

To:

Invoice No. 67053

Mr. Steven Novak  
 124 Quail Way  
 Lyons CO 80540

**Colorado**  
**State**  
 FOREST  
 SERVICE

Date: 11-18-04

Item	Unit Cost	Total
1 Written Wildfire Mitigation Plan		\$300.00
2 Defensible Space tree marking		
3 Sh-04-014		
4		
5		
6		
7		
8		
9		
Tax Exempt No. _____	Sales Tax	

Total \$300.00

CK-CA-MO Amount Paid:

Amount Due \$300.00

CSFS Originator

Payment Due By 12-18-04

Ck#

Dated

Rcv'd By

F.Y.

Remit to:

Funding	Amount
223530	0615 \$300.00

Deposit No.

Date

## **WILDFIRE MITIGATION PLAN**

Docket SPR- # SU - 04 - 014

Inspection date: 11/18/2004

Boulder District

5625 Ute Highway  
Longmont, Colorado 80503-9130  
(303) 823-5774

**Prepared for:**

Steven and Barbara Novak  
124 Quartz Way  
Lyons, CO 80540  
Phone: 303-823-5858

**Prepared by:**

Cory Secher - Forester  
Boulder District  
Phone: (303) 823-5774  
E-mail: csecher@lamar.colostate.edu

### **SITE LOCATION AND PROPERTY DESCRIPTION**

The property is located at 124 Quartz Way, Lyons CO 80540. Access to the property from Lyons go west on Highway 7 (St. Vrain Road) and turn south onto Old St. Vrain Road then continue to Red Gulch to Jasper and then take a right onto Quartz Way and the property will be on your left. The legal description is Section 48, Township 3N, and Range 70W Lot 48, Lyons Park Estates. The fire protection district is the Lyons fire protection district (303-441-3900). There will be 2 structures located on site, including an existing residence and a new residence to be built on site. The lot is 5.1 acres in size and has a ~15% percent slope with a southeast aspect. It is at 6,250 feet in elevation. The proposed building site is mid-slope and it is a relatively dry site. Quartz Way located about 200 feet south of the residence creates a small natural barrier that may help stop or slow the spread of a surface/crown fire on the site.

The site has a dominant overstory consisting of ponderosa pine (*Pinus ponderosa*) with a ponderosa pine (*Pinus ponderosa*) understory component. The area is predominantly fuel model 9 with ground fuels consisting of grasses and forbs. 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. There is no sign of any current insect and disease problems on the property at the time of inspection.

### **CONSTRUCTION DESIGN AND MATERIALS**

The proposed house has a relatively simple design with a simple roofline and is oriented with a north-northwest aspect. The roofing material will consist of class A shingles. The exterior wall material is to be log. Soffits are to be ¾" thick Plywood.

The structure has ~8 medium sized windows with the primary viewing direction being toward the northwest side of the structure. Windows will be double glazed with low e-coated tempered glass with frames made of vinyl. Exterior doors are to be 1-3/4", fire-rated, and made of fiberglass.

The one deck will be constructed of wood materials and supported by timber posts. The deck will be open (covered but not enclosed) and isolated from the surrounding landscape with gravel over a fiberglass weed barrier. This property will not have a propane tank on site.

### **EMERGENCY ACCESS**

The existing driveway will not create additional site disturbance or soil compaction and will require the removal of no trees. The driveway is 12 feet wide with a vertical clearance of 13'6" and a grade that is less than 12%. The driveway is 180 feet long therefore there will be a turn around required (see plan for details). The driveway is less than 400 feet therefore no pull-outs are required

### **WATER SUPPLY / UTILITIES / SEPTIC FIELD**

The water source will be from a 1,500 gallon domestic cistern that will be located 20 feet to the southeast of structure. Vegetation within 10 feet of the cistern will be kept cleared. Utilities for the property will be buried in a trench from a pole that is located about 375 feet to the southeast of structure. The septic field is located 200 feet to the southeast of residence.



## 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. If the property is less than 1 acre it may not have zones marked due to boundary interference. 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 hauled. Note that before burning piles, you must obtain a valid Open Burning Permit from the Boulder County Environmental Health Department and notify your local fire protection district (Lyons fire protection district (303-441-3900)).

## DEFENSIBLE SPACE ZONES

There are three defensible space zones to be created around the structure(s) on the site.

**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 three-foot wide, non-flammable strip will be created using gravel 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 is to be removed. Any large dead woody material on the ground will also be removed. Firewise plants will be used for landscaping and re-vegetation. Grasses will 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) will 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 are to be retained for screening. All remaining trees in this zone will 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 will 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 10 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 will 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 [www.colostate.edu/Depts/CSFS/](http://www.colostate.edu/Depts/CSFS/) 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 should 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
- 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; check the Boulder Fire Weather website at [www.crh.hoaa.gov/den/fireindx.html](http://www.crh.hoaa.gov/den/fireindx.html)
- 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

Wildfire mitigation plan – A plan to reduce wildfire hazards around a home or other structure through fuels reduction. A document to inform urban interface home owners of the dangers and responsibilities of living in the interface. A plan to help outline the initial and ongoing fuels reduction needed to maintain an effective and healthy wildfire defensible space.

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

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.

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

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







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

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



Property of Steve & Barbara Novak  
124 Quartz Way, Lyons CO 80540  
SU - 04 - 014

LEGEND

-  Zone 1 (0-15 ft from structure)
-  Zone 2 (0-100 ft from structure)
-  Driveway
-  Cistern
-  Large leave trees
-  Leach Field





**DIRECTIONS FOR FILLING OUT FORM:**

Please fill out as complete as possible and fax to Cory Secher at 303-823-5768 or mail to 5625 Ute Highway, Longmont CO 80503-9130.

Any **Bolded** categories will be filled in by the CSFS representative at the time of initial site visit and tree marking for the defensible space. If you have any questions about this form please contact Cory Secher at 303-823-5774 or by email at [csecher@lamar.colostate.edu](mailto:csecher@lamar.colostate.edu).

**Wildfire Mitigation Plan**  
FIELD DATA FORM

Inspection Date: 11-18-04

Landowner name: STEVEN R., SYLVIA M., BARBARA M. NOVAK

Mailing address: 124 QUARTZ WAY

City, State. Zip: LYONS, CO. 80540

Site address: - SAME -

Phone number: 303-823-5858

Road access: RTE. 7, ST. VRAIN RD., RED GULCH,  
JASPER, QUARTZ WAY (Directions from main access road)

Docket Number: SU-04-014 (SPR, LU, Etc.)

Section: 48

Township: LYONS

Range: \_\_\_\_\_

Legal Description: LOT 48, LYONS PARK ESTATES,  
COUNTY OF BOULDER, STATE OF COLORADO



FPD:

Lycus

Dominant fuel type:

Rock

(Grass/forbs/shrubs/slash/etc)

Dominant overstory:

Conifers Ponderosa

Co-dominant overstory:

Ponderosa

Fuel model type:

#9

Slash disposal:

hauled

(Chipped/hauled/burned/top-scatter)

Aspect:

SE

(Direction of slope)

Slope:

15°

Elevation:

6250 (feet)

Building site:

mid-slope (Chimney/saddle/valley/ridge/mid-slope)

Site moisture:

Dry - mail

Natural fire barrier:

Quailcreek ~ 180' south

Insect & Disease Diagnosis:

None

Lot size (acres):

5.1 (Acres)

Number of Structures:

2 (All structures to be present)

Existing Structures:

House (House/barn/garage/etc.)

New Structure:

House (House/Barn/new addition/etc..)

Driveway length:

~ 190 (Actual length in feet from road to home)

Driveway trees removed:

none (few/many/none)

Home buffer material:

gravel (Stone/crushed gravel/decorative stone)

House design:

simple (simple/complex)

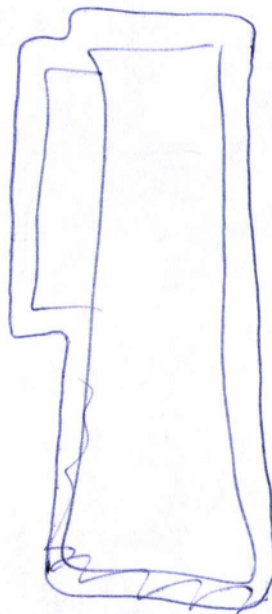
Roof Design:

simple (simple/complex)

Roof material:

Class A shingles (Asphalt shingles/concrete tiles/metal)





3 ft.  
of  
non-combust  
(stone, etc)  
need barrier



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

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

Windows (#): 8 (inc. group of window size) (approximate number of windows)

Windows Size: med. (On average: small/medium/large)

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

Windows Aspect: NW (Dominant viewing direction)

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

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

Deck material: wood (Wood/composite materials)

☒ Deck Description: open covered (Enclosed/open) Covered but not enclosed 6' x 30'

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

Deck buffer material: gravel (Crushed rock/gravel)

☒ Deck weed barrier: none (Fiberglass/polyester)

Structure SQR. FT.: 696 (Total square feet of structure) 375

☒ Utility Location: buried-SE (Pole/buried: Direction from structure) from Quate Way. (~435' from Structure)

Structure aspect: north by NW (Dominant facing direction/view)

☒ Leach field: SE - ~200' (Distance from house, and direction)

Cistern: 20' ~~type~~ SE (Distance from house, and direction)

Cistern Type: Domestic (Domestic Cistern or Fire Cistern)

Cistern size: 1000 to 1500 (gallons)

Well (if applicable): none (Distance form house, and direction)

Propane Tank location: none (Distance from house and direction)

Other: