WILDFIRE MITIGATION PLAN

Docket SPR-# 03-096

Inspection date: 12/8/2003

Prepared for: Barry Winitsky

P.O. Box 498 Niwot, CO 80544 Phone: 303-709-3814 Prepared by: Cory Secher - Forester Boulder District Phone: (303) 823-5774 E-mail: csecher&lamar.colostate.edu



Knowledge to Go Places

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

SITE LOCATION AND PROPERTY DESCRIPTION

The property is located at 2749 S. Lakeridge Trail, Boulder CO 80302. Access to the property is from Lake of the Pines Subdivision, South Lakeridge Trail. The legal description is Lake of the Pines Subdivision, Lot 3, Block 2. The fire protection district is the Lefthand fire protection district (303-823-6611). There will be 1 structure(s) located on site, including a Residence with attached garage. The lot is 1.36 acre(s) in size and has an 8-12% percent slope with a Western aspect. It is at approximately 5,700 feet in elevation. The proposed building site is mid-slope and it is a relatively moist site. There is a lake to the west and Lakeridge Trail Road to the East creating natural barriers 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 with a Ponderosa pines understory component. The area is predominantly fuel model 9 with an understory consisting of grasses and shrubs. There is no sign of insect or disease problems on the property.

CONSTRUCTION DESIGN AND MATERIALS

The proposed house has a relatively complex design with a complex roofline and is oriented with a Western aspect.

The roofing material will consist of asphalt shingles. The exterior wall material is to be stone and stucco. Soffits are to be 3/4" thick plywood.

There are 44 medium sized windows with the primary viewing direction being toward the West side of the structure. Windows will be double glazed with low e-coated tempered glass with frames made of aluminum clad. Exterior doors are to be 1-3/4", fire-rated, and made of wood.

The deck(s) will be made with Trex and supported by stucco wrap. The deck(s) will be open and isolated from the surrounding landscape with crushed rock over a fiberglass weed barrier.

There is no propane tank on site; the landowner has a natural gas line connected to Boulder County Utilities.

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 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 is to be removed. Any large dead woody material on the ground will also be removed. Firewise plants will be used for landscaping and revegetation. Grasses will be irrigated when possible and mowed to a maximum height of 6 to 8 inches.

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 crown spacing). No trees will overhang the house or decks. Trees should be at least 15 feet away from the house on all side.

Zone 2 - This zone extends out from Zone 1C, and acts as a transition zone between the heavily thinned area near the house to the existing forest setting. It extends down slope for 100 feet, to either side for 100 feet and behind the house for 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. 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 8 feet at the intersection of Zones 1 and 2 with limbing reduced in height to 6 feet as you approach Zone 3.

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.

EMERGENCY ACCESS

There is an existing driveway, therefore no trees are to be removed and no additional site disturbance and soil compaction will be required. The driveway is (12) feet wide with a vertical clearance of (13'6"). Grade is (12%), with a maximum of (14%). The driveway is less than 150 feet therefore no turn around is needed (see plan for details). The driveway is less than 400 feet therefore no pull-outs will be required

WATER SUPPLY / UTILITIES / SEPTIC FIELD

The water source will be from the City of Boulder Utilities. Utilities for the property are be buried in a trench. There is no septic field since residence is connected to City of Boulder Sewer.

MAINTENANCE AND RECCOMMENDATIONS

As detailed in fact sheet 6.302, <u>Creating Wildfire Defensible Zones</u>, 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 area.

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. The boundaries for zones 1 and 2 will be marked with red flagging. 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. Slash from the harvest will be chipped and 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 (Lefthand fire protection district (303-823-6611)).

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
- 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
- Be aware of fire danger; fire danger signs are posted at the entrance of most major canyons
- Keep driveways and property address marked with visible signage
- · Check the 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 and axes, available and ready for use
- · Clean debris from the roof and gutters at least two times a year
- Check screens and maintain spark arresters on chimneys
- Check to make sure address markers are clearly visible
- Avoid storing combustibles under decks

INSPECTION DATE

Inspection was conducted on 12/8/2003.

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.

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 sometimes squirrels.

Wildfire mitigation plan – A plan to reduce wildfire hazards around a home or other structure through fuels reduction and landowner awareness.

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Range.

PPD .

Aspect.

Slope

Legal Discription

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Inspection De-	12.8.03
Landowner mene:	ALEX WINTSBY
Mading addr	HOUGH # ASSOCIATES RO. BOX 498 NINOT, CO
City, Slave 2 ::	NIHOT CO. 80544
Siteladdress	2749 5. LAKERIDGE TRAL
Phone namper	720-494-7602
Road access 5.	LAKERIDGE TRAIL (Name of access road)
Docket Namiter	5PR -03-096 (SPR, LU, Etc.)
Section	
Township	

LOT 3 BLOCK 2 LAKE OF THE PINES SUB.

Dommant fixel type: (Grass/forbs/shrubs/slash/etc) Dominant over story.

Co-dominant werstory Fuel model type. Slash disposat (Chipped/hauled/burned/lop-scatter)

EAST DOWN TO WEST (Direction of slope)

2003 18:29 720-494-7625	WAUGH AND ASSOCIATES	PAGE 02
/2003 ; 04:23 2038235768	CSF9-BODIST	PAGE
Closanan	(feet)	
Bulding site		dge mid-slope)
She moisture		
Natural fire to ner: 1446 To	WEST	
Inspet & Discus Diagnosis		
En size (acres, 1.36 (Acres)	
Number of Selectures: 1		
Type of Structures: RESIDENCE	W/GARAGE (House/bair	(maraos)
	(<> 150 ft OR < > 400 ft)	- Bogingel
Driveway trees removed:(few/tr		
Home buffer statenal.	rany,	
	nple/complex)	
Roof Design COMPLEX (sin	A STATE AND A STATE AN	
Root material SPHALT SHI	Males (Asphalt shingles/concrete)	tiles/metal)
Soffictions		t board)
Signing munerical STONE/ST	UCC (Cement/hardboard/log/stud	co/stone/wood)
Windows (#) 44		
Windows Size MED. (sm	all/medium/large)	
Windows Frances: AUM. CLA	2(Wood/aluminum/aluminum	r clad)
Windows Aspect	(Viewing direction)	
Window Construction: LOW E	(Tempered glass/e-coating)	
Door Materia Wart	(Wood/steel/fiberglass/com	(tenne
	North Manager (1001E) 822 (OH)	

204	2003 44527	5768 C	SFS BODIST PAGE 04
	Deck materia	TPEX	(Woodscomposite materials)
	Deck Description:	OPEN	(Enclosed/open)
	Deck support type:	TUCCO HRAP	(Timber posts/logs/steel/concrete/stone)
	Deck Buffer insterial:	CRUKHED ROCK	(Crushed rock/gravel)

Deek weed is rier FIBERALASS (Fiberglass/polyester)

 Structure SON FT:
 Elege

 Unitity Locanon:
 BUPIED
 (Pole Xft from house/buried in trench)

 Btructure aspect
 WEST
 (Predeptimant facing direction - view)

 Leech field
 SEWER
 (Distance from house, propane, septic NSEW)

N/A

NA

Cistem or Well

Cistern size

Propant Tank location: N/A

(Level Whouse & >50ft from cistern)

(gallons)

(Distance from house, propane, septic NSEW)

NATURAL GAS

Dand Wa : Archited Far # 720-494-7625 **Boulder** District Colorado 5625 Ute Highway Longmont, CO 80503 \$250 (303) 823-5774 (303) 823-5768 fax Name: Barry Woodinski Defensible Space Lakuda SPR Address: 2749 trale Fire Mitigation 80302 Insect and Disease Control Interested Neighbors Phone: 307-709-3814 Acreage/Size: 1 acre a:cuam. Appointment Date: 12-8-63 ; Lett. Towar Lake of the Pires.) - Left the gote Directions: Green brian gate = \$2035 Comments: .



ADDRESS: 2749 S. LAKERIDGE TRAIL LAKE OF THE PINES SUBDIVISION A 0 LOT 3, BLOCK 2 COUNTY OF BOULDER STATE OF COLORADO Ш REVISIONS: SHEET INDEX 07 OCT 03 ADDED SECTIONS A,B,C & D SITE PLAN AI LOWER LEVEL FLOOR PLAN A2 MAIN LEVEL FLOOR PLAN A3 FRONT & LEFT ELEVATIONS REAR & RIGHT ELEVATIONS A4 A5 DRAWN BY: K. HUNTER HEIGHT OF BUILDING 16' (ABOVE ROAD) E # OF STORIES PROPERTY SQ. FT. TOTAL NEW HOUSE 59,084 SQ. FT. 6,905 SQ. FT. CO. TOTAL NEW GARAGE TOTAL NEW COVERED PORCH/DECK 864 SQ. FT. 929 SQ. FT. -COUNTY NXS TINIW LDER EXISTING TREES BOU 6' CONFERRAGE TREES NEW -ZONEZ FOR RESIDENCE TRAIL ates ZONE 1 - 15 FEET AROUND STRUGURE --- 1A -3 TO 5 FEET FROM STRUCTURE ALL FLOMABLE VELEDATION REMOVED • house LAKERIDGE associ COVERED W/CRUSHED RACK PRIVATE (B) IB - IRRIGATED GREEN SPACE - GROSSES MONIED 10 - REMAINING AREA MATURE TREES PRUNED TO 10 PEET S ZONE 2 75 FEET FROM STRUCTURE ALL LADDER FUEL & WOODY DEBRIS REMAYED TREES THINNED SO CROWNS ARE WIDELY SPACED A s LIME TREES GTO S FEET FROM GROUND waug 2749 ZONE 3 - FROM ZONE 2 TO EDGE OF PROPERTY OF LAKE THIN TREES FOR FOREFT HEALTH REMOVE DISEASED OR WEAKBINED TREES GENERAL NOTES: SHEET NO .: 30 SEPT 03 07 OCT 03 19 NOV 03 27 NOV 03 DEVELOPER, OWNER, AND/OR GENERAL CONTRACTOR ARE TO VERIFY ALL EXISTING DEVELOPER, OWNER, AND/OR GENERAL CONTRACTOR ARE TO VERIFY ALL EXISTING CONDITIONS, DIMENSIONS, AND SPECIFICATIONS ON THESE DRAWINGS PRIOR TO, AND DURING CONSTRUCTION. ANY DISCREPANCIES, OMISSIONS, OR ERRORS EXISTING IN THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CORRECTION PRIOR TO COMMENCING WORK. THE FAILURE TO NOTIFY THE ARCHITECT WITHIN TEN (10) DAYS FROM THE DATE OF THE DRAWINGS SHALL CONSTITUTE THE FINAL ACCEPTANCE OF THE DRAWINGS. ANY CHANGES MADE AFTER THE ACCEPTANCE OF THE DRAWINGS SHALL RELEASE THE ARCHITECT FROM ANY FUTURE RESPONSIBILITY. AL WILDFIRE ALL WORK SHALL COMPLY WITH, AND BE IN ACCORDANCE WITH, MINIMUM CONSTRUCTION STANDARDS OF THE UNIFORM BUILDING CODE, THE NATIONAL ELECTRIC AND PLUMBING CODES, AND ALL APPLICABLE STATE AND LOCAL CODES. MITIGATION SITE PLAN ALL WORKMANSHIP AND INSTALLATIONS SHALL BE AS ESTABLISHED BY GOOD AND NORMAL BUILDING PRACTICE AND MANUFACTURER'S INSTALLATION REQUIREMENTS.