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Hearing Date: November 15, 2013
Commission Action:

STAFF REPORT: CONSENT CALENDAR

Application Number: **5-08-142**

Applicant: Orange County Flood Control District

Agents: Nardy Khan & Sonica Kohli
Orange County Public Works,
Projects & Regulatory Permits.

Project Location: North levee of the East Garden Grove Wintersburg flood control channel from Graham Street (Station 74+00) downstream 3,800 feet to the "oil road bridge" (Station 36+00), Huntington Beach, Orange County.

Project Description: To make permanent the installation of approximately 3,800 linear feet of 30- to 40- foot deep steel sheet piles, installed pursuant to emergency Coastal Development Permit 5-07-025-G.

Staff Recommendation: Approval with conditions

SUMMARY OF STAFF RECOMMENDATION

Staff is recommending **approval** of the request to make permanent the work conducted under Emergency Coastal Development Permit 5-07-025-G with two special conditions confirming that 1) no changes to existing public access are proposed or authorized by this coastal development permit, and 2) this coastal development permit does not approve or preclude future habitat restoration within the project site and vicinity. Monitoring following the installation of the sheet piles confirms that as constructed under the approved emergency coastal development permit, the sheet pile installation has had no adverse impacts on wetland or ESHA. As conditioned, the project is consistent with Coastal Act Section 30236 regarding channelization of streams; Section 30233 regarding protection of wetlands; Section 30240 regarding protection of Environmentally Sensitive Habitat Areas; Sections 30230 and 30231 regarding protection of marine resources and biological productivity, and Section 30210 regarding public access. The applicants agree with the recommendation.

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APPENDICES

EXHIBITS

I. MOTION AND RESOLUTION

Motion: *"I move that the Commission **approve** the coastal development permit applications included on the consent calendar in accordance with the staff recommendations."*

Staff recommends a **YES** vote. Passage of this motion will result in approval of all the permits included on the consent calendar. An affirmative vote by a majority of the Commissioners present is needed to pass the motion.

Resolution:

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3 of the Coastal Act. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. STANDARD CONDITIONS

This permit is granted subject to the following standard conditions:

1. **Notice of Receipt and Acknowledgment.** The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.

3. **Interpretation.** Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.

4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS

This permit is granted subject to the following special conditions:

1. **Public Access**. No changes to existing public access are proposed by the applicant under this coastal development permit and none are authorized by this coastal development permit.

2. **Habitat**. This coastal development permit does not approve or preclude future habitat restoration within the project site and vicinity.

IV. FINDINGS AND DECLARATIONS

A. PROJECT DESCRIPTION & LOCATION

Project

The applicant proposes to make permanent approximately 3,800 linear feet of 30- to 40- foot deep steel sheet piles, installed pursuant to emergency coastal development permit 5-07-025-G. The project is located along the north levee of the East Garden Grove Wintersburg flood control channel from Graham Street (Station 74+00) downstream to the "oil road bridge" (Station 36+00) (See Exhibit 1). As allowed under the emergency permit, the sheet piles were driven into the levee through the unimproved, unvegetated levee-top maintenance road. The sheet piles were installed using a "Giken Driver" which presses the sheet piles into place in lieu of hammering or using vibration techniques. As approved and as installed, the sheet piles protrude approximately two feet above the top of the existing levee. All work was conducted within the Orange County Flood Control District (OCFCD) right-of-way. No dredging or import of material occurred. No additional work beyond that approved and constructed under the emergency permit is proposed under this follow-up permit application.

Emergency Coastal Development Permit No. 5-07-025-G was issued on November 26, 2007 subject to fifteen conditions of approval (see Exhibit 3). Among the conditions of approval was a requirement to submit an application for a follow-up regular coastal development permit (Condition No.15). This Coastal Development Permit Application (5-08-142) is intended to fulfill that condition of the emergency coastal development permit.

The nature of the emergency that required action more quickly than the time needed to process a regular coastal development permit was the extreme deterioration of the levee and the impending rainy season. Preceding submittal of the emergency request, the applicant had submitted a regular coastal development permit for levee repair work, but due to the location of the repair work and the extensive nature of the then proposed project (described below), questions about the project remained and the application had not been deemed complete. Around the same time the rainy season flood threat approached. Rather than proceed with the regular coastal development permit process, the applicant revised the project to one that was the minimum necessary to achieve the goal of flood protection for the upcoming rainy season. Those changes eliminated direct impacts to environmentally sensitive areas and wetland that had previously been proposed. Without the work conducted under the emergency coastal development permit, protection of inland developed areas from flooding could not have been assured.

It should also be noted that a project located adjacent to and north of the levee and adjacent to and south of Graham Street had been under review for LCP amendments and a coastal development permit in the time leading up to the County's levee repair proposal. That project (known as Parkside, CDP 5-11-068) included flood control measures that would significantly reduce flood hazard to the same inland areas threatened by the levee's deteriorated condition. Although the Parkside project's coastal development permit was approved, the permit still has not been issued and the flood control aspects of that development have not yet been constructed. The levee sheet piles approved under this coastal development permit will remain in place and be incorporated into the Parkside project's levee repair/reconstruction.

Site Location

The East Garden Grove Wintersburg flood control channel is part of a channel system (CO5/CO6) that drains a large inland watershed which eventually discharges into Outer Bolsa Bay and then into Huntington Harbour (via a culvert under Warner Ave.) and ultimately to the Pacific Ocean. The channel is tidally influenced for its entire length within the coastal zone. The channel flow is controlled by tide gates located downstream of the subject project. The channel is north of and adjacent to the Bolsa Chica Ecological Reserve and south of the areas known as Brightwater CDP 5-05-020 (on the Bolsa Chica Mesa) and Parkside CDP 5-11-068 (adjacent to Graham Street). Residential development is located immediately south of the south levee from Graham Street to just downstream of Bates Circle. In the project vicinity, the coastal zone boundary falls along Warner Avenue.

B. CHANNELIZATION

Section 30236 of the Coastal Act states:

> *Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (1) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the floodplain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish and wildlife habitat.*

The proposed project is the repair of an eroded flood control channel bank, thus it is a channelization allowed under item (2) of Section 30236 above, flood control projects. The issues the project raises with regard to consistency with Coastal Act Section 30236 are whether the project as proposed is the only feasible method for protecting existing structures and whether that protection is necessary to protect public safety and/or existing development (i.e. is the project that is proposed the least environmentally damaging feasible alternative), and whether the best mitigation measures feasible have been incorporated into the project.

The proposed retention of the sheet pile levee repair is necessary to protect existing structures. Much of the surrounding area is susceptible to flooding. High tides combined with storm surge will create tidal flooding in the project vicinity. The neighborhood north of the subject site, just west of Graham Street, and additional areas inland are located within the flood path and are at lower elevations than parts of the surrounding area. These low lying surrounding neighborhoods lie at elevations as low as 2.6 feet (MSL NADV 88) below sea level. Based on information submitted

with the Parkside project (5-11-068) and accepted by the Commission's technical staff, in a worst case flooding scenario (high tide, storm surge, and failure of the lower reaches of the levees), up to 170 acres of inland developed area would be flooded under current levee conditions. Although the sheet pile project alone may not be adequate to protect these areas from flooding beyond the immediately foreseeable future, it is expected to be adequate in the near term. And without the sheet piles, the risk of flooding would remain unacceptably high.

Alternatives

The applicant considered four possible project alternatives. These included an earthen levee buttress, traditional non-Giken sheet pile wall, Enviro-block retaining structure, and the "no project" alternative. These potential alternatives are discussed below.

Earthen Levee Buttress

This was initially the applicant's preferred alternative because it was considered by the applicant to be the least difficult project to construct. This alternative could be constructed within the existing right-of-way because small earth moving equipment can be utilized and safely operated on the existing, though deteriorated levee maintenance road. This alternative was originally proposed prior to the emergency coastal development permit request as described previously. However, this alternative would have adversely impacted ESHA and wetland. Rather than pursue this alternative, the applicant instead requested to move forward with the subject sheet pile project.

Traditional Non-Giken Sheet Pile Wall

The applicant's assessment of this alternative concluded that it would require the levee to be lowered and widened to accommodate the traditional sheet pile driving equipment. This alternative would create adverse biological impacts on both the water side and the land side of the levee. Thus, this alternative was deemed by the applicant to be infeasible and not preferred.

Enviro-Block Retaining Structures

The equipment necessary to construct this alternative would require construction of a 10-foot wide access road, which would need to be located almost entirely outside of the County's right-of-way, necessitating real estate or easement acquisition by the County. Moreover, this alternative would also have adverse biological impacts due to the associated access road construction requirement, which unavoidably would have impacted wetland and ESHA. Consequently, the applicant deemed this alternative infeasible due to acquisition issues and wetland and ESHA impacts.

No Project Alternative

This alternative assumes no emergency repair work has been done and no other work would be undertaken. The applicant (OCFCD) summarized this alternative in its emergency coastal development permit request as follows:

> *"The No Project alternative would jeopardize the safety of the people and property that the OCFD is committed and obligated to protect under the Orange County Flood Control District Act of 1927. Impacts to nearby coastal wetlands and ESHA would also occur should the levee be breached. The associated costs of the No Project alternative is estimated to be hundreds of millions of dollars and would jeopardize the health, safety, and welfare of the public, and does not solve the flood risk problem. Impacts associated with the*

No Project alternative will outweigh any other alternative; this alternative was deemed infeasible and would not address the emergency condition."

Alternatives – Conclusion

Of the alternatives considered, all but the proposed alternative of retaining the Giken driven sheet piles would result in adverse impacts on wetland and ESHA. In addition, the no project alternative would put extensive inland development at continued flood risk. Retention of the Giken driven sheet piles is the applicant's preferred alternative. This alternative achieves the goals of both near-term flood protection of inland development as well as avoiding adverse impacts on adjacent ESHA and wetland. Thus, the proposed alternative, retention of the sheet piles in place is the preferred alternative. Therefore, the Commission finds the applicant's preferred alternative to be an acceptable alternative. Of the alternatives considered, none have greater environmental benefits, and this alternative achieves the goal of the project which is to protect existing inland development from flood hazard. Therefore, the Commission finds the proposed project to be consistent with Section 30236 in that it is an allowable reason for channelization (flood control project) and that it is the least environmentally damaging option to achieve flood protection.

C. HABITAT

Section 30233 of the Coastal Act states, in pertinent part:

(a) The diking, filling or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following [uses] . .

Section 30240 of the Coastal Act states:

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.
(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be compatible with the continuance of those habitat and recreation areas.

Section 30233 of the Coastal Act limits the fill or diking of wetlands to seven specifically enumerated uses, requires that any allowable fill or diking must be the least environmentally damaging alternative and must provide adequate mitigation to offset the effects of any adverse wetland impacts. Also, Section 30240 of the Coastal Act requires that environmentally sensitive habitat areas (ESHAs) be protected from significant disruption and that only uses dependent on the ESHA be allowed within the ESHA. In addition, Section 30240 requires that development in areas adjacent to ESHA be sited and designed to prevent impacts that would significantly degrade the ESHA areas, and that development be compatible with the continuance of the ESHA.

The proposed levee work (retention of the sheet piles installed under the emergency permit) is located in close proximity to wetland and ESHA areas, as described below. Thus, consideration must be given to potential impacts to these sensitive habitats by the levee repair work.

Wetland

Wetlands are important because they often provide critical habitat, nesting sites, and foraging areas for many species, some of which are threatened or endangered. In addition, wetlands can serve as natural filtering mechanisms to help remove pollutants from storm runoff before the runoff enters into streams and rivers leading to the ocean. Further, wetlands often have the capacity to serve as natural flood retention areas. Another critical reason for preserving, expanding, and enhancing Southern California's remaining wetlands is because of their scarcity. As much as 75% of coastal wetlands in southern California have been lost, and, statewide up to 91% of wetlands have been lost.

Historically, this site was part of the extensive Bolsa Chica Wetlands system and was part of the Santa Ana River/Bolsa Chica complex. In the late 1890s the Bolsa Chica Gun Club completed a dam with tide gates. In the 1930s, agricultural ditches were introduced to the area, and in 1959, the subject East Garden Grove-Wintersburg flood control channel was constructed. All of these projects affected the area's hydrology. Regardless, wetlands persist throughout the vicinity today.

In its actions on the Parkside site, including HNB MAJ 1-06 (Land Use Plan amendment), HNB MAJ 2-10 (Implementation Plan amendment), and Coastal Development Permit 5-11-068, the Commission recognized wetland areas on that site. One of the wetland areas recognized through this review is an area known as the "CP" wetland, located in the southwest corner of the Parkside site. The CP wetland is adjacent to portions of the north levee of the flood control channel, including a portion of the sheet pile project site (See Exhibit 4).

The hydrologic conditions that support the wetland vegetation on the lower portions of the CP wetland are complex and not completely understood. The degree to which groundwater influences the vegetation and wetland function is not completely known. Thus, whether installation of sheet piles to depths of 30 and 40 feet between the CP wetland and the channel would have adverse impacts on the CP wetland was not clear. Consequently approval of the emergency coastal development permit for the sheet pile installation was conditioned upon, among other things, hydrologic and vegetation monitoring for these potential impacts to the CP wetland.

Initiation of the required monitoring was delayed due to access issues onto the adjacent private property that was to be monitored. Eventually the OCFCD did gain the ability to access the site and was able to commence the required monitoring. Condition of Approval No. 9 required that if the required monitoring revealed adverse impacts to the CP wetland as a result of the sheet pile installation, the applicant would be required to mitigate such impacts at a minimum ratio of 4:1 (mitigation to impact). The applicant carried out the required monitoring for the required three-year monitoring period following the sheet pile installation. The monitoring revealed very little change in wetland conditions, showing however a slight increase in overall wetland vegetation coverage. The final monitoring report (Report on Surface Water Hydrology and Wetland Vegetation in 2012 – Year Four of Four, prepared by LSA, dated September 2012), concludes:

> *"Although there have been observable changes in vegetation from 2009 to 2012, none of these changes are statistically significant. There is a readily observable expansion of vegetation into areas that were previously mostly unvegetated. Also, there has been an increase in the total number of wetland-dominated quadrats. This is consistent with the*

> *overall decrease in percent cover of exotic species and overall increase in percent cover of perennial wetland species, especially frankia."*

The final monitoring report, and all previous monitoring reports, were reviewed by the Commission's staff ecologist. In his review of the final monitoring report, the staff ecologist states:

> "*I have received the 2012 monitoring report from LSA with the cover letter from Nardy Khan. After 4 years of vegetation monitoring, there is no evidence of negative effects of the sheetpile on the CP wetlands. There has been a modest decrease in the amount of bare ground, a modest increase in the cover of the natives, an increase in the area that would qualify as a wetland, and a substantial decrease in the cover of weeds. Although not apparent in the sampling data, comparison of the 2009 and 2012 aerial photos suggest that the area disturbed by tracks and paths [unrelated to the levee project] has been substantially revegetated.*"

Based on the wetland monitoring conducted over the required monitoring period, it can be concluded that the sheet pile project has had no impact on the adjacent CP wetland. Therefore, no mitigation is required. Because the project did not adversely impact wetland areas and no diking of wetlands has occurred, the project can be found to be consistent with Section 30233 of the Coastal Act regarding diking of wetlands.

ESHA

The Parkside and Brightwater sites immediately north of and adjacent to the levee project (See Exhibit 1) also contain environmentally sensitive habitat areas (ESHA). On the Parkside site's southwestern boundary, at the base of the bluff, is a line of Eucalyptus trees that continues west onto the lower Brightwater site. The trees within this "eucalyptus grove" constitute an environmentally sensitive habitat area (ESHA) due to the important ecosystem functions they provide to a suite of raptor species. These eucalyptus trees are used for perching, roosting, or nesting by at least 12 of the 17 species of raptors that are known to occur at Bolsa Chica. Although it is known as the "eucalyptus grove", it also includes several palm trees and pine trees that are also used by raptors and herons. None of the trees are part of a native plant community. Nevertheless, this eucalyptus grove has been recognized as ESHA by multiple agencies since the late 1970's (USFWS, 1979; CDFG 1982, 1985) not because it is part of a native ecosystem, or because the trees in and of themselves warrant protection, but because of the important ecosystem functions it provides. Some of the raptors known to use the grove include the white tailed kite, sharp-shinned hawk, Cooper's hawk, and osprey. Many of these species are dependent on both the Bolsa Chica wetlands and the nearby upland areas for their food. These Eucalyptus trees were also recognized as ESHA by the Coastal Commission in prior actions including its 2006 approval the Bolsa Chica LCP area (although that approval eventually lapsed), the Coastal Commission's approval of the adjacent Brightwater development (Coastal Development Permit 5-05-020), Parkside development (Coastal Development Permit 5-011-068) and its actions on the Land Use Plan Amendment (HNB-MAJ-1-06) and Implementation Plan Amendment (HNB-MAJ-2-10) for the Parkside site. The southwestern grove of Eucalyptus trees is also recognized in the City of Huntington Beach certified Local Coastal Program as ESHA.

As described in Appendix B, earlier levee repair proposals and other alternatives considered would have adversely impacted the adjacent eucalyptus ESHA by removing ESHA trees and trimming other ESHA trees. However, the sheet pile project proposed for retention does not have these

adverse impacts. The levee repair project was necessary to protect inland development from flooding and was accomplished without impacts to ESHA.

In addition, the levee has coexisted with the Eucalyptus ESHA for decades. The sheet pile repair is not expected to create adverse impacts to the ESHA now. The placement of the emergency sheet piles appears to have had no effect on the ESHA, thus it is compatible with the ESHA's continuance. Therefore, the project can be found to be consistent with Section 30240 of the Coastal Act regarding protection of ESHA.

D. PUBLIC ACCESS AND RECREATION

Section 30210 of the Coastal Act states:

> *In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.*

Section 30210 of the Coastal Act requires that maximum public access and recreational opportunities be provided. Currently, no formal public access exists on the flood control channel north levee (i.e. the County doesn't formally recognize the north levee as a public trail and hasn't enhanced it for formal public use). Nevertheless, the public does make use of the north levee for recreation and coastal access.

Emergency coastal development permit 5-07-025-G Condition of Approval No. 13 requires:

> "*Public access along the top of the levee shall be considered as part of the follow-up application required in Special Condition No. 15* [of the emergency permit]. *The proposed sheet piles shall be installed in a manner that preserves the opportunity for the incorporation of future public access/bike trail along the top of the levee in the follow-up application.*"

The subject application is the follow-up application required by the Condition of Approval cited above, thus consideration of the provision of public access upon the levee within the area where the sheet piles were installed is required at this time. The sheet piles were installed from Graham Street downstream to the Oil Road Bridge.

With implementation of the development approved under Coastal Development Permit 5-11-068 (Parkside), the north levee would be improved as described previously, including a public access way on the north levee from Graham Street downstream to and including that project's Vegetated Flood Protection Feature (VFPF, described in Appendix B). It should be noted, however, that the development approved under Coastal Development Permit 5-11-068 does not include public access or any improvements on the levee downstream of that project's VFPF. At this point in time, although Coastal Development Permit 5-11-068 has been approved by the Coastal Commission, the permit has not been issued pending compliance with the special conditions of approval. The Parkside project applicant, Shea Homes, is actively pursuing condition compliance and hopes to begin construction on that project as soon as the permit is issued.

The County's (applicant's) follow-up project proposal (subject proposal) does not include public access improvements on the levee, including the area downstream of the Parkside project's approved VFPF. In its current state, informal public access does exist on the levee from Graham Street and downstream to the Oil Road Bridge, the entire area subject to this permit. And, as proposed, the project includes only retention of the sheet piles and does not include any components (such as gates, etc.) that would interfere with the on-going informal access on the levee.

Providing improved public access on the levee in the area downstream of the future Parkside project's public access improvements is difficult because it would require widening the top of the levee to accommodate a public trail. All the information contained in the related coastal development permits and permit applications, demonstrates that widening the top of the levee would require widening the base of the levee and thus would result in the adverse impacts to the CP wetland and Eucalyptus ESHA described previously in the project alternatives section of this staff report. Because at this time it appears that the provision of an improved public trail adjacent to the CP wetland and the Southern Eucalyptus ESHA would create adverse impacts on those resources, a requirement to provide an improved public trail on the levee downstream of the Parkside access improvements is not imposed at this time.

However, habitat restoration has been identified as desirable in the area including the north levee downstream of the future VFPF by various resource agencies involved with the Bolsa Chica Ecological Reserve. There are currently no immediate plans for such restoration however. Habitat restoration in the area is considered desirable because the area is either in public ownership and/or designated conservation, which increases the feasibility of habitat restoration. Moreover, habitat restoration in the area is considered desirable because much of the surrounding area has been restored either at the Bolsa Chica Ecological Reserve, as part of the Brightwater project, or is expected to be restored as part of the future Parkside project. A future habitat restoration project may also incorporate public access as a component of that project. Or, at some point in the future, a project to provide public access on the levee that would not diminish the value of the adjacent habitat may be developed.

Currently the sheet piles are necessary to protect inland areas from flooding, but if the approved levee improvements and VFPF are constructed as approved under the Parkside project, then the subject sheet piles may no longer be required for flood protection. If a future habitat restoration plan and/or public access plan includes removal or modification of the sheet piles to better accommodate those plans, that option should be retained. It is important that approval of the proposed project (retention of the sheet piles) not preclude the possibility of future habitat restoration and/or public access. Therefore, Special Condition No. 2 is imposed which confirms that this coastal development permit does not approve or preclude future habitat restoration within the project site and vicinity. Therefore, the Commission finds that only as conditioned is the proposed project consistent with Section 30240 of the Coastal Act regarding the protection and continuance of sensitive habitat.

In addition, it is important to assure that the existing informal public access on the north levee continues and that nothing in the current proposal would result in reducing or eliminating this on-going public access. Section 30210 of the Coastal Act requires that maximum public access and recreational opportunities be provided. In addition, the City of Huntington Beach certified LCP Land Use Plan (not the standard of review for this project, but used as a guidance document) contains the following policy:

> *Encourage the utilization of easements and/or rights-of-way along **flood control channels**, public utilities, railroads and streets, wherever practical, for the use of bicycles and/or pedestrian (emphasis added).*

Installation of gates or similar measures along the north levee would interfere with continued public pedestrian use of the trail, and would be inconsistent with Section 30210 of the Coastal Act which requires that public access be maximized. In order to make clear that informal public access along the north levee between Graham Street to the Oil Road Bridge shall not be interfered with, Special Condition No. 1 is imposed which confirms that no changes to existing public access are proposed by the applicant under this coastal development permit and none are authorized by this coastal development permit. Therefore, the Commission finds that only as conditioned is the proposed project consistent with Section 30210 of the Coastal Act regarding maximizing public access.

E. MARINE RESOURCES & WATER QUALITY

Section 30230 of the Coastal Act states:

> *Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.*

Section 30231 of the Coastal Act states:

> *The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.*

Section 30230 of the Coastal Act requires that marine resources be protected. Section 30231 of the Coastal Act requires that the biological productivity of coastal waters be maintained, and where feasible, restored. In addition, Sections 30230 and 30231 require that the quality of coastal waters be maintained and protected from adverse impacts.

The emergency repair project employed measures to help assure protection of coastal waters and marine resources as specified in Condition of Approval No. 6 of the Emergency Coastal Development Permit. (See Exhibit 3). These measures include: no construction materials, debris, waste, oil or liquid chemicals placed or stored where it may be subject to wave erosion and dispersion, stormwater, or where it may contribute to or come into contact with nuisance flow; all debris resulting from construction activities be removed from the site within 1 day of completion of construction; no machinery or construction materials not essential for project implementation allowed at any time in channel waters; if turbid conditions are generated during construction, a silt

curtain be utilized to minimize and control turbidity to the maximum extent practicable; all stock piles and construction materials be covered, enclosed on all sides, shall be located as far away as possible from drain inlets and any waterway, and shall not be stored in contact with the soil; all debris and trash be disposed of in the proper trash and recycling receptacles at the end of each construction day; the discharge of any hazardous materials into coastal waters or any receiving waters is prohibited; all temporary construction access measures (e.g. access ramps) be removed in their entirety upon completion of the emergency work and the area restored to the pre-construction condition. Thus, consistent with work carried out under the Emergency Coastal Development Permit, the project is consistent with Sections 30230 and 30231 of the Coastal Act regarding protection of biological productivity and marine resources.

F. JURISDICTION

The subject project is located within the flood control channel's north levee within the City of Huntington Beach and within areas unincorporated Orange County. The coastal zone boundary in the project vicinity runs along the inland right-of-way of Graham Street.

The City of Huntington Beach has a certified Local Coastal Program for most of the geographic area of the City. The residential area south of the channel between Graham Street and Bates Circle falls within the City's certified LCP area. Downstream of Bates Circle, south of the south levee is the Bolsa Chica Ecological Reserve (BCER), which is in unincorporated Orange County. There is no certified LCP for this area (Bolsa Chica LCP area). On the north side of the channel, at Graham Street, is an area known as the Parkside site. This area was an area of deferred certification at the time the City's LCP was certified. Recently, an LCP amendment for this area was certified by the Commission (HNB LCPA 1-06 Land Use Plan; HNB LCPA 1-10 Implementation Plan), and so the Parkside area is now within the City of Huntington Beach LCP jurisdiction. West of (downstream) of the Parkside Estates site, the area immediately north of the channel is known as the Brightwater site. The Brightwater site was recently annexed into the City of Huntington Beach. There is not yet a certified LCP for the Brightwater area.

The entire channel within the coastal zone is tidally influenced and therefore coastal development permit jurisdiction remains with the Coastal Commission even after all the surrounding areas of the City of Huntington Beach and of unincorporated Orange County become certified.

All work occurs within the Orange County flood control channel right of way. The channel is tidally influenced for its entire length within the coastal zone. Pursuant to Coastal Act Section 30519(b), development review authority for "development proposed or undertaken on any tidelands, submerged lands, or on public trust lands, whether filled or unfilled, lying within the coastal zone" remains with the Coastal Commission. Therefore, the standard of review for the subject coastal development permit application is the Chapter 3 policies of the Coastal Act.

G. LOCAL COASTAL PROGRAM

The subject site is adjacent to two Local Coastal Program (LCP) areas, the City of Huntington Beach and the unincorporated area of Orange County known as the Bolsa Chica LCP area. The City of Huntington Beach has a certified Local Coastal Program. The area known as Parkside north of the project site, a former area of deferred certification, was recently added to the City's certified LCP. The Brightwater site, located north of the levee, was annexed into the City recently, but has not yet been incorporated into the City's LCP. The area known as the Goodell site, is an

unincorporated pocket area of County area. It is not immediately adjacent to the flood control channel, but is near to it. The City has begun the annexation process for this area, but at this time it remains an unincorporated County area and there is no certified LCP for this area. Downstream and south of the project site is the Bolsa Chica Ecological Reserve (BCER). Efforts at certifying this area in the past were not successful and the area remains an uncertified area.

The channel is tidally influenced for its entire length within the coastal zone. Pursuant to Coastal Act Section 30519(b), development review authority for "development proposed or undertaken on any tidelands, submerged lands, or on public trust lands, whether filled or unfilled, lying within the coastal zone" remains with the Coastal Commission. Therefore, permit authority will remain with the Coastal Commission and the standard of review for development in this area will remain the Chapter 3 policies of the Coastal Act. In any case, approval of the project, as conditioned, will not prejudice the ability of each of the adjacent local governments, City of Huntington Beach (for the Brightwater and eventually the Goodell site) and the County of Orange (for the Bolsa Chica area), to prepare LCPs that are in conformity with the provisions of Chapter 3 of the Coastal Act.

H. CALIFORNIA ENVIRONMENTAL QUALITY ACT

Section 13096 of the Commission's regulations requires Commission approval of Coastal Development Permit applications to be supported by a finding showing the application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

For the proposed project, the County of Orange is the lead agency for CEQA purposes. An addendum to Environmental Impact Report No. 560 (evaluating improvements to the entire East Garden Grove-Wintersburg (CO5)/Oceanview Channel (CO6) flood control system, February 1998) was prepared for the north levee repair project that included the buttress component. It was prepared for the Orange County Public Works Department by BonTerra Consulting, dated November 2008. The proposed project, as conditioned, has been found consistent with the marine resources and habitat protection, water quality, and public access policies of the Coastal Act. As conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment. Therefore, the Commission finds that the proposed project can be found consistent with the requirements of the Coastal Act to conform to CEQA.

Appendix A - Substantive File Documents

Emergency Coastal Development Permit No. 5-07-025-G (Orange County Flood Control District) and related application file;

Coastal Development Permit 5-09-209 (Orange County Public Works) and related application file;

Coastal Development Permit 5-11-068 (Shea Homes) and related application file;

Vegetation Monitoring Plan, East Garden Grove-Wintersburg Flood Control Channel, Emergency Sheetpile Installation – CDP 5-07-025-G, prepared by LSA, Revised May 2009;

Monthly Ground Water Level Report, prepared by Environ International: March 2008, April 2008, May 2008, June 2008, July 2008, & August 2008;

Report on Surface Water Hydrology and Wetland Vegetation in 2009 – Baseline Analysis (Year One of Four), prepared by LSA, July 2009;

Report on Surface Water Hydrology and Wetland Vegetation in 2010 (Year Two of Four), prepared by LSA, August 2010;

Report on Surface Water Hydrology and Wetland Vegetation in 2011 (Year Three of Four), prepared by LSA, August 2011;

Report on Surface Water Hydrology and Wetland Vegetation in 2012 (Year Four of Four), prepared by LSA, September 2012;

City of Huntington Beach Local Coastal Program (guidance document).

APPENDIX B

EAST GARDEN GROVE WINTERSBURG CHANNEL APPLICATION/PERMIT HISTORY:

Regular Coastal Development Permit Application 5-07-025

Prior to submitting the emergency coastal development permit request, the County had submitted a regular coastal development permit application (5-07-025) requesting to restore the north levee by constructing an earthen buttress on the outside (non-channel side) of the levee using compacted fill placed at the toe of the levee slope. That project included a 2:1 slope from the top of the levee to the outer (non-channel) edge of the OCFCD's right of way. Construction of the buttress would have required import of up to 4,000 cubic yards of compactable levee-grade material onto the site, as well as excavation of 3,000 cubic yards of on-site materials, which would have been removed and recompacted on-site. Also previously proposed was grading of the levee top in order to widen the levee top maintenance road as necessary to provide adequate width for construction equipment to build the then-proposed buttress. All work and the final project footprint would have been located within the County's flood control channel right of way.

The earthen buttress levee project was intended to address urgent repair needs necessary to protect inland, developed areas from flooding. Information submitted by the Flood Control District with the application indicates that the levee was built in 1959 to interim design standards as part of the 1956 Bond Act. It was designed to carry less than 65 percent of the 25-year peak discharge and was not designed to provide protection against a 100-year storm event. In addition, the levee had experienced significant erosion and degradation during the 2005 rainy season, a very heavy rainfall year for Orange County. Moreover, burrowing animals such as gophers, rats, and mice exacerbated the eroded condition of the levee by burrowing holes into the levee's side slopes.

The earthen buttress was proposed as a portion of the solution to existing flood hazard created by the levee's under-designed and deteriorated state. Additional work would still have ultimately been required to meet current 100-year storm standards necessary to provide adequate protection to existing inland development. However, the County proposed the interim repair due to the immediate risk posed by the deteriorated condition of the levee and the imminent flood hazard.

Even though all work was to have been confined within the right-of-way, impacts to environmentally sensitive habitat area (ESHA) and wetlands would have unavoidably resulted from the project. Identified impacts included complete removal of eight trees from the adjacent ESHA, as well as trimming of other trees within the ESHA. In addition, the footprint of the earthen berm would have extended into an adjacent wetland, resulting in wetland fill.

In reviewing the application, Coastal Commission staff requested additional information to determine whether alternatives to the proposed buttress repair existed that could have lessened or avoided the adverse impacts to ESHA and wetland. However, as the 2007-2008 rainy season drew near, the applicant (Orange County Flood Control District) grew concerned that levee repairs would not be complete in time to prevent flooding of inland/upstream residences and other development. On October 16, 2007 the Orange County Board of Supervisors declared a local emergency for the purposes of awarding a construction contract under the emergency provisions of the California Contract Code. Ultimately, the County withdrew regular coastal development permit application 5-07-025 and requested an emergency coastal development permit to address levee repair needs.

Emergency Coastal Development Permit No. 5-07-025-G

Emergency coastal development permit application, 5-07-025-G, requested a project other than the earthen buttress previously proposed under regular permit application 5-07-025. Rather than the earthen buttress and related development described above, the emergency coastal development permit application requested installation of steel sheet piles to be driven into the levee's existing unimproved, unvegetated maintenance road. The sheet pile levee repair proposal avoided direct impacts to both ESHA and wetland. The emergency permit was approved and the sheet pile repair work constructed. The subject coastal development permit application, 5-08-142, is the required follow-up permit for work conducted under approved emergency coastal development permit 5-07-025-G. Only the work previously approved and constructed under emergency coastal development permit 5-07-025-G is included in the current permit application 5-08-142.

Emergency coastal development permit 5-07-025-G was approved subject to 15 conditions (See Exhibit 3). At the time the emergency permit was contemplated, concerns were raised regarding whether the placement of sheet piles 30 and 40 feet deep between the flood control channel and the wetland area would affect the local hydrology of the wetland, by potentially affecting the water source to the wetland. In order to address this concern, Condition of Approval No. 9 was imposed which required monitoring of the wetland area, including wetland hydrology and vegetation. To document the pre-construction condition, monitoring was required to begin prior to sheet pile construction and, if feasible, to include a full tidal cycle. Condition of Approval No. 9 required preparation of monitoring reports including an analysis of whether wetland impacts have occurred as a result of the sheet pile installation, to be submitted monthly for the first six months following sheet pile installation and annually thereafter for three years. If impacts were identified, a mitigation plan was required. The required monitoring was duly undertaken by the applicant.

Coastal Development Permit Application No. 5-08-142

It should be noted, however, that the project originally proposed under the subject follow-up permit application, 5-08-142, initially also included, in addition to retention of the sheet piles, construction of the earthen buttress previously requested under original coastal development permit application 5-07-025 (subsequently withdrawn). The buttress portion of the project continued to raise the same issues regarding adverse impacts to ESHA and wetland. Consequently, additional information was requested regarding the proposed project in order to determine whether there were alternatives to that project that could lessen

or avoid adverse impacts to ESHA and wetland. The applicant eventually chose to delete from the project all aspects of the project except the request to retain the sheet piles that were approved under the emergency permit (5-07-025-G).

Although the subject permit application was submitted within 180 days of the date of issuance of the emergency coastal development permit (5-07-025-G) as required by Condition No. 15 of that permit, Condition of Approval No. 9.d required: "Post-construction vegetation monitoring shall take place in April or May following installation of the sheet piles and then annually for 3 years". This condition was imposed because, at the time the emergency permit was approved, there were concerns as to whether the sheet piles would have an adverse effect on the water source to the wetland. At the time the required follow-up coastal development permit application 5-08-142 was submitted, the required monitoring had not been completed and would take a minimum of an additional three years to complete. Thus, the subject application has remained incomplete pending the results of the required monitoring. However, the required monitoring has now been completed and the application has been deemed complete.

Coastal Development Permit Application Nos. 5-09-209 & 5-07-353

A coastal development permit for work on the East Garden Grove Wintersburg flood control channel's south levee and areas of the north levee downstream of the subject site was approved in 2011 (5-09-209). That project included, among other things, construction of soil mix columns sandwiched between two rows of steel sheet piles within the south levee from Graham Street downstream to just south of Bates Circle, and excavation within the channel to the sheet piles proposed in the south levee and the sheet piles installed under emergency coastal development permit 5-07-025-G in the north levee. The channel excavation converted the shape of the channel bottom from trapezoidal to rectangular. The channel bottom remained soft. Additional work was included downstream of the sheet piles, at the request of resource agencies, to protect work implemented under the Bolsa Chica wetlands restoration project. In addition, the project included public access improvements along and to the levee.

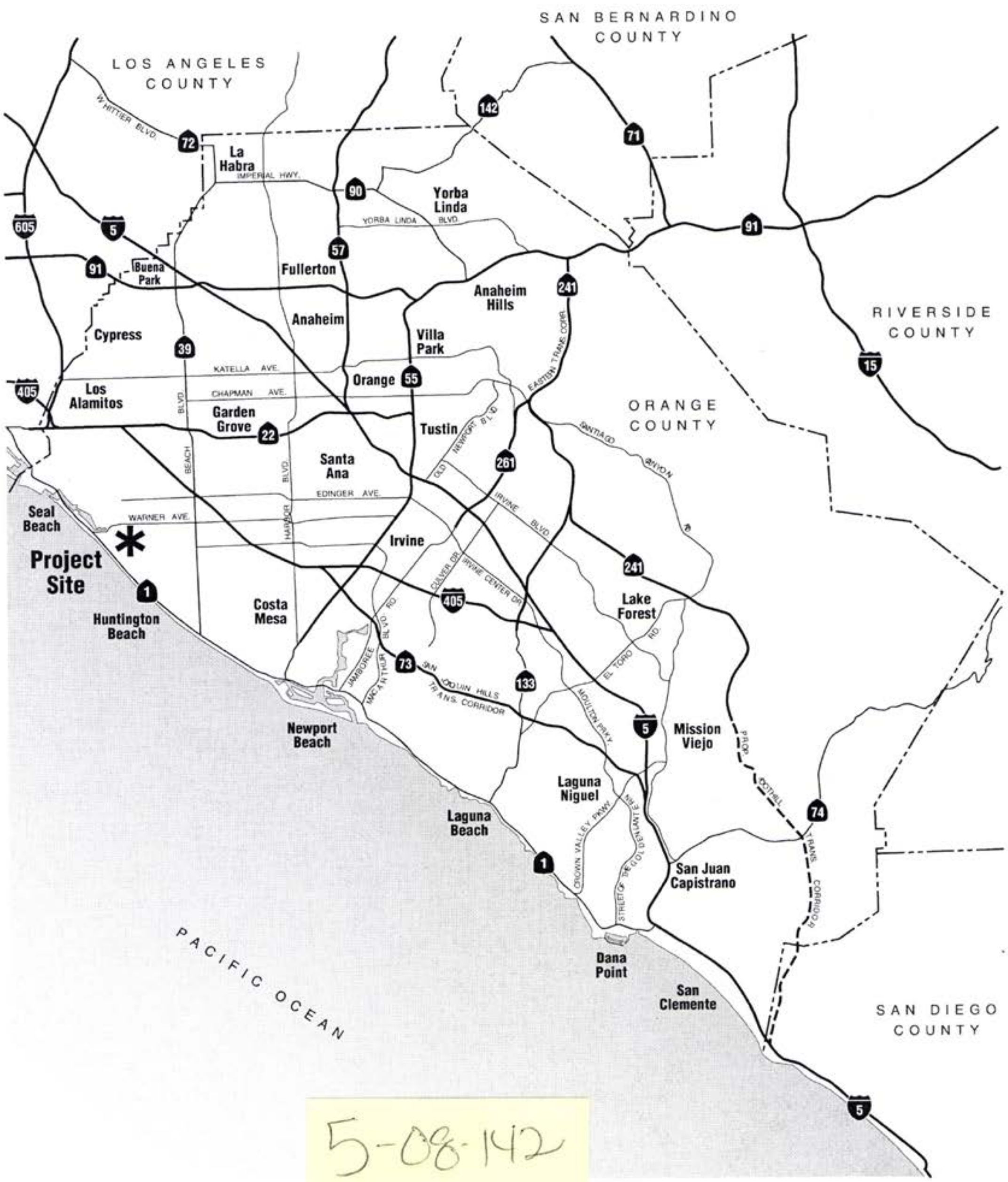
The south levee project was originally submitted as coastal development permit application 5-07-353 and included only the sheet pile and soil mix columns component. However, Resource agencies responsible for implementing and/or maintaining the Bolsa Chica restoration project (including California Department of Fish & Wildlife, U.S. Fish & Wildlife Service, National Marine Fisheries Service and U.S. Army Corps of Engineers), expressed concerns regarding whether that project, which did not include any work adjacent to the Bolsa Chica Ecological Reserve, would create adverse impacts on the Ecological Reserve. Impacts of concern included breach of the south levee and resultant inundation of the restored habitat areas within the reserve. Coastal development permit application 5-07-353 was withdrawn and replaced with the project approved under 5-09-209. Development approved under 5-09-209 is currently under construction.

Relationship Between 5-08-142 (OCFCD) and 5-11-068 (Parkside)

The subject application, 5-08-142 (OCFD), requests to make permanent the installation of steel sheet piles on the north levee from Graham Street downstream to the oil road bridge, a

distance of approximately 3,800 linear feet. Among many other development components (e.g. grading, housing development, habitat restoration) the project approved under coastal development permit 5-11-068 were improvements to the same levee from Graham Street to the approximate location of the former Slater Bridge (See Exhibit 4). The Parkside levee improvements will not continue all the way to the downstream end of the County's sheet pile project, stopping short of the wetland located adjacent to the levee known as the CP wetland. The levee improvements approved under the Parkside coastal development permit include installation of a matrix of deep soil-cement mix columns and soil-cement cap to be placed at the landward side of the emergency permit sheet piles. These columns will be cast (mixed) in place, in holes drilled by a drilling rig. The columns would penetrate a minimum of 5 feet into the dense alluvial soils lying below the existing sheet piles. The deep soil-cement columns would top out from 2 to 12 feet from the proposed levee access road. Above the drilled columns, a variably deep soil-cement cap will be placed using general earthmoving equipment, capable of working in close proximity to the existing sheet piles. The soil-cement is proposed to be placed in lifts until just below the access road section. Finally the access road structural section will be placed above the soil-cement levee. The existing sheet pile is proposed to be finished with a continuous cap and rail to provide a 42 inch minimum height handrail system along the public access trail on the top of the finished levee. The levee would then tie in to a structure known as a Vegetated Flood Protection Feature (more commonly referred to as VFPF), which serves as an extension of the flood control levee. The VFPF would then tie into the adjacent bluff that rises up to the Bolsa Chica mesa. Downstream of the Parkside project levee improvements and VFPF, the County's sheet piles will remain as is.

Although the Commission has approved the Parkside project, the permit has not yet been issued and the project has not commenced. However, condition compliance is actively underway and the applicant intends to begin construction once all conditions have been satisfied and the permit issued.



5-08-142
Exhibit
1a

RBF CONSULTING

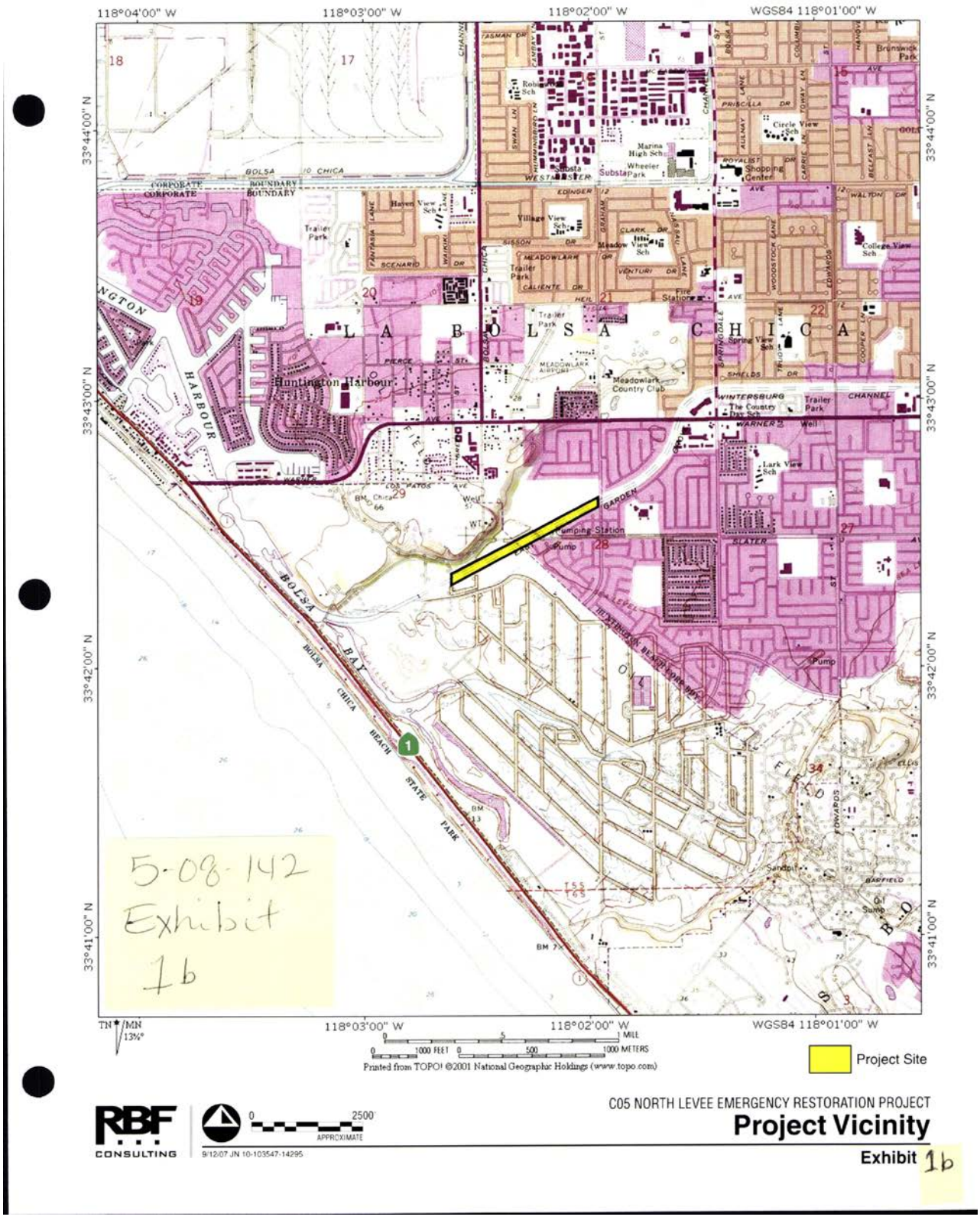
not to scale

9/12/07 JN 10-103547-14259

C05 NORTH LEVEE EMERGENCY RESTORATION PROJECT

Regional Vicinity

Exhibit 1a


118°04'00" W
118°03'00" W
118°02'00" W
WGS84 118°01'00" W
33°44'00" N
33°43'00" N
33°42'00" N
33°41'00" N
L A B O L S A C H I C A
Huntington Harbour
BOLSA CHICA STATE BEACH PARK
BOLSA BAY
Meadowlark Country Club
Pumping Station
Project Site
Printed from TOPO! ©2001 National Geographic Holdings (www.topo.com)
5-08-142
Exhibit
1b
C05 NORTH LEVEE EMERGENCY RESTORATION PROJECT
Project Vicinity
Exhibit 1b
RBF CONSULTING
9/12/07 JN 10-103547-14295


Warner Ave
Old Road Bridge
Bolsa Chica St
Graham St
Slater Ave
Brightwater Project CDP 5-05-020
So. Eucalyptus ESHA
0
225
450
Feet
N
Project Limits
C05 NORTH LEVEE
EMERGENCY RESTORATION PROJECT
Project Site
Exhibit 3A
5-08-142
Exhibit 2

COUNTY OF ORANGE

RESOURCES & DEVELOPMENT MANAGEMENT DEPARTMENT

Bryan Speegle, Director
300 N. Flower Street
Santa Ana, CA

P.O. Box 4048
Santa Ana, CA 92702-4048

Telephone: (714) 834-2300
Fax: (714) 834-5188

RECEIVED
South Coast Region
DEC 7 2007
CALIFORNIA
COASTAL COMMISSION

December 6, 2007

Ms. Sherilyn Sarb, Deputy Director
California Coastal Commission
South Coast District
200 Oceangate, 10th Floor
Long Beach, CA 90802-4416

Subject: **Emergency Permit acceptance for the East Garden Grove Wintersburg Channel North Levee Emergency Reinforcement Project, City of Huntington Beach, Orange County, CA**

Dear Ms. Sarb:

The County of Orange Resources and Development Management Department (RDMD) submits this Emergency Acceptance Form for the proposed work on the East Garden Grove Wintersburg Channel North Levee. The County would like to thank the Coastal Commission staff for their expedient review in approving this emergency work. The County will comply with the permit conditions to the best of our abilities and we are coordinating with other parties in obtaining the necessary information to successfully adhere to the stipulated requirements. At this point, we have not been able to secure access authorization to the Shea Homes property in order to implement the monitoring requirements of the permit. By signing this permit, we do not intend to represent that we have received authorization from the Shea property owners and we cannot guarantee that we will be able to secure such access. We will continue however to work on this task and make all reasonable efforts to secure Shea's permission; we will keep you informed of our progress.

Should you require additional information, please do not hesitate to contact me at 714-834-2308.

Sincerely,

Ignacio G. Ochoa, PE
Director of Public Works/Chief Engineer

cc: Karl Schwing, California Coastal Commission

5-08-142
Exhibit 3
Page a

STATE OF CALIFORNIA - THE RESOURCES AGENCY ARNOLD SCHWARZENEGGER, *Governor*

CALIFORNIA COASTAL COMMISSION

South Coast Area Office
200 Oceangate, Suite 1000
Long Beach, CA 90802-4302
(562) 590-5071

EMERGENCY PERMIT

DATE: **NOVEMBER 26, 2007**

EMERGENCY PERMIT: **5-07-025-G**

APPLICANT: Orange County Flood Control District,
Attn: Nadeem Majaj, P.E., District Manager

LOCATION: East Garden Grove-Wintersburg Channel, North Levee downstream of Graham Street (Station 74+00 to Station 36+00), City of Huntington Beach, Orange County

EMERGENCY WORK PROPOSED: Installation of approximately 3,800 linear feet of 30- to 40-foot deep steel sheet piles to harden the levee and prevent a breach by flood waters. The sheet piles will be driven into the levee through the unimproved, unvegetated levee-top road. The sheet piles will be installed using a "Giken Driver" to press the sheet piles into place in lieu of hammering or using vibration techniques. All work will be conducted within the Orange County Flood Control District (OCFCD) right-of-way. No dredging or import of material is proposed.

This letter constitutes approval of the emergency work you or your representative has requested to be done at the location listed above. I understand from your information that an unexpected occurrence in the form of heavy storm run-off causing channel bank erosion of an existing levee requires immediate action to prevent or mitigate loss or damage to life, health, property or essential public services. 14 Cal. Admin. Code Section 13009. The Executive Director hereby finds that:

(a) An emergency exists which requires action more quickly than permitted by the procedures for administrative or ordinary permits and the development can and will be completed within 30 days unless otherwise specified by the terms of the permit;

(b) Public comment on the proposed emergency action has been reviewed if time allows; and

(c) As conditioned the work proposed would be consistent with the requirements of the California Coastal Act of 1976.

The work is hereby approved, subject to the attached conditions.

Very Truly Yours,

Peter M. Douglas
Executive Director

for Teresa Henry
By: Sherilyn Sarb

Title: Deputy Director

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Exhibit 3
page 6

CONDITIONS OF APPROVAL:

1. The enclosed form must be signed by the permittee and returned to our office within 15 days.

2. Only that work specifically described above and for the specific property listed above is authorized. Any additional work requires separate authorization from the Executive Director.

3. The work authorized by this permit must be completed within 120 days of the commencement of sheet pile installation. OCFCD shall notify the CCC five days prior to the installation.

4. In exercising this permit the permittee agrees to hold the California Coastal Commission harmless from any liabilities for damage to public or private properties or personal injury that may result from the project.

5. This permit does not obviate the need to obtain necessary authorizations and/or permits from other agencies (e.g. City of Huntington Beach, California Department of Fish and Game, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers).

6. Construction Responsibilities and Debris Removal

The permittee shall comply with the following construction related requirements:

(a) No construction materials, debris, waste, oil or liquid chemicals shall be placed or stored where it may be subject to wave erosion and dispersion, stormwater, or where it may contribute to or come into contact with nuisance flow;
(b) Any and all debris resulting from construction activities shall be removed from the site within 1 week of completion of construction;
(c) No machinery or construction materials not essential for project implementation shall be allowed at any time in channel waters;
(d) If turbid conditions are generated during construction, a silt curtain shall be utilized to minimize and control turbidity to the maximum extent practicable;
(e) All stock piles and construction materials shall be covered, enclosed on all sides, shall be located as far away as possible from drain inlets and any waterway, and shall not be stored in contact with the soil;
(f) All debris and trash shall be disposed of in the proper trash and recycling receptacles at the end of each construction day;
(g) The discharge of any hazardous materials into coastal waters or any receiving waters shall be prohibited.
(h) All temporary construction access measures (e.g. access ramps) shall be removed in their entirety upon completion of the emergency work and the area restored to the pre-construction condition.

5-08-142
Exhibit 3
Page c

7. Authorization of this emergency permit shall not preclude implementation, through the regular coastal development permit process, of other hazard avoidance and/or protective response options.

8. The steel sheet pile shall be installed within the existing channel levee and shall be no more than approximately 3,800 linear feet long.

9. The applicant shall monitor for direct and indirect impacts to wetlands inside and outside the channel, including but not limited to changes to wetland hydrology and vegetation that are influenced by the proposed project. The wetlands to be monitored outside the channel are those identified as the 'CP' wetland on the attached 'Exhibit L'. PRIOR TO COMMENCEMENT OF DEVELOPMENT, the

County shall submit a wetland monitoring plan, prepared by an appropriately qualified professional, for the review and approval of the Executive Director that shall, at minimum, comply with the following:

a. Monitoring for hydrological impacts should begin prior to construction and should, if feasible, include a full tidal cycle (i.e. a spring/neap/spring cycle - or about 2 weeks);

b. Hydrological monitoring wells should be used in order to detect changes to hydrological input to the CP wetlands adjacent to the channel. Monitoring wells should be at least 6 ft deep, and deeper where necessary to adequately detect wetland hydrological changes. At a minimum, the applicant shall install, within the applicant's right-of-way, at least one monitoring well on the interior side of the sheetpile, and one monitoring well on the exterior side of the sheetpile as close to the base of the levee as is feasible. In addition, within the "CP" wetland, wells in at least 2 locations along the channel and at least 2 distances away from the channel should be monitored. If feasible, these wells should be existing wells for which there are historical data. Continuous monitoring of the wells (i.e. with data loggers) is preferred, however, manual monitoring on at least a twice-daily basis would also be acceptable; such monitoring shall begin immediately following the completion of the sheet pile installation and shall continue for at least six months, including at least 2 months during the period between 1 December and 31 March. Reports of groundwater levels in monitoring wells shall be submitted to Commission staff at monthly intervals for review and acceptance by the Executive Director.

c. If a significant reduction in the groundwater contributions to the CP wetland are deemed by the Executive Director to have occurred, then vegetation monitoring shall commence to document species diversity and abundance within zones at various distances from the flood control channel that include monitoring wells. Such monitoring plans shall be submitted for review and approval of the Executive Director;

d. Post-construction vegetation monitoring shall take place in April or May following installation of the sheet piles and then annually for 3 years;

e. A report documenting the monitoring along with an analysis of whether wetland impacts have occurred as a result of sheetpile installation and recommended mitigation, shall be submitted for the Executive Director's review and approval monthly following the installation of the sheetpiles for six months, and annually thereafter for 3 years. If any impacts to wetland habitat occurs, that can be attributed to the sheetpile installation, the applicant shall mitigate at a minimum 4:1 (mitigation to impact) ratio. A mitigation plan shall be submitted in conjunction with the follow-up regular coastal development permit application.

10. This emergency permit does not authorize any riparian impacts. If any inadvertent impacts to riparian habitat occurs, the applicant shall mitigate at a minimum 3:1 (mitigation to impact) ratio.

11. Construction activities shall, to the maximum extent feasible, avoid any work during times that sensitive species are known to utilize, or could be disturbed by work within, the subject area. A biological survey shall be completed prior to initiation of construction activities and shall provide recommendations for a biological monitor to be present during construction, if necessary.

12. Pre-project site biological conditions shall be documented through photographs of the site, mapping and other appropriate documentation prior to commencement of

5-08-142 Exhibit 3d

work and submitted with any required follow-up coastal development permit application.

13. Public access along the top of the levee shall be considered as part of the follow-up application required in Special Condition No. 15. The proposed sheet piles shall be installed in a manner that preserves the opportunity for the incorporation of future public access/bike trail along the top of the levee in the follow-up application.

14. PRIOR TO THE COMMENCEMENT OF THE PROPOSED DEVELOPMENT, the County shall provide for the review and approval of the Executive Director final engineering calculations for the proposed sheet piles.

15. Follow-Up

Within 180 days of the date of this permit, the permittee shall submit a complete application for a regular Coastal Development Permit, or revise, complete and where feasible consolidate pending Coastal Development Permit Applications 5-07-025 and 5-07-353, to address levee/channel improvements. Such application shall include an analysis, prepared by an appropriately qualified professional (e.g. engineer with expertise in channel environments), of alternative methods of addressing the condition of the channel, including but not limited to, the following alternatives: no-project and sheet piles with and without earthen levee buttress. The alternatives analysis shall identify which alternative is the least environmentally damaging feasible alternative and identify the applicant's preferred alternative along with the reasons for selecting the preferred alternative.

The follow-up application submittal shall also, at minimum, address the following issues: preparation of the levee to make formal public pedestrian and/or bicycle access possible; mitigation of any adverse impacts upon biological resources at the subject site; upstream and downstream erosion effects.

This emergency work is considered to be temporary work done in an emergency situation. If the property owner wishes to have the emergency work become a permanent development, a Coastal Development Permit must be obtained. A regular permit would be subject to all of the provisions of the California Coastal Act and may be conditioned accordingly. These conditions may include provisions for public access (such as an offer to dedicate an easement) and/or a requirement that a deed restriction be placed on the property assuming liability for damages incurred from hazards.

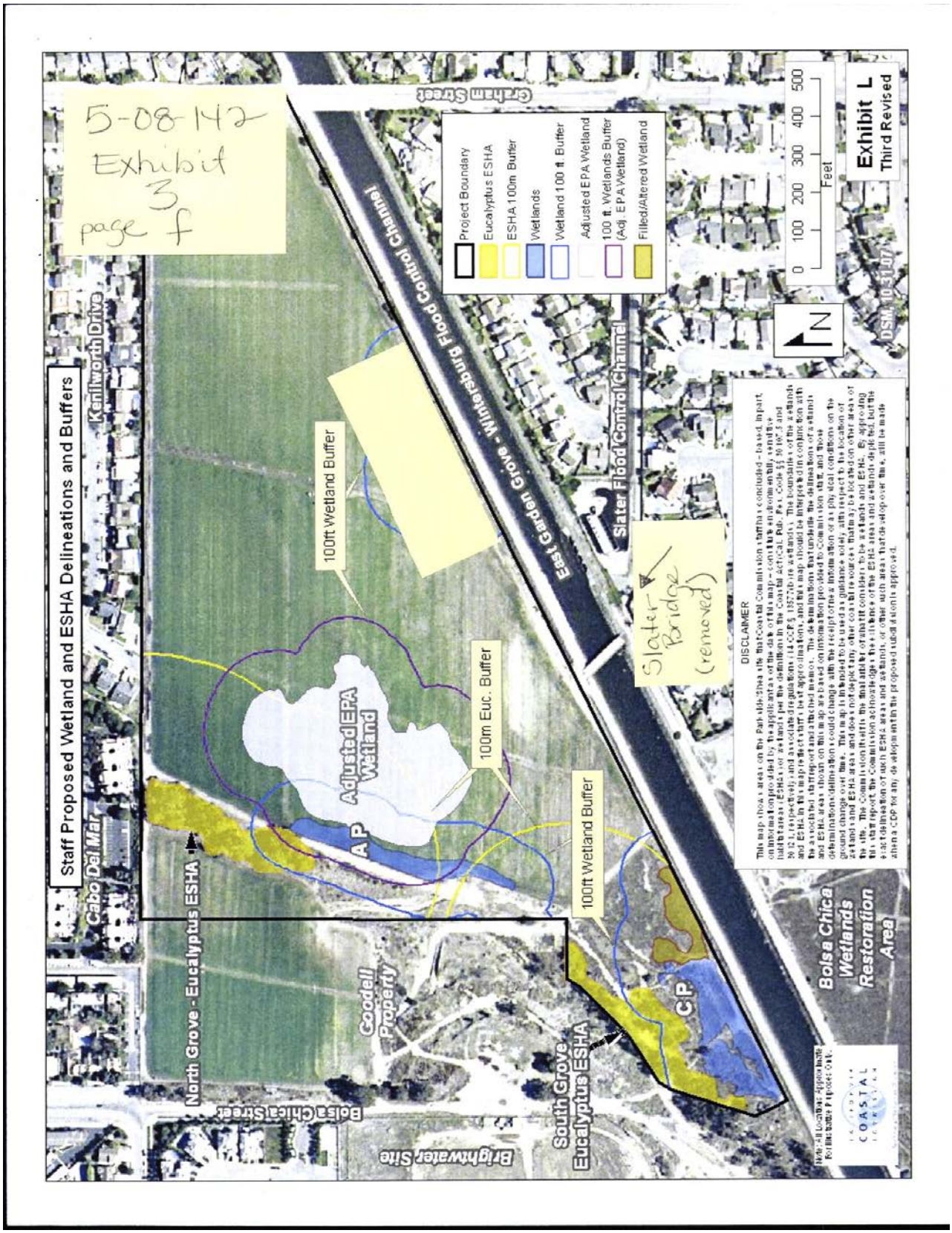
If you have any questions about the provisions of this emergency permit, please call the Commission office in Long Beach (562) 590-5071.

Attachments: Exhibit L - Depicting Location of "CP" Wetland

Enclosures: Acceptance Form
Coastal Permit Application Form

cc: City of Huntington Beach

5-08-142
Exhibit 3
page e


5-08-142
Exhibit 3
page 1
Staff Proposed Wetland and ESHA Delineations and Buffers
Exhibit L
Third Revised
Project Boundary
Eucalyptus ESHA
ESHA 100m Buffer
Wetlands
Wetland 100 ft. Buffer
Adjusted EPA Wetland
100 ft. Wetlands Buffer (Adj. EPA Wetland)
Filled/Altered Wetland
0 100 200 300 400 500
Feet
N
DSM 10/31/07
DISCLAIMER
Cabo Del Mar
Kenilworth Drive
Graham Street
East Garden Grove - Wintersburg Flood Control Channel
Slater Flood Control Channel
Slater Bridge (removed)
100ft Wetland Buffer
100m Euc. Buffer
Adjusted EPA Wetland
AP
CP
North Grove - Eucalyptus ESHA
Bolsa Chica Street
Brightwater Site
Coodell Property
South Grove Eucalyptus ESHA
Bolsa Chica Wetlands Restoration Area
COASTAL