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***Impacts determined not to be significant are addressed in this EIR under **Section VII, Impacts Determined to be Insignificant**, and have been omitted from the Impact Section of this report.

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IV.D PLANT LIFE

INTRODUCTION

This section of the Draft EIR discusses the botanical resources within the project site based on field surveys, literature review, and on known distribution and life history information for these resources. Particular emphasis is given to those resources considered rare, declining, or otherwise of special-status by State, Federal, or local resource agencies.

Methods

Literature Search

As part of the biological analysis of the project site, appropriate documents and databases regarding botanical resources were compiled and reviewed. Particular emphasis was afforded to the identification of special-status plant species that occur or potentially occur on the project site. Special-status plant species are those species that have been afforded special recognition by Federal, State, or local resource agencies or recognized conservation organizations. Special-status plant communities and habitats were also given consideration. Special-status plant communities are those designated by State and local resource agencies as declining throughout the state or region. To assist in this identification, the Rarefind application of the California Department of Fish and Game (CDFG) California Natural Diversity Data Base (CNDDB 2001) and the California Native Plant Society (CNPS) electronic inventory of rare and endangered vascular plants of California (Skinner and Pavlik1994-2001) were accessed and reviewed for the Beverly Hills, Topanga, Van Nuys, and Canoga Park 7.5-minute U.S. Geological Survey (USGS) quadrangle maps. Other references consulted include publications provided by the CDFG Non-Game Heritage Program, including the *Special Plants List* (CDFG 2001), and Federal Register publications.

Field Surveys

Field surveys were conducted within the project site during the spring season to verify and update the existing oak tree report, document common vascular plant species occurrences, characterize and assess plant habitat quality, and to determine the suitability of on-site habitats to support special-status plant species. Impact Sciences biologists conducted botanical surveys on May 24 and 25, 1996, May 20, 1997, and December 28, 1999. Because of the nearly impenetrable stands of chaparral and riparian scrub

vegetation in some portions of the project site, it was not feasible to survey all portions of the site. Plant specimens were identified in the field with reference to Hickman (1993), Raven et al. (1986), and McAuley (1996). Plant community descriptions generally follow Holland (1986) and are cross-referenced to those described in *A Manual of California Vegetation* (Sawyer and Keeler-Wolf 1995).

Two previous botanical studies have also been conducted on the site. Michael Brandman Associates (MBA) conducted a biological survey of the site in June 1986. MBA prepared a vegetation map and floral compendium, and, based on the proposed project plans at that time, assessed the impacts of the project and suggested mitigation measures to address significant impacts (MBA 1988). In 1987, Horticultural Management Consultants (HMC) conducted a tree inventory of the project site. All trees with at least 12-inch diameter trunks were identified during the course of this study. Each tree was identified to species, referenced to parcel number, and assessed for overall quality and health. The results of these studies were reviewed and incorporated in this Draft EIR.

ENVIRONMENTAL SETTING

Plant Communities

The vast majority of the plant communities within the approximate 449.5-acre site are mature, of high quality, and typical for this region of the Santa Monica Mountains. Exceptions include a few localized disturbances and Mission Canyon 8 Landfill area within the eastern portion of the site. A total of 10 plant communities were identified within the project site: non-native grasslands, non-native grasslands/disturbed coastal sage scrub, coastal sage scrub, coastal sage-chaparral scrub, mixed chaparral, mixed chaparral/California walnut woodland, California walnut woodland, southern mixed riparian woodland, mixed woodland, and ornamental. Each of these communities and the dominant plant species that characterize them, are discussed in more detail below. In addition, portions of the site within existing fuel modification zones have been designated as "disturbed" and/or "developed". Six oak trees, which are considered of special status by the City and County of Los Angeles, were also identified on the site.

The slopes of the north-south trending hills of the project site are dominated by mixed chaparral, mixed chaparral and sage scrub, and mixed chaparral/California walnut woodland, with a more dense vegetation cover occurring on the north-facing slopes. The small drainages in the project site support these same vegetation types, with occasional isolated trees. The large intermittent drainage in the southernmost portion of the project site is composed of mixed riparian woodland that increases in

density further to the south. Mission Canyon 8 Landfill area in the eastern portion of the site has been revegetated with non-native ornamental species.

The acreage of each of the vegetation types present within the approximate 449.5-acre property, which includes the existing developed and disturbed acreages—totaling 21.8-acres, prior to grading—is presented in **Table IV.D-1**. Distribution of each of the plant communities is illustrated on **Figure IV.D-1**. A list of the vascular plant species observed on the site is presented in **Appendix D**, **Table D-1**.

Table IV.D-1
Plant Communities and Acreage Within the Project Site

Plant Community	Approximate Acres Present within Project Site
Non-Native Grassland	9.4
Non-Native Grassland / Disturbed Coastal Sage Scrub	1.2
Coastal Sage Scrub	26.7
Coastal Sage-Chaparral Scrub	57.8
Chaparral	234.1
California Walnut Woodland	6.2
Mixed Chaparral / California Walnut Woodland	16.2
Southern Mixed Riparian Woodland	10.1
Mixed Woodland	8.1
Ornamental	57.9
Developed and Disturbed Acreages (existing condition)	21.8
TOTAL	**449.5**

Non-Native Grassland

This plant community is widespread throughout southern California on low hills and valley floors with fine textured, often deep clay soils. Non-native grassland vegetation is often associated with previous disturbance, intense grazing pressure, and frequent fire regimes. Disturbance usually allows the invasion of non-native plant species. Vegetation structure is generally low, with terrestrial surface cover usually less than 0.5 meter in height, and typically varies from a sparse to dense cover of introduced annual grasses, native annual wildflowers, and non-native weeds (Holland 1986).

Approximately 9.4 acres of the project site support non-native grassland, primarily along Canyonback Ridge, which crosses through the western portion of the site. Grassland components include slender

wild oat (*Avena barbata*), ripgut grass (*Bromus diandrus*), foxtail chess (*Bromus madritensis*), and soft chess (*Bromus hordeaceus*). Native species present in the grasslands include coast range melic (*Melica imperfecta*) and lupine (*Lupinus* spp.).

Non-Native Grassland/Disturbed Coastal Sage Scrub

This community is located within the southwestern portion of the project site, along Canyonback Ridge. It contains a mixture of the non-native grassland species described above and coastal sage scrub species described below. Non-native grassland / disturbed coastal sage scrub generally occurs in areas that have been disturbed by grading, disking, or livestock grazing. On the project site, it appears that the area where this community occurs was graded in the past. Non-native grassland species dominate this community; however, coastal sage scrub species are recolonizing this area. Approximately 1.2 acres of the project site supports non-native grassland / disturbed coastal sage scrub vegetation.

Coastal Sage Scrub

Coastal sage scrub is described as an assemblage of low, facultative drought-deciduous shrubs with an understory of annual grasses and forbs occurring on the foothills of the coastal mountains in southern California (Holland 1986). The understory typically consists of introduced annual grasses and a variety of native and introduced annual and perennial forbs. Because of its function as valuable wildlife habitat for both common and special-status plant and animal species, and because of its declining nature in the state, this plant community is considered of special-status by the CDFG.

Coastal sage scrub composition varies within southern California. The association present on the project site is described as Venturan coastal sage scrub (Holland 1986). This vegetation type is dominated on the site by two shrubs: California buckwheat (*Eriogonum fasciculatum*) and laurel sumac (*Malosma laurina*). Lesser amounts of California sagebrush (*Artemisia californica*) and purple sage (*Salvia leucophylla*) were observed within this community. In addition, this community supports scattered individuals of ceanothus (*Ceanothus* spp.). Approximately 26.7 acres of the project site supports coastal sage scrub vegetation.

A portion of the gently sloping ridgeline located in the central-southern portion of the site near Stoney Hill Ridge, totaling approximately 18 acres, was historically graded and now supports a nearly monotypic cover of California buckwheat. This low, dark green shrub is native to California and typically occurs as a component of coastal sage scrub vegetation on disturbed lowlands and slopes, such as old fields, roadsides, and previously graded areas. The on-site disturbed coastal sage scrub also

Figure IV.D-1

Location of Plant Communities, Coast Live Oak Trees, and Western Sycamore Trees

supports scattered laurel sumac, California broom (*Lotus scoparius*), and black sage (*Salvia mellifera*). Non-native grasses and weeds, including Russian thistle (*Salsola tragus*) and tocalote (*Centaurea melitensis*), constitute the majority of the understory. Other native species observed in this community include cliff malacothrix (*Malacothrix saxatilis*) and bicolored cudweed (*Gnaphalium bicolor*).

Coastal Sage-Chaparral Scrub

This vegetation type is an ecotone between coastal sage scrub and chaparral communities and is composed of a mixture of tall, evergreen, woody chaparral shrubs, and low, drought-deciduous, soft-woody coastal sage scrub shrubs. Coastal sage-chaparral scrub is generally a post-fire successional community.

Approximately 57.8 acres of the project site support coastal sage-chaparral scrub. This community, which occurs on primarily south-facing slopes throughout the site, is dominated by California buckwheat and laurel sumac. Additional shrubs observed include California sagebrush, ceanothus, and blue elderberry (*Sambucus mexicana*).

Chaparral

Chaparral vegetation is typically characterized as a dense assemblage of woody shrubs reaching two to four meters in height. Unlike the shrubs of the coastal sage scrub community, chaparral species have small leathery leaves, which remain on the plant year-round. Chaparral is widely distributed throughout southern California between the 1,000 and 5,000 foot elevation (Hanes 1976) and is located primarily on dry slopes and ridges (Munz 1959). Many chaparral types have been described within California, based on both geography and shrub species dominance.

Approximately 234.1 acres of the project site supports mixed chaparral, a common component of the vegetation in the Santa Monica Mountains region. This dense community covers the majority of the slopes within the project boundaries. Dominant species in this assemblage include greenbark ceanothus (*Ceanothus spinosus*), chamise (*Adenostoma fasciculatum*), toyon (*Heteromeles arbutifolia*), scrub oak (*Quercus berberidifolia*), laurel sumac, holly-leaved cherry (*Prunus ilicifolia* ssp. *ilicifolia*), and birch-leaf mountain-mahogany (*Cercocarpus betuloides* var. *betuloides*). Numerous ferns were observed within this community, including coastal wood fern (*Dryopteris arguta*), California lace fern (*Aspidotis californica*), bird's-foot fern (*Pellaea mucronata*), and goldenback fern (*Pentagramma triangularis*).

California Walnut Woodland

California walnut woodland is typically dominated by southern California black walnut (*Juglans californica* var. *californica*) and coast live oak (*Quercus agrifolia*). The relatively open tree canopy cover allows for the development of a grassy understory with winter active annuals that grow before the deciduous walnuts produce new leaves. Walnut woodlands occur primarily on north-facing slopes on soils that are often rich in clay with a high water holding capacity. This combination of factors helps to support the walnut trees through the dry summer months (Quinn 1990). Well-developed walnut woodlands occur from the southern Santa Monica Mountains inland to the San Gabriel Mountains and south to the Santa Ana Mountains, generally ranging in elevation from 500 to 3,000 feet. California walnut woodlands typically intergrade with chaparral, coastal sage scrub, and oak woodland communities. Because of its high biological value and declining nature in California, this community is considered of special status by CDFG.

Approximately 6.2 acres of the project site support California walnut woodland, predominantly on north and northwest-facing slopes within the western portion of the project site. This community is dominated by California black walnut, along with occasional coast live oak trees. The understory varies from grassland, coastal sage scrub and chaparral species.

Mixed Chaparral/California Walnut Woodland

California walnut woodland intergrades with mixed chaparral primarily on northwest-facing slopes in the western portion of the project site. In this area, the mixed chaparral supports scattered walnut trees. Approximately 16.2 acres of the project site support this plant community.

Southern Mixed Riparian Woodland

This community, totaling approximately 10.1 acres, occurs along the intermittent drainage and associated tributaries of Bundy Canyon, which is located in the central-southern portion of the site. Southern mixed riparian woodland occupies approximately ten acres of the project site. The tree canopy is dominated by western sycamore (*Platanus racemosa*), willows (*Salix* spp.), California walnut, and blue elderberry (*Sambucus mexicana*), along with occasional coast live oak trees. Chaparral species are also present within this riparian community. Understory species include poison oak (*Toxicodendron diversilobum*), desert grape (*Vitis girdiana*), mugwort (*Artemisia douglasiana*), and heart-leaved penstemon (*Keckiella cordifolia*).

Mixed Woodland

This woodland community occurs at the edge of the adjacent Crown and Promotory residential developments and along Sepulveda Boulevard. It contains a mixture of non-native and native species, including golden wattle (*Acacia longifolia*), cypress (*Cupressus* ssp.), gum (*Eucalyptus* spp.), southern California black walnut, and laurel sumac. Approximately 8.1 acres of the project site support mixed woodland vegetation.

Ornamental

Non-native ornamental species have been planted on the former landfill area within the eastern portion of the project site. Planted species include gum trees (*Eucalyptus* spp.), fountain grass (*Pennisetum villosum*), horsetail tree (*Casuarina equisetifolia*), and pampas grass (*Cortaderia jubata*). One native species, laurel sumac, also occurs within this community. Approximately 57.9 acres of the project site support ornamental species.

Disturbed Areas

Disturbed areas include the current fuel modification zones, as well as other areas (such as along Canyonback Road and Mission Canyon 8 Landfill site) which have been cleared and/or do not support plant growth. The approximate 15.3 acres of disturbed area are not considered part of a natural vegetation community.

Non-vegetated Areas

Developed Areas

Two small, developed areas (totaling approximately 4.5 acres) are found in the northeastern and southeastern corners of the project site. An additional 2 acres is attributed to existing paved roadways.

Special-Status Plant Species

No plant species listed as rare, threatened, or endangered by CDFG or U.S. Fish and Wildlife Service (USFWS) were observed on the site. However, several other species that are considered to be special-status by CDFG, USFWS, and/or CNPS potentially occur there. Each of these species is listed in **Table**

D-2 of **Appendix D** and includes Plummer's mariposa lily, many-stemmed dudleya, and Davidson's bush mallow. Each of these species is briefly discussed below.

Species Observed on the Site

Southern California black walnut (*Juglans californica* var. *californica*)***; CNPS List 4.*** This species is known from Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura Counties. Southern California black walnut trees are typically associated with cismontane woodlands (most often California walnut woodland), chaparral, coastal sage scrub, riparian, and alluvial habitats. This taxon is threatened by urbanization, grazing, and possibly by lack of natural reproduction (Skinner and Pavlik 1994). This large shrub or small tree typically occurs along drier riparian areas and forms a major component of oak and walnut woodlands. Southern California black walnut trees also occur in the Santa Monica Mountains as components of canyon bottom and north-facing slope chaparral vegetation associations.

On the project site, California black walnut occurs as a dominant species within the walnut woodland community and as scattered individuals within the mixed chaparral/California walnut woodland, southern mixed riparian woodland, and mixed woodland communities.

Species Potentially Occurring on the Site

Plummer's mariposa lily (*Calochortus plummerae*); ***CNPS List 1B.*** This species, which blooms from May through July, can occur in coastal sage scrub, chaparral, cismontane woodlands, lower montane coniferous forests, and grasslands. It was recorded in 1989 along a brushy ridge above Mandeville Canyon (CNDDB 2001), which is located approximately 0.4 mile west of the site. Plummer's mariposa lily was also recorded in 1992 approximately 1.6 miles north of the site (CNDDB 2001). Although not observed in those portions of the site that were surveyed, this species has a moderate potential of occurring within the coastal sage scrub, chaparral, walnut woodland, and grassland habitats on the site.

Many-stemmed dudleya (*Dudleya multicaulis*); ***CNPS List 1B.*** Many-stemmed dudleya is a perennial herb that blooms from May to July. It occurs on clay soils within coastal sage scrub and grassland habitats. Although not observed in those portions of the site that were surveyed, this species has been recorded near the site (CNDDB 2001) and has a moderate potential of occurring on site within the coastal sage scrub habitat.

Davidson's bush mallow (*Malacothamnus davidsonii*); ***CNPS List 1B.*** Davidson's bush mallow is a deciduous shrub that blooms from June to September. Chaparral, coastal sage scrub, and riparian woodlands are the known habitats for this species. Within these habitats, it generally occurs on slopes and in washes. Although not observed in those portions of the site that were surveyed, it is known to occur in the site vicinity (CNDDB 2001). Because of the presence of suitable habitat, this species has a moderate to high potential for occurrence on the site.

Special-Status Plant Communities

Special-status plant communities include those habitats that support rare, threatened, or endangered plant or wildlife species; are locally or regionally diminishing and of special concern to resource or other public agencies; or are considered of special status by the CDFG, which ranks declining natural communities based on remaining acreage and priority for preservation.

Three plant communities considered of special status are present on the project site: coastal sage scrub, California walnut woodland, and southern mixed riparian woodland. These communities are discussed below.

Coastal Sage Scrub

Coastal sage scrub (CSS) communities are typically treeless and composed of low shrubs. The composition of differing types of coastal sage scrub (subcommunities) may vary from region to region depending on environmental factors such as soil, available rainfall, fire regime, etc. Many plant and animal species, including several that are special-status species, occur within and are dependent on coastal sage scrub as habitat. Consequently, conservation efforts have been focused on the preservation of this vegetation community in California. The scattered distribution of coastal sage scrub and the loss of this community due to development pressure has reduced the amount of remaining coastal sage scrub to levels considered by the State of California and several Southern California conservation groups as declining and threatened.

California Walnut Woodland

Walnut woodlands are of limited distribution in southern California. These communities occur in Ventura, Orange, and Los Angeles Counties, and are fragments of a once broader historical distribution (Quinn 1990). Loss of this resource is attributed to conversion of natural open space to agricultural and urban land uses. California walnut woodlands, especially dense clusters are of high biological value to

a number of wildlife species, particularly birds. Because of this value, and because of the reduction in range of this community in California, the CDFG has assigned California walnut woodland a sensitivity status of S2.1 (very threatened status for habitats of 2,000 to 10,000 acres remaining) and is considered by CDFG to be a high priority for preservation.

Southern Mixed Riparian Woodland

Riparian woodlands are regarded as important ecosystems because of the number of functions they perform (e.g., nutrient removal, sediment stabilization, groundwater recharge) and their value as breeding, cover, foraging, and movement habitat for a number of wildlife species. In addition, riparian woodlands are of limited distribution in Los Angeles County. Remaining locations are small fragments of a broader historical distribution. Loss of these resources is attributed to conversion of habitat to agricultural and urban land uses. As riparian resources, the riparian woodland and the accompanying drainage channel in Bundy Canyon also likely fall under U.S. Army Corps of Engineers (ACOE) and CDFG regulatory jurisdiction. Because of their biological value, and because of the reduction in range of this community in California, the CDFG has assigned southern mixed riparian woodland a sensitivity status of S2.1, very threatened status for habitats of 2,000 to 10,000 acres remaining. It is considered by the CDFG to be a high priority for preservation.

Significant Trees

The project site supports three native tree species and several non-native tree species within the mixed woodland community. The native trees on the site are discussed below.

Coast live oak (*Quercus agrifolia*). Oak trees have long been a feature of the southern California landscape. Loss of oak trees over the last century to development, grazing, and agriculture has reduced the overall number of oak woodlands.

The status of oak trees occurring on the project site has changed since a 1987 report prepared by Horticultural Management Consultants. The 1987 survey documented nine coast live oak trees occurring on the property. Impact Sciences' May 1997 survey found six coast live oak trees measuring at least eight inches in diameter, at four and one-half feet above grade occurring on the project site. The location of these trees is presented in **Figure IV.D-1**. Surveys in 1998 revealed the loss of one of these trees (No. 5). The health of the remaining five trees was confirmed in 1999 by an Impact Sciences biologist.

Oak trees are spread among the non-native grassland, mixed chaparral, mixed chaparral/California walnut woodland, California walnut woodland, and southern mixed riparian woodland communities on the site. The height, diameter at breast height (DBH), health, aesthetic ratings, and the status of each oak tree following project implementation are provided below in **Table IV.D-2**. Most trees received average to below average ratings for health and aesthetics. One tree (No. 4), however, received good ratings for both health and aesthetics (HMC 1987).

Table IV.D-2
Oak Trees on the Project Site

Oak Tree Number	Height	Diameter at Breast Height	Aesthetics Rating	Health Rating
1	16 ft.	55 in.	3	3
2	14 ft.	34 in.	2	2
3	16 ft.	30 in.	4	4
4	18 ft.	37 in.	2	1+
5	19 ft.	26 in.	2+	3
6	**	**	**	**

** = *Site access did not allow the collection of data for this individual.*
∝ = *This individual was no longer present in 1998.*
Source: Impact Sciences, Inc., May 24-25, 1996; May 20, 1997; December 28, 1999.

Western sycamore (*Platanus racemosa*). During the 1987 field investigation, five western sycamore trees measuring at least 12 inches DBH were detected on the property. All of the sycamores are located adjacent to or within the intermittent drainage on the site. These trees were found to have varying degrees of damage due to fire, wind, insects, and diseases. Field surveys conducted by Impact Sciences in 1997 revealed a total of nine sycamores. These trees were observed within the area that will be preserved in natural open space. The location of these trees is presented in **Figure IV.D-1**. Because these additional four sycamore trees were inaccessible due to terrain and dense vegetation, diameter measurements were not taken. However, these trees appeared, from a distance, to be at least 12 inches DBH. These trees were revisited in 1998 and 1999 by Impact Sciences biologists.

Southern California Black Walnut (*Juglans californica*) Numerous southern California black walnut trees were observed within the plant communities California walnut woodland and mixed woodland. Although CDFG considers the California walnut woodland and mixed woodland communities as threatened, they do not give special status ranking to the species. However, the CNPS ranks southern

California black walnut as a list 4 species (apparently secure within California, but factors exist to cause some concern).

Drainages

Most of the site drains to the southeast via a major drainage feature, known as Bundy Canyon that begins on site and runs south-southeast off the site. The USGS Beverly Hills 7.5-minute quadrangle identifies this drainage as a blue-line, intermittent stream. A small amount of flowing water was observed within this drainage during the 1997 site surveys. A number of plant communities are associated with this drainage feature, including southern mixed riparian woodland, mixed chaparral/California walnut woodland, and mixed chaparral. The location of these plant communities in relation to this drainage feature is presented in **Figure IV.D-1**.

A jurisdictional delineation was conducted by Impact Sciences, utilizing aerial photography (March 11, 2002), which indicated that approximately 2.51 acres of waters of the U.S. and 9.40 acres of streambeds and riparian corridors as defined by the California Department of Fish and Game (CDFG) and the U.S, Army Corps of Engineers (ACOE) respectively, would be impacted as a result of the project (**Appendix D**) and subject to the regulatory jurisdiction of these and other agencies.

ENVIRONMENTAL IMPACT ANALYSIS

This section describes potential impacts to botanical resources as a result of project related activities. These adverse impacts are generally associated with the following: (1) the loss or degradation of plant communities, (2) the loss or degradation of individual plants and trees, and (3) the loss or degradation of special-status habitats (including wetlands) or special-status plant species. The level of significance of potential impacts on these resources is determined by an evaluation of significance criteria (described below) with respect to the overall biological value of a habitat area and/or a specific resource. The relative value of each of the plant communities present on site is measured by such factors as disturbance history, biological diversity, importance to particular plant and wildlife species, uniqueness or sensitivity status, the surrounding environment, and the presence of special-status resources.

Impact significance thresholds and the potential direct, indirect, and cumulative impacts of the proposed project on botanical resources are described below.

Thresholds of Significance

The L.A. CEQA *Thresholds Guide* indicates that a project would normally have a significant impact on biological resources if it could result in:

- The loss of individuals, or the reduction of existing habitat, of a state or federal listed endangered, threatened, rare, protected, candidate, or sensitive species or a Species of Special Concern;
- The loss of individuals or the reduction of existing habitat of a locally designated species or a reduction in a locally designated natural habitat or plant community;
- Interference with wildlife movement / migration corridors that may diminish the chances for long-term survival of a sensitive species;
- The alteration of an existing wetland habitat; or
- Interference with habitat such that normal species behaviors are disturbed (e.g., from the introduction of noise, light) to a degree that may diminish the chances for long-term survival of a sensitive species.

Direct Project Impacts

According to Vesting Tentative Tract Map 53072, dated June 06, 2002, the proposed project would add 29 dwelling units and associated infrastructure to the existing Mountaingate community of approximately 300 residential units. The proposed development envelope, which includes residential lots and associated graded areas, as well as infrastructure, totals approximately 43.4 acres. However, an additional 15 acres (approximate) will be impacted by fuel modification activities (i.e., brush clearance and thinning). The remainder of the site's acreage is to be designated as open space. The impacts associated with the equestrian / hiking trails that are located within the natural open space areas were not included within this analysis.

Direct impacts on botanical resources include the direct loss of plant communities, the loss of special-status plants and trees, and the potential loss of jurisdictional resources. These impacts are discussed below.

Plant Communities

The primary impact of the proposed project would be the conversion of natural, vegetated open space to development of homes, streets, and ornamental landscaping. The acreage of each vegetation type

subject to permanent disturbance is provided below in **Table IV.D-3**. The direct impact to each of the vegetation types identified on the project site is subsequently described.

Non-Native Grassland

Project implementation would result in the direct loss of approximately 7.5 acres, (80 percent) of non-native grassland vegetation. As previously stated, non-native grassland vegetation is typically composed of introduced annual grasses and forbs, and is often associated with disturbed areas. Other than coast live oak trees, no special-status plant or animal species were observed in the non-native grasslands on the project site. Non-native grasslands provide foraging habitat for a number of species, several of which occur or are expected to occur on the project site. However, because this community is fairly common in the region, has a relatively low habitat value, and because a relatively small amount would be impacted, the loss of approximately 7.5 acres of non-native grasslands is not considered a substantial loss of habitat and is not expected to substantially affect special-status species populations in the region. Therefore, this loss is not considered a significant impact.

Table IV.D-3
Direct Impacts to Vegetation on and off the Project Site

Plant Community	Acres Impacted	Acres Not Impacted	Total Acreage Present
Non-Native Grassland	7.5	1.9	9.4
Non-Native Grassland / Disturbed Coastal Sage Scrub	0.0	1.2	1.2
Coastal Sage Scrub	1.7	25.0	26.7
Coastal Sage-Chaparral Scrub	1.6	56.2	57.8
Chaparral	39.7	194.4	234.1
California Walnut Woodland	1.9	4.3	6.2
Chaparral / California Walnut Woodland	5.0	11.2	16.2
Southern Mixed Riparian Woodland	3.2	6.9	10.1
Mixed Woodland	0.3	7.8	8.1
Ornamental	0.0	57.9	57.9
TOTAL	**60.9**	**366.8**	**427.7**

Please note that an additional 3.7 acres of chaparral will be impacted outside the tract boundary to create a fuel modification zone

Non-Native Grassland/Disturbed Coastal Sage Scrub

Implementation of the proposed project would not impact any non-native grassland / disturbed coastal sage scrub vegetation. Therefore, no significant impacts to this community will occur.

Coastal Sage Scrub

Project implementation will result in the direct loss of approximately 1.7 acres (6.4 percent) of coastal sage scrub vegetation on the site. While this community typically provides habitat for several special-status plant and animal species including Plummer's mariposa lily, many-stemmed dudleya, and Davidson's bush mallow, no special-status species were observed within this community on the site during field surveys. The coastal sage scrub vegetation on the site is relatively isolated, with no larger contiguous patches of this community in the site vicinity. The loss of 1.7 acres would not be considered a significant reduction in a locally designated natural habitat or plant community and; therefore, would not be considered a significant impact.

Coastal Sage-Chaparral Scrub

Implementation of the proposed project will impact 1.6 acres (2.8 percent) of coastal sage/chaparral scrub vegetation on the site. This vegetation community provides habitat for a variety of plants and animals in the region; however, the loss of 1.2 acres does not represent a significant loss of this type of vegetation on the site or in the region and would not be considered a significant impact.

Chaparral

Project implementation would result in the direct loss of approximately 39.7 acres (17 percent) of chaparral vegetation on the site. The mixed chaparral vegetation on the site contains one coast live oak tree, and it is expected that some southern California black walnut trees are scattered within this community. In addition, San Diego desert woodrats, a special-status species, were captured within this community during the small mammal live-trapping effort. Chaparral is a relatively common plant community throughout southern California and is not considered of special status or declining by resource agencies. However, because of the relatively high quality of the habitat, the quantity impacted, and the presence of a special-status species, the loss of approximately 39.7 acres of chaparral is considered a significant impact.

California Walnut Woodland

Project implementation would result in the direct loss of approximately 1.9 acres (31 percent) of a total of approximately six acres of California walnut woodland vegetation located on the project site. California walnut woodland is considered a special status community by the CDFG, and has been substantially reduced by development in the Los Angeles region. The woodlands provide an important vegetation structure and composition that supports numerous species of plants and wildlife. The

California walnut woodland vegetation on the site supports two special-status plants, the southern California black walnut and coast live oak. In addition, this community provides habitat for other special-status species.

Because of the overall sensitive nature of walnut woodland vegetation, and because it supports special-status plant species, the loss of approximately 1.9 acres of this habitat on the site is considered a substantial loss of a special-status plant community and could substantially affect special-status species populations. Therefore, this loss is considered a significant impact.

Mixed Chaparral/California Walnut Woodland

Project implementation would result in the direct loss of approximately 5 acres, out of a total of approximately 16.2 acres (30.9 percent), of mixed chaparral/California walnut woodland vegetation present within the project site. This community contains scattered California black walnut trees and one coast live oak tree, both special-status tree species. In addition, this community provides habitat for several other special-status plant and animal species. Because of the overall sensitive nature and high biological value of this vegetation, and because it supports special-status plant species, the loss of 5 acres of this habitat on the site is considered a substantial loss of a special-status plant community and could substantially affect special-status species populations. Therefore, this loss is considered a significant impact.

Southern Mixed Riparian Woodland

The proposed project would result in the direct removal of approximately 3.2 acres (31.7 percent) of southern mixed riparian woodland present on the site. Southern mixed riparian woodland is considered a special status community by the CDFG, and has been substantially reduced by development in the Los Angeles region. In addition, this community and its accompanying drainage channel in Bundy Canyon are likely under the regulatory jurisdiction of ACOE and CDFG. The southern mixed riparian woodland vegetation affected by the project is considered to be of high biological value due to its structural diversity and high biological diversity. This habitat on the site supports two special-status tree species: the southern California black walnut and the coast live oak. In addition, this community provides habitat for other special-status plant and animal species. Because of its status as a sensitive vegetation community, because it supports special-status plant species, and because it is likely under the jurisdiction of ACOE and CDFG, the loss of four acres of this vegetation community is considered a significant impact.

Mixed Woodland

Project implementation would result in the direct loss of approximately 0.3 acre (3.7 percent) of mixed woodland. The mixed woodland contains a mixture of exotic and native species. Native species include California black walnut, which are not considered to be a special-status species. The mixed woodland community is not known to support any special-status plant and/or animal species. In general, this community, which is dominated by non-native plant species, is considered to be of low biological value.

Ornamental

Implementation of the proposed project would impact ornamental vegetation in the area of the landfill where excess fill will be deposited Exotic tree provide habitat for nesting birds and some wildlife. Because no special-status species are known to occur, or are expected to occur, within this area, and because of the relatively low biological value of this habitat, the loss of ornamental vegetation would not be considered a significant impact. The potential loss of nesting birds is addressed in **Section IV.E**, **Animal Life**, of this Draft EIR.

Special-Status Plant Species

As previously discussed, no plant species listed as rare, threatened or endangered by CDFG or USFWS were observed on the site. However, one species that is considered of special status by CDFG and CNPS is present on the site, and several others may potentially occur there. Potential impacts to these species are addressed below.

Species Known to Occur on the Site

Southern California black walnut. California black walnut trees occur as a dominant species within the walnut woodland community and as scattered individuals within the mixed chaparral/California walnut woodland, southern mixed riparian woodland, and mixed woodland communities. It is not known how many of these trees occur on the site or how many would be removed as a result of project implementation. Therefore impacts to walnut trees are included as a component of woodland communities, which contain these trees. Impacts to these communities have been previously addressed.

Coast live oak. Based on a review of the preliminary grading plan, it is expected that four out of the five existing coast live oak trees will be removed by project implementation. Because of the high

biological value of these trees, and because they are protected under the City of Los Angeles Oak Tree Ordinance, the loss of these trees represents a significant impact.

Western sycamore. Several western sycamores observed within the project site would be removed as a result of project implementation. These trees provide important habitat for wildlife and are most frequently associated with high value riparian habitats. The removal of these trees as addressed as a component of the on-site riparian woodlands (described previously) and jurisdictional resources are (discussed below).

Species Potentially Occurring on the Site

The majority of the remaining special-status plant species addressed in **Appendix D**, **Table D-2**, are either not expected to be present on the site, or individually have a low potential for occurrence. However, three species, **Plummer's mariposa lily**, **many-stemmed dudleya**, and **Davidson's bush mallow**, have a moderate to high potential for occurrence on the site within the grassland, coastal sage scrub, chaparral, walnut woodland, and riparian woodland habitats. Although none of these species were observed in those portions of the project site that were surveyed, it is possible that individuals of these species could occur either in areas that were not easily accessible or during future growing seasons. Depending on the number and population size of plants that would be removed, should they occur, the removal of these plants could represent a substantial affect on a special-status species. Therefore, this loss is a potentially significant impact.

Special-Status Plant Communities

Impacts to the three special-status plant communities on the site (coastal sage scrub, California walnut woodland, and riparian woodland) are discussed within the Plant Communities section above.

Jurisdictional Drainages and Riparian Habitats

Functions and Values

Drainages and riparian habitats such as those found on the project site, are ecologically important to the surrounding ecosystem as they provide the following important functions:

- dissipate stream energy associated with high waterflows, thereby reducing erosion and improving water quality;

- filter sediment, capture bedload, and aid in floodplain development;
- improve flood-water retention and groundwater recharge;
- develop root masses that stabilize streambanks;
- develop diverse ponding and channel characteristics to provide habitat and water depth, duration and temperature necessary for aquatic dependent wildlife; and
- support the diversity level of plant and wildlife species.

Regulatory Framework

The following section provides background information on wetlands regulation. Jurisdiction of the resource agencies discussed below is defined solely on the presence of particular wetland or riparian resources or similar habitat. A permit is generally required by these agencies for fill, vegetation removal, or other adverse impacts on wetlands and drainages under their jurisdiction.

U.S. Army Corps of Engineers

Wetlands and Waters of the U.S.

Under Section 404 of the Clean Water Act, the ACOE is primarily responsible for making jurisdictional determinations and for issuing permits for discharge of fill into waters of the United States. Waters of the United States, as defined in the Code of Federal Regulations (CFR) 328.3, includes: (1) territorial seas, measured seaward a distance of three miles; (2) tributaries of any defined waters of the U.S. (including tributaries that are normally dry streambeds or arroyos that only flow during the wet season); (3) coastal and inland waters, lakes, rivers and streams, and their tributaries; (4) interstate waters and their tributaries, including interstate wetlands; (5) wetlands adjacent to all of the above waters; and (6) all other waters, such as intrastate lakes, rivers, streams (including intermittent), isolated wetlands, mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds that are *not* part of a tributary system to interstate waters or to navigable waters of the U.S., the degradation or destruction of which could affect interstate commerce. Interstate or foreign commerce includes areas which are or could be used for recreation by interstate or foreign travelers, from which fish or shellfish are or could be taken and sold in interstate or foreign commerce, which are or could be used for industrial purposes by industries in interstate commerce.

ACOE jurisdiction in non-tidal waters extends to the ordinary high water mark (OHWM). In intermittent streams, for example, this line can be established by "the fluctuations of water as

indicated by physical characteristics such as clear, natural lines impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" (Section 33, Code of Federal Regulation, part 328.3 (e)).

Beyond the OHWM, ACOE jurisdiction extends to the limit of adjacent wetlands, if they are present. Adjacent is defined to mean "bordering, contiguous, or neighboring". Wetlands separated from other waters by man-made dikes or barriers, natural river berms, and beach dunes are considered adjacent wetlands (33 Code of Federal Regulation 328.3 (c)). In addition, seasonal wetlands that maintain wetland characteristics during the rainy season, but are dry during other parts of the year, have been held as jurisdictional waters under the Clean Water Act. Isolated or nonadjacent wetlands that are *not* adjacent to or hydrologically connected to drainages that carry an average annual flow of five cubic feet per second or greater could also be waters of the U.S.

Wetlands are defined as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (Environmental Laboratory 1987).

California Department of Fish and Game

The State of California also regulates water resources under Sections 1600 to 1603 of the Fish and Game Code of California. Section 1603 mandates that "…it is unlawful for any person to divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds, without first notifying the department of that activity." CDFG will also evaluate if such activity will substantially adversely affect fish or wildlife resources.

CDFG considers most natural drainages to be streambeds unless it can be demonstrated otherwise. Streambeds are defined in the California State Register (No. 87, No. 9, Section 1.72) as follows: "A stream is a body of water that flows at least periodically or intermittently through a bed or channel having banks and that support fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation."

CDFG jurisdiction includes ephemeral, intermittent, and perennial watercourses, and is often extended to the limit of riparian habitats that are located contiguous to the water resource and that function as

part of the watercourse system. According to the Fish and Game Code of California (Gould 1997), riparian habitat is defined as "…lands which contain habitat which grows close to and which depends on soil moisture from a nearby freshwater source."

Regional Water Quality Control Board

The State of California regulates water quality issues under Section 401 of the Clean Water Act, which provides regulatory authority to the RWQCB. The State regulates discharge of fill into wetlands and waters to ensure that clean water goals are met. Projects qualifying for an ACOE Section 404 permit must submit materials for review to the appropriate RWQCB and request a Section 401 certification.

Permit Requirements

Based on project plans, which include impacts to several drainages within the Bundy Canyon watershed, three jurisdictional permits are expected to be required prior to the implementation of the project. A jurisdictional delineation study, which will be required as part of the permitting process, will provide the ACOE, RWQCB, and CDFG with specific information those agencies will use to determine which permits will be issued for the project. It is anticipated the project will require a 404 Individual Nationwide Permit from the ACOE, a Section 401 certification from the RWQCB, and a 1603 Streambed Alteration Agreement from the CDFG. Consultations with these and/or other agencies will likely be required prior to the issuance of these permits.

On-site Drainages and Riparian Habitats

Project implementation would result in the direct fill of all or a portion of the on-site drainages. The Bundy Canyon drainage would then be re-contoured and re-vegetated and a debris basin would be installed near the southern end of the drainage within the property boundary. The estimated total of ACOE jurisdictional waters of the U.S. impacted as a result of the project implementation is approximately 2.51 acres. Furthermore, an estimated 9.40 acres of CDFG jurisdictional streambed will be impacted as a result of the project. These acreage figures are based on stereoscopic analysis of current (March 11, 2002) aerial photographs of the project site and the results are available in the jurisdictional report (**Appendix D**). Any modification to these streambeds will require permits and/or certifications to be obtained from the ACOE, CDFG, and the RWQCB prior to construction activities.

Indirect Project Impacts

Indirect impacts to botanical resources would occur within those habitat areas surrounding the development envelope, as well as within remaining habitat areas within the proposed development area, following completion of the proposed project. It is expected that implementation of the proposed project would result in indirect impacts to botanical resources in the following ways:

- an increased use of the area by humans;
- an increase in populations of non-native plant species associated with an urban environment;
- siltation and alteration of stream functions and habitat value; and
- increased habitat degradation and loss from construction and grading activities.

Indirect impacts associated with the proposed project are not quantifiable but are reasonably foreseeable. As such, the discussion that follows provides a common-sense identification of the types of secondary impacts and their relative magnitude such that decision makers and the general public are aware of the indirect impact potential associated with implementation of the proposed project.

Increased Human Presence

The project site is located within the existing Mountaingate community and adjacent to residential developments, golf course and hiking trails, all of which have introduced human presence in the area. Implementation of the proposed project would introduce an additional human population of approximately 85 persons to the currently undeveloped project site.[1] These homes would be built within the development area that already has impacted biological resources. Because there is already such a large human presence in the immediate area, the additional human presence as a result of the project is considered nominal and is not expected to significantly impact biological resources.

Siltation and Alteration of Streambed Function and Habitat Value

The proposed project will involve the fill and subsequent loss of vegetation within streambeds and riparian areas located within the Bundy Canyon area. Field investigations indicated that the existing substrate within these streambed / riparian corridors is primarily composed of rock. Consequently, pre-existing silt levels within this canyon are likely to be very low. Furthermore, the chemical composition, pH level, and temperatures within the canyon are directly correlated to the existing

1 California State Department of Finance single-family household generation factor of 2.93 was used to calculate estimated population size.

substrate and vegetation, including riparian cover present within the canyon. The introduction of large amounts of loose fill material and the loss of canopy and other vegetative cover would dramatically and perhaps irreversibly alter the function and habitat value of this habitat. Consequently, impacts related to the loss of the existing biological functions and values that would occur as a result of the implementation of the project would be considered a significant impact.

Increase in Populations of Non-Native Plants

As previously discussed, the undeveloped project site currently supports native plant species. After project completion, the introduction of non-native or ornamental landscaping would likely result in an increase in non-native plant species into native habitat areas. These plant species are often highly invasive and can adapt more quickly to urban edges and disturbed areas by out-competing other native species for sunlight, nutrients, and growing space. As a result, many of these species may ultimately displace native plant species and plant communities within remaining open space areas on the site and immediately off site.

The level of potential displacement of native plant populations with non-native species is difficult to quantify. However, over time, this displacement could substantially affect many native plant populations, including special-status plant species. Therefore, this displacement is considered a potentially significant impact.

Construction and Grading Operations

Construction and grading activities associated with project implementation could result in increased degradation of remaining natural habitat areas within the project site boundary and to adjacent habitats. Potential indirect impacts include the following:

- the increase in dust on the leaves of plants as a result of grading operations can inhibit growth and production;
- the operation of construction and grading machinery, particularly in turnaround zones, could inadvertently trample or result in the loss of vegetation not planned for removal;
- remaining trees and other vegetation can be degraded or adversely impacted as a result of on-site storage of construction materials and equipment;
- the leakage of gasoline, oil, and other toxic chemicals and compounds from on-site machinery or materials could adversely impact botanical resources on or adjacent to the project site; and

- erosion from newly graded areas both during and after construction could contribute to increased soil deposition within plant communities in adjacent open space areas.

Depending upon the amount and extent of these impacts, these activities can substantially affect remaining plant communities, including special-status species, within and adjacent to the project site. Therefore, impacts resulting from construction and grading operations are potentially significant.

Cumulative Impacts

The proposed project is located within a portion of the eastern Santa Monica Mountains, which has become increasingly urbanized. Ongoing urban development in this region has resulted in the cumulative loss of open spaces, which support natural vegetation. This trend will likely continue, further reducing the botanical resources of the region, including both common and special-status plant species and animal species. Sensitive plant communities such as coastal sage scrub, mixed riparian, and walnut woodland are considered of high biological value and provide habitat for a variety of common and special-status plants and animals. The loss of these plant communities and the filling of the drainages on the site would contribute to the regional loss of high value biological habitat, which would be considered a significant cumulative impact.

MITIGATION MEASURES

The following describes measures proposed to avoid, minimize, or reduce significant and potentially significant impacts to biological resources. Some of the measures, if successfully implemented, would reduce the degree of these impacts to a level that is less than significant. In addition, these measures would minimize the potential to violate state and federal laws and regulations protecting certain plant species.

1. Habitat Restoration, Management and Monitoring Plan

   To serve as the guiding plan for all restoration planting, a Habitat Restoration, Management, and Monitoring Plan (HRMMP) shall be developed by the applicant for plant communities and riparian and drainage areas that will be impacted by the project. The plan shall be consistent with the terms and conditions set forth in the various permits, certifications, and agreements issued by the appropriate jurisdictional agencies and should be prepared by a qualified habitat restoration biologist, as approved by the City. The HRMMP shall include, at a minimum, the following sections:

a. A **Planting Palette**, at a minimum, that lists all appropriate native plants to be included in all mitigation areas. The planting palette shall be developed by a qualified biologist and approved by the CDFG.

b. **Procedures regarding the removal of non-native vegetation, planting of native vegetation, translocation of trees, planting of container stock**, irrigation, and equipment use.

c. **Maps** that illustrate the specific location of mitigation.

d. **Procedures outlining monitoring and maintenance activities** including frequency and timing of monitoring visits, plant maintenance (i.e., pruning), and irrigation maintenance.

e. **Specific criteria** that will specify what goals must be accomplished at each mitigation area before the mitigation is deemed a success.

f. **Adaptive Management actions** that will specify what actions will be taken in the event success criteria are not met.

g. **The specific funding obligations** by the applicant that will be required to successfully carry out all procedures outlined in the HRMMP.

h. **The plan shall incorporate** the following specific mitigation standards and monitoring actions specified in mitigation measures as minimum standards.

Upland Habitats

Coastal Sage – Chaparral Scrub

2. The loss of approximately 1.2 acres of coastal sage—chaparral scrub habitat through development will be mitigated by replacement of the remaining coastal sage—chaparral scrub community on site or in the area.

In order to improve the biological value of coastal sage—chaparral scrub on site supplemental planting shall take place in areas determined to be of low or moderate value. Seed stock and container stock of coastal sage—chaparral scrub species, consistent with planting palette guidelines set forth in the HRMMP, shall be planted in disturbed portions of remaining coastal sage – chaparral scrub habitat on site or in the area.

Seed stock and container stock, consistent with planting palette guidelines set forth in the HRMMP, shall be planted at a 1:1 ratio for the amount to be impacted as understory vegetation in the mitigation areas on site.

Non-native shrubs and trees shall be removed from the remaining coastal sage - chaparral scrub habitat on site.

A monitoring plan for the coastal sage scrub mitigation shall be approved by CDFG and the City Planning Department and included in the HRMMP. At a minimum, the plan shall include quarterly monitoring by a qualified biologist for the first three years, and on an annual basis for two following years. During each monitoring visit, hand removal of non-native vegetation will be conducted. Approved success criteria shall be based on an overall percentage of vegetation cover (at least 75 percent) and percentage of non-native plant species (less than 10 percent) consistent with on-site high quality coastal sage - chaparral scrub habitat. Contingency actions will include supplemental plantings of native seed and/or container stock until success criteria have been met.

Chaparral

3. The loss of approximately 39.7 acres of chaparral habitat through development will be mitigated by replaced of the remaining chaparral scrub community on site or in the area.

In order to improve the biological value of chaparral on site supplemental planting shall take place in areas determined to be of low or moderate value. Seed stock and container stock of chaparral species, consistent with planting palette guidelines set forth in the HRMMP, shall be planted in disturbed portions of remaining chaparral habitat on site or in the area.

Seed stock and container stock, consistent with planting palette guidelines set forth in the HRMMP, shall be planted at a 1:1 ratio for the amount to be impacted on site.

Non-native shrubs and trees shall be removed from the remaining chaparral on site.

A monitoring plan for the chaparral mitigation shall be approved by CDFG and the City Planning Department and included in the HRMMP. At a minimum, the plan shall include quarterly monitoring by a qualified biologist for the first three years, and on an annual basis for two following years. During each monitoring visit, hand removal of non-native vegetation will be conducted. Approved success criteria shall be based on an overall percentage of vegetation cover (at least 75 percent) and percentage of non-native plant species (less than 10 percent) consistent with on-site high quality chaparral habitat. Contingency actions will include

supplemental plantings of native seed and/or container stock until success criteria have been met.

California Black Walnut Woodlands

4. The loss of approximately 1.9 acres of California black walnut woodland habitat through development will be mitigated by replaced of the remaining California black walnut woodlands on site or in the region.

In order to improve the biological value of California black walnut woodland on site supplemental planting shall take place in mitigation areas on site or in the area. Seed and container stock of California black walnuts, consistent with planting palette guidelines as developed in the HRMMP, shall be planted in on-site mitigation areas, or approved sites in the region.

Seed and container stock, consistent with planting palette guidelines set forth in the HRMMP, shall be planted at a 2:1 ratio for the amount of area to be impacted on site, and with a minimum of 5:1 mitigation ratio for the California black walnut trees impacted.

Non-native shrubs and trees shall be removed from the remaining California black walnut woodlands on site.

A monitoring plan for the California black walnut woodland mitigation shall be approved by CDFG and the City Planning Department and included in the HRMMP. At a minimum, the plan shall include quarterly monitoring by a qualified biologist for the first three years, and on an annual basis for two following years. During each monitoring visit, hand removal of non-native vegetation will be conducted. Approved success criteria shall be based on an overall percentage of vegetation cover (at least 75 percent) and percentage of non-native plant species (less than 10 percent) consistent with on-site high quality California black walnut woodland habitat. Contingency actions will include supplemental plantings of native seed and/or container stock until success criteria have been met.

Mixed Chaparral and California Black Walnut Woodlands

5. The loss of approximately 5.0 acres of mixed chaparral and California black walnut woodland habitat through development will be mitigated by replaced of the remaining mixed chaparral and California black walnut woodland community on site or in the region.

   In order to improve the biological value of mixed chaparral and California black walnut woodland on site supplemental planting shall take place in mitigation areas on site or in the area. Seed stock and container stock of chaparral species and California black walnuts, consistent with planting palette guidelines set forth in the HRMMP, shall be planted in on site mitigation areas, or approved sites in the region.

   Seed stock and container stock, consistent with planting palette guidelines set forth in the HRMMP, shall be planted at a 2:1 ratio for the amount of area to be impacted on site, and with a minimum of 5:1 mitigation ratio for the California black walnut trees impacted.

   Non-native shrubs and trees shall be removed from the remaining mixed chaparral and California black walnut woodland habitat on site.

   A monitoring plan for the mixed chaparral and California black walnut woodland mitigation shall be approved by CDFG and the City Planning Department and included in the HRMMP. At a minimum, the plan shall include quarterly monitoring by a qualified biologist for the first three years, and on an annual basis for two following years. During each monitoring visit, hand removal of non-native vegetation will be conducted. Approved success criteria shall be based on an overall percentage of vegetation cover (at least 75 percent) and percentage of non-native plant species (less than 10 percent) consistent with on-site high quality mixed chaparral and California black walnut woodlands. Contingency actions will include supplemental plantings of native seed and/or container stock until success criteria have been met.

Regulated Oak Trees

6. To mitigate the loss of four coast live oak trees, a tree replacement program shall be developed by the applicant for review and approval by the City. The plan shall include the replacement of these trees in appropriate locations within the remaining open space area. The following guidelines shall be followed, unless required otherwise by the CDFG:

- Oak trees shall be replaced at a ratio of 2:1;
- Trees shall be replaced with 15-gallon or larger container specimens and in appropriate locations in coordination with the City and CDFG;
- All other permit conditions of the City of Los Angeles Oak Tree Ordinance shall also be implemented with respect to replacement of oak trees;
- The source of acorns and container stock (if used) should be local; and
- Guidelines for preserving the remaining oak trees within the project development envelope shall also be included in the final replacement plan.
- All plantings shall be done in accordance with the HMMRP or as otherwise required by the City.

Jurisdictional Drainages and Riparian Habitats

Southern Mixed Riparian Woodlands

7. The loss of approximately 3.2 acres of southern mixed riparian woodland, a CDFG special status community, due to development will be mitigated by restoring southern mixed woodlands on site or in the area. This Community and its accompanying drainage channel in Bundy Canyon are likely under the regulatory jurisdiction of the ACOE, CDFG, and RWQCB and will require additional authorizations by these agencies.

   In order to improve the biological value southern mixed woodland on site sufficient hydrology may be present or restored to support supplemental plantings, which shall be installed in the mitigation areas on-site or in the area. Seed stock and container stock of southern mixed riparian woodland species, consistent with the planting palette guidelines set forth in the HRMMP, shall be planted in on site mitigation areas, or approved sites in the region.

   Seed stock and container stock, consistent with planting palette guidelines set forth in the HRMMP, shall be planted at a 5:1 ratio for the amount of area to be impacted on site.

   Non-native shrubs and trees shall be removed from the remaining southern mixed riparian woodland on site.

   A monitoring plan for the southern mixed riparian woodland mitigation shall be approved by CDFG, the City Planning Department other permitting agencies, and included in the HRMMP. At a minimum, the plan shall include quarterly monitoring by a qualified biologist for the first

three years, and on an annual basis for two following years. During each monitoring visit, hand removal of non-native vegetation will be conducted. Approved success criteria shall be based on an overall percentage of vegetation cover (at least 75 percent) and percentage of non-native plant species (less than 10 percent) consistent with on-site high quality southern mixed riparian woodland. Contingency actions will include supplemental plantings of native seed and/or container stock until success criteria have been met.

Special-Status Plants

8. Focused surveys shall be conducted by a qualified botanist during the appropriate blooming period prior to site construction for the species to be surveyed.

9. Any special-status plant populations located on the site shall either be avoided, or if avoidance is not feasible, be transplanted to appropriate areas within the remaining open space area. This does not apply to any special-status species that if found on the site would require consultation or an incidental take permit from the CDFG or the USFWS.

Increase in Non-Native Plant Species

10. Prior to issuance of building permit, preparation, review, and implementation of landscaping plans for common areas of the project shall include provisions for the control of invasive plant species. Landscaping plans subject to this requirement include any brush management plan (for the control of fire hazards at developed/natural interface areas), erosion control plans, and any landscaping near natural areas. Provisions for the control of invasive plant species would include: (a) City review and screening of proposed plant palette and planting plans to identify and avoid the use of invasive non-native species, especially near developed/natural interface areas; (b) the use of weed control applications (i.e., "Roundup" or equivalent) during the initial planting of landscaped areas; and (c) the monitoring and removal of weeds and other invasive plant species by the applicant as part of ongoing landscape maintenance activities. A qualified botanist shall determine the frequency and method of monitoring for invasive species.

11. Landscaping for the proposed project shall consist primarily of native plants as listed by the California Native Plant Society (CNPS), Santa Monica Mountains Chapter, in their document entitled *Recommended Native Plant Species for Landscaping Wildland Corridors in the Santa Monica Mountains*, dated November 23, 1988. Invasive, non-indigenous plant species that tend

to supplant native plants shall not be used. Topsoil and live plant materials shall, where feasible, be salvaged for erosion control and habitat enhancement and restoration efforts.

Construction and Grading Operations

12. An approved botanist/biologist shall be retained as a construction monitor to ensure that incidental construction impacts on biological resources are avoided or minimized. Responsibilities of the construction monitor include the following:

    - Attend appropriate pre-grade meetings to ensure that timing/location of construction activities do not conflict with mitigation requirements (e.g., seasonal surveys for plants).
    - Supervise cordoning of preserved natural areas (with temporary fence posts, flagging, or other easily observed boundary marker) that lie outside of grading areas.
    - Conduct a field review of the staking (to be set by the surveyor) designating the limits of all construction activity. Any construction activity areas immediately adjacent to sensitive habitat areas or other special-status resources may be flagged or temporarily fenced by the monitor, at their discretion.
    - Conduct meetings with the contractor and other key construction personnel describing the importance of restricting work to designated areas. The monitor should also discuss procedures for minimizing impacts on remaining trees and plant communities.

13. Staging/storage areas for construction equipment and materials shall be located outside of the driplines of remaining trees and areas of remaining vegetation. The biological monitor shall investigate all on-site storage areas to minimize impacts to biological resources.

14. Construction personnel shall be prohibited from entry into areas outside the designated construction area, except for necessary construction related activities, such as surveying. All such construction activities shall be coordinated with the biologist construction monitor.

15. During Construction, care should be taken to avoid degradation of the area through spillage of hazardous materials and discarded refuse. No refueling, changing of oil or other fluids, or discarding of any trash or other unwanted materials should be performed within natural areas on or immediately adjacent to the project site. Vehicles carrying supplies, such as concrete, should not be allowed to empty, clean out, or otherwise place materials into natural areas on or immediately adjacent to the site.

16. Standard SCAQMD dust control measures (please refer to mitigation measures in **Section IV.B, Air Quality**) shall be implemented to reduce impacts to nearby wildlife habitat. This includes a variety of options to reduce dust, including replacing ground cover in disturbed areas as quickly as possible; minimizing / reducing vehicle speeds on unpaved roads; watering active sites at least twice daily; and suspending all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 mph.

17. Best Management Practices (BMPs) including source controls and treatment controls shall be implemented during construction activities and post-construction. Such practices may include the use of screening devices such as hay bales or silt fencing. In addition:

    - The City's standard grading procedures and erosion control procedures shall be adhered to during construction;
    - Construction sites shall be stabilized by October 15 of each year in anticipation of the rainy season; and
    - No debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement, concrete or washings thereof, oil or petroleum products or other organic or earthen material from construction or associated activity shall be allowed to enter into drainages or be placed where it may be washed by rainfall or runoff into the drainages.

Cumulative Impact Mitigation Measures

When viewed individually, it may be possible for each ongoing or planned development project in the region to mitigate potentially (project-specific) significant impacts through the implementation of habitat replacement programs and through the requirements of the regulatory processes to which each of the projects may be subject (e.g., ACOE 404 permit process, CDFG Section 1603 permit process, etc.). The mitigation measures listed above, as well as those, which are to be developed in conjunction with future consultations with the biological resource agencies, will minimize the projects' contribution to cumulative impacts to biological resources.

ADVERSE EFFECTS

Implementation of the various mitigation measures listed above may partially mitigate the loss of plant life and jurisdictional resources. However, because the project will impact mature, individual trees, woodlands, and riparian habitats, restoration efforts may take many decades or possibly fail to restore the biological functions and values of the mitigation areas to similar, or pre-existing conditions. Should restoration efforts prove successful, long-term impacts to plant life and jurisdictional resources

may over time, be reduced to a less than significant level. Short-term impacts however, may be critical to the survival of individual species that rely on the mature habitat and the relatively undisturbed conditions that currently exist on the site. Dramatic changes in the biological composition of the site, which will occur and persist until such time that the mitigated areas mature to current functions and values may reduce, and ultimately extirpate, individual animals and plants from the area. Consequently, the short-term impacts to the biological resources that will result with the implementation of the project would be considered a significant, unavoidable impact.