

City of Alameda

## Site Management Plan

*Estuary Park*

*Alameda, California*

October 1, 2014

**FINAL**

**Russell Resources, Inc.**  
440 Nova Albion Way, Suite 1  
San Rafael, California 94903

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**Matthew Rodriguez**  
Secretary for  
Environmental Protection



## Department of Toxic Substances Control

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Miriam Barcellona Ingenito  
Acting Director  
700 Heinz Avenue  
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**Edmund G. Brown Jr.**  
Governor

October 6, 2014

Peter Russell, Ph.D., P.E.  
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Russell Resources, Inc.  
440 Nova Albion Way  
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### **FINAL SITE MANAGEMENT PLAN, ESTUARY PARK, ALAMEDA, CALIFORNIA DTSC CONCURRENCE**

Dear Dr. Russell,

The Department of Toxic Substances Control (DTSC) has reviewed the Final Site Management Plan for Estuary Park (SMP), dated October 1, 2014. DTSC previously reviewed and provided comments on the draft and draft final versions of the SMP. All DTSC comments on the draft and draft final versions of the SMP have been adequately addressed and DTSC has no further comments on the SMP at this time.

The Estuary Park Covenant to Restrict Use of Property Environmental Restriction (CRUP), a deed restriction attached to the Property, places soil management restrictions on the Estuary Park Property. In areas with no hardscape it restricts activities that will disturb soil more than four feet below grade (excavation, grading, trenching, etc.) without a Soil Management Plan, prepared in accordance with the Installation Restoration Site 25 Land Use Control Remedial Design dated October 2009 and approved in advance by DTSC, U.S. EPA, and the Department of the Navy (DON). In areas with hardscape or beneath structures it requires the Property owner to develop and comply with a Soil Management Plan approved by DTSC, U.S. EPA, and DON for major site work.

The Estuary Park SMP serves as the Soil Management Plan as described in the CRUP. DTSC concurs with the Estuary Park SMP and approves it as meeting the requirements for a Soil Management Plan.

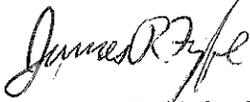
Peter Russell, Ph.D., P.E.

October 6, 2014

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If you have any questions regarding this matter, please contact me at (510) 540-3850 or [james.fyfe@dtsc.ca.gov](mailto:james.fyfe@dtsc.ca.gov).

Sincerely,



James R. Fyfe, P.E.

Hazardous Substances Engineer

Brownfields and Environmental Restoration Program

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## Estuary Park: Revised Draft Final SMP and Responses to Comments

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Wed, Oct 22, 2014 at 8:15 AM

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Hi Peter,

The Navy has reviewed and approves the 10/1/14 Revised Draft Final SMP for Estuary.

This email is considered official approval of the referenced document.

Best Regards,

Derek J. Robinson, PE  
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NAVFAC HQ, BRAC PMO  
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San Diego, CA 92108  
(619) 532-0951



Peter Russell <peter94903@gmail.com>

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## Estuary Park: Revised Draft Final SMP and Responses to Comments

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<David.Elias@waterboards.ca.gov>, James Fyfe <James.Fyfe@dtsc.ca.gov>, Derek Robinson

<derek.j.robinson1@navy.mil>

Hi Peter

EPA has reviewed the City's responses to our remaining comments on the Draft Final Site Management Plan for Estuary Park as well as the red-line/strikeout version. All of our comments have been addressed adequately. Therefore, we have no further comments on the Site Management Plan for Estuary Park (IR Site 25).

Thanks

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*Operable Unit 5 Remedial Investigation Report, December 2, 2002*  
*Project Closeout Report: CERCLA Time-Critical Removal Action at Installation Restoration Site 25, October 31, 2003*

*Groundwater Remedial Investigation/Feasibility Study, Alameda Point Site 25 / Alameda Annex IR-02, October 2004*

*Record of Decision, Site 25 Soil, September 2007*

*Land Use Control Remedial Design, IR Site 25 Soil, October 2009*

*Finding of Suitability to Transfer, Estuary Park (Portion of EBS Parcel 182), September 2009*

Appendix C: *Covenant to Restrict Use of Property, Environmental Restriction, December 17, 2013*

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***ACRONYMS, ABBREVIATIONS, AND CONTROLLED VOCABULARY***

AB	Assembly bill
ASTM	American Society for Testing and Materials
BAAQMD	Bay Area Air Quality Management District
BCT	BRAC Cleanup Team
bgs	below ground surface
BMP	best management practice
BRAC	Base Realignment and Closure
CAA	Corrective Action Area
Cal/EPA	California Environmental Protection Agency
CBO	Chief Building Official
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CIH	Certified Industrial Hygienist
City	City of Alameda
CoC	Chemical of Concern
CRUP	Covenant to Restrict Use of Property
DTSC	Department of Toxic Substances Control
ESL	Environmental Screening Level
FID	flame-ionization detector
FISCA	Fleet and Industrial Supply Center Oakland, Alameda Facility/Alameda Annex
FOST	Finding of Suitability to Transfer
FS	CERCLA Feasibility Study
HSP	Health and Safety Plan
IC	institutional control
Intrusive Activity	redevelopment activity that involves subsurface exposures, such as grading, excavating, trenching, pile driving, and dewatering
IR	Installation Restoration
LUC	Land Use Control
MCO	Marsh Crust Ordinance
mg/kg	milligrams per kilogram
NAS	Naval Air Station
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NPDES	National Pollutant Discharge Elimination System
NPL	CERCLA National Priorities List
OSHA	Occupational Safety and Health Administration
OU	Operable Unit
PAH	polycyclic aromatic hydrocarbon

PCB	polychlorinated biphenyl
PE	Professional Engineer
PID	photoionization detector
PG	Professional Geologist
PRC	Preliminary Remediation Criterion
QSD	Qualified SWPPP Developer
QSP	Qualified SWPPP Practitioner
RAP	Remedial Action Plan
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RI	CERCLA Remedial Investigation Report
ROD	Record of Decision
SARA	Superfund Amendments and Reauthorization Act of 1986
Site	Estuary Park (the portion of EBS Parcel 182 included in the 9/09 FOST)
SMP	Site Management Plan
SVOC	semivolatile organic compound
SWPPP	Storm Water Pollution Prevention Plan
TCE	trichloroethene
TCRA	Time-Critical Removal Action
Threshold Depth	the depth below which excavations must comply with the MCO
TPH	total petroleum hydrocarbon
TSCA	Toxic Substances Control Act
USC	United States Code
USEPA	United States Environmental Protection Agency
UST	underground storage tank
VOC	volatile organic compound
Water Board	California Regional Water Quality Control Board, San Francisco Bay Region
yd <sup>3</sup>	cubic yard

## 1 INTRODUCTION

This Site Management Plan (SMP) was prepared for the City of Alameda (the City) by Russell Resources, Inc. to mitigate potential risks associated with redevelopment of Estuary Park (the Site). The Site consists of approximately 8 acres, located entirely within Environmental Baseline Survey Parcel 182 of the former Naval Air Station (NAS) Alameda, now known as Alameda Point. The City plans to redevelop the Site for recreational use.

This SMP has four primary purposes, as follows.

1. Fulfill the restrictions stated in the Estuary Park Covenant to Restrict Use of Property (CRUP) requiring preparation of an SMP, prepared in accordance with the Land-Use Control (LUC) Remedial Design (RD) Installation Restoration (IR) Site 25 Soil Report dated October 2009.
2. Provide guidelines to help ensure that demolition and Intrusive Activities, such as grading, excavating, trenching, pile driving, and dewatering, associated with redevelopment of the Site are conducted in a manner protective of the health and safety of Site workers, future Site occupants, nearby residents, and the environment.
3. Assist in accessing Navy and regulatory documents that are relevant to the environmental investigation and remediation activities of the various areas of Site.
4. Fulfill the requirements of developers' elections under Section 13-56.8.c of City Ordinance No. 2824 regulating excavation into the marsh crust ("Marsh Crust Ordinance" [MCO]). The MCO requires preparation of an SMP for handling materials excavated from below the marsh crust Threshold Depth. Furthermore, this SMP fulfills the worker health and safety and waste management procedures stipulated in the Marsh Crust Remedial Action Plan/Record of Decision (RAP/ROD) approved by the DTSC on February 2, 2001.

This SMP is an adaptation of the May 2008 SMP, prepared by ERM-West, Inc. and Iris Environmental, entitled *Site Management Plan, Alameda Landing Site Portion of the Fleet and Industrial Supply Center Oakland, Alameda Facility/Alameda Annex (FISCA), Alameda, California*, which was approved by California Environmental Protection Agency (Cal/EPA) Department of Toxic Substances Control (DTSC), and the November 2011 SMP, prepared by Russell Resources, Inc., entitled *Site Management Plan, Lawrence Berkeley National Laboratory Second Campus Portion of Alameda Point, Alameda, California*, which was approved by the Department of the Navy, the US Environmental Protection Agency (USEPA), DTSC, and the California Regional Water Quality Control Board, San Francisco Bay Region (Water Board). The approved FISCA and Alameda Point SMPs have been modified only in order to address the Site's unique conditions and proposed land uses, and to provide a stand-alone SMP that is applicable to redevelopment of the Site. This SMP also reflects changes in response to USEPA

and Water Board comments on the March 19, 2014 draft *Site Management Plan, Phase 1 Transfer Portion of Alameda Point, Alameda, California*, prepared by Russell Resources, Inc.

This SMP does not set forth the scope of the remedial measures the Navy conducts at the Site, nor does it include the criteria for confirming the adequacy of those measures or the mitigation measures required to be implemented to control air emissions, surface runoff, and similar environmental conditions occurring during the implementation of the remedies. Those management measures are instead detailed in the Navy's Comprehensive Environmental Response Compensation and Liability Act (CERCLA) and Petroleum Program documents.

### **1.1 REPORT ORGANIZATION**

This SMP is organized as follows:

- Section 1.0 presents Site background information and describes the objectives, implementation, and oversight of the SMP;
- Section 2.0 briefly summarizes the residual environmental conditions at the Site, and the estimated health risks associated with the redevelopment plans, and references SMP appendices that contain more detailed information about Site environmental conditions;
- Section 3.0 presents risk management measures to be implemented prior to Site redevelopment;
- Section 4.0 presents risk management measures to be implemented during Site redevelopment;
- Section 5.0 presents risk management measures to be implemented after Site redevelopment; and
- Section 6.0 lists references used to prepare this SMP.

Appendices to this SMP include:

- Appendix A – Marsh Crust Ordinance
- Appendix B – Backup Documentation for Environmental Sites
- Appendix C – Estuary Park CRUP

## 1.2 HOW TO USE THE SMP

This section explains how best to use this SMP for both (1) the generalist, who is primarily interested in Alameda Point as a whole, and (2) the focused user who is primarily interested in a the Estuary Park parcel. Most users likely are of the second type, mainly interested only in Estuary Park. Accordingly, the SMP is organized so generalists can readily understand the Site as a whole without wading through voluminous detailed, parcel-specific information. At the same time, the SMP's structure allows those interested in specific issues at Estuary Park to efficiently find site-specific details as well as the Site's broader picture.

Some portions of this SMP, especially Appendix B, are highly technical. The reader is presumed to have a working understanding of environmental management practices and the specialized vocabulary contained in this SMP. **Before material decisions are made based on the content of this SMP, a qualified environmental professional should be consulted.**

For the generalist, the main body of the SMP, with its figures and tables, provides a Site-wide overview and discusses environmental issues that are applicable to the whole or portions of the Site.

For the focused user, information needs include a general understanding of Alameda Point, similar to the generalist, but also include access to detailed information about Estuary Park. This information includes historical land use, the location and nature of historical contamination, environmental investigation results, the nature and outcome of remediation efforts, and residual contaminant levels. This information is compiled in Appendix B. This appendix contains excerpts of important environmental documents that were prepared by the Navy with oversight by the environmental regulatory agencies. These documents include the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Remedial Investigation Report (RI), ROD, and LUC RD.

Appendix B should be utilized as an integral part of implementing the SMP, which is an efficient and effective way of drawing on the very large body of environmental information that has been prepared by the Navy at Alameda Point with regulatory agency oversight.

## 1.3 BACKGROUND

The Site is located in the northeastern corner of Alameda Point (formerly NAS Alameda) in Alameda, California. Alameda Point encompasses roughly 878 acres of land. Development of Alameda Point first began in 1930 under the ownership of the U.S. Army, and the majority of the former NAS Alameda was built on dredged fill that was placed over shallow open water. The average elevation of Alameda Point is about 15 feet above mean sea level.

Former NAS Alameda served as a base of operations for naval aviation from before World War II through its closure in 1997. Closure of former NAS Alameda was conducted pursuant to the Defense Base Realignment and Closure (BRAC) Act of 1990. During its long history of operations, former NAS Alameda was home to several thousand military and civilian personnel and supported operations of the Marine Corps, Navy, and other military entities. Hundreds of buildings and an extensive network of roadways and utilities were constructed at former NAS Alameda, and much of this infrastructure still exists. Former NAS Alameda supported aviation and surface craft activities through extensive runway and tarmac infrastructure and an enclosed lagoon for seaplanes and also supported naval surface vessels (including aircraft carriers) through an extensive system of piers, berthing areas, and turning basins. Specific activities conducted historically at NAS Alameda include, but are not limited to, aircraft maintenance, ship maintenance, support and training for Navy and Marine air units, storage, rework, and distribution of weaponry, fuel storage and refueling, dry goods storage and distribution, pest control, plating, metal working and fabrication, parts washing, cleaning and routine maintenance, blasting and painting, testing jet engines, heavy equipment maintenance, woodworking, and photography.

Figure 1 presents a general location map showing Alameda Point and the surrounding San Francisco Bay Area. Figure 2 shows the Site, labelled Estuary Park, and surrounding portions of Alameda Point. Figures 1 and 2 also show buildings and other Alameda Point features. The distinguishing chemical and physical features, and the associated management measures for the Site, are explained further in this SMP.

Investigation and cleanup activities have been performed at the facility under the Comprehensive Long-Term Environmental Action Navy Program, administered by the Naval Facilities Engineering Command Southwest Division in San Diego, California, as well as under CERCLA, administered by the USEPA and DTSC.

#### **1.4 OBJECTIVES**

The objective of this SMP is to document the following:

- Historical Site investigation activities and the nature and extent of residual contamination in Site soils and groundwater (This information is detailed in Appendix B, which contains, among other documents, excerpts from the 2002 OU-2B RI, the 2003 IR-25 Time-Critical Removal Action (TCRA) report, the 2004 IR-25/FISCA IR-02 Groundwater RI/Feasibility Study (FS), and the 2007 IR-25 Soil ROD.);
- Mitigation efforts to be implemented to minimize exposure of people and environmental receptors to contaminants that may be present at the Site prior to, during, and following redevelopment; and

- Protocols to help ensure that Intrusive Activities conducted at the Site is performed in accordance with applicable state and federal environmental health and safety regulations.

### *1.5 IMPLEMENTATION AND OVERSIGHT*

Oversight of cleanup at Alameda Point has been shared by USEPA, the DTSC, and the Water Board. With the Navy, these agencies constitute the BRAC Cleanup Team (BCT). Investigation and cleanup under the Petroleum Program is overseen by the Water Board. In general, environmental regulatory oversight for Alameda Point during development consists of the Water Board taking the lead role with respect to issues that primarily petroleum-related and DTSC taking the lead role for other issues. This allocation of roles is designed to minimize potential duplication of regulatory effort and to take advantage of the technical and organizational strengths of each agency. The Site contains no petroleum sites, either open or closed, so Water Board oversight would not be warranted unless and until unknown petroleum-related contamination were encountered.

The risk mitigation efforts specified in this SMP are to be implemented by the contractor performing SMP-covered work at the Site on behalf of the entity undertaking redevelopment and/or the City. These construction activities will include demolition of existing structures and any earth moving or dewatering activities performed to support Site redevelopment. As described in applicable sections of this SMP, implementation of this SMP will be overseen by a Professional Engineer (PE), Professional Geologist (PG), or other environmental professional who is familiar with environmental monitoring equipment, environmental health and safety regulations, and general industrial hygiene practices. Tasks that fall within the practice of engineering or geology shall be conducted by a PE (Civil) or PG, both of whom should be registered in the State of California. Health and Safety Plans (HSPs) shall be prepared by a Certified Industrial Hygienist (CIH). Storm Water Pollution Prevention Plans (SWPPPs) shall be prepared by a Qualified SWPPP Developer (QSD) and implemented by a Qualified SWPPP Practitioner (QSP). The PE, PG, CIH, QSD, and QSP may be assisted by other qualified personnel, provided the registered professional remains in responsible charge of the work.

Regulatory oversight of SMP implementation will be provided by the Water Board (petroleum-related), DTSC (other than primarily petroleum-related), and the City. The 2007 ROD for IR Site 25 soil (see Appendix B of this SMP) requires USEPA's approval for specified excavation projects at the Site, and USEPA may elect to participate in the approval process of this SMP (see Section 2.1.2). In addition, until the Site is delisted from the CERCLA National Priority List (NPL), USEPA must receive notifications and approve proposals that after delisting would be handled solely by DTSC. As further discussed in [Section 4.3.1](#), the City's Chief Building Official (CBO), as designated by the City Building Department, will oversee permitting of

excavations in accordance with the provisions of the MCO. The contact information for BCT representatives and the City's CBO appears in the following table.

Agency	Representative	Telephone Number	E-mail and Physical Addresses
USEPA	Chris Lichens	(415) 972-3149	lichens.christopher@epa.gov tran.xuan-mai@epa.gov 75 Hawthorne Street San Francisco, CA 94105
	Xuan-Mai Tran	(415) 972-3002	
DTSC	James Fyfe	(510) 540-3850	james.fyfe@dtsc.ca.gov 700 Heinz Avenue Berkeley, CA 94710
Water Board	David Elias	(510) 622-2509	david.elias@waterboards.ca.gov 1515 Clay Street, Suite 1400 Oakland, CA 94612
Navy	Derek Robinson	(619) 532-0951	derek.j.robinson1@navy.mil 1455 Frazee Road, Suite 900 San Diego, CA 92108-4310
City of Alameda, Dept. of Planning and Building	Greg McFann	(510) 747-6820	gmcfann@ci.alameda.ca.us 2263 Santa Clara Ave., Rm. 190 Alameda, CA 94501

## 1.6 APPLICABLE INSTITUTIONAL CONTROLS, STATUTES, AND REGULATIONS

Following is a list of identified institutional controls (ICs) and local, state, and federal laws and regulations that may apply to Site redevelopment activities.

### 1.6.1 Federal Statutes and Regulations

*National Environmental Policy Act (NEPA), 42 United States Code (USC) 4321* – Administered by the Council on Environmental Quality and the USEPA, this act addresses projects that constitute major federal actions with the potential to significantly impact the environment.

The NEPA process often invokes one or several other federal statutes as described further in this section. In California, NEPA requirements are often addressed under the California Environmental Quality Act (CEQA), discussed in [Section 1.6.2](#).

*Section 404, Clean Water Act, 33 USC 1344* – Administered by the U.S. Army Corps of Engineers, this act addresses discharges to navigable waters of the United States (including

wetlands and streams that are tributaries to navigable waters), and may apply to discharges of excavated soil or groundwater generated by construction and dewatering.

*Endangered Species Act, 16 USC 1536* – Administered by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service, this act regulates activities affecting federally protected species. It also protects listed species from harm or “take,” which is broadly defined as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.” The definition of “take” further includes unintentional, or incidental take, which might be associated with construction or other activities.

*Coastal Zone Management Act, 16 USC 1451* – Administered by the National Oceanic and Atmospheric Administration, this act regulates projects in the coastal zone.

*Resource Conservation and Recovery Act of 1976 (RCRA), 42 USC 692* – Administered by the USEPA, this act manages hazardous wastes from “cradle to grave,” governing the generation, storage, transportation, and disposal of hazardous waste. This includes excavated soil and/or groundwater that exceeds threshold criteria. RCRA also governs underground storage tanks (USTs).

*Toxic Substances Control Act of 1976 (TSCA), 15 USC 2601 et seq.* – Administered by the USEPA, this act governs the introduction, manufacture, and importation/exportation of chemicals produced in the United States. Relevant to this SMP, TSCA also governs asbestos and lead-based paint hazards.

*CERCLA, 42 USC 9601 et seq., and Superfund Amendments and Reauthorization Act of 1986 (SARA), 42 USC 9601* – Known as the Superfund Law, these acts direct the USEPA to develop the NPL, a federal list of the most highly contaminated, abandoned hazardous waste sites in the nation, and gives the USEPA jurisdiction over funds to identify potentially responsible parties and implement remediation at those sites.

*Emergency Planning and Citizen’s Right to Know Act of 1986, 42 USC 11001* – Also known as Title III of SARA, this act is designed to help communities protect public health, safety, and the environment from chemical hazards. Through the Toxics Release Inventory, a list of all chemicals used and emitted by businesses small and large, it also gives individuals the right to obtain information regarding chemical hazards in their communities. It established the State Emergency Response Commission, responsible for the development of emergency action plans.

*Occupational Safety and Health Administration (OSHA) Regulations, 29 Code of Federal Regulations (CFR) Sections 1910.120 and 1926.65* – These regulations govern the applicability and scope of training requirements for personnel involved in the handling of hazardous wastes.

### ***1.6.2 State Statutes and Regulations***

*CEQA, California Public Resources Code 21000 et seq. and the CEQA Guidelines, 14 California Code of Regulations (CCR) 15000 et seq.* – This act creates the state companion to the federal NEPA process, and is invoked by any nonexempt development project that requires public agency approval. This process can require, among other things, an Environmental Impact Report evaluating potentially significant environmental impacts related to the proposed project, as well as associated mitigation measures.

*Porter-Cologne Water Quality Control Act of 1969, California Water Code, Division 7, Section 13000 et seq.* – This act authorizes the Regional Water Quality Control Boards as the lead agencies in protecting the waters of the state. This is accomplished through implementation of the National Pollutant Discharge Elimination System (NPDES) permitting program for surface waters, and through issuing Waste Discharge Requirements for discharges potentially affecting groundwater quality. The State Water Resources Control Board Construction General Permit Order 2009-0009-DWQ (and subsequent amendments, collectively SWRCB Construction General Permit) addresses stormwater discharges associated with construction and land disturbance activities.

*Safe Drinking Water and Toxic Enforcement Act of 1986, California Health and Safety Code Section 25249.6 et seq. (Proposition 65), 22 CCR Section 12000 et seq.* – Proposition 65 is a voter ballot initiative passed in 1986 that requires the Governor to publish and update at least annually a list of chemicals known by the State of California to cause cancer or reproductive harm. The law prohibits businesses from discharging such chemicals into sources of drinking water and requires that warnings be given to potentially exposed individuals. Section 25249.6 of Proposition 65 requires “clear and reasonable warning” for specified potential chemical exposures.

*Air Toxic Hot Spots Information and Assessment Act of 1987, AB 2588* – This requires the Air Resources Board to inventory sources of over 700 toxic air contaminants to assess the health risks of toxic air releases, and notify potentially exposed populations.

*California Health and Safety Code Section 39000 et seq.* – The California Clean Air Act empowers regional air quality districts to enact rules and regulations that bring sources of air pollution into compliance with state and federal requirements. Section 41700 prohibits “discharge from any source whatsoever of such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to...the public.”

*California Endangered Species Act, Fish and Game Code, Sections 2050 et seq.* – This act mirrors the Federal Endangered Species Act and is implemented by the California Department of Fish and Wildlife.

*California Code of Regulations, Section 8* – These regulations, implemented and enforced by the California Division of OSHA, complement the federal statutes governing worker health and safety in hazardous environments and in the presence of hazardous materials.

### *1.6.3 Local Statutes, Regulations, and Institutional Controls*

*Bay Area Air Quality Management District (BAAQMD) Rules and Regulations* – Local regulations regarding discharge of air contaminants in the BAAQMD, which includes the Site. Particularly germane with respect to redevelopment of the Site are BAAQMD Regulation 6, which addresses “Particulate Matter and Visible Emissions”, and Regulation 8, Rule 40, which addresses “Aeration of Contaminated Soil”.

*City of Alameda Ordinance No. 2824 (Alameda Municipal Code Chapter XIII, Article XVII, Section 13-56)* – Informally known as the Marsh Crust Ordinance (MCO), this is an excavation ordinance that defines the depth to which anyone may excavate site soil within the former NAS Alameda and FISCA without taking special measures. Any excavations at or below the specified depth (the Threshold Depth) would require a permit from the City’s CBO, an approved site-specific HSP, and special material handling procedures. A copy of the MCO is attached as Appendix A.

This SMP is submitted pursuant to Section 13-56.8.c of the MCO and is intended to comply fully with the requirements of the MCO for construction site management plans. [Section 4.3.1](#) of this SMP details material sampling and handling protocols for soils excavated from below the Threshold Depth. However, this SMP also applies to those excavations above the depths that trigger compliance with the MCO.

*Environmental Restrictions and Covenants* - The Site is currently subject to certain environmental restrictions that regulate excavation into the marsh crust. Other CRUPs apply to the Site. Specifically, the Marsh Crust CRUP (see Section 2.1.2.1) and the CRUP required by the 2007 ROD for IR Site 25 Soil (see Appendix C) apply to the Site.

*City of Alameda Community Noise Ordinance* – This ordinance affects the redevelopment project in that it restricts the hours of operation for heavy construction machinery.

*Marsh Crust RAP/ROD* – The Marsh Crust RAP/ROD, approved by the San Francisco Bay Regional Water Quality Control Board on January 12, 2001, DTSC on February 2, 2001, requires that excavations below the Threshold Depth conform to the City of Alameda’s MCO. Should the MCO be repealed or invalidated, the RAP/ROD specifies that such excavations can be performed only with prior DTSC approval.

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## 2 ENVIRONMENTAL CONDITIONS

This section briefly summarizes the nature and extent of residual chemical occurrence in soils and groundwater at the Site, and the estimated potential health risks associated with the redevelopment plans.

### 2.1 SITE-WIDE ENVIRONMENTAL CONDITIONS

#### 2.1.1 Marsh Crust

The marsh crust is a subsurface soil horizon that lies between the native Bay mud sediment and the overlying imported fill material within the former intertidal zone throughout much of this portion of Alameda. Heavy industrial activity, such as operations of petroleum refineries and manufactured gas plants, in the vicinity of the Site prior to the time artificial fill was placed in Alameda resulted in significant discharges of petroleum waste to the surrounding marshlands. These wastes, often rich in semivolatile organic compounds (SVOCs), including polycyclic aromatic hydrocarbons (PAHs), were spread over much of the surface of the surrounding marshes, probably through tidal action. As artificial fill was later placed over the native marshes to create what is now Alameda, it is postulated that a thin, contaminated soil horizon (i.e., the marsh crust) was formed between the former high tide and low tide elevations.

The marsh crust is present only in some areas, and it is absent from many boring logs for the vicinity of Alameda Point, particularly beneath the former runways and in the southeast, which was historically was dry land. The fill/native soil interface at which the marsh crust may be found at the Site is 15 feet or more below ground surface (bgs). Figure 3 presents a conceptual model of the marsh crust. The MCO Threshold Depth map is provided in [Appendix A](#). As indicated on the MCO map, the Marsh Crust Threshold Depth is 10 feet bgs over the entire Site.

#### 2.1.2 Environmental Conditions Other Than Marsh Crust

The Navy has performed investigations of Alameda Point since the late 1980s and identified potential areas of concern based on past activities and/or releases. Thirty-four of these areas are carried through to the CERCLA Program as IR sites, because historical information suggests these areas could be impacted with chemicals. Extensive sampling has been conducted within each of the IR sites, as these were the identified potential ‘source areas’ at Alameda Point. Soil sampling conducted at each of the IR sites was comprehensive, in that generally samples were analyzed for metals, total petroleum hydrocarbons (TPH), polychlorinated biphenyls (PCBs), volatile organic compounds (VOCs), SVOCs, PAHs, and pesticides. In some cases, IR sites are grouped into Operable Units (OUs) for purposes of CERCLA decision making.

One IR site coincides with the Site: IR Site 25, which is part of OU-5. Two separate 2007 RODs are applicable to Estuary Park: one for IR Site 25 soil and one for OU-5 groundwater. IR Site 25 was closed with land use restrictions for soil (excerpts of the IR Site 25 Soil ROD are included in Appendix B to this SMP). The soil ROD requires preparation of a CRUP, which is provided in Appendix C. The CRUP's restrictions include ICs for excavation of soil from depths greater than four feet and for major site work consisting of removal of buildings or hardscape. These restrictions require (1) written approval from DTSC, the USEPA, and the Navy and (2) compliance with an SMP that is approved by the Navy, DTSC, and EPA, unless EPA, in its discretion, determines that its review and approval of a specific SMP is not necessary. This SMP satisfies the approved-SMP requirement. The IR Site 25 Soil ROD does not include groundwater restrictions. The final ROD for OU 5 groundwater includes restrictions and remediation requirements, but requires no remediation or land use restrictions for groundwater within 100 feet of the Site.

The Navy addresses petroleum related contamination at Alameda Point through the Petroleum Program. CERCLA generally does not consider petroleum contamination unless it is comingled with non-petroleum contamination. No Petroleum Program sites are present in or near the Site.

The purpose of the following description is to summarize the Site's history, environmental status, and associated potential human health risks. Further information regarding chemical analyses and remedial activities previously implemented at the Site is presented in applicable Navy reports, excerpts of which appear in Appendix B.

The summary provided for the Site draws heavily from the Navy's September 2009, *Finding of Suitability to Transfer, Estuary Park (Portion EBS Parcel 182), NAS Alameda (Alameda Point), Alameda, California*. More detailed information for the Site is available in Appendix B to this SMP, which contains excerpts from various Navy and regulatory agency documents related to environmental investigations and remedial efforts at the Site.

#### 2.1.2.1 CERCLA/RCRA

The Property is within the boundaries of IR Site 25, Coast Guard Housing and Estuary Park (Figure 2). Much of Alameda Point, including IR Site 25, was created by dredging nearby areas such as Oakland Inner Harbor and then filling tidelands, marshlands, and sloughs at the site, beginning in the early 1900s and continuing until 1930. The dredged materials used as fill likely contained manufactured coal gas wastes such as coal ash (containing trace metals and PAHs) from historical plant sites. As the marshlands and intertidal areas were filled in, the discharged petroleum products from non-Navy sources became entrapped in the subsurface, creating what is now referred to as the Marsh Crust. Subsequent filling buried the Marsh Crust at a depth of between 15 and 20 feet bgs at IR Site 25. The fill that overlies the Marsh Crust contains similar

materials to that forming the Marsh Crust, including PAHs. No groundwater plume (contamination) underlies Estuary Park.

PAHs are the only chemicals of concern for IR Site 25 soils.

The following CERCLA actions were taken at the Property:

- A RAP/ROD completed in 2001 for the Marsh Crust at FISCA and for the Marsh Crust and former subtidal area at Alameda Point selected land-use controls as the remedy for the Marsh Crust and former subtidal area at Alameda Point, which includes the Site. The land-use controls include environmental deed restrictions and CRUPs, and require compliance with the City of Alameda No. 2824, the Marsh Crust Ordinance.
- The Environmental Baseline Survey for Zone 16, which includes Parcel 182 (including the Property), was conducted in 2001.
- Sampling for the RI was conducted in May and June 2001. The RI report, which included a human health risk assessment, was finalized in 2002 (see Appendix B for excerpts).
- A TCRA at IR Site 25 was conducted in 2001 and 2002 based on results of the 2001 RI. During the TCRA, 66,763 cubic yards of soil was removed from IR Site 25 to a depth of approximately 2 feet bgs in the non-hardscape areas with the highest concentrations of PAHs. All of Estuary Park was included in the TCRA. Trees less than 6 inches in diameter and PAH-contaminated soil were removed to a depth of 2 feet bgs and replaced with clean fill (see Appendix B for excerpts of TCRA closeout report).
- The OU-5 soil Feasibility Study evaluated remedial alternatives for PAH-impacted soil and updated the RI human health risk assessment. To evaluate the risk from exposure to PAHs remaining in soil and the protectiveness of proposed removal actions, the FS evaluated post-TCRA risk for the TCRA parcels and updated the risk assessment for the non-TCRA areas.
- A ROD for soil at IR Site 25 documents the selected remedy of ICs to limit human contact with PAH-contaminated soil at IR Site 25. The ICs require future landowners to obtain written approval from the Navy, USEPA, and DTSC for excavation of soil from depths greater than 4 feet below ground surface and for the removal of hardscape. For this work, future landowners also must develop a soil management plan (this document), obtain approval of the plan from the Navy, DTSC, and EPA (unless EPA determines its review and approval of a specific soil management plan is not necessary) and comply with the soil management plan (see Appendix B for excerpts).
- Land use controls are detailed in the IR Site 25 LUC RD (see Appendix B for excerpts).

#### 2.1.2.2 *Petroleum Products and Derivatives*

No petroleum products or their derivatives have been known to be released on the Site.

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### ***3 RISK MANAGEMENT MEASURES TO BE IMPLEMENTED AT THE SITE PRIOR TO REDEVELOPMENT***

The following subsections describe the risk management measures to be implemented at the Site, prior to Site redevelopment, to minimize the potential for human exposures to chemicals that are present at the Site. This section also includes procedural guidelines to ensure that redevelopment activities at the Site are conducted in accordance with applicable federal, state, and local environmental health and safety regulations.

Section 4.01 of the Estuary Park CRUP (Appendix C) provides in part:

“a. Exposed Soil/No Hardscape Areas. In areas with exposed soil, meaning no hardscape (such as structures, concrete or paved roadways, parking lots, foundations and sidewalks) and no buildings:

1. “No activities that will disturb the soil below 4 feet below grade (e.g., excavation, grading, removal, trenching, filling, earth movement, mining, or drilling) shall be allowed on the Property without a Soil Management Plan [this SMP], prepared in accordance with the LUC RD IR Site 25 Soil Report dated October 2009, approved by the Department, U.S. EPA, and the DON in advance.

“b. Hardscape Areas. In areas with hardscape (such as, structures, concrete or paved roadways, parking lots, foundations and sidewalks) or buildings at the time of ROD signature...:

1. “For any excavation immediately below the hardscape or foundation, the Owner is required to (a) obtain written approval from the Department, U.S. EPA, and the DON; and, (b) develop and comply with an SMP [this SMP] approved by the agencies for major site work consisting of demolition or removal of hardscape and buildings existing at the time of ROD issuance (September 2007). Replacement of single-lot walkways and driveways is not considered major site work.”

This section is not intended to impose redevelopment requirements other than those that should be applied (when prudent) at any other urban construction project in the City, unless areas of known or suspected environmental contamination are involved.

This SMP does not set forth the scope of the active remediation required to be implemented by the Navy, nor does it include the criteria for confirming the adequacy of those efforts nor the mitigation measures required to be implemented to control air emissions, surface runoff, and similar environmental conditions occurring during the implementation of the remedy. Those management measures are detailed in applicable Navy documents.

### 3.1 WORKER HEALTH AND SAFETY

#### 3.1.1 Site-Specific Health and Safety Plan

Site-specific HSPs are designed to ensure that site construction activities are performed in a manner protective of the health and safety of site construction workers and of interim site users in the construction zone (i.e., within the fence that is erected at the beginning of construction activities to demarcate those areas where access needs to be restricted, discussed in [Section 4.2](#)). This SMP is designed primarily to ensure the health and safety of current and future Site users outside the immediate vicinity of construction; the development of a site-specific HSP is the responsibility of the contractor and is beyond the scope of this SMP. The site-specific HSP provides one mechanism through which all workers involved in the redevelopment of the Site are informed of the presence of chemicals in the area prior to initiating work.

Any contractor's site-specific HSP must meet the following minimum requirements that for that contractor to perform or oversee Intrusive Activities under this SMP:

- The HSP must be certified by a CIH;

The HSP must contain:

- A background section containing a description of the project, including work tasks, objectives, and personnel requirements;
- A discussion of project personnel organization and responsibilities, including names, assignments, responsibilities, reporting pathways, and contact information;
- A discussion of chemical hazards at the site, including acute and chronic health effects, and established occupational exposure limits of chemicals of potential concern identified at the site;
- A discussion of physical hazards known or reasonably expected to be present at the site based on proposed construction, including but not limited to hazards associated with equipment use, environmental hazards (heat stress, etc.), and noise;
- A discussion of engineering controls that will be employed to minimize exposure of site workers and adjacent populations to chemicals in soil and groundwater;
- A discussion of required worker qualifications, including training requirements, medical surveillance, and recordkeeping (see also [Section 3.1.2](#));
- An exposure monitoring plan, including personal workspace monitoring and sampling protocols, appropriate action levels, field monitoring logs, and monitoring equipment calibration specifications;
- A discussion of general safe work procedures, including site control and security measures, sanitation facilities, illumination, required personal protective equipment

(types and rationale for selection), establishment of work zones and decontamination procedures, and documented daily tailgate safety meetings (during which the above information, particularly the information regarding the presence of chemicals and chemical hazards, is disseminated to all workers);

- A discussion of confined space entry locations, risks, and specific safety precautions and training requirements;
- Monitoring and general safety protocols to be used in the event of the discovery of areas of unknown contamination or subsurface structures; and
- Emergency response procedures, including a map to the nearest hospital, an evacuation plan, first aid procedures, fire protection and response procedures, spill containment procedures, and emergency references (key telephone numbers, addresses, etc.).

### *3.1.2 Health and Safety Training and Certification*

Based on known environmental conditions at the Site, the use of personnel trained and certified in environmental health and safety procedures pursuant to OSHA 29 CFR 1910.120, HazWoper Training requirements (OSHA-certified), is required in certain areas during Intrusive Activities. In order to comply with OSHA rules and regulations, which is the responsibility of all contractors at the Site, OSHA-certified workers would likely be required to be used in the following areas if Intrusive Activities are to be performed:

- Intrusive Activities that may encounter groundwater, until the groundwater has been effectively remediated (The Site contains no known groundwater contamination. However, this provision would become applicable if apparent groundwater contamination were encountered.);
- Closed petroleum sites that have land-use restrictions (The Site contains no closed petroleum sites. However, this provision would become applicable if in the future a petroleum site were established and closed.);
- Open petroleum sites, until the soil and groundwater have been effectively remediated, if needed, and until the sites have been closed by the Water Board (The Site contains no open petroleum sites. However, this provision would become applicable if in the future a petroleum site were established.);
- The area below the marsh crust Threshold Depth, if material below the Threshold Depth is hazardous or uncharacterized ([Section 4.3.1.2](#)).

This SMP does not require the use of OSHA-certified workers for Intrusive Activities at locations within the Site, unless such workers are required to comply with requirements under Cal/OSHA rules and regulations. If unknown areas of contamination or subsurface structures are identified pursuant to [Section 4.3.3](#), compliance with OSHA rules and regulations would likely

indicate that OSHA-certified employees should perform all remaining Intrusive Activities at the area in question.

### ***3.2 RISK MANAGEMENT TO BE IMPLEMENTED DURING DEMOLITION***

#### ***3.2.1 Asbestos Abatement***

Asbestos surveys conducted at Alameda Point have identified buildings in which asbestos-containing materials are present. Removal of asbestos containing materials is regulated by the USEPA and BAAQMD pursuant to the National Emission Standards for Hazardous Air Pollutants (NESHAP) portion of the Clean Air Act and BAAQMD regulations. The following regulations apply to asbestos abatement:

- 29 CFR Sections 1910.12, 1910.20, 1910.134, 1910.145, and 1910.1001;
- 29 CFR Section 1926.1101;
- 34 CFR Section 231;
- 40 CFR Section 61, Subparts A and M;
- CCR Title 8, Sections 1529 and 5208;
- CCR Title 8, Article 2.5;
- CCR Title 22, Division 4; and
- BAAQMD Regulation 11, Hazardous Pollutants Rule 2.

Removal of asbestos containing materials at the Site must be performed in accordance with NESHAP requirements, BAAQMD regulations, any air monitoring plan prepared pursuant to [Section 4.4.2](#), and any other applicable rules and regulations. Collectively, these requirements include provisions for worker health and safety, prevention of releases to the environment, and material handling and disposal.

#### ***3.2.2 Lead-Based Paint Abatement***

Because most buildings at the Alameda Point were constructed prior to 1978, lead-based paint is likely present.

According to CCR Title 8, Section 1532.1 and CCR Title 17, Sections 35000-36100, loose and flaking lead-based paint must be removed prior to demolition of impacted structures. Appropriate measures to control the generation of dust particles during building demolition must then be implemented prior to demolition. Lead-based paint abatement will be performed according to all applicable regulations and statutes. General dust control measures to be employed during redevelopment, including demolition, are discussed in [Section 4.4.1](#).

### *3.2.3 Subsurface Structure Demolition*

Subsurface structures harboring impacted soils may be brought to the surface during demolition activities. If the location of these structures is known and anticipated, then demolition will be conducted in accordance with the soil management guidelines presented in [Section 4.3.1](#) and [Section 4.3.2](#).

In the event that unknown subsurface structures are encountered, demolition activities will be conducted in accordance with the contingency protocols set forth in [Section 4.3.3](#).

### *3.3 STRUCTURAL DESIGN CONSIDERATIONS*

No known VOC contamination is present in soil or groundwater at the Site. However, if unknown VOC contamination were encountered (see Section 4.3.3 and its subsections), this section would be applicable. The location of the nearest known groundwater plume containing VOCs is illustrated in Figures 4-1 through 4-10 of the 2004 IR-25/FISCA IR-02 Groundwater RI/FS. The absence of any Petroleum Program sites at the Site is documented in the Finding of Suitability to Transfer (FOST). Both of these documents are included in Appendix B to this SMP.

Future buildings at the Site that potentially would be underlain by VOCs in soil or groundwater may need to be constructed in a manner that mitigates the potential for organic vapors to infiltrate into occupied spaces. This applies to buildings in CERCLA and Petroleum Program sites, until the sites are closed without restrictions ([Section 2.2](#)). These areas of concern are addressed below.

Vapor mitigation described in this section is not required for a future building at any site with a final decision document that does not include a requirement to mitigate vapor intrusion, unless the building is also near an open site as explained in Section 3.3.2. If unknown VOC contamination is encountered, vapor mitigation in future buildings may be warranted along with revisions to the final decision documents.

Sites that have residual TCE must be evaluated based on EPA's recently released lowered TCE risk numbers for indoor air by a qualified environmental professional. (The Site contains no known TCE contamination.)

#### *3.3.1 Vapor Intrusion Risk Management in Areas of VOCs in Soil or Groundwater*

No known VOC contamination is present in soil or groundwater at the Site. However, if unknown VOC contamination were encountered, this section would be applicable.

In certain areas, vapor mitigation measures will need to be implemented to help ensure protection against the infiltration of organic vapors into future buildings. According to the DTSC *Vapor Intrusion Mitigation Advisory* of October 2011, acceptable vapor mitigation measures include, but are not limited to, sub-slab pressurization, depressurization, and venting systems for new buildings, such as the installation of a gravel blanket and piping system installed under the proposed floor slabs of any future building.

Vapor mitigation measures generally are not needed for buildings (or portions of buildings) whose lowest floor is below the water table in all seasons. Furthermore, the DTSC's *Advisory* allows for podium level garages and mechanically ventilated basement garages as an alternative to its prescriptive mitigation measures, depending on site-specific conditions and garage construction and operation details. Once construction of the mitigation system is completed, operation, maintenance and monitoring of the system should be implemented in general accordance with the DTSC *Advisory*. Exceptions, depending on site specific vapor intrusion risk levels, may include measuring air flow and pressure/vacuum in the system as an alternative to collecting and analyzing indoor air samples.

All remedial measures associated with VOC contamination of soil and groundwater, including but not limited to groundwater remedial activities and monitoring, will be addressed and implemented by the Navy through the applicable Alameda Point documents. The development and implementation of the vapor mitigation remedy will be coordinated with ongoing CERCLA remedial activities to ensure that access to and operation of the groundwater remedial system is not impeded.

### *3.3.2 Vapor Intrusion Risk Management Outside Areas of VOCs in Soil or Groundwater*

No known VOC contamination is present in soil or groundwater at the Site. However, if unknown VOC contamination were encountered, this section would be applicable.

Generally, structural designs for buildings outside open CERCLA or Petroleum Program sites with VOCs in soil or groundwater are not required to include vapor intrusion mitigation, unless specified in site closure documents. However, future buildings less than 100 feet from a CERCLA or Petroleum Program plume of volatile groundwater contaminants or an open Petroleum Program site that is not part of a Corrective Action Area (CAA) are subject to the vapor intrusion mitigation requirements in [Section 3.3.1](#).

## **3.4 RISK MITIGATING CONSTRUCTION TECHNIQUES**

Redevelopment has the potential to bring impacted subsurface soil and groundwater to the surface where Site users could potentially be exposed. This SMP addresses requirements for site-

specific construction techniques that minimize the transport of impacted material to the surface, where practicable. Site-specific conditions that may warrant mitigating construction efforts include chemical presence in subsurface soil and/or groundwater and a shallow groundwater table.

Construction techniques designed to minimize the amount of subsurface soil and groundwater brought to the surface include:

- Abandonment in place of utility lines that are deeper than approximately 4 feet below finished grade rather than excavation and disposal; and
- Driving support piles directly into the underlying soil without pre-boring, where practicable.

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#### ***4 RISK MANAGEMENT MEASURES TO BE IMPLEMENTED AT THE SITE DURING REDEVELOPMENT***

This section identifies appropriate risk management measures to be implemented at the Site to minimize the potential for human or environmental exposure to chemicals mobilized by construction activities. Where applicable, the risk management activities address each individual environmental medium, and provide risk mitigation efforts for each.

This section is not intended to impose redevelopment requirements other than those that should be applied (when prudent) at any other urban construction project in the City, unless areas or discoveries of known or suspected environmental contamination are involved.

##### ***4.1 IDENTIFICATION OF CONSTRUCTION/REDEVELOPMENT ACTIVITIES THAT COULD IMPACT HUMAN AND/OR ENVIRONMENTAL HEALTH***

Construction and redevelopment at the Site are likely to include various site preparation activities that will disturb soils and/or groundwater. The following activities have the potential to impact human or environmental receptors:

- Unauthorized access to the Site during construction;
- Dust generation associated with Intrusive Activities, movement of construction and transportation equipment, and winds traversing exposed soils or stockpiles;
- Off-Site transport of sediment by surface runoff;
- Contaminated groundwater migration via preferential groundwater flow pathways associated with subsurface utility conduits (No known groundwater contamination is present at the Site, so this bullet applies to unknown groundwater contamination were it to be encountered.);
- Contamination of soil and/or groundwater from the stockpiling of saturated, contaminated soil;
- Stockpiling of contaminated soil, especially soil whose chemical concentrations characterize the soil as “hazardous waste”;
- Inadvertent off-Site transport of soils on truck wheels or from unsecured truck beds; and
- Dewatering (No known groundwater contamination is present at the Site, so this bullet applies to unknown groundwater contamination were it to be encountered.).

##### ***4.2 ACCESS CONTROL DURING CONSTRUCTION***

The potential for unauthorized access to the construction site and the accompanying risk of exposure to contaminated soil shall be managed as follows:

- A 6-foot-high chain-link fence shall be erected around the construction site perimeter, unless site conditions warrant the use of a taller fence. Access to the Site will be restricted by control points (i.e., gates) that will be monitored, and locked during non-construction hours.
- “No Trespassing” signs in both English and Spanish shall be posted every 500 linear feet along the fence line.
- If required pursuant to Proposition 65, public notices shall be posted along the fence line alerting the public that chemicals with known adverse health effects have been found in soil and groundwater at the Site.

These are standard construction site security measures that are required to be implemented even in the absence of any contaminants in soil and/or groundwater.

#### *4.3 RISK MITIGATION TO ADDRESS CONTAMINANTS IN SOIL*

##### *4.3.1 Excavations Below the Marsh Crust Threshold Depth*

The marsh crust is a potentially contaminated subsurface soil horizon between the native Bay Mud sediment and the overlying imported fill material, which has been identified in borings throughout much of Alameda. [Section 2.1.1](#) contains a more detailed discussion, and the map attached to the MCO ([Appendix A](#)) presents the City of Alameda Marsh Crust Threshold Depth contours. To address concerns associated with contaminants in the marsh crust, the City enacted the MCO (Alameda Ordinance No. 2824) on February 15, 2000, regulating excavation activities in areas suspected to contain the marsh crust. The MCO, which is attached as [Appendix A](#), requires the following:

- An excavation permit for any excavations performed below the specified Threshold Depth;
- Adequate measures to protect worker health and safety;
- Handling of soils excavated from below the Threshold Depth as hazardous waste (if the soil were deemed a waste), unless reconnaissance sampling proves it to be non-hazardous waste to the satisfaction of the CBO.
- Adequate characterization of excavated soils to ensure that they are handled in accordance with all applicable environmental laws and regulations, for example, disposal in an off-site landfill or other disposal facility that is approved to accept such soils; and
- Construction site Best Management Practices (BMPs).

The MCO is regulated by the City’s CBO, under DTSC oversight.

This SMP is intended to complement the MCO. [Section 4.3.1.1](#) and [Section 4.3.1.2](#) fulfill the requirements of Sections 13-56.8a and 13-56.8c of the MCO, respectively. Compliance with this SMP does not relieve the contractor from fulfilling the permitting, health and safety, or other obligations promulgated in the MCO.

It is important to make future property owners at the Site aware of the presence and location of the marsh crust. Hence, as required under Section 13-56.8 of the MCO, any analytical data or observations regarding the marsh crust shall be submitted to the City for use by the CBO in amending the marsh crust map to reflect actual Site conditions. Prior to excavations that might extend below the Threshold Depth, the excavation contractor shall contact the CBO to obtain the most recent Marsh Crust Threshold Depth Map. This map must be obtained from the CBO in a timely manner, so that the excavation project can comply with the MCO if it is applicable.

#### 4.3.1.1 *Reconnaissance Sampling*

Section 13-56.8a of the MCO allows soils from below the Threshold Depth to be treated as non-hazardous waste if implementation of a reconnaissance sampling plan rules out, to the satisfaction of the CBO, the presence of soil that would be “hazardous waste” if the soil were deemed a waste. The CBO shall use the RCRA and CCR definitions of hazardous waste in making this determination. This section stipulates the reconnaissance sampling plan for excavations that will continue below the Threshold Depth pursuant to Section 13-56.8a of the MCO. Pursuant to the MCO, the CBO, under DTSC supervision, is the lead regulator overseeing implementation of these provisions of this SMP.

The results of previous environmental investigations conducted in the proposed area of excavation may be used to confirm the presence or absence of the marsh crust only following submission of these results to the CBO, and following approval by the CBO of their use for this purpose.

Unless redundant with the use of previous assessment results, or in conflict with any specific requirements stipulated in the excavation permit by the CBO, the following shall be considered minimum requirements to provide adequate confirmation of the presence or absence of the marsh crust, though more refined characterization may be conducted at the contractor’s discretion:

- A minimum of one continuous-core soil boring shall be advanced to at least 20 feet bgs via direct-push or hollow-stem auger methodology in the proposed excavation area. For excavations generating more than 1,000 cubic yards (yd<sup>3</sup>) of soil, additional such borings shall be advanced to achieve at least one boring per 1,000 yd<sup>3</sup> of soil generated. Boring spacing closer than 50-foot centers is not required.
- Lithological logging of each boring shall be performed under the supervision of a qualified California PE (Civil) or PG, and shall include, at a minimum, a description of

soils per the Unified Soil Classification System, color, odor, appearance, facies changes, and headspace reading of major soil units obtained via photo- or flame-ionization detector (PID/FID).

- A minimum of two soil samples shall be collected from each boring. One composite sample shall be collected from above the Threshold Depth. The other sample should be collected from within the suspected marsh crust interval, and should target the depth exhibiting the highest headspace reading or an interval exhibiting characteristics associated with the marsh crust (i.e., black discoloration, petroleum odor). If suspected marsh crust interval is encountered and if excavation is to extend deeper than that depth, one sample shall be collected midway between the depth of the suspected marsh crust interval and the depth of excavation. The samples shall be placed in a cooler on ice and shall be submitted to a state-certified laboratory under chain-of-custody tracking for the following analyses:
  - TPH by USEPA Method 8015B,
  - VOCs by USEPA Method 8260C,
  - PAHs by USEPA Method 8270C with selection ion monitoring (SIM),
  - PCBs by USEPA Method 8082,
  - Title 22 metals by USEPA Methods 6020/6010B/7470/7471A, and
  - closed-system purge and trap for volatile organics in soil by USEPA Method 5035

Soil samples collected from the marsh crust or shallower shall be analyzed by the TPH, VOCs, and PAHs methods only, unless the soil exhibits any of the indicators of apparent unknown contamination (see Section 4.3.3.1). Any soil samples that exhibit an indicator of apparent unknown contamination that is inconsistent with marsh crust or that are collected from below the marsh crust shall be analyzed by all of the methods listed above.

Should no marsh crust be encountered, or should the analyses described above indicate that soils below the Threshold Depth do not contain concentrations of chemicals that would cause the soil to be defined as “hazardous waste” if the soil were deemed a waste, under Federal or State law, the soil handling protocols set forth in [Section 4.3.2](#) shall apply to these soils. In the event that “hazardous soils” are identified, such soils (as established by the reconnaissance boring(s) or previous environmental work) shall be subject to the soil handling protocols established in [Section 4.3.1.2](#). In the event that soils exhibiting characteristics consistent with the marsh crust are encountered where reconnaissance sampling previously failed to detect these soils, the provisions of [Section 4.3.1.2](#) shall apply until these soils are properly characterized.

#### 4.3.1.2 Excavation of Uncharacterized Soils Below the Threshold Depth or Marsh Crust Soils

Section 13-56.8c of the MCO allows uncharacterized soils to be excavated from below the Threshold Depth and stockpiled while characterization takes place, provided a site-specific construction SMP has been implemented to ensure proper handling, characterization, and disposal of these soils as hazardous waste (unless demonstrated otherwise). This section is intended to fulfill the requirements of Section 13-56.8c of the MCO, and also provides handling protocols for soils shown to be hazardous by reconnaissance sampling or previous environmental investigations. Under the MCO, handling of material excavated below the Threshold Depth is to be overseen by a registered geologist or engineer licensed in the State of California.

Should excavation of soils from below the Threshold Depth occur without prior reconnaissance sampling that rules out the presence of marsh crust soils per [Section 4.3.1.1](#), or should soils known or suspected to be “hazardous waste” under law be excavated, the material should be managed as hazardous waste pursuant to CCR Title 22, Division 4.5 and the following handling protocols shall be implemented:

- Excavation and transportation shall be performed by OSHA-certified personnel;
- Soils shall remain on site until characterization is complete, unless disposed of as hazardous waste within 90 days;
- Breathing zones shall be monitored for dust and VOC concentrations as specified by the site-specific health and safety plan;
- Trucks transporting these soils shall be loaded atop polyethylene sheeting and decontaminated, as necessary, prior to departing the loading area, and all loads shall be covered during transport;
- Soil stockpiles shall be:
  - Managed to segregate soils of different origins
  - Placed atop and under anchored, impermeable sheeting
  - Limited in volume to 1,000 yd<sup>3</sup>
  - Managed in accordance with a SWPPP that complies with the SWRCB Construction General Permit
  - Access-restricted via erection of a 6-foot-high chain link fence with locked access points
  - Inspected daily, with inspection records maintained pursuant to [Section 4.3.2.5](#)
  - Posted with appropriate signage indicating the presence of potentially hazardous waste
- Drainage basins shall be protected in accordance with a SWPPP that complies with the SWRCB Construction General Permit;

- Soils shall be either characterized as non-hazardous waste or disposed of as hazardous waste within 90 days; and
- Should soils be determined to be hazardous waste, transportation shall be manifested under the appropriate RCRA or California regulations; off-site disposal shall be at a Federal- or State-licensed hazardous waste treatment or disposal facility, as appropriate; and disposal documentation shall be provided to the CBO.

Additional sampling for waste profiling may be required by the disposal facility prior to acceptance of the waste stream, and contractors may wish to collect these samples concurrently with reconnaissance sampling.

#### *4.3.2 Soil Management Protocols During Site Redevelopment*

All handling, movement, stockpiling, and reuse of soils within the Site is subject to protocols delineated in this section, except for soils addressed in [Section 4.3.1](#). [Section 4.3.3](#) specifies contingency protocols to manage risk in the event that unknown contamination or structures are discovered.

##### *4.3.2.1 Soil Movement and Handling*

Soil may be handled and moved from one portion of the Site to another, as needed, within the limitations established in [Section 4.3.2.6](#). Potential impacts associated with movement and handling are addressed through adherence to the soil stockpile management procedures, ([Sections 4.3.2](#)), the dust control measures ([Section 4.4](#)), and the storm water pollution prevention control measures ([Section 4.5.1](#)) detailed in this SMP. Additionally, soil movement shall be conducted pursuant to any traffic management plan that is applicable to the project.

The Navy TCRA for Estuary Park removed the top 2 feet of soil sitewide, except under buildings, hardscape, and large trees. The bottom of the excavation was lined with an orange, plastic demarcation barrier. The excavation was then backfilled with clean, imported fill. Soil between 2 feet bgs and the marsh crust in landscaped areas and at all depths shallower than the marsh crust beneath buildings, hardscape, and large trees should be presumed to be PAH-contaminated, based on the Navy's investigation of IR Site 25. PAH-contaminated soil excavated from beneath buildings, hardscape, or large trees or from deeper than 2 feet bgs in landscaped areas, must be segregated in separate stockpiles from soil excavated from the upper 2 feet of landscaped areas. Other than soil apparently containing unknown contamination, which must be managed according to [Section 4.3.3.1](#), excavated PAH-contaminated soil may be reused as backfill in the same excavation, provided no PAH-contaminated soil excavated from beneath buildings, hardscape, or large trees or from deeper than 2 feet bgs in other areas is backfilled within 2 feet of ground surface in landscaped areas. When backfilling excavations that are deeper

than the orange demarcation barrier, a similar demarcation barrier must be installed below the layer of clean soil, whether the backfill soil is imported or excavated from the top 2 feet bgs of the landscaped area.

#### 4.3.2.2 *Soil Stockpiles and Associated Dust Generation*

Soils excavated from the Site may require stockpiling. The risk management measures discussed below address potential risks from wind transport, surface erosion, and unauthorized access to these stockpiles.

All stockpiles shall be placed atop water-impermeable plastic sheeting within a soil berm, or equivalent sediment-trapping mechanism, as per the SWPPP. Several alternative measures are available to minimize the generation of dust from soil stockpiles:

- Cover the stockpiles with anchored impermeable sheeting,
- Enclose the stockpiles in a covered structure,
- Hydroseed the stockpiles,
- Apply a non-toxic soil stabilizer to the surface of the stockpiles, or
- Regularly spray stockpiles with water.

One or more of these dust mitigation methods shall be selected based on field conditions such as weather and the size of the stockpile(s). Selection of stabilization efforts shall be at the contractor's discretion, provided compliance with the BAAQMD regulations is ensured. These soil stockpile management protocols are consistent with what is required by BAAQMD for the management of soil stockpiles in a Bay Area construction setting.

Soils whose chemical concentrations would characterize the soil as "hazardous waste" if the soil were deemed a waste shall not be stockpiled for longer than 90 days. Should the soils meet any of the hazardous waste criteria, they will be disposed off-site accordingly within 90 days of generation.

As required by [Section 4.3.1.2](#), with respect to soils excavated from below the MCO Threshold Depth without prior reconnaissance sampling that rules out the presence of marsh crust soils per [Section 4.3.1.1](#), and with respect to soils known or suspected of being "hazardous waste" under law, stockpiling and other soil management shall segregate soils of different origins.

#### 4.3.2.3 *Soil Stockpiles and Erosion Management*

To help ensure that stockpiled soils do not erode and potentially impact off-site receptors, all stockpiles shall be protected in accordance with a SWPPP that complies with the SWRCB Construction General Permit (regardless of the presence of potential contaminants). Collection,

containerization, profiling, and disposal of any water that collects within any soil berm surrounding the stockpile shall be in accordance with applicable regulations.

#### 4.3.2.4 *Soil Stockpiles and Access Management*

Provided stockpiles are located within active construction zones, the access restrictions set forth in [Section 4.2](#) will be sufficient to control stockpile access. However, should the stockpile be located outside an active construction zone, access will be controlled using a chain-link fence with locked gates and appropriate warning signs in English and Spanish.

Stockpiles of the following types of soil shall be segregated from soils of different origin and surrounded by a 6-foot-high, locked, chain-link fence until determined to be non-hazardous or disposed off-Site within 90 days:

- Soil stockpiles containing unknown contamination encountered during redevelopment and/or excavation, as described in [Section 4.3.3](#);
- Soils excavated from below the marsh crust Threshold Depth, unless sampling has shown them to be non-hazardous;
- Soils whose chemical concentrations would characterize the soil as "hazardous waste" if the soil were deemed a waste; and
- Soils excavated from beneath buildings, hardscape, or large trees or from deeper than 2 feet bgs in other areas..

#### 4.3.2.5 *Soil Stockpiles and Monitoring*

Daily inspection of stockpiles shall be conducted for stockpiles of contaminated or uncharacterized materials and any stockpile located outside an active construction zone. All stockpiles shall be monitored in accordance with a SWPPP that complies with the SWRCB Construction General Permit (regardless of the presence of potential contaminants). All inspection activities shall be performed by or supervised by a QSP. The QSP may delegate any or all of these activities to an employee appropriately trained to do the task(s). Inspections of the integrity of the stockpile shall include an assessment of the following:

- The integrity of erosion control efforts;
- The effectiveness of access control measures; and
- The need for repairs to maintain erosion or access control.

Tears in a stockpile cover shall be repaired, or the cover replaced, if the tears exceed 6 inches in length and one-eighth inch in width. Soil washouts are to be replaced and recovered.

To facilitate adherence to the SMP, a stockpile log shall be kept by the developer's designated environmental professional, and shall be made available to the City upon request. The log shall include the following information:

- Date(s) of soil generation;
- Approximate location of excavation(s) generating stockpiled soils;
- Location of stockpile;
- Final destination of stockpiled soils;
- Log of any erosion control measures implemented or modifications made; and
- Stockpile inspection documentation.

#### 4.3.2.6 Soil Reuse

Soil reuse at the Site is subject to the same environmental practices and considerations that are applicable to such activities in other urbanized areas of the City of Alameda, except to the extent this section provides more specific direction.

Soil reuse at the Site shall adhere to the following three principles:

- Soil from a “contaminated area” that does not exceed the Water Board’s Environmental Screening Levels (ESLs) is not necessarily equivalent to soil from a “clean area”.
- Soil that does not exceed ESLs may be reused at the site where the release or cleanup occurred but not in a “clean area”.
- Contaminated soil can be reused in areas with comparable or greater contamination of the specific contaminants of concern.

For purposes of this section, “clean area” shall mean an area of the Site where soil does not appear to contain unknown contamination (see Section 4.3.3) and that is any of the following areas:

- An area that is not within a CERCLA site or a Petroleum Program site (The entire Site is within CERCLA IR Site 25);
- An area within a CERCLA site, but outside the area where a release occurred or to where contamination may have migrated (As explained in the fourth bullet of Section 2.1.2.1, the Navy replaced the top 2 feet of soil in landscape areas of the Site with clean fill [see also the 2003 IR-25 TCRA Closeout Report in Appendix B]. No other Site soil at or above the marsh crust should be presumed to be from a “clean area”.);
- An area within a closed Petroleum Program site for which the site closure package concludes that no significant release has occurred (No Petroleum Program sites are present at the Site.)

- An area within a closed Petroleum Program site that had a release, but outside the area where the release occurred or to where contamination may have.

Conversely, for purposes of this section, “contaminated area” shall mean any of the following areas:

- An area where soil appears to contain unknown contamination (see Section 4.3.3);
- An area within a CERCLA site or within a closed Petroleum Program site where a release has occurred or to where contamination may have migrated (This bullet applies to the entire Site.); or
- Any area within an open Petroleum Program site (No Petroleum Program sites are present at the Site.).

Soil from below the MCO Threshold Depth, even in an otherwise “clean area”, shall be managed the same as soil from a “contaminated area”, unless an evaluation of the area, as described in Section 4.3.1, establishes that marsh crust is not present in that area.

Soil from a “clean area” may be reused anywhere on the Site. (None of the Site satisfies the definition of “clean area”.)

Soil from a “contaminated area” may be reused in the same “contaminated area” or in another “contaminated area” with comparable or greater contamination of the specific contaminants of concern, unless the CERCLA ROD or the Petroleum Program site closure letter restricts such reuse. Soils exhibiting apparent unknown contamination may be mixed with other soils only after characterization of the apparent unknown contamination in consultation with the environmental regulatory agency(ies) contacted for assistance (see Section 4.3.3.1). With respect to carcinogenic PAHs, reuse in another “contaminated area” is also acceptable when the soil being reused has benzo(a)pyrene equivalent levels that do not exceed the Alameda Point-specific ambient levels of both (a) no soil has greater than 1 milligram per kilogram (mg/kg) and (b) the 95% upper confidence limit of the mean is no greater than 0.62 mg/kg.

Soils excavated from a “contaminated area” to be relocated and reused shall be sampled according to American Society for Testing and Materials (ASTM) E1903-11, *Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process*, and ASTM D4700-91, *Standard Guide for Soil Sampling from the Vadose Zone*. Excavated soils intended for relocation and reuse are subject to the following analytical requirements as needed to supplement existing validated characterization data:

- One discrete sample from every 50 yd<sup>3</sup> (at most, i.e., one sample per 40 yd<sup>3</sup> satisfies the requirement, but one sample per 60 yd<sup>3</sup> does not) for VOCs (including benzene, toluene, ethylbenzene, xylenes, and naphthalene) by USEPA Method 8260C;

- One composite sample from every 250 yd<sup>3</sup> (at most, i.e., one sample per 200 yd<sup>3</sup> satisfies the requirement, but one sample per 300 yd<sup>3</sup> does not) for Title 22 metals by USEPA Methods 6020/6010B/7470/7471A, and SVOCs (including PAHs) by USEPA Method 8270C SIM;
- One composite sample from every 500 yd<sup>3</sup> (at most, i.e., one sample per 400 yd<sup>3</sup> satisfies the requirement, but one sample per 600 yd<sup>3</sup> does not) for TPH by USEPA Method 8015B, PCBs by USEPA Method 8082, and asbestos by OSHA Method ID-191, and
- Closed-system purge and trap for volatile organics in soil by USEPA Method 5035.

Composite soil samples shall be created from one subsample from every 50 yd<sup>3</sup> (at most, i.e., one sample per 40 yd<sup>3</sup> satisfies the requirement, but one sample per 60 yd<sup>3</sup> does not).

The analytical requirements for excavated soils intended for reuse from an open CERCLA site that has a ROD consist only of analytes with RGs. The analytical requirements for excavated soils intended for reuse from an open Petroleum Program site consist only of analytes that have an Alameda Point Preliminary Remediation Criterion (PRC) (see [Table 14](#)).

Composite sampling from unanalyzed stockpiled soil is unacceptable, unless it is stockpiled at the borrow area and originates from the same source area. In addition, if samples are composited, they should be from the same in-place depth interval before excavation and stockpiling, and not from different depth intervals.

The direction provided in this section is intentionally conservative in order to be appropriate for Site-wide applicability. On a case by case basis, departures from this section may be acceptable. However, proposed reuse of soil that departs from this section shall be proposed to the Regional Board for concurrence. Concurrence is also required from USEPA until the Site is delisted from the CERCLA NPL.

#### 4.3.2.7 *Off-site Soil Disposal*

Excavated soils that are not reused at the Site must be fully profiled for off-site disposal and managed accordingly. If profiling determines that soils are hazardous waste under RCRA or California hazardous waste regulations, such soils will require appropriate handling and disposal at a licensed hazardous waste treatment, storage, and disposal facility.

#### 4.3.2.8 *Soil Transportation*

Soils requiring off-Site transportation must be fully profiled prior to removal from the Site. If profiling determines the soil is hazardous waste under RCRA or California hazardous waste regulations, the soil must be managed in accordance with RCRA and/or California waste

tracking protocols. If profiling determines that the soil is a designated waste, it will be managed and transported under Bill of Lading protocols.

#### *4.3.3 Contingency Protocols for the Discovery and Management of Unknown Contamination or Structures*

During construction at the Site, it is assumed that unknown contamination and/or structures may be encountered, especially during excavation. If such unknown contamination and/or structures are encountered, the risk mitigation measures described in the following subsections should be implemented in these areas.

##### *4.3.3.1 Identification and Management of Unknown Contamination*

Prior to beginning construction at the Site, the contractor shall review available data to identify any known areas of contaminant presence, including contaminant location, type, and concentration. As described in [Section 3.1.1](#), the site-specific HSP, to be prepared by contractors at the Site, shall incorporate a summary of the specific chemical constituents present at the Site to which the workers may be exposed.

Contingency monitoring protocols will be triggered by the identification of any nonconforming soil or groundwater conditions that are not consistent with the review of available data. Such conditions may be noted by visual or olfactory differences, or differences in physical composition from surrounding soils, and shall include, but not be limited to, the following:

- Oily or shiny soils;
- Soils saturated with a liquid other than water (i.e., free-phase liquids);
- Soils with an appreciable chemical or hydrocarbon odor;
- Soils with elevated organic vapor measurements (as measured with a PID, FID, or equivalent);
- Soil discoloration not related to lithologic facies changes; and
- Groundwater coloration, odor, or sheen.

If areas of previously unidentified apparent contamination are encountered, work shall cease in that area immediately and the City and either the Water Board (if apparently petroleum-related) or DTSC (if apparently not primarily petroleum-related) shall be contacted (within ten days, unless applicable law requires more immediate reporting) and their assistance requested in determining further sampling or mitigation. Until the Site is delisted from the CERCLA NPL, USEPA is to be contacted concurrently with DTSC whenever DTSC must be contacted. Contact information for BCT representatives and the City's CBO is provided in Section 1.4. Further construction in the area shall not proceed until authorized by the regulatory or City

representative. Materials that trigger these protocols shall be handled pursuant to [Section 4.3.1.2](#) until proven to be non-hazardous waste.

To minimize down time, samples should be collected immediately and analyzed by a State-certified laboratory for any suspected contaminants. Target analytes should be determined with input from the BCT and the City and shall be based on a review of field evidence, as well as existing analytical data from the area. If the unidentified material proves to be unacceptably contaminated, further actions shall be undertaken consistent with applicable Cal/OSHA rules and regulations, and under proper regulatory oversight.

#### 4.3.3.2 *Identification and Management of Unknown Structures*

During Intrusive Activities at the Site, it is possible that pipelines, underground storage tanks (USTs), sumps, drainage structures, or other previously unidentified subsurface structures may be encountered.

Chapter 6.7 of the California Health and Safety Code governs the removal and remediation of contamination associated with USTs. The Water Board is responsible for oversight of UST removal and any associated remediation activities. In the event that a UST or associated vents or piping are discovered, the Water Board staff shall be contacted and their assistance requested.

Other underground structures shall be assessed as follows:

1. The structure shall be inspected to assess whether it contains any indication of chemical residuals or free-phase liquids other than water. This assessment shall be conducted by the contractor's designated environmental professional, and shall be based on visual evidence and the results of vapor monitoring using a PID, FID, or equivalent. Under no circumstances shall any personnel enter an unknown subsurface structure at any time. If chemicals are not indicated within the structure by the above-referenced means, the structure may be removed or abandoned in place in a safe manner by the contractor.
2. If liquids are present in the structure, samples shall be collected and submitted to a State-certified laboratory for analysis using the analytical methods specified in the last bullet of Section 4.3.1.1. Liquids may be temporarily drummed or collected by vacuum truck while analysis is pending. Based on analytical results, the liquids shall be disposed under the direction of the contractor's environmental professional in accordance with all applicable environmental laws and disposal requirements.
3. If solids are present in the structure and contamination is suspected, samples shall be collected and submitted to a State-certified laboratory for analysis. Solids may be temporarily drummed while analysis is pending. Based on analytical results, the solids shall be disposed under the direction of the contractor's environmental professional in accordance with all applicable environmental laws and disposal requirements.

4. If contaminated liquid or solid media are present in the structure, the structure shall be inspected for physical integrity following removal of the contaminated media. The contractor's environmental professional shall document the results of this inspection, including an estimation of the volume and former use of the structure. The structure shall then be excavated and disposed at the direction of the environmental professional.
5. Once the structure is removed and if liquids were present in the structure, soils adjacent to and beneath the structure shall be assessed for contamination using all analytical methods specified item 2 of this section that detected any analytes in the structure's contents. If liquids were not present in the structure, soils adjacent to and beneath the structure shall be evaluated for apparent unknown contamination as described in Section 4.3.3.1. If contamination is suspected, soils should be managed as discussed in [Section 4.3.1.2](#).

#### **4.4 RISK MITIGATION EFFORTS TO ADDRESS CONTAMINANTS IN AIR**

##### **4.4.1 Construction Emissions Control Measures**

Contractors shall implement one or more of the following dust and equipment-exhaust control measures during construction to minimize air pollutant emissions. Successful dust and equipment-exhaust mitigation will accomplish the following goals:

- Reduce the potential for health impacts to construction workers;
- Prevent violations of ambient air quality standards;
- Minimize nuisance dust complaints from Site neighbors; and
- Minimize the migration of contaminants adhered to fugitive dust particles outside the Site.

##### **4.4.1.1 Specific Emissions Control Measures**

Basic emissions control measures to be implemented at the Site during construction are identified in the table below, which is excerpted from the current BAAQMD CEQA Guidelines for construction sites.

([http://www.baaqmd.gov/~media/Files/Planning%20and%20Research/CEQA/BAAQMD%20CEQA%20Guidelines\\_Final\\_May%202012.ashx?la=en](http://www.baaqmd.gov/~media/Files/Planning%20and%20Research/CEQA/BAAQMD%20CEQA%20Guidelines_Final_May%202012.ashx?la=en))

<b>Table 8-1 Basic Construction Mitigation Measures</b>	
1.	All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2.	All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3.	All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4.	All vehicle speeds on unpaved roads shall be limited to 15 mph.
5.	All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6.	Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
7.	All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
8.	Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Additionally, the following mitigation measures will be implemented to supplement the basic emissions control measures from the BAAQMD guidelines.

- Apply water or a soil tackifier on exposed soil surfaces to reduce dust levels if visible dust is being produced;
- Mist or spray water while loading or unloading soil transportation vehicles as needed to prevent dust generation;
- Minimize drop heights when loading transportation vehicles carrying sand, soil, or other loose materials;
- Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent;
- Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.

Should the above mitigation efforts prove inadequate to prevent visible dust plumes from leaving the Site, one or more of the following additional dust control measures shall be implemented at the contractor's discretion:

- Rumble strips, or an equivalently effective method, shall be used to eliminate excess soil from vehicle tires. All trucks and equipment, including their tires, shall be washed off prior to leaving the Site;
- Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction. (Wind breaks should have at maximum 50 percent air porosity.);
- All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 miles per hour; and/or
- The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.

Should these dust control measures prove inadequate to prevent visible dust plumes from leaving the Site, excavation and grading activities shall be suspended until wind speeds have diminished.

To further minimize construction equipment exhaust emissions, the following protocols shall be followed:

- Construction equipment shall be stored at the Site, except when not in continuous use;
- Alternative-fueled vehicles and equipment shall be used as practicable;
- Heavy equipment usage shall be restricted from 7 AM to 7 PM from Monday through Friday, and from 8 AM to 5 PM on Saturday, as specified in the City of Alameda Community Noise Ordinance.

#### 4.4.1.2 *Documentation of Emissions Control Measures*

Contractors will be required to record all mitigation activities daily. Logs are to be maintained for 60 days following the completion of construction where mitigation was implemented.

#### 4.4.2 *Air Monitoring Plan*

In addition to emissions control measures, if the contractor's environmental professional deems an air monitoring plan to be advisable to ensure the health and safety of off-Site receptors during construction, a site-specific air monitoring plan will be developed and implemented by or at the direction of the environmental professional. The environmental professional will use professional judgment when deciding whether an air monitoring plan is advisable and when drafting any air monitoring plan for the Site.

#### **4.5 RISK MITIGATION EFFORTS TO ADDRESS CONTAMINATION OF SURFACE WATER AND/OR GROUNDWATER**

##### **4.5.1 Off-Site Runoff Control**

To prevent the migration of soil from the Site into adjacent areas by surface drainage, runoff control measures shall be implemented in accordance with a SWPPP that complies with the SWRCB Construction General Permit. A SWPPP must be prepared by a QSD for each redevelopment project that is constructed at the Site.

##### **4.5.2 Methods to Minimize the Creation of Preferential Flow Pathways**

During redevelopment of the Site, trenches will be constructed for the placement of public and private utilities. In general, the depth to groundwater at the Site is between 4 and 8 feet bgs. The following risk management measures apply to trenches constructed below the upper limit of groundwater fluctuation at 4 feet, or below the water table as observed during construction, whichever is shallower. These measures will ensure that trench construction minimizes the migration of impacted groundwater through utility conduits. The measures to mitigate groundwater preferential flow pathways are to be implemented in all trenches that are constructed in an open CERCLA or Petroleum Program site (The Site has neither an open CERCLA nor Petroleum Program site.) having groundwater contamination, or other areas where apparent groundwater contamination has been encountered (as described in [Section 4.3.3.1](#)). For CERCLA or Petroleum Program sites where investigations are complete, these measures are not required more than 100 feet from the groundwater plume (No such areas are known to be present at the Site.).

Mitigation measures include the following:

- Low permeability materials will be placed at 300-foot intervals in the trench to disrupt groundwater flow within the trench backfill.
- Such impediments will also be placed at the intersection of trenches with the CERCLA or Petroleum Program site boundary.
- Several acceptable alternatives exist:
  - Backfilling a 1-foot trench section with a cement and bentonite mixture;
  - Installing a clay plug by compacting clay around the utility for a 5-foot trench section; or
  - Creating a 1-foot barrier by forming and pouring concrete around the utility.

#### *4.5.3 Dewatering Management Protocols*

Dewatering conducted in an open CERCLA or Petroleum Program site having groundwater contamination (The Site has neither an open CERCLA nor Petroleum Program site.) or in areas where apparent contamination has been encountered in groundwater, shall be conducted in compliance with all OSHA rules and regulations, and in accordance with the following guidelines:

- The dewatering system shall be monitored on a continuous, 24-hour basis during dewatering, or be designed with dual redundancy to prevent an overflow of contaminated water from detention structures. For example, fractionation tanks shall be equipped with both a high-level and an ultrahigh-level sensor, both of which will shut off influent pumps if tripped.
- All applicable discharge permits shall be obtained and observed.
- Dewatering and treatment residuals, such as tank bottoms and spent granular activated carbon, shall be disposed of in an appropriate manner at the direction of the contractor's environmental professional.
- Prior to dewatering in an open CERCLA or Petroleum Program site having groundwater contamination, the Navy shall be contacted to ensure coordination between proposed dewatering activities and groundwater investigation and remediation activities.

## ***5 RISK MANAGEMENT MEASURES TO BE IMPLEMENTED AT THE SITE FOLLOWING REDEVELOPMENT***

This section identifies appropriate risk management measures to be implemented at the Site after redevelopment to help ensure that Site occupants are fully protected from residual levels of contaminants that may remain in soil and/or groundwater at the Site.

Implementation of the management measures identified in this section is the responsibility of each owner, lessee, or their delegates with relevant property maintenance experience who have expressly assumed such responsibilities.

### ***5.1 LONG-TERM RESTRICTIONS ON GROUNDWATER USE***

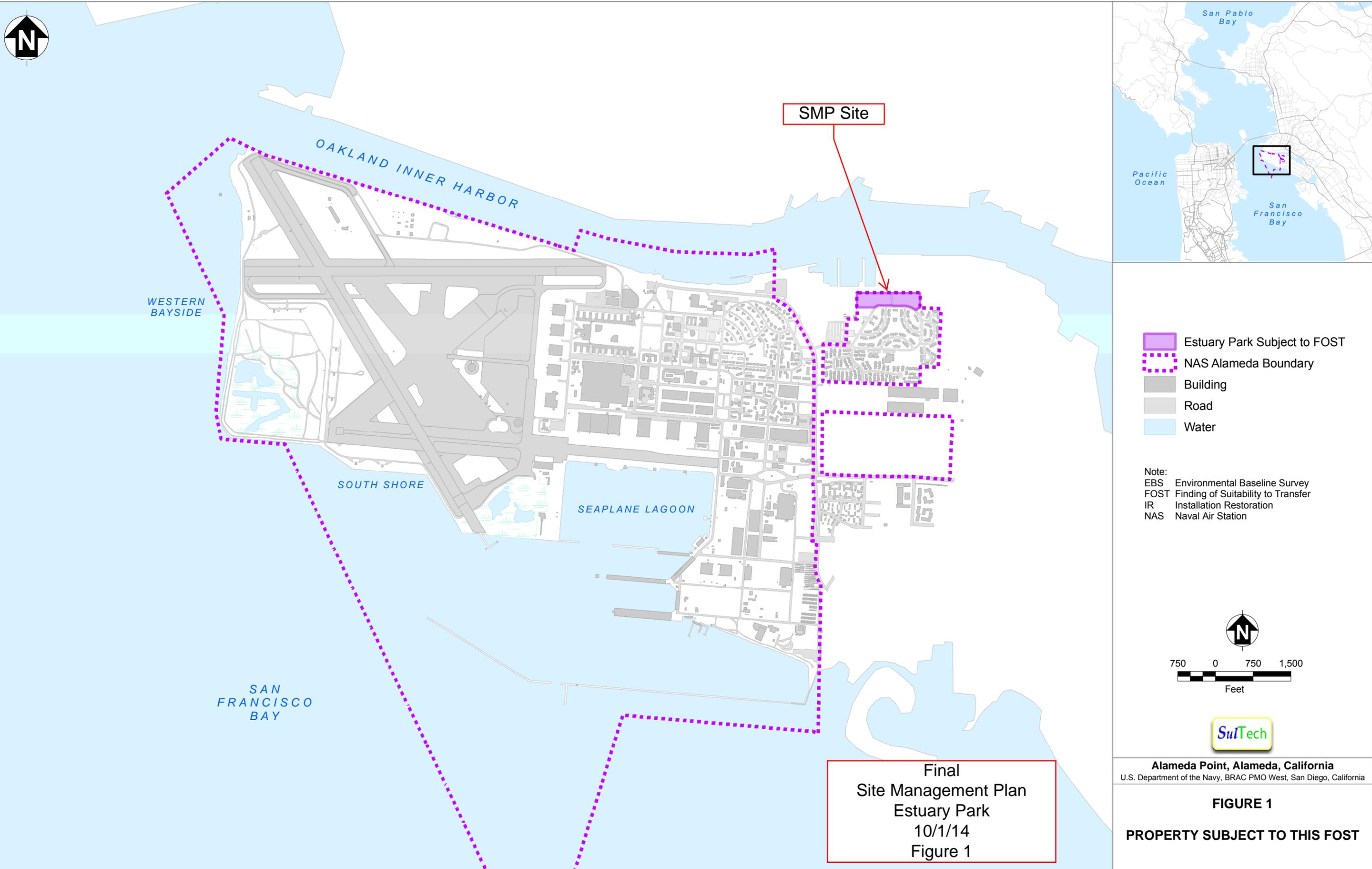
Based on high TDS concentrations, shallow groundwater beneath the Site is unlikely to be used as a source of drinking water. Well construction guidelines at Alameda Point prohibit the construction of any water well screened for the extraction of water from the shallowest groundwater zone. Extraction of groundwater for necessary construction dewatering will be permitted following concurrence by the Navy (if required in [Section 4.5.3](#)) that such extraction does not conflict with environmental remediation activities.

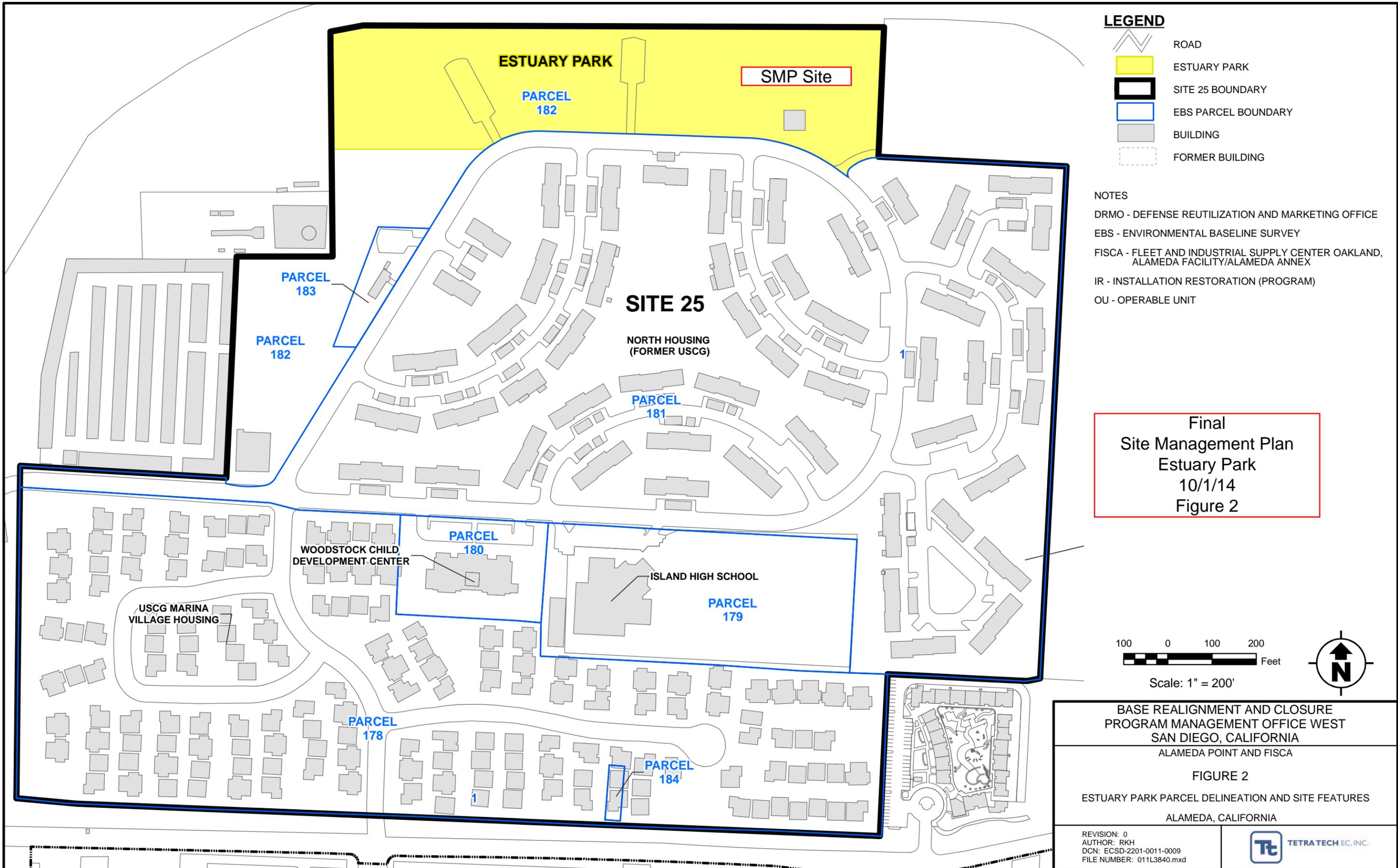
For buildings constructed with vapor intrusion mitigation systems, long-term operation and maintenance will be required to maintain the integrity of the mitigation system. These requirements will be outlined in building-specific operation and maintenance manuals and will include periodic system component inspection and repair procedures, and appropriate agency reporting.

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## *FIGURES*

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**ESTUARY PARK**

**SMP Site**

PARCEL 182

**SITE 25**

NORTH HOUSING (FORMER USCG)

PARCEL 183

PARCEL 182

PARCEL 181

WOODSTOCK CHILD DEVELOPMENT CENTER

PARCEL 180

ISLAND HIGH SCHOOL

PARCEL 179

USCG MARINA VILLAGE HOUSING

PARCEL 178

PARCEL 184

*APPENDIX A: MARSH CRUST ORDINANCE*

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FISC Marsh Crust

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FEB 17 2000

CITY OF ALAMEDA  
ALAMEDA POINT

CITY OF ALAMEDA ORDINANCE NO. 2824  
New Series

AMENDING THE ALAMEDA MUNICIPAL CODE BY AMENDING CHAPTER XIII (BUILDING AND HOUSING) BY ADDING A NEW SECTION 13-56 (EXCAVATION INTO THE MARSH CRUST/SUBTIDAL ZONE AT THE FORMER NAVAL AIR STATION ALAMEDA AND FLEET INDUSTRIAL SUPPLY CENTER, ALAMEDA ANNEX AND FACILITY) TO ARTICLE XVII (PITS, WELLS AND EXCAVATIONS)

WHEREAS, the marshlands and near shore areas once located adjacent to the island of Alameda were filled with dredge material between approximately 1900 and 1940; and

WHEREAS, the marsh crust, and the subtidal zone extending from it, is a horizon that is identifiable in the subsurface (the interface at the bottom of the fill material) which contains remnants of grasses and other intertidal and subtidal features; and

WHEREAS, the marsh crust/subtidal zone also contains, at least locally, elevated levels of petroleum-related substances, such as semi-volatile organic compounds, which substances may pose an unacceptable risk to human health and the environment if excavated in marsh crust/subtidal zone materials, brought to the ground surface and handled in an uncontrolled manner; and

WHEREAS, proper handling, storage and disposal of materials excavated from the marsh crust/subtidal zone, pursuant to state and federal hazardous materials laws, will help eliminate unacceptable exposures and risks to human health and the environment; and

WHEREAS, the Draft Base-wide Focused Feasibility Study for the Former Subtidal Area and Marsh Crust and Ground Water (U.S. Navy, February 20, 1999) recommends implementation by the City of an institutional control, such as an excavation ordinance, as a remedial action related to the cleanup by the United States Navy of Naval Air Station Alameda and the Fleet Industrial Supply Center, Alameda Annex and Facility, which closed military installations are anticipated to be transferred to the City; and

WHEREAS, it can be seen with a certainty that adoption of a permitting program by the City that requires proper handling, storage and disposal, pursuant to existing state and federal hazardous materials laws, of materials excavated from the marsh crust/subtidal zone will not involve or require any physical activities other than optional testing of excavated materials and, therefore, is exempt from the California Environmental Quality Act pursuant to California Code of Regulations, title 14, section 15061(b)(3) because there is no possibility that the enactment of the ordinance may have a significant effect on the environment.

Approved as to Form

CITY ATTORNEY

NOW, THEREFORE, BE IT ORDAINED by the Council of the City of Alameda that:

Section 1. The Alameda Municipal Code is hereby amended by adding a new Section 13-56 (Excavation Into the Marsh Crust/Subtidal Zone at the Former Naval Air Station Alameda and Fleet Industrial Supply Center) to Article XVII (Pits, Wells and Excavations) of Chapter XIII (Building and Housing) thereof to read:

**13-56 EXCAVATION INTO THE MARSH CRUST/SUBTIDAL ZONE AT THE FORMER NAVAL AIR STATION ALAMEDA AND FLEET INDUSTRIAL SUPPLY CENTER, ALAMEDA ANNEX AND FACILITY.**

**13-56.1 DEFINITIONS.**

For purposes of this Section 13-56 the following definitions shall apply:

*Bay* shall mean San Francisco Bay, including the Oakland Estuary and the Oakland Inner Harbor.

*DTSC* shall mean the California Environmental Protection Agency, Department of Toxic Substances Control.

*Earth material* shall mean any rock, natural soil or fill or any combination thereof.

*Excavation* shall mean the mechanical removal of earth material.

*Hazardous materials*, as defined in California Health and Safety Code sections 25260(d) and 25501(k), shall mean any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant or potential hazard to human health and safety, or to the environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous waste and any material which a handler or the administering agency has reasonable basis for believing would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

*Marsh crust* shall mean the underground layer that is the remnant of the tidal marsh that existed along the shoreline of Alameda Island before filling to create additional dry land. In many places, this layer contains substances from former industrial discharges that were retained in the historic marsh before filling.

*Subtidal zone* shall mean the underground layer that is the pre-filling Bay floor extension of the historic marsh. Together, the marsh crust and the subtidal zone constitute a single, continuous, underground layer that extends Bayward of the original mean higher high tide line of Alameda Island, before filling, throughout the area that was filled.

*Threshold depth* shall mean the depth below which a permit is required by this Section 13-56. The threshold depth is conservatively identified with the elevation above which there is little likelihood that substances from the historic marsh or Bay floor would have mixed during filling, including a margin of safety above the elevation of the historic marsh surface or subtidal zone. In no event will the threshold depth be above mean higher high water.

**13-56.2 Permit Required.**

- a. It shall be unlawful for any person, including utility companies and their employees and contractors, to excavate below a threshold depth above the marsh crust/subtidal zone within the area of the former Naval Air Station Alameda and Fleet and Industrial Supply Center, Alameda Annex and Facility, as depicted in Exhibit A, hereto, without first obtaining a permit in writing from the Chief Building Official.
- b. All excavation below the threshold depth in the area subject to this Section 13-56 shall be performed solely in accordance with the permit as approved and issued by the City.

**13-56.3 Depth of Excavation Subject to Permit Requirement.**

The Chief Building Official shall establish a threshold depth, consistent with DTSC's remedial decision documents pertaining to the marsh crust/subtidal zone, below which a permit shall be required for excavation pursuant to this Section 13-56. The threshold depth may vary by location. The Chief Building Official shall publish a map depicting the parcels and threshold depths for which a permit is required under this Section 13-56. The Chief Building Official may update the map, consistent with DTSC's remedial decision documents pertaining to the marsh crust/subtidal zone, as necessary to incorporate any new information concerning the depth of the marsh crust/subtidal zone received by the City since the preparation of the initial map or last update.

**13-56.4 Exception to Permit Requirement.**

- a. No permit shall be required under this Section 13-56 for pile driving or other penetration of the marsh crust/subtidal zone that involves neither (i) bringing materials from below the threshold depth to above the threshold depth; nor (ii) exposure of construction workers to soil excavated from below the threshold depth.
- b. No permit shall be required under this Section 13-56 for excavation associated with emergency repair of public infrastructure facilities; provided, however, that soil excavated from below the threshold depth in the area of the marsh crust/subtidal zone, as depicted on Exhibit A, must be managed as though it were hazardous in accordance with Subsection 13-56.8b.

### **13-56.5 Permit Application.**

Application for a permit shall be made in writing on forms available in or from the Building Services Office and shall be filed in the Building Services Office. Subsection 13-1.2 of Article I of Chapter XXIII regarding Appeals (Section 105.1), Appeal Fee (Section 105.2), Expiration (Section 106.4.4), Permit Fees (Section 107.2) and Plan Review Fees (Section 107.3) shall apply to all permits issued pursuant to this Section 13-56. The information required to be provided on the application shall be determined by the Chief Building Official and shall include at a minimum:

- a. A description and map of the property that is to be excavated sufficient to locate the area of proposed excavation on Exhibit A.
- b. Detailed plans, prepared by a registered civil engineer licensed in the State of California, of the excavation work to be done, including a drawing with dimensions to scale of all proposed excavation activity.
- c. A statement of the maximum depth of excavation.
- d. All elevations in plans and application materials submitted to the City shall be referenced to City Datum and shall show depth below ground surface.
- e. A cost estimate for purposes of determining the amount of the bond required to be obtained pursuant to Subsection 13-56.11.

### **13-56.6 Certifications and Acknowledgments.**

- a. The following certifications shall be required as part of the permit application:
  1. The applicant shall sign a certification prepared by the Chief Building Official acknowledging receipt of notice that the property to be excavated may be in the area of the marsh crust/subtidal zone, and that hazardous materials may be encountered during excavation.
  2. The applicant shall sign a certification prepared by the Chief Building Official acknowledging that federal and state hazardous materials laws and regulations will apply to storage, transportation and disposal of any materials excavated from the marsh crust/subtidal zone that are hazardous materials.
  3. The applicant shall sign a certification prepared by the Chief Building Official acknowledging liability for disturbing and removing all materials from the marsh crust/subtidal zone in accordance with this Section 13-56 and the permit.

- b. All building and excavation permits issued for construction or excavation within the area subject to this SubSection 13-56 shall contain the following written warning:

“Pursuant to Section 13-56 of Article XVII of Chapter XIII of the Alameda Municipal Code, excavation work in the area of the marsh crust/subtidal zone within the area of the former Naval Air Station Alameda and Fleet and Industrial Supply Center, Alameda Annex and Facility, as depicted in Exhibit A to Section 13-56 of Article XVII of Chapter XIII of the Alameda Municipal Code, may be subject to special materials handling requirements. The permittee acknowledges that he or she has been informed of the special materials handling requirements of Section 13-56 of Article XVII of Chapter XIII of the Alameda Municipal Code and that hazardous materials may be encountered during excavation.”

**13-56.7 Notification Prior to Start of Excavation.**

- a. After receipt of a permit and no less than two (2) business days (forty-eight (48) hours minimum) before commencement of any excavation activity in the area subject to this Section 13-56, the permittee shall notify the Chief Building Official of the planned start of excavation. Said notification shall include a schedule for any excavation work that will last for more than one day.
- b. The permittee shall give adequate notice to Underground Service Alert prior to commencing any excavation activity subject to this Section 13-56.

**13-56.8 Materials Handling.**

The permittee shall elect to follow one or more of the courses of action set forth below before beginning any excavation activities in the area subject to this Section 13-56. Unless otherwise demonstrated by the permittee by means of reconnaissance investigation pursuant to Subsection 13-56.8a, or unless the permittee prepares site management plans pursuant to Subsection 13-56.8c, soil below the threshold depth in the area of the marsh crust/subtidal zone, as depicted on Exhibit A, must be managed as though it were hazardous pursuant to Subsection 13-56.8b. The permittee may elect to follow Subsection 13-56.8a, but must comply with Subsection 13-56.8b or 13-56.8c if testing demonstrates that the materials below the threshold depth are hazardous materials. Copies of all reconnaissance testing results and/or existing information used to satisfy the reconnaissance investigation requirements of Subsection 13-56.8a shall be reported to and filed with the City. All observations or encounters with the marsh crust/subtidal zone during excavation shall be reported to the City.

- a. **Reconnaissance Investigation to Rule Out the Presence of Hazardous Materials Below the Threshold Depth.**

The permittee may elect to use reconnaissance borings, pursuant to a plan prepared by a qualified registered engineer or registered geologist, licensed in the State of California, to rule out, to the satisfaction of the Chief Building Official, the presence of hazardous materials below the threshold depth in the area to be excavated. As part or all of the reconnaissance plan, the permittee may make use of existing information, where appropriate, if the existing information is directly relevant to the location and depth to be excavated and contains observations or results of analyses that assist in concluding whether hazardous materials are present. The reconnaissance report shall include a description of all observations from below the threshold depth evidencing the presence or absence of the marsh crust/subtidal zone.

1. If hazardous materials are found below the threshold depth within the area to be excavated at any time (during reconnaissance or during excavation), the permittee shall comply with either Subsection 13-56.8b or Subsection 13-56.8c, at his or her election.
2. If hazardous materials are not found below the threshold depth within the area to be excavated, no additional materials controls, except as otherwise may be required under applicable federal, state or local law, are required under this Section 13-56.

**b. Handling Materials Excavated From Below the Threshold Depth as Hazardous Materials.**

If the permittee has not ruled out the presence of hazardous materials pursuant to Subsection 13-56.8a, or elects not to prepare a site management plan and materials testing program pursuant to Subsection 13-56.8c, the permittee shall presume that materials excavated from below the threshold depth must be disposed at an appropriately permitted disposal facility. In addition, no excavated materials from below the threshold depth may be stockpiled prior to disposal or returned to the excavation.

**c. Preparation of Construction Site Management Plan for Handling Materials Excavated From Below the Threshold Depth.**

1. In lieu of handling materials excavated from below the threshold depth pursuant to the restrictions in Subsection 13-56.8b, the permittee may elect to hire a qualified registered engineer or registered geologist, licensed in the State of California, to develop a site-specific construction site management plan, including a materials testing program, to the satisfaction of the Chief Building Official. The construction site management plan shall include, at a minimum, provisions governing control of precipitation run on and run off from stockpiled soils, soil segregation, securing of stockpiled soils, duration of stockpiling, and contingency plans for handling materials excavated from below the threshold depth that prove to be hazardous materials.

2. The permittee shall hire a qualified registered engineer or registered geologist, licensed in the State of California, to oversee compliance with the approved construction site management plan, and shall transmit to the Chief Building Official upon completion of the project written certification of compliance with the construction site management plan. The certification report shall include a description of all observations from below the threshold depth evidencing the presence or absence of the marsh crust/subtidal zone.

**13-56.9 Health and Safety Plan.**

The applicant shall cause to be prepared by a certified industrial hygienist, and keep on the construction site at all times, a health and safety plan to protect workers at the excavation site and the general public to the satisfaction of the Chief Building Official. The Chief Building Official may prepare and provide to applicants a model health and safety plan which, if used by the applicant, shall be modified by the applicant's certified industrial hygienist to suit the specific requirements of the applicant's project.

**13-56.10 Excavation Site Best Management Practices.**

All excavation and materials handling activities permitted under this Section 13-56 shall be conducted in accordance with applicable Alameda Countywide Clean Water Program Best Management Practices and City of Alameda Storm Water Management and Discharge Control Program Ordinance requirements.

**13-56.11 Bonds.**

Upon a finding by the Chief Building Official that a permit should issue for excavation pursuant to this Section 13-56, a surety or performance bond conditioned upon the faithful performance and completion of the permitted excavation activity shall be filed with the City. Such bond shall be executed in favor of the City and shall be maintained in such form and amounts prescribed by the Risk Manager sufficient to ensure that the work, if not completed in accordance with the approved plans and specifications, will be corrected to eliminate hazardous conditions.

**13-56.12 Nonassumption of Liability.**

In undertaking to require applicants for certain excavation permits to comply with the requirements of this Section 13-56, the City of Alameda is assuming an undertaking only to promote the general welfare. The City is not assuming, nor is it imposing on itself or on its officers and employees, an obligation for breach of which it is liable in money damages to any person who claims that such breach proximately caused injury.

**13-56.13 Construction on City Property.**

- a. The Chief Building Official shall prepare standard work procedures that comply with all the requirements of this Section 13-56 for all City

construction or improvement activities involving excavation below the threshold depth in the area subject to this Section 13-56. All departments, boards, commissions, bureaus and agencies of the City of Alameda that conduct construction or improvements on land under their jurisdiction involving excavation below the threshold depth in the area subject to this Section 13-56 shall follow such standard work procedures.

- b. The City shall include in all contracts involving excavation below the threshold depth in the area subject to this Section 13-56 a provision requiring City contractors to comply with all the requirements of this Section 13-56. All contracts entered into by departments, boards, commissions, bureaus and agencies of the City of Alameda that authorize construction or improvements on land under their jurisdiction involving excavation below the threshold depth in the area subject to this Section 13-56 also shall contain such standard contract provision.

**13-56.14 Severability.**

If any section, subsection, subdivision, paragraph, sentence, clause or phrase of this Section 13-56 or any part thereof is for any reason held to be unconstitutional or invalid or ineffective by any court of competent jurisdiction, such decision shall not affect the validity or effectiveness of the remaining portions of this Section 13-56 or any part thereof. The City Council hereby declares that it would have passed each section, subsection, subdivision, paragraph, sentence, clause or phrase of this Section 13-56 irrespective of the fact that one or more sections, subsections, subdivisions, paragraphs, sentences, clauses or phrases be declared unconstitutional or invalid or effective.

**13-56.15 Permit Fee.**

No permits for excavation in the marsh crust/subtidal zone shall be issued unless a fee has been paid. The fee shall be set by City Council resolution.

**13-56.16 Penalties.**

- a. Any person, including utility companies and their employees and contractors, violating any of the provisions of this Section 13-56 shall be deemed guilty of a misdemeanor, and each person shall be deemed guilty of a separate offense for each and every day or portion thereof during which any violation of any of the provisions of this Section 13-56 is committed, continued or permitted, and such violation may be prosecuted and punished as an infraction or misdemeanor pursuant to the provisions of Section 1-5.1 of the Alameda Municipal Code.
- b. Any person, including utility companies and their employees and contractors, that commences any excavation without first obtaining the necessary permits therefor shall, if subsequently allowed to obtain a permit, pay an amount, in

addition to the ordinary permit fee required, quadruple the permit fee otherwise required.

**13-56.17 Retention and Availability of Permit Files**

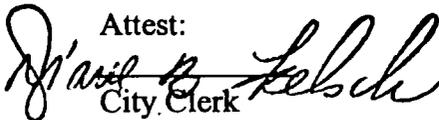
The City shall maintain files pertaining to all permits issued under this Section 13-56, and shall make such files available to DTSC for inspection upon request during normal business hours.

**13-56.18 Amendment of Section 13-56**

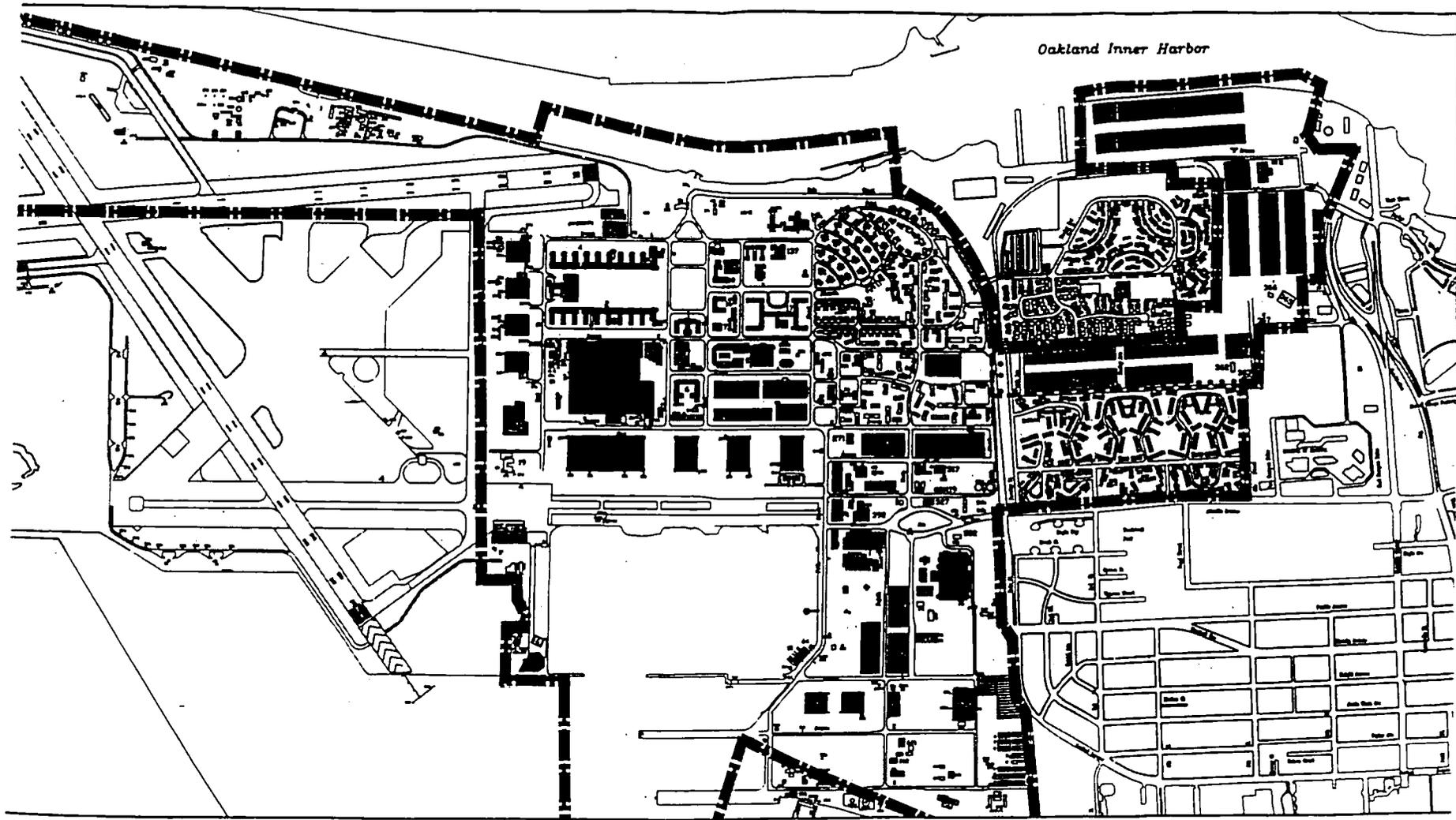
This Section 13-56 shall not be repealed or amended without thirty (30) days prior written notice to the DTSC Deputy Director for Site Mitigation.

Section 2. This Ordinance shall be in full force and effect from and after the expiration of thirty (30) days from the date of its final passage.

  
\_\_\_\_\_  
Presiding Officer of the City Council

Attest:  
  
City Clerk

\*\*\*\*\*



Oakland Inner Harbor



**LEGEND:**

 Marsh Crust / Subtidal Area

*Marsh Crust / Subtidal Area*

I, the undersigned, hereby certify that the foregoing Ordinance was duly and regularly adopted and passed by the Council of the City of Alameda in regular meeting assembled on the 15th day of February, 2000, by the following vote to wit:

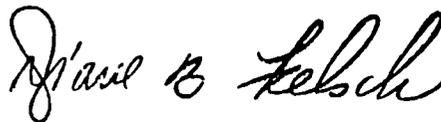
AYES: Councilmembers Daysog, DeWitt, Johnson, Kerr and Mayor Appezzato - 5.

NOES: None.

ABSENT: None.

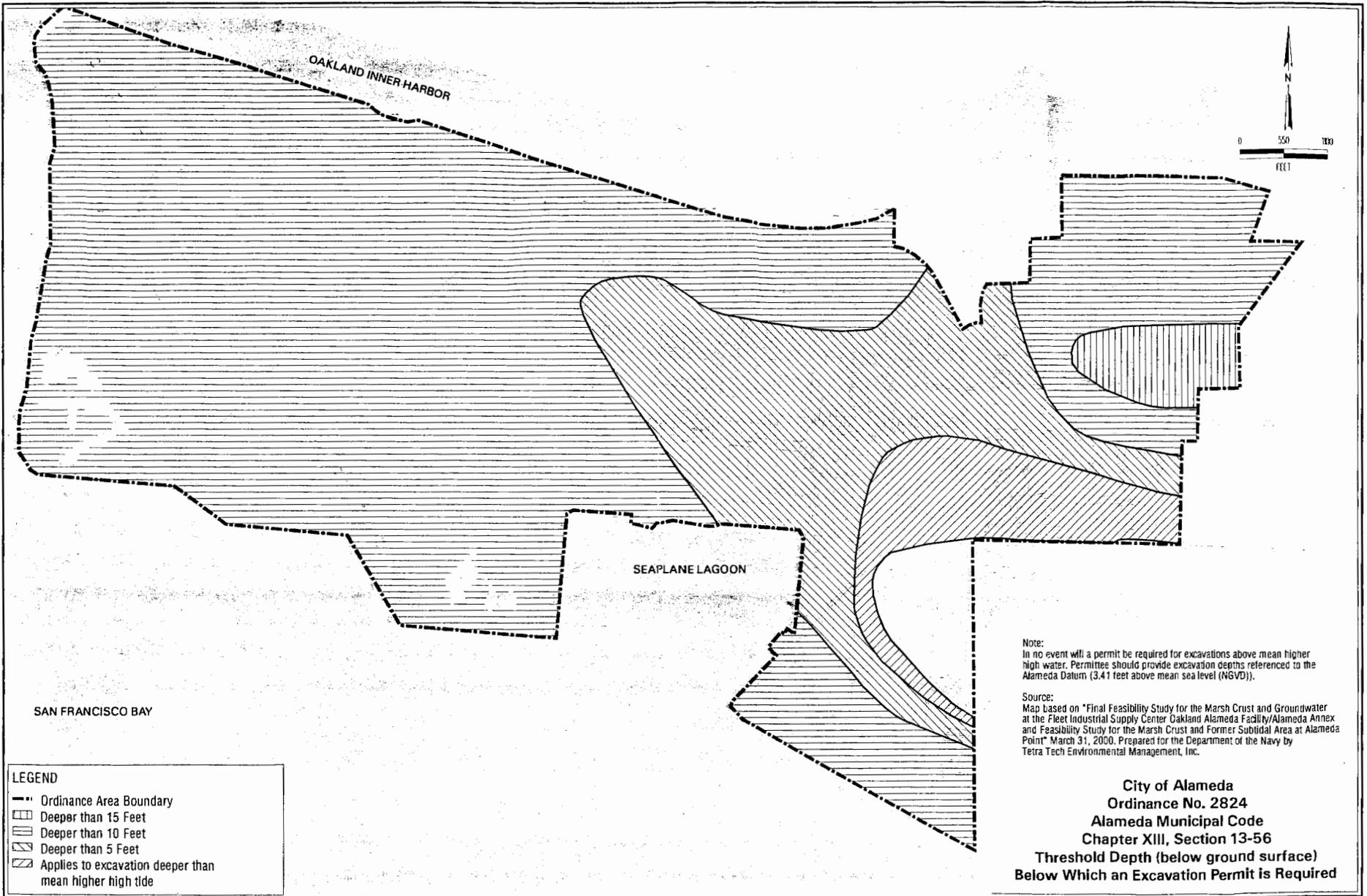
ABSTENTIONS: None.

IN WITNESS, WHEREOF, I have hereunto set my hand and affixed the official seal of said City this 16th day of February, 2000.



---

Diane Felsch, City Clerk  
City of Alameda



## *Appendix B: Background Documents*

- Remedial Investigation Report, OU-2B, December 2002 (excerpts)
- Closeout Report, IR-25 TCRA, October 2003 (excerpts)
- Groundwater Remedial Investigation/Feasibility Study, Alameda Point Site 25 / Alameda Annex IR-02, October 2004 (excerpts)
- Record of Decision, IR-25 Soil, September 2007 (excerpts)
- Land Use Control Remedial Design, IR-25, October 2009 (excerpts)
- Finding of Suitability to Transfer, Estuary Park, September 2009

ON DISK

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**OPERABLE UNIT 5 REMEDIAL INVESTIGATION REPORT  
ALAMEDA POINT  
ALAMEDA, CALIFORNIA**

**VOLUME I - TEXT**

**Final**

**December 2, 2002**

Submitted to:

Department of the Navy  
Southwest Division Naval Facilities Engineering Command  
1230 Columbia Street, Suite 1100  
San Diego, California

Submitted by:

Neptune and Company, Inc.  
1505 15<sup>th</sup> Street, Suite B  
Los Alamos, New Mexico 87544

IT Corporation  
1045 Jadwin Avenue, Suite C  
Richland, Washington 99352

ENVIRON  
6001 Shellmound Street, Suite 700  
Emeryville, California 94608

Southwest Division  
Naval Facilities Engineering Command  
Contracts Department  
1220 Pacific Highway, Building 127, Room 112  
San Diego, California 92132-5190

CONTRACT NO. N68711-98-D-5713  
CTO No. 0040

**FINAL**  
**PROJECT CLOSEOUT REPORT**  
Revision 0  
October 31, 2003

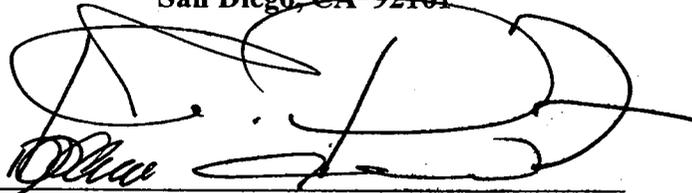
**CERCLA TIME-CRITICAL REMOVAL ACTION  
AT INSTALLATION RESTORATION SITE 25  
ALAMEDA POINT  
ALAMEDA, CALIFORNIA**

DCN: FWSD-RAC-03-3647

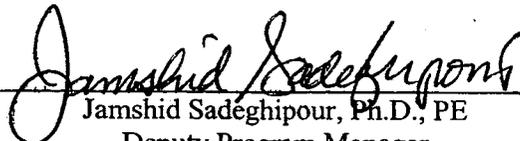


**FOSTER WHEELER ENVIRONMENTAL CORPORATION**

1230 Columbia Street, Suite 500  
San Diego, CA 92101



Abram Eloskof, M.Sc., M. Eng., CIH  
Project Manager



Jamshid Sadeghipour, Ph.D., PE  
Deputy Program Manager

# Groundwater Remedial Investigation/ Feasibility Study

Alameda Point Site 25 / Alameda Annex IR-02  
Final

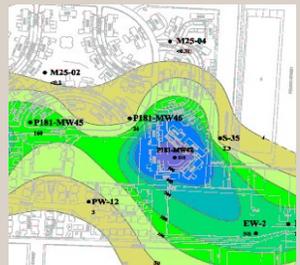
*October 2004*



*Prepared for:*



U.S. Department of the Navy  
Naval Facilities Engineering Command  
Southwest Division  
1230 Columbia Street, Suite 1100  
San Diego, CA 92101



Engineering/Remediation  
Resources Group, Inc.



**FINAL**

**RECORD OF DECISION  
SITE 25 SOIL**

**ALAMEDA POINT  
ALAMEDA, CALIFORNIA**

**September 2007**

*Prepared for:*  
**Base Realignment and Closure  
Program Management Office West  
1455 Frazee Road, Suite 900  
San Diego, CA 92108-4310**

*Prepared under:*  
**Naval Facilities Engineering Command,  
Southwest  
Contract Number N62473-06-D-2201  
Contract Task Order No. 0011**



**FINAL**

**LAND USE CONTROL  
REMEDIAL DESIGN  
IR SITE 25 SOIL**

**ALAMEDA POINT  
ALAMEDA, CALIFORNIA**

**October 2009**

*Prepared for:*

**Base Realignment and Closure  
Program Management Office West  
1455 Frazee Road, Suite 900  
San Diego, California 92108-4310**

*Prepared under:*

**Naval Facilities Engineering Command,  
Southwest  
Contract Number N62473-06-D-2201  
Contract Task Order No. 0011  
DCN: ECSD-2201-0011-0016**

**FINAL**

**FINDING OF SUITABILITY TO TRANSFER**

**Estuary Park  
(Portion of EBS Parcel 182)**

**NAS ALAMEDA (ALAMEDA POINT),  
ALAMEDA, CALIFORNIA**



Prepared By:

Department of the Navy  
BRAC Program Management Office West  
1455 Frazee Road, Suite 900  
San Diego, CA 92108

September 2009

- *APPENDIX C: Covenant to Restrict Use of Property,  
Environmental Restriction, December 17, 2013*

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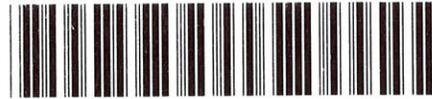
RECORDING REQUESTED BY:  
United States Navy  
BRAC Program Management Office West  
1455 Frazee Road, Suite 900  
San Diego, California 92109-4310  
Attention: Esther P. Ewell  
Real Estate Contracting Officer

WHEN RECORDED, MAIL TO:

Department of Toxic Substances Control  
700 Heinz Avenue  
Berkeley, CA 94710  
Attention: Mr. James Fyfe  
Alameda Remedial Project Manager



2013387314 12/18/2013 04:23 PM  
OFFICIAL RECORDS OF ALAMEDA COUNTY  
PATRICK O'CONNELL  
RECORDING FEE: 0.00



23 PGS

23  
John

SPACE ABOVE THIS LINE RESERVED FOR RECORDER'S USE

**Document required to be recorded under CA Government Code § 37393 and entitled to free recordation under CA Government Code § 27383**

## COVENANT TO RESTRICT USE OF PROPERTY

### ENVIRONMENTAL RESTRICTION

(Re: Former Naval Air Station [NAS] Alameda  
Estuary Park Public Benefit Conveyance [PBC]  
[Legal Description, Exhibit A])

This Covenant and Agreement ("Covenant") is made by and between the United States of America acting by and through the Department of the Navy ("DON", or the "Covenantor"), the current owner of certain property, situated in the City of Alameda, County of Alameda, State of California, described and depicted as Estuary Park PBC in Exhibit "A," (the "Property"), and the State of California acting by and through the California Environmental Protection Agency Department of Toxic Substances Control ("Department"). The Covenantor and the Department, collectively referred to as the "Parties", intend that the use of the Property be restricted as set forth in this Covenant, in order to protect human health, safety and the environment. The Parties have determined that this Covenant is reasonably necessary to protect present or future human

health or safety or the environment as a result of the presence on the land of hazardous material as defined in California Health and Safety Code section 25260, and enters into this Covenant in accordance with Health and Safety Code section 25355.5, California Civil Code section 1471(c), and Cal. Code Regs. Title 22, section 67391.1. In addition, pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (“CERCLA”) Section 104 (42 U.S.C. § 9604), as delegated to the Covenantor by Executive Order 12580, ratified by Congress in 10 U.S.C. § 2701, et. seq., and implemented by the National Oil and Hazardous Substances Pollution Contingency Plan (NCP-40CFR Part 300) and implementing guidance and policies, the Covenantor (“DON”) has also determined that this Covenant is reasonably necessary to protect present or future human health and safety and the environment as the result of the presence on the land of hazardous substances, pollutants and contaminants as defined in CERCLA Section 101 (42 U.S.C. § 9601).

The Parties therefore intend that the use of the Property be restricted as set forth in this Covenant, in order to protect human health and the environment.

## ARTICLE I

### STATEMENT OF FACTS

1.01 The Property, also referred to as Estuary Park PBC, is located along the northern perimeter of former NAS Alameda, located in the City of Alameda, Alameda County, California. The Property is comprised of approximately 7.67 acres and is more particularly described and depicted in Exhibit “A,” attached hereto and incorporated herein by reference. A strip of land separates the Property from the Oakland Inner Harbor to the North. A figure representing the

general location of the Property in relationship to the former NAS Alameda is provided in Exhibit "B," attached hereto and made a part hereof.

1.02 NAS Alameda was listed on the U.S. Environmental Protection Agency ("U.S. EPA") National Priorities List under CERCLA in July 1999. The Defense Environmental Restoration Program ("DERP"), codified as 10 U.S.C. 2701-2709, gave the Department of Defense ("DoD") Environmental Restoration Program statutory status. The Covenantor entered into a Federal Facility Agreement ("FFA") with U.S. EPA on July 5, 2001. The FFA was later signed by the Department and the Regional Water Quality Control Board ("RWQCB"). The FFA establishes a procedural framework for developing, implementing, and monitoring appropriate response actions at NAS Alameda in accordance with the Resource Conservation and Recovery Act ("RCRA"), CERCLA, and other applicable state or federal laws.

1.03 The Property is a portion of Installation Restoration ("IR") Site 25, which is being remediated in accordance with a Record of Decision ("ROD") issued for IR Site 25 soil pursuant to the DERP and CERCLA. The DON circulated the ROD for public review and comment. The ROD was signed by the DON and U.S. EPA and concurred on by the Department and RWQCB on October 3, 2007.

1.04 From the winter of 2001 to the spring of 2002, two soil removal actions were conducted to address polynuclear aromatic hydrocarbons ("PAHs") in the areas of Site 25 with the highest PAH concentrations, the chemicals of concern at the Property. In these areas, soil with elevated concentrations of PAHs was removed to a depth of two feet below ground surface. Orange-colored fencing material was placed at the bottom of the excavations to denote the PAH excavation subgrade as well as the extent of clean fill placement. Soil located beneath buildings and hardscape (such as concrete or paved roadways, parking lots, foundations, and sidewalks)

was not removed. Soil beneath buildings and hardscape may contain PAHs at concentrations that would not allow unrestricted use. PAHs remain on the Property under buildings and hardscape, or two (2) feet of soil. The IR Site 25 ROD selected remedy is institutional controls for areas beneath buildings and hardscape or soil beneath four (4) feet. The estimated cancer risk due to direct exposure to PAHs at concentrations present in soil at depths greater than four feet below surface exceeds  $1 \times 10^{-4}$  (one in ten thousand) for residential receptors, a level that warrants action to reduce exposure to reduce cancer risk. Institutional controls are necessary to limit exposure, protect human health and the environment and maintain the integrity of the remedy until the remedial action objectives are achieved or no longer considered necessary pursuant to CERCLA. The 2009 Final Land Use Control (“LUC”) Remedial Design (“RD”) details land use controls and provides how these controls will be implemented and maintained. No groundwater contamination underlies Estuary Park PBC.

1.05 The Parties have further concluded that the Property as remediated, and subject to the restrictions of this Covenant, does not present an unacceptable threat to human health, safety, or the environment when there is compliance with the restrictions of this Covenant.

## ARTICLE II

### DEFINITIONS

2.01 Covenantor. “Covenantor” shall mean the United States of America acting through the DON.

2.02 Department. “Department” shall mean the California Environmental Protection Agency Department of Toxic Substances Control and includes its successor agencies, if any.

2.03 U.S. EPA. "EPA" shall mean the United States Environmental Protection Agency and includes its successor agencies, if any.

2.04 FFA. "FFA" shall mean the Federal Facility Agreement among DON, U.S. EPA, the Department of Toxic Substances Control, and the San Francisco Bay Regional Water Quality Control Board.

2.05 Occupant. "Occupant" shall mean any person or entity entitled by leasehold or other legal relationship to the right to occupy any portion of the Property.

2.06 Owner. "Owner" shall mean the Covenantor's successors in interest, and their successors in interest, including heirs and assigns, during their ownership of all or any portion of the Property.

2.07 RWQCB. "RWQCB" shall mean the California Regional Water Quality Control Board, San Francisco Bay Region and includes its successor agencies, if any.

### ARTICLE III

#### GENERAL PROVISIONS

3.01 Restrictions to Run with the Land. This Covenant sets forth protective provisions, covenants, restrictions, and conditions (collectively, "Restrictions"), subject to which the Property and any associated monitoring and other equipment shall be improved, held, used, occupied, leased, sold, hypothecated, encumbered, and/or conveyed. These Restrictions are to be construed to be consistent with the separate Restrictions placed in the deed by and in favor of the Covenantor, conveying the Property from the Covenantor to its successor in interest. Each and every Restriction: (a) runs with the land in perpetuity pursuant to Health and Safety Code section 25355.5(a)(1)(C) and Civil Code section 1471; (b) inures to the benefit of, and passes

with, each and every portion of the Property; (c) shall apply to and bind all subsequent Owners and Occupants of the Property; (d) is for the benefit of, and is enforceable by the Department, and (e) is imposed upon the entire Property unless expressly stated as applicable only to a specific portion thereof.

3.02 Binding upon Owners and Occupants. Pursuant to Health and Safety Code section 25355.5(a)(1)(C), this Covenant binds all Owners and Occupants of the Property, their heirs, successors, and assigns, and the agents, employees, and lessees of the Owners, heirs, successors, and assignees. Pursuant to Civil Code section 1471(b), all successive owners of the Property are expressly bound hereby for the benefit of the Department.

3.03 Incorporation into Deeds, Leases, and/or Rental Agreements. The Restrictions set forth herein shall be incorporated by reference in each and all deeds, leases, and/or rental agreements for any portion of the Property to which they are in effect and applicable.

3.04 Conveyance of Property. The Owner shall provide notice to the Department not later than thirty (30) days after any conveyance of any ownership interest in the Property (excluding leases, mortgages, liens, and other non-possessory encumbrances). The Department shall not, by reason of this Covenant alone, have authority to approve, disapprove, or otherwise affect a conveyance, except as otherwise provided by law, by administrative order, or by a specific provision of this Covenant.

3.05 Costs of Administering the Covenant. The Department will incur costs associated with the administration of this Covenant. These costs must be paid by the Owner pursuant to California Code of regulations, Title 22, section 67391.1(h).

## ARTICLE IV

### RESTRICTIONS

4.01 Soil Management. DON conducted a baseline elevation survey of IR Site 25 for the purpose of defining the location of restricted activities. A copy of this survey has been provided to Department of Interior and the City of Alameda. The topographic map from the survey is attached as Exhibit C.

a. Exposed Soil/No Hardscape Areas. In areas with exposed soil, meaning no hardscape (such as structures, concrete or paved roadways, parking lots, foundations and sidewalks) and no buildings:

1. No activities that will disturb the soil below 4 feet below grade (e.g., excavation, grading, removal, trenching, filling, earth movement, mining, or drilling) shall be allowed on the Property without a Soil Management Plan, prepared in accordance with the LUC RD IR Site 25 Soil Report dated October 2009, approved by the Department, U.S. EPA, and the DON in advance.

2. Any contaminated soils from depths greater than 4 feet brought to the surface by grading, excavation, trenching or backfilling shall be managed in accordance with all applicable provisions of state and federal law.

3. This prohibition does not apply to repair and/or maintenance of utilities.

b. Hardscape Areas. In areas with hardscape (such as, structures, concrete or paved roadways, parking lots, foundations and sidewalks) or buildings at the time of ROD signature, as delineated in Exhibit C:

1. For any excavation immediately below the hardscape or foundation, the Owner is required to (a) obtain written approval from the Department, U.S. EPA, and the

DON; and, (b) develop and comply with an SMP approved by the agencies for major site work consisting of demolition or removal of hardscape and buildings existing at the time of the ROD issuance (September 2007). Replacement of single-lot walkways and driveways is not considered major site work.

2. The requirement in subsection 4.01(b)(1), above, does not apply to repair and/or maintenance of utilities or to minor site work, provided that all soils are returned to the excavation and re-covered with hardscape or clean soil. If excavated soils will not be returned to their original location, then the soils shall be sampled and handled appropriately based on the results of the sampling. The Department shall be notified of repair and/or maintenance of utilities or minor site work.

4.02. Access for Department. The Department shall have reasonable right of entry and access to the Property for inspection, monitoring, and other activities on the Property consistent with the purposes of this Covenant as deemed necessary by the Department in order to protect the public health or safety, or the environment subject to the requirement that all such persons with access to the Property shall comply with all safety rules and requirements in place for Owner's or Occupant's own personnel, and that such persons provide their own personal protective equipment as required by those safety rules. Nothing in this instrument shall limit or otherwise affect U.S. EPA's right of entry and access, or U.S. EPA's authority to take response actions, under CERCLA; the National Contingency Plan, 40 Code of Federal Regulations Part 300 (1997) and its successor provisions; or federal law. Nothing in this instrument shall limit or otherwise effect the Department's right of entry and access, or authority to take response actions, under CERCLA; the National Contingency Plan, 40 Code of Federal Regulations Part 300

(1997) and its successor provisions; Chapter 6.8, Division 20 of the California Health and Safety Code; California Civil Code, or other applicable State Law.

4.03. Inspection and Reporting Requirements. The Owner shall conduct an annual inspection and submit an Annual Inspection Report to the Department (with copies to U.S. EPA) for its approval by February 15th of each year. The annual report shall describe how all requirements outlined in this Covenant have been met for the prior calendar year. The annual report, filed under penalty of perjury, shall certify that the Property is being used in a manner consistent with this Covenant. The annual report must include the dates, times, and names of those who conducted and reviewed the annual inspection report. It also shall describe how the observations were performed that were the basis for the statements and conclusions in the annual report (e.g., drive by, fly over, walk in, etc.). If violations are noted, the annual report must detail the steps taken to return to compliance. If the Owner identifies any violations of this Covenant during the annual inspections or at any other time, the Owner must, within ten (10) days of identifying the violation: determine the identity of the party in violation; send a letter advising the party of the violation of the Covenant; and demand that the violation cease immediately. Additionally, copies of any correspondence related to the enforcement of this covenant shall be sent to the Department and U.S. EPA within ten (10) days of its original transmission.

## ARTICLE V

### ENFORCEMENT

5.01 Enforcement. Failure of the Owner or Occupant to comply with any of the Restrictions specifically applicable to the Property shall be grounds for the Department by means

of this Covenant to require that the Owner modify or remove any improvements ("Improvements" herein shall include, among other things, all earthen fills, caps, piers, structures, buildings, roads, driveways, paved parking areas, and landscaping) constructed or placed upon any portion of the Property in violation of the Restrictions. Violation of this Covenant by the Owner or Occupant may result in the imposition of civil and/or criminal remedies including nuisance or abatement against the Owner or Occupant as provided by law.

5.02 Enforcement Rights of U.S. EPA as a Third Party Beneficiary. The provisions of this Covenant shall be for the benefit of, and shall be enforceable by, U.S. EPA as a third party beneficiary. U.S. EPA, as a third party beneficiary, has the right to enforce the Environmental Restrictions contained herein.

## ARTICLE VI

### VARIANCE, REMOVAL AND TERM

6.01 Variance. Any person may apply to Department for a written variance from a restriction imposed by this Covenant. Such application shall be made in accordance with Health and Safety Code section 25223 and a copy of the application shall be submitted to U.S. EPA simultaneously with the application submitted to the Department. No variance may be granted under this paragraph without prior notice to and an opportunity to comment by U.S. EPA.

6.02 Removal. Any person may apply to the Department to remove a restriction imposed by this Covenant. Such application shall be made in accordance with Health and Safety Code section 25224 and a copy of the application shall be submitted to U.S. EPA simultaneously with the application submitted to the Department. No removal of a restriction may be granted under this paragraph without prior notice to and opportunity to comment by U.S. EPA.

6.03 Term. Unless ended in accordance with paragraph 6.02, by law, or by the Department in the exercise of its discretion, after providing notice to and an opportunity to comment by U.S. EPA, this Covenant shall continue in effect in perpetuity.

## ARTICLE VII

### MISCELLANEOUS

7.01 No Dedication Intended. Nothing set forth in this Covenant shall be construed to be a gift or dedication, or offer of a gift or dedication, of the Property, or any portion thereof to the general public or anyone else for any purpose whatsoever. Further, nothing in this Covenant shall be construed to effect a taking under state or federal law.

7.02 Recordation. The Covenantor shall record this Covenant, with Exhibits A, B and C, in the County of Alameda within ten (10) days of the Covenantor's receipt of a fully executed original.

7.03 Notices. Whenever any person gives or serves any notice ("notice" as used here includes any demand or other communication with respect to this Covenant), each such notice shall be in writing and shall be deemed effective: (1) when delivered, if personally delivered to the person being served or to an officer of a corporate party being served, two (2) or three (3) business days after deposit in the mail, if mailed by United States mail, postage paid, certified, return receipt requested:

To Covenantor: United States Navy  
BRAC Program Management Office West  
1455 Frazee Road Suite 900  
San Diego, CA 92108  
Attention: Director

To Department: Department of Toxic Substances Control  
700 Heinz Avenue  
Berkeley, CA 94710  
Attention: Mr. James Fyfe  
Alameda Remedial Project Manager

To U.S. EPA: U.S. Environmental Protection Agency  
Federal Facilities Site Cleanup Branch  
Superfund Division  
75 Hawthorne Street  
San Francisco, CA 94105

Any party may change its address or the individual to whose attention a Notice is to be sent by giving written Notice in compliance with this paragraph.

7.04 Partial Invalidity. If any portion of the Restrictions or other term set forth herein is determined by a court of competent jurisdiction to be invalid for any reason, the surviving portions of this Covenant shall remain in full force and effect as if such portion found invalid had not been included.

7.05 Exhibits. All exhibits referenced in this Covenant are deemed incorporated into this Covenant by reference.

7.06 Section Headings. The Section headings set forth in this Covenant are included for convenience and reference only and shall be disregarded in the construction and interpretation of any of the provisions of this Covenant.

7.07 Representative Authority. The undersigned representative of each party to this Covenant certifies that he or she is fully authorized to enter into the terms and conditions of this Covenant and to execute and legally bind that party to this Covenant.

7.08 Statutory References. All statutory references include successor provisions.

7.09 Counterparts. This Covenant may be executed simultaneously in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the Parties execute this Covenant.

COVENANTOR:

UNITED STATES OF AMERICA,  
acting by and through the Department of the Navy

By: Esther P. Ewell  
ESTHER P. EWELL  
Real Estate Contracting Officer

Date: 12-17-13

CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL

By: Karen M. Toth  
Karen M. Toth  
Unit Chief

Date: 12/10/2013

**CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT**

State of California

County of San Diego }

On Dec 17, 2013 before me, Dorann Pons, Notary Public,  
Date Here Insert Name and Title of the Officer

personally appeared Esther P. Fwell  
Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) ~~is/are~~ subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal

Signature [Handwritten Signature]  
Signature of Notary Public



Place Notary Seal Above

**OPTIONAL**

*Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.*

**Description of Attached Document**

Title or Type of Document: \_\_\_\_\_

Document Date: \_\_\_\_\_ Number of Pages: \_\_\_\_\_

Signer(s) Other Than Named Above: \_\_\_\_\_

**Capacity(ies) Claimed by Signer(s)**

Signer's Name: \_\_\_\_\_

- Individual
- Corporate Officer — Title(s): \_\_\_\_\_
- Partner —  Limited  General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: \_\_\_\_\_



Signer Is Representing: \_\_\_\_\_

Signer's Name: \_\_\_\_\_

- Individual
- Corporate Officer — Title(s): \_\_\_\_\_
- Partner —  Limited  General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: \_\_\_\_\_



Signer Is Representing: \_\_\_\_\_

# CALIFORNIA ALL-PURPOSE CERTIFICATE OF ACKNOWLEDGMENT

State of California

County of Alameda

On Dec. 10, 2013 before me, Nicole Thuemmler, NOTARY PUBLIC,  
(Here insert name and title of the officer)

personally appeared Karen Toth

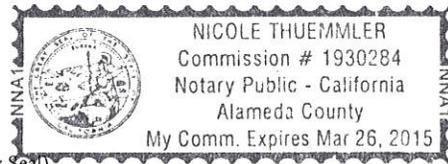
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Nicole Thuemmler

Signature of Notary Public



(Notary Seal)

## ADDITIONAL OPTIONAL INFORMATION

### INSTRUCTIONS FOR COMPLETING THIS FORM

*Any acknowledgment completed in California must contain verbiage exactly as appears above in the notary section or a separate acknowledgment form must be properly completed and attached to that document. The only exception is if a document is to be recorded outside of California. In such instances, any alternative acknowledgment verbiage as may be printed on such a document so long as the verbiage does not require the notary to do something that is illegal for a notary in California (i.e. certifying the authorized capacity of the signer). Please check the document carefully for proper notarial wording and attach this form if required.*

<p><b>DESCRIPTION OF THE ATTACHED DOCUMENT</b></p> <p style="text-align: center;"><u>Lien</u></p> <p style="text-align: center;">(Title or description of attached document)</p> <hr/> <p style="text-align: center;">(Title or description of attached document continued)</p> <p>Number of Pages <u>2</u> Document Date <u>12/10/13</u></p> <hr/> <p style="text-align: center;">(Additional information)</p>
---

<p><b>CAPACITY CLAIMED BY THE SIGNER</b></p> <p><input type="checkbox"/> Individual (s)</p> <p><input type="checkbox"/> Corporate Officer</p> <p style="text-align: center;">_____</p> <p style="text-align: center;">(Title)</p> <p><input type="checkbox"/> Partner(s)</p> <p><input type="checkbox"/> Attorney-in-Fact</p> <p><input type="checkbox"/> Trustee(s)</p> <p><input type="checkbox"/> Other _____</p>
--

- State and County information must be the State and County where the document signer(s) personally appeared before the notary public for acknowledgment.
- Date of notarization must be the date that the signer(s) personally appeared which must also be the same date the acknowledgment is completed.
- The notary public must print his or her name as it appears within his or her commission followed by a comma and then your title (notary public).
- Print the name(s) of document signer(s) who personally appear at the time of notarization.
- Indicate the correct singular or plural forms by crossing off incorrect forms (i.e. ~~he~~/she/~~they~~, is /~~are~~) or circling the correct forms. Failure to correctly indicate this information may lead to rejection of document recording.
- The notary seal impression must be clear and photographically reproducible. Impression must not cover text or lines. If seal impression smudges, re-seal if a sufficient area permits, otherwise complete a different acknowledgment form.
- Signature of the notary public must match the signature on file with the office of the county clerk.
  - ❖ Additional information is not required but could help to ensure this acknowledgment is not misused or attached to a different document.
  - ❖ Indicate title or type of attached document, number of pages and date.
  - ❖ Indicate the capacity claimed by the signer. If the claimed capacity is a corporate officer, indicate the title (i.e. CEO, CFO, Secretary).
- Securely attach this document to the signed document

Exhibit A

Estuary Park Public Benefit Conveyance  
Legal Description and Plat

## EXHIBIT 'A'

#8323.002

### LEGAL DESCRIPTION

Being a portion of Parcel 1A, as Parcel 1A is shown on Record of Survey No. 2113, filed on May 1, 2007, in Book 31 of Records of Survey, Pages 98 & 99, Alameda County Records, and located in the City and County of Alameda, State of California, more particularly described as follows:

BEGINNING at a point which is the northwest corner of said Parcel 1A; THENCE along the exterior boundary line thereof, the following five (5) courses and distances;

1. North  $76^{\circ} 58' 45''$  East, a distance of 51.21 feet;
2. South  $00^{\circ} 31' 09''$  East, a distance of 15.36 feet;
3. North  $76^{\circ} 58' 45''$  East, a distance of 30.74 feet;
4. South  $89^{\circ} 47' 06''$  East, a distance of 1180.63 feet;
5. South  $02^{\circ} 47' 45''$  West, a distance of 294.97 feet to a point of curvature, said point also being an angle point in said exterior boundary line;

THENCE leaving said boundary line, entering into and crossing said Parcel 1A, the following two (2) arcs;

1. From a radial line which bears North  $02^{\circ} 38' 08''$  East, 72.47 feet along the arc of a non-tangent 75.00 foot radius curve to the left, through a central angle of  $55^{\circ} 21' 57''$ ;
2. 22.49 feet along the arc of a 15.00 foot radius curve to the left, through a central angle of  $85^{\circ} 53' 39''$  to a point of cusp, also being a point of curvature on the exterior boundary line of said Parcel 1A;

THENCE along the exterior boundary line thereof, the following five (5) arcs, courses and distances;

1. From a radial line which bears North  $41^{\circ} 22' 32''$  East, 260.33 feet along the arc of a non-tangent 378.00 foot radius curve to the left, through a central angle of  $39^{\circ} 27' 38''$ ;
2. North  $88^{\circ} 05' 06''$  West, a distance of 463.90 feet to a point of curvature;
3. 142.35 feet along the arc of a 197.00 foot radius curve to the left, through a central angle of  $41^{\circ} 24' 01''$ ;

4. South 89° 28' 45" West, a distance of 349.82 feet;
5. North 00° 31' 15" West, a distance of 284.19 feet to the POINT OF BEGINNING.

Containing 334,208 square feet or 7.67 acres, more or less.

*See Exhibit "A-1", plat to accompany description, attached hereto and made a part hereof.*

The Basis of Bearings for this description is as shown on the aforementioned Record of Survey No. 2113.

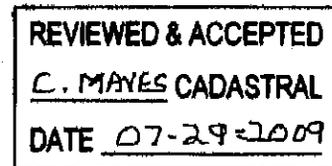
Distances shown hereon are grid distances. To obtain ground distances, multiply grid distances by 1.00007055, as based upon said Record of Survey.

June 9, 2009

END OF DESCRIPTION



7/24/09

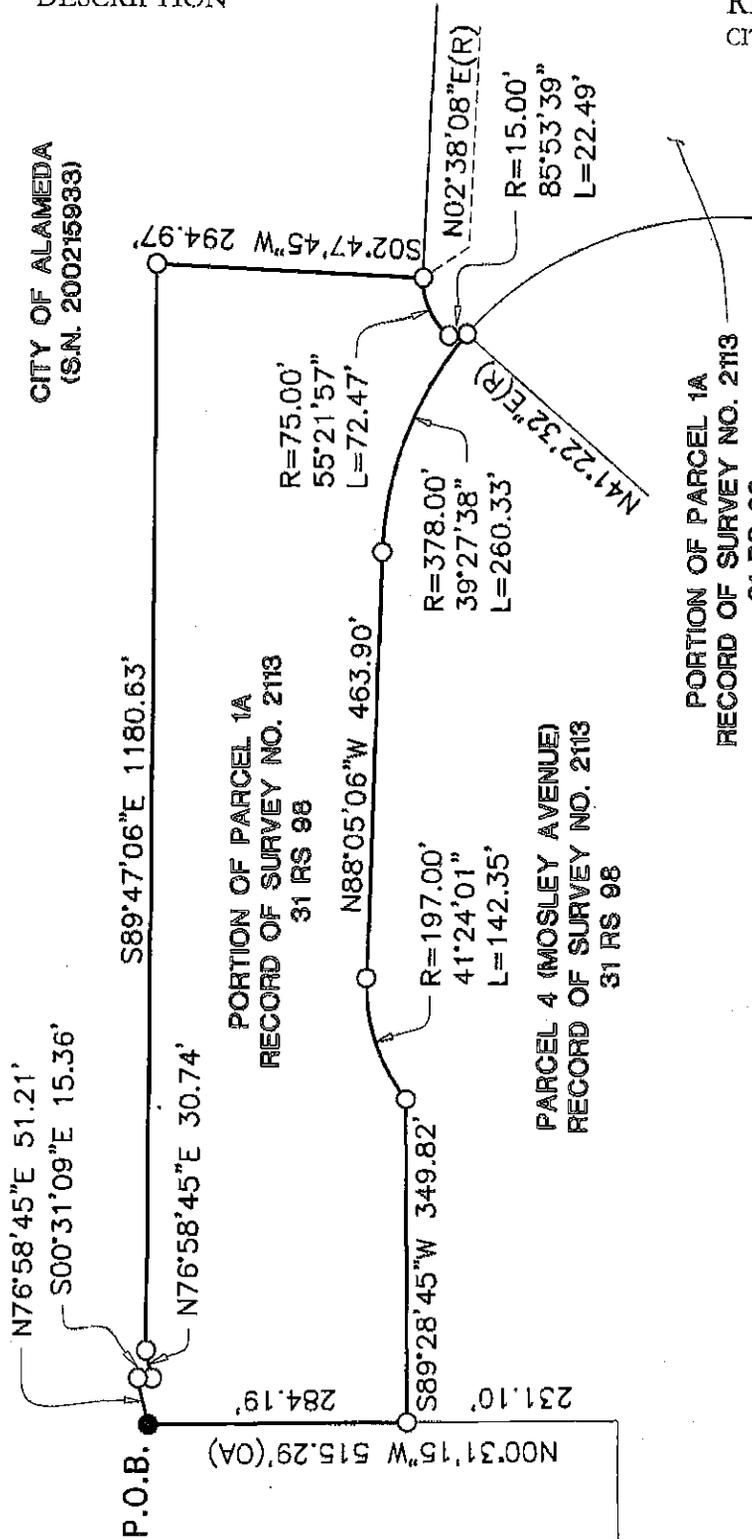


PREPARED BY WOOD RODGERS, INC.  
OAKLAND, CALIFORNIA

**EXHIBIT A-1**

PLAT TO ACCOMPANY  
DESCRIPTION

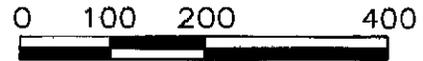
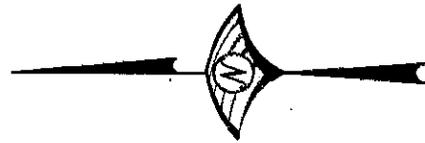
CITY OF ALAMEDA  
PORTION OF PARCEL 1A  
RECORD OF SURVEY NO. 2113  
CITY OF ALAMEDA / COUNTY OF ALAMEDA  
STATE OF CALIFORNIA



REVIEWED & ACCEPTED  
C. MAYE SCADASTRAL  
DATE 07-29-2009



7/24/09



SCALE: 1" = 200'



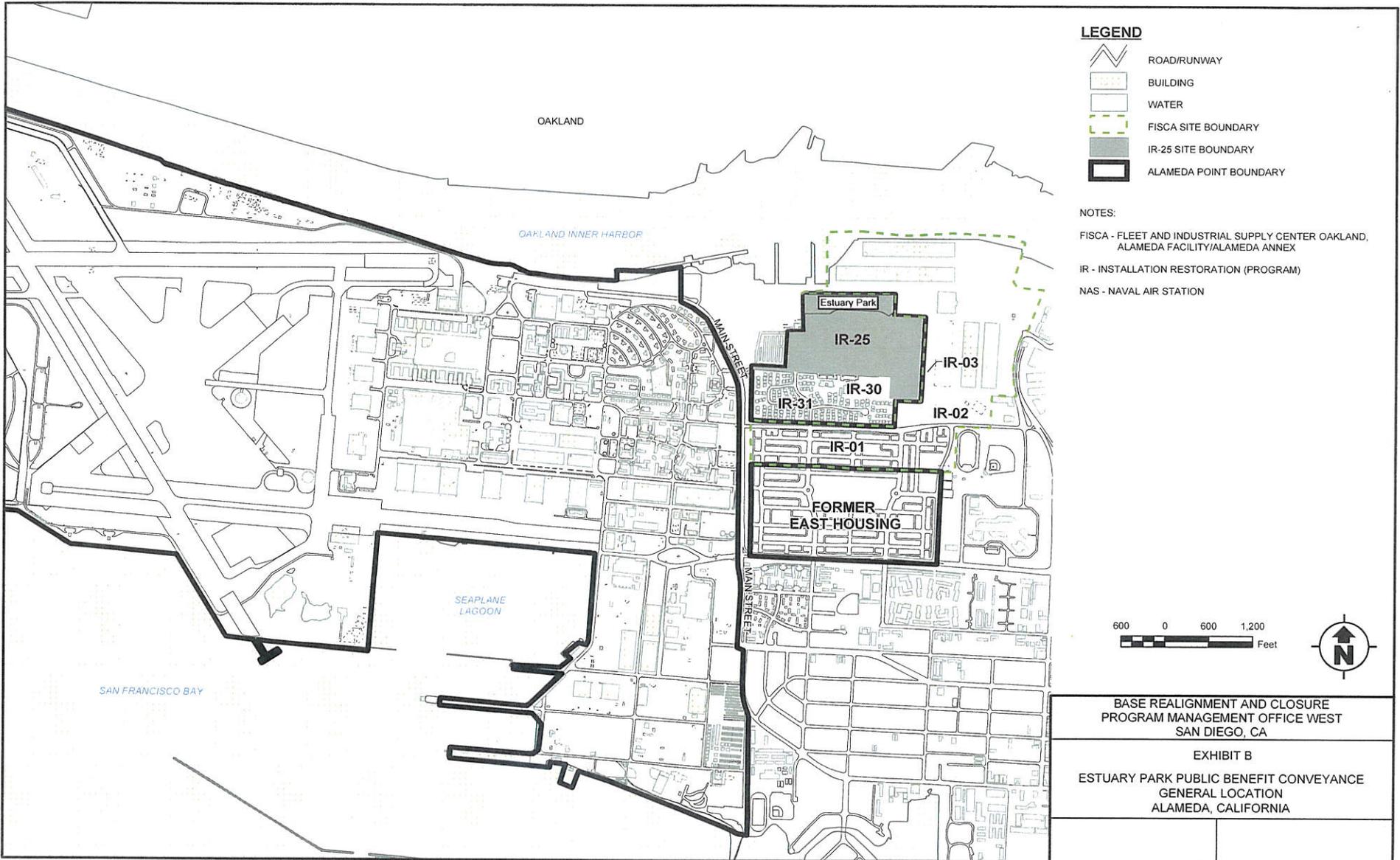
**WOOD RODGERS**  
DEVELOPING INNOVATIVE DESIGN SOLUTIONS

580 Second Street Ste. 200 Tel 510.208.2400  
Oakland, CA. 94607 Fax 510.208.2401

SEE DESCRIPTION FOR  
COURSE INFORMATION

## Exhibit B

### Estuary Park Public Benefit Conveyance General Location Map

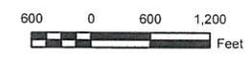


**LEGEND**

-  ROAD/RUNWAY
-  BUILDING
-  WATER
-  FISCA SITE BOUNDARY
-  IR-25 SITE BOUNDARY
-  ALAMEDA POINT BOUNDARY

**NOTES:**

- FISCA - FLEET AND INDUSTRIAL SUPPLY CENTER OAKLAND, ALAMEDA FACILITY/ALAMEDA ANNEX
- IR - INSTALLATION RESTORATION (PROGRAM)
- NAS - NAVAL AIR STATION

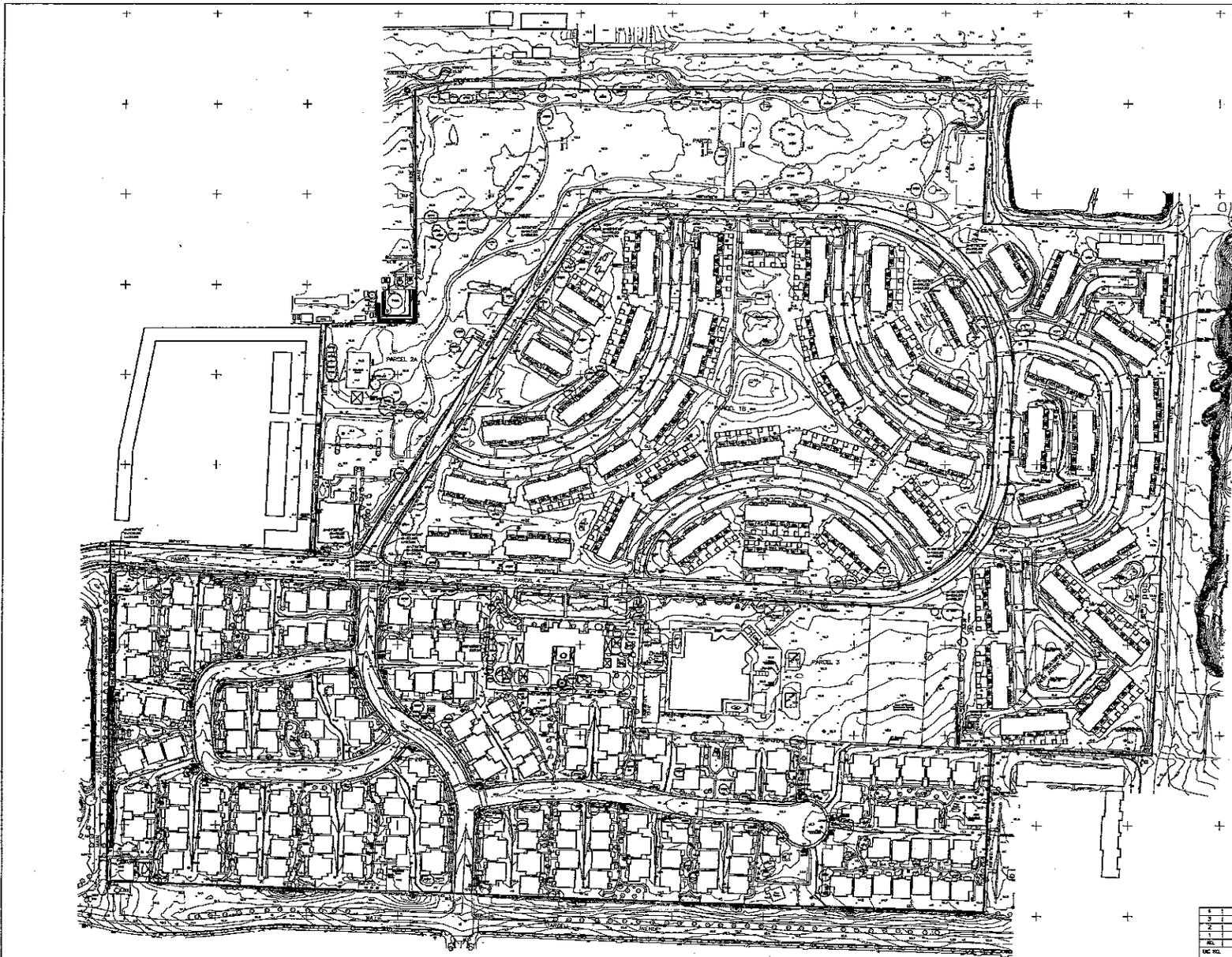


BASE REALIGNMENT AND CLOSURE  
PROGRAM MANAGEMENT OFFICE WEST  
SAN DIEGO, CA

EXHIBIT B  
ESTUARY PARK PUBLIC BENEFIT CONVEYANCE  
GENERAL LOCATION  
ALAMEDA, CALIFORNIA

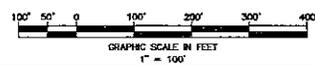
# Exhibit C

## Site 25 Topographic Map



**LEGEND**

- ⊙ HORIZ./VERT. CONTROL POINT
  - HEADWALL
  - FENCE
  - BUILDING OUTLINE
  - ROAD/DRIVEWAY
  - SIDEWALK
- |                       |               |
|-----------------------|---------------|
| AC ASPHALTIC CONCRETE | ITRCS IMPRESS |
| BCG BARBED WIRE GRILL | DC DECIDUOUS  |
| C CONCRETE            | FR FRUIT      |
| CONC CONCRETE         | PH PALM       |
| Ø DIAMETER            | PM PINE       |
| EQUIP EQUIPMENT       |               |
| FP FLAG POLE          |               |
| MH MANHOLE            |               |
| SP STANDPIPE          |               |
| TEMP TEMPORARY        |               |
| W/W WITH              |               |
- BACKFLOW PREVENTER
  - BOLLARD
  - ⊙ CATCH BASIN, SQUARE
  - ⊙ CATCH BASIN, ROUND
  - ⊙ CLEANOUT, SEWER
  - DRAIN INLET
  - GUY WIRE
  - ⊙ ELECTRICAL MANHOLE
  - ⊙ GAS VALVE
  - ⊙ IRRIGATION CONTROL VALVE
  - ⊙ FIRE HYDRANT
  - ⊙ ELECTRODERM
  - ⊙ MANHOLE
  - ⊙ MISCELLANEOUS MANHOLE
  - ⊙ MISCELLANEOUS UTILITY POLE
  - ⊙ MONITORING WELL
  - ⊙ PRESSURE INTAKE VALVE
  - ⊙ REDUCER VALVE
  - ⊙ SITE LIGHT
  - ⊙ STORM DRAIN MANHOLE
  - ⊙ SUN
  - ⊙ SANITARY SEWER MANHOLE
  - ⊙ TELEPHONE PEDESTAL
  - ⊙ TELEPHONE PULLBOX
  - ⊙ TELEPHONE VAULT
  - ⊙ TREE, PALM
  - ⊙ TREE, DECIDUOUS
  - TREE OUTLINE
  - ⊙ TRANSFORMER VAULT
  - ⊙ 'USA' GAS PAINT MARK
  - ⊙ 'USA' TELEPHONE PAINT MARK
  - ⊙ UTILITY POLE
  - ⊙ WATER HAMMOCK
  - ⊙ WATER METER
  - ⊙ WATER VAULT
  - ⊙ CONCRETE PAD



**NOTE**  
AERIAL PANEL COORDINATES LISTED BELOW ARE U.S. SURVEY FEET, NAD83(1983) CA ZONE 3 GRID COORDINATES WITH NAVD83 ELEVATIONS.

POINT	NORTHING	EASTING	ELEV.	AERIAL PANEL	DESCRIPTION
301	2114632.75	6043710.22	0.80	AERIAL PANEL	PRGWASHER
302	2115044.79	6044654.21	0.38	AERIAL PANEL	PRGWASHER
357	2121064.19	6044465.57	18.49	AERIAL PANEL	PRGWASHER
358	2114295.00	6046123.56	10.43	AERIAL PANEL	PRGWASHER

**HORIZONTAL DATUM**  
PUBLISHED HNS CONTROL POINT HTD80 WAS HELD HORIZONTALLY, BEING ON THE NAD83 (1983) HORIZONTAL DATUM, ALONG WITH POINTS 203, 208 AND 211 (FOUND MONUMENTS PER RECORD OF SURVEY NO. 2113, RECORDED IN BOOK 31 OF RECORDS OF SURVEY AT PAGES 98 THRU 99) ALSO BEING ON THE NAD83 (1983) HORIZONTAL DATUM.

**VERTICAL DATUM**  
PUBLISHED HNS CONTROL POINTS HTD84, HTD87, HTD80 AND HTD87 WERE HELD VERTICALLY AND ARE ON THE NAVD88 VERTICAL DATUM.

IF SHEET IS LESS THAN 24" x 36" IT IS A REDUCED PRINT-SCALE REDUCED ACCORDINGLY

NO. 0	DATE 11/22/2010	FORMER NAVAL AIR STATION
NO. 0	DATE 11/22/2010	ALAMEDA
NO. 0	DATE 11/22/2010	ALAMEDA COUNTY CALIFORNIA
DEPARTMENT OF THE NAVY		NAVIG SAUTHEAST
SAN DIEGO		CALIFORNIA
<b>TOPOGRAPHIC MAP</b>		
SHEET 1 OF 1	DATE 11/22/2010	SCALE 1" = 100'

A clearer copy could be located call  
 (619) 532-0765 MRS. Ewell 1455 FRAZEE Rd, Ste- 900  
 SAN Diego, CA 92109-4310