

EXHIBIT "A"

POINTE MARIN

NOVATO, CALIFORNIA

VEGETATION MANAGEMENT and FUEL MODIFICATION PLAN

April 8, 2003

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INTRODUCTION

The following information is a requirement of the "Novato Fire Protection District Fire Loss Management Division", Fire Protection Standard 220, "Vegetation Management Plan", DATED 2/22/01. The information and requirements contained in this document shall be incorporated into the Development CC & R's.

EXISTING SITE DESCRIPTION

Pointe Marin is a Planned Development of over three hundred and forty Single Family Residential Units, and 100 Senior Housing Units, to be developed under the Army Reuse Plan. Proposed to be constructed in three phases. Located in Ignacio Valley and bisected by Ignacio Boulevard. The site is surrounded by existing residential development on the North (partially), South and West. See Appendix C.

The North portion of phase one is adjacent to sloping natural open space consisting of grasses with solitary and small groupings of native trees.

VEGETATION MANAGEMENT AND FUEL MODIFICATION

A well-designed and properly maintained landscape is a visual delight, matches the needs of the homeowners desires and can be a major asset, both in property value and fire prevention.

Criteria contained within NFPD Standard 220 indicate that a "Defensible Space Zone" of 30' X 30' x 50' from proposed structures is required for Phase Two and Three of Pointe Marin. This zone was determined by the Fire Hazard Risk Assessment Matrix within NFPD Standard 220 and is found in Appendix F. When this zone is contained solely within a residential rear or side yard, residents shall be required to adhere to installing plant material as listed under the "Recommended Fire Resistant Plant Materials".

Pyrophytic plants are a classification of plant materials containing characteristics that ignite readily and burn intensely. Characteristics include blade-leaf or needle-leaf evergreens, typically stiff leaves, leathery leaves and wood containing volatile waxes, fats or oils, plants containing dry or dead materials, leaves that are pubescent or hair covered, loose or papery bark, plants that are water stressed or in poor condition, or plants that can be easily ignited with a match or spark.

Fire resistant plants are typically broad-leaf deciduous trees, leaves tend to be supple, moist and easily crushed, tend to be clean with little deadwood, low growing (shrubs) two feet, sap is water-like and lacks a strong odor.

Recommendations (key points) to minimize fire hazards:

- Minimize or eliminate highly flammable plants
- Reduce potential for a "fire ladder"
- Create a fuel break around structures
- Properly space and prune trees
- Remove flammable debris or build-up from site
- Remove trimmed or cut material from site
- Use Fire Resistant Plant Materials when ever possible
- Prohibit the use of "shredded redwood bark" or "monkey hair" as a mulch material

DEFENSIBLE SPACE ZONES

ZONE ONE is the first thirty feet around a structure. This is the landscape zone for foundation plantings. It may contain traditional trees, shrubs, groundcovers, and lawn. Plants in this zone shall be the most fire-resistant, and not include Pyrophytes that are high in oils and resins. Regular maintenance and a regulated irrigation program are essential. Non-flammable landscape patios, walkway materials with rock and gravel mulch are useful in reducing fire hazard in this zone.

ZONE TWO is the middle area consisting of thirty to seventy feet from the structure. This zone should include low plants, up to eighteen inches high, such as fire resistant groundcovers, to act as a fuel break and prevent the spread of ground fires. Existing native plant material within this zone will require regular monitoring and pruning or trimming with removal of dead wood and debris.

ZONE THREE included fringe areas adjacent to open space. A native area, occasionally containing introduced vegetation, shall be trimmed or thinned within and immediately adjacent to residential lots. Fringe or the perimeter of large residential lots shall be maintained on a regular basis to eliminate a build-up of dry brush and other debris. This will greatly assist to prevent a fire in the open space from spreading to homes.

FUEL MANAGEMENT and MAINTENANCE PROCEDURES

Landscape maintenance can be minimized with proper plant selection. Drought tolerant landscapes may cut water use by twenty to fifty percent when compared to more typical ornamental landscapes, and can save mowing, feeding, and pruning time. Regular monthly landscape inspection is important particularly during the summer and fall. Many of our commonly used landscape plant materials are either native, or come from the Mediterranean climatic region, which is similar to our own. Over time these plants have adapted to the cycles of winter rains and dry summers and will experience early dormancy, or entirely lose their leaves. Commonly, these plants are overwatered. A more desirable concept is to gradually cut back the amount of water given to plants after their initial establishment period. Deep watering at infrequent intervals results in sturdier, more drought tolerant plant material.

The purpose of the fuel management and maintenance procedures is to interrupt the "fuel ladder" and deny fire the means to endanger lives and property. A fire ladder may exist when flames can easily jump from shorter to higher vegetation, eventually reaching a structure. Flammable shrubs can allow flames to progress or be blown into a tree readily spreading a fire.

Avoid using "shredded redwood bark" or "monkey hair" as a mulch material. Remove any dry weeds or brush that have accumulated. Thin overgrown vegetation. Prune dry or dying branches and dispose of properly.

1. All mature and native tree limbs shall be trimmed to a minimum of six feet above ground level.
2. All dead trees, limbs, and wood shall be removed from trees and picked up from the ground during the month of May.
3. Brush and other vegetative materials shall be mulched and left to form organic compost.
4. Unirrigated grass and native brush shall be cut to less than one (1") inch and raked and removed for thirty feet around building sites, and trees shall be trimmed to preclude roof overhang or growth within ten feet of a chimney.

5. Landscape planting within thirty feet of neighboring properties shall consist of fire-resistant construction and plant materials. Unirrigated grasses within the thirty-foot strip shall be cut to a maximum of one-inch height at least once a year at the end of the rainy season, and prior to May 15th.

6. Original conformance to the above will be provided by the developer during the construction phase of the project. Thereafter, the property owner shall be responsible for his property.

REFERENCES:

The University of California – Cooperative Extension. "Hortscript" – No. 18, February 1996.

Novato Fire Protection District Standard 220: Vegetation/Fuels Management Plan. "Firescape Landscaping to Reduce Fire Hazard" – Second Edition, East Bay Municipal Utility District.

APPENDIX A

RECOMMENDED FIRE-RESISTANT PLANT MATERIALS

TREES

Acer spp.
Arbutus unedo
Ceratonia siliqua
Cercis occidentalis
Cercocarpus betuloides
Citrus spp.
Fagus spp.
Feijoa sellowiana
Fraxinus spp.
Gleditsia triacanthos
Macadamia hybrids
Metrosideros excelsus
Myoporum spp.
Pistacia chinensis
Pittosporum spp.
Quercus spp.
Rhus lancea
Robinia pseudoacacia
Schinus molle
Schinus terebinthifolius

Maple
Strawberry Tree
Carob
Western Redbud
Mountain Ironwood
Citrus
Beech
Pineapple Guava
Ash
Honey Locust
Macadamia Nut
New Zealand Christmas Tree
Myoporum
Chinese Pistache
Mock Orange
Oak
African Sumac
Locust, Black
California Pepper Tree
Brazilian Pepper

SHRUBS

Aeonium spp.
Achillea millefolium
Agave spp.
Aloe brevifolia
Aloe spp.
Aquilegia formosa
Arctostaphylos uva-ursi
Artiplex semibaccata
Asarum caudatum
Aster chilensis
Brugmansia spp.
Buddleia spp.
Carpantria californica
Ceanothus griseus 'Ray Hartman'
Ceanothus maritimus

Aeonium
Yarrow
Agave
Shortleaf Aloe
Aloe
Western Columbine
Bearberry
Australian Saltbush
Wild Ginger
Wild Aster
Angel's Trumpet
Butterfly Bush
Bush Anemone
Ray Hartman Ceanothus
Maritime Ceanothus

Cera stium tomentosum
Cistus crispus
Cistus salvifolius
Coleonema caka "Diosma"
Convolvus cneorum
Cotoneaster congestus
Cotoneaster horizontalis
Cotoneaster microphyllus
Cotoneaster dammeri
Cotyledon spp.
Crassula spp.
D. pulverulenta
Dicentra formosa
Digitalis spp.
Dudleya farinosa
Echeveria spp.
Echium spp.
Epipactis gigantea
Erigeron glaucus
Eriogonum spp.
Eriophyllum confertiflorum
Eriophyllum stachaedifolium var. *artemisaefolium*
Erysimum capitatum
Erysimum concinnum
Escallonia spp.
Gazania rigens leucolaena
Grindelia stricta venulosa
Heuchera micrantha
Iris douglasiana
Iris longipetala
Iris macrosiphon
Lavatera assurgentiflora
Ligustrum japonicum
Ligustrum lucidum
Ligustrum texanum
Mahonia repens
Mimulus spp.
Monardella vellosa
Nerium oleander
Nolino spp.
Penstemon spp.
Pittosporum crassifolium
Pittosporum tobira

Snow-in-Summer
 Rockrose
 Sageleaf Rockrose
 Brush of Heaven
 Bush Morning Glory
 Likiano
 Rock Cotoneaster
 Rockspray Cotoneaster
 Bearberry Cotoneaster
 NCN
 Crassula
 Dudleya
 Western Bleeding Heart
 Foxglove
 Dudleya or Cliff Lettuce
 Hen and Chicks
 Echium or Priderot
 Stream Orchid
 Beach Aster
 Wild Buckwheat
 Golden Yarrow
 Lizard Tail
 Foothill Wallflower
 Fragrant Wallflower
 Escallonia
 Trailing Gazania
 Coastal Wild Gum
 Coral Bells
 Douglas Iris
 Long-petaled Iris
 Ground Iris
 Malva Rose (Tree Mallow)
 Japanese Privet
 Glossy Privet
 Texas Privet
 Creeping Mahonia
 Monkey Flower
 Coyote Mint
 Oleander
 Nolina (related to Yucca)
 Bearded Tongue
 Dwarf Karo
 Mock Orange

Polystichum munitum
Portulacaria afra 'Variegata'
Prunus lyonii
Pteridium aquilinum
Punica granatum
Rhaphiolepis spp.
Rhamnus alaternus
Rhododendron (Azalea) spp.
Rhus integrifolia
Salvia sonomensis
Satureja douglasii
Sidalcea malvaeflora
Simmondsia chinensis
Solanum xanti
Symphoricarpos mollis
Trachelospermum jasminoides
Yucca spp.
Zigadenus fremontii

GROUNDCOVERS

Achillea spp.
Achillea tomentosa
Agapanthus spp.
Ajuga crispa
Ajuga reptans
Aloe aristata
Armeria maritima
Arctostaphylos hookeri
Arctotheca calendula
Bergenia spp.
Brodiaea laxa
Carpobrotus spp.
Ceanothus gloriosus
Ceanothus griseus 'Anchor Bay'
Ceanothus griseus horizontalis
Ceanothus griseus 'Emily Brown'
Centaurea cineraria
Centranthus ruber
Cerastium tomentosum
Coprosma kirkii
Coreopsis spp.
D. hispidum

Sword Fern
Elephant's Food
Catalina Cherry
Bracken Fern
Pomegranate
India Hawthorn
Italian Buckthorn
Rhododendrons and Azaleas
Lemonade Berry
Creeping Sage
Yerba Buena
Checkerbloom
Jojoba
Purple Nightshade
Creeping Snowberry
Star Jasmine
Yucca
Star Lily

Yarrow
Woolly Yarrow
Lily-of-the-Nile
Giant Ajuga
Carpet Bugle
Dwarf Aloe
Common Thrift
Monterey Carpet (Manzanita)
Silver Spreader
Bergenia
Grass Nut
Ice Plant
Point Reyes Ceanothus
Anchor Bay Ceanothus
Carmel Creeper
Emily Brown Carmel Creeper
Dusty Miller
Red Valerian (Jupiter's Beard)
Snow-In-Summer
Creeping Coprosma
Coreopsis
Rosea Ice Plant

Delosperma "Alba"
Dietes bicolor
Dietes vegeta
Orosanthemum floribunda
Duchesnea indica
Eounymus Fortunei coloratus
Erigeron karvinskianus
Erysimum linifolium
Eschscholzia spp.
Festuca rubra
Fragaria californica
Fragaria chiloensis
Gazania rigens leucolaena
Geranium spp.
Helichrysum petiolatum
Hemerocallis hybrids
Hesperaloe parviflora
Heuchera maxima
Hypericum calycinum
Iberis sempervirens
Iris spp.
Kniphofia uvaria
Lampranthus spp.
Lantana montevidensis
Lavandula spp.
Limonium perzil
Liriope gigantea
Lupinus spp.
Malephora crocea
Malephora luteola
Mimulus spp.
Myoporum parvifolium
Oenothera berlandieri
Onicera hispidula
Osteospermum fruiticosum
Pelargonium peltatum
Penstemon spp.
Phyla nodiflora
Potentilla tabernaemontanii
Pyracantha "Santa Cruz"
Ranunculus californica
Romneya coulteri
Santolina chamaecyparissus

White Trailing Iceplant
 African Iris
 Fomight Lily
 Rosea Ice Plant
 Mock Strawberry
 Winter Creeper
 Fleabane (Mexican Daisy)
 Wallflower
 California Poppy
 Creeping Red Fescue
 Wood Strawberry
 Beach Strawberry
 Trailing Gazania
 Geranium
 Curry Plant
 Daylily
 Red Yucca
 Island Alum Root
 St. Johnswort
 Evergreen Candytuft
 Iris
 Red Hot Poker (Torch Lily)
 Bush Ice Plant
 Lantana
 Lavender
 Sea Lavender
 Giant Lily Turf
 Lupine
 Croceum Ice Plant
 Yellow Trailing Ice Plant
 Monkey Flower
 Myoporum
 Mexican Evening Primrose
 Pink Honeysuckle
 Trailing African Daisy
 Ivy Geranium
 Beard Tongue
 Lippia
 Spring Cinquefoil
 Firethorn
 Buttercup
 Matilija Poppy
 Lavender Cotton

Santolina virens
Sedum confusum
Sedum rubrotinctum
Senecio serpens
Sisyrinchium californicum
Sisyrinchium spp.
Stachys byzantia
Strelitzia reginae
Teucrium chamaedrys
Thymus praecox arcticus
Trifolium fragiferum
Tulbaghia violacea
Verbena peruviana
Vinca spp.
Zantedeschia aethiopica
Zauschneria californica

VINES

Rosa banksiae
Solanum jasminoides
Tecomaria capensis
Trachelospermum jasminoides
Wisteria spp.

Green Lavender Cotton
Stonecrop
Brown Bean (Pork and Beans)
NCN
Yellow-Eyed Grass
Blue-Eyed Grasses
Lamb's Ears
Bird of Paradise
Prostrate Germander
Creeping Thyme
O'Connor's Legume
Society Garlic
Perennial Verbena
Periwinkle
Common Calla
California Fuschia

Lady Bank's Rose
Potato Vine
Cape Honeysuckle
Star Jasmine
Wisteria

APPENDIX B

PYROPHYTIC PLANT MATERIALS

(Prohibited High Fire Hazard Plants)

TREES

Abies spp.
Cedrus spp.
Chamaecyparis spp.
Cupressus sargentii
Eucalyptus spp.
Lithocarpus densiflora
Palms
Picea spp.
Pinus attenuata
Pinus coulteri
Pinus radiata
Pinus spp.
Pseudotsuga menziesii
Taxus spp.
Umbellularia californica

Firs
Cedars
False
Sargent Cypress
Eucalyptus
Tan Oak, Tanbark Oak
Palm (if dry fronds)
Spruces
Knobcone Pine
Coulter Pine
Monterey Pine
Pines
Douglas Fir
Yew
California Bay

SHRUBS

Acacia spp.
Adenostoma fasciculatum
Arctostaphylos spp.
Artemisia californica
Baccharis spp.
Bambusa spp.
C. Selbana
Castanopsis chrysophylla
Cortaderia jubata
Cytisus monspessulanus
Cytisus scoparius
Erigonum fasciculatum
Juniperus spp.
Larix spp.
Lonicera japonica
Pennisetum spp.
Pickeringia montana
Quercus spp.
Rosmarinus officinalis
Salvia mellifera
Spartium junceum

Acacia species
Chamise, Greasewood
Manzanitas
Sagebrush (California)
Coyote Brush
Bamboo
Pampas Grass
Chinquapin, Giant
Jubata Grass
French Broom
Scotch Broom
California Buckwheat
Junipers
Larch
Japanese Honeysuckle
Fountain Grass
Chaparral Pea
Scrub Oak (brushy oaks)
Rosemary
Black Sage
Spanish Broom

Thuja spp.
Tsuga spp.
Ulex europea
Vaccinium

Arborvitae
Hemlock
Gorse
Huckleberry

APPENDIX C

VEGETATION MANAGEMENT LOTS

The lot numbers listed below are within Point Marin and are located on the North boundary line of the project adjacent to the existing Open Space. Their specific location and relationship to the existing Open Space applies to the criteria listed in the "Novato Fire Protection District Standard 220 - Vegetation/Fuels Management Plan" dated 2/22/01

These lots are further delineated and their relationship to the Open Space shown on the Vegetation Management and Fuel Modification Plan (1"=80'-0") that can be found in Appendix F.

A.P. Number:

#160-015-70

LOT NUMBERS:

#188, 189, 190, 191, 192, 193, 199, 203, 204
#205, 206, 220, 221, 222, 223, 224, 248, 249
#253, 254, 255, 256, 257, 279, 280, 281, 282
#283, 284, 285, 286, 287, 288, 289, 290, 292
#293, 294, 295, 296, 304, 305, 306, 307, 308
#323, 324, 325, 329, 330, 331, 332, 334, 335
#336, 341, 342, 343, 344, 345

APPENDIX D

NOVATO FIRE PROTECTION DISTRICT FIRE LOSS MANAGEMENT DIVISION



Developed by John M. Craig
 District M. Craig, Fire Marshal
 Approved by Jeffery A. Nelson
 Jeffery A. Nelson, Fire Chief

Fire Protection Standard 220

VEGETATION/FUELS MANAGEMENT PLAN

Date 2/22/08

Revision: _____

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This Standard has been developed pursuant to Appendix II A of the Uniform Fire Code, adopted by local Ordinance and Section 4290 and 4291 of the Public Resources Code. Clearance distances, type of vegetation and topographic features influence factors in determining adequate green belts and fire fuel breaks around structures. This methodology is implemented for the primary purpose of providing time for fire suppression personnel and equipment to respond and establish operational tactics and strategies during an ensuing wildland fire.

I. General

- A. The Vegetation Management Plan referred to hereinafter as the VMP shall be submitted to the Fire Marshal for Review prior to implementation. The VMP shall be submitted in two forms, blue line drawings and text format describing specific and applicable contributing factors in the selection and design of the plan.
- B. The VPM shall include at the minimum; the entire "plan content" elements described in this Standard. Not less than three (3) complete plan sets should be submitted to the Fire District for review. Landscape plans only, will be rejected unless they include a specific outline of the information required by this Standard.

II. VMP Content

- A. Using the Hazard Assessment Matrix in the back of this standard, determine the hazard points of the specific property.
- B. Aspect. This is the direction in which the face of the slope is situated.
- C. Slope. This is the degree of angle on the site that the structure is to be placed.
- D. Fuel. 0-30 feet. Identify from the fuel type list on the hazard assessment matrix what vegetation is mostly represented in the 0 to 30 ft. zone from the proposed structure.
- E. Fuel. 31-100 feet. Identify the fuel type list on the hazard assessment matrix what vegetation type is most represented in the 31 to 100 ft. zone from the proposed structure.
- F. Total the hazard assessment points for each category. This will provide a set of distances that clearance is required around the proposed structure.

NOVATO FIRE PROTECTION DISTRICT FIRE LOSS MANAGEMENT DIVISION



Developed by Jeffrey A. Newton
 Forrest M. Craig, Fire Marshal

Approved by _____
 Jeffrey A. Newton, Fire Chief

Fire Protection Standard 220

VEGETATION/FUELS MANAGEMENT PLAN

Date: 1/27/01

Revision: _____

Page: 2 of 4

III. Plant List and Selection

- ^ By using the Firescape Plant selection list on the University of California Cooperative Extension Phytophytic vs. Fire Resistant Plants brochure, select use of native, domestic or combination thereof that best suits the architectural and planning design of the proposed project. Slope, soil type, drought resistance should be considered when selecting plant types.

IV. Plant Spacing and Crown Separation

- Regardless of plant selection, shrubs should be spaced so that no continuity exists between the ground fuels and tree crowns.
- Tree crowns should be separated by at least 10 feet. Add an additional five feet for every ten (10%) per cent increase in slope.
- Separate individual shrub crowns by at least two times the height or clump shrubs into islands of no greater than 11-ft. diameter. Separate the islands by a distance of no less than two times the canopy height.
- Chipped wood and mulch can provide an excellent thermal barrier, which will help prevent, lost moisture in ground fuels. However, shredded bark, sometimes referred to as "monkey hair" is prohibited from use because its high flammability and fire spread characteristics.

HAZARD ASSESSMENT MATRIX

Hazard Points	1	2	3	4	5	6	7	8	Points
Aspect	NE	NW	SE	SW					
Slope		0-10		11-20		21-30		31+	
Fuel 0-30	Specimen Garden	Hardwood	Grass	Mostly Grass	Mostly Brush	Pyrophoric Hardwoods Chaparral	Conifer	Conifer w/brush under story	
Fuel 31-100	Mostly Grass	Mostly Brush		Pyrophoric Hardwoods Chaparral	Conifer with brush under story				

Total Hazard Points _____

Minimum Horizontal Clearance Requirement in feet _____

Hazard Points:

1 2 3 4 5 6 7	8 9 10 11 12 13 14	15 16 17 18 19 20 21 22 23 24 25 >
30x30x30 ft.	30x30x50 ft.	50x50x100 ft.

NOVATO FIRE PROTECTION DISTRICT FIRE LOSS MANAGEMENT DIVISION



Developed by Jeffrey A. Martin
 Patrick H. Craig, Fire Marshal

Approved by _____
 Jeffrey A. Martin, Fire Chief

Fire Protection Standard 220

VEGETATION/FUELS MANAGEMENT PLAN

Date: 1/22/01

Revised: _____

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V. Fuel Types:

- A. Specimen Garden: a well-maintained ornamental garden, usually irrigated. Trees and shrubs are well spaced or clustered, thinned and free of deadwood. The lawn is mowed and clean. No pyrophytic plants within 10 ft. of house.
- B. Hardwood (Model 9): Broadleaf (non-pyrophytic) trees such as oaks, maples, ash, etc.
- C. Grass (Model 1): Wild field grass dominates, trees and shrubs occupy less than 1/3 of the area.
- D. Mostly Grass (Model 2): Brush and tree reproduction occupy more than 1/3 and less than 2/3 of the area.
- E. Mostly Brush (Model 5): Brush and tree reproduction occupies 2/3 of the area. Includes young chaparral, coastal scrub and broom stands.
- F. Pyrophytic Hardwoods (Model 12): Broadleaf trees that are high in volatile oils, that produce heavy debris and burn intensely. May have some conifers mixed in but the flammable hardwoods dominate the fire behavior.
- G. Chaparral (Model 4): Six foot and taller old, pyrophytic brush with excessive deadwood. Includes mixed chaparral of manzanita, scrub oak, chaparral pea, tall ceanothus, chamise, etc. Often has some young Douglas fir or pines.
- H. Conifer (Model 8): Needleleaf trees typically with heavy litter, low branches and plentiful deadwood. Often mixed with some hardwoods or even pyrophytic hardwoods, but conifers dominated and carry the fire.
- I. Conifer with Brush Understory (Model 10): Pine and Douglas Fir with heavy brush and down & dead branches and suppressed trees in the understory.

VI. Slope Influence on Minimum Defensible Space Clearances

Increasing slopes require increased defensible space clearances to be equally effective. For example, to be equally effective upslope, cross slope, and down slope clearances, around each structure must be increased as percentage of slope increases when compared to level terrain.

Rate of spread, flame length, convective and radiant heat, increase in relation to fuel type, aspect, and percentage of slope factors. Increased defensible space zone radiuses in relation to slope are required around structures through fuel modification and reduction.

Note increased upslope and cross slope defensible space clearance requirements related to increase in slope. Minimum recommended cross slope and upslope increases are shown. Specific terrain may require adjustment:

NOVATO FIRE PROTECTION DISTRICT FIRE LOSS MANAGEMENT DIVISION



Developed by James M. Craig, Fire Marshal

Approved by Jeffrey A. Norton, Fire Chief

Fire Protection Standard 220

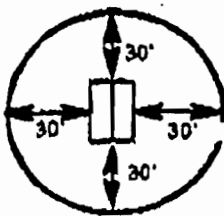
**VEGETATION/FUELS
MANAGEMENT PLAN**

Date: 2/21/2011

Revision: _____

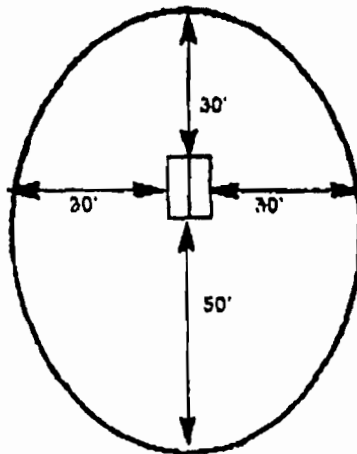
Page: 4 of 4

Minimum
30'X30'X30'X30'



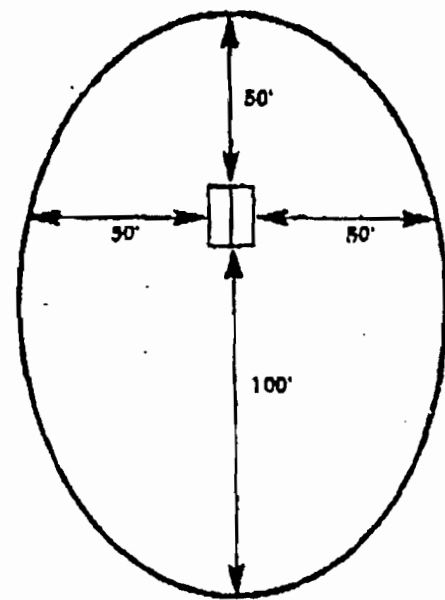
Level
0-10%

Minimum
30'X30'X30'X50'



Moderate Slope
11-30%

Minimum
50'X50'X50'X100'



Steep Slope
Greater than 30%

VII. References:

APPENDIX E

PHASE I

NOVATO FIRE PROTECTION DISTRICT FIRE LOSS MANAGEMENT DIVISION



Developed by Jeffrey A. Martin
 District Fire Chief

Approved by _____
 District Fire Chief

Fire Protection Standard 220

VEGETATION/FUELS MANAGEMENT PLAN

Date: 1/22/01

Revised: _____

Page: 2 of 4

III. Plant List and Selection

- By using the Firescape Plant selection list on the University of California Cooperative Extension Phytophytic vs. Fire Resistant Plants brochure, select use of native, domestic or combination thereof that best suits the architectural and planning design of the proposed project. Slope, soil type, drought resistance should be considered when selecting plant types.

IV. Plant Spacing and Crown Separation

- A. Regardless of plant selection, shrubs should be spaced so that no continuity exists between the ground fuels and tree crowns.
- B. Tree crowns should be separated by at least 10 feet. Add an additional five feet for every ten (10%) per cent increase in slope.
- C. Separate individual shrub crowns by at least two times the height or clump shrubs into islands of no greater than 18-ft. diameter. Separate the islands by a distance of no less than two times the canopy height.
- D. Chipped wood and mulch can provide an excellent thermal barrier, which will help prevent, lost moisture in ground fuels. However, shredded bark, sometimes referred to as "monkey hair" is prohibited from use because its high flammability and fire spread characteristics.

HAZARD ASSESSMENT MATRIX

Hazard Points	1	2	3	4	5	6	7	8	Points
Aspect	NE	NW	SE	SW					
Slope		0-10		11-20		21-30		31+	
Fuel 0-30	Specimen Garden	Hardwood	Grass	Mostly Grass	Mostly Brush	Pyrophoric Hardwoods Chaparral	Conifer	Conifer w/brush under story	
Fuel 31-100	Mostly Grass	Mostly Brush		Pyrophoric Hardwoods Chaparral	Conifer with brush under story				

Total Hazard Points 7

Minimum Horizontal Clearance Requirement in feet _____

Hazard Points:

1 2 3 4 5 6 7	8 9 10 11 12 13 14	15 16 17 18 19 20 21 22 23 24 25 >
30x30x30 ft.	30x30x50 ft.	50x50x100 ft.

PHASE II AND III

NOVATO FIRE PROTECTION DISTRICT FIRE LOSS MANAGEMENT DIVISION



Developed by _____
Forrest M. Craig, Fire Marshal

Approved by _____
Jeffrey A. Weston, Fire Chief

Fire Protection Standard 220

VEGETATION/FUELS MANAGEMENT PLAN

Date: 2/22/001

Revision: _____

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III. Plant List and Selection

- A. By using the Firescape Plant selection list on the University of California Cooperative Extension Phytophytic vs. Fire Resistant Plants brochure, select use of native, domestic or combination thereof that best suits the architectural and planning design of the proposed project. Slope, soil type, drought resistance should be considered when selecting plant types.

IV. Plant Spacing and Crown Separation

- A. Regardless of plant selection, shrubs should be spaced so that no continuity exists between the ground fuels and tree crowns.
- B. Tree crowns should be separated by at least 10 feet. Add an additional five feet for every ten (10%) per cent increase in slope.
- C. Separate individual shrub crowns by at least two times the height or clump shrubs into islands of no greater than 18-ft. diameter. Separate the islands by a distance of no less than two times the canopy height.
- D. Chipped wood and mulch can provide an excellent thermal barrier, which will help prevent, lost moisture in ground fuels. However, shredded bark, sometimes referred to as "monkey hair" is prohibited from use because its high flammability and fire spread characteristics.

HAZARD ASSESSMENT MATRIX

Hazard Points	1	2	3	4	5	6	7	8	Points
Aspect	NE	NW	SE	SW					
Slope		0-10		11-20		21-30		31+	
Fuel 0-30	Specimen Garden	Hardwood	Grass	Mostly Grass	Mostly Brush	Pyrophoric Hardwoods Chaparral	Conifer	Conifer w/brush under story	
Fuel 31-100	Mostly Grass	Mostly Brush		Pyrophoric Hardwoods Chaparral	Conifer with brush under story				

Total Hazard Points 11

Minimum Horizontal Clearance Requirement in feet _____

Hazard Points:

<u>1 2 3 4 5 6 7</u>	<u>8 9 10 11 12 13 14</u>	<u>15 16 17 18 19 20 21 22 23 24 25 ></u>
<u>30x30x30 ft.</u>	<u>30x30x50 ft</u>	<u>50x50x100 ft.</u>

APPENDIX F

Appendix F

The Vegetation Management and Fuel Modification Plan could not be reproduced in a Recordable Form.

A copy of the Plan is on file with the Novato Fire Protection District.