PRESERVE EDGE PLAN

Portion of Village Four

Otay Ranch, Chula Vista

Adopted May 15, 2018
By Resolution No. 2018-085

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Table of Contents

I. INTRODUCTION **3**

II. COMPLIANCE WITH RMP/MSCP SUBAREA PLAN POLICIES **3**

1. Drainage 3
2. Toxic Substances 5
3. Lighting 5
4. Noise 6
5. Invasives 7
6. Buffers 7
7. Setback Criteria 8
8. Restrict Access 9

III. FACILITIES AND IMPROVEMENTS PROPOSED WITHIN THE PRESERVE **10**

IV. FACILITIES PROPOSED WITHIN THE 100-FOOT PRESERVE EDGE **11**

V. APPENDIX A **13**

VI. APPENDIX B **16**

VII. FIGURE 1 ..... **17**

I. INTRODUCTION

The purpose of the Preserve Edge Plan is to identify allowable uses within appropriate land use designations for areas adjacent to the Otay Ranch Preserve. In accordance with Policy 7.2 of the Otay Ranch Resource Management Plan (RMP), a Preserve Edge Plan is to be developed for all SPAs that contain areas adjacent to the Preserve. Village Four will border the Otay Ranch Preserve on its northerly and westerly boundaries adjacent to Wolf Canyon. The Preserve Edge Plan area is a public or privately owned 100-foot wide strip of land adjacent to the Preserve. No structures other than fencing and walls shall be constructed within the 100-foot Preserve Edge. Fencing and walls shall be designed to minimize visual impacts to the Preserve and Wolf Canyon. To provide further guidance relating to the content of the Preserve Edge Plan, the Chula Vista Multiple Species Conservation Plan (MSCP) Subarea Plan contains policies related to land use adjacency. RMP and MSCP policies are summarized and evaluated below.

II. COMPLIANCE WITH RMP/MSCP SUBAREA PLAN POLICIES

The following discussion provides a description of the policies identified in the Chula Vista MSCP Subarea Plan, which were developed in consideration of the requirements of RMP, as well as compliance measures to be carried out by the various components of the Sectional Planning Area (SPA) Plan. The discussion is divided into edge effect issue areas identified in the Subarea Plan.

1. Drainage

MSCP Policy:

"All developed and paved areas must prevent the release of toxins, chemicals, petroleum products, exotic plant materials and other elements that might degrade or harm the natural environment or ecosystem processes within the Preserve. This can be accomplished using a variety of methods including natural detention basins, vegetated/infiltration swales or mechanical trapping devices. These systems should be maintained approximately once a year, or as often as needed, to ensure proper functioning. Maintenance should include dredging out sediments if needed, removing exotic plant materials, and adding chemical-neutralizing compounds (e.g., clay compounds) when necessary and appropriate." (Page 7-25).

Compliance:

Development of the site would reduce natural erosion and sedimentation potential through the increase in impervious surfaces and stabilized slopes. However, erosion potential may exist at the locations where runoff is ultimately released from the project. To avoid erosion impacts, the project has been designed to include energy dissipation and infiltration structures to reduce runoff and flow velocities to below erosive velocity limits.

Post-construction Best Management Practices (BMPs) are included in the design of the Village Four SPA Plan/Tentative Map (TM). The Post-construction BMPs are detailed in the Village Four Storm Water Quality Management Program (SWQMP).

As described in the Master Drainage Study for Village Four as well as the SWQMP for Village Four both prepared by Hunsaker Engineering, storm water run-off will be treated prior to entering the storm drain system, then discharged to Otay River via a storm drain pipeline. A portion of storm water run-off will be

collected onsite and discharged to the southwest corner of Village Four. This storm-water will be treated onsite and discharged to a hydro-modification basin. The hydro modification basin will release the treated storm water off-site into Wolf Canyon in accordance with the City's Storm Water Management Standards Requirements Manual, which includes the City's Standard Urban Storm Mitigation Plan (SUSUMP). Flow-based BMPs are provided in the SWQMP prepared for Village Four.

The BMPs will incorporate Low Impact Development (LID) techniques to assure water quality is being preserved, prior to discharge off-site. LID techniques will also be incorporated to treat dry weather flows and 'first flush' criteria as set forth by the Regional Water Quality Control Board (RWQCB). These methods will protect the open space Preserve adjacent to Village Four. Dry weather flows typically include landscape overwatering, washing driveways and automobiles. LID techniques to reduce dry weather flows include low water use landscaping, infiltration areas, and public education regarding washing vehicles and driveways. First flush flows take into account the initial runoff from rain events which may contain higher levels of pollutants than at the end of a rain event. BMPs will be implemented to reduce first flush pollutants and are detailed in the SWQMP. The RWQCB will require a Storm Water Pollution Prevention Plan (SWPPP) to address water quality impacts associated with construction and operation of the project. To mitigate impacts from "first flush" run-off and dry weather flow, BMPs will be identified in the SWPPP and the appropriate BMPs will be implemented. The SWPPP will be consistent with the requirements of the Federal Clean Water Act. BMPs identified in the SWPPP will include, but are not limited to the following.

<u>Construction-Related Measures:</u>

- Existing vegetation will be retained where possible. To the extent feasible, grading activities will be limited to the immediate area required for construction.
- Temporary erosion control measures will be installed in disturbed areas. These control measures may include but are not limited to silt fencing, straw waddles, jute netting, or hydroseeding. The temporary erosion control measures will be detailed in the SWQMP and the SWPPP.
- Disturbed surfaces will not be left without erosion control measures in place from October 1 through April 1, or when there is a potential for a rain event.
- Landscaping will be installed as soon as practical to reduce erosion potential.

<u>Design/Post-Construction Measures:</u>

- Sediment will be retained on-site by a system of sediment basins, traps, or other appropriate measures.
- Where deemed necessary, storm drains will be equipped with silt and oil traps to remove oils, debris, and other pollutants. Storm drain inlets shall be labeled "NO Dumping-Drains to Ocean." Storm drain inlets shall be regularly maintained to ensure their effectiveness.
- The parking lots will be designed when possible to allow storm water run-off to be directed to vegetative filter strips and/or oil–water separators to control sediment, oil, and other contaminants.

- Permanent energy dissipation structures will be installed for each drainage outfall to a natural watercourse.
- The project area drainage basins will be designed to provide effective water quality control measures, as outlined in the SWQMP. Design and operational features of the drainage basins will include design features to provide maximum infiltration, maximum detention time for settling of fine particles; maximize the distance between basin inlets and outlets to reduce velocities; and establish maintenance schedules for periodic removal of sedimentation, excessive vegetation, and debris.

In addition to the permanent drainage facilities, temporary desiltation basins to control construction related water quality impacts shall be constructed within the Plan area with each grading phase to control sedimentation during construction. The interim desiltation basins shall be designed to be consistent with RWQCB and National Pollution Discharge Elimination System Permit (NPDES) Certification/permitting requirements. Sediment from the project grading operations that drains into the natural drainage channels would incorporate water quality control features to maximize water quality. The exact size, location, and component elements of these interim basins shall be identified on the grading plans.

2. Toxic Substances

MSCP Policy:

"All agricultural uses, including animal-keeping activities, and recreational uses that use chemicals or general by-products such as manure, potentially toxic or impactive to wildlife, sensitive species, habitat, or water quality need to incorporate methods on their site to reduce impacts caused by the application and/or drainage of such materials into the Preserve. Methods shall be consistent with requirements requested by the RWQCB and NPDES." (Page 7-26)

Compliance:

The SPA Plan area does not have agricultural uses adjacent to the Preserve, consistent with the Otay Ranch Village Four SPA Plan Agricultural Plan.

3. Lighting

MSCP Policy:

"Lighting of all developed areas adjacent to the Preserve should be directed away from the Preserve, wherever feasible and consistent with public safety. Where necessary, development should provide adequate shielding with non-invasive plant materials (preferably native), berming, and/or other methods to protect the Preserve and sensitive species from night lighting. Consideration should be given to the use of low-pressure sodium lighting." (Page 7-26)

Compliance:

The Village Four SPA Plan has been designed to have rear yards backing up to the preserve edge along the southern portion of the project. There are no public streets that require lighting adjacent to the preserve edge. Trails and maintenance access roads within the preserve will not be lighted.

4. Noise

MSCP Policy:

"Uses in or adjacent to the Preserve should be designed to minimize noise impacts. Berms or walls should be constructed adjacent to commercial areas and any other use that could impact or interfere with wildlife utilization of the Preserve. Excessively noisy uses or activities adjacent to breeding areas, including temporary grading activities, must incorporate noise reduction measures or be curtailed during the breeding season of sensitive bird species.

Where noise associated with clearing, grading or grubbing will negatively impact an occupied nest for the least Bell's vireo during the breeding season from March 15 to September 15, noise levels should not exceed 60 dBA Leq-h. However, on a case by case basis, if warranted, a more restrictive standard may be used. If an occupied Bell's vireo nest is identified in a pre-construction survey, noise reduction techniques, such as temporary noise walls or berms, shall be incorporated into the construction plans to reduce noise levels below 60 dBA Leq-h.

Where noise associated with clearing, grubbing or grading will negatively impact, an occupied nest for raptors between January 15-July 31 or the California gnatcatcher between February 15 and August 15 (during the breeding season), clearing, grubbing or grading activities will be modified if necessary, to prevent noise from negatively impacting the breeding success of the pair. If an occupied raptor or California gnatcatcher nest is identified in a pre-construction survey, noise reduction techniques shall be incorporated into the construction plans. Outside the bird breeding season(s) no restrictions shall be placed on temporary construction noise." (Page 7-26)

Compliance:

Requirements placed on the project by the Environmental Impact Report (EIR) include, but are not limited to, pre-grading surveys for gnatcatchers, vireos and nesting raptors. Based on those surveys and locations of nesting birds during construction, if it is determined that the noise impact thresholds established in the Chula Vista Subarea Plan would be exceeded, the applicant would be required to reduce the impact below 60 dBA Leq-h standard through either modification of construction activities mitigation using sound barriers, such as temporary walls or berms, or avoiding clearing, grubbing, grading, or construction activities within 500-feet of an active nest site from March 15 to September 15, during the breeding season.

The Village Four SPA Plan design has located typically low noise generating uses adjacent to the preserve. These uses include low density residential development, passive hiking trails and open space. Native landscaping that requires a reduced amount of maintenance will be installed where practical. To the extent practicable, non-emergency brush management in Zone 3 will be undertaken outside the bird breeding seasons (April 1 – June 30) in areas where breeding and/or nesting may occur.

5. Invasives

MSCP Policy:

"No invasive non-native plant species shall be introduced into areas immediately adjacent to the preserve. All slopes immediately adjacent to the Preserve should be planted with native species that reflect the adjacent native habitat. The plant list contained in the "Wildland/Urban Interface: Fuel Modification Standards," and provided as Appendix L of the Subarea Plan, must be reviewed and utilized to the maximum extent practicable when developing landscaping plans in areas adjacent to the Preserve." (Page 7-27)

Compliance:

Landscaping within 100-feet of the Preserve will not contain any invasive or undesirable plant species, as determined by the City of Chula Vista. A list of invasive and/or undesirable species is provided in Appendix A attached. A list of plant species that may be planted on manufactured slopes adjacent to the Preserve is provided in the attached Appendix B, entitled "Approved Plant List for the Village Four Preserve Edge." These plant lists have been developed consistent with Table 3-5 (Appendix A) of the City's MSCP Subarea Plan and shall be incorporated into the Village Four Landscape Master Plan. Specifically, the take area as part of the Boundary Line Adjustment (see the Biological Technical Report for location) will be a manufactured graded slope and will be landscaped with native species to provide a buffer for the Preserve. The slope will also be seeded with Otay tarplant (*Deinandra conjugens*) in an effort to re-establish populations within this area. In addition, the give areas (see the Biological Technical Report for location) will be a potential recipient of transplantable species such as cactus which may be location located within the impact area. The Approved Plant List for the Village Four Preserve Edge (Appendix B of the Edge Plan) also meets the requirements outlined in the Fire Protection Plan (FPPA-A) as these manufactured slopes are also within the 100-feet Brush Management Zone required by the MSCP Subarea Plan. Any changes to the approved plant list must be approved by the Director of Planning and Building and Deputy City Manager/Development Services Director. The area may be planted with container stock (liners) or a hydroseed mix.

6. Buffers

MSCP Policy:

"There shall be no requirements for buffers outside the Preserve, except as may be required for wetlands pursuant to Federal and/or State permits, or by local agency California Environmental Quality Act (CEQA) mitigation conditions. All open space requirements for the Preserve shall be incorporated into the Preserve. Fuel modification zones must be consistent with Section 7.4.4 of the Subarea Plan."

Compliance:

Fuel modification zones have been incorporated into the proposed development areas of the SPA Plan pursuant to the requirements of the Subarea Plan. Fuel modification zones are allowed within the 100-foot Preserve Edge pursuant to RMP Policy 7.2 (Adjacent Land Uses). Where appropriate, graded landscaped slope areas will be maintained pursuant to Fire Department requirements and will be outside of the Preserve. A Fire Protection Plan for Village Four West has been

prepared that provides specific fuel modification requirements for the entire SPA area. Consistent with the Chula Vista MSCP requirements, a 100-feet Brush Management Zone has been established adjacent to the MSCP. A description of the Brush Management Zones is provided in the Fire Protection Plan.

MSCP Adjacency Guidelines:

All new development must adhere to the Adjacency Guidelines for drainage found on Page 7-25 of the Subarea Plan. In summary, the guidelines state that:

- All developed areas must prevent the release of toxins, chemicals, petroleum products, exotic plant materials and other elements the might degrade or harm the natural environment or ecosystem processes within the Preserve.
- Develop and implement urban runoff and drainage plans which will create the least impact practicable for all development adjacent to the Preserve.
- All development located within or directly adjacent to or discharging directly to an environmentally sensitive area are required to implement site design, source control, and treatment control Best Management Practices (BMPs).

To adhere to these MSCP guidelines, excessive runoff into the Preserve from adjacent irrigated slopes shall be minimized. Erosion control BMPs must be installed prior to planting and watering to prevent siltation into the Preserve. The irrigation system installed on the slopes should have an automatic shutoff valve to prevent erosion in the event the pipes break. Irrigation heads shall be directed away from the Preserve. Irrigation schedules for the slopes adjacent to the open space Preserve should be evaluated and tested in the field to determine the appropriate water duration and adjusted, as necessary, to prevent excessive runoff. Once landscaping is mature and irrigation is no longer necessary, the temporary irrigation system in Zone 2 and Zone 3 will be removed.

In addition, a manual weeding program shall be prepared and implemented to the satisfaction of the Deputy City Manager/Development Services Director within areas adjacent to the Preserve to control the spread of invasive species. The manual weeding program shall be prepared in conjunction with the Landscape Master Plan, and shall describe at a minimum, the entity responsible for controlling invasive species, the maintenance activities and methods required to control invasive plants, and a maintenance/monitoring schedule. A qualified biological monitor shall check the irrigated slopes during plant establishment to verify that excessive runoff does not occur and that weed infestations are controlled.

7. Setback Criteria

Otay Ranch RMP Policy:

The Otay Ranch RMP outlines specific setback criteria in the guidelines for Policy 9.8, to which all boundary modifications must adhere. The setback criteria are designed to provide a buffer between the development and special-status species and resources, including coastal sage scrub, coastal California gnatcatcher, perennial (native) grassland, vernal pools, mulefat scrub, riparian woodlands, oak woodlands, and southern interior cypress forest.

Compliance:
The Preserve Boundary Line Adjustment includes the following applicable resources: coastal sage scrub and coastal California gnatcatcher. The guidelines for these two resources are shown on Figure 1 and as follows:

1. Coastal sage scrub and chaparral shall be provided a 100-foot-wide setback where interfacing with residences and a minimum of 50-foot-wide where interfacing with commercial and industrial development, active park uses, and schools.
2. Coastal sage scrub habitat occupied by gnatcatcher and/or cactus wren shall be provided a setback no less than 100 feet determined in consideration of topography or other factors through additional study at the SPA level.

Otay Ranch RMP Policy
The proposed project and associated Preserve Boundary Line Adjustment must adhere to the setback criteria through compliance with RMP Policy 7.2, which requires a minimum 100-foot-wide setback between development and the Preserve.

Compliance
Perimeter fencing will be installed along the rear yards of Village Four Development Area to restrict unauthorized access into the Preserve. There are no public streets that require lighting adjacent to the Preserve edge, and trails and maintenance access roads within the Preserve will not be lighted. To avoid erosion impacts to the Preserve, the project has been designed to include energy dissipation and infiltration structures to reduce runoff and flow velocities to below erosive velocity limits.

8. Restrict Access

Both the Otay Ranch RMP and Chula Vista MSCP Subarea Plan contain policies that restrict or limit access into the Preserve. These policies are discussed below:

Policy 6.5 of the Otay Ranch Resource Management Plan states the following:

"Identify restricted use areas within the Preserve."

Standard:
Public access may be restricted within and adjacent to wetlands, vernal pools, restoration areas, and sensitive wildlife habitat (e.g., during breeding season) at the discretion of the Preserve Owner/Manager.

Guidelines:
The Preserve Owner/Manager shall be responsible for identifying and designating restricted areas based on biological sensitivity.

MSCP Policy:
"The public access to finger canyons will be limited through subdivision design, fencing to other appropriate barriers, and signage."

"Install barriers (fencing, rocks/boulders, and appropriate vegetation) and/or signage in new communities where necessary to direct public access to appropriate locations."

Compliance:
Pursuant to the requirements of the MSCP Subarea and RMP, Village Four land plans have been designed to limit access to the adjacent Preserve area and within the MSCP. Public access is not provided into the Preserve from the development area of Village Four. The access will be in compliance with the requirements of the MSCP Subarea Plan and the RMP. Signage will be installed at trailheads or junction points to restrict public access outside the designated trails. Maintenance access will be provided via the trail access points. The trail system within the preserve edge will be constructed during the adjacent single-family development phase. Access will be restricted using gates, fences, and signs until the trails are completed. Perimeter fencing will be installed along the rear yards of the Village Four to restrict unauthorized access into the preserve. In addition, a lodge pole railing, post markers with signage or equal shall be installed along the MSCP limit or along the Village Four boundary as depicted in the SPA. The location and type of access controls (i.e., gates, fencing, post markers, and signage) shall be incorporated into the Village Four Landscape Master Plan to the satisfaction of the Deputy City Manager/Development Services Director.

III. FACILITIES AND IMPROVEMENTS PROPOSED WITHIN THE PRESERVE

The facilities described below and depicted on Figure 1 are proposed within the MSCP Preserve and are not subject to this Preserve Edge Plan, but rather are discussed for context purposes only. Per the MSCP Subarea Plan, certain infrastructure and roads planned in conjunction with development will be allowed to be constructed, operated and maintained within the Preserve. The Subarea Plan anticipated these "Planned" and "Future" facilities and requires compliance with the siting criteria identified in Section 6.3.3.4 of the Subarea Plan. The Project's Biology Report and Functional Equivalency Analysis provides the siting criteria analysis. Facilities proposed within the Preserve include:

Detention Basin, Access Roads, and Associated Utilities
The detention basin (Future Facility) is located south of development and adjacent to the development area/quarry boundary. The basin will be lined and planted with native vegetation which will likely consist of a custom seed mix or container plants of the following species: *Carex praegracilis*, *Carex spissa*, *Sporobolus airoides*, *Juncus acutus* ssp. *leopoldii*, *Leymus condensatus*, and *Leymus triticoides*. The detention basin will have an access road (Future Facility) extending off Main Street. Storm drain (Future Facility) and sewer lines (Planned Facility) extending south from Village Four development will be in line with the location of the detention basin access roads. In order to connect the basin with the Salt Creek Interceptor (Planned Facility) to the south of Wiley Road, storm drain and sewer lines will be placed within the footprint of an existing dirt access road (Planned Facility) located within Village Three. The utility easement within the existing dirt road will require a graded width of 18 feet and the existing dirt road will be replaced with a 12-foot all weather access road. The new road from Main Street to the basin and the dirt road will require a graded width of 25 feet with a 12 foot utility access road

constructed within that 25-foot easement. The detention basin, access road from Main Street, and the storm drain are considered Future Facilities while the Salt Creek Interceptor, sewer lines and access road from the basin to the Salt Creek Interceptor are Planned Facilities. Because the extent of the access road from Main Street to the detention basin and utilities are the same, the impact is based on the Planned Facility, i.e., width necessary for sewer facilities. All facilities/utilities have been co-located within the planned easement of the access road to the Salt Creek Interceptor and the access road width is able to accommodate these additional facilities/utilities without resulting in additional impacts. Therefore, the only Future Facility not co-located with a Planned Facility is the detention basin.

Main Street

Main Street is proposed as an east/west six-lane arterial roadway that would serve as the primary connection to the surrounding existing and planned regional circulation network. Class II bicycle lanes in each direction, and a buffered 5-foot-wide pedestrian walkway on each side of the roadway. Direct pedestrian links would extend through the proposed project site into Village Eight West, and future connections would be provided to Village Three via Main Street. Class II bicycle facilities are planned on Main Street.. Main Street will be located through the center of Village Four along the Preserve and development boundary. Portions of the alignment are not within the Preserve and therefore not subject to the siting criteria. The Main Street sewer connection and storm drain improvements have been co-located within the road right-of-way (ROW) to minimize and avoid additional impacts. Thus, the two 20-foot-wide easements that would have been required for these two facilities have been co-located within the road. The Main Street Bridge is not considered part of this project and would be constructed by others or the City of Chula Vista. Main Street will be extended east to provide a future connection into/through Village Eight West to the interchange at SR-125 and westerly into/through Village Three.

IV. FACILITIES PROPOSED WITHIN THE 100-FOOT PRESERVE EDGE

Several facilities and improvements are proposed within the 100-foot Preserve Edge as shown on Figure 1.

Community Purpose Facility (CPF) 2

CPF-2 would be a 0.87-acre site located on the west side of Street ‘A’ in Planning Area R-2b. CPF-2 is planned for private recreation uses, and provides an overlook of a portion of Wolf Canyon and the MSCP. Conceptual plans for CPF 2 include a low profile and non-combustible tot lot playground, recreational turf grass, and stabilized decomposed granite trail. This private recreation area will comply with the MSCP Adjacency Guidelines, Preserve Edge requirements, and the Fire Protection Plan.

Planning Area R-2b

Portions along the perimeter of Planning Area R-2b are located within the Preserve Edge. Planning Area R-2b would provide for duplexes/townhomes and other similar products that allow a variety of housing types. R-2b is proposed to include 40 units at a density of 9.43 dwelling units per acre. Associated development and performance standards are described in the Project’s Planned Community District Regulations for residential districts.

Open Space and Slopes

A total of 9.98 acres of perimeter slopes would occur at the edges of development within the project site. Perimeter slopes refer to the slopes that occur at the edges of development within the SPA (lots OS-6 and OS-9). The portions of these slopes that are located within 100-feet of the MSCP Preserve are part of the Preserve Edge. The intent of the Preserve Edge is to create a buffer zone between proposed development and the Otay Ranch Preserve, thereby protecting the Preserve from human activity and non-native species. This area also includes dedicated right-of-way for a future access road to Otay Valley Regional Park. No structures would be permitted within perimeter slopes with the exception of walls and fences. Trails are permitted within perimeter slope areas, but are subject to the requirements outlined within the SPA Plan.

Main Street

A portion of Main Street (as described previously) would be located within the Preserve Edge.

APPENDIX "A"

UNDESIRABLE PLANT LIST

The following species are highly flammable and should be avoided when planting within the first 100 feet adjacent to a structure. The plants listed below are more susceptible to burning, due to rough or peeling bark, production of large amounts of litter, vegetation that contains oils, resin, wax, or pitch, large amounts of dead material in the plant, or plantings with a high dead to live fuel ratio. Many of these species, if existing on the property and adequately maintained (pruning, thinning, irrigation, litter removal, and weeding), may remain as long as the potential for spreading a fire has been reduced or eliminated.

BOTANICAL NAME	COMMON NAME
Abies species	Fir Trees
Acacia species	Acacia (trees, shrubs, groundcovers)
*Adenostoma sparsifolium***	Red Shanks
*Adenostoma fasciculatum***	Chamise
Agonis juniperina	Juniper Myrtle
Araucaria species	Monkey Puzzle, Norfolk Island Pine
*Artemesia californica***	California Sagebrush
Bambusa species	Bamboo
Cedrus species	Cedar
Chamaecyparis species	False Cypress
Coprosma pumila	Prostrate Coprosma
Cryptomeria japonica	Japanese Cryptomeria
Cupressocyparis leylandii	Leylandii Cypress
*Cupressus forbesii***	Tecate Cypress
Cupressus glabra	Arizona Cypress
Cupressus sempervirens	Italian Cypress
Dodonea viscosa	Hopseed Bush
*Eriogonum fasciculatum***	Common Buckwheat
Eucalyptus species	Eucalyptus
*Heterotheca grandiflora***	Telegraph Plant
Juniperus species	Junipers
Larix species	Larch
Lonicera japonica	Japanese Honeysuckle
Miscanthus species	Eulalia Grass
*Muehlenbergia species***	Deer Grass
Palmae species	Palms
Picea species	Spruce Trees
*Pickeringia Montana***	Chaparral Pea
Pinus species	Pines
Podocarpus species	Fern Pine
Pseudotsuga menziesii	Douglas Fir
Rosmarinus species	Rosemary
*Salvia mellifera***	Black Sage
Taxodium species	Cypress
Taxus species	Yew
Thuja species	Arborvitae
Tsuga species	Hemlock
*Urtica urens***	Burning Nettle

APPENDIX "A"

** San Diego County native species

References: Gordon, H. White, T.C. 1994. Ecological Guide to Southern California Chaparral Plant Series. Cleveland National Forest.

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APPENDIX "A"

The California Exotic Pest Plant Council

List A-1: Most Invasive Wildland Pest Plants; Widespread

Latin Name[1]	Common Name	Habitats of Concern and Other Comments	Distribution[2]
Ammophila arenaria	European beach grass	Coastal dunes	SCo,CCo,NCo
Arundo donax	giant reed, arundo	Riparian areas	cSNF,CCo,SCo,SnGb,D,GV
Bromus tectorum	cheat grass, downy brome	Sagebrush, pinyon-juniper, other desert communities; increases fire frequency	GB,D
Carpobrotus edulis	iceplant, sea fig	Many coastal communities, esp. dunes	SCo,CCo,NCo,SnFrB
Centaurea solstitialis[C]	yellow starthistle	Grasslands	CA-FP (uncommon in SoCal)
Cortaderia jubata	Andean pampas grass, jubatagrass	Horticultural; many coastal habitats, esp. disturbed or exposed sites incl. logged areas	NCo,NCoRO,SnFrB, CCo,WTR,SCo
Cortaderia selloana	pampas grass	Horticultural; coastal dunes, coastal scrub, Monterey pine forest, riparian, grasslands; wetlands in ScV; also on serpentine	SnFrB,SCo,CCo,ScV
Cynara cardunculus[B]	artichoke thistle	Coastal grasslands	CA-FP, esp. CCo,SCo
Cytisus scoparius[C]	Scotch broom	Horticultural; coastal scrub, oak woodlands, Sierra foothills	NW,CaRF,SNF,GV, SCo,CW
Eucalyptus globulus	Tasmanian blue gum	Riparian areas, grasslands, moist slopes	NCoRO,GV,SnFrB, CCo,SCoRO,SCo,nChl
Foeniculum vulgare	wild fennel	Grasslands; esp. SoCal, Channel Is.; the cultivated garden herb is not invasive	CA-FP
Genista monspessulana[C]	French broom	Horticultural; coastal scrub, oak woodlands, grasslands	NCoRO,NCoRI,SnFrB, CCo,SCoRO,sChl,WTR,PR
Lepidium latifolium[B]	perennial pepperweed, tall whitetop	Coastal, inland marshes, riparian areas, wetlands, grasslands; potential to invade montane wetlands	CA (except KR,D)
Myriophyllum spicatum	Eurasian watermilfoil	Horticultural; lakes, ponds, streams, aquaculture	SnFrB,SnJV,SNH(?), prob. CA
Pennisetum setaceum	fountain grass	Horticultural; grasslands, dunes, desert canyons; roadsides	Deltaic GV,CCo,SCo, SnFrB
Rubus discolor	Himalayan blackberry	Riparian areas, marshes, oak woodlands	CA-FP
Senecio mikanioides (=*Delairea odorata*)	Cape ivy, German ivy	Coastal, riparian areas, also SoCal (south side San Gabriel Mtns.)	SCo,CCo,NCo,SnFrB,SW
Taeniatherum caput-medusae[C]	medusa-head	Grasslands, particularly alkaline and poorly drained areas	NCoR,CaR,SNF,GV,SCo
Tamarix chinensis, T. gallica, T. parviflora & T. ramosissima	tamarisk, salt cedar	Desert washes, riparian areas, seeps and springs	SCo,D,SnFrB,GV,sNCoR, sSNF,Teh,SCoRI,SNE, WTR
Ulex europaeus[B]	gorse	North, central coastal scrub, grasslands	NCo,NCoRO,CaRF, n&cSNF,SnFrB,CCo

Noxious Weed Ratings

F: Federal Noxious Weed, as designated by the USDA; targeted for federally-funded prevention, eradication or containment efforts.

A: CA Dept. of Food & Agriculture, on "A" list of Noxious Weeds; agency policies call for eradication, containment or entry refusal.

B: CA Dept. of Food & Agriculture, on "B" list of Noxious Weeds; includes species that are more widespread, and therefore more difficult to contain; agency allows county Agricultural Commissioners to decide if local eradication or containment is warranted.

C: CA Dept. of Food & Agriculture, on "C" list of Noxious Weeds; includes weeds that are so widespread that the agency does not endorse state or county-funded eradication or containment efforts except in nurseries or seed lots.

Q: CA Dept. of Food & Agriculture's designation for temporary "A" rating pending determination of a permanent rating.

For most species nomenclature follows *The Jepson Manual: Higher Plants of California* (Hickman, J., Ed., 1993).

[1]. 2 1999 CalEPPC List

VI. Appendix B

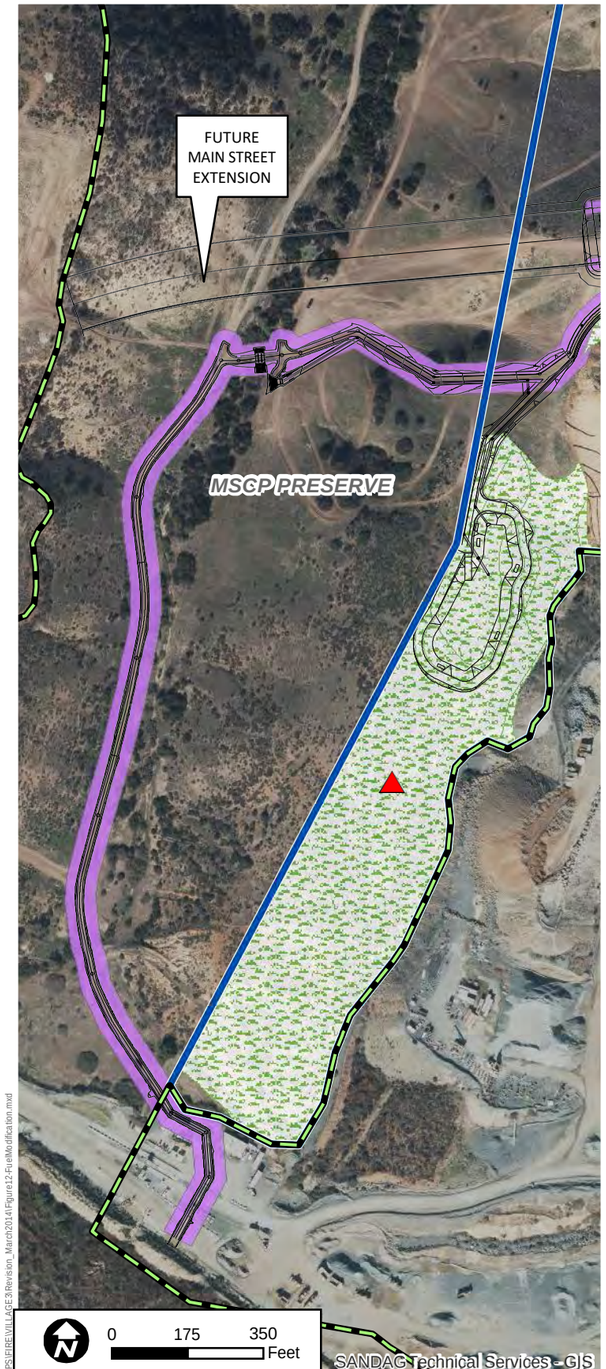
Trees Adjacent to Open Space Preserve

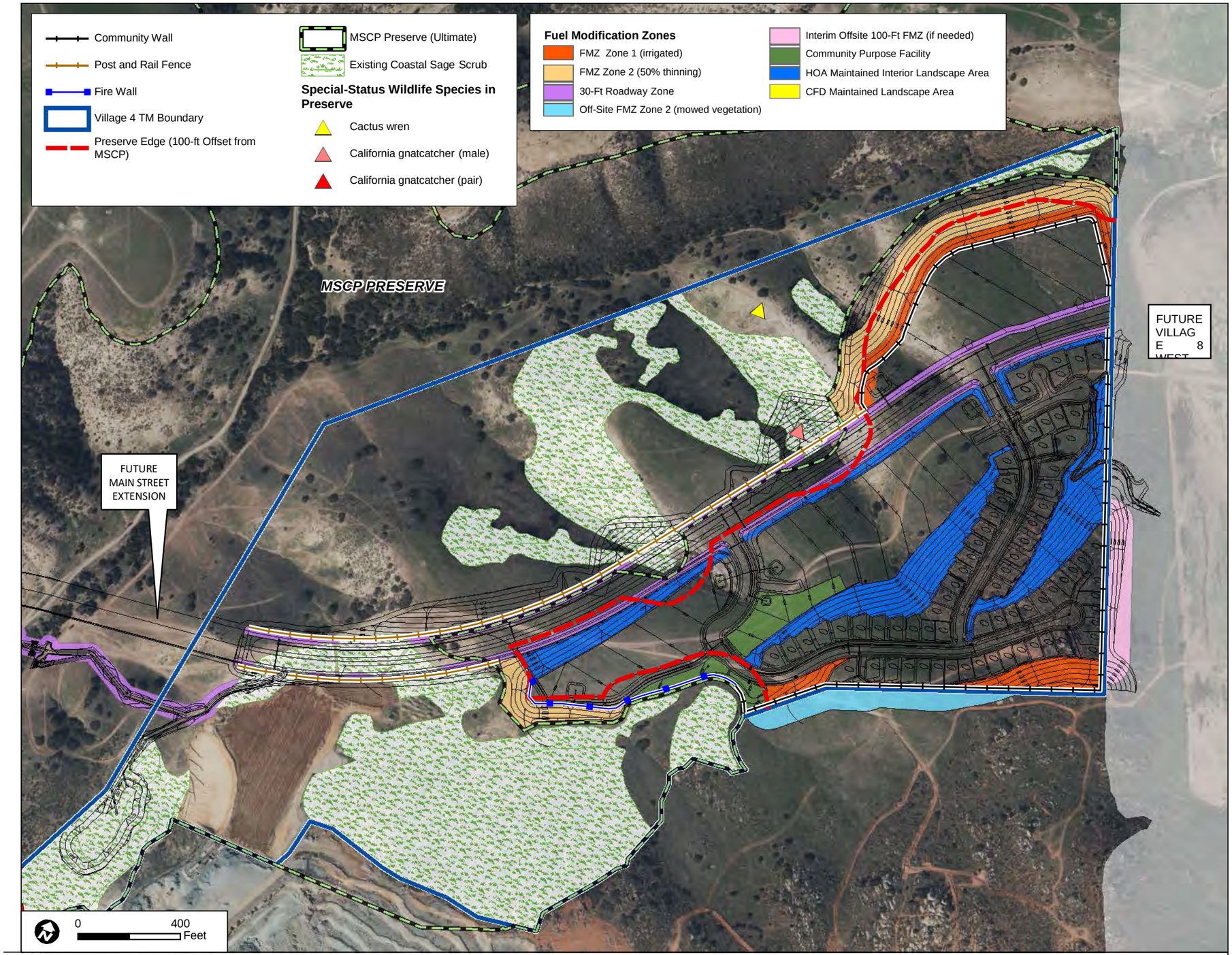
Quercus engelmannii	Englemann Oak
Platanus racemosa	California Sycamore
Prunus ilicifolia	Hollyleaf Cherry
Quercus agrifolia	California Coast Live Oak
Prunus lyonii	Catalina Cherry

Shrubs and Groundcover Adjacent to Open Space Preserve

Native/Low height/Low fuel/Revegetation Plants and Hydroseed such as:

Arctostaphylos spp.	Manzanita
Baccharis pilularis 'Pidgeon Point'	Dwarf Coyote Brush
Ceanothus griseus horizontalis	Carmel Creeper California Lilac
Deinandra conjugens	Otay tarplant
Encelia californica	Coast Sunflower
Galvezia juncea	Baja Brush-Snapdragon
Galvezia speciosa	Island Brush-Snapdragon
Lonicera subspicata	Chaparral Honeysuckle
Malacothamnus fasciculatus	Mesa Bushmallow
Prunus ilicifolia	Hollyleaf Cherry
Rhus integrifolia	Lemonade Berry
Sisyrinchium bellum	Blue-Eyed Grass
Sisyrinchium californicum	Golden-Eyed Grass
Solanum xantii	Purple Nightshade
Verbena lilacina	Lilac Verbena
Viguiera laciniata	San Diego Sunflower





SOURCE: HUNSAKER & ASSOCIATES 2016

DUDEK

FIGURE 1

Preserve Edge Map

PRESERVE EDGE PLAN - OTAY RANCH VILLAGE FOUR SOUTH

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