

October 1, 2014

David Kelly, Esq.
GSW Arena LLC
1011 Broadway, 5th Floor
Oakland, California 94607

Re: Construction Related Depressions at Golden State Warriors Mission Bay Site

Dear Mr. Kelly,

This report addresses the regulatory status of construction related features from recent remediation activities at the proposed site of the Golden State Warriors Arena (Project Area), located in the Mission Bay redevelopment area in San Francisco, California (Figure 1) in the context of Section 404 of the Clean Water Act¹. Recent remediation of the site involved excavation of a large volume of contaminated soils in response to Regional Water Quality Control Board Order R2-2005-0028, creating construction related depressions that are in the process of being backfilled in preparation for development. The remaining depression created during the remediation action is deep enough to intersect groundwater.

As part of the site review process for the Warriors Arena, this depression was identified for further investigation to determine whether it was subject to jurisdiction under Section 404 of the Clean Water Act (CWA). This report provides an evaluation of the history of the site and explains why water filled construction-related depressions are exempt from regulatory jurisdiction under the CWA.

REGULATORY BACKGROUND AND EXEMPTIONS FROM CORPS JURISDICTION

Section 404 of the Clean Water Act gives the U.S. Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (Corps) regulatory and permitting authority regarding the discharge of dredged or fill material into “navigable waters of the United States.” Section 502(7) of the Clean Water Act defines navigable waters as “waters of the United States, including territorial seas.” Section 328 of Chapter 33 in the Code of Federal Regulations (CFR) defines the term “waters of the United States” as it applies to Corps jurisdiction under the Clean Water Act. A summary of this definition of “waters of the U.S.” in 33 CFR 328.3 includes (1) waters used for commerce; (2) interstate waters and wetlands; (3) “other waters” such as intrastate lakes, rivers, streams, and wetlands; (4) impoundments of waters; (5) tributaries to the above waters; (6) territorial seas; and (7) wetlands adjacent to waters. The limits of Corps jurisdiction under Section 404 as given in 33 CFR Section 328.4 are as follows: (a) Territorial seas: three nautical miles in a seaward direction from the baseline; (b) Tidal waters of the U.S.: high tide line or to the limit of adjacent non-tidal waters; (c) Non-tidal waters of the U.S.: ordinary high water mark or to the limit of adjacent wetlands; (d) Wetlands: to the limit of the wetland.

The Corps has established technical methods to identify areas as detailed in the U.S. Army Corps of Engineers Wetlands Delineation Manual (“Corps Manual”; Environmental Laboratory 1987), the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid

¹ Federal Water Pollution Control Act of 1972

West Region ("Arid West Supplement"; Corps 2008), and applicable Regulatory Guidance Letters. Some areas that meet the technical criteria for wetlands or waters may not be jurisdictional under the Clean Water Act per Section 404 regulations, Corps regulatory guidance, and the Corps Manual. Included in this category are:

- Some man-induced wetlands, including areas that are maintained only due to the presence of man-induced hydrology (1987 Corps Manual)
- Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA (33 CFR 328.3a)
- Ditches dug wholly in, and draining only uplands and that do not carry a relatively permanent flow of water (51 Fed. Reg. 41206, Corps 2008)
- Artificial lakes or ponds created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing (51 Fed. Reg. 41206)
- Artificial reflecting or swimming pools, or other similar ornamental bodies of water created by excavating and/or diking dry land to retain water for primarily aesthetic reasons (51 Fed. Reg. 41206)
- Water-filled depressions created as a result of construction activity (51 Fed. Reg. 41206)
- Pits excavated in upland for fill, sand, or gravel (51 Fed. Reg. 41206)
- Areas that are isolated from and/or do not have a significant nexus to navigable waters of the U.S. (Corps 2008)

The applicability of one of these exemptions can be demonstrated through a variety of resources, including site history, engineering drawings, maintenance records, aerial photographs, and previous documentation prepared for government agencies.

The exemption for water-filled depressions created as a result of construction activity is directly applicable to the current Project Area. This exemption is described more fully within the Preamble to the CWA Regulations (33 CFR Parts 320 through 330), published in the Federal Register on November 13, 1986 (51 Fed. Reg. 41206):

(e) Water-filled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States.

As demonstrated by aerial photographs and documentation submitted to the RWQCB as part of the remediation activities, the low lying areas located on the Project Area were created incidental to construction activities for the purpose of site remediation and are in the process of being backfilled and prepared for future site redevelopment.

SITE HISTORY AND REMEDIATION CONSTRUCTION ACTIVITIES

Initial development of the Mission Bay area occurred between 1892 and 1913. Historic uses of the area were as a rail yard, maritime shipping, and storage and distribution center (Figures 2 and 3). During this time, the Project Area was used for railroad operations, a machine shop, boiler house, a steel mill, well casing manufacturer, fruit cannery, a ready mix concrete facility, and storage and distribution of bulk fuel, agricultural chemicals, lumber, food, automobiles, and

other commodities (Treadwell and Rollo 2012). Planning for redevelopment of the area began in the early 1990s, with the San Francisco Board of Supervisors approving the overall redevelopment plan and Environmental Impact Report (EIR) in 1998 (City and County of San Francisco 2014). Aquatic areas within China Basin were the only sensitive biological resources identified in the EIR (City and County of San Francisco 1998).

At the time of the approval of the Mission Bay redevelopment plan by the City of San Francisco, the Project Area was a shipping and receiving warehouse for a variety of goods (Treadwell and Rollo 2012). Several orders from the RWQCB were issued related to the remediation of hazardous materials at the Project Area and vicinity, which was referred to as the “Pier 64/Mission Bay” project in Geotracker (<http://geotracker.waterboards.ca.gov/>). Final cleanup requirements were described in the RWQCB Order No. R2-2005-0028, which also superseded and rescinded all previous Orders (Treadwell and Rollo 2012). The Project Area was referred to as the North Terminal Operating Unit (NT OU) in this order and in all subsequent Pier 64/Mission Bay remediation project documentation.

Remediation activities in the Project Area included removal of several underground storage tanks and required the excavation of almost 91,000 tons of material within the Project Area and in the area to the south of 16th street, which is currently occupied by commercial biotechnology office buildings (BBL 2006). Figures 4 and 5 (aerial photographs from September 2005 and February 2007) show the excavation in the beginning stages and after completion of excavation, respectively. Approximately 80,000 cubic yard of clean soil originating from the NT OU excavation was used to completely backfill the area to the south of 16th street (Treadwell and Rollo 2012, BBL 2006). As described in the remediation completion report (BBL 2006), *“NT OU was backfilled with all available materials originating from NT OU to an elevation below final grade. The property owner will complete backfilling and final grading of NT OU”* in compliance with the final site design.

Groundwater monitoring was required by the RWQCB post-excavation between 2007 and 2013 to ensure that the area met applicable standards for site cleanup. Subsequent to the closure of the groundwater monitoring wells in the summer of 2013, the RWQCB issued Order No. R2-2014-0022 on June 5, 2014, rescinding Order No. R2-2005-0028 and declaring that the site has met all applicable standards (Treadwell and Rollo 2012, Geotracker 2014). As shown in Figures 6 and 7, backfilling of the excavation in the Project Area was ongoing during the period of required groundwater monitoring. Figure 8 shows the current condition of the Project Area.

Also worth noting is the fact that the Project Area was purchased by Salesforce during the period of groundwater monitoring and proposed for development as office space. The area of the NT OU excavation and backfilling within the Project Area was proposed as a 6-story building with a partial basement (Treadwell and Rollo 2012). The basement would have required re-excavation of backfill imported into the NT OU excavation area. In addition, during the time between approximately October 2008 and the time that Salesforce was developing plans to build on the property, economic conditions negatively impacted the availability of fill material for completing the backfill of the NT OU excavation. Availability of fill material is closely tied to building activity, and the economic recession sharply reduced construction activity between approximately late 2008 and 2012, resulting in extremely limited soil availability to complete the backfilling of the NT OU site.

WATER FILLED DEPRESSIONS IN THE PROJECT AREA WERE CREATED AS A RESULT OF CONSTRUCTION AND ARE NOT JURISDICTIONAL

As described above, construction related depressions containing ponded water within the Project Area are water-filled depressions created incidental to construction necessary for compliance with a site cleanup order issued by the RWQCB. As described in the RWQCB Order No. R2-2005-0028, the Project Area was to be excavated and backfilled in preparation for future development as part of the overall Mission Bay redevelopment plan. Excavation of contaminated materials from the site resulted in large areas of ponded depressions resulting from high groundwater in the area.

As described in 51 Fed. Reg. 41206, such depressions created incidental to construction activities are not jurisdictional until such time that they are abandoned. Backfilling of the excavations and plans for development of the Project Area have been ongoing since the time that the excavation was completed. Following the completion of the remediation excavation, much of the excavation has been backfilled and other portions of the property have been developed into parking lots. The property has also been the subject of development plans for commercial office space as well as the current Golden State Warriors Arena. Additionally, backfilling of the excavated area in preparation for future development was a requirement of the RWQCB Order describing the cleanup of the site. That cleanup was not considered complete until June of 2014. Responsibility for backfilling of the depressions created by the remediation excavation was left to the property owner and has not yet been completed due to acceptance of final details of planned site development. Backfilling of soil and plans for development of the property have been continuous since the time that the construction-related depressions were created, and are currently ongoing with plans to develop the area for the Golden State Warriors Arena. These ongoing activities at the Project Area since the creation of the excavations make it clear that the area has not been abandoned. Therefore, the water-filled depressions on site are not jurisdictional per the exemption described in 51 Fed. Reg. 41206.

OTHER EXAMPLES WHERE THE CORPS HAS REACHED A SIMILAR DECISION RELATED TO EXEMPTION APPLICABLE TO WATER FILLED DEPRESSIONS RESULTING FROM CONSTRUCTION ACTIVITIES

The following are examples of other properties which have been exempted from CWA jurisdiction by the San Francisco District of the Corps of Engineers due to construction-related activities.

Beachwood Property (Corps File Number 18154S20)

The property owner had approval from the City of Half Moon Bay to implement a residential development on this property; however, the City imposed a sewer moratorium which delayed development for many years while the City undertook expansion of the waste water treatment plant. In the interim, the City requested permission to excavate soils from the property for a street improvement project. The depressions on the property ponded water and wetland developed during the period of the moratorium. At the end of the moratorium, the City contended that wetlands had formed on the site and that it was subject to regulatory jurisdiction under the CWA and the City's Local Coastal Program. The San Francisco District of the Corps determined that these features were exempt from regulation under Section 404 of the CWA because they were "water filled depressions" created on dry land incidental to construction-related activities and that the property owner had not ceased his efforts to develop the property; but was merely waiting for the moratorium to end and for subsequent approvals to be issued.

Oyster Point Development (Former US Steel Site; Corps File Number 29933S)

As part of its remediation of a former US Steel site in South San Francisco, the Regional Water Quality Control Board issued a Cleanup and Abatement Order that included the filling of some wetlands and capping of the site with clean soil. Water retention features were designed to keep water from flowing off the cap into San Francisco Bay. Over time, the cap subsided in some locations which allowed water to pond on the surface and wetland plants to become established. When the project site was proposed for development, the City noted that wetlands may be present on the site. The San Francisco District of the Corps determined that the wetland features were construction-related and that the applicant did not require permits from the Corps to fill these depressions.

Fremont-Cushing Development (Corps File Number 23205S)

The applicant received permission from the City to stockpile fill on their property in anticipation of development. Previous to that, the applicant had also received approvals from the San Francisco District of the Corps to fill wetlands on the property. As part of the fill placement to support development, the applicant was required to follow stormwater runoff treatment guidelines which required that drainage swales and depressions be temporarily constructed within the filled areas to retain stormwater. When the property was sold and the new owner sought approvals from the City, the consultant to the City submitted a report that described wetland plants as present on the filled portions of the property and the City required that the new owner seek a permit from the Corps. The San Francisco District of the Corps determined that the applicant had received all applicable permits with the first approval and the depressions and swales were construction-related, water-filled depressions and did not require further permitting by the Corps.

CONCLUSION

Based on the analysis above, the water-filled depressions present on-site were created incidental to construction activities for on-site remediation and have not been abandoned. As such, these features do not meet the definition of regulated “waters of the United States”. The Golden State Warriors are advised that the Corps, by regulation, is given discretionary authority to make the final decision on its jurisdiction under this exemption. However, based on the clear evidence presented above, we conclude based on our professional opinion and the analysis in this report that no application or request for determination of jurisdiction needs to be made to the Army Corps under Section 404 of the CWA at this time.

Sincerely,

A handwritten signature in black ink, appearing to read "Justin Semion". The signature is fluid and cursive, with the first name "Justin" and last name "Semion" clearly distinguishable.

Justin Semion
Senior Aquatic Ecologist

Encl. Figures 1 – 8 showing site history on aerial photographs

REFERENCES

- BBL Environmental Services, Inc. 2006. Pier 64 Phase II Completion Report. Former Petroleum Terminals and Related Pipelines Located at Pier 64 and the Vicinity City and County of San Francisco, California. June 2006.
- City and County of San Francisco. 2014. Office of Community Investment and Infrastructure. Website for Mission Bay. Retrieved from: <http://www.sfocii.org/index.aspx?page=61>
- City and County of San Francisco. 1998. Final Mission Bay Subsequent Environmental Impact Report. Final SEIR Certification date September 17, 1998.
- Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Department of the Army, Waterways Experiment Station, Vicksburg, Mississippi 39180-0631.
- Regional Water Quality Control Board (RWQCB). 2014. California Regional Water Quality Control Board, San Francisco Bay Region. Order No. R2-2014-0022. Rescission of site cleanup requirements (Order No. R2-2005-0028) for: Atlantic Richfield Company, Chevron, U.S.A. Inc., Phillips Petroleum Company, Texaco, Inc., Union Oil Company of California, City and County of San Francisco, and ECOR-SF Holdings, Inc. (formerly known as Esprit de Corp) for the former petroleum terminals and related pipelines located at: Pier 64 and Vicinity, City and County of San Francisco.
- Treadwell and Rollo. 2012. Site history Report and Sampling and Analysis Plan. Blocks 29 through 33, Mission Bay, San Francisco, California. Prepared for salesforce.com, inc. March 26, 2012.
- U.S. Army Corps of Engineers (Corps). 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). September.

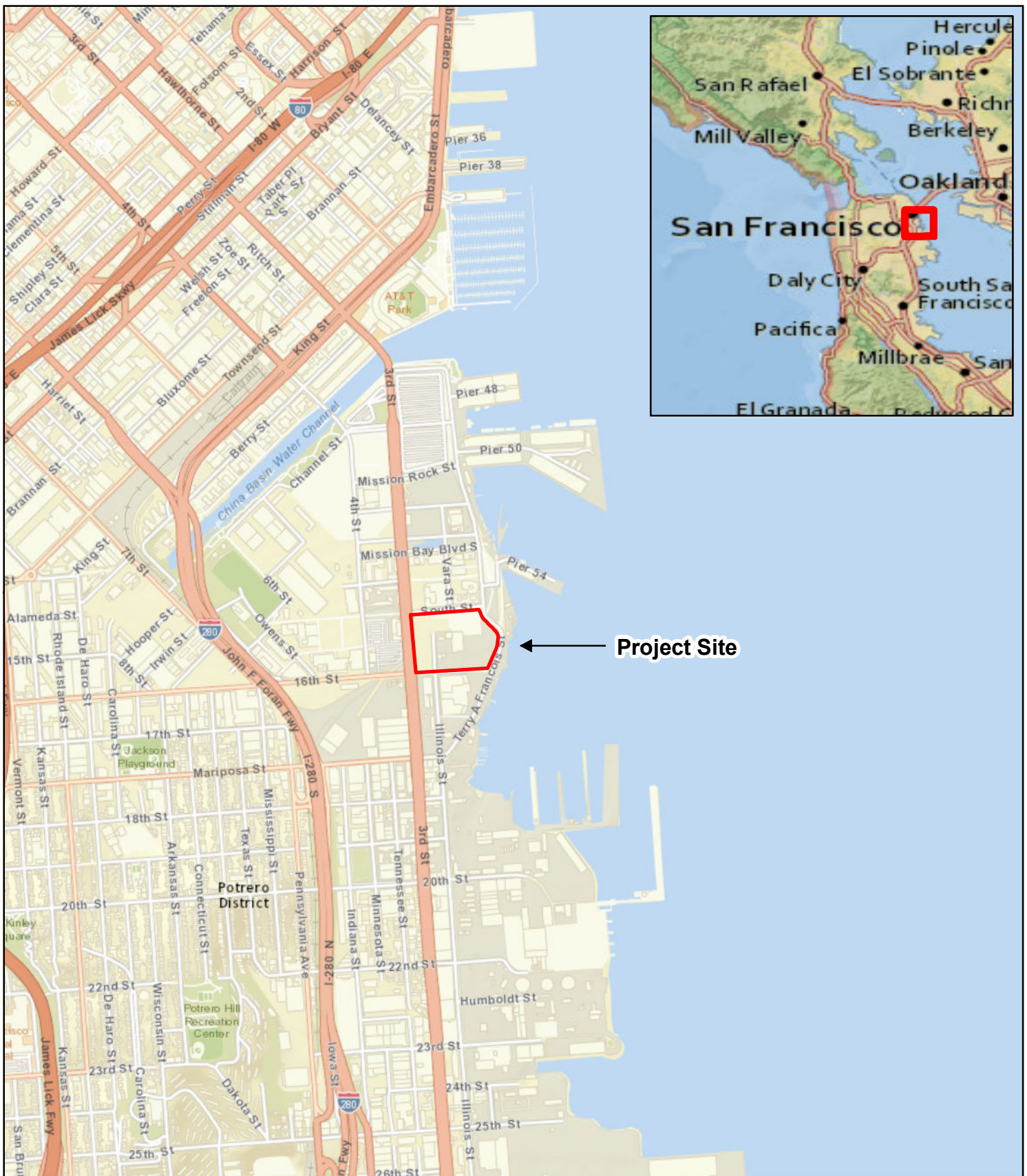


Figure 1. Project Site Location

Golden State Warriors Arena Site
San Francisco, CA



0 0.125 0.25 0.5
Miles



Date: September 2014
Map By: PK
Base Source: Google Earth

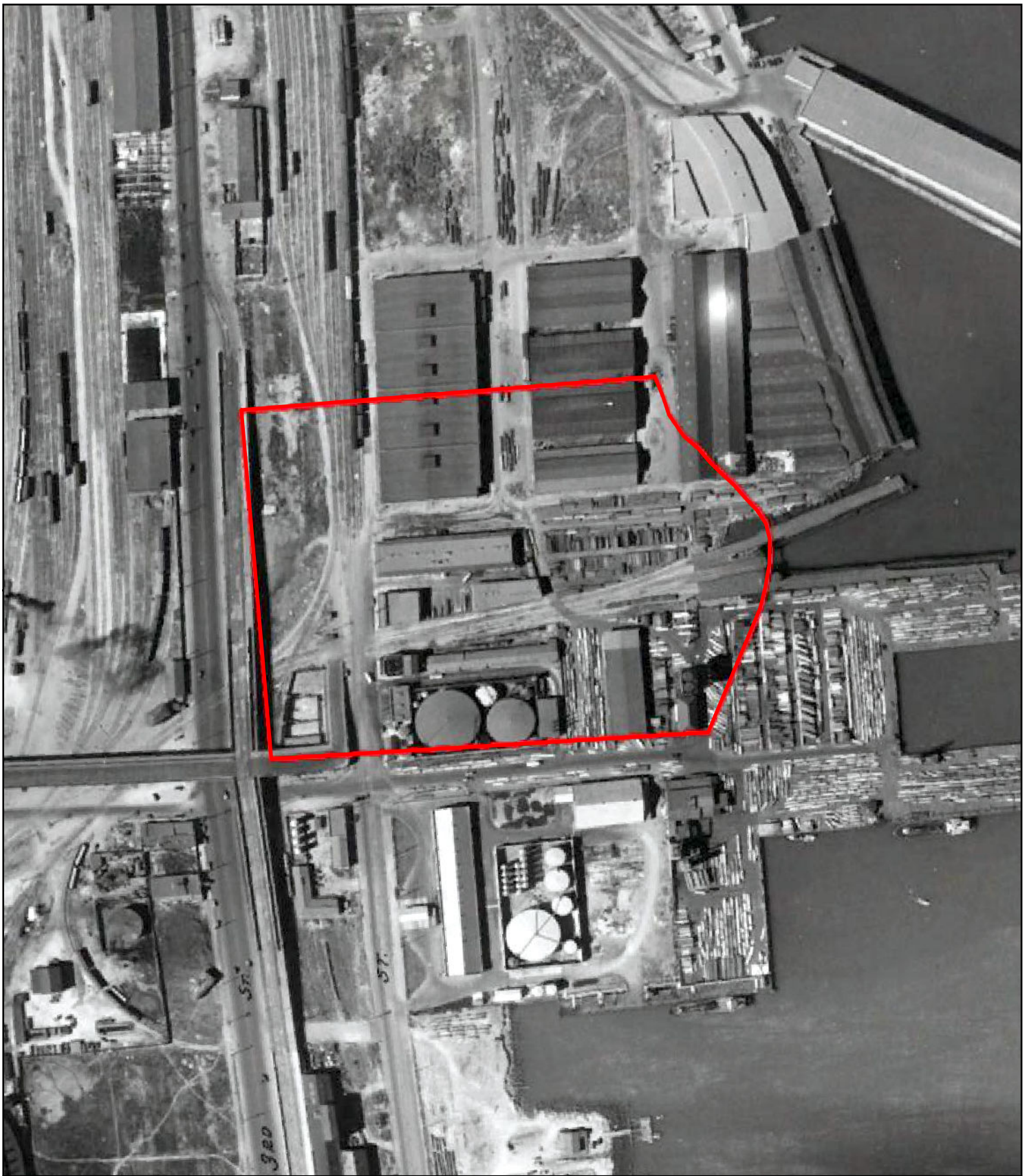


Figure 2. Historic Uses at the Project Site
July 1938

Golden State Warriors Arena Site
San Francisco, CA



0 125 250 500
Feet



Date: September 2014
Map By: PK
Base Source: Google Earth



Figure 3. Recent Land Use
and Surrounding Mission Bay Development
August 2002

Golden State Warriors Arena Site
San Francisco, CA

0 125 250 500
Feet



Date: September 2014
Map By: PK
Base Source: Google Earth



Figure 4. Building Demolition and Soil
Excavation for Remediation
October 2005

Golden State Warriors Arena Site
San Francisco, CA



0 125 250 500
Feet



Date: September 2014
Map By: PK
Base Source: Google Earth



Figure 5. Completion of Soil Excavation
February 2007

Golden State Warriors Arena Site
San Francisco, CA



0 125 250 500
Feet



Date: September 2014
Map By: PK
Base Source: Google Earth



Figure 6. Soil Excavation Backfilling
September 2008

Golden State Warriors Arena Site
San Francisco, CA



0 125 250 500
Feet



Date: September 2014
Map By: PK
Base Source: Google Earth



Figure 7. Soil Excavation Backfilling
October 2009

Golden State Warriors Arena Site
San Francisco, CA



0 125 250 500
Feet

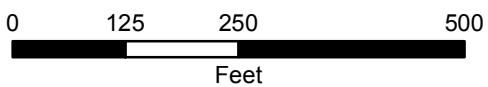


Date: September 2014
Map By: PK
Base Source: Google Earth



Figure 8. Present Condition, June 2014

Golden State Warriors Arena Site
San Francisco, CA



Date: September 2014
Map By: PK
Base Source: Google Earth