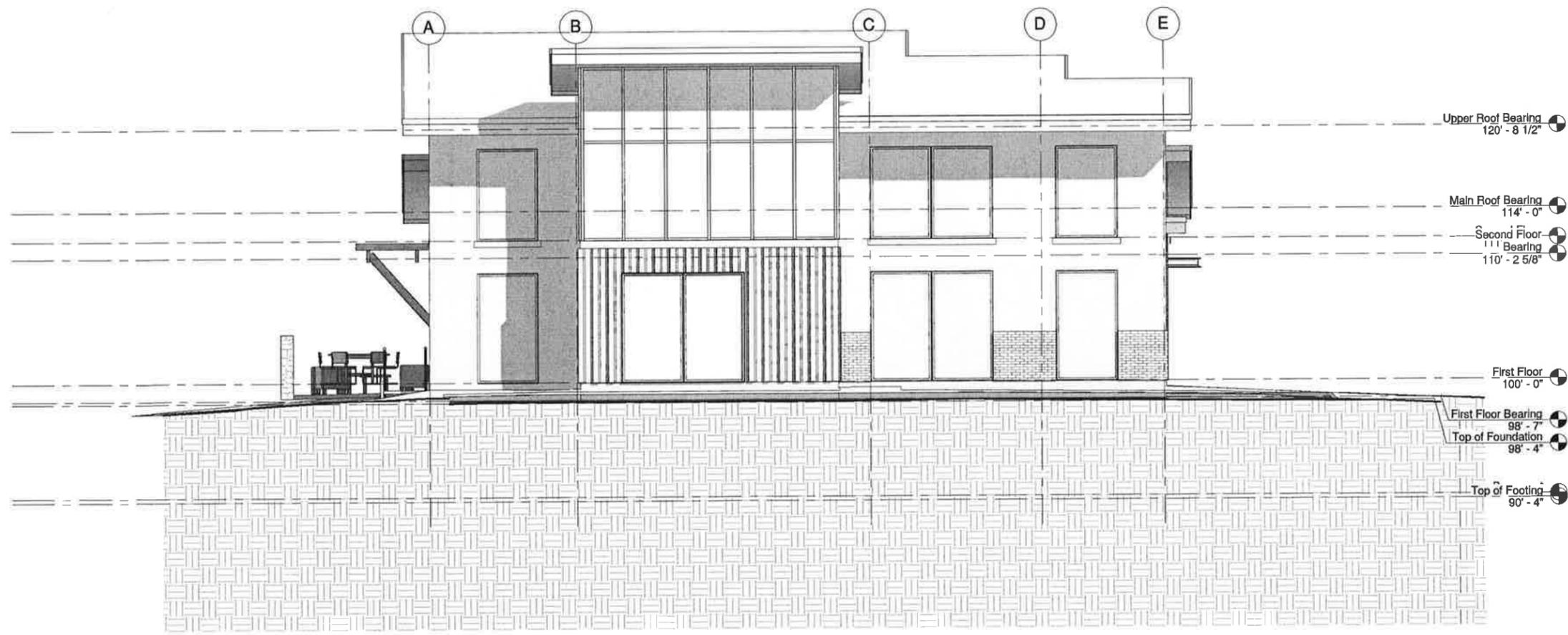
Front Elevation  
3/16" = 1'-0"



Right Elevation  
3/16" = 1'-0"



Rear Elevation  
3/16" = 1'-0"



Left Elevation  
3/16" = 1'-0"

# Alpine City

## Gateway Historic District



## Design Guidelines

Draft 3.12.02

COOPER ROBERTS SIMONSEN ARCHITECTS

**Table of Contents:**

**A. Introduction – Page 3**

**B. Guidelines for Existing Buildings – Page 7**

**C. Guidelines for New Additions – Page 14**

**D. Guidelines for New Commercial Construction – Page 21**

**E. Site Design & Features – Page 25**

**F. General Guidelines and Design Standards – Page 28**

**G. Energy Conservation and Environmental Standards – Page 32**

**H. Maintenance Standards – Page 37**

**I. Architectural Styles – Page 48**

**J. Glossary of Architectural Terms – Page 53**

**A. Introduction:**

**Design Review Purpose & Intent:**

The process facilitates the retention of the historical character of Alpine by the review of several elements related to both existing and new structures. Insensitive alterations to historic structures and incompatible new construction can compromise the effort to promote and protect the historic and architectural heritage of the town of Alpine.

The review process highlights the importance of retaining the historical character of Alpine and how it contributes to the quality of life valued by residents and property owners. The guidelines will facilitate compatibility issues for the various historical architectural styles and new construction in Alpine. The process and the guidelines serve as a mechanism for increasing public awareness on the importance of preserving the culture and heritage of Alpine.

The guidelines shall also serve as an educational resource to the public and assist them in making informed decisions during the renovation and alteration of historic structures. As a town's population grows, historic structures are vulnerable to the threat of demolition or alteration. Balancing the goals of preservation while planning and managing growth is a challenge. The guidelines are structured to encourage the preservation of historic structures within the district while recognizing that use of the structure may take on a more contemporary, economically-viable use.

The guidelines are designed to be responsive and flexible, serving as a source of technical assistance rather than as a collection of restrictions on what may or may not be done with personal property.

**Board of Architectural Review:**

The Board of Architectural Review shall oversee the design review process. The Board shall consist of five members – two planning commission members and three others (one registered architect, one landscape architect, and one member of the Alpine Historic Committee is recommended) as appointed by the Council.

**Role of the Board:**

The role of the board shall be to advise the city council and planning commission regarding:

- Exterior alterations to historic structures and non-contributing structures within the designated historic district;
- New additions to existing structures within the district;
- New construction located within the district; and
- Proposed demolition of contributing historic structures.

Exterior alterations include: maintenance, repair, rehabilitation, and restoration projects, as well as the renovation of a structure or the construction of any type of addition to, or expansion of, the structures. In addition, the Board shall have the authority to oversee the designation of structures/districts as historic.

**Design Review Process:**

**Acquiring a Building Permit:**

Review by the board is the first step in acquiring a building and zoning permit for projects within the designated district. Compatibility with historic character and context may take precedence over current development standards, ordinances, and building codes.

Smaller projects, such as window replacement, not requiring a permit may be reviewed by staff and administratively approved if adherence to the design guidelines is met. Likewise, simple repair and maintenance projects (re-roofing, replacing downspouts or gutters, tuckpointing) may also be administratively reviewed and approved.

**What to Bring to the Review Process:**

Whether a project is reviewed administratively by staff, or undergoes full review by the board, the amount, type, and quality of information supplied by the applicant in the beginning determines how quickly the process can proceed. In addition to those materials required by the permit application, it is recommended that the applicant bring photographs, drawings, manufacturer's brochures, and material samples. These shall help facilitate the application of the design guidelines to the project during the review by the board/staff. The more quality information provided by the applicant the quicker the review will proceed.

**Evaluation by the Board:**

In its review, the board evaluates the extent and appropriateness of alterations to all exterior surfaces and design elements. The design guidelines outlined in this document serve as a means for consistent decision-making during the evaluation process.

- Greater scrutiny is given to surfaces and features visible from the street or other public way.
- In the review process, each project is evaluated on its own merits in a qualitative process. No established score or number of guidelines must be met. Rather, the board evaluates the extent of preservation and alteration to assure that the significant characteristics of the structure remain apparent.
- Each proposed project is analyzed regarding the standards set forth in the design guidelines and by how the goals of these guidelines are achieved.

During the review process, the board may provide recommendations to the applicant to encourage preservation and construction practices that may enhance the historic nature of the building or neighborhood.

**Certificate of Appropriateness:**

Once a project has been thoroughly evaluated, the Board may grant a Certificate of Appropriateness if the project has been shown to sufficiently comply with the

## Alpine Gateway Historic District Design Guidelines

Draft 3/12/02

### Section A: Introduction

standards as set forth by the design guidelines. If the project as proposed does not comply with the standards, the applicant may return for another review after incorporating recommendations as made by the board. Once the Certificate of Appropriateness has been awarded, the building permit process may be completed. When the public utilizes the design guidelines as a resource at the start of the proposed project, the process of approval is facilitated by a common knowledge of desired approaches within the designated historic district.

#### **Historic Districts - Protection and Benefits:**

The protection of historic landmarks/districts is derived mainly from local ordinances and review processes. A local historic district serves in a regulatory capacity, and is established using the police powers of a city's zoning ordinance. City code determines the criteria for designation. Properties that are located within a designated district are subject to protections as outlined in the ordinance, including design review before making alterations and proposing demolition.

In addition to status as a local historic district/site, it is also recommended that National Register Historic District/Site status should be pursued. Listing on the National Register offers eligibility for tax-credit incentives, including structures that are used in a commercial capacity. In order to receive the tax credit, projects on historic structures need to be approved by a design review board and comply with the Secretary of the Interior's Standards for Rehabilitation. National Register listing alone does not protect historic properties from demolition or inappropriate alterations.

#### **Secretary of the Interior's Standards for Rehabilitation:**

These standards serve as basis for most historic design guidelines. Agreement to support these principles may enable the city to receive status as a CLG. CLG status would allow the city to be eligible for technical and financial assistance to administer preservation activities. The complete list of standards is included in the appendix.

## **B. Guidelines for Existing Buildings – Commercial Use**

These design standards apply to existing buildings within the Gateway-Historic Zone. The guidelines are intended to protect and promote the architectural heritage of Alpine by providing standards for making consistent decisions. These guidelines shall be applied for any exterior alterations, including: maintenance, repair, rehabilitation, and restoration projects, as well as the renovation of a structure to a new, adaptive use.

Adaptive use of existing structures shall comply with the permitted and conditional uses of the underlying zone. The board shall be granted the authority to allow variances to existing city code regarding use, landscaping elements, parking, and signage.

The underlying principle to maintaining the character of historic buildings is to repair rather than replace whenever feasible. The key to successful preservation of these buildings is regular maintenance using proper methods. Well-intentioned maintenance and repairs can compromise the integrity of a building if appropriate methods are not followed for the particular materials involved. Thus, a separate maintenance section (Section ?) is included that provides details for the specific approaches and methods listed in the following design standards.

Standards for the following building/site elements are provided:

- 1 Exterior Walls and Surfaces
  - a. Masonry
  - b. Stucco
  - c. Exterior Wood
- 2 Roofs and Chimneys
- 3 Windows and Doors
  - a. Screen Doors
- 4 Porches and Stairs
- 5 Exterior Ornamental Trim
- 6 Exterior Materials: Finishes, Texture and Colors
- 7 Foundations

## **1. Exterior Walls & Surfaces:**

Since they are the largest single element of a structure, exterior walls are very significant character-defining features. Intact exterior walls quickly communicate important information about a building's age, style and construction. Consequently, every effort should be made to retain and preserve the original wall materials, detailing and appearance of the various historic buildings of Alpine. General standards for exteriors are followed by specific standards for specific materials (masonry, stucco, wood).

### Design Standards:

#### General:

- The original appearance of exterior surface materials should be preserved.
- Covering original exterior materials is not recommended. Use of aluminum or vinyl siding is not allowed.
- The removal of later coverings, such as siding, is recommended in order to convey the historical character of a structure. Once the material is removed, the original materials should be repaired. (Removal of some materials, such as stucco, may be damaging to the original finish – a test patch must be done to determine the condition of the underlying material.)
- Repair of original materials is recommended – replacement should occur only when repair is not feasible.
- If replacement is necessary, match the original material in composition, scale, and finish. Avoid the use of synthetic materials (panelized brick, synthetic stucco, etc.) for replacement.
- When cleaning exterior surfaces, utilize the gentlest means possible. (Refer to maintenance section for further details)

#### Masonry:

- Painting of masonry is not recommended.
- If not historically painted, brick may be stripped of the paint if it will not damage the original finish. Repainting may be recommended if damage is possible.
- Repointing of joints should use chemically compatible mortar of matching strength, texture and color.
- The joints should be the same width and profile as the originals.
- Reinstall loose masonry units – if badly damaged or missing, replace with units of matching size, proportion, finish, and color.

#### Stucco:

- Because of differences in its composition, stucco maintenance, repair or replacement should employ material of the same strength, color and finish as the original.
- When repainting stucco, consider using rubber-based coatings designed specifically to expand and contract over stucco without peeling or cracking.

#### Wood:

- Repair of wood shall take priority over the replacement of wood.

**2. Roofs & Chimneys:**

Roofs serve as an important, character-defining feature for most historic homes due to their visibility and contribution to particular architectural styles. Roof styles, pitches and materials vary greatly. Each roof has its own characteristics and maintenance needs. Chimneys also serve as a character-defining feature of some architectural styles.

Design Standards:

- If repairing, retain the original roof shape and form, along with its associated features such as chimneys, towers, dormers, and ridge caps. Do not remove or radically alter original roof shapes and orientations
- Retain the original roofing material, or replace only with matching or similar material.
- New roofing should match the original work in size and design. Avoid the use of conjectural, imitation materials.
- Repairing or replacing original roofing with non-original, or visually incompatible materials is not recommended, nor is painting or coating roofing that was not coated historically.
- Original roof features such as chimneys and dormers should be retained whenever possible.
- Retain the original eave depth. Altering the traditional roof overhang is not recommended.
- Alternatives to placing swamp coolers or other air-conditioning units or equipment in highly visible locations should also be considered.
- If they have been lowered or modified, consider returning chimneys to their original appearance.
- When repairing chimneys, remove all loose masonry units down to solid material. Rebuild using the old or matching masonry and joinery. Retain the original chimney design using masonry reinforcement if necessary.

**3. Windows and Doors:**

Windows and doors make important contributions to the appearance of any historic building. Conversely, the character of even the most intact historic structure can be adversely impacted by inappropriate window and door alterations. Sensitive window and door repair or replacement is thus encouraged.

Design Standards:

- Retain windows and doors in their original locations, shapes, sizes, functions and materials.
- Avoid filling, removing or radically modifying original door or window openings.
- Retain original components such as surrounds and casings, frame and sashes, muntins, glazing, shutters, moldings and hardware.
- When repairing or replacing missing or badly deteriorated elements, match original materials and patterns.
- If window replacement is deemed necessary in-kind replacements should be used on the primary façade.
- If in-kind replacements are considered too expensive, vinyl or metal-clad units with enameled finishes may be used in secondary locations. Mill-finished aluminum units are not appropriate for any style of historic structure.
- If installing double-pane glass, retain the pattern and width of the original muntins, if possible.
- Covering windows or changing the muntin pattern by removing or adding muntins is also discouraged.
- Maintain all units with proper caulking, weather-stripping and hardware. Consider using storm windows rather than replacing historic windows for energy-efficiency reasons.
- When selecting screen doors, choose a design that complements the design of the door behind it, as well as the style of the house.

The following treatments are **not recommended** for windows or doors:

- Replacing original glass with reflective, obscure, colored or other non-original glazing;
- Replacing existing, serviceable units with new units rather than repairing the historic units; or
- Adding windows out of character with the historic architectural design.
- 
- Avoid placing modern aluminum, mill-finish screen doors over historic house doors, or using door styles unrelated to the house's architectural style.

#### **4. Porches and Stairs:**

Porches serve as an important character-defining feature of many historic homes. The porch defines the entrance to a home, orienting it to the street. The elements of a porch correspond with the architectural style of the home, thus the particular characteristics for each style should be referenced (see the architectural style section.)

Design Standards:

- Original porch stairs and railings should be retained and kept in good repair.
- Avoid removing or adversely modifying original porches. Do not cover historic materials or details.
- Leave porches open as they were originally. Do not permanently enclose the porch.
- Replace missing or damaged elements with matching or similar work. If entire porch replacement is required, reconstruct it to match the original.
- If it is necessary to add handrails to stairs or between columns of a porch, match the style and materials of original or period railings.
- Unsafe stairs should be repaired or replaced with in-kind materials.

#### **5. Exterior Trim and Architectural Detailing:**

Architectural styles are in large part determined by their exterior trim and detailing. Preserving original trim and details is an important factor in retaining the integrity of any historic structure.

Design Standards:

- Retain original, character-defining trim such as cornices, brackets, door and window casings or surrounds, beams and columns, steps, railing, lighting, vigas, canales, decorative tile, etc.
- When repairing such features or replacing missing or badly deteriorated elements, use matching or similar materials and designs.
- Use accurate information (old photographs, etc.) when planning replacement. If no documentation is available, develop a new design that is a simplified interpretation of a similar feature.
- Do not add trim that did not exist originally to give a building a more detailed or different stylistic character.

**6. Exterior Finishes and Colors:**

Color scheme is a character-defining feature of importance for some architectural styles. The essence of a building's character is communicated by the type of finish used and should be appropriate for its style.

Design Standards:

- Consider identifying and using the building's original colors. If these are unappealing or cannot be determined, use colors from a palette of the same time period and style as the building.
- Using colors from a different era, painting a house with too many or too few colors for its style, or reversing the pattern of values, will have an effect on the appearance of your house and is not recommended
- The use of trendy, contemporary paint schemes, modern pastels or luminescent colors is discouraged.
- Avoid painting materials that were historically unpainted. In most eras, masonry, front doors and wood roofs were intended to remain unpainted. The architectural style section should be referenced for exceptions to this standard.
- By the same token, avoid removing paint from materials historically intended to remain painted. Masonry walls in American Colonial Revival houses, for example, were painted from the beginning to achieve the desired sense of early American aesthetics.

**7. Foundations:**

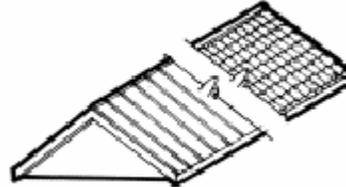
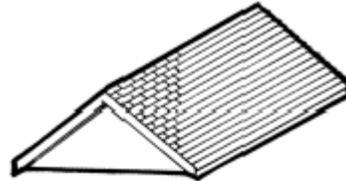
Depending on the style, foundations may be of varying importance as a character-defining feature. They need to be kept in good repair due to their importance in supporting a building's superstructure.

Design Standards:

- Unpainted foundation walls are more historically appropriate in terms of retaining original architectural appearance.

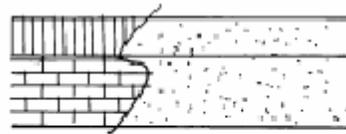


*A bungalow with its original wall materials intact has a distinct early twentieth century design (top). The same bungalow with new siding conveys a much different appearance (bottom).*



*If the original roof had wood shingles, consider re-roofing with matching wood shingles or "weathered wood" style asphalt shingles (top) instead of using metal, tile or other non-original roofing (bottom).*

**Graphics for existing historic structures.**



*Stuccoing or applying siding over original foundation materials is not an appropriate treatment.*



*The porch offers shade, a sheltered entry and visual interest for the front of this Spanish Colonial Revival home (top). Filling in the porch only gains a small interior space while dramatically altering the entire facade (bottom).*

ORIGINAL WINDOWS (ABOVE)

THE SAME WINDOWS ALTERED (BELOW)

*Filling in the top of a window opening to install a sliding window*

*Filling in the top of the original opening and widening the opening to accept a non-compatible window*

*Replacing original units with non-compatible windows, and adding exterior shades and non-original shutters.*

## **C. Guidelines for New Additions – Commercial Use**

Additions to existing structures in local historic districts should complement the original structure while not attempting to directly replicate the historical style of architecture. They should, however, reflect the design, scale and architectural type of the original structure. Additions should respect the original character of the property, but should be distinguishable from the original construction.

In general, all new additions should minimize any negative effect on the original features and materials of the structure. Consideration should be taken as to the impact on the original structure during the construction process.

Uses for new additions shall comply with the permitted and conditional uses of the underlying zone. Addition to historical residential structures for the continued use as a residence shall be allowed. The board shall be granted the authority to allow variances to existing city code regarding landscaping elements, parking, and signage.

The following guidelines are intended to encourage addition designs that are compatible with the existing structure.

1. Addition Placement
2. Design for Rooftop Additions
3. Design of New Additions: shapes, forms and massing
4. Height
5. Setback
6. Exterior wall treatments
7. Windows and doors
8. Trim and Decorative Detailing
9. Roofing
10. Materials: Colors, Texture, and Finishes

# Alpine Gateway Historic District Design Guidelines

Draft 3/12/02

## Section C: New Additions

### 1. Addition Placement:

Additions should be located to have the least effect on the historic structure and site. Adding new construction that is architecturally incompatible in terms of size, scale, design, materials or finish diminishes the appearance of the historic home as well as its integrity as an architectural resource. The primary façade should be preserved as well as the historic relationship between the building and its setting, landscape and open space.

#### Design Standards:

- Locate new exterior additions to the rear of the historic structure if at all possible. If not, locate along the side of the building.
- Do not place additions across or alongside the front façade(s) unless reconstructing missing elements.
- If a side addition is necessary, utilize proper setbacks from the front façade to minimize the visual impact on the historic structure.
- New additions should not destroy or obscure existing architectural features, such as cornices, brackets, and other architectural details.
- For a larger addition, it is recommended that it be set apart from the original structure and linked using a simple, small connector.
- Second story additions shall be placed to the rear of an existing building and reflect the design elements of the original architecture.
- Non-significant outbuildings, additions or site features that detract from the historic character of the site or main building may be removed to accommodate the new addition.
- Do not remove original construction or early additions in favor of a new addition.
- The removal of historic site elements such as landscaping, walls and fences to accommodate new additions is not recommended. (See Section E – Site Design for specific landscaping recommendations.)

**2. Design of Rooftop Additions:**

When introducing non-original elements such as dormers, roof decks or exterior stairs, place such elements to the rear of the building using designs and materials compatible to the historic construction. Dormers, chimneys or other related roof features should be consistent with the design of original or period elements. If properly designed, the roofs over new additions can provide interesting, unifying elements to the overall architectural composition.

Design Standards:

General:

- Preserve the overall configuration of the roof if planning any rooftop additions.

Dormers:

- Design new roofs and dormers to repeat the shapes, sizes, proportions, pitches, and materials of the originals.
- If the original roof is gabled, add gabled roofs; if a combination of roof types, add similar combinations.
- Do not introduce new roof types or materials that have no reference in the existing architecture. This will adversely affect the historic character of a house.
- The mass and scale should be subordinate to the historic structure.
- Dormer should be similar in design and scale to historic dormers seen on similar historic structures.

Skylights:

- If skylights are deemed necessary, consider placing them on roof planes not visible from the street.

Attic Expansions:

- Creating finished spaces in previously unfinished attics is recommend as an expansion approach. It is a cost-efficient way of adding usable square footage without adding to the footprint of the building.
- If the addition of dormers is required to make the attic space usable, follow the guidelines for dormers as above.

**3. Design of New Additions – Form, Massing, Scale:**

In addition to rooftop approaches, expansion to historic structures can also take place by increasing the footprint of the building. While new rooms or wings should be visually compatible with the size and scale of the main building, they should be distinguished as a product of their own time. This can be accomplished by utilizing subtle changes in materials and styles.

Design Standards:

- Preserve the established massing and orientation of the historic structure.
- Keep consistent with the historic character of the original structure.
- The new addition should be physically and visually subordinate to the historic structure. A setback of 10 feet from the primary façade is recommended.
- Use a comparable solid-to-void ratio; i.e. the relative percentage of wall to windows.

**4. Height**

New additions should relate to the original height of a structure.

Design Standards:

- In general, additions should always be visually subordinate to the historic structure.
- If an addition is larger or taller than the historic structure, it should be substantially set back from the primary, historic structure.

**5. Setbacks:**

The change in view from the street or other public right of way should be minimized. Placement of new additions to the rear and side will decrease the change in view.

Design Standards:

- New additions should be constructed so that the setback associated with the architectural style is maintained. The board may grant variance if there is a conflict with the underlying zone standards.

**6. Exterior Walls and Surfaces:**

Depending on the sensitivity of their design, new additions can complement and enhance an historic building, or detract from it. The use of similar materials on the exterior of an addition can provide for a successful blending of old and new.

Design Standards:

- Design new forms to respect and reflect the character and design elements of the historic building by repeating existing shapes, heights and widths of form.
- Use matching or similar materials, textures and detailing.
- 

**7. Doors and Windows:**

In additions, use doors and windows matching or similar to the units original to the building. Designs should reflect the placement, size, shape, materials and details of the historic architecture.

When adding to a house with several types and sizes of historic windows, use similar types and sizes in similar locations in the new walls. For example, large, picture windows tend to face the street while tall, narrow windows are usually found on the side.

Design Standards:

- Avoid introducing doors and windows incompatible with the design of the building's original units. Use units that are similar in character to those in the historic part of the structure.
- Adding aluminum-frame windows when wood-framed units exist throughout the original building is not allowed.
- Adding too many or too few openings in relation to the pattern of openings in the existing building also should be avoided.

**8. Exterior Trim and Decorative Detailing:**

The thoughtful application of compatible trim on a new addition can create a harmonious appearance to the overall design.

Design Standards:

- When adding new trim, install trim of the same or similar materials but simplified in design so as to allow the addition to be distinguishable as a product of its own time.
- Design the trim to be compatible with the architectural style of the original building.
- Do not add trim of a style, type or material different from the original.
- Employing trim that appears older, newer or fancier than the period style is not recommended, as is exactly replicating the detailing of the existing trim on a new addition.

**9. Roofing:**

The roof form and the slope used on the addition should conform to the character of the original historic structure. Typically, gable, hip, and shed roofs are appropriate with most historic structures.

Design Standards:

- For dormers, the eave lines should be similar and materials should be compatible. The dormers themselves should be subordinate to the overall roof mass.
- For new additions, the roof form and slope should match the character of the historic building. Example: A flat roof should not be used for an addition to a hip-roofed structure.

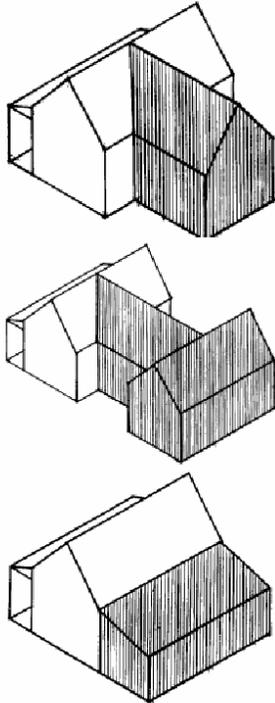
**10. Materials - Colors, Texture, and Finishes:**

When finishing the exterior of an addition, attempt to match the original finishes, textures and colors. Introducing finishes, textures and colors foreign to the original architecture of the building, or adding too many different finishes can seriously affect a house's appearance.

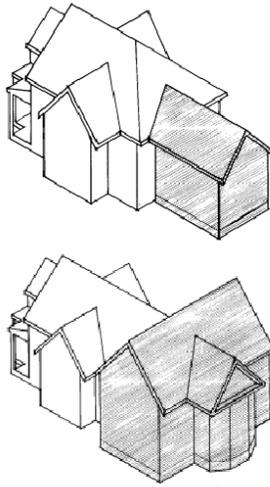
Design Standards:

- Do not use modern colors on an addition rather than the original colors or a period palette. To do so creates both historical and visual disharmony.
- It is recommended to paint using a period color scheme, even on an addition. This provides the kind of thoughtful "finishing touch" that distinguishes high quality renovation and new construction.
- Seek to use materials on the new addition that are similar or complementary to the original style of architecture. Painted wood clapboard and brick are used in many traditional additions.

2 Addition shapes, forms and massing



Three compatible ways of adding to the rear of a gabled Vernacular house.

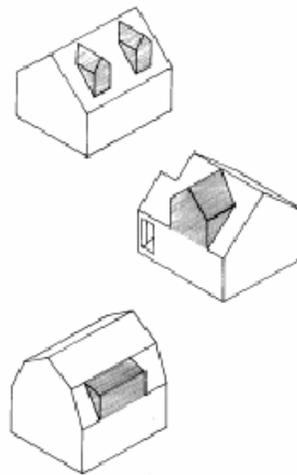


These hypothetical additions to the rear of a Queen Anne cottage duplicate the forms and roof pitches of the original house.



Original roof shapes are an important part of a building's historic architectural character (top). Removing, adding to or otherwise altering historic roofs can have an adverse effect on a building's character (bottom).

Graphics for New Additions to Existing Historic Structures



These hypothetical dormers added to rear or side roofs are compatible with the main buildings. Narrow gabled dormers on an American Colonial Revival house (top); A broad, gabled dormer on a bungalow (middle); A shed dormer - the dormer typically used in Dutch Colonial Revival architecture (bottom).

## **D. Guidelines for New Commercial Construction**

In the interest of preserving the character of the Gateway-Historic district, it is necessary to regulate to a certain extent the new construction that is built there. New structures should only affect the district in positive manner, signifying continued growth, and not in detrimental ways by inappropriate density, scale, or materials.

While respecting the heritage of Alpine associated with the historical structures in the district, it should be recognized that the area is dynamic and progressing forward in time. New construction should respect the intents and objectives of the new Gateway Master Plan.

These guidelines are not meant in any way to preclude making exception in the case of innovative design. They utilize approaches that have been shown to encourage the sustainability of historic districts and neighborhoods.

The board shall be granted the authority to allow variances to existing city code regarding building heights, setbacks, landscaping elements, parking, and signage.

The guidelines for the following elements are intended to encourage compatible new construction:

1. Relation to the Surrounding Area – Massing, Scale, Orientation
2. Height
3. Setbacks
4. Exterior Walls and Surfaces
5. Windows and Doors
6. Exterior Trim and Decorative Detailing
7. Roofing
8. Materials – Texture, Color, Finishes

**1. Relation to the Surrounding Area – Massing, Scale, Orientation:**

New construction that utilizes appropriate massing, and scale can affect historic districts in a positive manner. The imitation of historic styles in the district is not recommended. New structures should take their own place in time by using

Design Standards:

- The imitation of historic styles in the district is not recommended.
- New structures should relate to the fundamental characteristics of the district, but use their own style and method of construction.
- Orientation of new construction should be to the street to establish a pedestrian-friendly quality.
- One major entrance shall orient to each street the building abuts for easy access by pedestrians from the street and sidewalk.
- Corner entrances may be used for buildings orienting to two streets at an intersection.
- New construction should not be dramatically greater in scale than surrounding structures in the district.
- The perceived width of new construction should be visually compatible with adjacent structures. Wider buildings should be divided into modules to convey a sense of traditional construction.
- The building form of new construction should be similar to surrounding structures but should not be a direct imitation.

**2. Height:**

In general, new construction should respect the overall height limits established in the city code for the underlying zone. However, exceptions should be made for uses considered to relate well with the surrounding scale of the area.

Design Standards:

- The height of buildings should be compatible with adjacent historic structures.
- A minimum height of 10 feet is recommended. A maximum of 34 feet shall be enforced. However, a variance may be granted by the board for innovative building design.

**3. Setbacks:**

The location of new construction on a lot contributes greatly to the perception of accessibility by the pedestrian. Buildings that are located too far from the street generally do not have a positive effect on the streetscape.

Design Standards:

- A minimum setback of 10 feet is recommended.
- Setbacks shall not be more than 30 feet from the street for the primary façade. Exceptions may be considered for buildings proposing a public park area in front of the primary façade of the building.
- Setbacks from the street shall not include off-street parking. Exceptions may be considered for access by the physically disabled.
- Setbacks from the street shall include usable public space – incorporating landscaping, plazas, seating, or public art.
- Side setbacks for structures abutting commercial uses shall not be required.
- Side setbacks for structures abutting residential uses shall be 10 - 15 feet.

**4. Exterior Walls and Surfaces:**

The type of materials used for new construction can greatly enhance the relationship to surrounding historical structures while maintaining individual identity.

Design Standards:

- The use of stone, brick, wood, or cement stucco is encouraged for use as the primary exterior material.
- Avoid the use of synthetic materials.
- Innovative use of other materials should be considered.

**5. Windows and Doors:**

Windows and doors of new construction should relate to the general character of the area.

Design Standards:

- Windows with a vertical emphasis shall be encouraged over a horizontal orientation.
- Materials for framing windows and doors shall be similar in scale, proportion, and character to others used in the area.
- The simple shape of windows is encouraged.
- If new construction is built to the sidewalk, the use of awnings or canopies should be considered for providing protection to the pedestrian.
- The ground floor of the primary façade shall contain at least 60 % windows or transparency at the pedestrian level for commercial structures, 40% for all other uses.
- Non-reflective glass shall be used for at least 60% of the primary façade windows.

**6. Exterior Trim and Decorative Detailing:**

New construction can be enhanced by the wise use of exterior trim and decorative detailing. Using these details to break up uninspiring solid surfaces can help avoid the box-like appearance often seen in new construction.

Design Standards:

- Trim and detailing shall be simple in material and design.
- Materials that are compatible to the primary exterior material shall be used.
- Excessive ornamentation is not recommended.

**7. Roofing:**

The style and form of the roof on new construction can contribute to the success of blending in with surrounding historic structures.

Design Standards:

- Smaller structures should use a hip, gable, or shed roof.
- Flat roofs should be considered for use on structures where the context is appropriate.
- Flat roofs shall provide a cornice or other decorative treatment.

**8. Materials – Texture, Color, Finishes:**

The materials used for the finish of the exterior surface of new construction should be compatible with the nature of the surrounding area.

Design Standards:

- The use of color schemes should be compatible with the surrounding area. Simplicity is encouraged – excessive amounts of different colors should not be used.
- The texture and finish of new construction should attempt to convey a modern building while still respecting the historic character of the area.

## **E. Site Design and Features**

Site features can serve as significant character-defining elements, especially in historic districts. Attention should be paid to maintain the appearance not only of the primary structure, but also to its surroundings. This includes elements such as landscaping, parking, and fencing and other screening mechanisms.

### **EXISTING STRUCTURES:**

Many historic homes are distinguished by historic and character-defining site features such as original wing walls, fences, courtyards, patios, gardens, walks, drives, archways, outbuildings, lights, benches and planting. The present guidelines are included to provide general recommendations on these features as part of a project's overall planning.

The preservation of the publicly visible features on private property is a higher priority than features in less visible side and rear yards. Therefore, whenever possible, do not remove, cover or alter the appearance of historic site features. When repairing or replacing these features, match the original designs and materials. Introducing new features of styles and materials out of character with the historic features is less desirable than adding features compatible with period elements.

Original landscaping requires constant maintenance and occasional replacement. When new planting needs to be introduced, consider using planting which is compatible with the historic planting. Place the landscaping to complement rather than compete with or obscure the house.

Site features that survive should be preserved and maintained when possible. New additions to the site, such as landscaping, parking, fences, paving, and related site features are most appropriate when matching the original site design or reflecting design influences true to the building's historic period.

New exterior stairs, enclosed decks or patios, swimming pools or spas are best located in rear yards or the rear portions of side yards since these elements were not traditionally located in front yards.

The removal of historic site elements such as landscaping, walls and fences to accommodate new additions is not recommended.

Historic structures often provide a challenge when parking is considered. Parking areas and structures should be as unobtrusive as possible.

### **NEW CONSTRUCTION:**

The urban design of new construction sites and the entire Gateway-Historic area is critical to creating an appropriate sense of place and scale. Attention to the landscaping, parking location/amount, and use of fencing/screening is of great importance to integrating new construction into the area.

The following elements related to site design and features are discussed:

1. Landscaping
2. Parking
3. Fencing
4. Signage & Lighting

## 1. Landscaping

### Design Standards:

- The use of drought-tolerant species is encouraged.
  - Landscaping should be located in the front setback of all new construction with a minimum of 60% coverage.
  - Street trees should be planted in new park strip areas.
  - Historic landscape features such as walkways, fences, walls, street trees, and other ornamental site features should be preserved.
  - Existing mature trees should be maintained whenever feasible.
  - New additions should not compromise historical landscape elements.
  - Repair deteriorated features. If replacement is required, use similar features/materials. Maintain the location and proportion of the original features.
  - New site features should be compatible in material and design with the historic context of the site. Maintain the relationship of the structure to its site and the street.
  - Avoid destroying the definition between public and private space.
  - Maintain the overall historic grading of the site. Any changes should be minimal.

## 2. Parking

### Design Standards:

- No off-street parking shall be required, except in the case of allowing access to the structure by the physically disabled.
- Any off-street parking shall be located to the rear of the structure whenever possible. If sufficient space is not available in the rear, then parking shall be located on the side of the structure.
- Off-street parking shall not exceed 3 spaces per 1000 square feet regardless of use.
- Any off-street parking shall be screened from the street using fences, walls, or plantings, or a combination of these.
  - Existing driveways may be utilized for parking.
- If adding a separate, accessory structure for parking, do so in conformance with the original design features of the historic structure. Each style has particular ways of incorporating porches, pergolas, carports and built-in garages. Refer to the section on architectural styles for guidance.
- For new parking structures added to the site of a historic main structure, avoid introducing features not historically associated with the style of the building.
- New garage designs need not replicate the style and detailing of the house, but they should reflect the basic architectural characteristics of the house.
- When expanding an existing historic garage or carport, use similar materials and design elements. Respect the dimensions, shapes and details of the original design.
  - Garage expansions follow similar principles for adding to the main house. This is

especially true if the existing garage dates from the period of the house. In such instances, use forms, shapes, materials and designs compatible to the original work when planning an expansion.

- Parking lots shall be located primarily in the rear of new construction.
  - Shared parking shall be encouraged, including the use of on-street parking.
  - Adjacent commercial structures with rear parking lots shall interconnect the lots to provide contiguous access.

### **3. Fencing/Screening**

Design Standards:

- Preserve original fencing when feasible and replace only portions deteriorated beyond repair.
- If replacing fencing, use materials similar to the original or to the period of the structure.
- Fencing in front yards shall not exceed 3 feet in height, regardless of setback.
- When making additions to an historic structure, preserve original fencing when feasible and replace only portions deteriorated beyond repair.
- If removing and replacing fencing, use materials similar to the original or to the period of the structure.
- Fencing and/or screening should allow for views into the site from the street or sidewalk. Solid fencing/screening is not allowed in front yards so that the house and streetscape are enhanced rather than obstructed
- For new construction, front fencing is not recommended. Use of landscape elements is preferred for providing a natural barrier.
- Fencing and/or screening should allow for views into the site from the street or sidewalk. Solid fencing/screening is not allowed in front setback areas so that the streetscape is enhanced and the building is not obstructed.

### **4. Signage & Lighting**

Any signage should be unobtrusive and respectful of the village character of Alpine. Signage should be compatible with the surrounding structures of the area. Signs that are added to historic structures, usually due to a change in use, should respect the historic character of the structure and the district. The same applies for signage added to new additions.

Design Standards:

- Back-lit signs are not allowed.
- Monument signs are encouraged, not to exceed a height of 3 feet.
- Variances to the existing sign ordinance may be allowed if the board deems the proposed sign to be compatible with the site and surrounding area.
- Lighting for new buildings shall be compatible with the streetscape lighting theme

used in the district.

## **F. General Guidelines and Design Standards**

The following guidelines are general standards for the following components:

1. ADA Compliance and Accessibility
2. Equipment and Accessories
3. Awnings and Shades
4. Gutters and Downspouts
5. Entrances, Portes cochère, Pergolas and Carports

### **1. Access for the Physically Disabled**

Providing wheelchair access to the historic house presents a special challenge to the home preservationist. The least expensive, but often most visually obtrusive approach, is to provide access via a front yard ramp. However, a ramp rising at the rate of one inch per foot- the maximum slope allowed by most codes- could result in a 24-foot ramp. In the front yard, this ramp would become a major visual feature, especially if enclosed and roofed. Consequently, it is suggested that ramps be designed to rise along the driveway side of a house rather than cut through the front yard directly in front of the main entry. Along the driveway, the bottom of the ramp would be closer to the automobile parking area. If there is already a carport, the need for a roofed enclosure also might be eliminated. This type of ramping can be functional, yet visually less intrusive to the building's historic architecture.

### **2. Equipment and Accessories**

Cooling units are commonly used to provide a comfortable interior living environment. Evaporative or "swamp" coolers mounted on the exterior of the building are a popular type of cooler used historically and today. Typically these cooling units are large, metal boxes mounted on metal frames. The tendency is to mount these coolers as close as possible to the spaces most needing to be cooled. Such equipment and their placement can detract from the appearance of any house. Consider placing cooling units in locations not visible or minimally visible, such as on the back or rear sidewalls of the house, or on rear sections of the roof.

Whenever possible, do not place cooling units in front windows, along the front elevation or yard, or on parts of the roof which are highly visible. To get cool air to front rooms, place the cooling units to the rear of the house or roof and duct through the attic to registers in the ceilings of the front rooms. Since cold air is heavy, it will sink through and cool the hot air found in the front rooms. Ask a heating and cooling specialist to determine the best way to achieve an aesthetically sensitive yet functional cooling installation.

Locate other exterior equipment such as television and short-wave radio antennas, satellite dishes, solar panels, utility meters, power poles and related equipment in the least visible places possible, and in accordance with city permitting procedures.

### **3. Awnings and Shades**

From the Vernacular Era forward, houses have employed front porches to shade the large windows of the front rooms. In some eras, however, the desire for fashion overrode the practical need to provide shade. Thus, English Tudor/Elizabethan Revival houses, for example, generally have neither porches nor shades of any kind. The same is true for other styles, as well as for individual examples in virtually all styles.

Without protection some houses overheat inside, especially if they have large windows facing south or west. Historical remedies, such as porches and window awnings are a practical solution to this problem, even today. If a historic porch has been removed, rebuilding it, matching the appearance and materials of the original porch, also will provide the needed shade.

If the house never had a porch, consider installing awnings of a style and materials true to the building's particular historic period. Canvas awnings were used in nearly every period and with virtually every style. Since canvas awnings are subject to tearing and fading, synthetic canvas awnings are an acceptable alternative because the material is more weather-resistant and has superior color-holding properties. If utilized, awnings should be of the same appearance as canvas. Awnings should be fastened to the window frame rather than the adjacent walls. This is particularly critical for installation on masonry homes.

Smooth plastic and "backlit" awnings are not recommended, nor are metal, plastic or wood shades, or hoods or canopies permanently mounted over the exteriors of windows. Introducing styles of shades not used in the building's historic period is not recommended. Installing any kind of shade, blind or covering which hides the window from view detracts from the appearance of a historic house.

### **4. Gutters and Downspouts**

Collecting and conveying water from roofs to yards or waste lines is the purpose of gutters and downspouts. Gutters and spouts are features of most building styles with sloping roof types. Gutters and spouts can be found that are architecturally compatible with the style of the building with which they are associated. For example, Victorian gutters and spouts are often ornamental, while those on Tudor cottages may be simple, even "neutral" as they relate to the house's architectural statement.

Some homes do not have gutters and may not need them. If roof water is being conveyed well into the yard where it percolates down through the earth without damaging foundations, gutters are unnecessary. However, if roof overhangs or pitches are minimal and water pours down exterior walls or collects along foundations, gutters and spouts are called for to prevent deterioration or building settlement.

If historic gutters and spouts exist, consider repairing rather than replacing them. If they are beyond repair or missing, install new ones in locations, styles and materials compatible with the building's historic design. Place downspouts in inconspicuous locations so that they do not intrude upon windows or important architectural features. Provide splash blocks at the bottoms of downspouts to convey water well away from foundation walls. Prime and paint gutters and spouts to blend in with the building's overall color scheme.

### **5. Entrances, Portes cochère, Pergolas and Carports**

Entrances and related sheltering appendages are essential visual features of virtually every style of residential architecture. Portes cochère, pergolas and carports are also important, especially in the Bungalow and Period Revival eras.

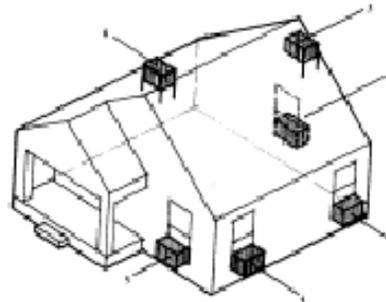
Retain and preserve original architectural shapes, locations, configurations, materials, trim and individual components such as columns, beams, pilasters, entablatures, rafters, brackets, balustrades, railing, steps, doorways, wing-walls and so forth.

Repair or replace missing or badly deteriorated fabric with matching materials and design. If elements are missing, restore them based on photographic, historical or architectural documentation. If this is unavailable, employ designs compatible with the style, materials and detailing of the original or similar period buildings.

Avoid removing or adversely modifying an original porch or entrance. This will result in a loss or alteration of the building's architectural character. Do not replace original materials and features with incompatible new work, such as replacing wood columns with wrought-iron poles. Do not add to or fill in covered openings, or roof over open pergolas or courtyards. To retain a building's original appearance, leave the openings of recessed entries, appendages and courtyards open.

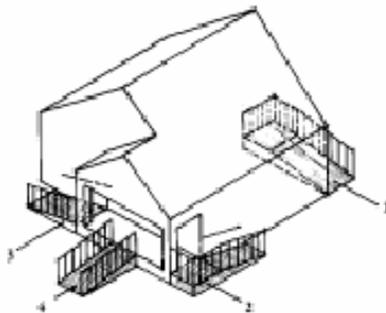


*This porte cochère provides vehicle shelter and visually extends the size of the house.*

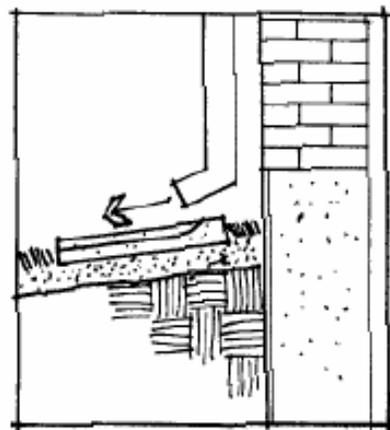


*Some placements of cooling units are better than others. The cooler locations shown are numbered in order of preference with "1" being the least obtrusive and "6" the most obtrusive and least desirable placement.*

**Graphics for General Guidelines & Maintenance**



*To preserve the historic appearance of primary facades, consider placing ramps in locations where they allow convenient access without being visually intrusive. On this diagram "1" shows the least obtrusive placement for ramps, while "4" is the most obtrusive and least desirable placement.*



*Keep water away from foundation walls by sloping the earth and draining runoff through downspouts and splash blocks.*

## **G. Energy Conservation & Environmental Standards**

In this age of diminishing fossil fuels, volatile fuel accessibility, increasing prices and environmental pollution, energy conservation consciousness is high. Energy conservation design is no longer a convenience but an imperative responsibility. Our building practices have a significant impact on the environment. Both new construction and the preservation and reuse of older structures can follow approaches designed to mitigate negative impacts on the environment.

This section is split into two components:

1. Environmental Building Practices
2. Preservation and Energy Conservation

### **1. Environmental Building Practices:**

#### **EROSION:**

Control erosion to reduce negative impacts on water and air quality. Design to a site sediment and erosion control plan that conforms to best management practices in the EPA's Storm Water Management for Construction Activities.

- Prevent the loss of soil during construction by storm water run-off and/or wind erosion, including protecting topsoil by stockpiling for reuse.
- Prevent sedimentation of storm sewer or receiving streams and/or air pollution with dust and particulate matter.
- Stabilize soil by using measures such as temporary seeding, permanent seeding, and mulching.

#### **REDUCED SITE DISTURBANCE:**

Conserve existing natural areas and restore damaged areas to provide habitat and promote biodiversity.

- On greenfield sites, limit site disturbance including earthwork and clearing of vegetation to:
  - 40 feet beyond the building perimeter,
  - 5 feet beyond primary roadway curbs, walkways, and main utility branch trenches, and
  - 25 feet beyond pervious paving areas that require additional staging areas
- On previously developed sites, restore a minimum of 50% of the remaining open area by planting native or adapted vegetation.
- Reduce the development footprint (including building, access roads and parking) to exceed the local zoning's open space requirement for the site by 25%.

STORMWATER MANAGEMENT:

Limit disruption of natural water flows by minimizing stormwater runoff, increasing on-site infiltration and reducing contaminants. Implement a stormwater management plan that results in:

- No net increase in the rate and quantity of stormwater runoff from existing to developed conditions; OR, if existing imperviousness is greater than 50%, implement a stormwater management plan that results in a 25% decrease in the rate and quantity of stormwater runoff.
- Treatment systems designed to remove 80% of the average annual post-development total suspended solids (TSS), and 40% of the average annual post-development total phosphorus (TP). By implementing best management practices as outlined in the EPA's Guidance Specifying Management Measures for Source of Non-point Pollution in Coastal Waters. (Chapter 4, Part II addresses urban runoff and suggests a variety of strategies for treating and infiltrating stormwater volumes after construction is completed.)

LANDSCAPE AND EXTERIOR DESIGN (to reduce heat islands):

Reduce heat islands (thermal gradient differences between developed and undeveloped areas) to minimize impact on microclimate and human and wildlife habitat.

- Provide shade (within 5 years) on at least 30% of non-roof impervious surface on the site, including parking lots, walkways, plazas, etc. OR,
- Use light-colored/high-albedo materials (reflectance of at least 0.3) for 30% of the site's non-roof impervious surfaces, OR
- Place a minimum of 50% parking space underground or use an open-grid pavement system for a minimum of 50% of the parking lot area.
- Use ENERGY STAR Roof-compliant, high-reflectance AND high emissivity roofing for a minimum of 75% of roof surface, OR
- Install a "green" (vegetated) roof for at least 50% of the roof area.

LIGHT POLLUTION REDUCTION:

Eliminate light trespass from the building site, improve night sky access, and reduce development impact on nocturnal environments.

- Do not exceed Illuminating Engineering Society of North America (IESNA) footcandle level requirements as stated in the Recommended Practice Manual: Lighting for Exterior Environments, AND
- Design interior and exterior lighting such that zero direct-beam illumination leaves the building site.

WATER EFFICIENT LANDSCAPING:

Limit or eliminate the use of potable water for landscape irrigation.

- Use high-efficiency irrigation technology, OR use captured rain or recycled site water, to reduce potable water consumption for irrigation by 50 - 100% over conventional means.
- Do not install permanent landscape irrigation systems.

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### RECYCLABLES:

Facilitate the reduction of waste generated by building occupants that is hauled to and disposed of in landfills.

- Provide an easily accessible area that serves the entire building and is dedicated to m separation, collection and storage of materials for recycling including (at a minimum) paper, glass, plastics, and metals.

### CONSTRUCTION WASTE MANAGEMENT:

Divert construction, demolition, and land clearing debris from landfill disposal. Redirect recyclable material back to the manufacturing process.

- Develop and implement a waste management plan, quantifying material diversion by weight. (Salvage may include the donation of materials to charitable organizations such as Habitat for Humanity)
- Recycle and/or salvage at least 50 - 75% (by weight) of construction, demolition, and land clearing waste.

### RESOURCE REUSE:

Extend the life cycle of targeted building materials by reducing environmental impacts related to materials manufacturing and transport.

- Specify salvaged or refurbished materials for 5 - 10% of building materials.

**2. Preservation and Energy Conservation:**

The goals of historic preservation and energy conservation are clearly in the public interest, but each value system needs to be more responsive in accommodating the purposes of the other. This means finding ways of achieving energy-conserving design while addressing the aesthetic concerns of preservation. The preservation philosophy of retaining original materials, repairing rather than replacing and replacing, when necessary, with matching or similar materials, is inherently an energy-conserving approach. Retaining original masonry, concrete, metal, and glass conserves the great amount of energy it would take to make these products anew. Retaining existing wood products reduces the pressure on our diminishing, albeit renewable forests, and the energy required to convert a tree to siding, moldings or shingles. Retaining existing structures and their materials also lessens the increasing difficulty of finding places to dispose of discarded, non-biodegradable refuse.

In addition to these advantages of preserving, rehabilitation designs that reduce energy losses and gains are also needed. Reducing unwanted heat loss and gain is another way of reducing energy consumption. The highest percentage of heat loss and gain occurs through uninsulated roofs and through windows. To a lesser extent, heat is lost and gained through any locations where air infiltration occurs, such as walls, foundations, and door openings.

Heat loss/gain through roofs, walls, foundations and openings is best reduced by insulation these areas. Adding batt or blown-in insulation to attics is a standard procedure, as is weather-stripping door and window openings. Insulating existing walls, especially masonry walls, is more problematic and expensive.

A five-year payback period justifies an energy conserving modification. Applying "value engineering" criteria, funds should be spent first on improvements that have the quickest payback. On this basis, insulating walls rates low on the payback scale. The same is true of adding "air-lock" vestibules to existing construction. The cost is so high that its economic recovery, in terms of energy savings, is several decades.

Controlling heat loss and gain through windows significantly reduces costs incident to heating and cooling, and should be an improvement priority. Heat is conveyed through windows via the frame and sash, the glass and by leakage or infiltration. Since wood contains porous cavities, it insulates better than steel or aluminum. Therefore, existing wood window assemblies should be retained. Infiltration can be controlled by weather-stripping and by an overall tightening of the assembly with nailing, caulking and painting. This leaves the problem of controlling heat transmission through glass.

Single pane, 1/8" thick polished plate glass is typically found in historic homes of the late nineteenth and early twentieth centuries. This type of glass quickly transmits heat. Double-paned glazing reduces heat loss or gain by about one-half but is expensive to obtain if either retrofitting existing windows or purchasing new windows.

In evaluating conservation options, consider the orientation of the house with respect to its major windows. Large windows facing north or east will lose more heat and require greater interior space heating. Conversely, south and west-facing windows experience greater heat gain in the summer, and will increase interior cooling needs. Several options are possible. Consider adding glass storm windows, appropriately designed replacement windows, or retrofitted windows to all but the street-facing elevation of the house. The front windows should be weather-stripped, but could otherwise be left intact. The result would be significantly improved window performance

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in three of four exterior walls (assuming a square or rectangular plan) and slightly improved conservation in the front wall. If the entire house, including all but the front windows, were upgraded, the house's overall performance would greatly improve. The percentage of loss/gain through the front windows would be a small fraction of the total.

Houses with several large windows in a long expanse of front wall may still lose/gain unacceptable quantities of heat. In this event, retrofitting existing windows may be deemed practical. However, historic window sashes, whether wood or metal, are rarely wide enough to allow for the width of double-paned glass units. If the sashes are wide enough, they can be removed, re-routed, fitted with thermopane glass and reinstalled. If the sashes are too thin for such retrofitting, two options exist.

The first is to add storm windows to either the exterior or interior of the historic window. If added to exterior, the new window should be a large pane in a narrow frame so as not to obscure the view of the original window. Regardless, the glare and airspace associated with the new window will tend to diminish the view of the older window sashes and frame. Interior storm windows have the advantage of being installed and cleaned from the inside. They also leave a clear view of the exterior of the window, although they must be removed in order to open an operable window. Unless weep holes are provided, they may also fog up in changing weather due to condensation between the outside and inside panes.

The second option is to replace the original windows with new, double-paned units. This is desirable only if the appearance of the historic windows can be replicated in the new windows. This is not difficult to achieve with simple one-over-one types, but is expensive to accomplish if the historic units have several small panes of glass. The small panes are separated and held in place by small wood muntins. Muntins hold the glass in the middle of a wood stop on the interior side and hold "glazing points" and caulk on the exterior side. Metal-frame windows have similar construction. Muntins provide "true divided light," a character-defining window type common to all buildings prior to World War II.

Some window manufacturers offer to replace the "true divided light" system with large glass panes and fake grids simulating the old muntin pattern. These are rarely preferred because they are often flimsily made of wood or plastic, have non-historic profiles, are available in limited colors, and, most importantly, do not penetrate the glass as do the muntins. That is, they are placed only against one side of the glass. While somewhat visible from the outside, they have a very different appearance from historic "true divided light" windows. Given the high cost and low payback of replacing windows with small glass panes, and given the adverse visual impact, replacement of divided-light window types is not recommended.

Tinted or reflective glass coatings are often applied in an effort to control heat loss/gain. While most of these succeed in their purpose, many carry the disadvantage of diminishing a house's architectural integrity. Reflective films are especially distracting since they eliminate the transparency of glass with their metallic, opaque appearance. Their coats also tend to bubble, crack, fade, change colors or lose their adherence to the glass. Reflective films are thus not recommended. For similar reasons, heavily tinted glass (usually bronze or gray colored) are also discouraged. Lightly tinted (30 percent or less) glass and clear, "Low E" treatments are more acceptable due to their closeness to the clear appearance of historic glass.

## **H. Maintenance and Renovation Guidelines for Existing Buildings**

### **Introduction**

This section provides information on two closely related approaches to preserving existing buildings: maintenance and renovation. Maintenance, which aims at retaining historic materials and original design as long as possible, is the highest preservation priority.

Renovation, which is intended to give a building a new functional condition, goes beyond maintenance to include repair, replacement or alteration when necessary for continued or new uses.

### **Preservation Maintenance**

The need for expensive, sometimes character-reducing repair and replacement of historic building fabric can be deferred and/or greatly reduced by regular preservation maintenance. Such cyclical maintenance is as valuable for restored or renovated buildings as it is for new structures.

All objects, whether organic or inorganic, deteriorate over time. Careful preservation maintenance slows the process of deterioration by controlling its causes and creating an environment resistant to further change. Deterioration can never be arrested entirely, but the aim of slowing the rate of change can be accomplished by applying protective coatings, shielding materials from sunlight, moderating temperature swings, controlling the movement of water, and simply by cleaning.

While this section intends to provide recommendations for the exterior maintenance of historic houses, it does not purport to be comprehensive or highly technical. For more technical treatments, the reader is referred to such publications as:

*Cyclical Maintenance for Historical Buildings*  
*A Guide to the Maintenance and Alterations of Historic Buildings*  
*Rehab Right*  
*Preservation and Conservation: Principles and Practices*  
*Renovation: A Complete Guide*  
"Preservation Briefs" of the National Park Service  
(See the SELECTED BIBLIOGRAPHY for full citations).

General guidelines for such issues as earthquake and fire safety, access for the physically impaired, building code compliance, structural upgrading, security systems or interior rehabilitation design are in a separate section. For the most part, these topics are only peripherally related to exterior preservation concerns—the main focus of these guidelines. Instead, this section will present some general maintenance principles for specific exterior building components.

### **Renovation**

In addition to the information on maintenance, the general guidelines for renovation are also provided in this section. These guidelines deal with features common to any building regardless of style or age and are consistent with *The Secretary of the Interior's Standards for Rehabilitation*.

**Review of the Building Components:**

Maintenance tips, renovation recommendations and design standards will be presented here for each of several basic building components in the following order:

- 8 Exterior Walls and Surfaces
  - d. Masonry
  - e. Stucco
  - f. Exterior Wood
- 9 Roofs and Chimneys
- 10 Windows and Doors
  - a. Screen Doors
- 11 Porches and Stairs
- 12 Exterior Ornamental Trim
- 13 Entrances and Pergolas
- 14 Exterior Materials: Finishes, Texture and Colors
- 15 Foundations
- 16 Paint and Soot Removal
- 17 Site Design
- 18 Signage

**1. Exterior Walls & Surfaces:**

Since they are the largest single element of a structure, exterior walls are very significant character-defining features. Intact exterior walls quickly communicate important information about a building's age, style and construction. Consequently, every effort should be made to retain and preserve the original wall materials, detailing and appearance of the various historic buildings of Alpine. This section discusses maintenance and design standards for the three basic materials used on exteriors: masonry, stucco, and wood.

**MASONRY**

Although such masonry units as brick, stone, adobe, concrete and cinder block, hollow clay or terra cotta are considered very durable, they are susceptible to deterioration and significant damage if not properly maintained. Since water is the major cause of masonry deterioration, protect masonry by draining water away from it and by not allowing water to collect in flat surfaces or in crevices. If masonry units or mortar are deteriorating, correct the cause of the problem by repairing leaking roofs, gutters or pipes. If water is entering the walls through joints with missing, cracked or disintegrated mortar, repoint the joints.

Repointing should use chemically compatible mortar of matching strength, texture and color. The joints should be the same width and profile as the originals. Reinstall loose masonry units. If units are badly damaged or missing, replace them with matching units. Masonry walls were generally not painted originally, although there are exceptions, particularly with Period Revival and Ranch houses. If masonry was not painted or stuccoed originally, it is most appropriate to retain the historic nature of character-defining masonry by leaving it unpainted.

**REPAINTING:**

If one desires to repaint the already painted masonry, hand-scrape away the loose paint down to the next solid layer and repaint with compatible coatings

Sometimes painting or covering masonry walls is contemplated or undertaken in an attempt to correct or conceal deterioration. In these circumstances, it is better to remedy the cause of deterioration rather than to merely hide it. Unless the source of the problem is addressed, the condition will persist.

**REMOVING PAINT AND SOOT:**

To remove paint or heavy soot from masonry, first conduct a cleaning test to assess if cleaning is needed and to determine the gentlest, safest means of paint removal. For soot, steam or mild detergents applied with natural bristle brushes is advisable. To remove paints, use the gentlest chemical that works, along with a low-pressure water wash. Sandblasting and water blasting or other high pressure, abrasive or caustic cleaning methods are harmful to masonry units and mortar and are definitely not recommended.

Technical experts do not recommend applying sealant to vertical masonry surfaces because some sealants may discolor, chemically react with mortar, create a glazed finish, or break down and lose their effectiveness after a few years.

**STUCCO**

Stucco is a non-structural, trowel-applied plaster composed largely of cement. Stucco is generally applied over expanded metal lath, "chicken wire," nails or other binding materials.

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Sometimes it is applied by trowel directly on the walls without any “keying” or binding material.

#### STRUCTURAL ISSUES:

As a veneer or thin surface coating, stucco is vulnerable to cracking and deterioration if broken by wall movement, thermal expansion or poor adhesion to the structural walls. Earlier vernacular structures, especially those built of adobe, were often covered with non-reinforced mud or lime plaster, a soft, non-cement based material.

Because of the differences in its composition, stucco maintenance, repair or replacement should employ material of the same strength, color and finish as the original. For example, mud plaster will bond to adobe with no adverse effects because it is of the same material. But modern cement stucco is a much harder, less flexible material and has a different rate of expansion. Consequently, when applied to adobe it can create unequal stresses through the walls, which may lead to structural damage. If stucco is not well bonded to the wall, it will eventually detach, buckle or crack, allowing moisture to collect between the stucco and wall. Eventually, this moisture may ruin the wall.

#### PAINTING:

Stucco is usually painted after the final coat dries. Colored dye is sometimes mixed in with the stucco, providing homogenous coloring. When repainting stucco, consider using rubber-based coatings designed specifically to expand and contract over stucco without peeling or cracking.

#### EXTERIOR WOOD

Almost all historical architectural styles depend to some degree on exterior wood for trim, windows and porches. For a few styles, such as the Queen Anne Style or the American Colonial Revival, exterior walls are sheathed almost entirely with wood siding or shingles. The maintenance of wood is a high priority for many involved in historic house preservation.

Wood siding, trim and ornamental elements are essential to a building's character but susceptible to deterioration and damage. Fortunately, wood is readily available and easily worked. Because this is so, wood is unfortunately often replaced rather than repaired. For the sake of preserving a building's historic fabric it is preferable to maintain and repair original wood whenever feasible.

#### DECAY:

Wood is subject to decay, which may lead to cosmetic deterioration or structural disintegration. Decay may be caused by thermal forces, swelling and shrinking due to exposure to weather, as well as by water-related problems of rot, fungi, hydrolysis and oxidation. Of course, fire can destroy wood instantly and termites and other insects can ruin wood over time. It is essential to protect exterior wood from these causes of deterioration, especially from exposure to sunlight and water. Existing wood should be well nailed or screwed in place. Joints between wood members or other materials should be sealed so as not to allow the seepage of water. Raw wood should be primed and either painted, stained or varnished.

Whenever possible, retain original wood. Wood in danger of deterioration may be treated with wood preservatives. Impregnating wood, including wood shingles, with fire retardants may also prove useful.

Preserving deteriorated or damaged wood in place may be accomplished by applying wood

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adhesives and fillers. These are generally hand-set. For larger structural members such as cracked beams, adhesives may penetrate by injection.

#### REPLACING WOOD:

Perpetually wet or rotted wood or wood damaged beyond the point of repair may require replacement. When replacing, it is advisable to use matching or similar wood. New wood should be dry, uninfested, straight, and of high quality grade. It should be primed before installation and painted with two coats of good, exterior wood paint. New wood used on additions should have the same properties. Select decay-resistant wood and treat it with water repellents. Treat wood with preservatives if it has a chance of being exposed to water or is near the ground. Avoid flat wood surfaces if possible by sloping railings, tops of walls, windowsills and porch floors. As always, tight joints, caulking, priming and painting, and proper drainage of water away from wood, are essential for wood preservation.

#### PAINTING:

Due to aging, the original paint on most historic houses has not survived. Repainting is an on-going part of cyclical maintenance and should be attended to regularly to protect the underlying materials.

Prior to painting, it is essential to properly prepare all surfaces by securing and repairing damaged materials, scraping and sanding off loose paint, and cleaning all solidly adhering paint. New paint will not adhere to loose, dirty paint. Additionally, not all types of paint are compatible with each other. Using incompatible paints reduces adhesion and accelerates deterioration. It is advisable to recoat surfaces with the same kind of paint used previously.

Varnished surfaces such as doors can be cleaned with commercial wood cleaners. Use a fine grade of steel wool and a liquid varnish remover to strip varnish. Because each type of varnish and paint has its own chemical properties, it is advisable to consult coating specialists about proper paint cleaning or stripping products and methods. Similarly, different exterior materials, such as wood, masonry and metals, also require their own type of primer and paint.

Since the pigments in old, oil-based paints migrate or change colors over time, it is not easy to determine original colors merely by sanding down to the first color. Moreover, the first color may have been a primer rather than the finish coat of paint. When looking for original colors, find drops of paint hidden in cracks or found in places not directly exposed to the sun.

## **2. Roofs and Chimneys:**

### **ROOFS:**

Roofs serve as an important, character-defining feature for most historic homes due to their visibility and contribution to particular architectural styles. Maintaining a watertight roof that drains properly to the ground prevents both interior and exterior deterioration. Roof styles, pitches and materials vary greatly. Tile, slate, wood, asphalt, metal and “built-up” flat roofs are all found here. Each roof has its own characteristics and maintenance needs.

The ability of the roof to hold and shed water is largely determined by the quality of the initial installation. Existing roofs need to be inspected seasonally for signs of wear, damaged flashing, filled gutters or spouts, etc.

When replacing roofing, remove the existing roofing down to the decking—the wood boards or sheets nailed to the rafters or roof joists. If needed, repair the decking or apply new sheathing. Install tight flashing along valleys, chimneys, walls, or wherever there is a change in roof types. Install metal drip edges around eaves, and also gutters and downspouts if needed. Next apply proper roofing felt, “ice shield” sheathing or other underlayment or nailers particular to your type of roofing. Use high quality roofing materials that come with a warranty. Be sure to adhere to the different roofing types. It may be advisable to treat some kinds of roofing, especially wood shingles, with fire retardants. Wood shingles will last longest if initially treated with a mixture of graphite and linseed oil and regularly maintained with the same preservative thereafter.

Roofs should be kept in good repair and be watertight. Gutters and downspouts should be regularly cleaned. Flashing and roof anchorage should also be kept in good repair. Roofs require adequate ventilation.

When planning building improvements or additions, it is important not to remove or radically alter original roof shapes and orientations. Changing the roof pitch or adding incompatibly designed new elements, such as dormers, skylights or new sections of roof, also alters the configurations and design of the original roof. Consequently, when planning these types of improvements, be sure to take into account architectural style and the appropriateness or visibility of the proposed change.

### **CHIMNEYS:**

When repairing chimneys, remove all loose masonry units down to solid material. Rebuild using the old or matching masonry and joinery. Retain the original chimney design using masonry reinforcement if necessary.

Poorly maintained chimneys may eventually deteriorate to the point of failing structurally. Failing bricks or chimney caps are a danger that can be avoided by inspecting chimneys seasonally. Look for mortar deterioration and cracked or loose caps. Structural reinforcement of the cap is especially important. Tall chimneys may benefit from a steel brace connected to the roof from the chimney.

### **3. Windows and Doors**

The character of even the most intact house can be adversely impacted by inappropriate window and door alterations. Sensitive window and door repair is encouraged.

It is always advisable to keep window assemblies in good repair, since it is less expensive to maintain historic windows than to replace "in-kind." Keep windows painted, caulked and glazed. Keep hardware in operable repair. Weather-strip windows to reduce air infiltration. Maintain all units with proper weather-stripping.

Existing, serviceable historic units should be repaired when at all possible. It should be understood that either new or well-maintained existing wood-framed assemblies are more energy-efficient than metal units with the same glazing. The cost of replacing windows is rarely recovered in a reasonable amount of time compared with the lower cost of repairing and weatherizing existing units.

Existing hardware is part of the historic appearance and also should be retained. If the hardware is beyond repair or has been replaced with incompatible hardware, replace it with units similar in design and finish to the original hardware.

#### **SCREEN DOORS**

Screen doors are far from being a major architectural feature. Like other architectural elements found in a house, screen doors were designed to fit in with the other features of a particular style. Victorian houses had fancy, delicately designed screen doors with thin wood frames and ornamental corner braces to give them strength. Bungalow screen doors were predictably simpler, and so forth.

When selecting new screen doors, choosing a design that complements the design of the door behind it, as well as the style of the house, will enhance its historic appearance. A good finish carpenter or mill can make a custom screen door appropriate for most older homes at a reasonable cost.

#### **4. Porches and Stairs**

Original porches should be retained and their roofs kept in good repair. For advice on how to accomplish this, see the sections of “Roofs,” “Exterior Wood,” and so forth for applicable porch components.

Certain kinds of porches have beams and columns with all their surfaces exposed to the elements. It is especially important to keep such elements painted or otherwise coated. The bottoms of porch columns also often deteriorate if not coated and kept out of water. Consider treating wood elements near or in contact with the ground or water with wood preservatives. The same applies to wooden porch floors and wall siding or lattice.

Many original porches are made of concrete or concrete block. Flat concrete floors may be sealed and coated to prevent water seepage and to enhance appearance and slip-resistant characteristics. Wood porches are less common and are more susceptible to deterioration as a result of the weathering effects on wood.

Modern building safety codes require that stairways with two or more steps should have handrails. Unsafe stairs should be repaired or replaced in-kind. Avoid removing or adversely modifying original porches. New products such as “indoor-outdoor” carpet detract from the character of historic porches and stairs. Replace missing or damaged elements with matching or similar work.

#### **5. Exterior Ornamental Trim**

Retaining original trim is an important factor in maintaining the historical appearance of any older home. Keep original features in good repair and protect against the adverse effects of weathering. Also avoid harsh cleaning and painting originally unpainted trim. Maintain trim in good condition. When repairing such features or replacing missing or badly deteriorated elements, use matching or similar materials and designs.

#### **6. Exterior Finishes and Colors**

Color scheme is a character-defining feature of some importance. Victorian Era homes, for example, featured polychromatic color schemes with at least five and as many as eight or more different colors, one each for the stone, brick or siding and roofing and several for the wood trim, window frames, sashes and doors. Diversity in color was as important as the variation of forms, roofs and textures. Painting a Victorian house a single color negates the designer’s intent and the essence of the building’s character as much as any other change.

Likewise, red tile roofs and white or light colored walls are essential to the character of Spanish Colonial architecture. Similarly, Greek Revival houses are traditionally white. Pueblo Revival houses are most authentic and convincing when earth-colored. English Tudor/Elizabethan houses are known by their dark brown half-timbering set in white stuccoed walls. Even bungalows and ranch houses were designed with specific color schemes intended to bring out carefully conceived architectural effects.

When maintaining, rehabilitating or adding to your home, consider identifying and using the building’s original colors. If these are unappealing or cannot be determined, consider using colors from a palette of the same time period and style as the building.

## 7. Foundations

Foundations should be kept in good repair due to their importance in supporting a building's superstructure. Depending on the style, foundations may be of varying importance as a character-defining feature. Unpainted foundation walls are more historically appropriate in terms of retaining original architectural appearance.

### Water Damage:

Since the deterioration of all building materials, including concrete walls, masonry units and mortar, is accelerated by the passage of water through the material, the less water in the material, the less the damage will be. Having the earth slope away from a building's perimeter can reduce foundation settling and deterioration. If water is allowed to pond around a foundation, either from roof water or site drainage, the water may percolate down through the ground and find its way beneath the footing. If the earth under the footing is sufficiently water-saturated, it may compress under the weight of the building's structure, causing settling, cracking and sometimes structural failure. It is advisable to fill ponds around the foundation and to grade earth away from foundation walls using a slope of no less than 1/4" per foot. Gutters and downspouts emptying into splash blocks away from the foundation are also recommended.

### Landscaping, Planting, Sprinklers:

It is best not to place planting directly against or near foundations since plants need to be watered. As their roots naturally seek water, they sometimes grow into building walls or become entangled with underground pipes and wires. It is also advisable to point sprinkler heads away from foundations. Water may invisibly enter a wall by a process called "creeping damp," the vertical movement of ground moisture up a wall by capillary action.

### Sealants:

There is no physical advantage to painting foundation walls or sealing them with impermeable sealants. Walls should be allowed to breathe. Although paints and sealants prevent most water from entering a wall from the exterior, they also trap water and water vapor inside the wall where deterioration occurs.

### Cracks:

Recent cracks created by settling should be filled and the causes for settling should be corrected. If the cracks occurred early in the building's history and no further movement is occurring, it is sufficient to fill the cracks for the purpose of stabilizing the foundation and arresting the seepage of moisture. Foundation cracks are best filled with concrete or mortar of compatible strength and finish to the original materials.

For treatments of masonry or stucco foundations, refer to the related section discussing these materials (Section 1).

## 8. Paint and Soot Removal

Over time, the exteriors of all buildings become soiled. Some owners have responded to this unattractive and chemically damaging condition by regularly cleaning their building's exterior. Others have painted over the dirt, whether the exteriors were wood, masonry, stucco or a combination of these. A few others have simply left the exteriors to weather and accumulate a patina indicative of age.

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## Section H: Maintenance

Since exterior maintenance is important to the appearance of any house, the following suggestions are made. If desiring to remove paint or soot from any surface, first conduct a test to determine if removal can be achieved without damaging the underlying materials. Following the test, use the gentlest method capable of removing the paint or soot. Sand blasting, water blasting and other abrasive or high-pressure techniques are harmful to the historic fabric and are inappropriate. Highly caustic or toxic chemical removers may also be harmful to materials as well as to workers and plant life.

For large, difficult jobs, it may be desirable to obtain the services of professional cleaners. If attempted by the building owner, always closely follow manufacturer's application instructions. Note that the process for removing soot and dirt is easier than that used for paint removal. Water and gentle detergents or steam cleaning are effective processes which homeowners may be capable of undertaking.

### 9. Additions

Attic expansion and things to consider as the space is expanded.

#### ATTIC EXPANSIONS:

A cost-efficient way of adding usable square footage without adding to the footprint of the building is to create finished spaces in previously unfinished attics. Successful attic conversions need to take several factors into account.

Sufficient headroom, or space over seven feet tall, is desirable and may be required by code for certain uses. Low-pitched roofs, as on ranch houses, may not provide the high space needed.

If attic rooms are to be used for bedrooms, building code requirements for exiting must be met. This will likely mean adding code-complying stairways, doors and windows.

Attic floors will likely require structural upgrading to accommodate new loads as most were only designed as ceilings for the level below. As such, the joists were designed to carry ceiling plaster or sheetrock, not floor loads with people and furniture. Thus, floor joists may need to be doubled up or larger joists and new flooring may need to be added alongside the existing joists.

To obtain proper light, headroom and/or egress, dormers may need to be added to make the attic space more functional. See the above section on Dormer Additions for advice on compatible dormer design.

Like any new construction, converted attic spaces need code-complying wiring, heating, insulation, finishes, etc. Codes may also require fire protection or detection systems, ranging from sprinklers to smoke and heat detectors, depending on the building's height and occupancy.

#### ADDITION EXTERIORS:

When finishing the exterior of an addition, attempt to match the original finishes, textures and colors. Introducing finishes, textures and colors foreign to the original architecture of the building, or adding too many different finishes can seriously affect a house's appearance. If, for example, a rear second-story addition were to be made to a Spanish Colonial Revival residence, hand-applied, earth-colored stucco walls with tapered or rounded corners would be appropriate.

## **I. Architectural Styles**

### **Classical Vernacular Characteristics**

1. One Story
2. Rectangular or square plan
3. Boxlike shape; horizontal emphasis with broadside of building facing front
4. Symmetrical front elevation
5. Either hip or gable roof, usually low to medium in pitch, originally with wood shingles
6. Wide front porches with wood posts and hip or shed roof
7. Adobe walls, usually plastered, brick or wood frame walls in post-1878 examples
8. Flat or segmentally arched, linteled window and door openings
9. Wood-framed windows with small panes such as 6/6 pattern; paneled wood doors, sometimes with small glass panes
10. Flat board or simply molded trim with little or no ornament, or in Greek Revival variations, classically molded cornices and wood trim

### **Queen Anne Characteristics**

1. One or two stories
2. Irregular plan, usually cross wing
3. Asymmetrical façade with vertical emphasis; masses of varied shapes including towers, turrets, porches and polygonal wings or bay windows
4. Multiple roof types including gables, hips and cones, originally with wood shingles; dormers are common
5. Dominant front porches, sometimes with verandas or balconies
6. Brick walls on stone foundations; wood frame walls in modest examples; an overall effect of visual activity and varied color
7. Flat or segmentally arched window and door openings, usually with fancy stone or brick lintels
8. Tall windows, either one-over-one or with small, colored glass panes; tall wood doors have fancy raised panels, sometimes with a glass upper panel, transoms, picture windows and stained or leaded glass are also common
9. Ornamental wood trim, spindlework, porch balusters, brackets, casings and decorative wooden scrollwork
10. Decorative gable-end shingles, metal ridge cresting and finials

**Victorian Eclectic Characteristics**

1. Two stories but occasionally one story
2. Irregular plan, usually cross wing
3. Combines elements of two or more Victorian Era styles, resulting in a varied, eclectic composition with round and polygonal turrets, towers, spires and projecting bays
4. Complex combination of hip, gable, shed, conical, gambrel and other roof forms
5. Pedimented porches with ornamental wood columns
6. Brick and stone walls in a variety of textures and colors
7. Segmental, round or Gothic-arched window and door openings; fat-topped openings are also common
8. Tall, double-hung windows with plain, leaded or stained glass; one-over-one operable windows and fixed picture windows are common, as are tall, ornately paneled doors
9. Fancy woodwork, decorative bargeboards, balustrades, ridge cresting and finials
10. Corbeled brick and carved stone masonry

**Pyramid Cottage Characteristics**

1. One story
2. Cross wing floor plan
3. Asymmetrical façade, boxlike shape, small and simple massing
4. Hip roof, sometimes “belcast” or curved as it reaches the eaves; a small dormer is centered on the front roof
5. Front porch over the recessed entry supported usually by one column
6. Raised stone or concrete block foundations with brick or rusticated concrete block upper walls
7. Tall, flat-topped, round or segmentally arched door and window openings
8. Double-hung and fixed picture windows
9. Simple molded wood trim
10. Corbeled brick masonry trim

**Craftsman Bungalow Characteristics**

1. One or one-and-a-half stories
2. Rectangular or square plans, always with a large front porch
3. Simple massing with a low, boxlike shape and asymmetrical façade
4. Gabled low-pitched roofs, usually with gable ends facing front, although broadside-facing examples are common
5. Large porch, pergola or porte cochere with massive stone, brick or wood pillars
6. Native materials, especially river rock. Brick is most commonly found on primary exterior walls; upper stony walls and gable ends are usually shingled or stuccoed
7. Flat-topped or segmental-arched window and door openings
8. Front “Chicago” windows (central picture window flanked by narrow double-hung units); wide double-hung windows, often with small panes in the upper sashes
9. Exposed wood trim, especially heavy timber trusses, beams, brackets, bolsters and rafter tails
10. The extensive use of large-scaled exposed structural elements, lower-pitched roofs and lower, broader appearance distinguish this style from the California Bungalow

**California Bungalow Characteristics**

1. Usually one story
2. Rectangular floor plan with four to six rooms
3. Boxlike shape with small, simple massing, usually with horizontal emphasis
4. Low-to-medium-pitched gable roof, sometimes with gabled or shed-roofed dormers
5. Masonry and wood-columned porch, usually offset from the center of the front elevation; pergolas and portes cochere are common
6. Brick masonry or stucco walls; decorative shingle work or stucco in the upper gable ends
7. Flat-topped window and door openings are most common although segmental arches exist on earlier examples
8. Multi-paned upper sashes of 1/1 double-hung windows; sidelights around front door; front picture windows
9. Small-scaled wood brackets or beams under the eaves
10. Ornamental wood vent screen at the apex of the gable walls

**Spanish Colonial Revival Characteristics**

1. One or two stories but one story the most common
2. Elongated plan, roughly rectangular
3. Horizontal, asymmetrical façade with a variety of low, simple forms
4. Combination of low-pitched gable, shed and flat roofs
5. Small porches; occasional pergolas or portes cochere
6. Plastered walls and chimneys with smooth or minimal texturing
7. Roman or semi-circular-arched arcades and door and window openings; flat openings commonly occur
8. Tall, double-hung windows, sometimes with small panes in the upper sashes; picture windows; canvas awnings
9. Modest detailing from any of several eras of Spanish and Mexican architecture, including applied terra cotta, tile or cast concrete ornament
10. Decorative iron trim: sconces, grillwork, brackets, railings and fences, balconets

**Monterey Revival Characteristics**

1. Almost always two stories
2. L-shaped or rectangular plan
3. Combination of two-story and one-story elements, with an overall horizontal emphasis
4. Low-pitched roof, usually gabled, sometimes hipped, with red roof tiles; stuccoed chimneys
5. Cantilevered second-story balconies with square wood posts and heavy timber beams
6. Plastered walls in white or light colors; second floor walls may be covered with wood board-and-batten siding
7. Square, flat-topped window and door openings, sometimes with wood lintels
8. Wood or metal frame windows, often casements with small panes of glass; wood plank doors
9. Sparse ornament; wrought iron balcony columns or balustrades in later examples
10. In brick versions, the masonry walls are painted white to simulate plaster or white-washing

**Mediterranean Revival Characteristics**

1. More often two stories than one
2. Varied massing and form; irregular, large plan and asymmetrical façade
3. Varied massing and forms with horizontal emphasis and asymmetrical facades, polygonal or square towers and projecting bays or wings
4. Low-pitched hip roof with red tile
5. Courtyards framed by the buildings; porches with low stuccoed walls; balconets and occasional verandas and/or loggias
6. Plastered walls, usually white and smooth
7. Round and square-arched openings; elaborate, formal door openings, often projecting or recessed
8. Small-paned casement windows; wood plank doors
9. Often extensively decorated with plaster or cast concrete columns, pilasters, urns, finials, plaques, surrounds, cornices, etc.
10. Wrought iron balustrades and trim

**American Colonial Revival Characteristics**

1. One or two stories
2. Rectangular or L-shaped plan with the long side facing the street front
3. Simple boxlike massing with light colored walls of horizontal wood siding, stucco, wood shingles or painted brick
4. Low-medium-pitched gable roof, usually with the broadside facing the street, sometimes with gabled dormers
5. Gabled, flat or shed roofed front porch, either the full width of the façade or just the width of the main entry; usually with wood posts or columns
6. American Colonial style door surrounds
7. Rectangular openings except for a possible round-arched transom over the front door
8. Six-over-six windows, usually with dark colored shutters; sidelights flanking the front door and sometimes a fanlight over it; six-panel wood doors
9. Federal or Greek Revival trim at the columns, cornices, casings and door frontispiece
10. Small roof-top chimneys

**Transitional/Early Ranch Characteristics**

1. One story
2. Small, boxlike form with an L-shaped plan
3. Either a low-pitched gable or hip roof; double gables are sometimes found
4. Small, wood columned porch over the entry at the juncture of the two front wings
5. Brick walls painted or unpainted; stucco is occasionally found
6. Square or rectangular window and door openings
7. Metal-framed windows with small panes; of either casement or fixed types
8. Sometimes corner windows or shuttered windows
9. Often horizontal siding on the gable end
10. Usually asphalt shingle roofing

**California Ranch Characteristics**

1. One story
2. Low, very horizontal orientation with an asymmetrical front façade
3. L-shaped plan with a projecting wing facing the street
4. Low-pitched gable or hip roof, often covered with wood shakes
5. Attached garage
6. Exterior walls combining any of the following: board-and-batten siding, stucco, clapboard or brick
7. Front porches with wood posts
8. Modest ornamental detailing
9. Single and groups of fixed, sliding or casement windows (sometimes shuttered), often with small panes of glass

**American Colonial Ranch Characteristics**

1. One story
2. Elongated rectangular or L-shaped plan
3. Low, long forms with the broadside of the façade facing the street
4. Low-to-medium-pitched gable roof, usually with one gable facing the street
5. Light-colored horizontal siding, shingles or painted brick
6. Federal or Greek Revival door surrounds and/or front porch
7. Classical moldings on cornices, window and door openings, with classical doors
8. Small-paned, usually paired, casement windows
9. Simple masonry chimney
10. Louvered shutters, dark colored

**Classical Bungalow Characteristics**

1. One story
2. Rectangular or square plan
3. Simple, small boxlike shape with a symmetrical façade
4. Large porch across the entire front façade
5. Hipped or gabled roof; if hipped, sometimes a single, small dormer on the front roof
6. Stone or concrete block foundations with brick upper walls and shingled gabled ends
7. Segmental-arched or flat-topped window and door openings
8. Tall, double-hung windows; front picture windows; simple wood doors
9. Modest trim, usually a combination of simplified Victorian and early bungalow elements like exposed rafter tails and wall brackets
10. "Broadside" versions have the long side of a gabled roof facing the front, extending over a four-columned porch

## J. Glossary of Architectural Terms

### INTRODUCTION

Readers of this book may find several descriptive architectural terms with which they are not familiar. This "Glossary of Terms" is provided to give simple definitions of words used throughout this text.

**ADOBE** A large, unfired brick made of clay-based mud and straw binder, handpicked in a form and dried in the sun.

**ARCADE** A range of arches supported by piers or columns. A passageway, of which one side is a range of arches supporting a roof.

**ARCH** A structural element designed to support the weight above an opening. A true arch consists of wedge-shaped stones or bricks that make a curved bridge spanning an opening.

**ASHLAR** Textured, rough-hewn stone; or the simulated appearance of rusticated stone in concrete blocks.

**ASTRAGAL** A molding of half-round profile, especially the strip covering the joint between a pair of doors or casements.

**BALCONET** A decorative balcony that is too small to stand on.

**BALUSTRADE** A railing consisting of a handrail supported on balusters, often built on a base.

**BALUSTERS** Lathe-turned or straight spindles that support a handrail as part of a balustrade.

**BARGEBOARD** Ornamental trim board along the face of the incline of a roof gable.

**BATTERED WALL** A wall that slopes inward as it rises; a tapering pier. Common on Pueblo walls and Bungalow porches.

**BAY WINDOW** A window that projects from the outer wall, extending the floor space and creating an alcove in the interior space.

**BELCAST ROOF** A roof slope with a convex profile creating a distinctive curve, associated with some Victorian and Bungalow styles.

**BELT COURSE** A slightly raised horizontal band marking a division in wall surfaces.

**BOARD-AND-BATTEN** Vertical plane siding with joints covered by narrow wood strips.

**BRACKET** A Supporting member, often L-shaped or triangular, for a projecting roof cave, balcony or shelf.

**BROKEN SCROLL** A Colonial decorative motif placed over doors or windows featuring a central ornament flanked by interrupted gable moldings.

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**CANALE** A waterspout extending beyond the plane of an exterior wall or parapet.

**CANTILEVER** Construction in which a beam or structure extends beyond the face of a wall, being supported only at the one end.

**CASEMENT** A window with the sashes opening outward on vertical hinges.

**CASING** Decorative trim encasing a window or door opening.

**CHICAGO STYLE** With reference to windows, a symmetrical, flat-arched, tri-partite gang of windows with a large, fixed picture window in the center, flanked on both side by narrower, operable windows.

**CLASSICAL ORDERS** In classical architecture, the design of a column and entablature relating to a specific style and time period, including: Doric, Ionic, Corinthian, Composite and Tuscan.

**COPING** The sloped capping or top course of a wall made of stone, metal, wood, or some other material for the purpose of protecting the wall from weather.

**CORBEL** A projection of successive level of masonry beyond the wall surface producing a bracket form.

**CORNICE** The projecting member at the top of a wall or roof trim.

**COLUMN** A vertical round shaft that supports, or appears to support, a load.

**CREEPING DAMP** (Sometimes called rising damp) The vertical movement of water through a substance by capillary action. Common on lower levels of masonry buildings.

**CROSS WING** A house form involving two intersecting rectilinear shapes, one recessed.

**CROWN MOLDING** A curved molding used to terminate the trim on cornices, walls, casings and cabinets.

**CURVILINEAR PARAPET** The multiple-curving, ornamental motif on the center of the top of a parapet wall, especially in Mission Style architecture.

**DEAD LOAD** The uniform, fixed weight inherent in any structure (as opposed to LIVE LOAD).

**DECKING** The material used to cover the floor of a porch, balcony or other flat exterior walking surface.

**DENTILS** A classical ornamental molding consisting of a horizontal series of block-like projections thought to have been based on the appearance of rows of teeth.

**DORIC** The simplest of the classical orders.

**DORMER** A projecting gable in a pitched roof with a window or windows on its front vertical side.

**DOUBLE HUNG** A window in which both the upper and lower sash are independently operable in vertical movement within the same frame.

**EAVE** The edge of a roof that projects over the outside wall.

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**ELEVATION** A "head-on" drawing of face of a building or object, without any allowance for the effect of the laws of perspective.

**ENTABLATURE** In classical architecture, the horizontal member immediately above the columns consisting of the architrave, the frieze and the cornice.

**FACADE** The front or principal face of building: any side of a building that faces street or other open space.

**FANLIGHT** A semi-elliptical or semicircular window, usually over a door,

**FASCIA** A flat board with a vertical face that forms the trim along the edge of a flat roof or along the eaves of a pitched roof.

**FEDERAL** A classical American architectural style. Dating from 1780 to the mid-1800's.

**FENESTRATION** The arrangement and design of windows in a building.

**FINIAL** A terminal form at the top of a spire, gate-post, pinnacle, or other point of relative height.

**FLASHING** Metal sheets at the junction of roofs and walls or chimneys used to prevent leaking.

**FLUSH** Being even with or in the same plane or line as.

**FLUTING** A decoration consisting of long, rounded grooves in columns or casings.

**FOOTPRINT** A popular term for the shape of an area within the perimeter of a floor plan.

**FRAME** The part of an encasement of an opening supporting a door or window. Also, a method of building construction employing a skeletal system of several repetitive structural components, as in wood-frame or steel-frame, or the work of constructing such a system.

**FRONTISPIECE** A classical, ornamental projection, including windows, around a major door. Sometimes refers to a wing extending forward from the facade.

**GABLE ROOF** A ridged roof forming a gable at each end. A roof with a single peak.

**GABLE** The upper (usually triangular shaped) terminal part of a wall under the eave of a pitched roof.

**GAMBREL ROOF** A roof with two slopes on each of two sides, the lower steeper than the upper.

**GLAZING** Glass set in windows.

**GREEK REVIVAL** A classical American architectural style, or individual components of that style, generally dating from 1820 to 1860, but also used during later decades in the west. Architectural style, or individual components of that style, generally dating from 1820 to 1860, but also used during later decades in the West.

**HALF-TIMBER** A form of Medieval construction using exposed wood framing with the intervening spaces filled with stucco or masonry. Ornamental trim that reflects the internal structure.

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- HIGH STYLE** Common terminology for the most elaborate and formal versions of major architectural styles.
- HIP ROOF** A roof with sloping ends and sides, usually with four sides terminating in a ridge or point.
- HOOD** A protective, often ornamental cover over doors or windows.
- HUE** Generally, color or a particular shade or tint of a given color.
- IN-KIND** Matching the original material.
- ITALIANATE** An architectural style from the mid-to-late nineteenth century which derived its designs and forms from mansions and villas of the Italian Renaissance.
- JACOBEAN** A seventeenth century English architectural style, revived in America in the early twentieth century, characterized by red brick Wells, and steep, coped, cast concrete gable trim.
- JERKINHEAD** A gable roof with the ends of the gables clipped off to form small hips.
- JOINERY** The hand-crafted intersecting joints in ornamental woodwork; associated with woodwork, eaves and cabinetry.
- LACE WORK** Fine wooden or metal ornamental screens or scrollwork.
- LANCET ARCH** A tall, thin, three-centered or pointed arch surrounding a window opening or vent.
- LINTEL** A supporting beam placed over a door, window or other opening; usually visible and of a contrasting material from the wall surface.
- LIVE LOAD** A moving or inconstant structural load or weight (such as people) that a building's structure carries in addition to its own weight.
- LOGGIA** A covered second-story porch, typically cantilevered and framed by a balustrade. Square posts or turned columns usually support a shed roof.
- MANSARD ROOF** A roof that slopes in two planes, the lower of which is usually steeper. Typical of the French Second Empire style.
- MILL FINISH** The raw, unfinished color and texture of an aluminum or other metal product, such as a window or door frame, as it comes directly from the mill or factory.
- MUNTIN** A small piece of wood or metal in a window sash holding in place and separating one piece of glass from another.
- ONE-OVER-ONE (1/1)** A double-hung window with one pane of glass in the top sash and one pane in the bottom. 2/2 has two panes over two panes. A likewise 4/4, 6/6, 12/9 and other window patterns.
- ORIEL** A projecting corner window supported by brackets.

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- OXIDATION** In rusting or burning, the chemical union of a substance with oxygen.
- PALLADIAN WINDOW** A tri-partite window consisting of a large, central, round headed window flanked by two smaller, rectangular windows.
- PARAPET** A low wall at the edge of a roof, porch, or terrace.
- PATINA** A thin coating or color change resulting from natural oxidation during aging; for example, the changing of copper to a greenish-blue color over time.
- PENDANT** A hanging ornament.
- PERGOLA** An arbor or colonnade with columns or posts supporting open roof timber.
- PIECE-IN** To add a piece or pieces matching the original in order to repair.
- PILASTER** A pier or half-column of shallow depth applied to a wall.
- PINNACLE** A terminal ornament or protecting cap, usually tapered upward to a point or knob and used as a high point of a roof.
- PITCH** The degree of slope or inclination, as in the steepness of a roof.
- PLASTER** A wall finish material, usually made of lime gypsum or cement, sand and water, applied in a plastic state with or without a heavy texture, to exterior or interior surfaces.
- PLINTH BLOCK** A small, slightly projecting block at the bottom of the casing around a door opening.
- PLUMB** The degree to which a wall is perfectly vertical.
- POLYCHROMATIC** Featuring several colors, as opposed to monochromatic or one color.
- PORTAL** A principal entrance, usually recessed and arched.
- PORTE COCHÈRE** An open-walled but covered structure attached to the side of a building through which a carriage or automobile may pass or under which they may park. Also a roof and supporting projection over a driveway near the entrance to a house; later referred to as a carport.
- PRESERVATION** The process of preserving the existing form, character and appearance of a structure through techniques designed to arrest or slow the deterioration of a structure, or to improve structural conditions.
- PROJECTING BAY** Typically a three sided extension from the main facade of a building, containing windows and ornamental elements; sometimes called a "pent" or "slanting" bay or BAY WINDOW.
- QUARREL** A small, diamond-shaped pane of glass, one of many in a window. Associated with English styles.

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**QUOINS** An ornamental element, usually of masonry, on the corners of buildings that expresses the structural interlocking of the corner.

**RAISED PANEL** In wood millwork, a door, cabinet or furniture with beveled panels inset in flat wooden frames. Doors will usually have several raised panels, as opposed to slab or flat panel doors that may have only one panel per door.

**RAFTER** A wooden frame member stretching from the ridge to the eave of the roof.

**RENOVATION** The introduction of new elements to a building to replace old worn parts.

**RESTORATION** To employ treatments aimed at returning a building to its original appearance and condition.

**REHABILITATION** To take corrective measures to make a building usable or livable again.

**RIDGE** The horizontal top line formed by the meeting of two sloping roof planes.

**RIDGE CAP** The wood, tile or metal cap covering the ridge of a roof.

**ROMAN ARCH** A semi-circular or "round" arch, invented by the Romans.

**ROOF CRESTING** A decorative metal element placed along a ridgeline.

**ROOF PITCH** The relative angle of the roof slope.

**SASH** The movable frame holding glass in a window opening.

**SCONCES** Decorative wall fixtures or lamps. Wrought iron sconces are common to the Spanish Colonial and Mediterranean Revival styles.

**SCUPPER** An opening through a wall that allows for roof drainage. Term also refers to the metal funnel which catches runoff water and directs it into the downspout.

**SECOND EMPIRE** An American architectural style from the mid-to-late nineteenth century, employing the Mansard roof and related elements from the reign of Napoleon.

**SEGMENTAL ARCH** A gently curving arch having the shape of the uppermost segment of a circle.

**SHAKE** A thick, wavy, rough, shingle made of wood, used in Ranch Era architecture.

**SHED ROOF** A single sloped roof.

**SHINGLE STYLE** A turn of the century American architectural style characterized by the use of shingles on most wall surfaces, often paired with Colonial Revival ornamentation.

**SIDELIGHTS** Tall, narrow windows with small glass panes flanking a doorway, or picture window.

## Alpine Gateway Historic District Design Guidelines

Draft 3/12/02

### Section J: Glossary

**SOLID CORE** With reference to doors, a slab door made of solid wood rather than several panels with a hollow interior.

**SPINDLEWORK** Delicate ornamentation of turned wood spindles, typically from the Victorian Era, often found on porches and as ornamentation for doorways.

**SQUARE** Forming a right angle.

**STUCCO** Plaster for exterior walls.

**SURROUND** Ornamental trim or casing surrounding a door or window opening.

**TERRA COTTA** Cast and fired clay units, usually larger and more intricate in form and detail than brick.

**THATCH** A Medieval roofing material consisting of matted or woven straw; imitated by undulating wood shingles in Period Revival architecture.

**THREE-POINTED ARCH.** An elliptically shaped arch with its curve established by three perspective points beneath the arch.

**TRANSOM** A window opening over a door.

**TRI-PARTITE** Consisting of three similar, joined components, such as windows or ornament.

**TRUNCATED** Having the top of a hip roof cut off by a flat plane.

**TUDOR ARCH** An English arch which slopes gently upward to a point. Associated with English Revival styles.

**TURRET** A small -tower, sometimes corbelled from the corner of a building and extending above it.

**VENTS** Ventilation openings, pipes or shafts.

**VESTIBULE** A small entrance room or enclosure situated at an exterior entry to a building.

**VIGA** A horizontal roof beam, usually a wood log exposed and extending beyond the plane of a wall or parapet.

**VERANDA** A long, roofed, gallery-like arcade or porch that spans the width of a facade.

**VERNACULAR** Indigenous architecture characteristic of a certain locale.

**WAINSCOT** Wood paneling or some other decorative material that is applied to the lower part of a wall.

**WINGWALL** A non-structural ornamental wall extending out to the side of a building.

## **ALPINE PLANNING COMMISSION AGENDA**

**SUBJECT:** River Meadows Senior Living Phase 4 - Revised Site Plan

**FOR CONSIDERATION ON:** July 7 2015

**PETITIONER:** Patterson Construction

**ACTION REQUESTED BY PETITIONER:** Review and recommend the revised site plan.

**APPLICABLE STATUTE OR ORDINANCE:** Article 3.18 Senior Housing Overlay Zone - Development Code

**PETITION IN COMPLIANCE WITH ORDINANCE:** Yes

### **BACKGROUND INFORMATION:**

The River Meadows Senior Living phase 4 lies within the Senior Housing Overlay zone. The developer is requesting approval of a modification of building pad locations. The proposed revision meets setback requirements for the zone and will match the existing units.

### **STAFF RECOMMENDATION:**

That the Planning Commission review the proposed site plan and make a recommendation to the City Council.



Date: February 25, 2015

By: Jed Muhlestein, P.E. *JMA*  
Assistant City Engineer

**Subject: River Meadows Senior Living Phase 4 – Revised Site Plan  
8 Units on approximately 0.70 Acres**

### **Background**

The Planning Commission and City Council have previously approved the River Meadows Senior Assisted Living Plan which lies within the Senior Housing Overlay Zone. The reason this is coming to Planning Commission and City Council is to request approval for modification of building pad locations. An exhibit is attached showing approved vs revised layout for the building pads.

Due to the alteration of the building pad locations, the rest of the zone requirements were reviewed and are outlined below.

### **Senior Housing Overlay Zone Requirements**

The Senior Housing Overlay Zone requires 2 parking spaces per dwelling and 30 foot front setbacks with 20 foot rear and side yard setbacks. The site plan meets these guidelines.

The architectural character of the proposed units will match the existing units and is attached as an exhibit.

The total landscaped area of the project is 2.84 acres, or 31 percent of the project. The ordinance requires that a minimum of 30% of the total project area be landscaped. The provided landscaping plan is meant to blend in with the existing landscaping.

### **Street System/Parking Areas**

The development plan shows a private street meeting the 20 foot minimum width. Parking lot

lighting is shown at the end of the street which should be sufficient. The existing portion of the development does have lighting in place.

### **Sewer System**

There is an existing 8-inch sewer line in Red Pine Drive that could serve the development.

### **Culinary Water System**

There is an existing 8-inch water line in Red Pine Drive that could serve the development. The location of proposed fire hydrants has been approved by the Fire Marshal.

### **Pressurized Irrigation System**

There is an existing 8-inch pressurized irrigation line in Red Pine Drive that could serve the development.

### **Storm Water Drainage System**

The storm drain design was submitted and approved previously. The drainage from this part of the development flows to Red Pine Drive and is collected there and piped to a detention basin by Dry Creek that serves the entire development for runoff control.

### **General Subdivision Remarks**

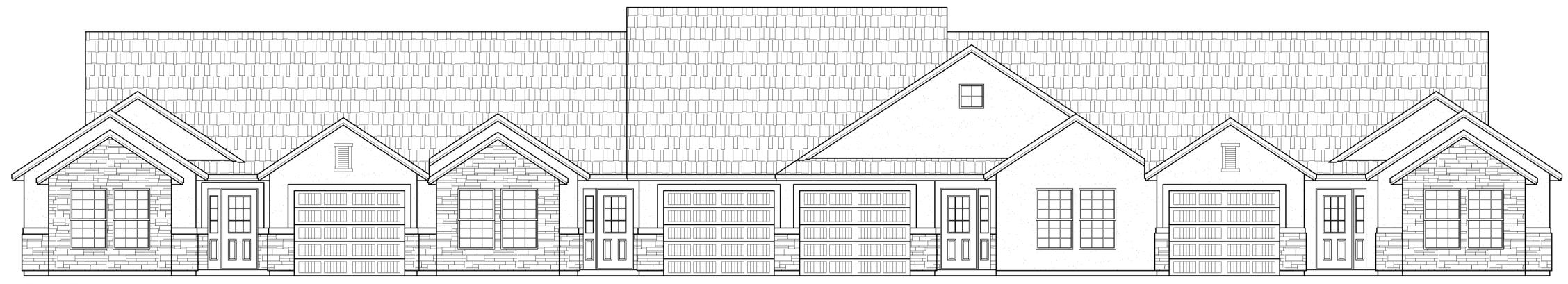
The developer met the water policy when Spring Creek Plat A AMD was recorded.

**We recommend that approval of the proposed development be approved.**

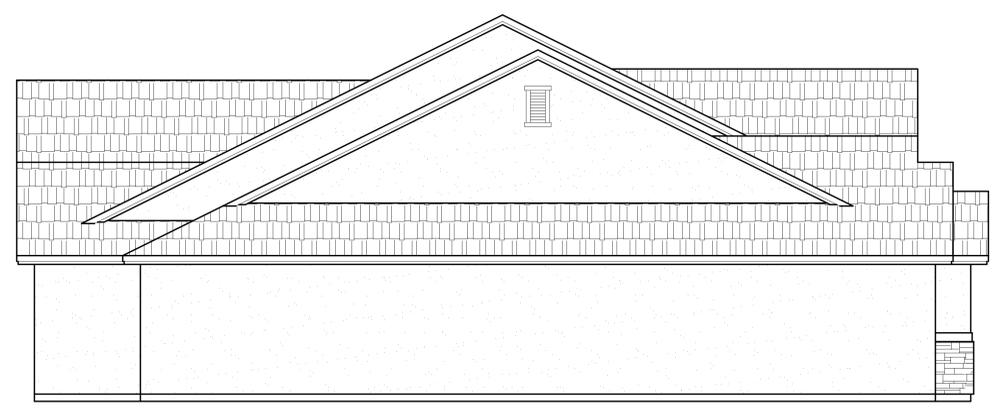


**River Meadows Assisted Living Town Homes**  
 Alpine, UT

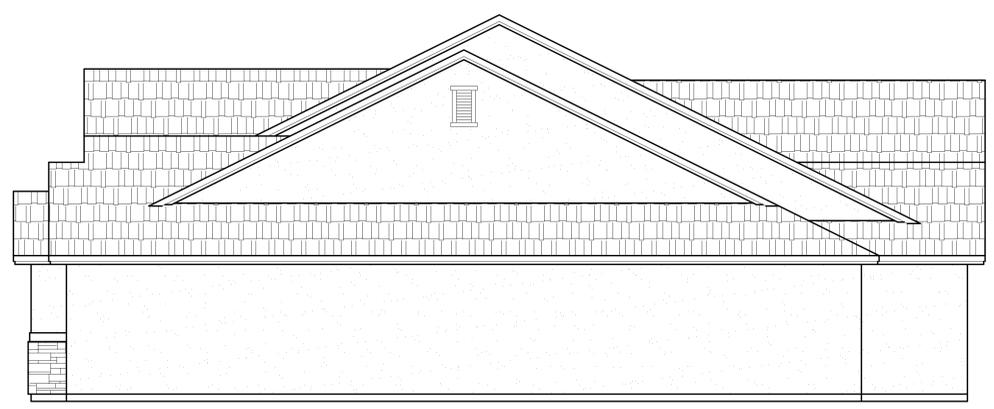
Elevations - Scale 1/4" = 1'  
 Patterson Homes



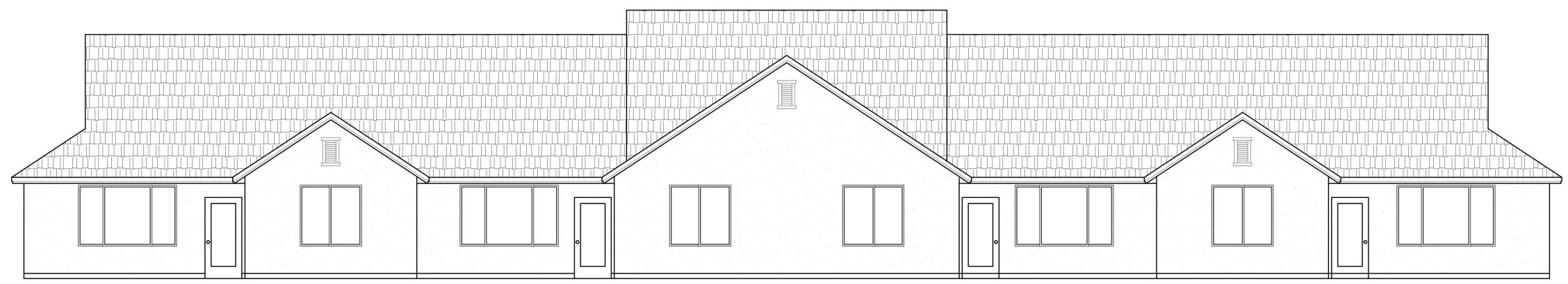
Front Elevation



Left Elevation



Right Elevation



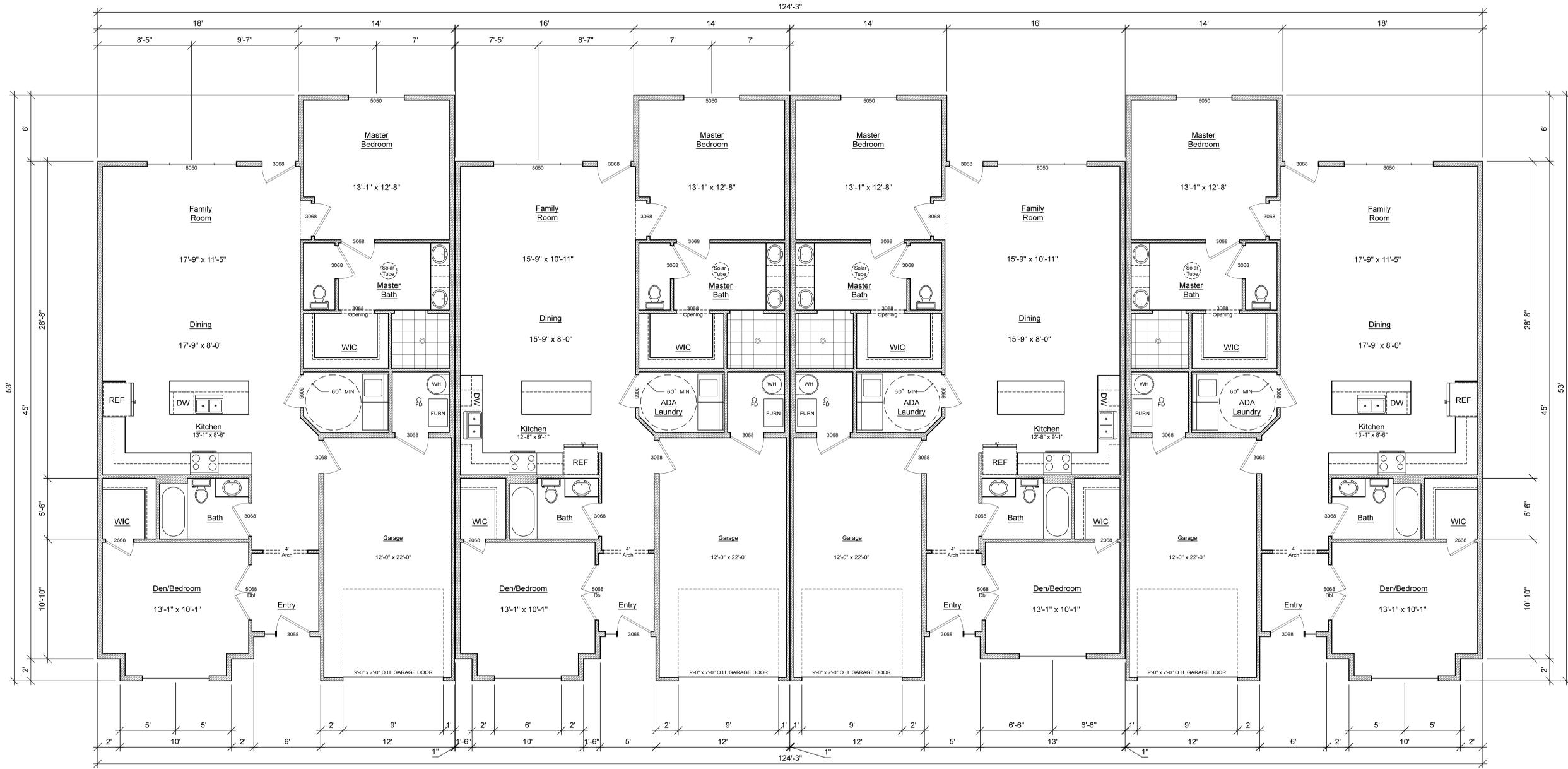
Front Elevation

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Main:	N/A sf
Upper:	N/A sf
Attic:	N/A sf

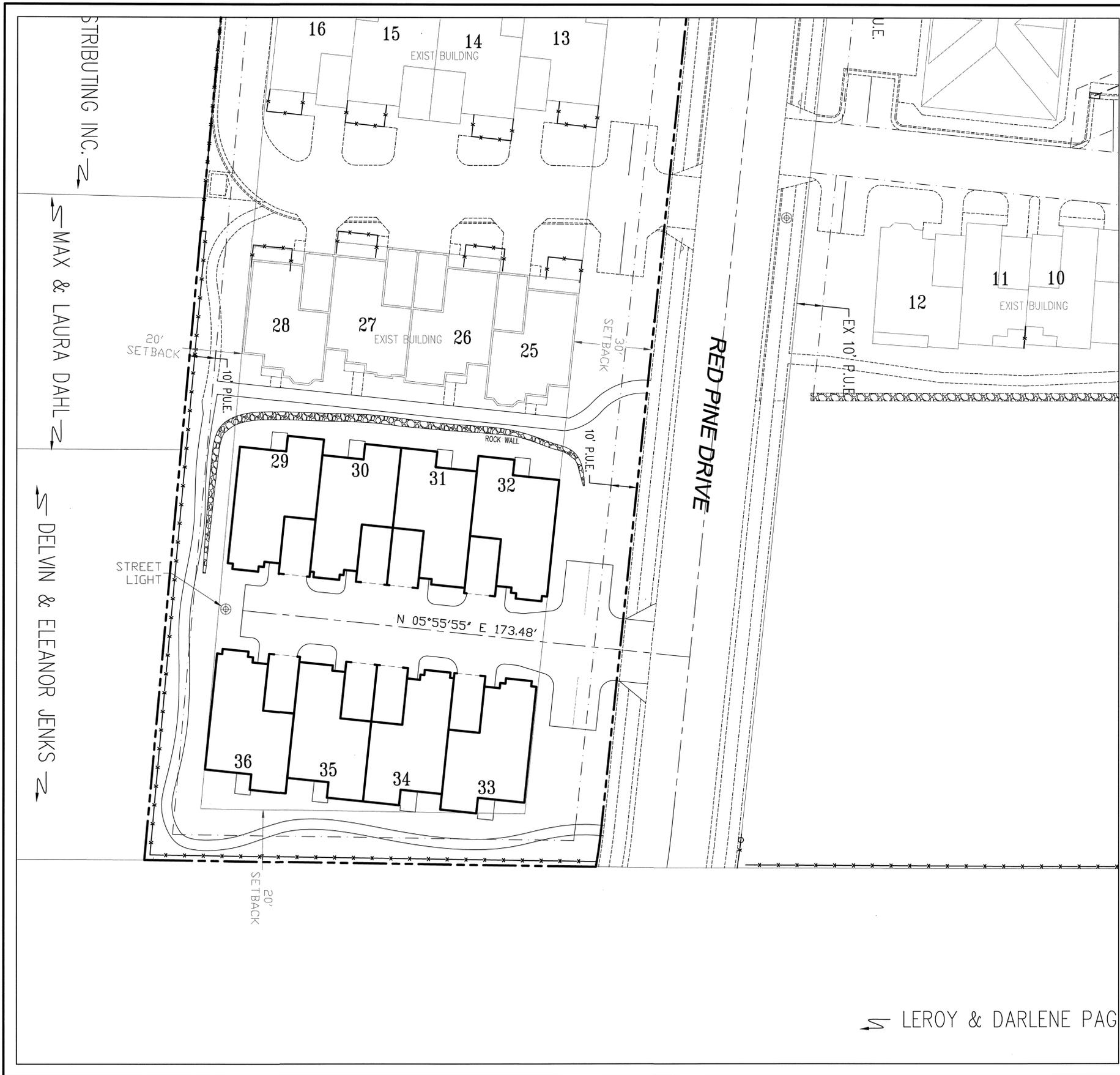
Total: N/A sf

PAGE:

**River Meadows Assisted Living Town Homes**  
**Alpine, UT**  
 Floor Plans - Scale 1/4" = 1'  
 Patterson Homes



Bsmt:	N/A sf
Main:	N/A sf
Upper:	N/A sf
Attic:	N/A sf
<b>Total:</b>	<b>N/A sf</b>



# RIVER MEADOWS SENIOR LIVING PHASE 4

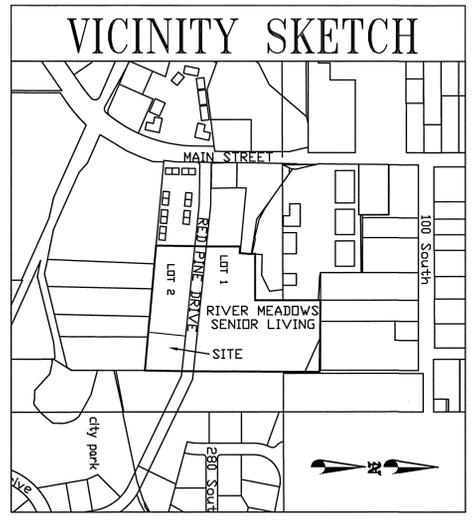
A PORTION OF LOT 2 OF SPRING CREEK SUBDIVISION  
134 E. RED PINE DRIVE  
ALPINE CITY, UTAH COUNTY, UTAH

### SHEET INDEX

C1	SITE PLAN
C2	OVERALL UTILITY PLAN
C3	GRADING & DRAINAGE PLAN
C4	LANDSCAPING PLAN
SW1-3	SWPPP

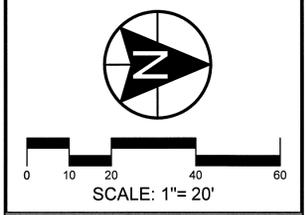
### ADDRESS TABLE

UNIT	ADDRESS
29	134 E. RED PINE DRIVE UNIT 29
30	134 E. RED PINE DRIVE UNIT 30
31	134 E. RED PINE DRIVE UNIT 31
32	134 E. RED PINE DRIVE UNIT 32
33	134 E. RED PINE DRIVE UNIT 33
34	134 E. RED PINE DRIVE UNIT 34
35	134 E. RED PINE DRIVE UNIT 35
36	134 E. RED PINE DRIVE UNIT 36



DEVELOPER  
**RIVER MEADOWS SENIOR LIVING PHASE 4**  
134 EAST RED PINE DRIVE  
ALPINE CITY, UTAH COUNTY, UTAH

DEVELOPER  
**AUTUMN MOUNTAIN, LLC**  
11038 N HIGHLAND BLVD.  
HIGHLAND, UT 84003  
(801) 756-7303



**berg**  
CIVIL ENGINEERING  
11038 N Highland Blvd Suite 400  
Highland UT, 84003  
office (801) 492-1277  
cell (801) 616-1877

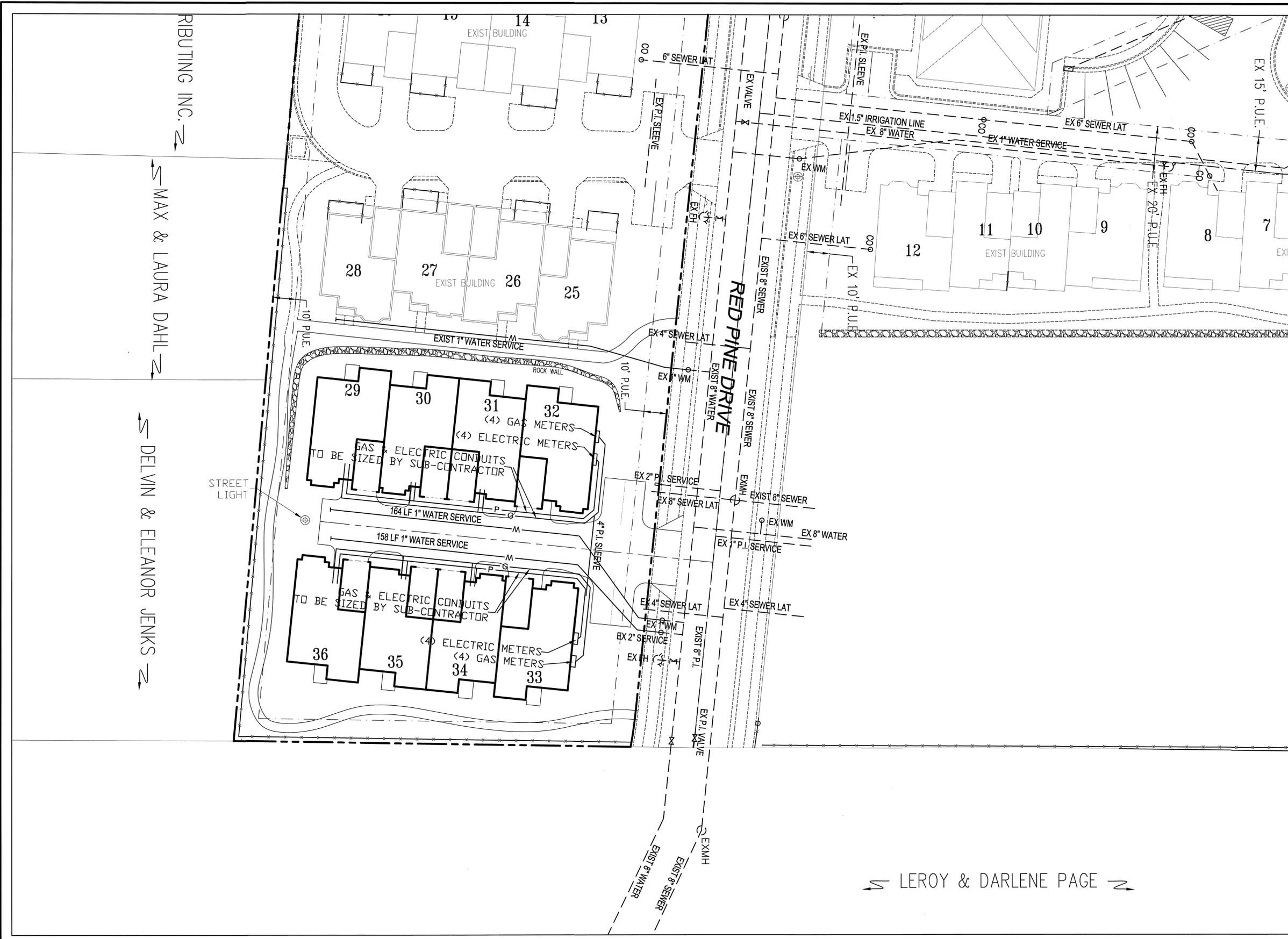
PROJECT STATUS		SEAL
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ACTION	DATE
FINAL	6/16/15

PROJECT  
**RIVER MEADOWS SENIOR LIVING PHASE 4**

DESCRIPTION  
**CONSTRUCTION DRAWINGS**

SHEET NAME	SHEET NUMBER
COVER	<b>C1</b>



RIBUTING INC. ↗

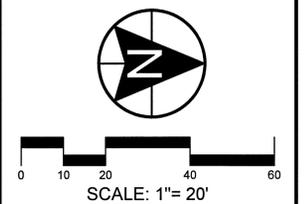
↖ MAX & LAURA DAHL ↗

↖ DELVIN & ELEANOR JENKS ↗

↖ LEROY & DARLENE PAGE ↗

DEVELOPMENT  
**RIVER MEADOWS SENIOR LIVING PHASE 4**  
 134 EAST RED PINE DRIVE  
 ALPINE CITY, UTAH COUNTY, UTAH

DEVELOPER  
**AUTUMN MOUNTAIN, LLC**  
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PROJECT STATUS			SEAL
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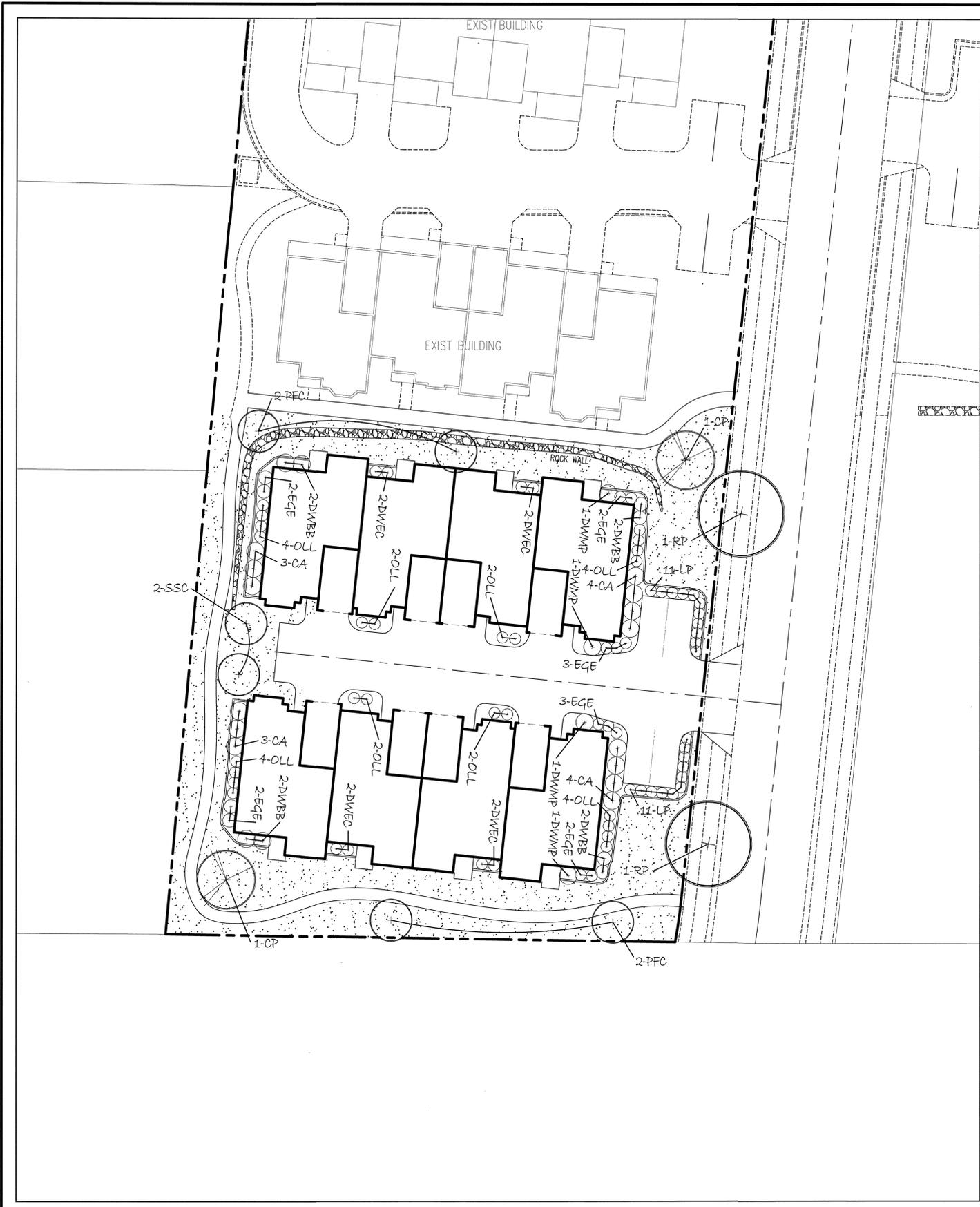
ACTION	DATE
FINAL	6/16/15

PROJECT  
**RIVER MEADOWS SENIOR LIVING PHASE 4**

DESCRIPTION  
**CONSTRUCTION DRAWINGS**  
**OVERALL UTILITY PLAN**

SHEET NAME SHEET NUMBER  
**UTILITY C2**





**PLANT LEGEND**

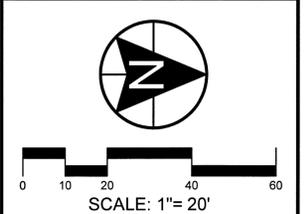
QUANTITY	ABBR.	SCIENTIFIC NAME	COMMON NAME	SIZE	SPACING
SHADE TREES					
2	RP	PYRUS CALLERYANA 'REDSPIRE'	REDSPIRE PEAR	2' CAL	30' O.C.
ORNAMENTAL TREES					
14	CA	POPULUS TREMULA 'ERECTA'	COLUMNAR ASPEN	2' CAL	AS SHOWN
2	CP	PYRUS CALLERANA 'CHANTICLEER'	CHANTICLEER PEAR	2' CAL	AS SHOWN
4	PFC	MALUS 'PRAIRIE FIRE'	PRAIRIE FIRE CRABAPPLE	2' CAL	AS SHOWN
2	SSC	MALUS 'SPRING SNOW'	SPRING SNOW CRABAPPLE	2' CAL	AS SHOWN
MEDIUM AND LARGE SHRUBS					
8	DWBB	EUCONYMUS ALATUS COMPACTA	DWARF BURNING BUSH	5 GAL	5' O.C.
14	EGE	EUCONYMUS FORTUNEI 'EMERALD GAITY'	EMERALD GAITY EUCONYMUS	5 GAL	3' O.C.
4	DWMP	PINUS MUGO MUGUS	DWARF MUGO PINE	3 GAL	5' O.C.
24	OLL	PRUNUS LAUROCERASUS	OTTO LUYKEN LAREL	3 GAL	3' O.C.
8	DWEC	VIBURNUM OPULUS 'NANUM'	DWARF EUROPEAN CRANBERRY	5 GAL	4' O.C.
22	LP	LIGUSTRUM VULGARE 'LODENSE'	LODENSE PRIVET	1 GAL	3' O.C.
GROUNDCOVERS AND LAWN					
			LAWN (SOB)	(SOB)	N.A.

**PLANT NOTES**

- 1) ALL PLANTER BEDS TO BE MULCHED TO A MINIMUM 2" DEPTH.
- 2) AUTOMATIC IRRIGATION SYSTEM TO BE INSTALLED IN ALL LAWN AND SHRUB BED AREAS.
- 3) 6" CONCRETE MOW STRIP TO BE INSTALLED AT PLANTER BEDS AS SHOWN.

DEVELOPMENT  
**RIVER MEADOWS SENIOR LIVING PHASE 4**  
 134 EAST RED PINE DRIVE  
 ALPINE CITY, UTAH COUNTY, UTAH

DEVELOPER  
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PROJECT STATUS			SEAL
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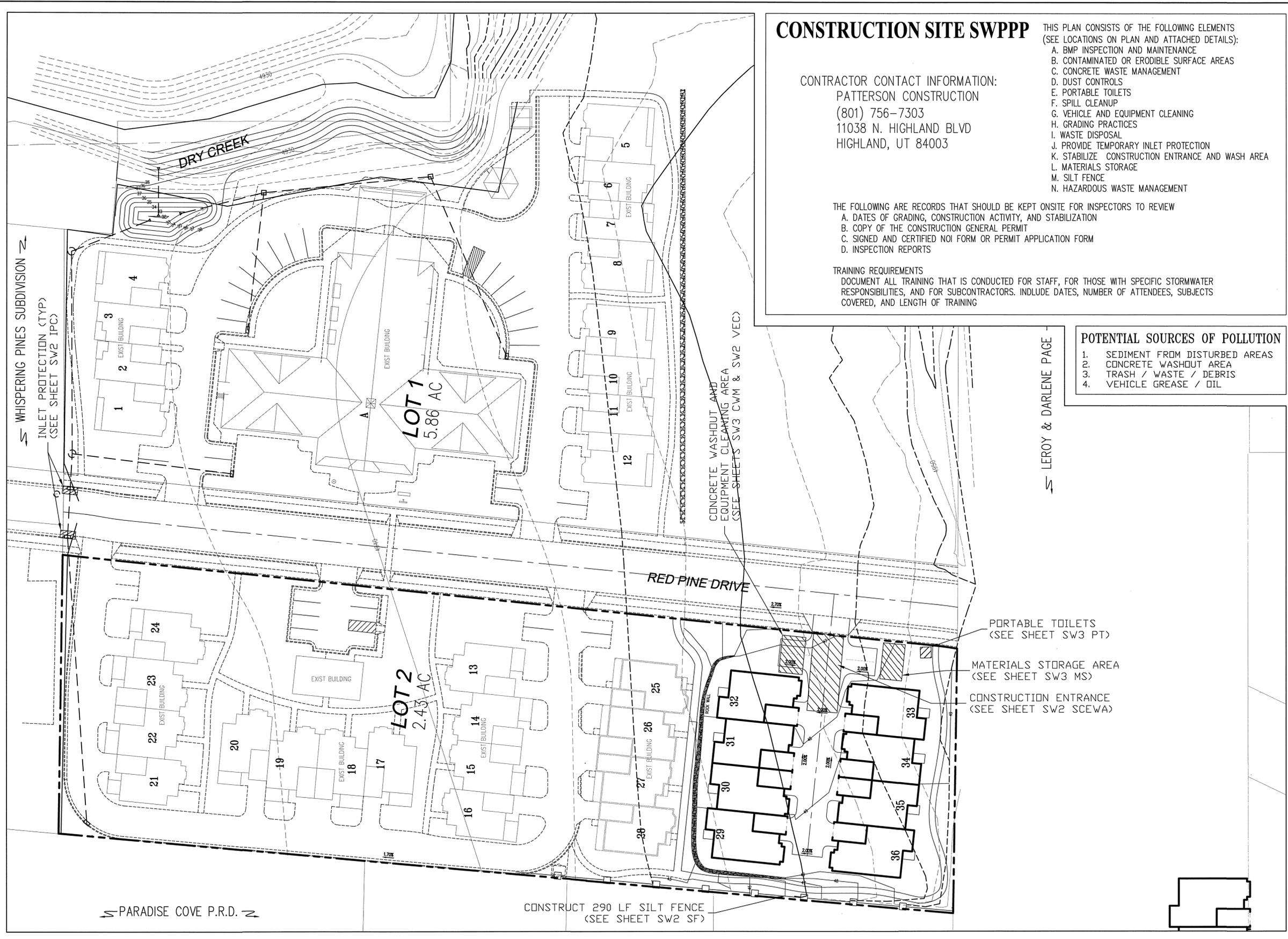
ACTION	DATE
FINAL	6/16/15

PROJECT  
**RIVER MEADOWS SENIOR LIVING PHASE 4**

DESCRIPTION  
**CONSTRUCTION DRAWINGS**  
**LANDSCAPE PLAN**

SHEET NAME      SHEET NUMBER  
**LANDSCAPE      C4**

20150615 river meadows ph 4 site plan/ls 04 landscape.dwg



**CONSTRUCTION SITE SWPPP**

CONTRACTOR CONTACT INFORMATION:  
 PATTERSON CONSTRUCTION  
 (801) 756-7303  
 11038 N. HIGHLAND BLVD  
 HIGHLAND, UT 84003

- THIS PLAN CONSISTS OF THE FOLLOWING ELEMENTS (SEE LOCATIONS ON PLAN AND ATTACHED DETAILS):
- A. BMP INSPECTION AND MAINTENANCE
  - B. CONTAMINATED OR ERODIBLE SURFACE AREAS
  - C. CONCRETE WASTE MANAGEMENT
  - D. DUST CONTROLS
  - E. PORTABLE TOILETS
  - F. SPILL CLEANUP
  - G. VEHICLE AND EQUIPMENT CLEANING
  - H. GRADING PRACTICES
  - I. WASTE DISPOSAL
  - J. PROVIDE TEMPORARY INLET PROTECTION
  - K. STABILIZE CONSTRUCTION ENTRANCE AND WASH AREA
  - L. MATERIALS STORAGE
  - M. SILT FENCE
  - N. HAZARDOUS WASTE MANAGEMENT

THE FOLLOWING ARE RECORDS THAT SHOULD BE KEPT ONSITE FOR INSPECTORS TO REVIEW

- A. DATES OF GRADING, CONSTRUCTION ACTIVITY, AND STABILIZATION
- B. COPY OF THE CONSTRUCTION GENERAL PERMIT
- C. SIGNED AND CERTIFIED NOI FORM OR PERMIT APPLICATION FORM
- D. INSPECTION REPORTS

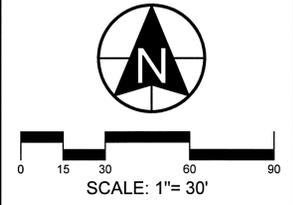
TRAINING REQUIREMENTS  
 DOCUMENT ALL TRAINING THAT IS CONDUCTED FOR STAFF, FOR THOSE WITH SPECIFIC STORMWATER RESPONSIBILITIES, AND FOR SUBCONTRACTORS. INCLUDE DATES, NUMBER OF ATTENDEES, SUBJECTS COVERED, AND LENGTH OF TRAINING

**POTENTIAL SOURCES OF POLLUTION**

1. SEDIMENT FROM DISTURBED AREAS
2. CONCRETE WASHOUT AREA
3. TRASH / WASTE / DEBRIS
4. VEHICLE GREASE / OIL

DEVELOPMENT  
**RIVER MEADOWS SENIOR LIVING PHASE 4**  
 134 EAST RED PINE DRIVE  
 ALPINE CITY, UTAH COUNTY, UTAH

DEVELOPER  
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PROJECT STATUS		SEAL
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ACTION	DATE
FINAL	6/16/15

PROJECT  
**RIVER MEADOWS SENIOR LIVING PHASE 4**

DESCRIPTION  
**STORMWATER POLLUTION PREVENTION PLAN**

SHEET NAME SHEET NUMBER  
**SWPPP SW1**



← LEROY & DARLENE PAGE

CONCRETE WASHOUT AND EQUIPMENT CLEANING AREA (SEE SHEETS SW3 CWM & SW2 VEC)

PORTABLE TOILETS (SEE SHEET SW3 PT)

MATERIALS STORAGE AREA (SEE SHEET SW3 MS)

CONSTRUCTION ENTRANCE (SEE SHEET SW2 SCEWA)

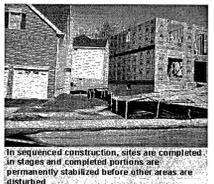
CONSTRUCT 290 LF SILT FENCE (SEE SHEET SW2 SF)

← PARADISE COVE P.R.D. →

← WHISPERING PINES SUBDIVISION →  
 INLET PROTECTION (TYP) (SEE SHEET SW2 IPC)

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**BMP: Construction Sequencing** CS



**DESCRIPTION:**  
Construction sequencing requires creating and following a work schedule that balances the timing of land disturbance activities and the installation of measures to control erosion and sedimentation, in order to reduce on-site erosion and off-site sedimentation. Staging areas can be used to limit contamination and erosion.

**APPROACH:**  
Construction sequencing can be used to plan earthwork and erosion and sediment control (ESC) activities at sites where land disturbances might affect water quality in a receiving water body.

**CONSTRUCTION SEQUENCING SCHEDULES SHOULD, AT A MINIMUM, INCLUDE THE FOLLOWING:**

- Principal development activities
- Which measures should be installed before other activities are started
- Compatibility with the general contract construction schedule

**THE FOLLOWING ACTIVITIES AND FEATURES SHOULD BE INCLUDED (AS THEY APPLY):**

- Construction access—entrance to site, construction routes, areas designated for equipment parking
- Sediment traps and barriers—barricade traps, sediment fences, outlet protection
- Runoff conveyance system—stable stream banks, storm drains, channels, inlet and outlet protection, slope drains
- Land clearing and grading—site preparation (cutting, filling, and grading, sediment traps, barriers, diversion, drains, surface roughening)
- Landscaping and final stabilization—top-soiling, trees and shrubs, permanent seeding, mulching, sodding, riprap

**LIMITATIONS:**  
Weather and other unpredictable variables may affect construction sequence schedules.

**MAINTENANCE:**  
The construction sequence should be followed throughout the project and the written plan should be modified before any changes in construction activities are executed.

**APPLICABLE ACTIVITIES:**

- Manufacturing
- Material Handling
- Vehicle Maintenance
- Construction
- Commercial Activities
- Roadways
- Waste Containment
- Housekeeping Practices

**TARGETED POLLUTANTS:**

- Sediment
- Nutrients
- Heavy Metals
- Toxic Materials
- Oxygen Demanding Substances
- Oil & Grease
- Flammable Materials
- Bacteria & Viruses

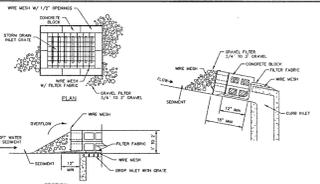
**IMPACT:** High Impact, Medium Impact, Low or Unknown Impact

**IMPLEMENTATION REQUIREMENTS:**

- Capital Costs
- O&M Costs
- Maintenance
- Training

**IMPACT LEVEL:** High, Medium, Low

**BMP: Inlet Protection - Concrete Block** IPC



**OBJECTIVES:**

- Housekeeping Practices
- Contain Waste
- Minimize Disturbed Areas
- Stabilize Disturbed Areas
- Protect Slopes/Channels
- Control Site Perimeter
- Control Internal Erosion

**DESCRIPTION:**  
Concrete block and gravel filter placed over inlet to storm drain system.

**APPLICATION:**  
Construct of inlets in paved or unpaved areas where upgradient area is to be disturbed by construction activities.

**INSTALLATION/APPLICATION CRITERIA:**

- Place wire mesh (with 1/4 inch openings) over the inlet grate extending one foot past the grate in all directions.
- Place concrete blocks around the inlet with openings facing outward. Stack blocks to minimum height of 12 inches and maximum height of 24 inches.
- Place wire mesh around outside of blocks.
- Place gravel (3/4" to 3") around blocks.

**LIMITATIONS:**

- Recommended for maximum drainage area of one acre.
- Excess flows may bypass the inlet requiring down gradient controls.
- Ponding will occur at inlet.

**MAINTENANCE:**

- Inspect inlet protection after every large storm event and at a minimum of once monthly.
- Remove sediment accumulated when it reaches 4 inches in depth.
- Replace filter fabric and clean or replace gravel if clogging is apparent.

**APPROACH:**  
Adapted from Salt Lake County BMP Fact Sheet

**TARGETED POLLUTANTS:**

- Sediment
- Nutrients
- Toxic Materials
- Oil & Grease
- Flammable Materials
- Other Waste

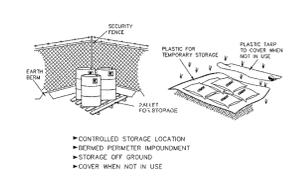
**IMPACT:** High Impact, Medium Impact, Low or Unknown Impact

**IMPLEMENTATION REQUIREMENTS:**

- Capital Costs
- O&M Costs
- Maintenance
- Training

**IMPACT LEVEL:** High, Medium, Low

**BMP: Materials Storage** MS



**OBJECTIVES:**

- Housekeeping Practices
- Contain Waste
- Minimize Disturbed Areas
- Stabilize Disturbed Areas
- Protect Slopes/Channels
- Control Site Perimeter
- Control Internal Erosion

**DESCRIPTION:**  
Controlled storage of on-site materials.

**APPLICATION:**

- Storage of hazardous, toxic, and all chemical substances.
- Any construction site with outside storage of materials.

**INSTALLATION/APPLICATION CRITERIA:**

- Designate a secured area with limited access as the storage location. Ensure no waterways or drainage paths are nearby.
- Construct compacted earthen berm (see Earth Berm Barrier Information Sheet), or similar perimeter containment around storage location for impoundment in the case of spills.
- Ensure all on-site personnel utilize designated storage area. Do not store excessive amounts of material that will not be utilized on site.
- For active use of materials away from the storage area ensure materials are not set directly on the ground and are covered when not in use. Protect storm drainage during use.

**LIMITATIONS:**

- Does not prevent contamination due to mishandling of products.
- Spill Prevention and Response Plan still required.
- Only effective if materials are actively stored in controlled location.

**MAINTENANCE:**

- Inspect daily and repair any damage to perimeter impoundment or security fencing.
- Verify that materials are being correctly stored (i.e. standing upright, in labeled containers, lightly capped) and that no materials are being stored away from the designated location.

**APPROACH:**  
Adapted from Salt Lake City BMP Fact Sheet

**TARGETED POLLUTANTS:**

- Sediment
- Nutrients
- Toxic Materials
- Oil & Grease
- Flammable Materials
- Bacteria & Viruses

**IMPACT:** High Impact, Medium Impact, Low or Unknown Impact

**IMPLEMENTATION REQUIREMENTS:**

- Capital Costs
- O&M Costs
- Maintenance
- Training

**IMPACT LEVEL:** High, Medium, Low

**BMP: Grading Practices** GP



**OBJECTIVES:**

- Housekeeping Practices
- Contain Waste
- Minimize Disturbed Areas
- Stabilize Disturbed Areas
- Protect Slopes/Channels
- Control Site Perimeter
- Control Internal Erosion

**DESCRIPTION:**  
Control soil erosion by minimizing the exposure of bare soil to erosive forces. This is done by 1) limiting the amount of land disturbed at one time in preparation for construction 2) limiting the amount of time between the disturbance of soil and protection or stabilization of disturbed soils, and 3) using grading practices to protect exposed soils susceptible to storm water runoff. Related practices include construction sequencing, preservation of existing vegetation, erosion control practices and sediment control practices.

**APPROACH:**

- Limit the area of disturbance to those areas requiring grading. This preserves existing vegetation and reduces the vulnerability of soil to erosion.
- Based on erosion potential and sediment control measures on the site, establish what areas are to be graded at one time.
- An undisturbed buffer zone containing vegetation at the lowest elevation of a construction site can reduce the transport of sediment off site.
- Initiate soil protection measures during the course of work to minimize the length of time soil is exposed to erosive forces.
- Conduct work in stages so that construction or soil stabilization occurs promptly after disturbance of soil.
- Establish a schedule governing the stabilization of disturbed slopes, both in terms of passage of time since construction and completion of disturbance and in terms of planting season.
- Leaving the surface of the disturbed soil graded in a roughened condition (not smooth) can reduce the quantity and velocity of storm water runoff.
- Prevent storm water runoff from running onto steep slopes from above.
- Avoid long, steep cut or fill slopes that allow runoff water of sufficient quantity or velocity to cut into and erode the slope.

**LIMITATIONS:**  
The specific approach to grading on a particular site depends on the conditions of the site and surrounding land; engineering judgment is required to design the approach best suited for each site.

**MAINTENANCE:**  
Practices may need to vary from the approved plan if erosion problems appear when storm water runoff occurs.

**APPROACH:**  
Adapted from Salt Lake County BMP Fact Sheet

**TARGETED POLLUTANTS:**

- Sediment
- Nutrients
- Heavy Metals
- Toxic Materials
- Oxygen Demanding Substances
- Oil & Grease
- Flammable Materials
- Bacteria & Viruses

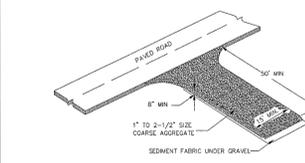
**IMPACT:** High Impact, Medium Impact, Low or Unknown Impact

**IMPLEMENTATION REQUIREMENTS:**

- Capital Costs
- O&M Costs
- Maintenance
- Training

**IMPACT LEVEL:** High, Medium, Low

**BMP: Stabilized Construction Entrance and Wash Area** SCEWA



**OBJECTIVES:**

- Housekeeping Practices
- Contain Waste
- Minimize Disturbed Areas
- Stabilize Disturbed Areas
- Protect Slopes/Channels
- Control Site Perimeter
- Control Internal Erosion

**DESCRIPTION:**  
A stabilized pad of crushed stone located where construction traffic enters or leaves the site from or to paved surface. The area can be used to spray off vehicles before they leave the site.

**APPLICATIONS:**  
At any point of ingress or egress at a construction site where adjacent traveled way is paved. Generally applies to sites over 2 acres unless special conditions exist.

**INSTALLATION/APPLICATION CRITERIA:**

- Clear and grub area and grade to provide maximum slope of 2%.
- Compact subgrade and place filter fabric if desired (recommended for entrances to remain for more than 3 months).
- Place coarse aggregate, 1 to 2-1/2 inches in size, to a minimum depth of 8 inches.
- Provide water to the area that can be used to spray off vehicles as needed to prevent the tracking of mud off of the construction site. This may not be needed during dry periods of work, but is needed when construction is proceeding under wet conditions.
- Provide berming as needed to prevent sediment laden wash water from entering storm water facilities or other water bodies, or leaving the site.

**LIMITATIONS:**

- Requires periodic top dressing with additional stones.
- Should be used in conjunction with street sweeping on adjacent public right-of-way.
- Must be situated such that waste water does not run off site.

**MAINTENANCE:**

- Inspect daily for loss of gravel or sediment buildup.
- Inspect adjacent roadway for sediment deposit and clean by shoveling and sweeping.
- Repair entrance and replace gravel as required to maintain control in good working condition.
- Expand stabilized area as required to accommodate traffic and prevent erosion at driveways.

**APPROACH:**  
Adapted from Salt Lake County BMP Fact Sheet

**TARGETED POLLUTANTS:**

- Sediment
- Nutrients
- Toxic Materials
- Oil & Grease
- Flammable Materials
- Other Waste

**IMPACT:** High Impact, Medium Impact, Low or Unknown Impact

**IMPLEMENTATION REQUIREMENTS:**

- Capital Costs
- O&M Costs
- Maintenance
- Training

**IMPACT LEVEL:** High, Medium, Low

**BMP: Vehicle And Equipment Cleaning** VEC



**OBJECTIVES:**

- Housekeeping Practices
- Contain Waste
- Minimize Disturbed Areas
- Stabilize Disturbed Areas
- Protect Slopes/Channels
- Control Site Perimeter
- Control Internal Erosion

**DESCRIPTION:**  
Prevent or reduce the discharge of pollutants to storm water from vehicle and equipment cleaning by using off-site facilities, washing in designated, contained areas only, eliminating discharges to the storm drain by infiltrating or recycling the wash water, and/or training employees and subcontractors.

**INSTALLATION/APPLICATION:**

- Use off-site commercial washing businesses as much as possible. Washing vehicles and equipment outdoors or in areas where wash water flows onto paved surfaces or into drainage pathways can pollute storm water. If you wash a large number of vehicles or pieces of equipment, consider conducting this work at an off-site commercial business. These businesses are better equipped to handle and dispose of the wash waters properly. Performing this work off-site can also be economical by eliminating the need for a separate washing operation at your site.
- If washing must occur on-site, use designated, bermed wash areas to prevent wash water contact with storm water, creeks, rivers, and other water bodies. The wash area can be sloped for wash water collection and subsequent infiltration into the ground.
- Use as little water as possible to avoid having to install erosion and sediment controls for the wash area. Use phosphate-free biodegradable soaps. Educate employees and subcontractors on pollution prevention measures. Do not permit steam cleaning on-site. Steam cleaning can generate significant pollutant concentrations.

**LIMITATIONS:**

- Even phosphate-free, biodegradable soaps have been shown to be toxic to fish before the soap degrades.
- Sending vehicles/equipment off-site should be done in conjunction with Stabilized Construction Entrance.

**MAINTENANCE:**  
Minimal, some berm repair may be necessary.

**APPROACH:**  
Adapted from Salt Lake County BMP Fact Sheet

**TARGETED POLLUTANTS:**

- Sediment
- Nutrients
- Toxic Materials
- Oil & Grease
- Flammable Materials
- Other Waste

**IMPACT:** High Impact, Medium Impact, Low or Unknown Impact

**IMPLEMENTATION REQUIREMENTS:**

- Capital Costs
- O&M Costs
- Maintenance
- Training

**IMPACT LEVEL:** High, Medium, Low

**BMP: Hazardous Waste Management** HWM



**PROGRAM ELEMENTS:**

- New Development
- Residential
- Commercial Activities
- Industrial Activities
- Municipal Facilities
- Illegal Discharges

**DESCRIPTION:**  
Prevent or reduce the discharge of pollutants to storm water from hazardous waste through proper material use, waste disposal, and training of employees. Another important aspect of this BMP is to insure the use of sub-consultants who are properly licensed and trained.

**APPLICATION:**  
Many of the chemicals used on-site can be hazardous materials which become hazardous waste upon disposal. These wastes may include:

- Paints and solvents; petroleum products such as oils, fuels and greases; herbicides and pesticides; acids for cleaning masonry; and concrete curing compounds.

In addition, sites with existing structures may contain wastes which must be disposed of in accordance with federal, state and local regulations, including:

- Sandblasting grit mixed with lead, cadmium or chromium based paints, asbestos, and PCBs.

**INSTALLATION/APPLICATION CRITERIA:**  
The following steps will help reduce storm water pollution from hazardous wastes:

- Use all of the product before disposing of the container.
- Do not remove the original product label, it contains important safety and disposal information.
- Do not over-apply herbicides and pesticides. Prepare only the amount needed. Follow the recommended usage instructions. Over-application is expensive and environmentally harmful. Apply surface dressings in several smaller applications, as opposed to one large application, to allow time for infiltration and to avoid excess material being carried off-site by runoff. Do not apply these chemicals just before it rains. People applying pesticides must be certified in accordance with federal and state regulations.

**LIMITATIONS:**  
Hazardous waste that cannot be reused or recycled must be disposed of by a licensed hazardous waste collector.

**MAINTENANCE:**  
Inspect hazardous waste receptacles and areas regularly. Arrange for regular hazardous waste collection.

**APPROACH:**  
Adapted from Salt Lake County BMP Fact Sheet

**TARGETED POLLUTANTS:**

- Sediment
- Nutrients
- Heavy Metals
- Toxic Materials
- Oxygen Demanding Substances
- Oil & Grease
- Flammable Materials
- Bacteria & Viruses

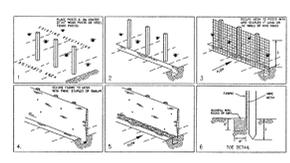
**IMPACT:** High Impact, Medium Impact, Low or Unknown Impact

**IMPLEMENTATION REQUIREMENTS:**

- Capital Costs
- O&M Costs
- Regulatory
- Training
- Staffing
- Administrative

**IMPACT LEVEL:** High, Medium, Low

**BMP: Silt Fence** SF



**OBJECTIVES:**

- Housekeeping Practices
- Contain Waste
- Minimize Disturbed Areas
- Stabilize Disturbed Areas
- Protect Slopes/Channels
- Control Site Perimeter
- Control Internal Erosion

**DESCRIPTION:**  
A temporary sediment barrier consisting of entrenched filter fabric stretched across and secured to supporting posts.

**APPLICATION:**

- Perimeter control: place barrier at downgradient limits of disturbance
- Sediment barrier: place barrier at toe of slope or soil stockpile
- Protection of existing waterways: place barrier near top of stream bank
- Inlet protection: place fence surrounding catchbasins

**INSTALLATION/APPLICATION CRITERIA:**

- Place posts 6 feet apart on center along contour (or use preassembled unit) and drive 2 feet minimum into ground. Excavate an anchor trench immediately upgradient of posts.
- Secure wire mesh (14 gage min. With 6 inch openings) to upslope side of posts. Attach with heavy duty 1 inch long wire staples, tie wires or hog rings.
- Cut fabric to required width, unroll along length of barrier and drape over barrier. Secure fabric to mesh with twine, staples, or similar, with trailing edge extending into anchor trench.
- Backfill trench over filter fabric to anchor.

**LIMITATIONS:**

- Recommended maximum drainage area of 0.5 acre per 100 feet of fence
- Recommended maximum upgradient slope length of 150 feet
- Recommended maximum uphill grade of 2:1 (50%)
- Recommended maximum flow rate of 0.5 cfs
- Ponding should not be allowed behind fence

**MAINTENANCE:**

- Inspect immediately after any rainfall and at least daily during prolonged rainfall.
- Look for runoff bypassing ends of barriers or undercutting barriers.
- Repair or replace damaged areas of the barrier and remove accumulated sediment.
- Reanchor fence as necessary to prevent shortcutting.
- Remove accumulated sediment when it reaches 1/2 the height of the fence.

**APPROACH:**  
Adapted from Salt Lake County BMP Fact Sheet

**TARGETED POLLUTANTS:**

- Sediment
- Nutrients
- Toxic Materials
- Oil & Grease
- Flammable Materials
- Other Waste

**IMPACT:** High Impact, Medium Impact, Low or Unknown Impact

**IMPLEMENTATION REQUIREMENTS:**

- Capital Costs
- O&M Costs
- Maintenance
- Training

**IMPACT LEVEL:** High, Medium, Low

DEVELOPMENT

# RIVER MEADOWS SENIOR LIVING PHASE 4

134 EAST RED PINE DRIVE  
ALPINE CITY, UTAH COUNTY, UTAH

DEVELOPER

## AUTUMN MOUNTAIN, LLC

11038 N HIGHLAND BLVD.  
HIGHLAND, UT 84003  
(801) 756-7303

PROJECT STATUS	SEAL
NO.	DATE
1	
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ACTION: FINAL DATE: 6/16/15

**berg**

CIVIL ENGINEERING  
11038 N Highland Blvd Suite 400  
Highland Ut, 84003  
office (801) 492-1277  
cell (801) 616-1677

PROJECT

# RIVER MEADOWS SENIOR LIVING PHASE 4

DESCRIPTION

## STORMWATER POLLUTION PREVENTION PLAN

SHEET NAME: SWPPP SHEET NUMBER: SW2

**BMP: BMP Inspection and Maintenance** BMPIM



**APPLICATIONS**

- Manufacturing
- Material Handling
- Vehicle Maintenance
- Construction
- Commercial Activities
- Roadways
- Waste Containment
- Housekeeping Practices

**DESCRIPTION:**  
Inspect and maintain all structural BMP's (both existing and new) on a routine basis to remove pollutants from entering storm drain inlets. This includes the establishment of a schedule for inspections and maintenance.

**APPROACH:**  
Regular maintenance of all structural BMP's is necessary to ensure their proper functionality.

- > Annual Inspections.
- > Prioritize maintenance to clean, maintain, and repair or replace structures in areas beginning with the highest pollutant loading.
- > Clean structural BMP's in high pollutant areas just before the wet season to remove sediments and debris accumulated during the summer and fall.
- > Keep accurate logs of what structures were maintained and when they were maintained. Record the amount of waste collected.

**LIMITATIONS:**  
Availability of trained staff

**TARGETED POLLUTANTS**

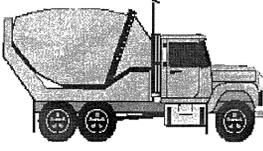
- Sediment
- Nutrients
- Heavy Metals
- Toxic Materials
- Oxygen Demanding Substances
- Oil & Grease
- Floatable Materials
- Bacteria & Viruses

**IMPLEMENTATION REQUIREMENTS**

- Capital Costs
- O&M Costs
- Maintenance
- Staffing
- Training
- Administrative

■ High  Medium  Low

**BMP: Concrete Waste Management** CWM



**OBJECTIVES**

- Housekeeping Practices
- Contain Waste
- Minimize Disturbed Areas
- Stabilize Disturbed Areas
- Protect Slopes/Channels
- Control Site Perimeter
- Control Internal Erosion

**DESCRIPTION:**  
Prevent or reduce the discharge of pollutants to storm water from concrete waste by conducting washout off-site, performing on-site washout in a designated area, and training employees and subcontractors.

**APPLICATIONS:**  
This technique is applicable to all types of sites.

**INSTALLATION/APPLICATION CRITERIA:**

- Store dry and wet materials under cover, away from drainage areas.
- Avoid mixing excess amounts of fresh concrete or cement on-site.
- Perform washout of concrete trucks off-site or in designated areas only.
- Do not wash out concrete trucks into storm drains, open ditches, streets, or streams.
- Do not allow excess concrete to be dumped on-site, except in designated areas.
- When washing concrete to remove fine particles and expose the aggregate, avoid creating runoff by draining the water within a bermed or level area. (See Earth Berm Barrier Information Sheet.)
- Train employees and subcontractors in proper concrete waste management.

**LIMITATIONS:**  
Off-site washout of concrete wastes may not always be possible.

**MAINTENANCE:**

- Inspect subcontractors to ensure that concrete wastes are being properly managed.
- If using a temporary pit, dispose hardened concrete on a regular basis.

**TARGETED POLLUTANTS**

- Sediment
- Nutrients
- Toxic Materials
- Oil & Grease
- Floatable Materials
- Other Waste

**IMPLEMENTATION REQUIREMENTS**

- Capital Costs
- O&M Costs
- Maintenance
- Training

■ High  Medium  Low

**BMP: Dust Controls** DC



**OBJECTIVES**

- Housekeeping Practices
- Contain Waste
- Minimize Disturbed Areas
- Stabilize Disturbed Areas
- Protect Slopes/Channels
- Control Site Perimeter
- Control Internal Erosion

**DESCRIPTION:**  
Dust control measures are used to stabilize soil from wind erosion, and reduce dust by construction activities.

**APPLICATION:**  
Dust control is useful in any process area, loading and unloading area, material handling areas, and transfer areas where dust is generated. Street sweeping is limited to areas that are paved.

**INSTALLATION/APPLICATION CRITERIA:**

- Two kinds of street sweepers are common: brush and vacuum. Vacuum sweepers are more efficient and work best when the area is dry.
- Mechanical equipment should be operated according to the manufacturers' recommendations and should be inspected regularly.
- Water may be sprayed on the ground surface to moisten dry soils, making it less susceptible to wind erosion.

**LIMITATIONS:**  
Street sweeping is labor and equipment intensive and may not be effective for all pollutants.

**MAINTENANCE:**  
If excess water results from water spraying, dust-contaminated waters should not be allowed to run off site. Areas may need to be resprayed to keep dust from spreading.

**TARGETED POLLUTANTS**

- Sediment
- Nutrients
- Toxic Materials
- Oil & Grease
- Floatable Materials
- Other Waste

**IMPLEMENTATION REQUIREMENTS**

- Capital Costs
- O&M Costs
- Maintenance
- Training

■ High  Medium  Low

**BMP: Contaminated or Erodible Surface Areas** CESA



**OBJECTIVES**

- Housekeeping Practices
- Contain Waste
- Minimize Disturbed Areas
- Stabilize Disturbed Areas
- Protect Slopes/Channels
- Control Site Perimeter
- Control Internal Erosion

**DESCRIPTION:**  
Prevent or reduce the discharge of pollutants to storm water from contaminated or erodible surface areas by leaving as much vegetation on-site as possible, minimizing soil exposure time, stabilizing exposed soils, and preventing storm water runoff and runoff.

**APPLICATION:**  
This BMP addresses soils which are not so contaminated as to exceed criteria but the soil is eroding and carrying pollutants off in the storm water.

**INSTALLATION/APPLICATION CRITERIA:**  
Contaminated or erodible surface areas can be controlled by:

- Preservation of natural vegetation
- Re-vegetation
- Chemical stabilization
- Removal of contaminated soils
- Geosynthetics.

**LIMITATIONS:**  
Disadvantages of preserving natural vegetation or re-vegetating include:

- Requires substantial planning to preserve and maintain the existing vegetation.
- May not be cost-effective with high land costs.
- Lack of rainfall and/or poor soils may limit the success of re-vegetated areas.

Disadvantages of chemical stabilization include:

- Creation of impervious surfaces.
- May cause harmful effects on water quality.
- Is usually more expensive than vegetative cover.

**MAINTENANCE:**  
Maintenance should be minimal, except possibly if irrigation of vegetation is necessary.

**TARGETED POLLUTANTS**

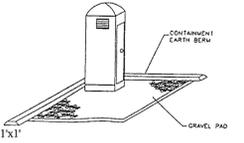
- Sediment
- Nutrients
- Toxic Materials
- Oil & Grease
- Floatable Materials
- Other Waste

**IMPLEMENTATION REQUIREMENTS**

- Capital Costs
- O&M Costs
- Maintenance
- Training

■ High  Medium  Low

**BMP: Portable Toilets** PT



**OBJECTIVES**

- Housekeeping Practices
- Contain Waste
- Minimize Disturbed Areas
- Stabilize Disturbed Areas
- Protect Slopes/Channels
- Control Site Perimeter
- Control Internal Erosion

**DESCRIPTION:**  
Temporary on-site sanitary facilities for construction personnel.

**APPLICATION:**  
All sites with no permanent sanitary facilities or where permanent facility is too far from activities.

**INSTALLATION/APPLICATION CRITERIA:**

- Locate portable toilets in convenient locations throughout the site.
- Prepare level, gravel surface and provide clear access to the toilets for servicing and for on-site personnel.
- Construct earth berm perimeter (See Earth Berm Barrier Information Sheet), control for spill/protection leak.
- Stake toilets to prevent them from tipping.

**LIMITATIONS:**  
No limitations.

**MAINTENANCE:**

- Portable toilets should be maintained in good working order by licensed service with daily observation for leak detection.
- Regular waste collection should be arranged with licensed service.
- All waste should be deposited in sanitary sewer system for treatment with appropriate agency approval.

**TARGETED POLLUTANTS**

- Sediment
- Nutrients
- Toxic Materials
- Oil & Grease
- Floatable Materials
- Other Waste

**IMPLEMENTATION REQUIREMENTS**

- Capital Costs
- O&M Costs
- Maintenance
- Training

■ High  Medium  Low

**BMP: Spill Clean-Up** SCU



**OBJECTIVES**

- Housekeeping Practices
- Contain Waste
- Minimize Disturbed Areas
- Stabilize Disturbed Areas
- Protect Slopes/Channels
- Control Site Perimeter
- Control Internal Erosion

**DESCRIPTION:**  
Practices to clean-up leakage/spillage of on-site materials that may be harmful to receiving waters.

**APPLICATION:**  
All sites.

**GENERAL:**

- Store controlled materials within a storage area.
- Educate personnel on prevention and clean-up techniques.
- Designate an Emergency Coordinator responsible for employing preventative practices and for providing spill response.
- Maintain a supply of clean-up equipment on-site and post a list of local response agencies with phone numbers.

**METHODS:**

- Clean-up spills/leaks immediately and remediate cause.
- Use as little water as possible. NEVER HOSE DOWN OR BURY SPILL CONTAMINATED MATERIAL.
- Use rags or absorbent material for clean-up. Excavate contaminated soils.
- Dispose of clean-up material and soil as hazardous waste.
- Document all spills with date, location, substance, volume, actions taken and other pertinent data.
- Contact local Fire Department and State Division of Environmental Response and Remediation (Phone #801-536-4100) for any spill of reportable quantity.

**TARGETED POLLUTANTS**

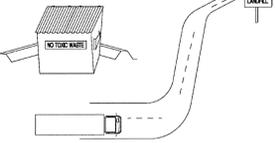
- Sediment
- Nutrients
- Toxic Materials
- Oil & Grease
- Floatable Materials
- Other Waste

**IMPLEMENTATION REQUIREMENTS**

- Capital Costs
- O&M Costs
- Maintenance
- Training

■ High  Medium  Low

**BMP: Waste Disposal** WD



**OBJECTIVES**

- Housekeeping Practices
- Contain Waste
- Minimize Disturbed Areas
- Stabilize Disturbed Areas
- Protect Slopes/Channels
- Control Site Perimeter
- Control Internal Erosion

**DESCRIPTION:**  
Controlled storage and disposal of solid waste generated by construction activities.

**APPLICATION:**  
All construction sites.

**INSTALLATION:**

- Designate one or several waste collection areas with easy access for construction vehicles and personnel. Ensure no waterways or storm drainage inlets are located near the waste collection areas.
- Construct compacted earthen berm (See Earth Berm Barrier BMP Fact Sheet), or similar perimeter containment around collection area for impoundment in the case of spills and to trap any windblown trash.
- Use water tight containers with covers to remain closed when not in use. Provide separate containers for different waste types where appropriate and label clearly.
- Ensure all on site personnel are aware of and utilize designated waste collection area properly and for intended use only (e.g. oil toxic, hazardous, or recyclable materials shall be properly disposed of separately from general construction waste).
- Arrange for periodic pickup, transfer and disposal of collected waste at an authorized disposal location. Include regular Porto-potty service in waste management activities.

**LIMITATIONS:**  
On-site personnel are responsible for correct disposal of waste.

**MAINTENANCE:**

- Discuss waste management procedures at progress meetings.
- Collect site trash daily and deposit in covered containers at designated collection areas.
- Check containers for leakage or inadequate covers and replace as needed.
- Randomly check disposed materials for any unauthorized waste (e.g. toxic materials).
- During daily site inspections check that waste is not being incorrectly disposed of on-site (e.g. burial, burning, surface discharge, discharge to storm drain).

**TARGETED POLLUTANTS**

- Sediment
- Nutrients
- Toxic Materials
- Oil & Grease
- Floatable Materials
- Other Waste

**IMPLEMENTATION REQUIREMENTS**

- Capital Costs
- O&M Costs
- Maintenance
- Training

■ High  Medium  Low

**BMP: Catch Basin Cleaning** CBC



**PROGRAM ELEMENTS**

- New Development
- Residential
- Commercial Activities
- Industrial Activities
- Storage Facilities
- Illegal Discharges

**DESCRIPTION:**  
Maintain catch basin and stormwater inlets on a regular basis to remove pollutants, reduce high pollutant concentrations during the first flush of storms, prevent clogging of the downstream conveyance system, and restore the catch basin' sediment trapping capacity. A catch basin is distinguished from a stormwater inlet by having at its base a sediment sump designed to catch and retain sediments below the overflow point. This information sheet focuses on the cleaning of accumulated sediments from catch basins.

**APPROACH:**  
Regular maintenance of catch basins and inlets is necessary to ensure their proper functioning. Clogged catch basins are not only useless but may act as a source of sediments and pollutants. In general, the key to effective catch basins are:

- At least annual inspections.
- Prioritize maintenance to clean catch basins and inlets in areas with the highest pollutant loading.
- Clean catch basins in high pollutant load areas just before the wet season to remove sediments and debris accumulated during the summer.
- Keep accurate logs of the number of catch basins cleaned.
- Record the amount of waste collected.

**LIMITATIONS:**  
There are no major limitations to this best management practice.

**MAINTENANCE:**  
Regular maintenance of public and private catch basins and inlets is necessary to ensure their proper functioning. Clogged catch basins are not only useless but may act as a source of sediments and pollutants. In general, the keys to effective catch basins are:

- Annual/monthly inspection of public and private facilities to ensure structural integrity, a clean sump, and a stenciling of catch basins and inlets.
- Keep logs of the number of catch basins cleaned.
- Record the amount of waste collected.

**TARGETED POLLUTANTS**

- Sediment
- Nutrients
- Heavy Metals
- Toxic Materials
- Oxygen Demanding Substances
- Oil & Grease
- Floatable Materials
- Bacteria & Viruses

**IMPLEMENTATION REQUIREMENTS**

- Capital Costs
- O&M Costs
- Regulatory
- Training
- Staffing
- Administrative

■ High  Medium  Low

DEVELOPMENT

# RIVER MEADOWS SENIOR LIVING PHASE 4

134 EAST RED PINE DRIVE  
ALPINE CITY, UTAH COUNTY, UTAH

DEVELOPER

## AUTUMN MOUNTAIN, LLC

11038 N HIGHLAND BLVD.  
HIGHLAND, UT 84003  
(801) 756-7303



**BERG**  
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Highland Ut, 84003  
office (801) 492-1277  
cell (801) 616-1677

PROJECT STATUS		SEAL
NO.	DATE	DESCRIPTION
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ACTION DATE

FINAL 6/16/15

PROJECT

# RIVER MEADOWS SENIOR LIVING PHASE 4

DESCRIPTION

## STORMWATER POLLUTION PREVENTION PLAN

SHEET NAME SHEET NUMBER

SWPPP SW/3

PUBS18-River Meadows High 4 - site plan SW/3 - 07-2015

## **ALPINE PLANNING COMMISSION AGENDA**

**SUBJECT: River Meadows PRD Plat Amendment**

**FOR CONSIDERATION ON: July 7 2015**

**PETITIONER: Patterson Construction**

**ACTION REQUESTED BY PETITIONER: Review and recommend approval of the amended plat.**

**APPLICABLE STATUTE OR ORDINANCE: 10-9a-608 Utah Code Annotated**

**PETITION IN COMPLIANCE WITH ORDINANCE: Yes**

### **BACKGROUND INFORMATION:**

The River Meadows PRD is an approved subdivision with 24 senior housing unit. During foundation staking of the final four units, it was noted that two of the units fell within the flood plain. The developer has adjusted lot lines out of the flood plain and is seeking approval for a plat amendment which will affect the common area.

### **STAFF RECOMMENDATION:**

That the Planning Commission review the proposed plat amendment and make a recommendation to the City Council.



Date: June 29, 2015

By: Jed Muhlestein, P.E. *JM*  
Assistant City Engineer

**Subject: River Meadows PRD – Lot Line Adjustment/Plat Amendment**

**Background**

The River Meadows PRD is an approved subdivision with 24 senior housing units. Twenty of the twenty-four units have been built. During foundation staking of the final four units it was noted that the staking for the foundations was within close proximity to Dry Creek. Upon closer inspection it was discovered that two of the units fell within the flood plain. The developer has adjusted lot lines out of the flood plain and is seeking approval for a plat amendment. A plat amendment is required because the lot line adjustment affects common area, which is owned equally by all owners within the development. Therefore, all need to sign off on the adjustment/amended plat.

Due to the need for a plat amendment, the rest of the zone requirements were reviewed and are outlined below.

**Senior Housing Overlay Zone Requirements**

The Senior Housing Overlay Zone requires 2 parking spaces per dwelling and 30 foot front setbacks (from a public right-of-way) with 20 foot rear and side yard setbacks. The site plan meets these guidelines.

The total landscaped area of the project is 1.35 acres, or 43 percent of the project. The ordinance requires that a minimum of 30% of the total project area be landscaped. The provided landscaping plan is meant to blend in with the existing landscaping. Most of the landscaping is complete at this point.

**Street System/Parking Areas**

The development plan shows a private street meeting the 20 foot minimum width. Parking lot

lighting is shown at the end of the street which should be sufficient. Lighting is currently installed.

### **Sewer System**

The development is currently connected to the sewer system. Sewer laterals were installed for the previous building layout design. Two of the four sewer laterals previously installed will be capped and abandoned and two new laterals will be installed.

### **Culinary Water System**

Similar to the sewer, water meters were installed for the previous building design. Two of the four water meters previously installed will be capped and abandoned and two new water laterals and meters will be installed. The location of proposed fire hydrants has been approved by the Fire Marshal. They are installed.

### **Pressurized Irrigation System**

The secondary water system connections mirror the same scenario as the water and sewer. Two will be capped and abandoned; two new ones will be installed.

### **Storm Water Drainage System**

The existing storm drain design consists of catch basins which route the runoff to an existing detention basin near lot 21. The detention basin will need to be graded and reshaped to accommodate the changing location of the building pads. The submitted design shows grading that preserves the original storage volume of the basin.

**We recommend that approval of the proposed plat amendment be granted.**

**NOTE**  
INDIVIDUAL HOME SEWER EJECTOR PUMPS REQUIRED FOR UNITS 15-24 IF BASEMENT IS SEWERED.

**NOTE**  
ALL COMMON AREAS AND LIMITED COMMON AREAS ARE PUBLIC UTILITY AND DRAINAGE EASEMENTS.

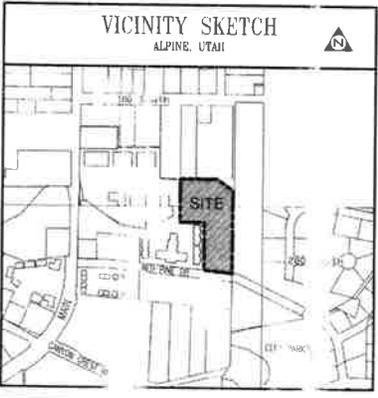
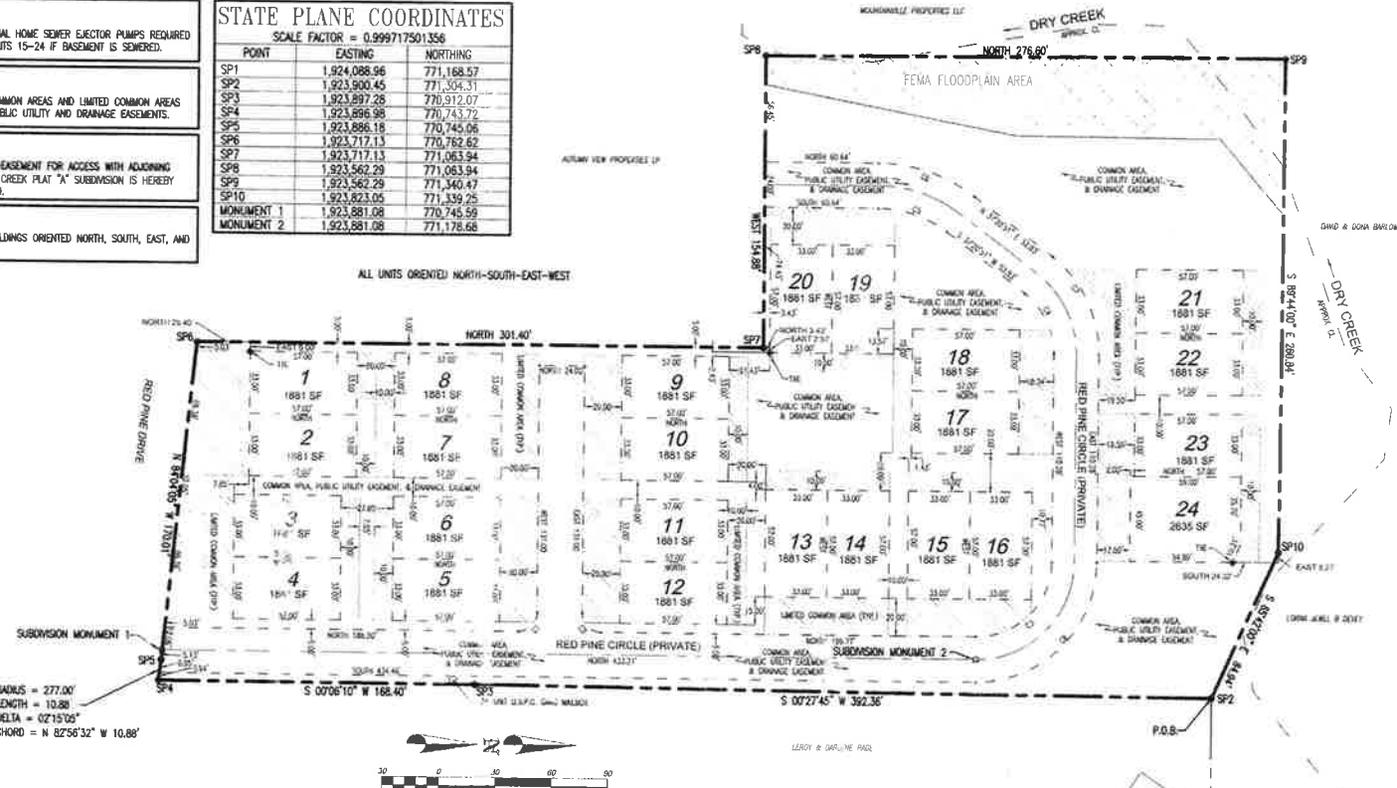
**NOTE**  
CROSS-EASEMENT FOR ACCESS WITH ADJOINING SPRING CREEK PLAT "X" SUBDIVISION IS HEREBY GRANTED.

**NOTE**  
ALL BUILDINGS ORIENTED NORTH, SOUTH, EAST, AND WEST.

**STATE PLANE COORDINATES**  
SCALE FACTOR = 0.999717501356

POINT	EASTING	NORTHING
SP1	1,924,086.96	771,168.57
SP2	1,923,900.45	771,304.31
SP3	1,923,897.28	770,912.07
SP4	1,923,696.98	770,743.72
SP5	1,923,886.18	770,745.06
SP6	1,923,717.13	770,762.62
SP7	1,923,717.13	771,063.94
SP8	1,923,562.29	771,063.94
SP9	1,923,562.29	771,340.47
SP10	1,923,823.05	771,339.25
MONUMENT 1	1,923,881.08	770,745.59
MONUMENT 2	1,923,881.08	771,178.68

ALL UNITS ORIENTED NORTH-SOUTH-EAST-WEST



**ADDRESS TABLE**

UNIT 1	201 EAST RED PINE DRIVE UNIT 1
UNIT 2	201 EAST RED PINE DRIVE UNIT 2
UNIT 3	201 EAST RED PINE DRIVE UNIT 3
UNIT 4	201 EAST RED PINE DRIVE UNIT 4
UNIT 5	201 EAST RED PINE DRIVE UNIT 5
UNIT 6	201 EAST RED PINE DRIVE UNIT 6
UNIT 7	201 EAST RED PINE DRIVE UNIT 7
UNIT 8	201 EAST RED PINE DRIVE UNIT 8
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UNIT 15	201 EAST RED PINE DRIVE UNIT 15
UNIT 16	201 EAST RED PINE DRIVE UNIT 16
UNIT 17	201 EAST RED PINE DRIVE UNIT 17
UNIT 18	201 EAST RED PINE DRIVE UNIT 18
UNIT 19	201 EAST RED PINE DRIVE UNIT 19
UNIT 20	201 EAST RED PINE DRIVE UNIT 20
UNIT 21	201 EAST RED PINE DRIVE UNIT 21
UNIT 22	201 EAST RED PINE DRIVE UNIT 22
UNIT 23	201 EAST RED PINE DRIVE UNIT 23
UNIT 24	201 EAST RED PINE DRIVE UNIT 24

**CURVE TABLE**

CHORD BEG.	CHORD END.	LENGTH	ANGLE	CHORD BEG.	CHORD END.
10.00	11.71	1870.00"	14.14	1.500000"	1.500000"
10.00	13.71	3020.00"	14.14	1.450000"	1.450000"
10.00	15.71	4170.00"	14.14	1.400000"	1.400000"
10.00	17.71	5320.00"	14.14	1.350000"	1.350000"
10.00	19.71	6470.00"	14.14	1.300000"	1.300000"
10.00	21.71	7620.00"	14.14	1.250000"	1.250000"
10.00	23.71	8770.00"	14.14	1.200000"	1.200000"
10.00	25.71	9920.00"	14.14	1.150000"	1.150000"
10.00	27.71	11070.00"	14.14	1.100000"	1.100000"
10.00	29.71	12220.00"	14.14	1.050000"	1.050000"
10.00	31.71	13370.00"	14.14	1.000000"	1.000000"

**SURVEYOR'S CERTIFICATE**

I, DAVID J. THOMAS, DO HEREBY CERTIFY THAT I AM A LICENSED LAND SURVEYOR AND THAT I HAVE CERTIFICATE NO. 163844 AS PRESCRIBED UNDER THE LAWS OF THE STATE OF UTAH. I FURTHER CERTIFY THE AUTHORITY OF THE COURTS I HAVE MADE A SURVEY OF THE TRACT OF LAND SHOWN ON THIS PLAN AND DESCRIBED BELOW AND HAVE SUBSCRIBED SAG STAKES OF LAND WITH TEST COBLES AND EASEMENTS AND THE SAME HAS BEEN CORRECTLY SURVEYED AND SET ON THE GROUND AS SHOWN ON THIS PLAN AND THAT THIS PLAN IS TRUE AND CORRECT.

DATE: Jan 28, 2015

**BOUNDARY DESCRIPTION**

BEGINNING AT A POINT WHICH IS NORTH 135.78 FEET AND WEST 188.92 FEET FROM THE SOUTHEAST CORNER OF SECTION 24, TOWNSHIP 4 SOUTH, RANGE 1 EAST, SALT LAKE EAST 1N MERIDIAN;

RUNNING THENCE S 002°45' W 392.36 FEET; THENCE S 010° 10' W 168.40 FEET; THENCE ALONG A 277.00-FOOT RADIUS CURVE TO THE LEFT 100M FLEET (CHORD BEARS N 82°56'32" W 10.88 FEET); THENCE N 84°04'05" W 170.01 FEET; THENCE NORTH 201.40 FEET; THENCE WEST 134.88 FEET; THENCE NORTH 235.65 FEET; THENCE S 89°44'00" E 280.84 FEET; THENCE S 89°42'00" E 84.94 FEET TO THE POINT OF BEGINNING.

CONTAINING 3.39 ACRES.

**DEVELOPER PLAT DEDICATION**

WE, THE UNDERSIGNED OWNERS OF ALL THE REAL PROPERTY DEPICTED ON THIS PLAT AND DESCRIBED IN THE SURVEYOR'S CERTIFICATE ON THIS PLAT, HAVE GRANTED THE LAND DESCRIBED ON THE PLAT TO BE GRANTED AND LOTS, STREETS, EASEMENTS AND OTHER PUBLIC USES AS DESIGNATED ON THIS PLAT AND NOW SO HEREBY DEDICATE UNDER THE PROVISIONS OF 70-9-507 UTAH CODE, WITHOUT CONDITION, RESERVE OR RESERVATION TO THE CITY OF ALPINE, UTAH, ALL STREETS, WATER, SEWER AND OTHER PUBLIC INFRASTRUCTURE EASEMENTS AND ALL OTHER PLACES OF PUBLIC INFRASTRUCTURE REQUIRED FOR THE BENEFIT OF THE CITY AND THE INHABITANTS THEREOF.

IN WITNESS WHEREOF, WE HAVE HERETOBY SET OUR HANDS THIS 28th DAY OF JANUARY, A.D. 2015.

*James K. Patterson, Jr.*  
President, Patterson Construction, Inc.

**ACKNOWLEDGMENT**

STATE OF UTAH )  
COUNTY OF LEAH ) SS

ON THIS 28th DAY OF JANUARY, A.D. 2015, PERSONAL APPEARANCE BEFORE ME THE SIGNERS OF THE FOREGOING DEDICATION AND HEREBY ACKNOWLEDGE TO ME THAT THEY DID EXECUTE THE SAME.

AN AFFIDAVIT DEPOSES David J. Thomas NOTARY PUBLIC

**ACCEPTANCE BY LEGISLATIVE BODIES**

THE CITY COUNCIL OF THE CITY OF ALPINE, UTAH, APPROVES THIS SUBDIVISION AND ACCEPTS THE DEDICATION OF ALL STREETS AND EASEMENTS FOR THE PUBLIC USE.

APPROVED: David J. Thomas CITY ENGINEER

**PLANNING COMMISSION APPROVAL**

APPROVED THIS 28th DAY OF August, A.D. 2015.

APPROVED: James K. Patterson, Jr. PLANNING COMMISSION SECRETARY

**RIVER MEADOW P.R.D.**

LOCATED IN THE NE 1/4 OF SECTION 23 AND SE 1/4 OF SECTION 24, TOWNSHIP 4 SOUTH, RANGE 1 EAST, SALT LAKE EAST 1N MERIDIAN.

SUBDIVISION NO. 139975

APPROVED AS TO FORM

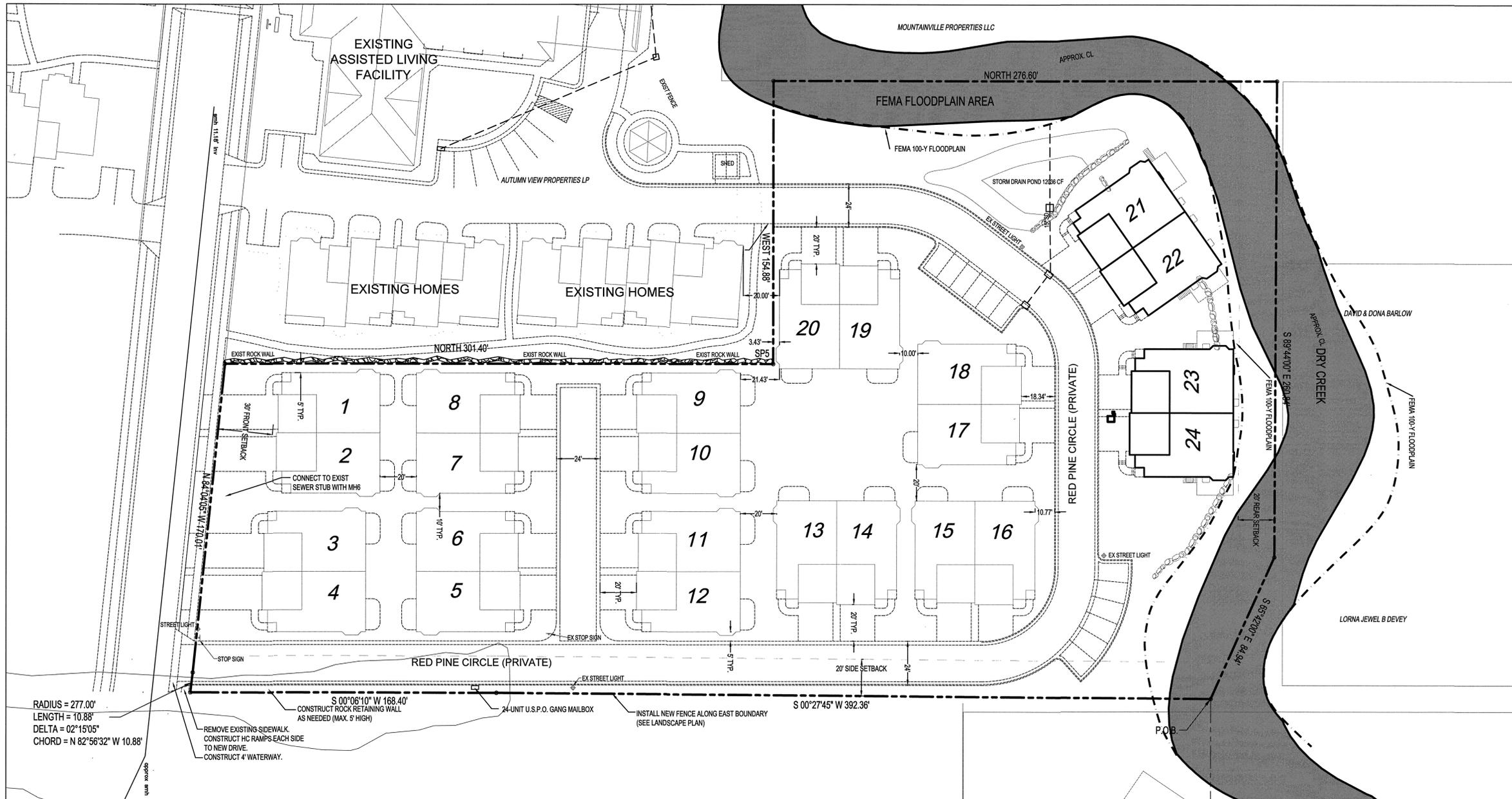
APPROVED AS TO FORM THIS 26th DAY OF March, A.D. 2013.

*David J. Thomas*  
CITY ATTORNEY



139975

SEC 25, T4S, R1E  
SUBDIVISION T1641

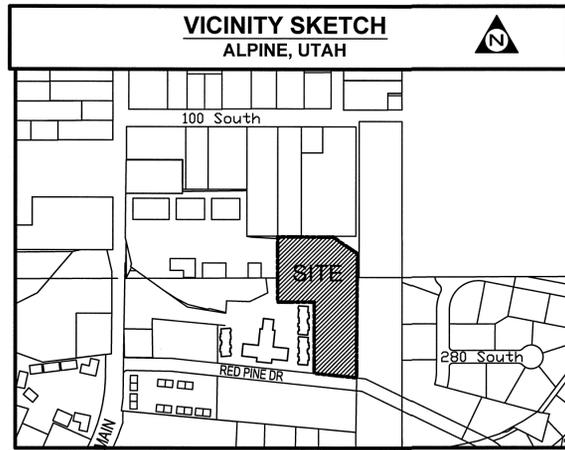


RADIUS = 277.00'  
 LENGTH = 10.88'  
 DELTA = 02°15'05"  
 CHORD = N 82°56'32" W 10.88'

S 00°06'10" W 168.40'  
 CONSTRUCT ROCK RETAINING WALL  
 AS NEEDED (MAX. 5' HIGH)

REMOVE EXISTING SIDEWALK.  
 CONSTRUCT HC RAMPS EACH SIDE  
 TO NEW DRIVE.  
 CONSTRUCT 4' WATERWAY.

24-UNIT U.S.P.O. GANG MAILBOX  
 INSTALL NEW FENCE ALONG EAST BOUNDARY  
 (SEE LANDSCAPE PLAN)



- GENERAL NOTES**
- EXISTING ZONE = BUSINESS COMMERCIAL WITH SENIOR HOUSING OVERLAY AS APPROVED BY CITY COUNCIL MAY 2012.
  - TOTAL PARCEL SIZE = 3.39 ACRES OWNED BY MEADOWBROOK PROPERTIES, L.P., COUNTY PARCEL NUMBER 11:023:0188.
  - DENSITY AS SHOWN WITH 24 UNITS ON 3.4 ACRES = 7 DU/AC.
  - ALL ROADWAYS ARE PRIVATE DRIVES TO BE MAINTAINED BY HOA.
  - PHASING PLAN TO BE GENERALLY IN ORDER OF BUILDING NUMBERS.
  - CC&R'S TO BE PREPARED AND APPROVED WITH FINAL PLAT.
  - ALL TWIN HOMES ARE FOR SALE AS SEPARATE UNITS WITH INDIVIDUAL OWNERSHIP.
  - ALL LANDSCAPED AREA, DRIVEWAYS, ROADWAYS, AND STORM DRAIN POND AREAS ARE COMMON AREAS AND PUBLIC UTILITY EASEMENTS.
  - BAY WINDOWS AND FIREPLACE POP-OUTS EXTENDING BEYOND FOUNDATION ARE SPECIFICALLY INCLUDED IN THE BUILDING PRIVATE OWNERSHIP DEFINED IN THE CC&R'S.
  - TABULATIONS FOR IMPERVIOUS AREAS ARE AS FOLLOWS:  
 ROADWAYS, PARKING, & GUTTERS = 0.59 ACRES  
 DRIVEWAYS, WALKS, AND PATIOS = 0.33 ACRES  
 BUILDING AREA (ROOFTOPS) = 1.12 ACRES  
 LANDSCAPED AREA (43% OF TOTAL) = 1.35 ACRES  
 TOTAL SITE AREA = 3.39 ACRES

**SHEET INDEX**

C1	COVER AND LAYOUT
C2	UTILITY PLAN
C3	GRADING AND DRAINAGE PLAN
PLAT	RIVER MEADOWS PRD AMENDED

DEVELOPMENT

# RIVER MEADOWS PRD

DEVELOPER

www.phutian.com

11038 N. Highland Blvd Suite 100  
 Highland, UT 84003  
 (801) 642-0119

SCALE: 1" = 30'

**BERG CIVIL ENGINEERING**  
 11038 N Highland Blvd Suite 400  
 Highland Ut, 84003  
 office (801) 492-1277  
 cell (801) 616-1677

PROJECT STATUS		SEAL
NO.	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		
7		

ACTION	DATE
PRELIMINARY	3/2/15

PROJECT

## RIVER MEADOWS PRD

DESCRIPTION

### UNITS 21-24 AMENDED LAYOUT

SHEET NAME	SHEET NUMBER
COVER	C1

2015/river\_meadows/acad-rivermeadows\_amendment.dwg

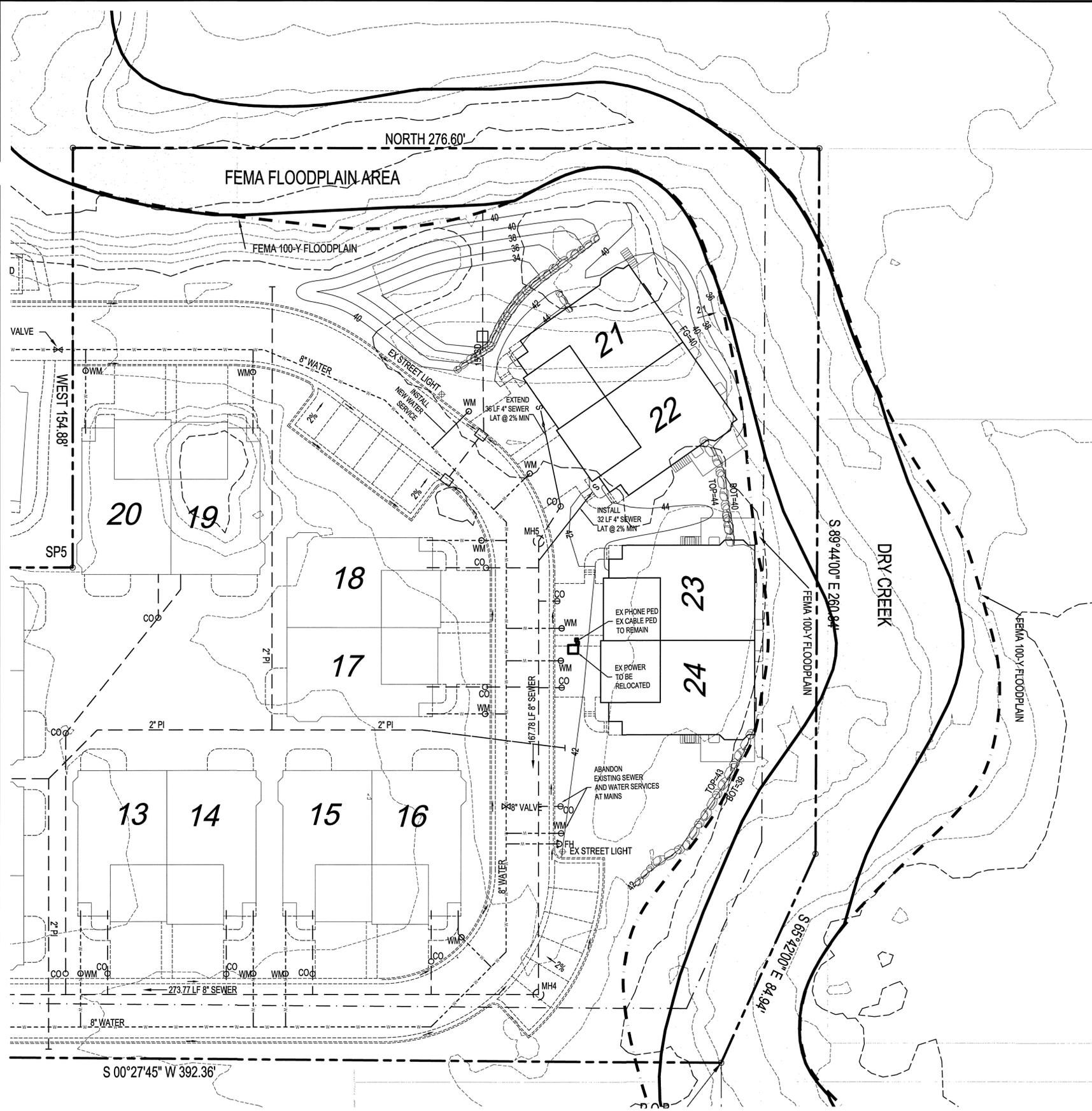
**UTILITY PLAN NOTES**

1. ALL CONSTRUCTION TO CONFORM TO ALPINE CITY STANDARDS AND SPECIFICATIONS. ALPINE CITY USES APWA STANDARDS AND DETAILED DRAWINGS IN MOST CASES.
2. SEE SEPARATE SOILS AND GEOTECHNICAL REPORT FOR THIS SITE.
3. ALL SEWER LATERALS TO BE 4" WITH MINIMUM 2% SLOPE
4. ALL WATER SERVICE LINES TO BE 1" LINE WITH 1/4" METER AND STANDARD ALPINE CITY METER BOX AND SETTER.

**GEOTECHNICAL REPORT AND SOIL CONDITIONS**

A GEOTECHNICAL STUDY WAS COMPLETED FOR THIS SITE BY EARTHTEC ENGINEERING, INC. IN JULY 2012. THAT REPORT LISTED SEVERAL SPECIAL CONDITIONS THAT EXIST ON THIS SITE AND RECOMMENDATIONS TO SOLVE POTENTIAL SOIL CONDITIONS. THE CONTRACTOR IS REQUIRED TO READ THOROUGHLY, UNDERSTAND, AND COMPLY WITH THAT REPORT. SOME OF THE SPECIFIC FINDINGS AND RECOMMENDATIONS OF THE REPORT ARE LISTED BELOW.

- A. EARTHTEC SHOULD OBSERVE THE BUILDING EXCAVATIONS TO VERIFY THE ADEQUACY OF THEIR RECOMMENDATIONS.
- B. CONVENTIONAL STRIP AND SPREAD FOOTINGS MAY BE USED TO SUPPORT STRUCTURES, WITH FOUNDATIONS PLACED ENTIRELY ON NATIVE SAND/GRAVEL SOILS OR ENTIRELY ON A MINIMUM OF 36 INCHES OF PROPERLY PLACED AND COMPACTED STRUCTURAL FILL DUE TO THE COLLAPSE POTENTIAL OF ON-SITE SILT SOILS.
- C. SOME FILL ENCOUNTERED APPEARS TO BE UNDOCUMENTED AND THIS SHOULD BE REMOVED BENEATH EACH BUILDING FOOTPRINT OR PAVEMENT AREA PRIOR TO CONSTRUCTION OF THE BUILDINGS OR PAVEMENT.
- D. TOPSOIL SHOULD BE REMOVED BENEATH THE ENTIRE BUILDING FOOTPRINT AND BETWEEN EXTERIOR FLATWORK AND PAVEMENT AREAS.
- E. SOME SOILS ON SITE INDICATED A SLIGHT TO HIGH POTENTIAL (ABOUT 0.5 TO 2.4 PERCENT) FOR COLLAPSE (SETTLEMENT) UNDER INCREASED MOISTURE AND ANTICIPATED LOAD CONDITIONS.
- F. ALL SURFACE VEGETATION AND UNSUITABLE SOILS (SUCH AS TOPSOIL, ORGANIC SOILS, UNDOCUMENTED FILL, SOFT, LOSE, OR DISTURBED NATIVE SOILS, AND ANY OTHER INAPT MATERIALS) SHOULD BE REMOVED FROM BELOW FOUNDATION, FLOOR SLAB, AND EXTERIOR CONCRETE FLATWORK.
- G. IF MORE THAN 3 FEET OF GRADING FILL WILL BE PLACED ABOVE THE EXISTING SURFACE (TO RAISE GRADES), EARTHTEC SHOULD BE NOTIFIED SO THAT THEY MAY ASSESS POTENTIAL SETTLEMENT AND MAKE ADDITIONAL RECOMMENDATIONS IF NEEDED.
- H. THE EXISTING FILL AND NATIVE SOILS DO NOT APPEAR SUITABLE FOR USE AS STRUCTURAL FILL BUT THE NATIVE GRAVEL SOILS MAY BE. IT IS RECOMMENDED THAT EARTHTEC BE ADVISED AND VERIFY THE STRUCTURAL FILL TO BE USED ON THIS PROJECT.
- I. UTILITY TRENCHES BELOW ANY STRUCTURAL LOAD SHOULD BE BACKFILLED USING STRUCTURAL FILL.
- J. IF FREE-DRAINING FILL WILL BE PLACED ADJACENT TO SOIL CONTAINING A SIGNIFICANT AMOUNT OF SAND OR SILT/CLAY, PRECAUTIONS SHOULD BE TAKEN TO PREVENT THE MIGRATION OF FINE SOIL INTO THE FREE-DRAINING FILL. SUCH PRECAUTIONS SHOULD INCLUDE EITHER PLACING A FILTER FABRIC BETWEEN THE FREE-DRAINING FILL AND THE ADJACENT MATERIAL, OR USING A WELL GRADED, CLEAN FILTERING MATERIAL APPROVED BY THE GEOTECHNICAL ENGINEER.
- K. DURING GRADING THE SOIL IN ANY OBVIOUS SOFT SPOTS SHOULD BE REMOVED AND REPLACED WITH GRANULAR MATERIAL.
- L. STRUCTURAL FILL USED BELOW FOUNDATIONS SHOULD EXTEND Laterally A MINIMUM OF 6 INCHES FOR EVERY 12 VERTICAL INCHES OF STRUCTURAL FILL PLACED.
- M. A MINIMUM OF 4 INCHES OF FREE-DRAINING FILL MATERIAL SHOULD BE PLACED BENEATH FLOOR SLABS TO FACILITATE CONSTRUCTION, LEVELING, ACT AS A CAPILLARY BREAK, AND AID IN DISTRIBUTING FLOOR LOADS.
- N. THE NEAR-SURFACE SOILS ENCOUNTERED IN THE SOUTHERN PORTION OF THE SITE CONSISTED OF 3.5 FEET OF UNDOCUMENTED FILL, WHICH SHOULD BE ENTIRELY REMOVED AND REPLACED WITH STRUCTURAL FILL.
- O. THE GROUND SURFACE SHOULD BE GRADED AWAY FROM THE BUILDING IN ALL DIRECTIONS A MINIMUM OF 6 INCHES IN THE FIRST 10 FEET.
- P. ROOF RUNOFF SHOULD BE COLLECTED IN RAIN GUTTERS WITH DOWNSPOUTS DESIGNED TO DISCHARGE WELL OUTSIDE OF THE BACKFILL LIMITS, OR AT LEAST 10 FEET FROM THE FOUNDATIONS.
- Q. A MINIMUM OF 3.5 INCHES OF ASPHALT, 6 INCHES OF COMPACTED ROAD BASE, AND 12 INCHES OF COMPACTED SUBBASE IS RECOMMENDED FOR ALL DRIVES AND ROADS.
- R. EARTHTEC SHOULD PERFORM SPECIAL MATERIAL TESTING AND INSPECTIONS AS CONSTRUCTION ON THE PROJECT PROGRESSES.



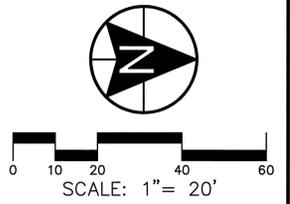
DEVELOPMENT

**RIVER MEADOWS PRD**

DEVELOPER

**PATTERSON HOMES**  
www.phutah.com

11038 N. Highland Blvd Suite 100  
Highland, UT 84003  
(801) 642-0119



**berg**

CIVIL ENGINEERING  
11038 N Highland Blvd Suite 400  
Highland Ut, 84003  
office (801) 492-1277  
cell (801) 616-1677

PROJECT STATUS		SEAL
NO.	DATE	DESCRIPTION
1		
2		
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4		
5		
6		
7		

PROFESSIONAL ENGINEER  
243602  
Kenneth Ray  
Berg  
STATE OF UTAH

ACTION	DATE
PRELIMINARY	3/2/15

PROJECT

**RIVER MEADOWS PRD**

DESCRIPTION

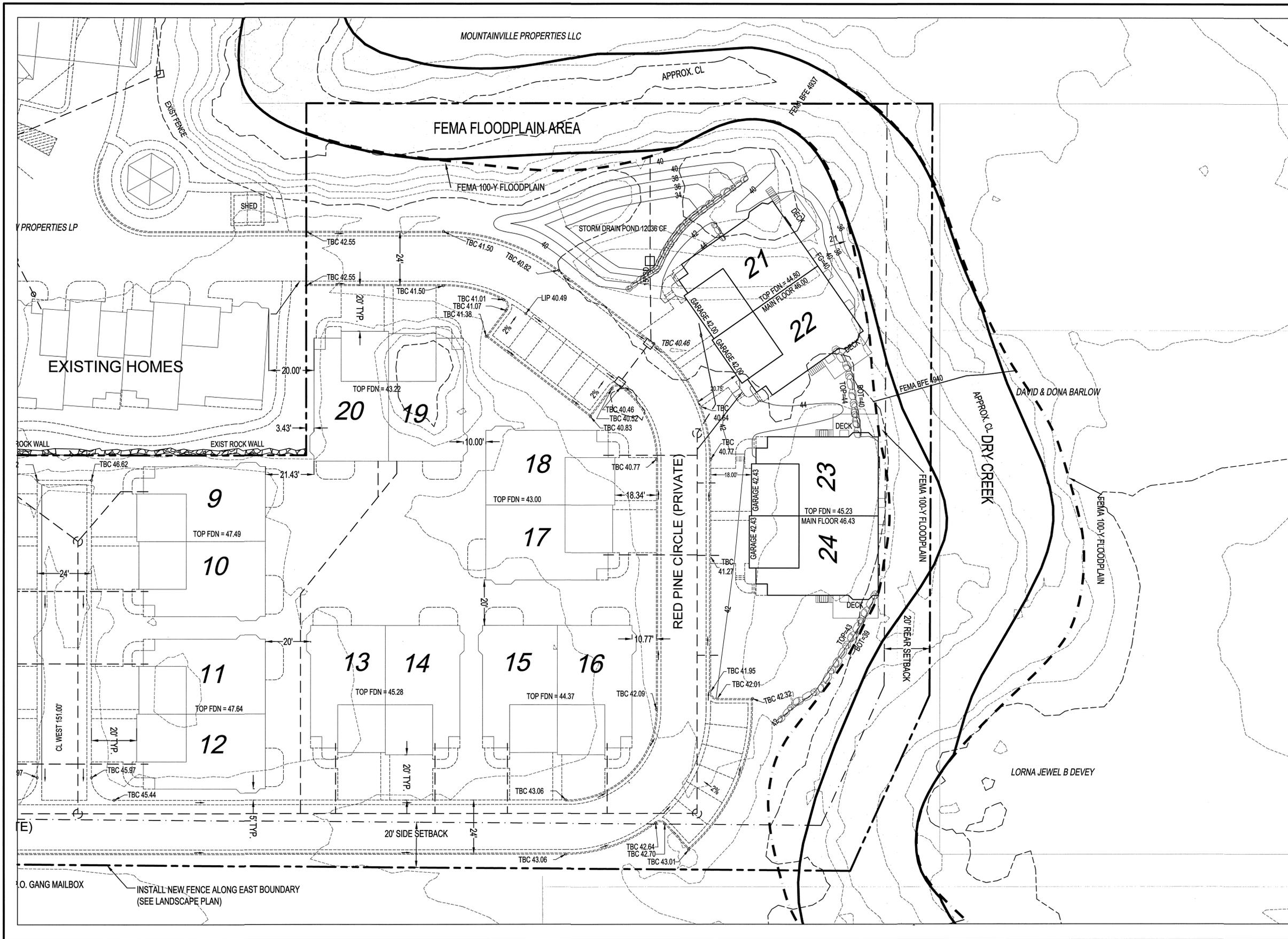
**UNITS 21-24 AMENDED LAYOUT**

SHEET NAME

**UTILITY**

SHEET NUMBER

**C2**



DEVELOPMENT

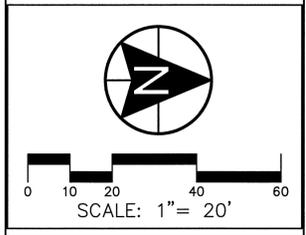
# RIVER MEADOWS PRD

DEVELOPER



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PROJECT STATUS		SEAL
NO.	DATE	DESCRIPTION
1		
2		
3		
4		
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ACTION	DATE
PRELIMINARY	3/2/15

PROJECT

# RIVER MEADOWS PRD

DESCRIPTION

## UNITS 21-24 AMENDED LAYOUT

SHEET NAME: **GRADING** SHEET NUMBER: **C3**

**NOTE**

INDIVIDUAL HOME SEWER EJECTOR PUMPS REQUIRED FOR UNITS 15-24 IF BASEMENT IS SEWERED.

**NOTE**

ALL COMMON AREAS AND LIMITED COMMON AREAS ARE PUBLIC UTILITY AND DRAINAGE EASEMENTS.

**NOTE**

CROSS-EASEMENT FOR ACCESS WITH ADJOINING SPRING CREEK PLAT "A" SUBDIVISION IS HEREBY GRANTED.

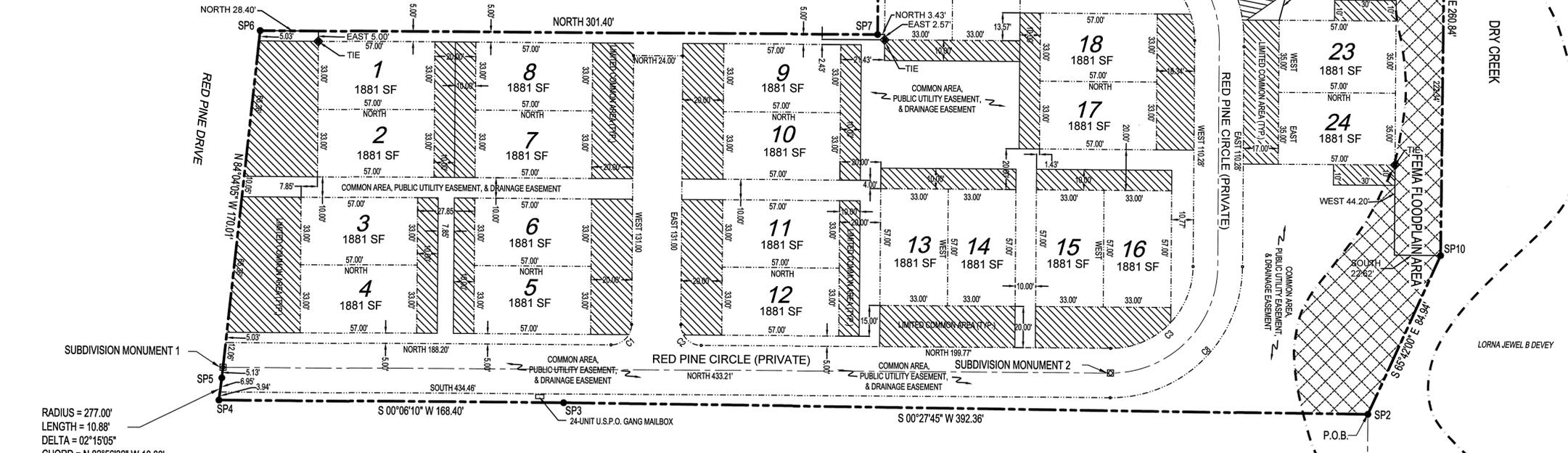
**NOTE**

ALL BUILDINGS ORIENTED NORTH, SOUTH, EAST, AND WEST UNLESS OTHERWISE ANNOTATED.

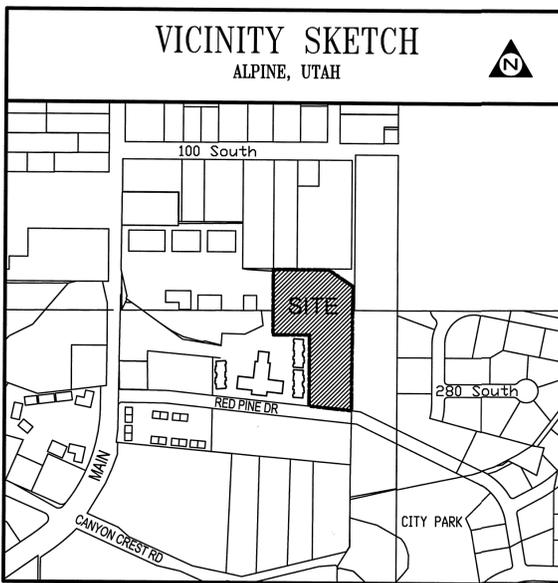
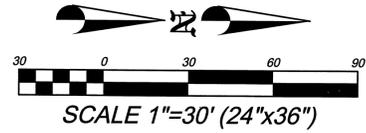
**STATE PLANE COORDINATES**

SCALE FACTOR = 0.999717501356

POINT	EASTING	NORTHING
SP1	1,924,088.96	771,168.57
SP2	1,923,900.45	771,304.31
SP3	1,923,897.28	770,912.07
SP4	1,923,896.98	770,743.72
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MONUMENT 1	1,923,881.08	770,745.59
MONUMENT 2	1,923,881.08	771,178.68



RADIUS = 277.00'  
LENGTH = 10.88'  
DELTA = 02°15'05"  
CHORD = N 82°56'32" W 10.88'



**ADDRESS TABLE**

UNIT 1	201 EAST RED PINE DRIVE UNIT 1
UNIT 2	201 EAST RED PINE DRIVE UNIT 2
UNIT 3	201 EAST RED PINE DRIVE UNIT 3
UNIT 4	201 EAST RED PINE DRIVE UNIT 4
UNIT 5	201 EAST RED PINE DRIVE UNIT 5
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UNIT 19	201 EAST RED PINE DRIVE UNIT 19
UNIT 20	201 EAST RED PINE DRIVE UNIT 20
UNIT 21	201 EAST RED PINE DRIVE UNIT 21
UNIT 22	201 EAST RED PINE DRIVE UNIT 22
UNIT 23	201 EAST RED PINE DRIVE UNIT 23
UNIT 24	201 EAST RED PINE DRIVE UNIT 24

**CURVE TABLE**

CURVE NO.	RADIUS	LENGTH	DELTA	CHORD	BEARING
C1	10.00	15.71	90°00'00"	14.14	N 45°00'00" W
C2	10.00	15.71	90°00'00"	14.14	N 45°00'00" E
C3	40.00	62.83	90°00'00"	56.57	N 45°00'00" W
C4	40.00	36.76	52°39'09"	35.48	S 63°40'28" W
C5	60.00	39.11	37°20'51"	38.42	S 18°40'28" W
C6	84.00	54.75	37°20'51"	53.79	N 18°40'28" E
C7	84.00	58.81	52°39'09"	56.77	N 63°40'28" E
C8	84.00	100.53	90°00'00"	90.51	S 45°00'00" E

APPROVAL AS TO FORM  
APPROVED AS TO FORM THIS  
DAY OF \_\_\_\_\_ A.D., 20\_\_\_\_  
CITY ATTORNEY

**SURVEYOR'S CERTIFICATE**

I, DAVID V. THOMAS, DO HEREBY CERTIFY THAT I AM A REGISTERED LAND SURVEYOR, AND THAT I HOLD CERTIFICATE NO. 163947 AS PRESCRIBED UNDER THE LAWS OF THE STATE OF UTAH. I FURTHER CERTIFY BY AUTHORITY OF THE OWNERS, I HAVE MADE A SURVEY OF THE TRACT OF LAND SHOWN ON THIS PLAT AND DESCRIBED BELOW, AND HAVE SUBDIVIDED SAID TRACT OF LAND INTO LOTS, STREETS AND EASEMENTS AND THE SAME HAS BEEN CORRECTLY SURVEYED AND STAKED ON THE GROUND AS SHOWN ON THIS PLAT AND THAT THIS PLAT IS TRUE AND CORRECT.

DATE \_\_\_\_\_ SURVEYOR (SEE SEAL BELOW)

**BOUNDARY DESCRIPTION**

BEGINNING AT A POINT WHICH IS NORTH 135.78 FEET AND WEST 188.57 FEET FROM THE SOUTHEAST CORNER OF SECTION 24, TOWNSHIP 4 SOUTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN;  
RUNNING THENCE S 00°27'45" W 392.36 FEET; THENCE S 00°06'10" W 168.40 FEET; THENCE ALONG A 277.00-FOOT RADIUS CURVE TO THE LEFT 10.88 FEET (CHORD BEARS N 82°56'32" W 10.88 FEET); THENCE N 84°04'05" W 170.01 FEET; THENCE NORTH 301.40 FEET; THENCE WEST 154.88 FEET; THENCE NORTH 276.60 FEET; THENCE S 89°44'00" E 260.84 FEET; THENCE S 65°42'00" E 84.94 FEET TO THE POINT OF BEGINNING.  
CONTAINING 3.39 ACRES.

**OWNER PLAT DEDICATION**

WE, THE UNDERSIGNED OWNERS OF ALL THE REAL PROPERTY DEPICTED ON THIS PLAT AND DESCRIBED IN THE SURVEYOR'S CERTIFICATE ON THIS PLAT, HAVE CAUSED THE LAND DESCRIBED ON THE PLAT TO BE DIVIDED INTO LOTS, STREETS, EASEMENTS AND OTHER PUBLIC USES AS DESIGNATED ON THIS PLAT AND NOW DO HEREBY DEDICATE UNDER THE PROVISIONS OF 10-9-807 UTAH CODE, WITHOUT CONDITION, RESTRICTION OR RESERVATION TO THE CITY OF ALPINE, UTAH, ALL STREETS, WATER, SEWER AND OTHER UTILITY IMPROVEMENTS, EASEMENTS, AND ALL OTHER PLACES OF PUBLIC IMPROVEMENTS REQUIRED FOR THE BENEFIT OF THE CITY AND THE INHABITANTS THEREOF.

IN WITNESS WHEREOF WE HAVE HEREUNTO SET OUR HANDS THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, A.D. \_\_\_\_\_

NAME: JAMES K. PATTERSON, PRESIDENT  
PATTERSON CONSTRUCTION, INC.

**ACKNOWLEDGMENT**

STATE OF UTAH }  
COUNTY OF UTAH } S.S.  
ON THE \_\_\_\_\_ DAY OF \_\_\_\_\_, A.D. 20\_\_\_\_ PERSONALLY APPEARED BEFORE ME JAMES K. PATTERSON, PRESIDENT OF PATTERSON CONSTRUCTION, INC. THE SIGNER OF THE FOREGOING DEDICATION WHO DULY ACKNOWLEDGE TO ME THAT THEY DID EXECUTE THE SAME.  
MY COMMISSION EXPIRES \_\_\_\_\_ NOTARY PUBLIC

**ACCEPTANCE BY LEGISLATIVE BODY**

THE \_\_\_\_\_ CITY COUNCIL OF \_\_\_\_\_ ALPINE CITY COUNTY OF UTAH, APPROVES THIS SUBDIVISION AND HEREBY ACCEPTS THE DEDICATION OF ALL STREETS AND EASEMENTS FOR THE PERPETUAL USE OF THE PUBLIC THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, A.D. 20\_\_\_\_  
MAYOR \_\_\_\_\_  
APPROVED \_\_\_\_\_ ATTEST \_\_\_\_\_  
CITY ENGINEER (SEE SEAL BELOW) CLERK-RECORDER (SEE SEAL BELOW)

**PLANNING COMMISSION APPROVAL**

APPROVED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, A.D. 20\_\_\_\_ BY THE \_\_\_\_\_ ALPINE CITY \_\_\_\_\_ CITY PLANNING COMMISSION  
DIRECTOR - SECRETARY \_\_\_\_\_ CHAIRMAN, PLANNING COMMISSION \_\_\_\_\_

**RIVER MEADOWS P.R.D. AMENDED**

LOCATED IN THE NE 1/4 OF SECTION 25 AND SE 1/4 OF SECTION 24, T4S, R1E, SLB&M  
SUBDIVISION \_\_\_\_\_ ALPINE \_\_\_\_\_ CITY, UTAH COUNTY, STATE OF UTAH  
SCALE: 1" = \_\_\_\_\_ FEET

SURVEYOR'S SEAL CITY ENGINEER SEAL CLERK-RECORDER SEAL

**OWNER PLAT DEDICATION**

WE, THE UNDERSIGNED OWNERS OF ALL THE REAL PROPERTY DEPICTED ON THIS PLAT AND DESCRIBED IN THE SURVEYOR'S CERTIFICATE ON THIS PLAT, HAVE CAUSED THE LAND DESCRIBED ON THE PLAT TO BE DIVIDED INTO LOTS, STREETS, EASEMENTS AND OTHER PUBLIC USES AS DESIGNATED ON THIS PLAT AND NOW DO HEREBY DEDICATE UNDER THE PROVISIONS OF 10-9-807 UTAH CODE, WITHOUT CONDITION, RESTRICTION OR RESERVATION TO THE CITY OF ALPINE, UTAH, ALL STREETS, WATER, SEWER AND OTHER UTILITY IMPROVEMENTS, EASEMENTS, AND ALL OTHER PLACES OF PUBLIC IMPROVEMENTS REQUIRED FOR THE BENEFIT OF THE CITY AND THE INHABITANTS THEREOF.

IN WITNESS WHEREOF WE HAVE HEREUNTO SET OUR HANDS THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, A.D. \_\_\_\_.

NAME: MATTHEW S. CHILDS

**ACKNOWLEDGMENT**

STATE OF UTAH }  
COUNTY OF UTAH } S.S.

ON THE \_\_\_\_\_ DAY OF \_\_\_\_\_, A.D. 20 \_\_\_\_ PERSONALLY APPEARED BEFORE ME, MATTHEW S. CHILDS, THE SIGNER OF THE FOREGOING DEDICATION WHO DULY ACKNOWLEDGE TO ME THAT THEY DID EXECUTE THE SAME.

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NOTARY PUBLIC SEAL

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NAME: JOSHUA D. SCHELLENBERG

**ACKNOWLEDGMENT**

STATE OF UTAH }  
COUNTY OF UTAH } S.S.

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NAME: SUE A. MORGAN

**ACKNOWLEDGMENT**

STATE OF UTAH }  
COUNTY OF UTAH } S.S.

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NAMES: BRENT A. MANGUM

NAMES: STACIE MANGUM

**ACKNOWLEDGMENT**

STATE OF UTAH }  
COUNTY OF UTAH } S.S.

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NAMES: DOUG WESTENHAVER

NAMES: JOAN WESTENHAVER

**ACKNOWLEDGMENT**

STATE OF UTAH }  
COUNTY OF UTAH } S.S.

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IN WITNESS WHEREOF WE HAVE HEREUNTO SET OUR HANDS THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, A.D. \_\_\_\_.

NAMES: VERNON W. PAYNE III

NAMES: MICHELE J. PAYNE

**ACKNOWLEDGMENT**

STATE OF UTAH }  
COUNTY OF UTAH } S.S.

ON THE \_\_\_\_\_ DAY OF \_\_\_\_\_, A.D. 20 \_\_\_\_ PERSONALLY APPEARED BEFORE ME, VERNON W. PAYNE III & MICHELE J. PAYNE, THE SIGNERS OF THE FOREGOING DEDICATION WHO DULY ACKNOWLEDGE TO ME THAT THEY DID EXECUTE THE SAME.

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IN WITNESS WHEREOF WE HAVE HEREUNTO SET OUR HANDS THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, A.D. \_\_\_\_.

NAMES: THEODORE E. DODSON

NAMES: MARY F. DODSON

**ACKNOWLEDGMENT**

STATE OF UTAH }  
COUNTY OF UTAH } S.S.

ON THE \_\_\_\_\_ DAY OF \_\_\_\_\_, A.D. 20 \_\_\_\_ PERSONALLY APPEARED BEFORE ME, THEODORE E. DODSON & MARY F. DODSON, THE SIGNERS OF THE FOREGOING DEDICATION WHO DULY ACKNOWLEDGE TO ME THAT THEY DID EXECUTE THE SAME.

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**RIVER MEADOWS P.R.D. AMENDED**

LOCATED IN THE NE 1/4 OF SECTION 25 AND SE 1/4 OF SECTION 24, T4S, R1E, SLB&M

SUBDIVISION \_\_\_\_\_ ALPINE \_\_\_\_\_ CITY, UTAH COUNTY, STATE OF UTAH

SCALE: 1" = \_\_\_\_\_ 30 FEET

**ALPINE CITY PLANNING COMMISSION MEETING at  
Alpine City Hall, 20 North Main, Alpine, Utah  
June 02, 2015**

**I. GENERAL BUSINESS**

**A. Welcome and Roll Call:** The meeting was called to order at 7:00pm by Co Chairman Judi Pickell. The following commission members were present and constituted a quorum.

Chairman: Steve Cospser

Commission Members: Bryce Higbee, Jason Thelin, David Fotheringham, Steve Cospser, Jane Griener, Steve Swanson, Judi Pickell

Commission Members Not Present: Bryce Higbee (Jane Griener joined the meeting via the phone)

Staff: Jason Bond, Marla Fox, Jed Muhlestein

Others: Roger Bennett, Erin Darlington, Paul Kroff, Myrna Grant, M Grant, Lon Lott

**B. Prayer/Opening Comments:** Steve Cospser

**C. Pledge of Allegiance:** Jason Thelin

**II. PUBLIC COMMENT**

No comment

**III. ACTION ITEMS**

**A. Annexation Policy Plan Discussion**

The current annexation Policy Plan was adopted May 26, 2009, the City Council has asked that the Planning Commission work on updating this plan.

Jason Bond said we want to focus on updating the Annexation Plan because it is out of date. He said we need some guidance from the Planning Commission along with following the State guidelines. Jason Bond said there are a few things in the plan that need to be discussed. He said there are some areas that are not in the plan and we need to discuss if we want those areas to be included in the Annexation Plan. He said there are a few areas in the County that need to be discussed to see if we want them added to the plan. He said an interesting thing in the State Code is there is no requirement to designate what the potential zoning of an annexation area would be. Jason Bond said the potential zoning can be misleading or not followed. He said as a Planner he feels it's wise to plan what we want these areas to look like; what we want the City to look like.

Jason Thelin said just because the plan is six years old doesn't mean it's outdated. He said adding density to the plan would only be to give direction to the owners; he wanted to know why the City Council asked the Planning Commission to redo the plan. Jason Bond said because we are starting to have developers come in and want to know if they can be annexed. He also said the City Council said the plan is out of date and asked the Planning Commission to get it up to date.

David Fotheringham said he didn't think we needed to change very much in the plan but to update property owners and some dates. Steve Cospser said the plan doesn't need a major overhaul because he said the plan follows the State Code pretty closely and follows all the rules. He said the map needs to be changed.

Steve Swanson asked how the City came up with the numbers they did in the current plan. He said he would be interested in costs and revenue. He said access to the northern properties needs to be addressed because Grove Drive can't handle the extra burden new developments would bring. Steve Cospser said that's where the traffic study comes in. Jason Bond said we could put in the plan that we would like to see at a time of an annexation request that a traffic study be done.

Steve Swanson said the biggest drawbacks on the annexation issues have been water and how we're going to commute. Other issues are hillsides and other protected areas. He said he would like to see in the plan a breakdown

1 of those studies that would allow us to have some decision making capabilities once somebody comes with a  
2 proposed plat.

3  
4 Judi Pickell asked what other properties have asked to be annexed. She wanted to know if the City should approach  
5 owners to see if they want to be annexed. Jason Bond showed on a map what areas could come to the City to be  
6 annexed. He said Draper City has some land they feel would be better served by Alpine City. He also said there is  
7 land north of the Melby property that is owned by Lehi City.

8  
9 David Fotheringham asked if it would be better to start with the Master Plan because decisions on the Annexation  
10 Plan should come from the Master Plan. Jason Bond said because of current issues coming up, he feels it would be  
11 better to focus on the Annexation Plan first.

12  
13 The Planning Commission discussed the remaining land that is currently in the County. Some is already in the  
14 annexation Plan and some is not. Jason Bond said his recommendation would be to include all the properties in the  
15 plan.

16  
17 Jane Griener asked why the City would want to annex a property that is already developed. Jason Bond said  
18 because of the proximity to the City it makes sense to have them included in the City. Jane Griener said these  
19 properties would have to come to the City and ask if they could be annexed, she said the City should not go to them.  
20 She said we need to find out if annexing some of these areas benefits the City in any way before they are annexed.  
21 She said there are safety issues and road issues and if there is no financial benefit, why would we do it.

22  
23 Jason Bond said South Box Elder has been approved for development and asked if we want to include them in the  
24 annexation Plan. Steve Cospers said with recent history, he doubted anyone would want to annex. Jason Bond said  
25 they have already been in asking to be annexed and have actually built their subdivision to City standards.

26  
27 Jason Thelin said it makes sense to add most of these properties to the plan with the exception of the Cove and the  
28 property on the Highland border. Jason Bond said by annexing the Cove it doesn't mean that they will  
29 automatically be annexed. Jason Thelin said it doesn't mean they won't be annexed either. Steve Cospers said just  
30 because we put these properties in the plan, doesn't mean they will be annexed in the property. Jason Thelin said he  
31 didn't see any benefit of annexing the Cove and it just opens up problems and should be left alone. He said we don't  
32 have to suck up every piece of County property. He said if the County wants to give increased density and provide  
33 services then that's their decision.

34  
35 Steve Cospers said by annexing these properties, it would give us a tool to use to say this is what is required, it's not  
36 a commitment. He said it makes sense to include it all so we have a plan, but it may never come to fruition. Jane  
37 Griener said she doesn't want to annex properties that have already been developed in the County.

38  
39 David Fotheringham said the State Code said and the Annexation Plan states that one jurisdiction should provide  
40 service to the development. He said we're splitting up an area to multiple service districts. He said the whole area  
41 should be served by the same services and managed together. Jed Muhlestein said that the Cove has their own water  
42 district and he agrees with Jason Thelin in that we should leave them be as they are. He said Box Elder South is  
43 already using all of the City services.

44  
45 Jed Muhlestein said if we take on Box Elder South, are we taking on any flooding liability. Judi Pickell said that  
46 would be a bridge we would cross later. She said we could put it in the plan and if we're approached, that would be  
47 one of the contingencies or criteria. They would have to prove to us that we would not be liable. She said all of that  
48 can be figured out later. Jed Muhlestein said if a proposal comes in then the proof of burden would be on them.

49  
50 Jason Thelin said developers are never going to say their development is not safe. An example is when there was a  
51 fire about thirteen years ago, the developer didn't do some things correctly within the development, but the City  
52 ended up paying for the damages in the end. Steve Swanson said there is a reason that some of these properties  
53 haven't been annexed and that's because they may not be safe to do so.

54  
55 Jason Thelin said if the County wants to support putting homes in unsafe areas, then let them, he doesn't want to  
56 annex them later. He said he's fine to let that that property stay in the County. Jane Griener said we should look

1 back into history and find out why these properties were not annexed into the City. She said there is probably a good  
2 reason they weren't added in the past. She also said we need to find out if there is any benefit to the City and we  
3 need to be very careful that the City will not be liable.

4  
5 Steve Cospers said he would like the staff to do a general update and then bring it back for the Planning Commission  
6 to review. Judi Pickell asked what the Fire Department would say about annexing these properties.

7  
8 Jane Griener asked Jason Bond how far into the future this plan is projected for. Jason Bond said it would be about  
9 seven or eight years. Jane also wanted to know what the build out projections were. Jason Bond said it is projected  
10 to have about 5,000 more people with the land that is currently available. Steve Cospers said he doesn't think this  
11 many more people is possible. Jason Bond said the City took the developable land that is left and calculated an  
12 average household and that is the number they came up with.

13  
14 Brian Thrapp asked about the Box Elder South Property. Jason Bond said that property is in the County and is being  
15 developed and doesn't match up with the annexation plan.

16  
17 Erin Darlington it seems like there would be a little more weight to decisions and exceptions given when these  
18 properties come in for annexation and density discussions. She said the Planning Commission should make sure it  
19 benefits the City and the citizens.

#### 20 21 **COMMUNICATION:**

22 Steve Swanson said he was approached by neighbors that live on Bald Mountain. He said the open space has a lot  
23 of overgrowth and wanted to know who was responsible to clean up the weeds. Jason Bond said that is City owned  
24 open space and is left natural. The City is responsible to clean weeds off of sidewalks, but the open space will be  
25 left natural with City trails running through it.

26  
27 Steve Swanson said the neighbors are willing to cut or spray the weeds. Jason Bond and Jason Thelin both said no,  
28 this area should be left alone. These people most likely bought their property with the natural open space in place.  
29 Jason Thelin said that area is beautiful and others would be upset if the grass was cut down. He said this property  
30 was developed as natural open space and needs to be left as that. Jason Bond said the City doesn't have to man  
31 power to maintain this type of property, he said it was never meant to be a park.

32  
33 Judi Pickell said going forward, if the City doesn't want to maintain open space, it could be put in a condition that  
34 the area be maintained and cleaned up by an HOA. She said she personally sees that this plan works in her own  
35 neighborhood. David Fotheringham said maybe the Stakes and Wards could help clean up within their own  
36 boundaries.

37  
38 Steve Cospers asked what the outcome was with the Lot Line Adjustment at City Council. Jason Bond said it was  
39 approved and they did not require any payment for the land.

#### 40 41 **VI. APPROVAL OF PLANNING COMMISSION MINUTES OF: May 19, 2015**

42  
43 **MOTION:** David Fotheringham moved to approve the Planning Commission Minutes for May 19, 2015 subject to  
44 changes.

45  
46 Steve Swanson seconded the motion. The motion passed unanimously with 6 Ayes and 0 Nays. Jason Thelin, David  
47 Fotheringham, Steve Cospers, Steve Swanson, Jane Griener and Judi Pickell all voted Aye.

48  
49 Judi Pickell stated that the Planning Commission had covered all of the items on the agenda and adjourned the  
50 meeting at 8:10pm.