

**Delineation of Jurisdictional Waters and Wetlands
12.5-Acre Newport Village Park
City of Newport Beach, Orange County, California
(Laguna Beach 7.5 Minute USGS Topographic Map Section 93, T-6S, R-10W)**

Prepared for:

Hall & Foreman, Inc.
420 Exchange, Suite 100
Irvine, CA 92602
714.665.4500

Contact: Mark Reader, Project Manager

Prepared by:

Michael Brandman Associates
220 Commerce, Suite 200
Irvine, CA 92602
714.508.4100

Contact: Shelah Riggs, Project Manager



August 2004

TABLE OF CONTENTS

Section 1: Summary	1
Subject Waterway(s)	1
Location and Existing Uses	1
Brief Description of Project	1
Endangered Species	2
Environmental Documentation	2
Section 2: Introduction	3
2.1 - Project Location	3
2.2 - Project Description	3
Section 3: Environmental Setting	5
Section 4: Regulatory Background	7
4.1 - USACE Section 404 Regulations.....	7
Waters of the United States.....	7
Wetlands.....	7
USACE Regulated Activities.....	8
4.2 - CDFG Section 1602 Regulations	8
CDFG Regulated Activities.....	8
Section 5: Jurisdictional Methodology	9
5.1 - Pre-Survey Investigation	9
5.2 - Field Investigation	9
Section 6: Jurisdictional Delineation Results	10
6.1 - Jurisdictional Areas	11
6.2 - Drainage Description.....	11
Wetland Determination	12
Soils.....	12
Hydrology	13
Section 7: Conclusion	14
Section 8: References	15
Appendix A: Wetland Data Forms	
Appendix B: Determination of Jurisdictional Wetlands and Waters	
Appendix C: Site Photographs	
Appendix D: Floral Compendium	

LIST OF TABLES

Table 1: Jurisdictional Areas (Acres) 11

LIST OF EXHIBITS

Exhibit 1: Regional and Local Vicinity Map 4
Exhibit 2: Jurisdictional Features 6

SECTION 1: SUMMARY

Applicant Name:

City of Newport Beach
Public Works Department
3300 Newport Boulevard
Newport Beach, CA 92663

Agent Name:

Michael Brandman Associates
220 Commerce, Suite 200
Irvine, CA 92602
Phone: 714.508.4100
Email: sriggs@brandman.com

Subject Waterway(s)

The Newport Village Park (proposed project) site includes two unnamed drainages which flow to a channel that ultimately terminates at Balboa Bay. They are both under the jurisdiction of the United States Army Corps of Engineers (USACE) and California Department of Fish and Game (CDFG). The site also includes two highly disturbed ephemeral ponded areas and a concrete drainage structure that are not under the jurisdiction of USACE and CDFG.

The proposed project site includes approximately 0.50 acres of waters of the United States, of which approximately 0.23 acres are wetlands, as regulated by the USACE, and approximately 1.12 acres of waters of the state, of which approximately 0.23 acres are wetlands, as regulated by the CDFG.

Location and Existing Uses

The proposed project site is generally located north of Coast Highway (Highway 1), south of the San Joaquin Hills Transportation Corridor (SR-73), and west of MacArthur Boulevard in the City of Newport Beach, County of Orange. Specifically, the proposed project site is bounded on the north by San Miguel Drive, on the east by MacArthur Boulevard, on the south by the Newport Beach Public Library, and on the west by Avocado Avenue. The site is currently vacant and consists of non-native grasses, coastal sage scrub, and riparian vegetation communities.

Brief Description of Project

The proposed project involves the construction of a parking lot and passive recreation park area. The parking lot would contain a maximum of 120 spaces and would be accessible from the public library according to the Americans with Disabilities Act (ADA accessible). The park area would include lawn, landscaping, walkways, native plantings, and a riparian restoration area. The final project plans are currently being prepared.

Endangered Species

A pair of the federally threatened coastal California gnatcatcher (CAGN) were seen on the proposed project site in the spring of 1998. MBA is not aware of any other documentation of the presence or absence of the CAGN on the proposed project site. The site may also support the federally listed San Diego fairy shrimp. The proposed project site is within a Non-Reserve parcel of the Coastal Subregion of the County of Orange Natural Communities Conservation Plan (NCCP). It is not classified as a Special Linkage Area, Existing Use Area, or Non-Reserve Open Space Area. The NCCP provides the basis for authorizing incidental take of special-status species identified in the plan, including CAGN. The NCCP includes avoidance and minimization measures that must be implemented for CAGN and fairy shrimp. These measures are outlined in the project biological assessment report; prepared by MBA.

Environmental Documentation

An initial biological survey and a follow-up biological report was completed by Robert Hamilton in March and July (respectively) of 1998. MBA conducted a biological assessment in the summer of 2004. The City of Newport Beach will prepare and adopt project specific environmental documentation in accordance with the California Environmental Quality Act prior to implementation of the proposed project.

SECTION 2: INTRODUCTION

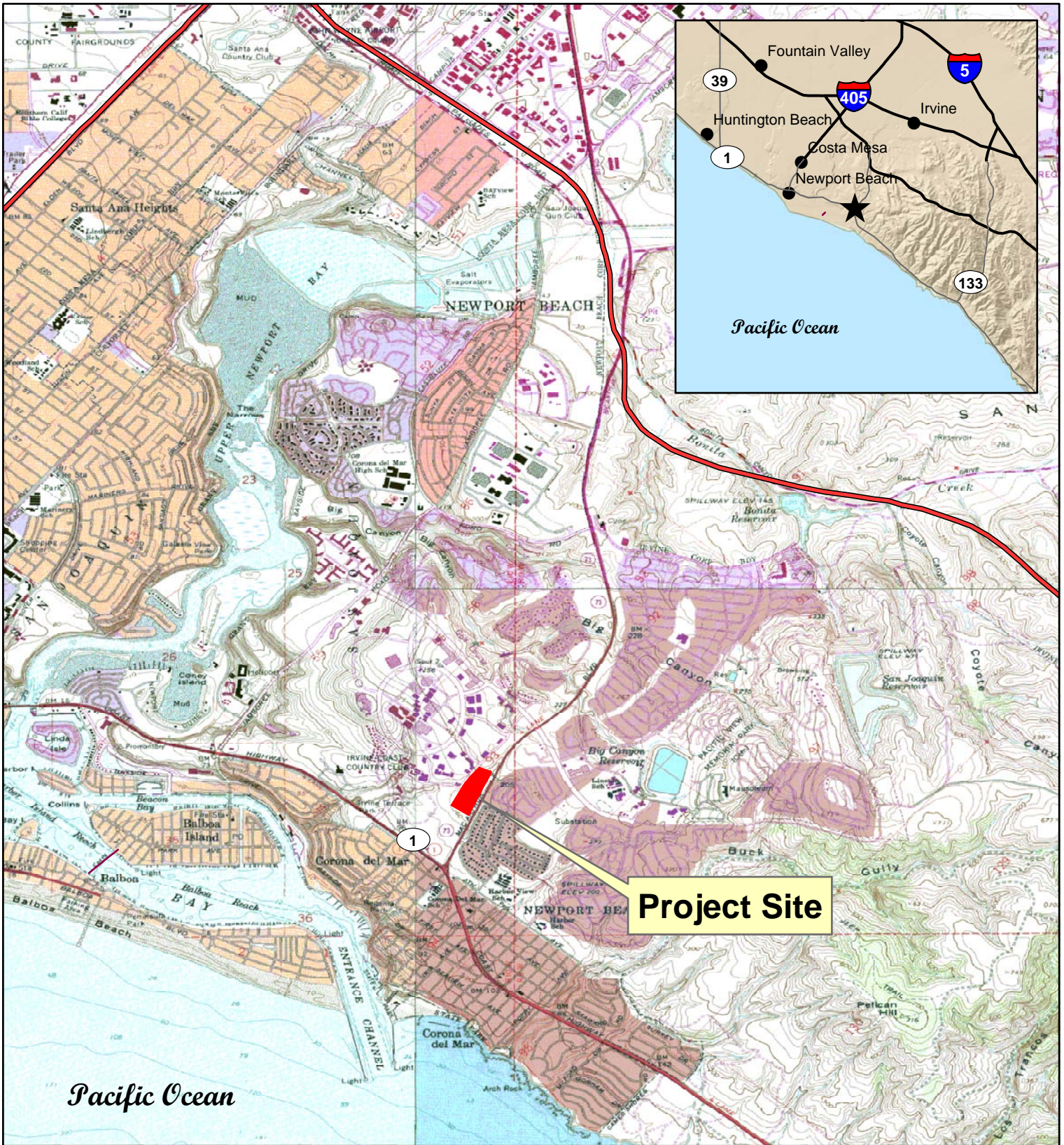
2.1 - PROJECT LOCATION

The Newport Village Park project site is generally located north of Coast Highway (Highway 1), south of the San Joaquin Hills Transportation Corridor (SR-73), and west of MacArthur Boulevard in the City of Newport Beach, County of Orange. Specifically, the project site is bounded on the north by San Miguel Drive, on the east by MacArthur Boulevard, on the south by the Newport Beach Public Library, and on the west by Avocado Avenue (Exhibit 1: Regional and Local Vicinity Map). The site can be found within Section 93 of Township 6 South, Range 10 West of the Laguna Beach United States Geological Survey (USGS) 7.5-minute topographic map.

2.2 - PROJECT DESCRIPTION

The proposed project consists of the construction of a parking lot and a park area that includes a passive recreation area and riparian-habitat restoration area. The parking lot would accommodate between 100 to 120 spaces. The passive recreation area would be ADA accessible from the Newport Beach Public Library and would be comprised of walkways, lighting, landscaping, lawn, and miscellaneous structures including benches, trellis, pergola, turf amphitheater, seat walls, and signage. The plans for the riparian-habitat restoration area include the construction of walkways, the protection of existing native plants and streambeds, the planting of additional California native plants, and the modification of existing drainage facilities to blend into the natural environment. The plant palette would include coastal sage scrub vegetation, native grassland, and wildflower groundcover along with other native plant species.

The intent of the City of Newport Beach is to locate the parking lot in a non-biologically sensitive portion of the project site while preserving existing ecologically valuable habitat present within the project site to the extent practicable.



Source: CA GIS Library 2004



Michael Brandman Associates

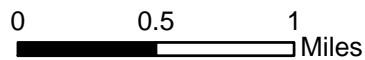


Exhibit 1

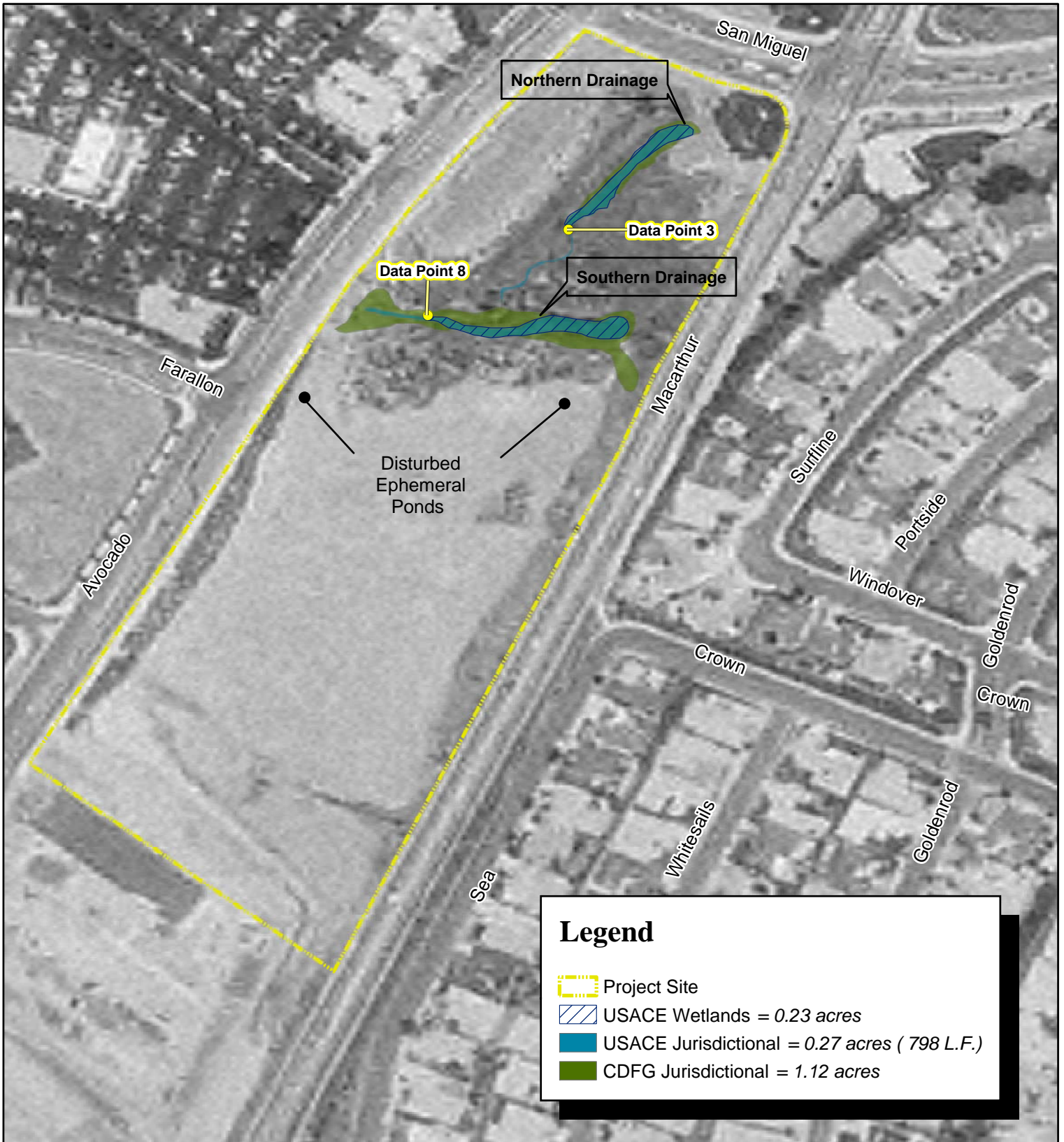
Regional Map

SECTION 3: ENVIRONMENTAL SETTING

The proposed project site is located north of Balboa Bay and east of Upper Newport Bay. It is surrounded by commercial and public uses to the north, west, and south and residential development to the east. Vegetation within the proposed project site includes non-native grassland to the south which transitions into coastal sage scrub to the north, freshwater marsh within the two onsite drainages. One drainage feature, referred to as the northern drainage, begins on the northern property boundary and flows southwesterly. The second drainage feature, the southern drainage, begins on the eastern property boundary and flows westerly through the property (Exhibit 2: Jurisdictional Features).

The elevation of the Site ranges from 140 to 240 feet above mean sea level. The proposed project site contains two different soils series: Calleguas clay loam and Myford sandy loam. Neither series is included as a hydric soil on the Field Office Official List of Hydric Soil Map Units for Orange & Part of Riverside County, California.

The two drainage features within the proposed project footprint contain evidence of an ordinary high water mark (OHWM) and a defined bed and bank. There is also a noticeable soil and vegetation change commonly associated with active channels. The two drainage features include similar vegetation; the banks of the channels are dominated by upland sage scrub species including California sagebrush (*Artemisia californica*), black sage (*Artemisia mellifera*), bush sunflower (*Encelia californica*), and bladderpod (*Isomeris arborea*). The beds of both channels are comprised of slender cat-tail (*Typha angustifolia*) and mulefat (*Baccharis salicifolia*). The southern drainage also contains black and arroyo willow (*Salix gooddingii*, *Salix lasiolepis*).



Legend

- Project Site
- USACE Wetlands = 0.23 acres
- USACE Jurisdictional = 0.27 acres (798 L.F.)
- CDFG Jurisdictional = 1.12 acres

Source: CA GIS Library 2004

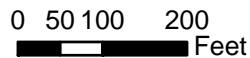


Exhibit 2

Jurisdictional Drainages Map

SECTION 4: REGULATORY BACKGROUND

4.1 - USACE SECTION 404 REGULATIONS

The discharge of dredged or fill material (temporarily or permanently) into areas delineated as waters of the United States, including wetlands, typically requires prior authorization from the USACE, pursuant to Section 404 of the Clean Water Act.

Waters of the United States

Waters of the United States, as defined in the Code of Federal Regulations (CFR) 328.3 include all waters or tributaries to waters such as lakes, rivers, intermittent and perennial streams, mudflats, sandflats, natural ponds, wetlands, wet meadows, and other aquatic habitats. Frequently, a water of the United States (with at least intermittently flowing water or tidal influences) is demarcated by the ordinary high water mark (OHWM), defined in CFR 328.3(e) as the line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line 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. Typically, in this area, the OHWM is indicated by the presence of an incised streambed with defined bank shelving.

The United States Army Corps of Engineers South Pacific Division issued Guidelines for Jurisdictional Delineations for Waters of the United States in the Arid Southwest, June 2001. The purpose of the document was to provide background information concerning physical characteristics of dryland drainage systems. These guidelines were reviewed and used to delineate the drainage feature within the proposed project site.

Wetlands

According to the *Federal Manual for Identifying and Delineating Jurisdictional Wetlands (1987)*, three criteria must be satisfied to classify an area as a jurisdictional wetland. These are: (1) a predominance of plant life that is adapted to life in wet conditions (hydrophytic vegetation); (2) soils that saturate, flood, or pond long enough during the growing season to develop anaerobic conditions in the upper part (hydric soils); and (3) permanent or periodic inundation or soils saturation, at least seasonally (wetland hydrology). Wetland vegetation is characterized by vegetation in which more than 50 percent of the composition of dominant plant species are obligate wetland, facultative wetland, and/or facultative species that occur in wetlands. These criteria are discussed in more detail

in Appendix B. As a result of the 2001 Solid Waste Agency of North Cook County (SWANCC) case, a wetland must show connectivity to a stream course in order for such a feature to be considered jurisdictional.

USACE Regulated Activities

USACE regulated activities involve a regulated discharge of dredged or fill material include, but are not limited to, grading, placing of rip-rap for erosion control, pouring concrete, laying sod, and stockpiling excavated material. Activities that generally do not involve a regulated discharge (if performed specifically in a manner to avoid discharges) include driving pilings, drainage channel maintenance, temporary mining and farm/forest roads, and excavating without stockpiling.

4.2 - CDFG SECTION 1602 REGULATIONS

The Fish and Game Code of California mandates that “it is unlawful for any person to substantially 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 such activity.” CDFG jurisdiction includes ephemeral, intermittent and perennial watercourses (including dry washes) characterized by (1) the presence of hydrophytic vegetation; (2) the location of definable bed and banks; and (3) the presence of existing fish or wildlife resources.

Furthermore, CDFG jurisdiction is often extended to habitats adjacent to watercourses, such as oak woodlands in canyon bottoms or willow woodlands that function as part of the riparian system. Historic court cases have further extended CDFG jurisdiction to include watercourses that seemingly disappear, but re-emerge elsewhere. Under the CDFG definition, a watercourse need not exhibit evidence of an OHWM to be claimed as jurisdiction. However, CDFG does not regulate isolated wetlands; that is, those that are not associated with a river, stream, or lake.

CDFG Regulated Activities

CDFG regulated activities are those that involve diversions, obstruction, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife resources.

SECTION 5: JURISDICTIONAL METHODOLOGY

5.1 - PRE-SURVEY INVESTIGATION

Prior to the field visit, an aerial photograph of the proposed project site was compared with the Laguna Beach USGS 7.5-Minute Topographic Quadrangle Map to identify drainage features as indicated from topographic changes or visible drainage patterns. The National Wetland Inventory was also reviewed to determine whether any wetland areas had been documented within the vicinity of the proposed project site. The United States Department of Agriculture Soil Survey Map was reviewed to identify the soil series that occur on the Site.

5.2 - FIELD INVESTIGATION

Michael Brandman Associates' Biologist, Ms. Linda Archer, completed an onsite wetland delineation on May 18, 2004 consistent with the USACE's *1987 Federal Manual for Identifying and Delineating Jurisdictional Wetlands*. Weather conditions during the delineation surveys were mostly clear with temperatures in the mid 80's. The data was mapped on the topographic base map and aerial photograph. Other materials used included a 30-meter tape measure, shovel, and Munsel color chart.

The entire proposed project site was surveyed by vehicle to determine the presence of potential jurisdictional areas. Potential jurisdictional areas were surveyed on foot. Along jurisdictional areas within the proposed project site, width measurements were taken from bank to bank at the OHWM, at approximately 100-foot intervals. Information regarding hydrologic characteristics such as an observable channel bed and bank and changes in soils or vegetation were recorded on standardized datasheets.

Width and length measurements were entered into Geographical Information System (GIS) Arcview software to identify the drainage area location and dimensions. The Arcview application was then used to compute the surface area of each drainage feature in acres. Acreage computations were verified using the field data to calculate surface area by multiplying the total length of the drainage segment by its average width.

SECTION 6: JURISDICTIONAL DELINEATION RESULTS

The following section describes the jurisdictional delineation area, including findings related to vegetation communities, topography and soils, hydrology, and wetlands for the onsite drainage features.

The biological survey completed by Robert Hamilton in 1998 noted two seasonal ponds, a seasonally wet upland swale and two perennial drainages containing cattail marshes within the project site. No other potentially jurisdictional features were observed during the survey.

Two perennial drainage features supporting cat-tail marshes, described by Mr. Hamilton, were determined to be under the jurisdiction of both USACE and CDFG. The drainage features contain a definable bed and bank and drain into a channel which flows into Balboa Bay and ultimately to the Pacific Ocean; therefore, the connectivity to a navigable water body required by USACE for a water body to be considered jurisdictional is established. Both drainage features contain additional associated riparian vegetation, thus extending CDFG jurisdiction beyond the immediate stream bank.

Two highly disturbed features were observed during the delineation that appear to be the seasonal ponds described by Hamilton. These features were dry during the delineation, which was conducted in August. The features were minor topographical depressions with a minor change in vegetation where the non-native grasses become less dense. Hydrophytic vegetation was limited to one or two mulefat and curly dock in one pond. The features are hydrologically disconnected from waters of the State or waters of the U.S. Therefore, they would be considered isolated seasonal ponds that do not fall under the jurisdiction of USACE. Some vernal pools, depending on their species composition, are considered sensitive by CDFG and would fall under CDFG jurisdiction. However, it was not possible to determine at the time of the delineation if these areas support sensitive vernal pool plant species or whether these features are subject to state jurisdiction as defined under the Porter-Cologne Act.

The upland swale located on the southern end of the property is within a concrete v-ditch and concrete-lined channel that appears to have been constructed in an upland area to prevent storm runoff from entering the adjacent library parking lot. The swale contains an intermittent bed and bank feature approximately 2 to 3 feet in height and varies in length; however, the channel bottom has been grown over with grasses and mustard and no recent evidence of flow was observed. A couple mulefat were observed on the eastern end of the drainage feature, but no other vegetation generally

associated with riparian areas was observed onsite. Because the ditch and concrete channel are man-made features created within an upland area, they were determined to be nonjurisdictional.

6.1 - JURISDICTIONAL AREAS

Jurisdictional areas within the proposed project site total 0.5 acres of waters of the United States, including 0.23 acres of wetlands; and 1.12 acres of waters of the State, including 0.23 acres of wetlands. Representative photographs of the drainage features are found in Appendix C.

Table 1: Jurisdictional Areas (Acres)

Drainage	Non-Wetland Waters of the US	Wetland Waters of the US	Total Waters of the US	Waters of the State (CDFG)
Northern	0.12	0.10	0.22	0.38
Southern	0.15	0.13	0.28	0.74
Total	0.27	0.23	0.50	1.12

6.2 - DRAINAGE DESCRIPTION

The northern drainage originates from an underground culvert and a concrete flood control facility at the northern property boundary. The flowing water likely originates from urban runoff, and flows southwesterly to converge with the southern drainage. The portion of this drainage within the project site is approximately 432 feet in length and the OHWM ranges from 4 feet to 30 feet in width with an average of approximately 25 feet. The dominant plant species associated with the bed of this drainage feature include slender cattail (*Typha angustifolia*), sweet alyssum (*Lobularia maritima*), western yellow cress (*Rorippa curvisiliqua* var. *occidentalis*), and marsh fleabane (*Pluchea odorata*). Upland species on the banks of the drainage include California sagebrush (*Artemisia californica*), black sage (*Salvia mellifera*), and California bush sunflower (*Encelia californica*).

The northern drainage can be divided into two distinct areas (north and south). The portion of the drainage north of data point 3 is considered to be a perennial drainage with riparian vegetation. It is approximately 288 linear feet and averages 30 feet in width. South of data point 3, the riparian vegetation ends and the drainage becomes ephemeral. At this point, the channel is approximately 4 feet in width and is covered by a canopy of coastal sage scrub species including sugar bush (*Rhus ovata*) and California sagebrush, as well as African daisy (*Osteospermum ecklonis*). The channel is concrete lined for approximately 50 linear feet before it joins the southern drainage.

The southern drainage originates at the eastern property boundary with from an concrete culvert that also contains urban runoff. It flows westerly through the proposed project site to an underground

drainage structure at the western property boundary beneath Avocado Avenue. The onsite portion of the drainage is approximately 366 linear feet and the OHWM ranges from 2 feet to 50 feet with an average of about 20 feet. This drainage can also be divided into two segments, east and west of data point 8. West of data point 8, the water flows into an underground concrete channel that is stabilized with riprap. The vegetation communities of the eastern segment of the southern drainage are similar to the northern segment of the northern drainage. The vegetation in the bed of the channel consists of slender cat-tail, western yellow cress, sweet alyssum, marsh fleabane, and duck weed (*Lemna* sp.). This drainage also contains black willows (*Salix gooddingii*) and arroyo willows (*Salix lasiolepis*), extending the jurisdiction of CDFG beyond the bed and bank of the stream.

Wetland Determination

Vegetation

The northern portion (north of data point 3) of the northern drainage and the eastern portion (east of data point 8) of the southern drainage contain similar vegetation in the bed of the channel; slender cattail (*Typha angustifolia*), sweet alyssum (*Lobularia maritima*), western yellow cress, and marsh fleabane (*Pluchea odorata*). The southern drainage also contains duckweed and willows. With the exception of sweet alyssum, all of the dominant plant species in the bed of the channels are either obligate wetland or facultative wetland species and, therefore, the southern drainage and the northern segment of the northern drainage feature meet the criteria for hydrophytic vegetation.

For the northern drainage, the segment south of data point 3 is covered by a canopy of coastal sage scrub species including sugar bush (*Rhus ovata*) and California sagebrush, as well as African daisy (*Osteospermum ecklonis*). All three of these species are considered upland and therefore, this segment of the drainage feature does not meet the criteria for hydrophytic vegetation

Soils

The soil in the northern segment of the northern drainage is dominated by loam with organic streaking, which is considered evidence of hydric soils. The northern segment of the northern drainage and the eastern segment of the southern drainage appear to be perennial and hold ponded water for seven days or more during the growing season; therefore, they meet the National Technical Committee for Hydric Soils criteria for hydric soils.

In the southern segment of the northern drainage, the soils no longer contain organic streaking or other evidence of hydric soils. Because this segment of the drainage is ephemeral and is dominated by upland species, it is not expected to hold ponded water for seven days or more during the growing season to meet the National Technical Committee for Hydric Soils criteria for hydric soils. This segment of the drainage feature does not meet the criteria for hydric soils.

The western segment of the southern drainage is concrete lined and, therefore, does not contain hydric soils.

Hydrology

The northern segment of the northern drainage feature and the eastern portion of the southern drainage are inundated with water, a wetland hydrology indicator, and, therefore, meet the hydrology criteria for a wetland.

The southern segment of the northern drainage was not inundated or saturated with water. No other wetland hydrology indicators were observed. The western segment of the southern drainage flowed underground in a concrete channel. The water was actively flowing and no indicators of wetland hydrology were observed in this segment.

Wetland Conclusion

The northern segment of the northern drainage and the eastern portion of the southern drainage meet all 3 criteria for jurisdictional wetlands: a dominance of hydrophytic vegetation, hydric soils, and wetland hydrology and, therefore, are considered wetlands in accordance with the criteria set forth in the *Federal Manual for Identifying and Delineating Jurisdictional Wetlands (1987)*. The northern drainage contains approximately 0.10 acres of wetlands and the southern drainage contains approximately 0.13 acres of wetlands.

The southern segment of the northern drainage does not meet the wetland criteria for soils or hydrophytic vegetation and, therefore, is not considered a wetland. The western segment of the southern drainage does not meet the wetland criteria for soils or hydrology and, therefore, is not considered a wetland.

SECTION 7: CONCLUSION

MBA documented 0.50 acres of USACE jurisdictional waters of the U.S. (798 linear feet), of which 0.23 are jurisdictional wetlands, and 1.12 acres of CDFG jurisdiction, of which 0.23 are jurisdictional wetlands.

The two drainage features have defined bed and banks with clearly identified OHWMs. The wetlands were dominated by cat-tails, sweet alyssum, and marsh fleabane. CDFG jurisdiction in the southern drainage extended to include areas containing willows.

Based upon the results of the jurisdictional delineation, regulatory permits are not expected to be required if the project is designed to avoid all temporary and permanent construction activities within the two jurisdictional drainages, subject to concurrence by the USACE. Such concurrence would involve a written request to the USACE for a jurisdictional determination. The determination process includes a field meeting with the regulators and issuance of a determination letter.

If the proposed project will impact the two jurisdictional features in any way, including the construction of trails, footbridges, or temporary construction equipment crossings, MBA recommends early consultation with USACE, RWQCB, and CDFG to obtain permits under Section 404 and 401 of the Clean Water Act and Section 1600 of the California Fish and Game Code, respectively.

The proposed project site has a high potential to support the federally threatened coastal California gnatcatcher and a moderate potential to support the federally endangered San Diego fairy shrimp. The site is located within the Reserve System of the Coastal Subregion of the County of Orange Natural Communities Conservation Plan (NCCP). The NCCP provides the basis for authorizing incidental take of special-status species identified in the plan, including CAGN and fairy shrimp. The NCCP sets forth specific avoidance and minimization measures for CAGN and fairy shrimp that must be followed prior to and during construction. These measures are outlined in the project biological assessment report prepared by Michael Brandman Associates (August 2004). Federal endangered species consultation is not required.

SECTION 8: REFERENCES

- California, State of. 1989. *Fish And Game Code*.
- Department of Army. 1986 (Nov 13). 33 CFR Parts 320 Through 330, Regulatory Programs of the Corps of Engineers; Final Rule. *Federal Register*. 51(219): 41206-260.
- Department of Army. 2000 (Mar 9). 33 CFR Parts 320 Through 330, Regulatory Programs of the Corps of Engineers; Final Rule. *Federal Register*. Vol. 65 No. 47: 12818-899.
- Department of Army. 2002 (Jan 15). 33 CFR Parts 320 Through 330, Regulatory Programs of the Corps of Engineers; Final Rule. *Federal Register*. Vol. 67 No. 10: 2020-2095.
- Department of Army-South Pacific Division 2001 (June). *Guidelines for Jurisdictional Delineations for Waters of the United States In the Arid Southwest*.
- Federal Interagency Committee For Wetland Delineation. 1989. *Federal Manual For Identifying and Delineating Jurisdictional Wetlands*. U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Services, and U.S.D.A. Soil Conservation Service. Washington, D.C. Cooperative Technical Publication.
- Kollmorgen Corporation, 1975. Munsell Soil Color Charts. Macbeth Division of Kollmorgen Corporation, Baltimore, Md.
- Michael Brandman Associates, *Biological Resources Assessment for the Munger Storm Drain Sand Filter Project*, June 2004.
- Reed, P.B. 1988. *National List of Plant Species That Occur In Wetlands: California (Region 0)*. National Wetlands Inventory, U.S. Fish and Wildlife Service Biological Report 88 (26.9).
- U.S. Department of Agriculture, Soil Conservation Service and Forest Service. 1973. *Soil Survey of Orange County and Western Portion of Riverside County, California*.
- U.S.D.A Soil Conservation Service. 1987. *Hydric soils of the United States*. In cooperation with the National Technical Committee for Hydric Soils. U.S.D.A. Soil Conservation Service. Washington, D.C.
- U.S. Fish And Wildlife Service. 1988 (May). *National List of Plant Species that Occur in Wetlands: California (Region 0)*. Biological Report 88(26.10). Washington, D.C.: USFWS.
- U.S. Geological Survey. 1997. Laguna Beach, California. 7.5-minute topographic map.

Appendix A: Wetland Data Forms

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>Newport Village Park</u> Applicant/Owner: <u>City of Newport Beach</u> Investigator: <u>Linda Archer</u>	Date: <u>7/23/04</u> County: <u>Orange</u> State: <u>CA</u>
Do Normal Circumstances exist on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Is the site significantly disturbed (Atypical Situation)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Is the area a potential Problem Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If needed, explain on reverse.)	CommunityID: <u>Cat-tail marsh</u> Transect ID: _____ Plot ID: <u>1</u>

VEGETATION

#	Dominant Plant Species	Stratum	Indicator	#	Dominant Plant Species	Stratum	Indicator
1.	<u>Typha domingensis</u>	<u>S</u>	<u>obl</u>	9.	_____	_____	_____
2.	<u>Lobularia maritima</u>	<u>H</u>	<u>---</u>	10.	_____	_____	_____
3.	<u>Rorippa curvisiliqua</u>	<u>H</u>	<u>obl</u>	11.	_____	_____	_____
4.	<u>Pluchea odorata</u>	<u>S</u>	<u>obl</u>	12.	_____	_____	_____
5.	_____	_____	_____	13.	_____	_____	_____
6.	_____	_____	_____	14.	_____	_____	_____
7.	_____	_____	_____	15.	_____	_____	_____
8.	_____	_____	_____	16.	_____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 75%

Remarks:

HYDROLOGY

<input checked="" type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake or Tide Gauge <input checked="" type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators <input checked="" type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Indicators Secondary Indicators (2 or more required); <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>5</u> (in). Depth of Free Water in Pit: _____ (in). Depth to Saturated Soil: _____ (in).	

Remarks:

SOILS

Map Unit Name _____ Drainage Class: _____
(Series and Phase): _____
Taxonomy (Subgroup): _____ Field Observations
Confirmed Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input checked="" type="checkbox"/> Aquic Moisture Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No
Wetland Hydrology Present? Yes No
Hydric Soils Present? Yes No Is this Sampling Point Within a Wetland? Yes No

Remarks: Wetland = ACE = approximately 30 feet; CDFG approx 40 feet

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>Newport Village Park</u> Applicant/Owner: <u>City of Newport Beach</u> Investigator: <u>Linda Archer</u>	Date: <u>7/23/04</u> County: <u>Orange</u> State: <u>CA</u>
Do Normal Circumstances exist on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Is the site significantly disturbed (Atypical Situation)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Is the area a potential Problem Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If needed, explain on reverse.)	CommunityID: <u>Cat-tail marsh</u> Transect ID: _____ Plot ID: <u>2</u>

VEGETATION

#	Dominant Plant Species	Stratum	Indicator	#	Dominant Plant Species	Stratum	Indicator
1.	<u>Typha domingensis</u>	<u>S</u>	<u>obl</u>	9.	_____	_____	_____
2.	<u>Baccharis salicifolia</u>	<u>S</u>	<u>facw</u>	10.	_____	_____	_____
3.	<u>Rorippa curvisiliqua</u>	<u>H</u>	<u>obl</u>	11.	_____	_____	_____
4.	<u>Pluchea odorata</u>	<u>S</u>	<u>obl</u>	12.	_____	_____	_____
5.	_____	_____	_____	13.	_____	_____	_____
6.	_____	_____	_____	14.	_____	_____	_____
7.	_____	_____	_____	15.	_____	_____	_____
8.	_____	_____	_____	16.	_____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC 100%
(excluding FAC-). _____

Remarks:

HYDROLOGY

<input checked="" type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake or Tide Gauge <input checked="" type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators <input checked="" type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Indicators Secondary Indicators (2 or more required); <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>5</u> (in). Depth of Free Water in Pit: _____ (in). Depth to Saturated Soil: _____ (in).	
Remarks:	

SOILS

Map Unit Name (Series and Phase): _____		Drainage Class: _____			
Taxonomy (Subgroup): _____		Field Observations Confirmed Mapped Type? Yes No			
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol		<input type="checkbox"/> Concretions			
<input type="checkbox"/> Histic Epipedon		<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils			
<input type="checkbox"/> Sulfidic Odor		<input type="checkbox"/> Organic Streaking in Sandy Soils			
<input checked="" type="checkbox"/> Aquic Moisture Regime		<input type="checkbox"/> Listed on Local Hydric Soils List			
<input type="checkbox"/> Reducing Conditions		<input type="checkbox"/> Listed on National Hydric Soils List			
<input type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Other (Explain in Remarks)			
Remarks:					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Wetland Hydrology Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Hydric Soils Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Is this Sampling Point Within a Wetland?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Remarks: Wetland = ACE approximately 25 feet; CDFG approx 32 feet				

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>Newport Village Park</u> Applicant/Owner: <u>City of Newport Beach</u> Investigator: <u>Linda Archer</u>	Date: <u>7/23/04</u> County: <u>Orange</u> State: <u>CA</u>
Do Normal Circumstances exist on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Is the site significantly disturbed (Atypical Situation)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Is the area a potential Problem Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If needed, explain on reverse.)	CommunityID: <u>Cat-tail marsh</u> Transect ID: _____ Plot ID: <u>3</u>

VEGETATION

#	Dominant Plant Species	Stratum	Indicator		#	Dominant Plant Species	Stratum	Indicator
1.	<u>Rorippa curvisiliqua</u>	<u>H</u>	<u>obl</u>		9.	_____	_____	_____
2.	<u>Pluchea odorata</u>	<u>S</u>	<u>obl</u>		10.	_____	_____	_____
3.	_____	_____	_____		11.	_____	_____	_____
4.	_____	_____	_____		12.	_____	_____	_____
5.	_____	_____	_____		13.	_____	_____	_____
6.	_____	_____	_____		14.	_____	_____	_____
7.	_____	_____	_____		15.	_____	_____	_____
8.	_____	_____	_____		16.	_____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

<input checked="" type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake or Tide Gauge <input checked="" type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators <input type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Indicators Secondary Indicators (2 or more required); <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>2</u> (in). Depth of Free Water in Pit: _____ (in). Depth to Saturated Soil: _____ (in).	

Remarks:

SOILS

Map Unit Name _____ Drainage Class: _____
(Series and Phase): _____
Taxonomy (Subgroup): _____ Field Observations
Confirmed Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input checked="" type="checkbox"/> Aquic Moisture Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No
Wetland Hydrology Present? Yes No
Hydric Soils Present? Yes No Is this Sampling Point Within a Wetland? Yes No

Remarks: Wetland = ACE approximately 10 feet; CDFG approx 18 feet

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>Newport Village Park</u> Applicant/Owner: <u>City of Newport Beach</u> Investigator: <u>Linda Archer</u>	Date: <u>7/23/04</u> County: <u>Orange</u> State: <u>CA</u>
Do Normal Circumstances exist on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Is the site significantly disturbed (Atypical Situation)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Is the area a potential Problem Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If needed, explain on reverse.)	CommunityID: <u>Coastal sage scrub</u> Transect ID: _____ Plot ID: <u>4</u>

VEGETATION

#	Dominant Plant Species	Stratum	Indicator		#	Dominant Plant Species	Stratum	Indicator
1.	<u><i>Osteospermum ecklonis</i></u>	<u>S</u>	<u>---</u>		9.	_____	_____	_____
2.	<u><i>Artemisia californica</i></u>	<u>S</u>	<u>----</u>		10.	_____	_____	_____
3.	<u><i>Rhus ovata</i></u>	<u>S</u>	<u>----</u>		11.	_____	_____	_____
4.	_____	_____	_____		12.	_____	_____	_____
5.	_____	_____	_____		13.	_____	_____	_____
6.	_____	_____	_____		14.	_____	_____	_____
7.	_____	_____	_____		15.	_____	_____	_____
8.	_____	_____	_____		16.	_____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks:

HYDROLOGY

<input checked="" type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake or Tide Gauge <input checked="" type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Indicators Secondary Indicators (2 or more required); <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in). Depth of Free Water in Pit: _____ (in). Depth to Saturated Soil: _____ (in).	

Remarks: Defined OHWM continues

SOILS

Map Unit Name (Series and Phase): _____	Drainage Class: _____
Taxonomy (Subgroup): _____	Field Observations Confirmed Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input type="checkbox"/> Aquic Moisture Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		
Wetland Hydrology Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Hydric Soils Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Is this Sampling Point Within a Wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Remarks: OHWM continues (approx 4 feet wide); however, channel is covered by a canopy of upland coastal sage scrub species. Soils have no hydric indicators.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>Newport Village Park</u> Applicant/Owner: <u>City of Newport Beach</u> Investigator: <u>Linda Archer</u>	Date: <u>7/23/04</u> County: <u>Orange</u> State: <u>CA</u>
Do Normal Circumstances exist on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Is the site significantly disturbed (Atypical Situation)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Is the area a potential Problem Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If needed, explain on reverse.)	CommunityID: <u>Cat-tail marsh</u> Transect ID: _____ Plot ID: <u>5</u>

VEGETATION

#	Dominant Plant Species	Stratum	Indicator		Dominant Plant Species	Stratum	Indicator
1.	<u>Typha domingensis</u>	<u>S</u>	<u>obl</u>		9.	_____	_____
2.	<u>Lemna sp.</u>	<u>H</u>	<u>obl</u>		10.	_____	_____
3.	<u>Salix lasiolepis</u>	<u>T</u>	<u>facw</u>		11.	_____	_____
4.	<u>Baccharis salicifolia</u>	<u>S</u>	<u>facw</u>		12.	_____	_____
5.	_____	_____	_____		13.	_____	_____
6.	_____	_____	_____		14.	_____	_____
7.	_____	_____	_____		15.	_____	_____
8.	_____	_____	_____		16.	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

<input checked="" type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake or Tide Gauge <input checked="" type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators <input checked="" type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Indicators Secondary Indicators (2 or more required); <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>6</u> (in). Depth of Free Water in Pit: _____ (in). Depth to Saturated Soil: _____ (in).	

Remarks:

SOILS

Map Unit Name _____ Drainage Class: _____
(Series and Phase): _____
Taxonomy (Subgroup): _____ Field Observations
Confirmed Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input checked="" type="checkbox"/> Aquic Moisture Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No
Wetland Hydrology Present? Yes No
Hydric Soils Present? Yes No Is this Sampling Point Within a Wetland? Yes No

Remarks: Wetland approximately 50 feet; ACE = Wet; CDFG approx 65 feet

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>Newport Village Park</u> Applicant/Owner: <u>City of Newport Beach</u> Investigator: <u>Linda Archer</u>	Date: <u>7/23/04</u> County: <u>Orange</u> State: <u>CA</u>
Do Normal Circumstances exist on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Is the site significantly disturbed (Atypical Situation)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Is the area a potential Problem Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If needed, explain on reverse.)	CommunityID: <u>Cat-tail marsh</u> Transect ID: _____ Plot ID: <u>6</u>

VEGETATION

#	Dominant Plant Species	Stratum	Indicator	#	Dominant Plant Species	Stratum	Indicator
1.	<u>Typha domingensis</u>	<u>S</u>	<u>obl</u>	9.	_____	_____	_____
2.	<u>Pluchea odorata</u>	<u>H</u>	<u>obl</u>	10.	_____	_____	_____
3.	<u>Salix lasiolepis</u>	<u>T</u>	<u>facw</u>	11.	_____	_____	_____
4.	<u>Baccharis salicifolia</u>	<u>S</u>	<u>facw</u>	12.	_____	_____	_____
5.	_____	_____	_____	13.	_____	_____	_____
6.	_____	_____	_____	14.	_____	_____	_____
7.	_____	_____	_____	15.	_____	_____	_____
8.	_____	_____	_____	16.	_____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

<input checked="" type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake or Tide Gauge <input checked="" type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators <input type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Indicators Secondary Indicators (2 or more required); <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in). Depth of Free Water in Pit: _____ (in). Depth to Saturated Soil: _____ (in).	

Remarks:

SOILS

Map Unit Name _____ Drainage Class: _____
(Series and Phase): _____
Taxonomy (Subgroup): _____ Field Observations
Confirmed Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input checked="" type="checkbox"/> Aquic Moisture Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No
Wetland Hydrology Present? Yes No
Hydric Soils Present? Yes No Is this Sampling Point Within a Wetland? Yes No

Remarks: Wetland approx 25 feet wide; ACE = Wet; CDFG approx 28 feet wide

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>Newport Village Park</u> Applicant/Owner: <u>City of Newport Beach</u> Investigator: <u>Linda Archer</u>	Date: <u>7/23/04</u> County: <u>Orange</u> State: <u>CA</u>
Do Normal Circumstances exist on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Is the site significantly disturbed (Atypical Situation)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Is the area a potential Problem Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If needed, explain on reverse.)	CommunityID: <u>Cat-tail marsh</u> Transect ID: _____ Plot ID: <u>7</u>

VEGETATION

#	Dominant Plant Species	Stratum	Indicator	#	Dominant Plant Species	Stratum	Indicator
1.	<u>Typha domingensis</u>	<u>S</u>	<u>obl</u>	9.	_____	_____	_____
2.	<u>Pluchea odorata</u>	<u>H</u>	<u>obl</u>	10.	_____	_____	_____
3.	<u>Scirpus microcarpus</u>	<u>S</u>	<u>obl</u>	11.	_____	_____	_____
4.	<u>Rorippa curvisiliqua var. occidentalis</u>	<u>H</u>	<u>obl</u>	12.	_____	_____	_____
5.	<u>Lemna sp.</u>	<u>H</u>	<u>obl</u>	13.	_____	_____	_____
6.	_____	_____	_____	14.	_____	_____	_____
7.	_____	_____	_____	15.	_____	_____	_____
8.	_____	_____	_____	16.	_____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks: _____

HYDROLOGY

<input checked="" type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake or Tide Gauge <input checked="" type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators <input checked="" type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Indicators Secondary Indicators (2 or more required); <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>1</u> (in). Depth of Free Water in Pit: _____ (in). Depth to Saturated Soil: _____ (in).	

Remarks:

SOILS

Map Unit Name _____ Drainage Class: _____
(Series and Phase): _____
Taxonomy (Subgroup): _____ Field Observations
Confirmed Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input checked="" type="checkbox"/> Aquic Moisture Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No
Wetland Hydrology Present? Yes No
Hydric Soils Present? Yes No Is this Sampling Point Within a Wetland? Yes No

Remarks: Wetland approx 25 feet wide; ACE = Wet; CDFG approx 45 feet wide

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>Newport Village Park</u> Applicant/Owner: <u>City of Newport Beach</u> Investigator: <u>Linda Archer</u>	Date: <u>7/23/04</u> County: <u>Orange</u> State: <u>CA</u>
Do Normal Circumstances exist on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Is the site significantly disturbed (Atypical Situation)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Is the area a potential Problem Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If needed, explain on reverse.)	CommunityID: <u>Cat-tail marsh</u> Transect ID: _____ Plot ID: <u>8</u>

VEGETATION

#	Dominant Plant Species	Stratum	Indicator		#	Dominant Plant Species	Stratum	Indicator
1.	<u>Rorippa curvisiliqua var. occidentalis</u>	<u>H</u>	<u>obl</u>		9.	_____	_____	_____
2.	<u>Pluchea odorata</u>	<u>H</u>	<u>obl</u>		10.	_____	_____	_____
3.	<u>Lobularia maritima</u>	<u>H</u>	<u>----</u>		11.	_____	_____	_____
4.	_____	_____	_____		12.	_____	_____	_____
5.	_____	_____	_____		13.	_____	_____	_____
6.	_____	_____	_____		14.	_____	_____	_____
7.	_____	_____	_____		15.	_____	_____	_____
8.	_____	_____	_____		16.	_____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 66%

Remarks:

HYDROLOGY

<input checked="" type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake or Tide Gauge <input checked="" type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators <input checked="" type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Indicators Secondary Indicators (2 or more required); <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>2</u> (in). Depth of Free Water in Pit: _____ (in). Depth to Saturated Soil: _____ (in).	

Remarks:

SOILS

Map Unit Name _____ Drainage Class: _____
(Series and Phase): _____
Taxonomy (Subgroup): _____ Field Observations
Confirmed Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input checked="" type="checkbox"/> Aquic Moisture Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No
Wetland Hydrology Present? Yes No
Hydric Soils Present? Yes No Is this Sampling Point Within a Wetland? Yes No

Remarks: Wetland approximately 10 feet wide; ACE approx. 13 feet; CDFG approx 25 ft

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>Newport Village Park</u> Applicant/Owner: <u>City of Newport Beach</u> Investigator: <u>Linda Archer</u>	Date: <u>7/23/04</u> County: <u>Orange</u> State: <u>CA</u>
Do Normal Circumstances exist on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Is the site significantly disturbed (Atypical Situation)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Is the area a potential Problem Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If needed, explain on reverse.)	CommunityID: <u>willows</u> Transect ID: _____ Plot ID: <u>9</u>

VEGETATION

#	Dominant Plant Species	Stratum	Indicator	#	Dominant Plant Species	Stratum	Indicator
1.	<u>Salix lasiolepis</u>	<u>T</u>	<u>facw</u>	9.	_____	_____	_____
2.	<u>Salix gooddingii</u>	<u>T</u>	<u>facw</u>	10.	_____	_____	_____
3.	<u>Baccharis salicifolia</u>	<u>S</u>	<u>facw</u>	11.	_____	_____	_____
4.	<u>Callistemon</u>	<u>T</u>	<u>----</u>	12.	_____	_____	_____
5.	_____	_____	_____	13.	_____	_____	_____
6.	_____	_____	_____	14.	_____	_____	_____
7.	_____	_____	_____	15.	_____	_____	_____
8.	_____	_____	_____	16.	_____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 75%

Remarks: CDFG approximately 40 feet wide

HYDROLOGY

<input checked="" type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake or Tide Gauge <input checked="" type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Indicators Secondary Indicators (2 or more required); <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in). Depth of Free Water in Pit: _____ (in). Depth to Saturated Soil: _____ (in).	

Remarks: Concrete lined channel underground; covered with large rocks/boulders

SOILS

Map Unit Name _____ Drainage Class: _____
(Series and Phase): _____
Taxonomy (Subgroup): _____ Field Observations
Confirmed Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input type="checkbox"/> Aquic Moisture Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No
Wetland Hydrology Present? Yes No
Hydric Soils Present? Yes No Is this Sampling Point Within a Wetland? Yes No

Remarks:

Appendix B: Determination of Jurisdictional Wetlands and Waters

Jurisdictional Criteria

The *Federal Manual for Identifying and Delineating Jurisdictional Wetlands (1987)* sets forth three mandatory criteria and a number of non-mandatory field indicators to use in evaluating whether or not an area is a jurisdictional wetland. The three mandatory criteria are hydrophytic vegetation, hydric soils, and wetland hydrology. The following paragraphs discuss the mandatory criteria, the field indicators, and other reference materials used to determine if each criterion has been met at the proposed project site.

Hydrophytic Vegetation

Hydrophytic vegetation is defined as plant life growing in water, soil or substrate that is at least periodically deficient in oxygen because of excessive water content. The U.S. Fish and Wildlife Service has published the *National List of Plant Species That Occur in Wetlands*, and divided plants into four groups based on their “wetland indicator status”: (1) obligate wetland plants (OBL) that occur almost always in wetlands under natural conditions; (2) facultative wetland plants (FACW) that usually occur in wetlands but occasionally are found in upland areas; (3) facultative plants (FAC) that are equally likely to occur in wetlands as well as upland; and (4) facultative upland plants (FACU) that usually occur in upland areas but occasionally are found in wetlands. An area has hydrophytic vegetation when, under normal circumstances, more than 50 percent of the composition of dominant plant species from all strata are obligate wetland (OBL), facultative wetland (FACW) and/or facultative species (FAC).

Hydric Soils

Hydric soils are defined as soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part. “Long enough” generally means one week during the growing season and soils that are saturated for this period usually support hydrophytic vegetation. The criteria for establishing the presence of hydric soils vary among different types of soils and between normal circumstances, disturbed areas, and problem areas. Due to their wetness during the growing season, hydric soils usually develop certain morphological properties that can be readily observed in the field. Prolonged anaerobic soil conditions typically lower the soil redox potential, causing a chemical reduction of some soil components, mainly iron oxides and manganese oxides. This reduction is typically reflected by the presence of iron or manganese concretions, gleying or mottling. Other field indicators of hydric soils include the presence of sulfidic material, an aquic or peraquic moisture regime, or a spodic horizon. (All organic soils, with the exception of Folists, are classified as hydric soils.)

Wetland Hydrology

Wetland hydrology is permanent or periodic inundation, or soil saturation for a significant period during the growing season. Numerous factors influence the wetness of an area, including

precipitation, stratigraphy, topography, soil permeability, and plant cover. At certain times of the year in most wetlands, and in certain types of wetlands at most times, wetland hydrology is quite evident, since surface water or saturated soils may be observed. Yet, in many instances, especially along the uppermost boundary of wetlands, hydrology is not readily apparent. Despite this limitation, hydrologic indicators can be useful for confirming that a site with hydrophytic vegetation and hydric soils still exhibits wetland hydrology. While hydrologic indicators are sometimes diagnostic of the presence of wetlands, they are generally either operationally impracticable (e.g., in the case of recorded data) or technically inaccurate (e.g., in the case of some field indicators) for delineating wetland boundaries.

The following hydrologic indicators, while not necessarily indicative of hydrologic events during the growing season or in wetlands alone, do provide evidence that inundation or soil saturation has occurred at some time: visual observation of inundation, visual observation of soil saturation, oxidized channels (rhizospheres) associated with living roots and rhizomes, water marks, drift lines, waterborne sediment deposits, water-stained leaves, surface scoured areas, morphological plant adaptations, and hydric soil characteristics.

Appendix C: Site Photographs

NORTHERN DRAINAGE



Facing north; cache basin at origination of drainage



At midway of drainage, facing north at wetlands



At midway of drainage, facing south at wetlands



End of wetlands; facing south, drainage is covered by upland vegetation

SOUTHERN DRAINAGE



Facing east; cache basin at origination of drainage



Facing east at wetlands



Facing west; end of wetlands, associated riparian vegetation continues

Appendix D: Floral Compendium

FLORAL COMPENDIUM

Angiosperms (*Dicotyledons*)

Asteraceae	Sunflower Family
<i>Artemisia californica</i>	California sagebrush
<i>Baccharis pilularis</i>	coyote brush
<i>Baccharis salicifolia</i>	mulefat
* <i>Centaurea melitensis</i>	toçalote
* <i>Chrysanthemum coronarium</i>	garland daisy
<i>Encelia californica</i>	California bush sunflower
<i>Gnaphalium californicum</i>	California everlasting
<i>Deinandra fasciculata</i> (was <i>Hemizonia</i>)	fascicled tarweed
<i>Heterotheca grandiflora</i>	telegraph weed
<i>Isocoma menziesii</i>	coastal goldenbush
<i>Lessingia filaginifolia</i>	California aster
<i>Osteospermum ecklonis</i>	African daisy
<i>Pluchea odorata</i>	marsh fleabane
Boraginaceae	Borage Family
<i>Amsinckia menziesii</i>	common fiddleneck
<i>Heliotropium curassavicum</i>	saltmarsh heliotrope
Brassicaceae	Mustard Family
* <i>Brassica nigra</i>	black mustard
* <i>Hirshfeldia incana</i>	short-podded mustard
* <i>Lobularia maritime</i>	sweet-alyssum
<i>Rorippa curvisiliqua</i> var. <i>occidentalis</i>	western yellow cress
Capparaceae	Caper Family
<i>Isomeris arborea</i>	bladderpod
* <i>Salsola tragus</i>	Russian thistle
<i>Eremocarpus setigerus</i>	dove weed
Fabaceae	Legume Family
<i>Lotus scoparius</i>	deerweed
Lamiaceae	Mint Family
<i>Salvia mellifera</i>	black sage
Myrtaceae	Myrtle Family
* <i>Eucalyptus</i> sp.	gum tree
* <i>Callistemon</i> sp.	bottle brush
Polygonaceae	Buckwheat Family
<i>Eriogonum fasciculatum</i>	California buckwheat

Salicaceae	Willow Family
<i>Salix gooddingii</i> <i>Salix lasiolepis</i>	black willow arroyo willow

Solanaceae	Nightshade Family
* <i>Nicotiana glauca</i>	tree tobacco

Angiosperms (Monocotyledons)

Cyperaceae	Sedge Family
<i>Scirpus microcarpus</i>	small-fruited bulrush

Lemnaceae	Duckweed Family
<i>Lemna</i> sp.	duckweed

Poaceae	Grass Family
* <i>Avena barbata</i>	slender wild oat
* <i>Avena fatua</i>	wild oat
* <i>Bromus diandrus</i>	ripgut grass
* <i>Bromus hordeaceus</i>	soft chess
* <i>Bromus madritensis</i> ssp. <i>Rubens</i>	foxtail chess
* <i>Cortaderia selloana</i>	pampas grass

Typhaceae	Cat-tail Family
<i>Typha angustifolia</i>	slender cattail

* Non-native species