

WILDFIRE MITIGATION PLAN

For William Herrea
737 Cougar Run, Nederland, CO 80466
Docket: SPR - 07 - 068
Inspection date: 9/7/2007

Colorado
State
FOREST
SERVICE
Boulder District
5625 Ute Highway
Longmont, CO 80503
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Prepared for:

William Herrea
759 Cougar Run
Nederland, CO 80466
Phone: 303-258-0524

Prepared by:

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PURPOSE OF A WILDFIRE MITIGATION PLAN

The purpose of a Wildfire Mitigation Plan is to give guidelines for reducing wildfire hazards around a home or other structures through fuels reduction. It is a document to inform urban interface home owners of the dangers and responsibilities of living in the interface. This plan will help outline the initial and ongoing fuels reduction needed to create and maintain an effective wildfire defensible space. However, having a wildfire mitigation plan, implementation of a defensible space thinning, and following all the recommendations as outlined in this plan **does not guarantee that your home will survive a wildland fire; however, in combination they will give your home the best potential probability to survive a wildland fire.**

SITE LOCATION AND PROPERTY DESCRIPTION

The property is located in Section 4, Township 1S, and Range 72W, lot 41 of St Anton Highlands 1. The property is located within the Nederland Fire Protection District (303-258-9161). A 2,520 sq.ft residence and a 452 sq.ft. attached garage are proposed for the site. The lot is 1.1 acres in size and has a modest ~2-30 percent slope with a north-northeast aspect. The site is at ~8,150 feet in elevation and located on a mid-slope which is relatively dry and moist. Cougar Run to the south creates a small natural barrier that may help slow the spread of a surface fire on the site.

CONSTRUCTION DESIGN AND MATERIALS

The proposed residence will have a moderately complex design with a moderately complex roofline and will be oriented with a north-northeast aspect. **The overall design of the structure greatly influences how it will withstand a wildfire. Complex building forms create heat traps, areas where the walls and roof members intersect on another where eddies form and hot air and embers from a fire can collect. It is important to keep these areas clear of combustibles such as needles and brush.**

The roofing material will consist of class-A asphalt shingles. **Falling embers and fire brands from a wildfire can land on a roof and ignite the roof, either by directly heating the roofing material, or by igniting light fuels (pine needles) that have collected on the roof. It is recommended to place screening over gutters and/or make a yearly check to keep them clear of leaves and needles.**

The exterior wall material is to be cement board. Soffits and fascia are to be 1/4" thick cement board. The structure will have 13 medium to large sized windows with the primary viewing direction being toward the north side of the structure. Windows will be double glazed with Low-E coating and tempered glass where required. Frames are to be made of aluminum clad wood. Exterior doors are to be 1 3/4", fire-rated and made of steel/wood. One sliding glass door will be located on the second floor deck. **All operable windows must be provided with screening that is constructed of either aluminum, galvanized steel, copper or of an approved material that when exposed to flame for 15 seconds, will not burn through or melt, and remains intact. Windows are one of the weakest parts of a structure with regards to wildfire. They often crack and fail before the structure itself ignites, providing a direct path for embers and radiant heat to reach the interior. It is best to minimize the number of windows, especially on the downhill side of the structure. Fire typically burns up hill faster and will create a great deal of radiant heat.**

UTILITIES

The propane tank is to be set on a pad of crushed rock overlaying a weedbarrier at a minimum of 50 ft from the structure at a TBD location. Utilities for the property are buried from a pole. The septic field is located ~60 ft to the west of the residence. A well is located ~10 ft to the west.

DRIVEWAY ACCESS FOR EMERGENCY VEHICLES

Access the property from Boulder by heading west up Boulder Canyon (CO 119), head north on Hwy 72, turn right on Ridge Rd, turn left on Cougar Run, end at 737 Cougar Run.

The driveway will create a significant amount of site disturbance and soil compaction and will require the removal of many trees. The driveway is to be ~12 feet wide with a vertical clearance of 13'6" and a grade that is less than 12 percent. The driveway is approximately 180 feet long therefore no turn around will be required. Since the driveway is less than 400 ft., no pull-outs are required along the driveway.

EMERGENCY WATER SUPPLY FOR FIRE FIGHTING

The water source will be from a community cistern. Contact the Nederland Fire Protection District (303-258-9161) for more information and specific details.

FUELS REDUCTION

All trees to be removed are marked with blue spray paint. All trees that are to remain within zones 1 and 2 will be unmarked and need to be pruned up to a height of 8ft or 1/3 the height of the tree, whichever is less. Harvested wood that remains on site will be stacked at least 30 feet from the house and at the same elevation when possible. Slash from the harvest will be chipped and hauled off site. Note that if you decide to burn piles, you must obtain a valid Open Burning Permit from the Boulder County Environmental Health Department (303-441-1180) and notify your local fire protection district Nederland Fire Protection District (303-258-9161).

FOREST COMPONENT AND HEALTH

The site has a dominant overstory consisting of lodgepole pine (*Pinus contorta*) with a lodgepole pine, ponderosa pine (*Pinus ponderosa*), and Douglas-fir (*Pseudotsuga menziesii*) component. The understory consists of a sparse cover of native grasses, forbs and shrubs. The forested area is best represented by Fuel Model 9. Fuel Model 9 is represented by closed canopy stands of ponderosa pine and mixed conifer. Understory may consist of small trees and shrubs, grasses and moderate concentrations of down, dead woody litter. High amounts of needle litter may be present. This model can exist from foothills to subalpine.

Lodgepole pine dwarf mistletoe (*Arceuthobium americanum*) was noted in a few trees on the property and adjacent to the property. Refer to the enclosed material or contact the Colorado State Forest Service for management recommendations.

DEFENSIBLE SPACE MANAGEMENT

There are three defensible space zones to be created around the structure(s) on the site. Please note that it is possible that one or more of these zones will cross over the subject property onto adjacent properties. Property boundaries must be respected; mitigation work is not required beyond immediate boundaries. However, landowners are encouraged to contact and work with neighbors if property lines limit the ability to mitigate within the prescribed area. **Defensible space is a benefit, not only to the individual but also to the community as a whole.**

Zone 1 - Starts at the foundation and extends out 15 feet in all directions from the outside edge of the structure(s). Zone 1 is broken down into three segments:

Zone 1A - Consists of the structure(s) themselves and the area immediately adjacent to and surrounding the structure(s) on all sides. A five-foot wide, non-flammable strip should be created using crushed stone over a fiberglass weed barrier material. This strip will also extend back under, and out to, two feet past the drip line of any decks.

Zone 1B - Extends out from Zone 1A. In this zone, all highly flammable vegetation should be removed. Any large dead woody material on the ground should also be removed. Firewise plants should be used for landscaping and re-vegetation. Grasses should be irrigated when possible and mowed to a maximum height of 6 to 8 inches twice per growing season to a distance of 30 feet from the structure.

Zone 1C - This zone extends out from Zone 1B to 15 feet from the house. All understory trees (ladder fuels) should be removed as marked. These are small seedling and sapling size trees that can be ladders for fire to get in the crowns of the larger trees. A few of the larger, healthy trees can be retained for screening. All remaining trees in this zone should be pruned to a height of 10 feet. They must be well spaced so that the crowns are not touching (10 foot minimum crown spacing). No trees should overhang the house or decks, unless approved by Boulder County or CSFS as "part of the structure" with additional fuels reduction around those trees to insure the defensible space integrity. Trees should be at least 15 feet away from the house on all sides, and a minimum of 20 feet from chimneys.

Zone 2 - This zone extends out from Zone 1C, and acts as a transition zone between the heavily thinned areas near the house to the existing forest setting. It extends down slope between 100-170 feet depending upon slope steepness. Zone 2 also extends on either side of the structure a minimum of 100 feet and behind the house between 70-100 feet assuming no boundary restrictions. Tree spacing begins as in Zone 1C and gradually decreases as you approach the outer edge of the zone. Thinning and crown spacing becomes greater in areas of steep slopes. Ladder fuels and poor quality, suppressed and/or diseased trees, 6 to 8 inches in diameter, make up the majority of the removals. The remaining

mature trees should be pruned to a height of 10 feet at the intersection of Zones 1 and 2 with limbing reduced in height to 6 feet as you approach Zone 3. If there are any questions pertaining to slope and the changes in thinning spacing and distance regulations please refer to <http://www.ext.colostate.edu/pubs/natres/pubnatr.html> and find the *Quick Facts 6.302 Creating Wildfire Defensible Space*.

Zone 3 - This zone extends out from Zone 2 to the edge of the property. It may extend out to areas that are not part of the immediate mitigation efforts. In this zone, a few thicker clumps of trees are acceptable, as well as some unpruned trees near the outer edge. Thinning in this zone adds some protection, but is aimed more at forest health. Trees that are of poor quality or form, or have insect or disease infestations, should be removed. Slash in this zone can be lopped and scattered and/or piled for wildlife use.

- Thin suppressed trees and trees with disease and insect infestations and retain the larger, healthier trees.
- Snags can be retained for wildlife.
- Some slash in this zone can be lopped and scattered and/or piled for wildlife enhancement and shelter.
- Large amounts of slash should be disposed of by chipping, hauling to an approved site, or burning.
- For burning permits, check with your local fire protection district.

MAINTENANCE AND RECOMMENDATIONS

As detailed in fact sheet 6.302, *Creating Wildfire Defensible Zones*, an important factor that determines a structure's ability to survive wildfire is defensible space. Defensible space is a maintained area around a structure where fuels (flammable materials) are modified to slow the possible spread of wildfire to the structure, as well as from the structure to the surrounding areas. Defensible space provides a place where structure protection and fire suppression operations may occur. Wildfire hazard mitigation work breaks up fuel continuity, potentially decreasing a wildfire's intensity, and for more effectiveness should be completed beyond a home's defensible space, zone 1 and 2, area into zone 3.

In addition to the above recommendations, several other measures can be taken to make your home more fire safe and add an additional measure of safety for your family. While not required through site plan review, the following measures should be undertaken to maintain the home and defensible space in the future.

- Maintain your defensible space yearly; contact your local forester for a 5-year maintenance inspection
- Establish an escape route and safety zone with the aid of your local fire protection district
- Keep firewood at least 30 feet away from buildings; clear weeds and grass from around pile
- Do not stack fresh cut wood against live trees – this could invite unwanted insects
- When possible, maintain an irrigated green space; mow grasses 6" to 8" high
- Connect, and have available, a minimum of 50 feet of garden hose with an adjustable nozzle
- Have an emergency evacuation plan in place (included in wildfire mitigation plan)
- Be aware of fire danger; your nearest fire danger sign is located at your fire station or check the Boulder Fire Weather website at www.crh.noaa.gov/bou
- Keep driveways and property address marked with reflective easy to see signs
- Maintain screens on foundations, soffit vents, roof vents, and attic openings
- Get rid of unnecessary accumulations of debris and trash from yards
- Keep tools such as shovels, rakes, ladders, and axes available and ready for use
- Clean debris from the roof and gutters at least two times annually
- Check screens and maintain spark arresters on chimneys annually
- Avoid storing combustibles under decks such as wood piles, scrap lumber, and fuels

DEFINITIONS

Aspect – Exposure. The direction a slope faces.

Canopy – The cover of branches and foliage formed collectively by crowns of adjacent trees.

Crown – Branches and foliage of a tree.

Dominant fuel type – Matter that would carry a fire, found on the ground.

Duff – a layer of accumulated dead organic matter (pine needles).

Eddies – Small wind occurrences that are separate from normal wind flows.

Fuel Model – A number system that identifies the types of fuels found on the property that will directly influence fire behavior.

Fire danger - An assessment of both fixed and variable factors of the fire environment, which determine the ease of ignition, rate of spread, difficulty of control, and the fire impact.

Fire hazard - The potential fire behavior for a fuel type, regardless of the fuel type's weather-influenced fuel moisture content or its resistance to fireguard construction. Assessment is based on physical fuel characteristics, such as fuel arrangement, fuel load, condition of herbaceous vegetation, and presence of elevated fuels.

Fire management - The activities concerned with the protection of people, property and forest areas from wildfire and the use of prescribed burning for the attainment of forest management and other land use objectives, all conducted in a manner that considers environmental, social and economic criteria.

Fire risk - The probability or chance of fire starting determined by the presence and activities of causative agents.

Fuel continuity – The proximity of fuels to each other. Helps determine if a fire can sustain itself.

Forest health - A forest condition that is naturally resilient to damage; characterized by biodiversity, it contains sustained habitat for timber, fish, wildlife, and humans, and meets present and future resource management objectives.

Ladder fuels - Fuels that provide vertical continuity between the surface fuels and crown fuels in a forest stand, thus contributing to the ease of torching and crowning.

Limb (verb) –To remove the branches from a tree.

Noxious weeds - Any weed so designated by the Weed Control Regulations and identified on a regional district noxious weed control list.

Overstory – The tree species that forms the uppermost forest layer (dominant and co-dominant).

Slash – The residue left on the ground as a result of forest and other vegetation being altered by forest practices or other land use activities.

Snag – Standing dead tree, often used by wildlife such as woodpeckers, owls, and other various mammals.

Understory – Plants that grow underneath the overstory species.

Wildland urban interface – a popular term used to describe an area where various structures (most notably private homes) and human developments meet or are intermingled with forest and other vegetative fuel types.



Annual fire safety checklist

- Thin trees and brush properly within defensible space.
- Remove trash and debris from defensible space.
- Remove needles and pine cones from window wells.
- Remove trees growing through a porch or other portions of a structure.
- Clear leaves and debris from the roof and gutters of structures.
- Remove branches that overhang a chimney or roof.
- Stack firewood uphill from a home or on a contour away from the home.
- Use noncombustible roof materials.
- Place shutters, fire curtains or heavy drapes on windows.
- Place screens on foundation and eave vents.
- Enclose sides of stilt foundations and decks.
- Remove any combustibles from under decks, porches or entrances ways.
- Use a chimney screen or spark arrester in fireplaces.
- Clear vegetation from around fire hydrants, cisterns, propane tanks, etc.
- Place placards on garages if storing flammable materials inside.
- Make sure that an outdoor water supply is available with a hose, nozzle and pump.
- Post address signs that are clearly visible from the street or road.
- Make sure that driveways are wide enough for fire trucks and equipment.
- Check with appropriate highway agencies to make sure load limits are posted on bridges and for the appropriate protocol for posting load limits for bridges on private property.
- Install and test smoke detectors.
- Practice a family fire drill and evacuation plan.

Evacuation tips

- If a wildfire is threatening your area, listen to the radio for updated reports and evacuation information.
- Confine pets to one room and make plans to take care of them in the event of evacuation.
- Arrange for temporary housing with a friend or relative whose home is outside the threatened area. Leave a note in a prominent place in your home that says where and how you can be contacted.
- If your home is threatened by wildfire, you will be contacted and advised by law enforcement officers to evacuate. If you are not contacted or you decide to stay and help defend your home, evacuate pets and family members who are not needed to protect your home.
- Remove important documents, mementos, etc. from the possible fire area.
- Choose an evacuation route away from the fire if possible. Watch for changes in the speed and direction of the fire and smoke.

Take a disaster supply kit containing:

- Drinking water.
- A change of clothing and footwear for each family member.
- Blanket or sleeping bag for each person.
- First-aid kit and prescription medications.
- Emergency tools including a battery-powered radio, flashlight and extra batteries.

- Extra set of car keys and credit cards, cash or traveler's checks.
- Extra pairs of eyeglasses or other special items for infants, elderly or disabled family members.

Defending your home

Whether you choose to stay to defend your home or to evacuate, complete as many of the following preparations as possible.

- DO NOT JEOPARDIZE YOUR LIFE. NO MATERIAL ITEM IS WORTH A LIFE.
- Wear fire-resistant clothing and protective gear.
- Remove combustible materials from around structures.
- Close or cover outside vents and shutters.
- Position garden hoses to reach the entire house, but do not turn the water on until it is needed. Hoses should have an adjustable nozzle.
- Place large, full water containers around the house. Soak burlap sacks, small rugs or large rags in the containers.
- Place a ladder against the roof of the house on the opposite side of the approaching wildfire. Place a garden hose near the ladder, prepared as described previously.
- Place portable pumps near available water supplies, such as pools, hot tubs, creeks, etc.
- Close all windows and doors. Do not lock them.
- Close all inside doors.
- Turn on a light in each room and all outside lights. Leave them on even during daylight hours.
- Fill tubs, sinks and similar containers with water.
- Shut off gas supplies to structures at outside meters. Shut off propane supplies at the outside meter of the tank.
- Remove curtains made of lace, nylon or other light materials. Close blinds, heavy drapes and fire resistant window covers.
- Move overstuffed furniture into the center of the house, away from windows and sliding doors.
- Cars should be parked in the garage, facing out. Close the windows of the vehicle but do not lock the doors. Leave the keys in the ignition.
- Close the garage door but leave it unlocked. Disconnect automatic garage door openers.

For additional copies of these checklists, visit www.colostate.edu and search for wildfire, view the Colorado State Cooperative Extension fact sheet on [Forest Home Fire Safety](#), or contact the local Cooperative Extension office usually listed under the county government section of your local phone book.

(Information provided by Colorado State University Cooperative Extension and the Colorado State Forest Service.)

Safety Zone Guidelines

A Safety Zone is an area that in the event of a wildland fire you could survive the passing fire without the aid of a fire shelter. A natural safety zone could be an area already burned clean by the fire (in the black), rock areas where flashy fuels are absent, or large bodies of water. A manmade safety zones could be pre-constructed sites such as clear cuts. It should be close enough to your home to consider escape time to reach the safety zone. They should not be located upslope or downwind of the fire or in heavy fuels.

1. Avoid locations that are downwind from the fire.
2. Avoid locations that are in chimneys, saddles, or narrow canyons.
3. Avoid locations that require a steep uphill escape route.

4. Take advantage of heat barriers such as lee side of ridges, large rocks, or solid structures.
5. Burn out safety zones prior to flame front approach.
6. For radiant heat only, the distance separation between you and the flames must be at least four times the maximum flame height. This distance must be maintained on all sides, if the fire has ability to burn completely around the safety zone. Convective heat from wind and/or terrain influences will increase this distance requirement.

Calculations Assuming No Slope and No Wind

<u>Flame Heights</u>	<u>Distance separation</u>	<u>Area in Acres</u>
10 feet	40 feet	1/10 acre
20 feet	80 feet	1/2 acre
50 feet	200 feet	3 acres
75 feet	300 feet	7 acres
100 feet	400 feet	12 acres
200 feet	800 feet	50 acres

Note: Distance separation is the radius from the center of the safety zone to the nearest fuels. When fuels are present that will allow the fire to burn on all sides of the safety zone this distance must be doubled in order to maintain effective separation in front, to the sides, and behind the person.

Area in Acres is calculated to allow for distance separation on all sides for a three person family and a vehicle. One acre is approximately the size of a football field or exactly 208 feet x 208 feet.

Example: Given a fire with 10 foot flame heights (no wind or slope). You would need a minimum of 40 feet between you and the flames. So your total safety zone should be 80 feet x 80 feet. If you are settled into the middle of the safety zone you will have a minimum distance of 40 feet to each edge of the zone.

Landscape view of the William Herrea property
737 Cougar Run, Nederland, CO 80466
SPR - 07 - 068

737 Cougar Run

Boulder Canyon (CO 119)

Ridge Road

Legend

— Property Boundary

0 330 660 1,320 1,980 2,640 Feet



This map is intended for display purposes only
and is not intended for any legal representations

Property of William Herrea
737 Cougar Run, Nederland, CO 80466
SPR - 07 - 068

Cougar Run

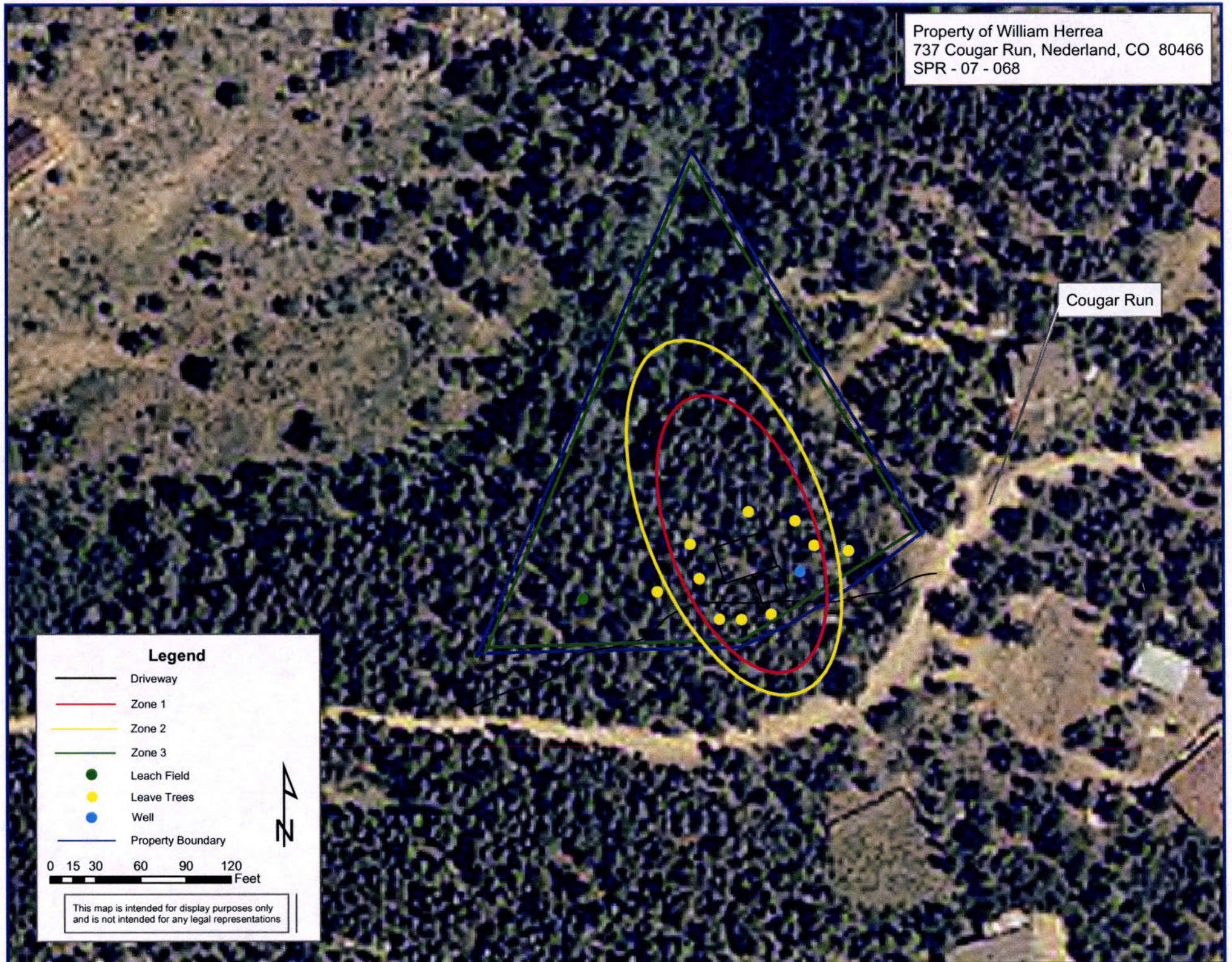
Legend

- Driveway
- Zone 1
- Zone 2
- Zone 3
- Leach Field
- Leave Trees
- Well
- Property Boundary



0 15 30 60 90 120
Feet

This map is intended for display purposes only
and is not intended for any legal representations



DIRECTIONS FOR FILLING OUT FORM:

Please fill out the data form as completely as possible. You may email it to Matthew Jedra at mjedra@lamar.colostate.edu or fax it to 303-823-5768, or bring it to the scheduled appointment.

Any **Bolded** categories will be filled in by the Colorado State Forest Service (CSFS) representative at the time of initial site visit. If you have any questions about this form please contact Matthew Jedra at 303-823-5774.

Wildfire Mitigation Plan
FIELD DATA FORM

Inspection Date:

9/17/07

Landowner name:

William Herrea

Mailing address:

759 Cougar Run

City, State, Zip:

Nederland Co 80466

Site address:

737 Cougar Run

Phone number:

303 258 0524

Road access:

(Directions from main access road)

Docket Number:

SPR-07-068

(SPR, LU, Etc.)

Section:

4

Township:

1 South

Range:

72 West

Legal Description:

Contact Info
Burr's Construction
Burr Chilcox
P.O. Box 1273
Nederland Co 80466
303 258 7786
303 810 2349

Elevation: _____ (feet)

Lot size: 1.1 (Acres)

Driveway length: 180' or 65' (Actual length in feet from road to home)

Driveway trees removed: _____ (few/many/none)

House design: simple (simple/complex)

Home buffer material: stone crushed (Stone/crushed gravel/decorative stone)

Roof Design: Simple (simple/complex)

Roof material: Asphalt (Asphalt shingles/concrete tiles/metal)

Soffits type: Cement board (Plywood/hardboard/cement board)

Siding material: Cement board (Cement/hardboard/log/stucco/stone/wood)

Windows (#): 13 (approximate number of windows)

Windows Size: 3x4 (On average: small/medium/large)

Windows Frames: aluminum clad (Wood/aluminum/aluminum clad)

Windows Aspect: _____ (Dominant viewing direction)

Sliding Glass Doors: 1 upper deck (Location and Number)

Window Construction: _____ (Tempered glass/e-coating/etc.)

Window wells: 0 (Number and location if present)

Door Material: steel/wood (Wood/steel/fiberglass/composite)

Deck material: Composite (Wood/composite materials)

Deck Description: open underneath (Enclosed/open underneath or overhead)

Deck support type: Timber post (Timber posts/logs/steel/concrete/stone)

Deck buffer material: Crushed rock (Crushed rock/gravel)

Deck weed barrier: _____ (Fiberglass/polyester)

Number of Structures: 1 (All structures to be present)

Existing Structures: 0 (House/barn/garage/etc.)

New Structure: House (House/Barn/new addition/etc..)

Structure SQR. FT.: 2500 2520 (Total square feet of structure) 3001.5

Utility Location: buried (Pole/buried: Direction from structure)

Structure aspect: South (Dominant facing direction/view)

Garage if detached: 452 (Total square feet)

Out buildings: 0 (Total square feet of sheds, cabins, ect...)

Leach field: 60' (Distance from house, and direction)

Cistern size: 0 (gallons)

Cistern: 0 (Distance from house, and direction)

Cistern Type: 0 (Domestic Cistern or Fire Cistern)

Making a donation to community cistern: yes (Yes or No)

Have you talked to the local fire department: NO (Yes or No)

Are you required to have a sprinkler system: NO (Yes or No)

Water supply: well (Well or main line)

Well (if applicable): 10' EAST (Distance from house, and direction)

Propane or natural gas: Propane

Propane Tank location: ? (Distance from house and direction)

Slash disposal: Chipped (Chipped/hailed/burned/lop-scatter)

Can you provide a copy of a map with locations: _____ (Yes or No)

This part will be filled out by the CSFS inspecting forester

FPD: Ned

Dominant fuel type: GFS (Grass/forbs/shrubs/slash/etc)

Dominant overstory: hedge row

Co-dominant overstory: DF PP

Fuel model type: 8

Aspect: _____ (Direction of slope)

Slope: -2 - 30

Building site: chimney (Chimney/saddle/valley/ridge/mid-slope)

Site moisture: wet/dry

Natural fire barrier: conifer to the South

Insect & Disease Diagnosis: multiple



Boulder County Land Use Department
2045 13th Street / 13th & Spruce Streets / Courthouse Annex
Mailing address: PO Box 471; Boulder, CO 80306
Phone 303-441-3930 / Fax 303-441-4856
http://www.co.boulder.co.us/lu e-mail: planner@co.boulder.co.us

489315, CR# 3451, 1075.00 RS

SHADED AREAS FOR STAFF ONLY	
INTAKE STAMP	P A I D
JUL 11 2007	
BOULDER COUNTY LAND USE	

APPLICATION FORM

PROJECT NUMBER		PROJECT NAME	
*No Application Deadline: <input type="checkbox"/> LIMITED IMPACT SPECIAL USE <input checked="" type="checkbox"/> SITE PLAN REVIEW <input type="checkbox"/> SITE PLAN REVIEW WAIVER <input type="checkbox"/> SUBDIVISION EXEMPTION <input type="checkbox"/> 1041-STATE INTEREST REVIEW <input type="checkbox"/> EXEMPTION PLAT <input type="checkbox"/> OTHER		*Application Deadline - 1st Wednesday of the month: <input type="checkbox"/> VARIANCE <input type="checkbox"/> APPEAL	
*Application Deadline - 2nd Wednesday of the month: <input type="checkbox"/> PRELIMINARY PLAN <input type="checkbox"/> LOCATION AND EXTENT <input type="checkbox"/> RESUBDIVISION (REPLAT) <input type="checkbox"/> ROAD/EASEMENT VACATION		<input type="checkbox"/> FINAL PLAT <input type="checkbox"/> ROAD NAME CHANGE <input type="checkbox"/> SPECIAL USE/SSDP <input type="checkbox"/> EXTENSION OF APPROVAL <input type="checkbox"/> SKETCH PLAN <input type="checkbox"/> REZONING	
LOCATION(S) - STREET ADDRESS(ES) 737 Cougar Run (new address)			
SUBDIVISION NAME NEDERLAND, CO 80466			
ST ANTON Highland			
LOT(S) H2	BLOCK(S)	SECTIONS(S) 4	TOWNSHIP(S) 1 south
AREA IN ACRES 1.16708		EXISTING ZONING	EXISTING USE OF PROPERTY
PROPOSED WATER SUPPLY well		PROPOSED SEWAGE DISPOSAL METHOD septic	
NUMBER OF PROPOSED LOTS 72 WEST			
APPLICANTS			
APPLICANT/PROPERTY OWNER William Herrera		EMAIL ADDRESS	
STREET ADDRESS 759 Cougar Run			
CITY Nederland	STATE CO	ZIP CODE 80466	PHONE NUMBER 303-258-0524
FAX NUMBER			
APPLICANT/PROPERTY OWNER		STREET ADDRESS	
CITY	STATE	ZIP CODE	PHONE NUMBER
FAX NUMBER			
AGENT/CONSULTANT Burr's Construction Co Burr Wilcox		EMAIL ADDRESS burrscnstruction@nednet.net	
STREET ADDRESS 26935 Boulder Canyon Dr P.O. Box 1273			
CITY Nederland	STATE CO	ZIP CODE 80466	PHONE NUMBER 303-258-7786
FAX NUMBER 303-258 0277			
AGENT/CONSULTANT		STREET ADDRESS	
CITY	STATE	ZIP CODE	PHONE NUMBER
FAX NUMBER			
CERTIFICATION			
I certify that I am signing this Application Form as an owner of record of the property included in the Application. I certify that the information and exhibits I have submitted are true and correct to the best of my knowledge. I understand that all materials required by Boulder County must be submitted prior to having this matter processed. I understand that public hearings or meetings may be required. I understand that I must sign an Agreement of Payment for Application processing fees and that additional fees or materials may be required as a result of considerations which may arise in the processing of this docket. I understand that the road, school and park dedications may be required as a condition of approval. I understand that I am consenting to allow the County Staff involved in this application or their designees to enter onto and inspect the subject property at any reasonable time, without obtaining any prior consent.			
All landowners are required to sign application. If additional space is needed attach additional sheet signed and dated.			
SIGNATURE OF LANDOWNER X [Signature]		DATE 6.21.2007	
SIGNATURE OF LANDOWNER X		DATE	
OTHER SIGNATURE *		DATE	
X			

* Only if the Land Use Director waives the landowner signature requirement for good cause shown under the applicable provisions of the Land Use Code.

PLEASE REFER TO THE REGULATIONS AND APPLICATION SUBMITTAL PACKAGE FOR COMPLETE APPLICATION REQUIREMENTS

Form: P/02

Revised: 6/1/06

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Boulder County Land Use Department Planning Publications

Site Plan Review Fact Sheet

Each section of this Fact Sheet is required to be completed, even if the information is duplicated elsewhere in the application. Completed Fact Sheets cut application review time, and assist staff in expediting determinations. Please make duplicates of this page if the project involves more than two structures.

Structure Information

TYPE OF STRUCTURE: New residence
(e.g. residence, studio, barn, etc.)

TOTAL EXISTING FLOOR AREA: 4/A sq/ft **DEMOLISH:** 4/A sq/ft
(Finished + Unfinished sq.ft. - always include garage if attached)

Is new floor area proposed in areas where demolition is will occur?

Yes NA No

If Yes, please be sure this area is included in the table below.

STRUCTURE #1:

PROPOSED FLOOR AREA (new construction only)			
	Finished	Unfinished	Total
Basement	<u>85</u> sq/ft	<u>1175</u> sq/ft	<u>1260</u> sq/ft
1st Floor	<u>1260</u> sq/ft	sq/ft	<u>1260</u> sq/ft
2nd Floor	sq/ft	sq/ft	sq/ft
Garage <input type="checkbox"/> Detached <input type="checkbox"/> Attached	sq/ft	<u>452</u> sq/ft	<u>452</u> sq/ft
Covered Deck		sq/ft	<u>325</u> sq/ft
Total	sq/ft	sq/ft	<u>3004.5</u> sq/ft

Height above existing grade 27 FT

Exterior wall:

- Material HARDIE siding
- Color Cedar

Roofing:

- Material CLASS A Shingle
- Color BROWN

When completed, this structure will have a total of 3 bedrooms.

Project Identification

Project Name:

Herreo

Property Address/Location:

Lot 42 - St. Anton High Lands

Current Owner:

William Herreo

Size of Property in Acres:

1.16708

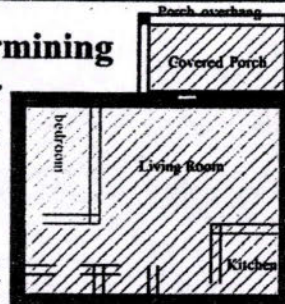
Determining

Floor

Area:

Floor area is measured in terms of square

feet as everything within the inside of the outside walls and includes covered porches, garages and basements. The shaded area on the diagram above indicates the area counted as square feet.



Please note: If existing walls and/or roof are removed and new walls/roof are constructed, the associated floor area due to the new walls and/or roof is considered new construction and must be included in the calculation of floor area for Site Plan Review & shown on the Fact Sheet.

If a Limited Impact Special Use Review is required, then call 303-441-3930 and ask for a new Preapplication conference for the Limited Impact Review.

This document prepared by:
Boulder County Land Use Dept.
Courthouse Annex, 13th & Spruce St.
PO Box 471; Boulder, CO 80306
Phone: 303-441-3930
Fax: 303-441-4856
Web Site:
<http://www.co.boulder.co.us/lu/>
or <http://www.bouldercounty.us/lu/>
E-mail: planner@co.boulder.co.us
Office Hours:
Monday through Friday
8:00 AM to 4:30 PM

STRUCTURE #2:

TYPE OF STRUCTURE:

(e.g. residence, studio, barn, etc.)

TOTAL EXISTING FLOOR AREA: _____ sq/ft **DEMOLISH:** _____ sq/ft
(Finished + Unfinished sq.ft. - always include garage if attached)

PROPOSED FLOOR AREA (new construction only)			
	Finished	Unfinished	Total
Basement	sq/ft	sq/ft	sq/ft
1st Floor	sq/ft	sq/ft	sq/ft
2nd Floor	sq/ft	sq/ft	sq/ft
Garage <input type="checkbox"/> Detached <input type="checkbox"/> Attached	sq/ft	sq/ft	sq/ft
Covered Deck		sq/ft	sq/ft
Total	sq/ft	sq/ft	sq/ft

Height above existing grade _____

Exterior wall:

- Material _____
- Color _____

Roofing:

- Material _____
- Color _____

When completed, this structure will have a total of _____ bedrooms.

Note that applicants must fill in the shaded boxes even though foundation work does not contribute toward the 500 cubic yard trigger requiring Limited Impact Special Use Review.


Also, note that all areas of earthwork must be represented on the site plan.

	Area	Area	Total
Driveway & Parking Areas	50	150	200
Berms			
Other Grading:			
<u>Total</u>	50	150	200 Box 1

If the total in *Box 1* is more than 500 cubic yards, then a Limited Impact Special Review is required.

	Cnt	Fill	Total
Foundation	150	75	225

Material cut from foundation excavation to be removed from the property. Excess material will be transported to the



Out and fill calculations are necessary to evaluate the disturbance of a project and to verify that a Limited Impact Review (LI) is not required. A LI is required when grading for a project involves more than 500 cubic yards (minus normal cut/fill and backfill contained within the foundation footprint). If grading totals are close to the 500-yard trigger, additional information may be required, such as a grading plan stamped by a Colorado Registered Professional Engineer.

identify the property (if not already addressed) and stake the location of the improvements on the site within four days of submitting this application. I understand that the intent of the Site Plan Review process is to address the impacts of location and type of structures, and that modifications may be required. Site work will not be done prior to issuance of a Grading or Building Permit.

Signature

Date _____

Is your property gated and locked? If county personnel cannot access the property, then it could cause delays in reviewing your application.

Burr's Construction Company
PO Box 1273 Nederland, CO 80466
PH: 303 258 7786
Fax: 303 258 0277

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BURR'S CONSTRUCTION CO.

July 10, 2007

Info Sheet Herrera Residence

Lot 42 St. Anton Highland Cougar Run Nederland

Single Family Home with two Cars attached Garage

Septic and Well

6 exterior lights all to be down lights.

Siding to be Hardie none combustible lap siding color to be Cedar

Roofing to be Tamko Heritage Series Class A in Rustic Cedar

Decks to be constructed to meet or excide code and county requirements for combustibility and structure

We are proposing a pass through drive way be cause of the narrow road which is not a county maintained road. It will be better for the fire department with access to the house site. The road is to narrow to make a turn out of the drive of the house next door it requires a K turn. The pass through drive would allow vehicles to access the property with difficulty.

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Boulder County

Land Use Department
PreApp - Vicinity Map



This map is for informational purposes only and, in itself, does not indicate whether property will conflict with any Comprehensive Plan or Environmental Resources. Review processes may also reveal environmental resources not found on County maps.

Legend

Open Space

Federal

State

Local

Conservation Easements

Gravel resources

Utilities and other

Subdivision

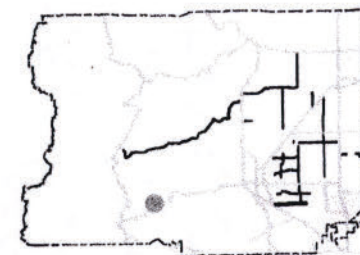
Lots

Nupud

Floodplain

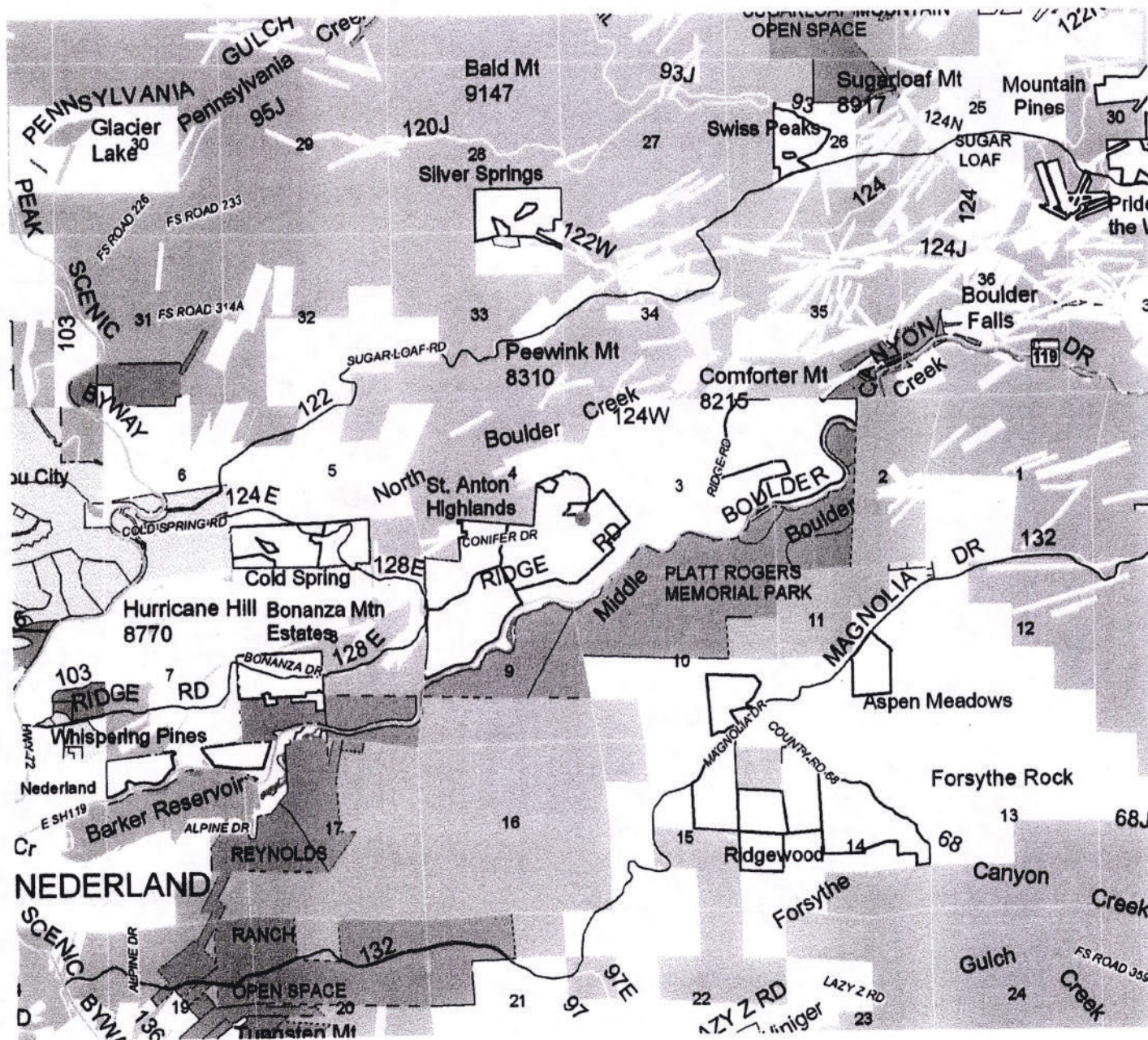
FO Zoning District

Map Location



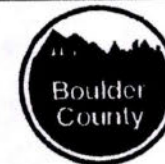
This map is for illustrative purposes only, and is not suitable for official use in decision making. The areas depicted here are approximate. More site-specific studies may be required to draw accurate conclusions.

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Boulder County

Land Use Department
PreApp - Location Map



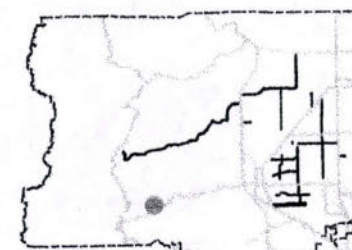
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Legend

Archeologically Sensitive Travel Routes

- Municipalities
- Archeologically Sensitive Areas
- Open Corridors, Roadside
- Open Corridors, Streamside
- Overland Habitat Connectors
- Stream Habitat Connectors
- Significant Riparian Corridors
- Critical Wildlife Habitats
- Rare Plant Areas
- Floodplain - FO Zoning District
- Environmental Conservation Areas
- Natural Landmarks and Areas
- Significant Natural Communities
- Significant Agricultural Lands
- National Importance
- Statewide Importance
- Local Importance

Map Location



This map is for illustrative purposes only, and is not suitable for parcel-specific decision making. The areas depicted here are approximate. More site-specific studies may be required to draw accurate conclusions.

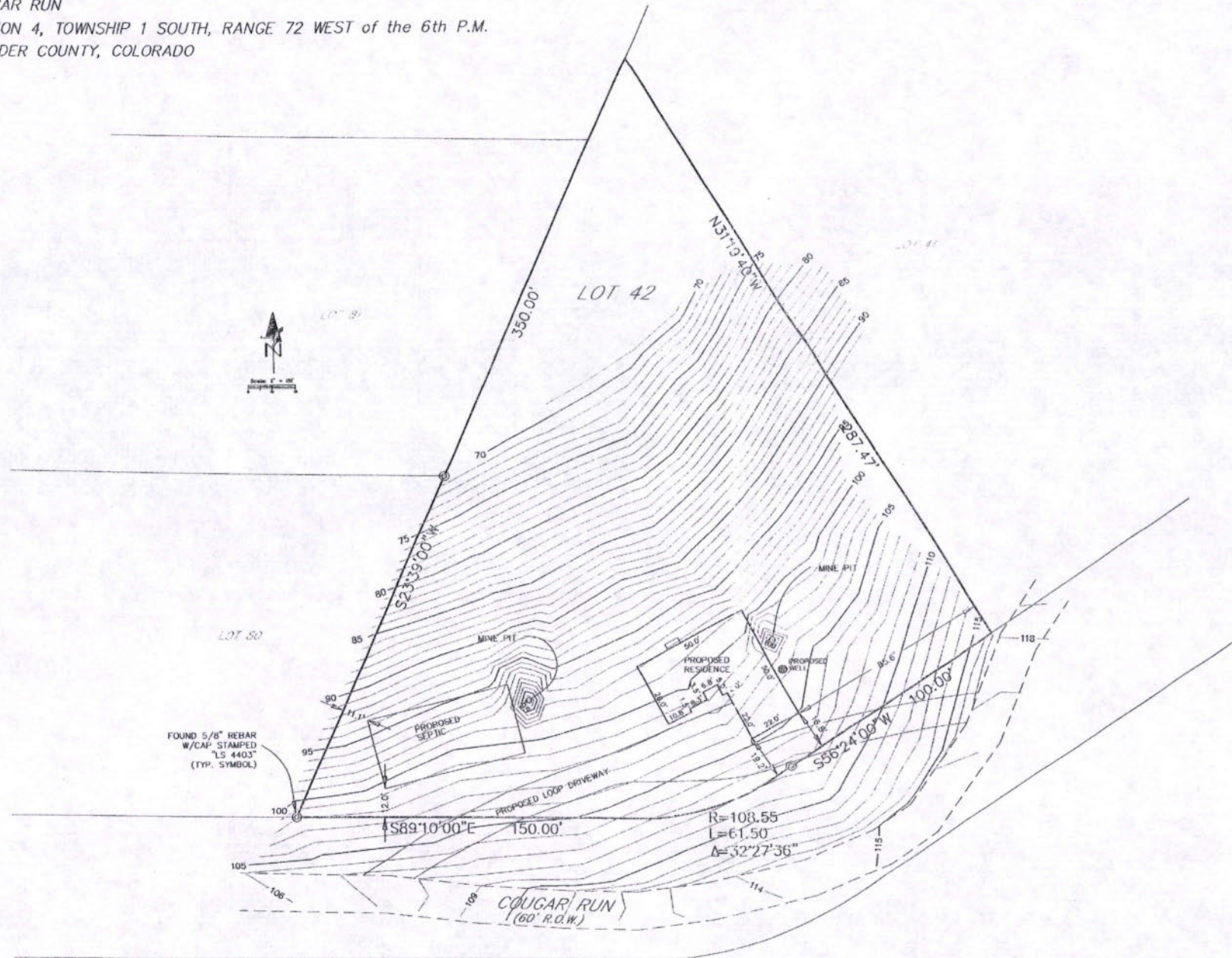
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SITE PLAN

COUGAR RUN

SECTION 4, TOWNSHIP 1 SOUTH, RANGE 72 WEST of the 6th P.M.
BOULDER COUNTY, COLORADO



LEGAL DESCRIPTION
LOT 42,
ST. ANTHONY HIGHLAND, FIRST NATION
COUNTY OF BOULDER,
STATE OF COLORADO

NOTES:
1) THIS SURVEY WAS PREPARED PURSUANT TO THE SCOPE OF
THIS CONTRACT. THE NECESSARY INFORMATION FOR THIS
LIMITED PROPERTY SEARCH BY STAFF PEAK SURVEYING, INC.
PROCESSED BY THE CLIENT.
2) BOUNDARY DATA IS PLOTTED AS PER THE ORIGINAL PLAT
BOULDER COUNTY CLERK AND FILED TO THE PUBLIC RECORDS.
3) ELEVATIONS ARE BASED UPON AN ASSUMED ELEVATION
4) SPINE SET BY STAFF PEAK FOR THE PURPOSES OF THIS SURVEY
AND ARE NOT TIED TO A KNOWN BENCHMARK.
5) AVERAGE OF BENCHMARKS IS THE PLAT BENCHMARK OF 10,000.00
WEST LINE OF THE SURVEYED PROPERTY (EITHER FOUND
AND SECOND BENCHMARK.

PROPERTY LOCATION:
18th COUGAR RUN, NEDERLAND, CO 80466

SITE PLAN
I, the undersigned, hereby certify that this SITE PLAN was prepared
BY ME OR UNDER MY CLOSE PERSONAL SUPERVISION AND THAT I AM A
LICENSED SURVEYOR IN THE STATE OF COLORADO. I am not aware of
any error or omission in this plan, and I am not aware of any
error or omission in the data furnished to me by the client.
DATE: November 21, 2006 except utility crosses
boundaries of the parcel, except as shown, that I
verify the described portions by improvements on a
survey as indicated, and that there is no dispute
any interest crossing or bordering any part of or

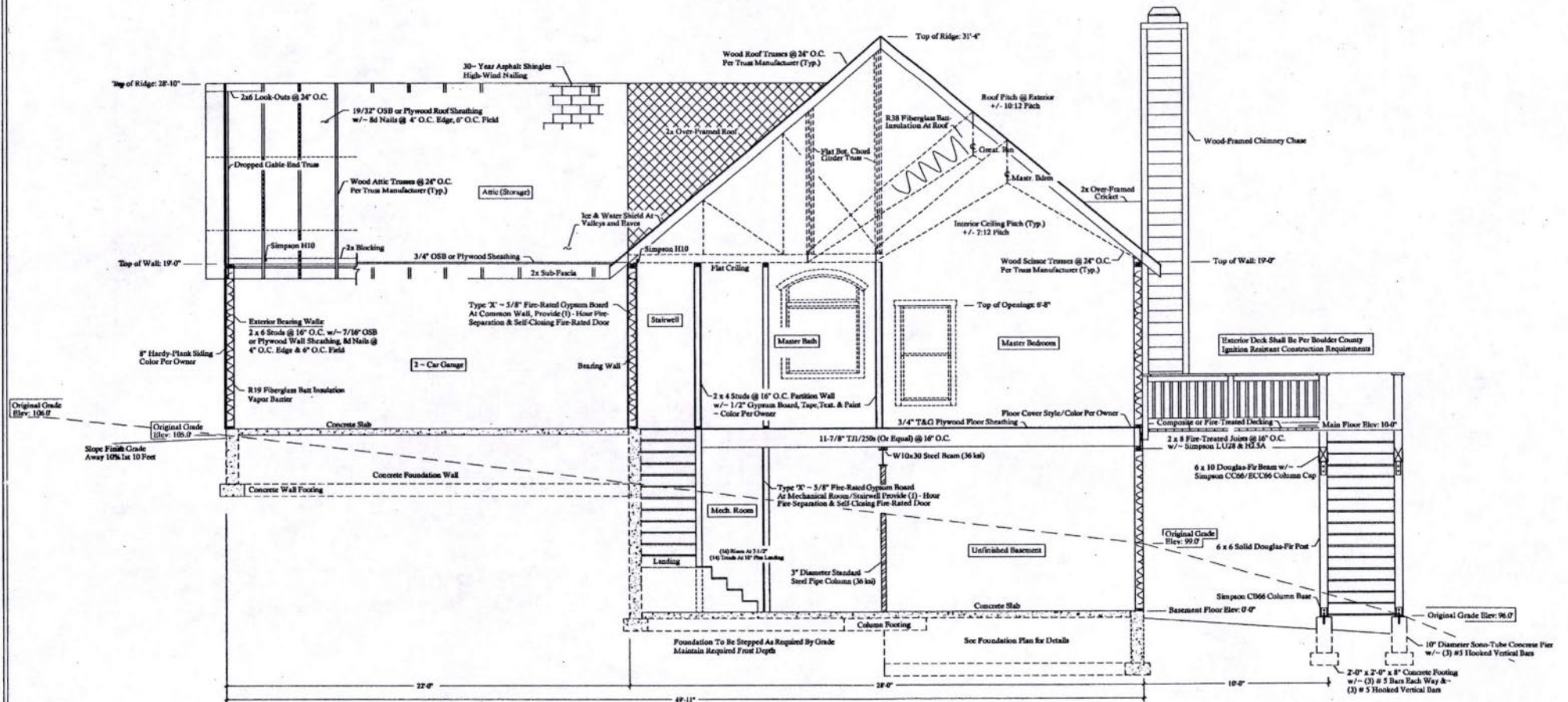
CSH
CHRISTOPHER B. HARTMAN, P.E.S. 34108
FOR AND ON BEHALF OF
STAFF PEAK SURVEYING

PREPARED FOR: GARR

STAFF PEAK
P.O. BOX
NEDERLAND,
303-03

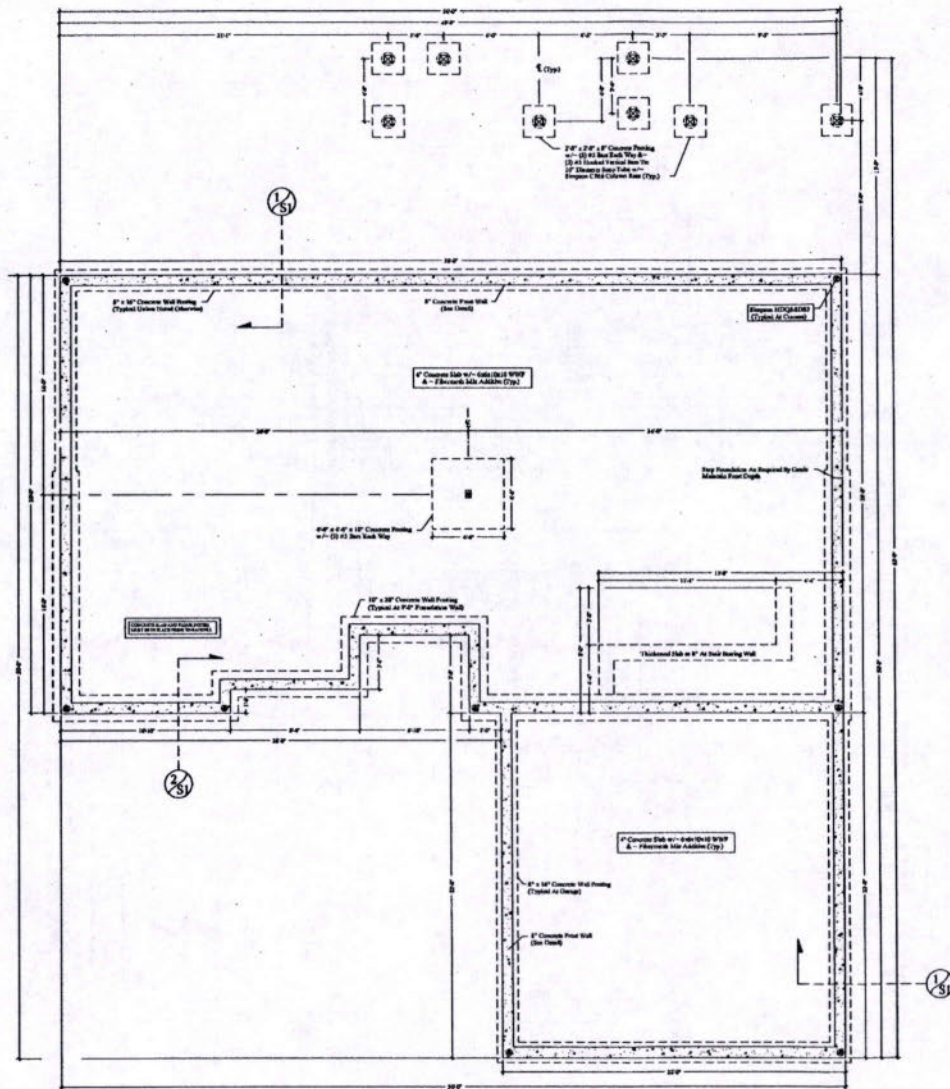
2/23/2007

(242,041) $0-1 = .81$ 374.25



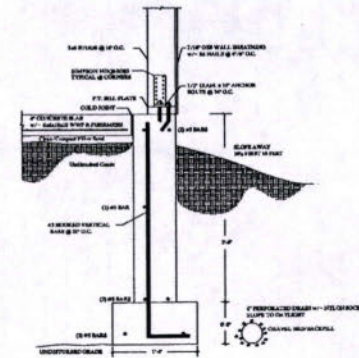
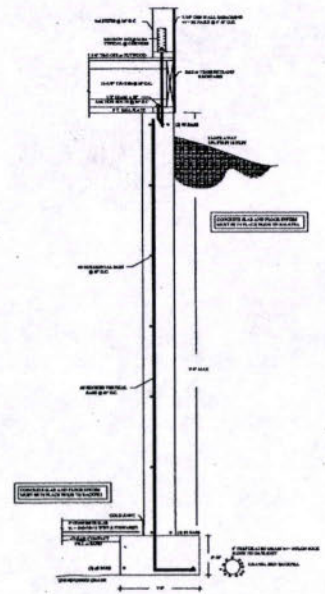
CROSS SECTION
SCALE: 3/8" = 1'-0"

GENERAL NOTES		DESIGN LOADS	
• All construction shall conform to the 2021 International Residential Code as amended by Boulder County and shall be consistent with good building practice.	• Insulate finish to be gypsum board, unless noted otherwise.	• Snow: 77 psf	• 2021 International Residential Code
• Foundation shall be detailed with structural drawings and be built in accordance with Boulder County Building Department.	• Structural Design/Details per Licensed Contractor, Plumbing/Heating/Design/Details per Licensed Contractor, Electric/Details per Licensed Contractor.	• Floor: 40 psf	• Wind: 110 mph (Exposure B)
	• Windows/Door Schedule per Owner/Builder, none indicated.	• Dead Load: 10 psf	• Boulder County, CO



FOUNDATION PLAN
SCALE: 1/4" = 1'-0"

FOUNDATION DETAIL
SCALE: 3/4" = 1'-0"



FROST WALL DETAIL
SCALE: 1" = 1'-0"



* SPECIAL NOTE *

A Soils Investigation and Subsequent Report by A Geotechnical Engineer is REQUIRED to verify that Conditions and Allowable Bearing Capacity. This Report shall be provided to the owner for the safety of the Foundation Design and Construction.

FOUNDATION NOTES

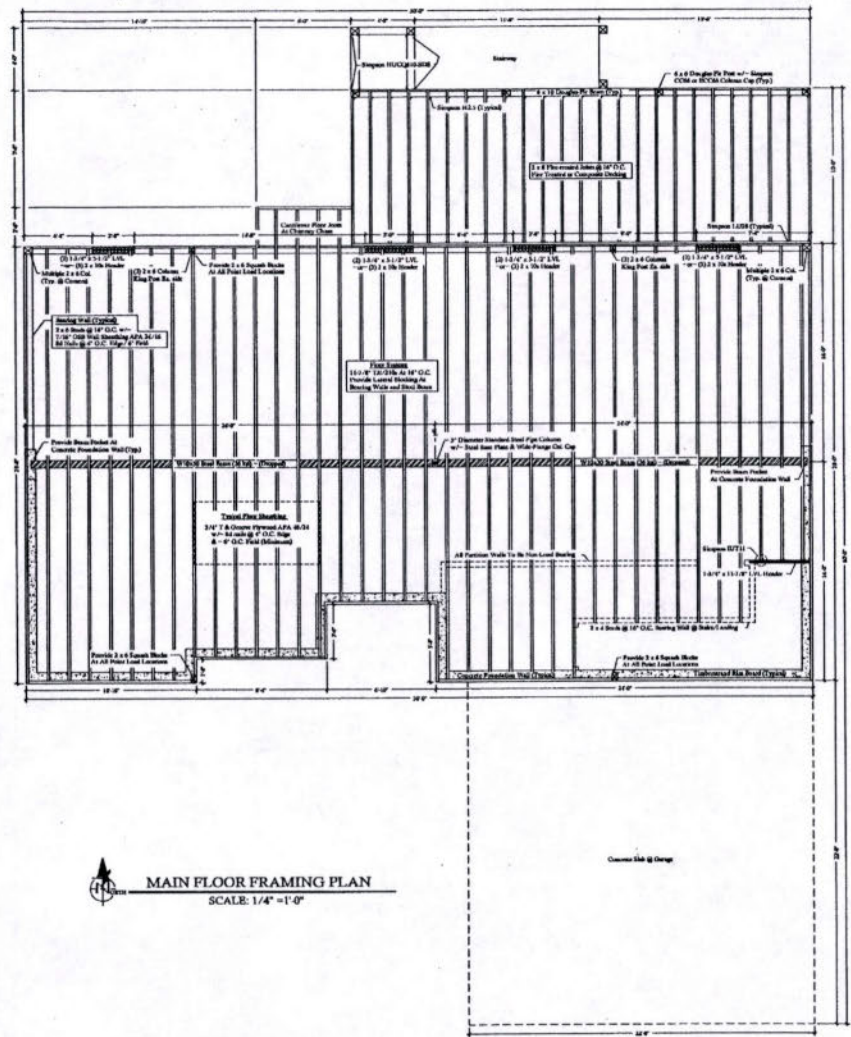
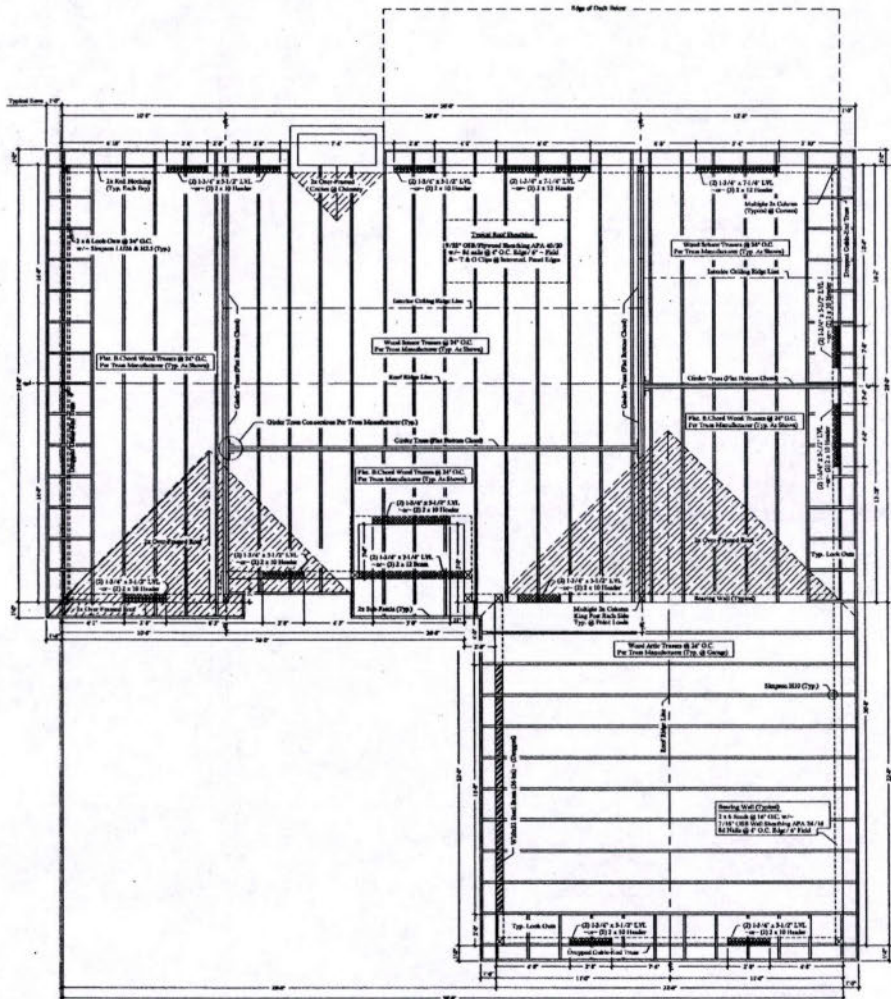
- Allowable soil bearing pressure is assumed at 1,000 psf.
- Concrete shall be made in place, 3000 psi 28-day strength.
- Reinforcing shall be grade 60 and shall be placed in accordance with ACI 318, splice length shall be 30 bar diameter and lap length shall be 30 bar diameter.
- Foundation exterior finish shall be as specified.
- Show wall anchor locations and anchor bolt spacing and shall be verified per plan.
- All construction shall be consistent with good business practice and shall conform to ACI 318 and the 2003 International Building Code.
- All dimensions to be field verified by construction prior to pour.

GENERAL NOTES

- All construction shall conform to the 2003 International Residential Code as amended by Boulder County and shall be consistent with good business practice.
- Interior finish to be gypsum board, install and color per Owner.
- Exterior Design: 1 space per Electrical Contractors' Planning, Lighting Design, Layout per Electrical Contractors. Show color code per Owner.
- Windows/Doors Schedule per Owner/Builder, show as indicated.

DESIGN LOADS

- Snow: 10 psf
- Floor: 40 psf
- Dead Load: 10 psf
- Wind: 130 mph (2 second gust)
- Boulder County, CO



FRAMING NOTES

- All 2"x framing shall be Douglas Fir No. 1.
- Ch. 2x12s shall be spaced 16" on center.
- Horizontal shear diaphragms shall be per p. 1001 of the IRC.
- Wood joist connections shall be as per IRC.
- Multiple 2"x columns shall be nailed together.
- Wall connections shall be as per IRC.
- All connections shall be consistent with p. 1001 of the IRC.
- All dimensions shall be field unless noted.

GENERAL NOTES

- All construction shall conform to the 2003 International Residential Code as amended by Boulder County and shall be consistent with good building practice.
- Interior finish to be as per owner's selection.
- Standard Design Layout per Standard Construction Planning Drawing Design Layout per Framing Contractor. Submit schedule per Owner.
- Windows/Doors Schedule per Owner/Builder, same as indicated.

DESIGN LOADS

- Dead: 10 psf
- Live: 40 psf
- Wind: 115 mph (Zone 4)
- Roof: 10 psf