





## **WILDFIRE MITIGATION PLAN**

For Bryan and June Zwan  
5235 Old Stage Rd, Boulder, CO  
Docket: SPRW - 07 - 077  
Inspection date: 12/10/2007

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

Bryan and June Zwan  
5235 Olde Stage Rd  
Boulder, CO 80302  
Phone: 303-859-2133

### **Prepared by:**

Matthew Jedra  
Forester - Boulder District  
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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 11, Township 1N, and Range 71W, SE 1/4 NE1/4 20 ACS M/L and SW 1/4 NE 1/4 11.4 ACS M/L Total 31.4 ACS M/L 11-1N-71W. The property is located within the Boulder Rural Fire Protection District (303-530-9575). A covered porch addition of 1,659 sq.ft. is proposed for the residence. The lot is 31.4 acres in size and has a modest ~2-50 percent slope with a south-southeast aspect. The site is at ~5,858 feet in elevation and located on a relatively dry site. Lee Hill Dr to the south and Olde Stage Rd to the east create a small natural barrier that may help slow the spread of a surface fire on the site.

## **CONSTRUCTION DESIGN AND MATERIALS**

The current structures on site have a complex design with a complex roofline and will be oriented with a south-southeast 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 currently consist of Class-A asphalt shingles which will be replaced with concrete tiles. **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 stucco and stone. Soffits and fascia are to be 3/4" thick solid wood - tongue and groove. The structure will have 46 medium to large sized windows with the primary viewing direction being toward the south and east side of the structure. Windows are tempered glass with a Low-E coating. Frames are to be made of aluminum clad wood. Exterior doors are to be 1 3/4", fire-rated, and made of wood and aluminum clad wood. **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 fiberglass/polyester weedbarrier. The current propane tank is located ~10 ft north of the detached garage/studio. Utilities for the property are buried from a pole ~600 ft northeast of the residence. The septic field is located ~25 ft southeast of the residence. The water for the residence is from a cistern located on site.

## **DRIVEWAY ACCESS FOR EMERGENCY VEHICLES**

Access the property from Boulder by heading north on Broadway, west on Lee Hill Dr, right on Olde Stage Rd, 2nd driveway on the left.

The existing driveway will create minimal amount of site disturbance and soil compaction and will require the removal of few trees. The driveway is ~12 feet wide with a vertical clearance of 13'6" and a grade that is less than 12 percent. The



driveway is approximately 1,500 feet in length. A hammerhead turnout already exist 50 ft from the residence. Since the driveway is greater than 400 ft., two pull-outs are required along the driveway.

### EMERGENCY WATER SUPPLY FOR FIRE FIGHTING

The water source will be from 3, 2,500 gallon cisterns, 2 domestic and 1 fire cistern. The cistern is located ~25 ft west of the residence. The cistern will have a dry hydrant connection with a 6 inch NH threaded connection and cap (note that a 2-1/2" adaptor may be needed, depending upon the requirements of your fire protection district). Alternatively, a contribution may be made to the fire protection district community cistern fund (if available). Contact the Boulder Rural Fire Protection District (303-530-9575) 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 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. 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 Boulder Rural Fire Protection District (303-530-9575).

### FOREST COMPONENT AND HEALTH

The site has a dominant overstory consisting of ponderosa pine (*Pinus ponderosa*) with a ponderosa pine component. The understory consists of a dense/sparse cover of native grasses, forbs and shrubs. The forested area is best represented by Fuel Model 2. Fuel model 2 consists of open grown pine stands. Trees are widely spaced with few understory shrubs or regeneration. Ground cover consists of mountain grasses and/or needles and small woody litter. This model occurs in open grown and mature ponderosa pine stands, in the foothill to montane zone.

There were no current signs of insect or disease problems on the property at the time of the inspection.

### 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 polyester 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 to 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](http://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](http://www.colostate.edu) and search for wildfire, view the Colorado State Cooperative Extension fact sheet at <http://www.ext.colostate.edu/PUBS/NATRES/06304.html>, 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 Bryan and June Zwan  
5235 Olde Stage Rd, Boulder, CO 80302  
SPR - 07 - 077

Old Stage Rd

Lee Hill Dr

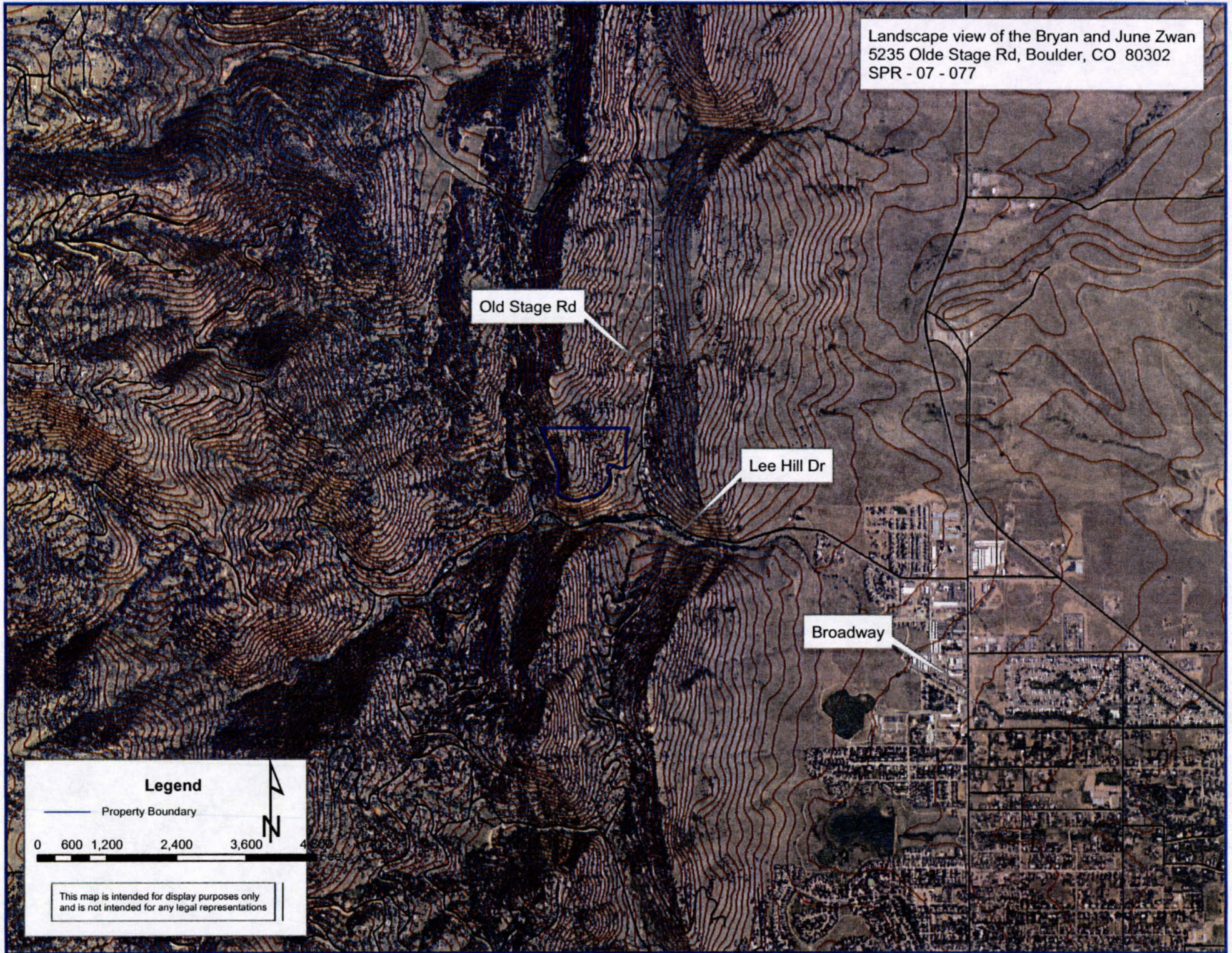
Broadway

**Legend**

— Property Boundary

0 600 1,200 2,400 3,600 4,800 Feet

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





Property of Bryan and June Zwan  
5235 Olde Stage Rd, Boulder, CO 80302  
SPR - 07 - 077

Old Stage Rd

Lee Hill Dr

### Legend

- Driveway
- Zone 1
- Zone 2
- Zone 3
- Fire Cistern
- Leach Field
- Leave Trees
- Propane Tank
- Property Boundary

0 35 70 140 210



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



ATTN MATT JEDRA.**Colorado State Forest Service**  
**Wildfire Mitigation Plan Data Form****Colorado State**  
**FOREST SERVICE**  
Boulder District  
5625 Ute Highway  
Longmont, CO 80503  
(303) 823-5774  
FAX: (303) 823-5768

Please be specific. Fill out the data form as completely and as accurately as possible, **do not** leave any blanks. Leaving blanks can delay the process of your wildfire mitigation plan. You may email it to Matthew Jedra at [mjedra@lamar.colostate.edu](mailto: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.

Inspection Date:

12/10/07

Landowner name:

BRYAN & JUNE ZWAN

Mailing address:

5235 OLDE STAGE ROAD

City, State, Zip:

BOULDER, CO 80302

Site address:

SAME

Phone number:

303.859.2133

Road access: (Directions from main access road)

FROM NORTH BROADWAY IN BOULDER,  
WEST ON UEEHILL, 1ST DRIVE PAST OLDE STAGE  
INTERSECTION

Docket number:

SPRW - 07 - 077 (SPR, SPRW, LU, Etc.)

Section:

~~11~~ 11

Township:

1N

Range:

71W

Legal Description:

SE 1/4 NE 1/4 20 ACS M/L & SW 1/4  
NE 1/4 11.4 ACS M/L TOTAL 31.4 ACS M/L 11-N-71

Elevation:

5858 (feet)



Deck buffer material: CRUSHED ROCK (Crushed rock/gravel/decorative stone)

Deck weed barrier: POLYESTER (Fiberglass/polyester)

Number of Structures: 2 (All structures to be present, including sheds, garages and out buildings)

Existing Structures: HOUSE + DET. GARAGE/STUDIO (House/barn/garage/etc.)

New Structure: COVERED PORCH ADDITION (House/Barn/garage/new addition/etc...)

Structure Square feet: 1938 SF PATIO + 416 SF DECK (Total sq.ft. of structure - this must be accurate and match the sq.ft that you submitted for SPR, if it has changed, please specify)

Structure aspect: SOUTH & EAST (Dominant facing direction/view, N, S, E, W)

Utility Location: BURIED : 600 FT NE (Pole/buried: Direction and distance from residence - N, S, E, W/20ft, 30ft, 40ft, etc...)

Detached Garage (if applicable): 600 SF (Total square feet)

Out buildings: NONE (Total square feet of any and all sheds, cabins, ect...)

Leach field: 1350' x 30' TO 125' FROM SOUTH & EAST OF RESIDENCE. (Direction and distance from residence - N, S, E, W/20ft, 30ft, 40ft, etc...)

Cistern size (if applicable): 3 X 2500 GAL. (gallons)

Cistern Location: 25 FT TO THE WEST OF GARAGE (Direction and distance from residence - N, S, E, W/20ft, 30ft, 40ft, etc...)

Cistern Type: 2 DOMESTIC & FIRE (Domestic Cistern or Fire Cistern)

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

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

Are you required to have a sprinkler system: YES (Yes or No) (If your house/addition is greater than 3,600 sq.ft. you are required to have an a full interior NFPA 13 D Sprinkler system per Boulder County)

Water supply: CISTERN (Well or main line)



Well (if applicable): NONE (Direction and distance from residence – N, S, E, W/20ft, 30ft, 40ft, etc...)

Propane or natural gas: YES. PROPANE

Propane Tank location: 10 FT NORTH OF DETACHED STUDIO/GARAGE (Direction and distance from residence – N, S, E, W/20ft, 30ft, 40ft, etc...)

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

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

Comments: \_\_\_\_\_

**This part will be filled out by the CSFS inspecting forester**

FPD: \_\_\_\_\_

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

Dominant overstory: \_\_\_\_\_

Co-dominant overstory: \_\_\_\_\_

Fuel model type: \_\_\_\_\_

Aspect: \_\_\_\_\_ (Direction of slope)

Slope: \_\_\_\_\_ (Percent)

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

Site moisture: \_\_\_\_\_

Natural fire barrier: \_\_\_\_\_

Insect & Disease Diagnosis: \_\_\_\_\_

Comments: \_\_\_\_\_



Lot size: 31.4 (Acres)

Driveway length: ± 1500 ft (Actual length in feet from road to home)

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

House design: COMPLEX (simple - rectangle shape, moderately complex - any shape with a few alcoves, complex - any shaped with a number of alcoves complex design)

Home buffer material: CRUSHED STONE (Material that is spread 5 ft. wide around the house - stone/crushed gravel/decorative stone)

Roof Design: COMPLEX (simple/complex)

Roof material: CLASSICAL ASPHALT SHINGLES PERROOF W/ CONCRETE TILES.  
(Class A- Asphalt shingles/concrete tiles/metal (wood roof is not permitted in Boulder County))

Soffit type and thickness: 3/4" SOLID WOOD - T & G. (Plywood/hardboard/cement board, thickness)

Siding material: STUCCO, (Cement/hardboard/log/stucco/stone/wood, etc...)  
STONE - TO BE REFINISHED.

Windows (#): ± 46 (number of windows in the structure)  
EXISTING

Window Size: MED-LRG (On average: small - <3x4', medium - 4x5', large <5x6')

Window Frames: WOOD AL. CLAD (Wood or aluminum clad wood/ vinyl is not permitted)  
WOOD

Window Aspect: SOUTH & EAST (Dominant viewing direction)

Window Construction: LOW E (Low E- Coating/Tempered glass/etc...)

Window Wells: NONE (Number and location if present, these are windows that sit below ground level, usually in a basement)

Sliding Glass Doors: NONE (Location and Number)

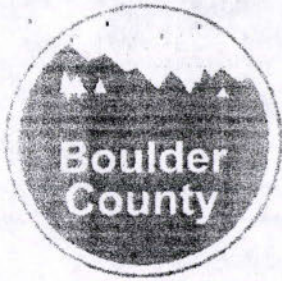
Door Material: WOOD AND (Wood/steel/fiberglass/composite)  
ALUMINUM CLAD WOOD.

Deck material: WOOD/ IPE (Wood/composite materials)

Deck Description: OPEN DECK (Enclosed deck/open deck/enclosed underneath/open underneath)

Deck support type: CONCRETE (Timber posts/logs/steel/concrete/decorative stone)  
PIER & TIMBER BEAMS.  
HEAVY.





## Land Use Department

Courthouse Annex

1300 13th Street • 13th & Spruce Streets • Boulder, Colorado 80302 • (303) 441-3930  
<http://www.boulder-county.usda/>

### **MEMORANDUM**

**TO:** AGENCIES, ADJACENT PROPERTY OWNERS AND INTERESTED PARTIES

**FROM:** Robin Kerns, Staff Planner

**SUBJECT:** Request to waive Site Plan Review for a 1,659 sq.ft. covered patio at 5235 Olde Stage Rd.

**DOCKET:** SPRW-07-077: ZWAN covered patio addition

**DATE:** September 20, 2007

The purpose of this memorandum is to inform interested parties that the above listed address is under consideration by the Land Use Director for a waiver from the Site Plan Review process for a **1,659 sq.ft. covered patio at 5235 Olde Stage Rd.**

In May of 2000, the Site Plan Review regulations were revised in order to allow for certain accessory structures to be waived from the full Site Plan Review process that would normally be required to approve their construction. In the plains, accessory structures up to 5,000 square feet are eligible to be waived from Site Plan Review; in the mountainous areas of the county, accessory structures up to 2,000 square feet are eligible to be waived from Site Plan Review.

In June of 2003, these regulations were expanded in order to allow Site Plan Review waivers for additions under 2,000 square feet and grading involving less than 500 cubic yards of earthwork. Waivers from Site Plan Review may be granted if the Land Use Department does not find the proposal to be in conflict with the standards listed in Article 4-806 of the Boulder County Land Use Code.

Article 4-802(C) requires that adjacent property owners be notified of the request to waive Site Plan Review and be given seven days to respond. The project, even if waived from Site Plan Review, is still subject to the applicable building permits and building code requirements.

The Board of County Commissioners and the Land Use Department appreciate any comments that you may have regarding this proposal. Please direct any written or verbal comments to the Land Use Department by **September 27, 2007.**

If you have any questions or comments, feel free to contact this office at (303) 441-3930.

cc: applicant, agent

Cindy Domenico  
County Commissioner

Ben Pearlman  
County Commissioner

Will Toor  
County Commissioner





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

7047188686CK#3781,KS#260-

SHADED AREAS FOR STAFF ONLY	
INTAKE STAMP	SEP 19 2007
BOULDER COUNTY LAND USE	

## APPLICATION FORM

PROJECT NUMBER		PROJECT NAME	
<input type="checkbox"/> No Application Deadline: <input type="checkbox"/> LIMITED IMPACT SPECIAL USE <input type="checkbox"/> SITE PLAN REVIEW <input checked="" type="checkbox"/> SITE PLAN REVIEW WAIVER <input type="checkbox"/> SUBDIVISION EXEMPTION <input type="checkbox"/> 1041-STATE INTEREST REVIEW <input type="checkbox"/> OTHER		<input type="checkbox"/> Application Deadline - 1st Wednesday of the month: <input type="checkbox"/> VARIANCE <input type="checkbox"/> APPEAL	
<input type="checkbox"/> Application Deadline - 2nd Wednesday of the month: <input type="checkbox"/> EXEMPTION PLAT <input type="checkbox"/> LOCATION AND EXTENT <input type="checkbox"/> RESUBDIVISION (REPLAT) <input type="checkbox"/> ROAD/EASEMENT VACATION		<input type="checkbox"/> PRELIMINARY PLAN <input type="checkbox"/> ROAD NAME CHANGE <input type="checkbox"/> SPECIAL USE/SSDP <input type="checkbox"/> EXTENSION OF APPROVAL <input type="checkbox"/> FINAL PLAT <input type="checkbox"/> SKETCH PLAN <input type="checkbox"/> REZONING	
LOCATION(S) - STREET ADDRESS(ES) 5235 OLDE STAGE ROAD			
SUBDIVISION NAME TR, Nbr 128, 158, 172-178 FOOTHILLS			
LOT(S)	BLOCK(S)	SECTIONS(S)	TOWNSHIP(S)
AREA IN ACRES 30.4		EXISTING ZONING F	EXISTING USE OF PROPERTY SINGLE FAMILY RES
PROPOSED WATER SUPPLY CISTERN		NUMBER OF PROPOSED LOTS 1	
PROPOSED SEWAGE DISPOSAL METHOD SEPTIC + LEACH FIELDS			
APPLICANTS			
APPLICANT/PROPERTY OWNER BRYAN & JUNE ZWAN		EMAIL ADDRESS	
STREET ADDRESS 5235 OLDE STAGE RD.			
CITY BOULDER	STATE CO	ZIP CODE 80302	PHONE NUMBER 3. 859. 2133
APPLICANT/PROPERTY OWNER		STREET ADDRESS	
CITY	STATE	ZIP CODE	PHONE NUMBER
AGENT/CONSULTANT STEVEN DODD ARCHITECT INC.		EMAIL ADDRESS sdodd@mac.com	
STREET ADDRESS 3076 7th STREET			
CITY BOULDER	STATE CO	ZIP CODE 80304	PHONE NUMBER 3. 440. 7957
AGENT/CONSULTANT		STREET ADDRESS	
CITY	STATE	ZIP CODE	PHONE 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 <i>[Signature]</i>	DATE 9/14/07
SIGNATURE OF LANDOWNER X	DATE
OTHER SIGNATURE X <i>[Signature]</i> FOR STEVEN DODD ARCHITECT INC.	DATE 9/14/07

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





# Boulder County Land Use Department Planning Publications

## Site Plan Review Waiver 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. **Please note:** If a project is granted a SPR Waiver but the building permit floor area calculations result in new floor area exceeding 2,000 sq.ft., then the project will trigger a full SPR prior to issuance of a building permit.

### Structure Information

TYPE OF STRUCTURE: RESIDENCE - SINGLE FAMILY  
(e.g. residence, studio, barn, etc.)

TOTAL EXISTING FLOOR AREA: 5227 sq/ft DEMOLISH: 0 sq/ft  
(Finished + Unfinished sq.ft. - always include garage if attached)

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

Yes      No X

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

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		1659 sq/ft	1659 sq/ft
Total	sq/ft	1659 sq/ft	1659 sq/ft

Height above existing grade 24'8"

Exterior wall:

- Material STONE/WOOD STUCCO

- Color EARTH TONE

Roofing:

- Material COMPOSITION SHINGLE

- Color LIGHT EARTH TONE

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

### Project Identification

Project Name: ZWAN RESIDENCE COVERED PORCH ADDITION  
Property Address/Location: 5235 OLDESTAGE RD BOULDER, CO 80302  
Current Owner: BRYAN & JUNE ZWAN

Size of Property in Acres:

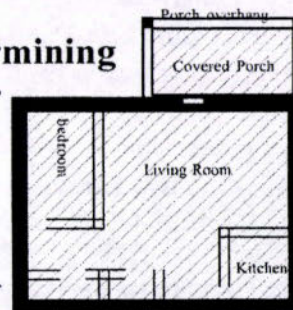
30.45

### Determining Floor Area:

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](mailto:planner@co.boulder.co.us)

**Office Hours:**  
Monday through Friday  
8:00 AM to 4:30 PM

TYPE OF STRUCTURE: N/A  
(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.



Please note: If a project is granted a SPR Waiver but the building permit floor area calculations result in new floor area exceeding 2,000 sq.ft., then the project will trigger a full SPR prior to issuance of a building permit.

### Earth Work / Grading

This worksheet is to help you accurately determine the amount of grading for the property in accordance with the *Boulder County Land Use Code*. Please fill in all applicable boxes.

*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.

	Cut	Fill	Total
Driveway & Parking Areas	0	0	0
Berms		20CY	20CY
Other Grading:			
Total			20 <small>Box 1</small>

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

	Cut	Fill	Total
Foundation	45CY	25CY	70CY

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

N/A

Use this space to describe any special circumstances that you feel the Land Use Office should be aware of when reviewing your application. If more room is needed, feel free to attach a separate sheet.

### Grading Calculation Note

Cut and fill calculations are necessary to evaluate the disturbance of a project and to verify that a Limited Impact Review (LU) is not required. A LU 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.

### Certification

I certify that the information submitted is complete and correct. I agree to clearly 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

9/14/07

Form: spr\_waiver\_fact  
Revised: 6/21/06

STEVEN BODD ARCHITECT INC.

g:\handouts\planning\Site\_Plan\_Review\current\spr\_waiver\_fact.pmd  
Page 2

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



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.

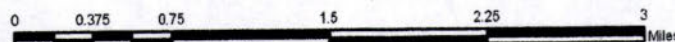
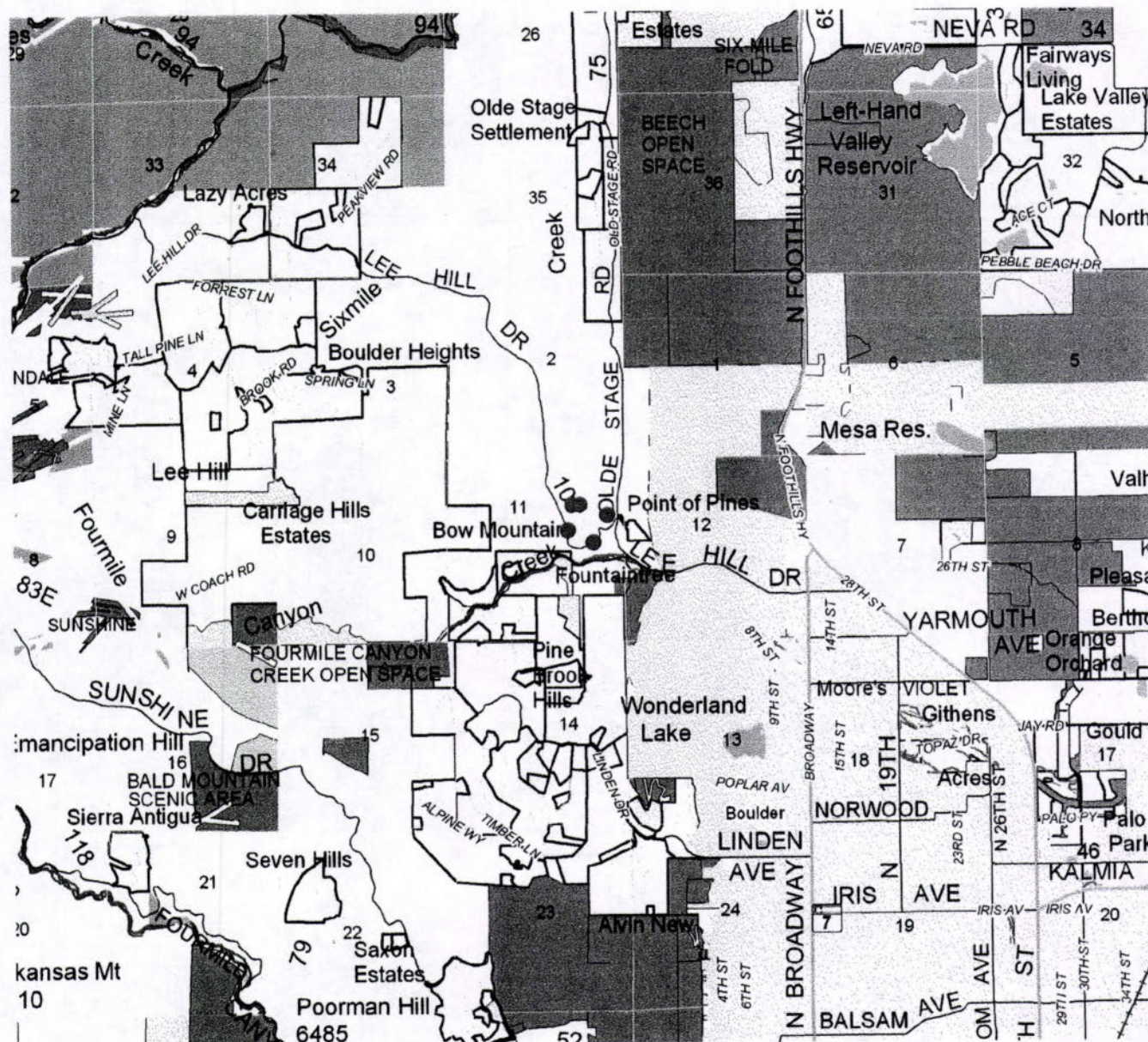
### Legend

- 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 parent-specific 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



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

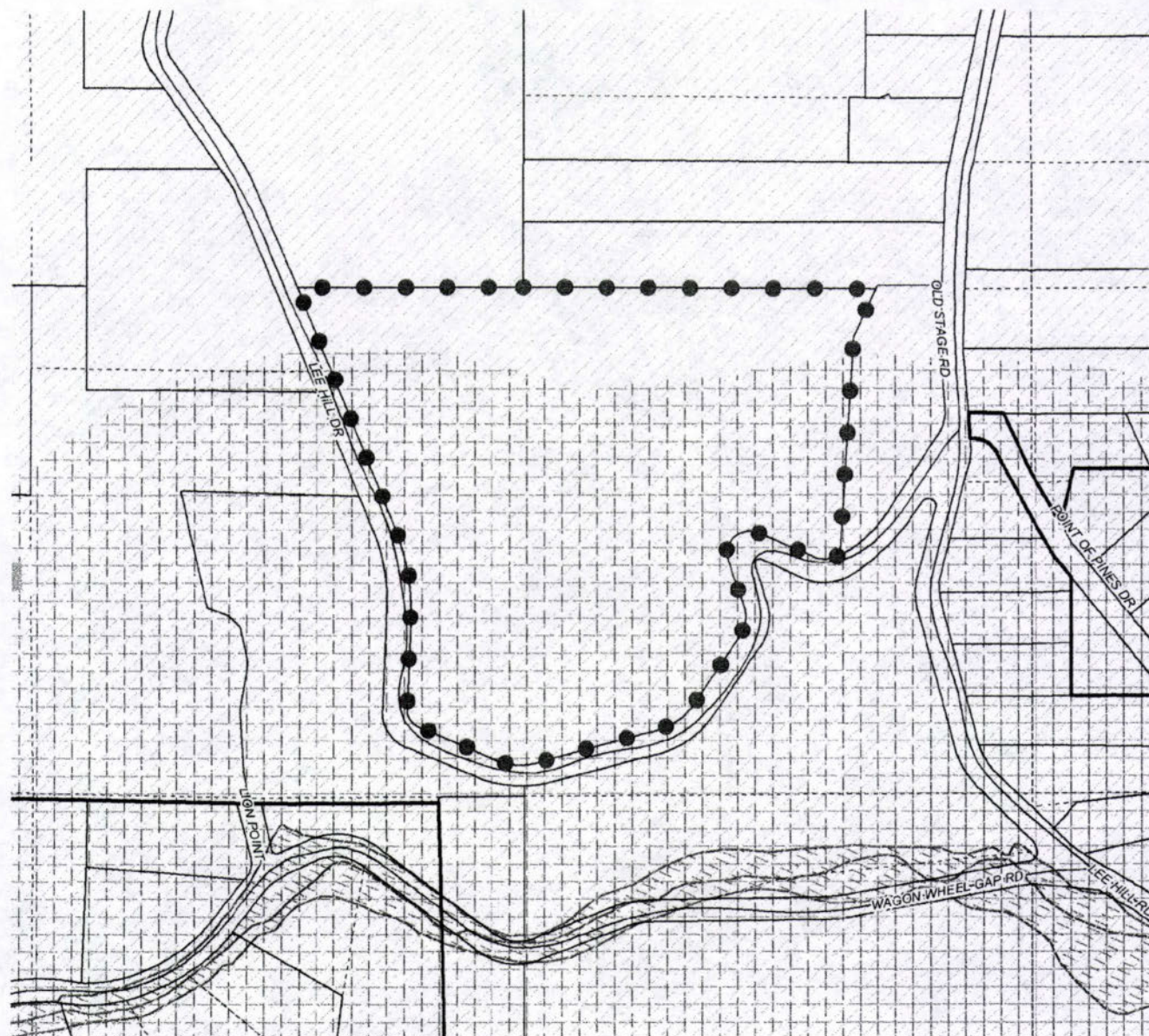
- Archeologically Sensitive Travel Routes
- Municipalities
- Archeologically Sensitive Areas
- Open Corridors, Roadside
- Open Corridors, Streamside
- Overland Habitat Connectors
- Stream Habitat Connectors
- Significant Riparian Corridors
- Critical Wildlife Habitats
- Rare Plant Areas
- Floodplain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

## Map Location



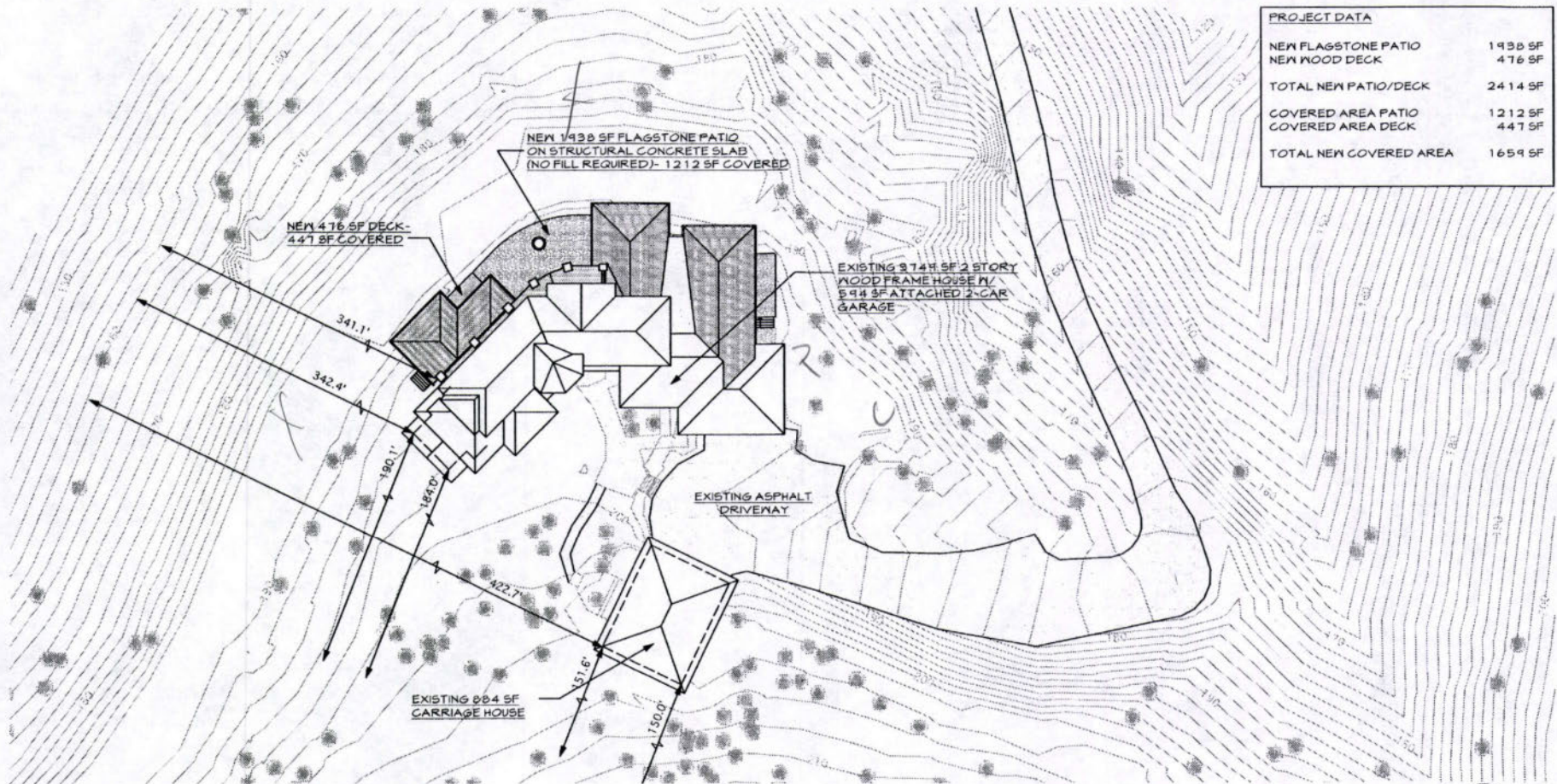
This map is for illustrative purposes only, and is not suitable for parcel-specific decision making. The areas depicted here are approximate. More site-specific studies may be required to draw accurate conclusions.

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0 0.035 0.07 0.14 0.21 0.28 Miles





PROJECT DATA	
NEW FLAGSTONE PATIO	1938 SF
NEW WOOD DECK	476 SF
TOTAL NEW PATIO/DECK	2414 SF
COVERED AREA PATIO	1212 SF
COVERED AREA DECK	447 SF
TOTAL NEW COVERED AREA	1659 SF

Site Plan  
scale 1" = 30'



steven dodd • architect • inc  
3076 7th Street, Boulder CO 80304 p 303.440.7957 f. 303.325.3156

Zwan Residence Patio Addition  
5235 Olde Stage Road, Boulder, CO 80302

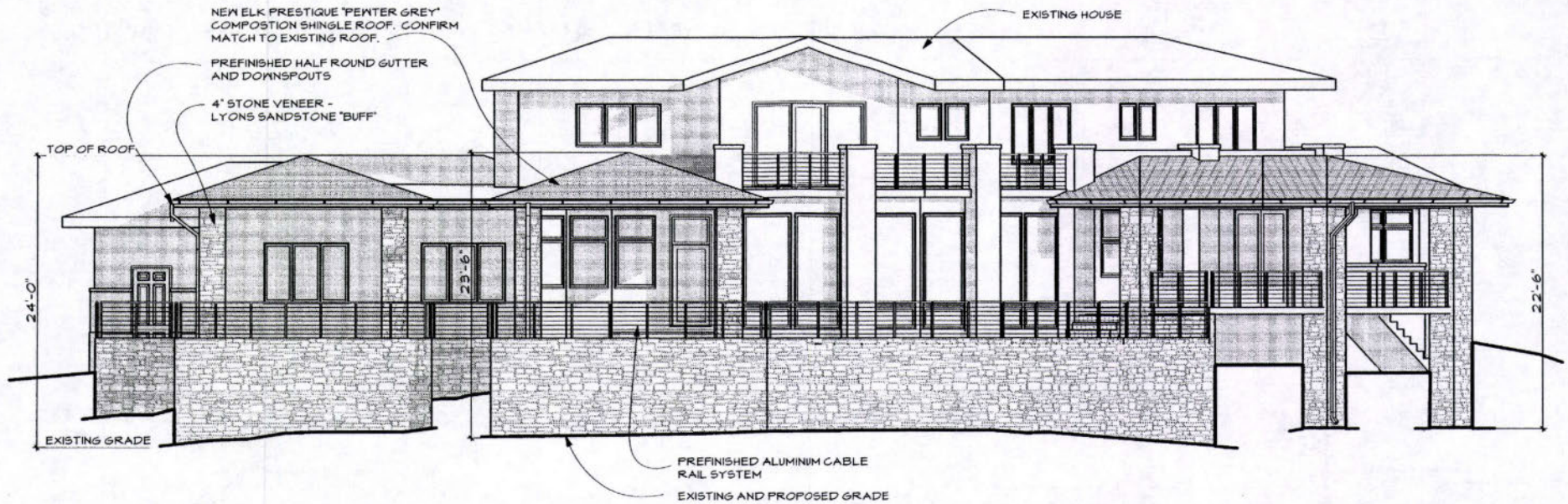
Site Plan Review Waiver Submittal

drawing info:		issue dates:		sheet title:	sheet #:
PROJECT NO:	0611	date	description	Site Plan Scale 1" = 30'	1
MODEL FILE:	Zwan Current Plan.dwg	09/17/07	SPN		
DRAWN BY:	SD				
CHK'D BY:	SD				
COPYRIGHT	2007				









## South Elevation

scale 1/8" = 1'-0"

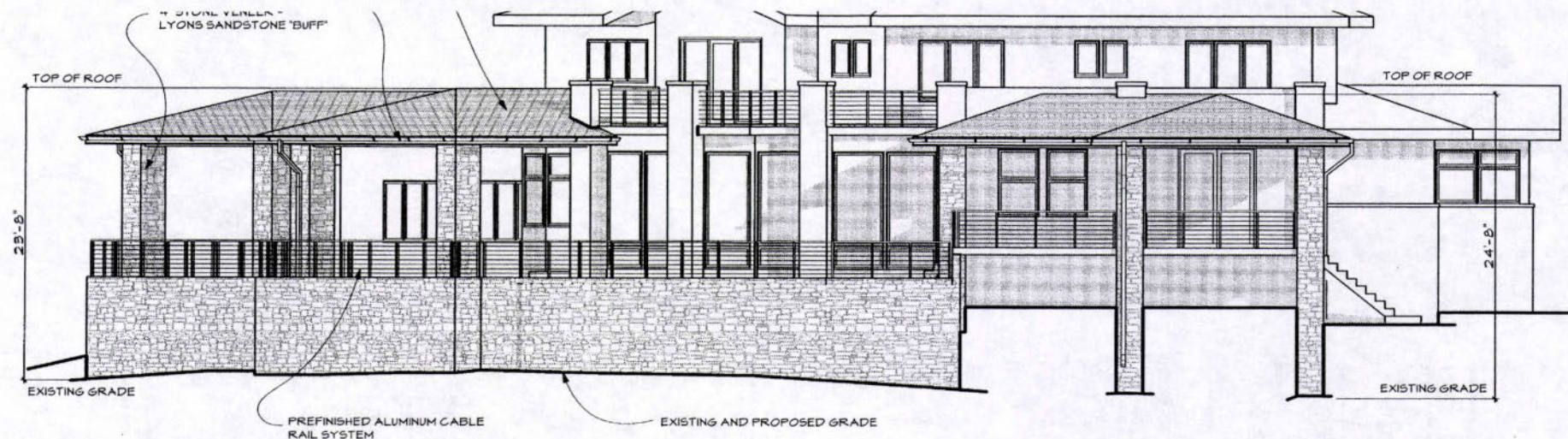
steven dodd • architect • inc  
3076 7th Street, Boulder CO 80304 p. 303.440.7957 f. 303.325.3156

**Zwan Residence Patio Addition**  
5235 Olde Stage Road, Boulder, CO 80302

Site Plan Review Waiver Submittal

drawing info:		issue dates:		sheet title:	sheet #:
PROJECT NO:	0611	date	description	South Elevation Scale 1/8" = 1'-0"	3
MODEL FILE:	Zwan Current Plan.pln	09/17/07	SF91		
DRAWN BY:	SD				
CHK'D BY:	SD				
COPYRIGHT	2007				





## East Elevation

scale 1/8" = 1'-0"

steven dodd • architect • inc

3076 7th Street, Boulder CO 80304 p 303.440.7957 f. 303.325.3156

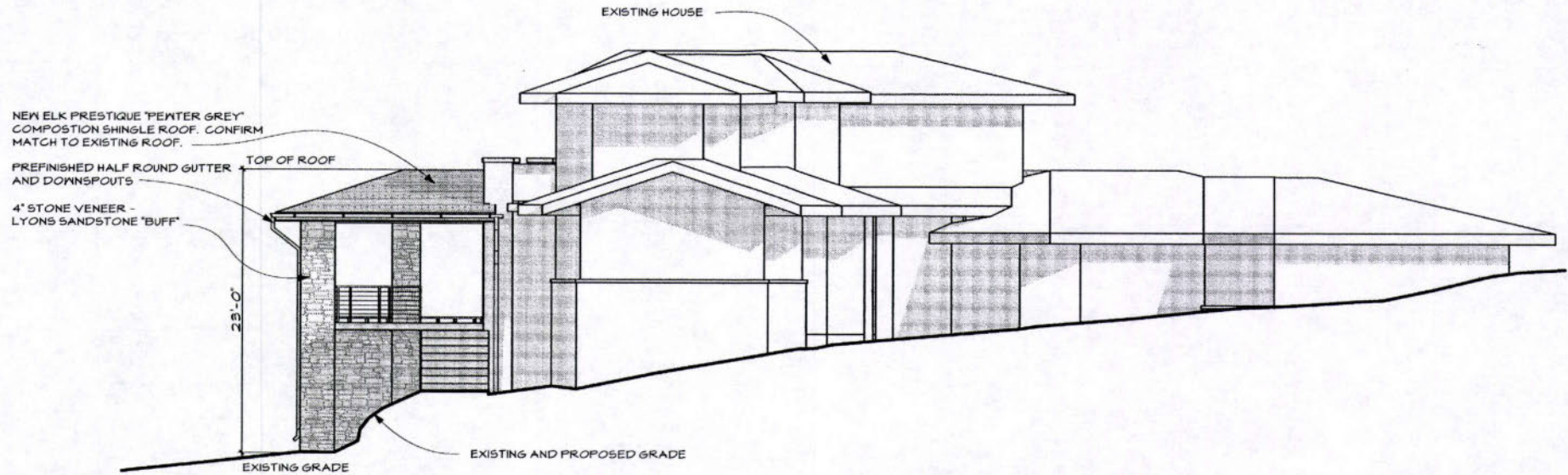
## Zwan Residence Patio Addition

5235 Olde Stage Road, Boulder, CO 80302

Site Plan Review Waiver Submittal

drawing info:		issue dates:		sheet title:	sheet #:
PROJECT NO:	0611	date	description	East Elevation Scale 1/8" = 1'-0"	4
MODEL FILE:	Zwan Current Plan.rvt	09/17/07	SFR		
DRAWN BY:	SD				
CHK'D BY:	SD				
COPYRIGHT	2007				





## North Elevation

scale 1/8" = 1'-0"

steven dodd • architect • inc

3076 7th Street, Boulder CO 80304 p 303.440.7957 f. 303.325.3156

## Zwan Residence Patio Addition

5235 Olde Stage Road, Boulder, CO 80302

Site Plan Review Waiver Submittal

### drawing info:

PROJECT NO: 0611  
 MODEL FILE: Zwan Current Plan.pln  
 DRAWN BY: SD  
 CHK'D BY: SD  
 COPYRIGHT 2007

### issue dates:

date	description
09/17/07	SPR

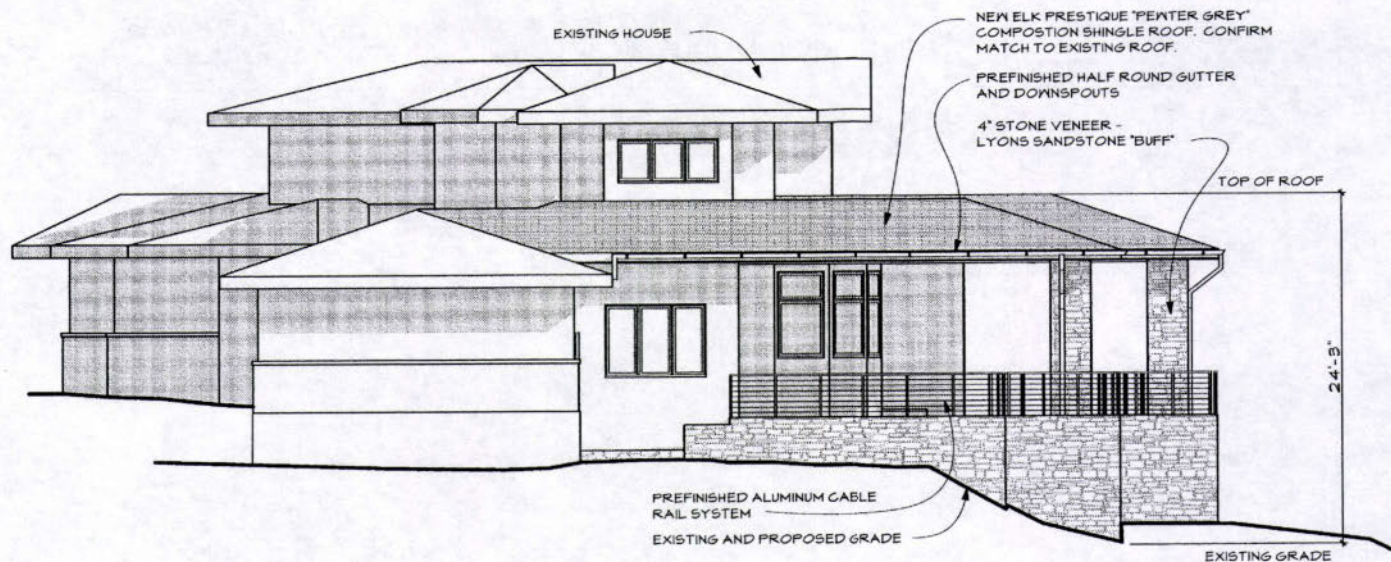
### sheet title:

North Elevation  
 Scale 1/8" = 1'-0"

### sheet #:

5





## West Elevation

scale 1/8" = 1'-0"

steven dodd • architect • inc

3076 7th Street, Boulder CO 80304 p 303.440.7957 f. 303.325.3156

## Zwan Residence Patio Addition

5235 Olde Stage Road, Boulder, CO 80302

Site Plan Review Waiver Submittal

### drawing info:

PROJECT NO: 0611  
MODEL FILE: Zwan Current Plan.plt  
DRAWN BY: SD  
CHK'D BY: SD  
COPYRIGHT 2007

### issue dates:

date	description
08/17/07	SPR

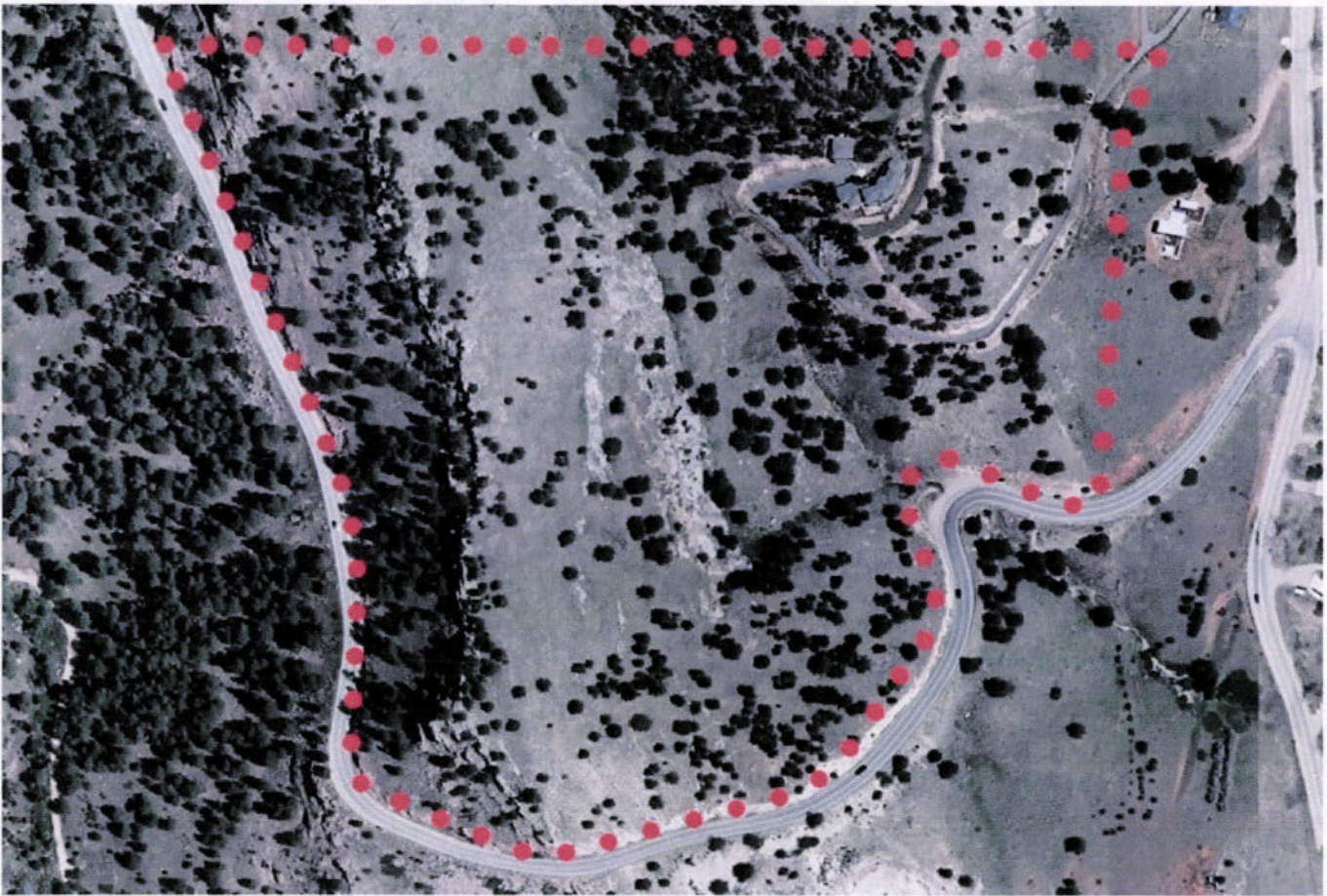
### sheet title:

West Elevation  
Scale 1/8" = 1'-0"

### sheet #:

6









Boulder District  
0.16 Lefthand Canyon Drive  
Boulder, Colorado 80502  
(303) 442-0428

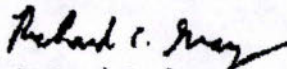
6 March 1996

Boulder County Land Use Department  
P.O. Box 471  
Boulder, CO 80306 SPR-95-051

Dear Molly,

At this time, mitigation work at the Wight property off of Old Stage Road is satisfactory and meets all requirements as outlined in the wildfire mitigation plan. If you have any questions, please contact me at the above number.

Sincerely,

  
Richard C. Gray  
Forester





Boulder District  
936 Lefthand Canyon Drive  
Boulder, Colorado 80302  
(303) 442-0428

March 6, 1996

SPR. # 95-051

Mr. Bob Wight  
c/o Mr. Dave Adams  
3993 Nelson Road  
Longmont, CO 80503

Dear Mr. Adams:

It was a pleasure talking with you about wildfire mitigation efforts at your home site. This plan will reinforce the topics we discussed and recommend treatments to mitigate wildfire hazards.

#### DESCRIPTION OF PROPERTY

The property is located off of Olde Stage Road in Sec. 11; T. 1 N.; R. 71 W., in Boulder County. The property is accessible via a long private driveway from Olde Stage Road. The dominant fuel type is mountain grasses with some forest litter. The overstory is scattered Ponderosa Pine. This area was burned over in 1990 by the Olde Stage Fire.

#### HOMESITE

The house sits on an area that has been flattened by construction. There are several slopes leading to the house with the dominant aspect to the southeast. Slopes are steep, approaching 30%. The dominant fuel type is forest litter and grass. A large area has been cleared for parking behind the house and the leach field is down slope in front and on the east side of the house.

#### RECOMMENDATIONS

There are several options which can be taken to create a fire safe zone around your site, these options are explained in detail in the



Service in Action Sheet #6.302, which is enclosed. There are three zones of protection which are to be created around the homesite. Zone 1 is the most critical and affords the most protection to the site. Zones 2 and 3 are extensions of this protection.

#### ZONE 1

This zone will start at the foundation and extend out in all directions. Zone 1 is further broken down into three segments.

##### Zone 1A

Immediately adjacent to the structure, create a strip of nonflammable ground cover. This can be accomplished using decorative rock or gravel. This strip should be 3 feet wide and should surround the house.

##### Zone 1B & Zone 1C

Zones 1B & 1C have been combined. Both of these zones will extend out from 1A. On the west side of the house, in the area from the house to the leach field, and down slope to the driveway, remove all trees marked with green flagging and prune all remaining trees to a height of 8 feet. Prune the 2 trees next to the house to above the eave line.

In front of the house, a strip of flag stone 20 feet wide exists. This should be maintained as is or if landscaped, landscaped with fire safe vegetation (see attachment). The leach field extends out below this for a distance of 30 feet. Mow the grass in this area to a maximum height of 8 inches during dry periods. The same recommendations apply on the east side of the house.

Behind the house, to the north, prune all trees in the area between the 2 driveways to a height of 8 feet. The 3 slash piles on north, east and west side, need to be disposed of prior to C.O.

In zone 1, all slash needs to be disposed of by chipping, hauling to an approved disposal site, or by burning. For burning permits, check with your local fire protection district.

#### ZONE 2

This zone extends out from Zone 1C, and acts as a transition zone between the heavily thinned area near the house to a more traditional forest setting. Space trees as in Zone 1C and increase tree density as you approach the outer edge of the zone. Prune trees to a height of 6 feet at the intersection of Zone 1 and reduce the height as you approach Zone 3. In this zone, some thicker clumps of trees are acceptable, as well as some unpruned trees near the outer edge. In general, poor quality, suppressed trees make up the majority of the removals. This can be done over



time and would be beneficial in the area to the north up slope of the house.

ZONE 3

This zone will extend out from Zone 2 and is of no set shape or size. At your site this zone could extend out in areas that are not part of the immediate mitigation efforts. This zone would add some protection, but is aimed more at forest health. Thin trees that are suppressed, or have insect or disease infestations. Retain the larger, more healthy trees. Slash in this zone should be lopped and scattered and/or piled for wildlife.

It has been a pleasure working with you. If you have questions, or are ready for inspection on the completed mitigation work, please contact me at the above number.

Sincerely,

*Richard C. Gray*

Richard C. Gray  
Forester