

2.0 PROJECT DESCRIPTION

2.1 BACKGROUND AND NEED FOR THE PROPOSED PROJECT

Phillips 66 seeks authorization to remove the existing non-operational marine oil terminal (MOT) located near the town of Port Costa, in the Carquinez Strait (see Figures 1-1 and 2-1) in accordance with the terms and conditions of its existing California State Lands Commission (CSLC) Lease No. PRC 2869.1, which expires on November 30, 2014. The original MOT, constructed around 1908 and later expanded, was used for storage and shipment of various petroleum products, including heavy fuel oil, residual fuel oil, gas oil, and catalytic cracker charge stock. Operations at the MOT site ceased in 1968, and in 1970 a fire destroyed more than half of the wharf, rendering it unusable. The 1.16-acre lease area was revised to 0.48 acre in November 1984, following the removal of timbers and other material destroyed during the fire. The Project's goal is the safe removal of all remaining materials and improvements associated with the wharf, while maintaining embankment stability to ensure the safety of existing, adjacent rail operations.

2.2 PROJECT LOCATION

The Project site is located in the Carquinez Strait in unincorporated Contra Costa County, about 0.6 mile southeast of the town of Port Costa and east of Carquinez Scenic Drive, and comprises approximately 8.89 acres including a 200-foot offshore buffer around the improvements to be removed. Benicia is about 0.75 mile northeast across the Carquinez Strait, Union Pacific Railroad (UPRR) tracks run parallel to the shoreline immediately west of the Project site, and segments of the East Bay Regional Parks District (EBRPD) Carquinez Strait Regional Shoreline Park are situated along the shoreline both downstream and upstream of the wharf remains. The site is located primarily offshore, with the only onshore portion being two temporary staging areas, one within the former TXI/Pacific Custom Materials, Inc. (TXI) brickyard property located southwest of the wharf and the other located offsite at the selected contractor's shore base. Figure 2-1 shows the general Project layout.

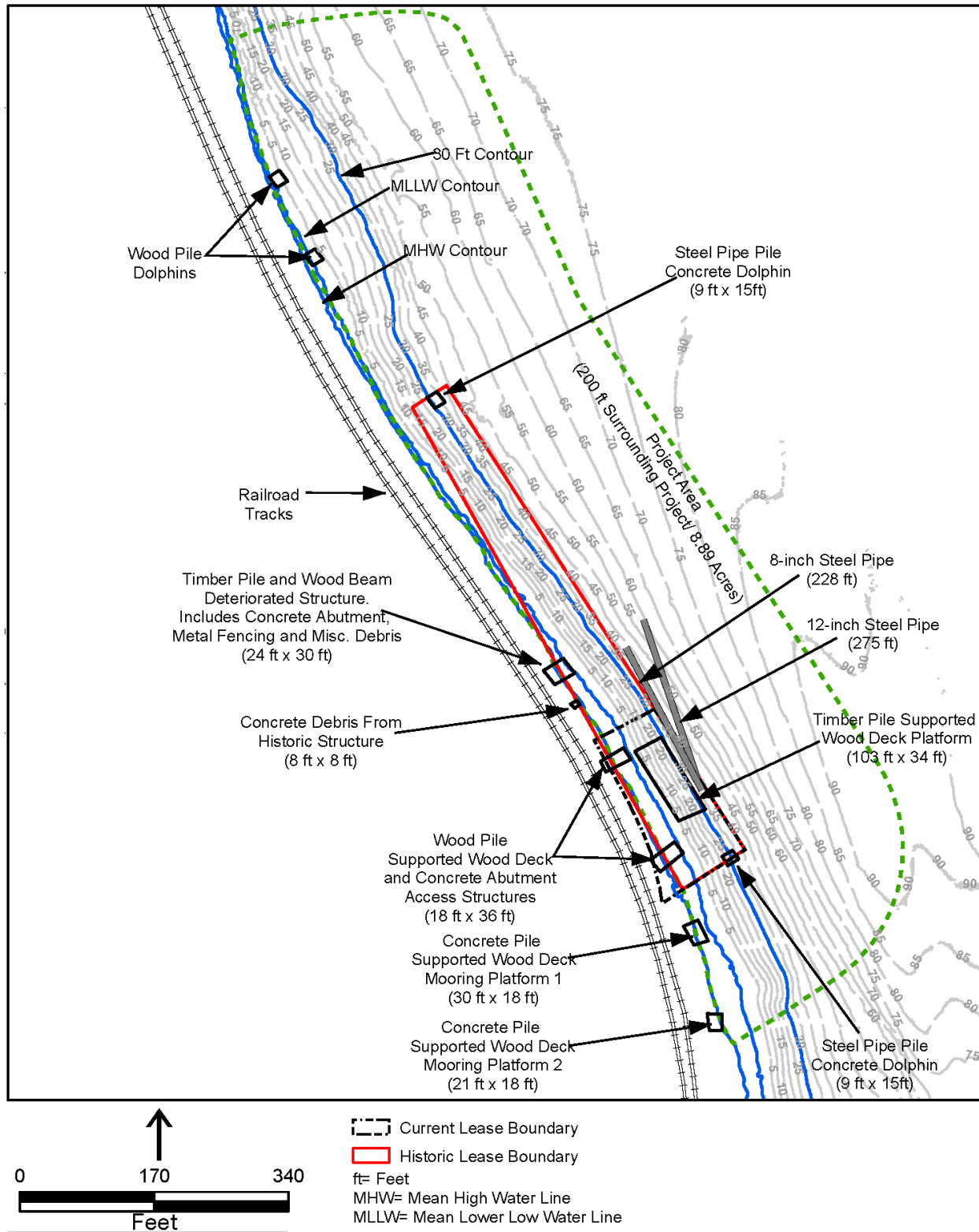
2.3 EXISTING FACILITIES

The remaining visible structures include:

- One approximately 34-foot by 103-foot remnant main wharf structure running parallel to the western shoreline of the Carquinez Strait;
- Three deteriorated timber-pile-supported wood-beam/deck platforms/piers of approximately 24-foot by 30-foot, 18-foot by 36-foot, and 18-foot by 36-foot size, respectively, each perpendicular to the shoreline, which were formerly connected to the larger wharf structure;

1

Figure 2-1. Project Site Map



- 1 • Two steel-pipe-pile and concrete-deck mooring dolphins of approximately 9-foot
2 by 15-foot size, located northwest and southeast of the main wharf structure;
- 3 • Two concrete-pile-supported wood-deck mooring platforms of 30 feet by 18 feet
4 and 21 feet by 18 feet, respectively, located on the shoreline south of the main
5 wharf structure; and
- 6 • Two wood-pile dolphins consisting of a total of 10 to 13 piles, located in the
7 northernmost section of the Project site.

8 Miscellaneous concrete, metal, and timber debris was observed along the shoreline.
9 Concrete slabs along the shore may have been former wharf abutments. The concrete
10 slabs and debris are generally functioning as riprap shore protection. It is not clear
11 where the debris came from, but it may be intentional riprap placed on the adjacent rail
12 bed embankment over a number of years. Phillips 66 proposes to keep the concrete
13 slabs and debris in place to minimize the potential for destabilizing the embankment.

14 **2.3.1 Description of the Proposed Project**

15 MOT deconstruction would be initiated using a CSLC-approved, Project-specific Marine
16 Safety Plan. Key MOT deconstruction work activities would include:

- 17 • Wharf deck fixtures removal;
- 18 • Concrete and wood deck and mooring dolphin deconstruction;
- 19 • Wood, concrete, and steel pile removal or deconstruction; and
- 20 • Removal of debris and marker buoys.

21 Removal of the wharf remnants would involve several types of work activities including
22 the use of cutting torches (hot-work), air- or electric-powered tools, rigging equipment,
23 and barge-mounted cranes. Large pieces of structures to be removed would have tag
24 lines attached to facilitate recovery from the Carquinez Strait in the event of an accident.
25 Deconstruction materials that cannot be salvaged would be disposed of through sale as
26 components for scrap or disposed of in a permitted landfill.

27 **2.3.2 Deck Fixtures Removal/Deconstruction**

28 Deck fixtures (e.g., metal fenders, mooring bits, mooring cleats, nails, coils, wiring,
29 chain-link fencing, and mooring posts and remnants of equipment) would be removed
30 and deconstructed. Fixture removal may proceed concurrently with deck deconstruction.

31 **2.3.3 Concrete Deck Deconstruction**

32 The MOT includes two mooring dolphin decks made of concrete. Each mooring dolphin
33 deck measures approximately 9 feet by 15 feet. The average deck thickness is about 2

1 feet. If necessary, a diamond-wire saw would be used to cut each mooring dolphin into
2 multiple smaller pieces for removal. The actual size of the concrete pieces would
3 depend on the availability of equipment at the time deconstruction services are procured
4 and would be detailed in a Deconstruction and Seafloor Debris Removal Plan that
5 would be prepared for review and approval by the CSLC prior to implementing the
6 deconstruction and removal work. Rigging would be secured to each piece prior to it
7 being cut free from the pile caps. Alternatively, the top slab may be removed by cutting
8 piles with cutting torches.

9 Prior to implementing the concrete deconstruction process, provisions would be made
10 to contain debris and cutting fluids associated with the concrete deconstruction process.
11 If cutting fluids are used during the drilling or concrete sawing process, the process
12 would be conducted in accordance with Federal and State environmental protection
13 regulations. Debris and cutting fluid containment details would be provided by the
14 selected contractor in a Project Work Plan.

15 **2.3.4 Wooden Deck Deconstruction and Removal**

16 The MOT facility includes:

- 17 • a central, predominantly wood landing platform measuring approximately 103
18 feet by 34 feet;
- 19 • three smaller pier platforms approximately 24 feet by 30 feet, 18 feet by 36 feet,
20 and 18 feet by 36 feet, respectively; and
- 21 • two mooring platforms with wood decking on concrete piles; one is approximately
22 30 feet by 18 feet and the other is approximately 21 feet by 18 feet.

23 The timber decking is likely creosote-treated and would be removed and disposed of at
24 facilities licensed to take creosote.

25 **2.3.5 Wood, Concrete, and Steel Pile Deconstruction and Removal**

26 The Applicant would attempt complete extraction of all piles, except for those directly
27 adjacent to the shoreline whose removal could result in the potential instability of the
28 railroad embankment. A review of historical aerial photographs indicated that the
29 railroad embankment adjacent to the Project area experienced significant erosional
30 failures around 1939. Dive survey results (conducted in March 2013) note that the piles
31 nearest shore are protected by medium size riprap comprised of concrete slabs and
32 debris. Since the riprap does not cover the whole area, it appears to have been placed
33 after installation of the wharf. The riprap was likely intended to serve as shoreline
34 protection from waves and vessel wakes and their potential effects on the existing
35 adjacent rail line. In order to minimize the risk of future embankment instability,

1 disturbance of the existing riprap and associated piles would be minimized to the extent
2 possible. Therefore, Phillips 66 proposes to keep the riprap in place to minimize the
3 potential for destabilizing the rail bed embankment and to cut off the piles directly
4 adjacent to the shoreline at the level of the existing riprap using a hydraulic shear or
5 another suitable device (AECOM 2013, Attachment F).

6 The MOT is located in the central area of the Carquinez Strait adjacent to the southern
7 edge of the shipping channel, which is approximately 0.5-mile wide in this area. A May
8 2012 bathymetric survey conducted by eTrac Engineering, Inc. (eTrac) indicated that
9 the general water depth under the MOT structures is currently approximately -20 feet
10 referenced to mean lower low water (MLLW). The federal channel is maintained to -30
11 feet MLLW. The water level in this area of the Strait increases to depths of -90 feet
12 MLLW within approximately 500 feet of the wharf. The location of the MOT is a high
13 energy environment where water moves through the Carquinez Strait between Suisun
14 Bay upstream and San Pablo Bay downstream. Predictions for several water years
15 indicate that Suisun Bay exports sediment during the wet season, and imports sediment
16 from San Pablo Bay during the dry season (Ganju and Schoellhamer 2006).

17 The 2012 bathymetric survey of the Project area, and a dive survey conducted in March
18 2013, did not report scour around any piles within the Project area. In addition, little net
19 deposition was noted within the Project site. Based on best engineering judgment, the
20 Project site appears to be currently stable relative to sediment deposition/scour in the
21 area of the proposed pile removal (AECOM 2013, Attachment F).

22 In areas where scour is not expected to occur, the general practice for pile removal in
23 the San Francisco Bay Area is removal to at least 2 feet below the mud line. This is
24 thought to be sufficient to ensure that the pile stubs remain buried within the sediments,
25 and do not have the potential to protrude above the seafloor, posing a potential hazard
26 to navigation (Cacchione 2008). Therefore, if the complete extraction of piles is not
27 successful, they would be cut off to a minimum depth of 2 feet below the mud line. In
28 addition, if piles are not completely extracted, a post-deconstruction bathymetric survey
29 would be conducted immediately following deconstruction and every 2 years for 6 years
30 to document that scour is not occurring within the Project footprint and that piles
31 embedded in the Carquinez Strait bottom have not become exposed by erosion.

32 The following best management practices (BMPs) would be used to minimize creosote
33 release, sediment disturbance, and total suspended solids generation during pile
34 removal/deconstruction:

- 35 • Install a floating surface boom to capture floating surface debris;
- 36 • Keep all equipment (e.g., bucket, steel cable) out of the water and grip piles
37 above the waterline;

- 1 • Slowly lift the pile from the sediment and through the water column; and
- 2 • Dispose of all removed piles, floating surface debris, sediment spilled on work
- 3 surfaces, and all containment supplies at a permitted upland disposal site that
- 4 accepts creosote-treated wood and materials contaminated with creosote.

5 2.3.5.1 Removal of Timber Piles

6 The MOT facility has approximately 117 timber piles that are likely creosote-treated.
7 Associated with the main wharf structure are approximately 63 timber piles. There are
8 approximately 28 piles lying on the Carquinez Strait bottom. The three smaller
9 piers/platforms running perpendicular to the shore are supported by approximately 13
10 timber piles total. Last, the two wood pile dolphins in the northern section of the Project
11 site are supported by approximately 13 timber piles total: six for the southern dolphin
12 and seven for the northern dolphin.

13 Complete removal of the creosote-treated timber piles from locations that would not
14 impact the stability of the shoreline embankment would be conducted consistent with a
15 CSLC-approved Marine Safety Plan. The Applicant proposes vibratory extraction for
16 complete pile removal. The vibratory extraction technique involves attaching a vibratory
17 hammer to the pile to break the seal between the pile and the sediment and pulling with
18 a crane or excavator. The crane or excavator operator would be trained to remove each
19 pile slowly to minimize turbidity in the water column as well as sediment disturbance.
20 For the creosote-treated timber piles, the extraction equipment would be kept out of the
21 water to avoid equipment (e.g., bucket, steel cable, vibratory hammer) pinching the
22 creosoted piling below the water line. Piles would not be broken off intentionally by
23 twisting, bending or other deformation to avoid the potential for releasing creosote to the
24 water column. The work surface on the barge deck would include a containment basin
25 for piles and any sediment removed during pulling. Upon removal from substrate, the
26 piles, and adjacent riprap not associated with the shoreline embankment (to the extent
27 possible), would be moved expeditiously from the water into the containment basin. The
28 piles would not be shaken, hosed-off, stripped or scraped off, left hanging to drip or any
29 other action intended to clean or remove adhering material from the pile.

30 Because of the embedded depth of the timber piles (likely 40 feet below mud line) and
31 their age (well over 50 years), the piles may break during the removal procedure.
32 Should timber piles break off during removal, the distance below the existing mud line
33 would be verified by measuring the distance from the mud line stain evident on the
34 portion of the piling brought to the surface to the break point of the piling. If the piling
35 breaks at too high a point or leaves a stub that is at an elevation higher than 2 feet
36 below the mud line, a diver may be used to inspect the area and provide further
37 direction on how to remove any timber remnants to a depth of 2 feet below the existing
38 mud line. If needed, the sediment around the base of the pilings would then be jetted

1 away to provide access for the cutting tool. A hydraulic shear or other suitable device
2 (e.g., a clam shell bucket or a pneumatic underwater chainsaw) would then be used to
3 cut the timber pile remnants 2 feet below the existing mud line. Final confirmation of
4 whether piling stubs or debris are present on or above the seafloor would be made with
5 a post-deconstruction bathymetric survey.

6 2.3.5.2 Removal of Concrete Piles

7 The various structures associated with the MOT include an estimated total of 11 20-inch
8 square concrete piles. The two wood-deck mooring platforms to the south of the wharf
9 are supported by eight and three concrete piles each. Neither the main wharf structure,
10 nor the three wood-deck platforms running perpendicular to the shoreline and formerly
11 connecting to the wharf, are supported by concrete piles.

12 Concrete piles would be removed after the timber decking is removed. As discussed
13 above, given the pile proximity to the embankment that supports the active rail line,
14 these piles, if attempted to be completely removed, could destabilize the rail bed
15 embankment. Therefore, the piles would be cut off to the level of the existing riprap
16 using a hydraulic shear or another suitable device. The Project would attempt to
17 process and recycle the concrete as aggregate rather than dispose of it at a local
18 landfill. The concrete remnants would be loaded onto a barge and transported back to
19 the selected contractor's onshore staging area where the concrete would be reduced
20 and recycled or disposed of as appropriate at a permitted facility. The material will not
21 be used for additional riprap.

22 2.3.5.3 Removal of Steel Piles

23 Each mooring dolphin is supported by approximately 12 steel piles for a total of up to 24
24 steel piles. Steel piles will be removed using methods similar to those described for
25 timber piles. Once the concrete decking and fixtures have been removed, the steel piles
26 would be extracted using a vibratory hammer or cut off 2 feet below the mud line if
27 extraction proves impossible. The steel pile remains would be loaded onto a barge,
28 transported to the chosen deconstruction contractor's staging area, and transported to a
29 recycling center if the waste material is acceptable for recycling.

30 2.3.6 Removal of Identified Debris

31 A bathymetric survey was conducted in May 2012 by eTrac. A follow-up underwater
32 inspection was conducted on March 19-21, 2013, by trained divers aided by a scanning
33 sonar head. Results of the survey are provided in Appendix B and summarized below.
34 The surveys detected a number of piles and a large truck tire on the seafloor. These
35 objects appeared to be in satisfactory condition to allow for easy rigging and intact
36 recovery to the surface, where they would be removed and disposed of during

1 deconstruction activities. The underwater inspections also identified two steel pipe
2 sections lying within a few feet of each other near the south end of, and parallel to, the
3 main wharf structure. One pipe section is 8 inches in diameter and 228 feet long, and
4 the other is 12 inches in diameter and 275 feet long. Due to the extreme currents
5 experienced in the area, some scour occurs on the offshore sides of the two pipes, with
6 mud cover accumulated on the inshore sides of the piping. This scour is relatively minor
7 and would lessen the difficulty of establishing recovery rigging.

8 The 8-inch-diameter pipe has two timber piles lying on top of it that are in generally
9 good condition and can be easily recovered. The 8-inch pipe terminates in a “tee” fitting;
10 one side of the tee is open, with the opposite side blind flanged. The northern end of the
11 pipe is flanged and blanked. The diver reported that some support members may be
12 attached at a few points along the 8-inch pipe that are presently buried. Excavation
13 would be required to determine if this is the case, however these miscellaneous
14 supports, if they exist, would not likely present a significant impediment to removal of
15 the piping. The 12-inch-diameter pipe trails down-slope at its northern extremity to a
16 depth of approximately 66 feet of water. It has a flanged valve in place on the south end
17 of the pipe, and northern end of the pipe is blind flanged. Three flanged couplings were
18 reported along the length of pipe, and appeared to be secure and tight.

19 Prior to removal, recovery approach and removal details would be outlined in a
20 Deconstruction and Seafloor Debris Removal Plan. The plan would address
21 characterization of the pipe contents, and assure that removal is carefully designed to
22 mitigate the potential of releasing potential hazardous materials (if any) into the Bay.
23 Following characterization, the pipe sections would be recovered and disposed of
24 during deconstruction activities.

25 Onshore, a number of concrete slabs/abutments serve as riprap along the shoreline and
26 are proposed to be left in place to reduce the potential for destabilizing the embankment
27 supporting the rail bed.

28 **2.3.7 Post-Project Surveys and Sea Floor Debris Removal**

29 After removal of the MOT is completed, a post-project survey would be conducted of the
30 lease area, including the MOT work area. The survey would document the condition of
31 the Strait’s floor and identify debris from previous MOT operations and/or from the
32 deconstruction activities. Identified debris would be removed from the Strait’s floor and
33 disposed of or recycled as appropriate in accordance with the Project’s Seafloor Debris
34 Removal Plan. Following are key details for sea floor debris removal:

- 35 1. The post-deconstruction survey would use the same methods employed in the
36 pre-deconstruction survey to verify debris is removed. Debris determined not to
37 be associated with the MOT or deconstruction process would not be recovered.

- 1 2. After the post-deconstruction survey has been completed, the deconstruction
2 contractor would attempt recovery of detected submerged debris from the
3 surface using appropriate equipment. If a diver is required to recover debris, the
4 debris would be rigged and raised to the deck of a barge or support vessel.
5 Rigging methods would depend on the sizes, weight, and type of debris. Heavy
6 debris would be choked with wire rope slings and raised to the surface using a
7 crane. If required, heavy lifts would be subject to a Rigging and Lifting Plan,
8 which would be approved by the CSLC prior to deconstruction activities. Lighter
9 pieces of debris may be fastened to soft-line and raised to the surface by hand.
- 10 3. As described above, the objects located by the dive team consist of piping timber
11 pilings and a large tire. These objects, as far as could be determined by touch,
12 are in generally good condition, although encrusted with marine growth, and
13 should hold together during recovery to the surface. The timber pilings and truck
14 tire can be rigged and recovered to the surface in single crane picks. Recovery of
15 the two steel pipes would likely require lifting one end up to the barge deck, and
16 cutting the piping into lengths required for handling and transport.
- 17 4. Recovered debris, if any, would be transported to the selected Contractor's shore
18 base and disposed onshore at local landfill facilities or recycled.
- 19 5. The following personnel and equipment may be used to identify and recover
20 debris:
 - 21 ○ Personnel: Deconstruction Manager, Contractor Project Manager,
22 Foreman, Crane Operator, Riggers, Tugboat Operator, Crew Boat
23 Operator, Crew Boat Deckhand, Divers, and Diver Tenders.
 - 24 ○ Equipment: Barge with 100-ton crane and 4-point anchor spread, support
25 tugboat, crew boat, industrial air compressor, jet pump (150 horsepower
26 [hp]), diver's air compressor, electrical generators, and airlift.

27 **2.3.8 Contractor's Shore Base**

28 At the present time, Phillips 66 has not selected a contractor to perform the Project.
29 However, several companies have expressed interest in bidding on the Project, and for
30 the purposes of this document, it is assumed that the contractor's shore base and the
31 facilities for equipment, barges, materials, and waste handling would occur offsite at one
32 of the existing commercial/industrial facilities, listed below:

- 33 • Power Engineering Construction Company has an available shore facility at
34 Intersection of West Hornet Avenue, Fairview, Alameda;
- 35 • C.S. Marine Constructors, Inc. has an available shore facility at Mare Island at
36 425 15th Street, Mare Island Berth 19, Vallejo;

- 1 • The Dutra Group has several local shore facilities, including on the Oakland
2 Estuary at 2199 Clement Avenue, Alameda, and at 615 River Road., Rio Vista;
- 3 • Manson Construction Co. has a shore facility at the Richmond Inner Harbor at
4 200 Cutting Boulevard., Richmond; and
- 5 • Vortex Marine Construction, Inc. has a small pier and office in a mixed-use area
6 along the Oakland Estuary at the Livingston Street Pier.

7 The furthest contractor shore base(s) (likely in Alameda) is approximately 40 miles
8 away from the Project site by water. Assuming the average boat travelling speed at 10
9 to 12 miles per hour, a roundtrip from the furthest contractor shore base to the Project
10 site would take approximately 6 to 8 hours. It was assumed in the air quality – emission
11 calculations (Appendix C) that the boat operation time is 8 hours per day, which covers
12 the roundtrip (as needed) between the contractor shore base and the Project site.

13 Please note that daily work crews will likely be picked up at commercial marina facilities
14 close to the MOT. Docks to be used for picking up work crews on a daily basis are
15 available at Vallejo Municipal Marina on Harbor Way, Vallejo, and at the Martinez
16 Marina in Martinez. Due to the proximity of an active rail line onshore, access to the site
17 would be by water.

18 **2.3.9 Deconstruction Schedule**

19 Deconstruction of the MOT is scheduled for 2014, prior to expiration of the CSLC lease.
20 Deconstruction activities would occur over approximately 3 to 5 months. Work would be
21 conducted Monday through Friday generally from 8 a.m. to 5 p.m. The Project is
22 currently projected to start in June 2014 (in-water work would not start until July 1,
23 2014) and be completed by the end of November 2014, based on the forecasted permit
24 schedule. The forecasted schedule corresponds with the recommended National Marine
25 Fisheries Service (NMFS) and California Department of Fish and Wildlife (CDFW) (C.
26 Spurr, CDFW, pers. comm. December 2013) deconstruction windows to protect
27 salmonids; however, because deconstruction methods do not include pile driving or
28 dredging activities and are expected to result in minimal sediment disturbance, adverse
29 effects on migrating salmonids are not expected. Deconstruction activities at the MOT
30 would be limited to normal workdays and hours. All environmental analyses were
31 conducted assuming a worst case scenario of a 5-month duration of deconstruction
32 activities.

33 **2.3.10 Project Workforce**

34 Deconstruction activities at the MOT would require approximately eight to 12
35 deconstruction personnel, depending on the deconstruction and removal stage. At the
36 peak of deconstruction and removal, an estimated 12 workers would be on site.

1 2.4 DECONSTRUCTION PROCEDURES

2 Deconstruction work activities include:

- 3 • Surveys of lead-based paint (LBP), asbestos-containing materials (ACM), and
4 other hazardous materials, and as needed, abatement and/or appropriate
5 disposal or reuse;
- 6 • Deconstruction of marine structures and cutting of concrete structures; and
- 7 • Processing, transport, and recycling/disposal of resulting deconstruction debris.

8 2.4.1 Pre-Deconstruction Surveys, Abatement, Disposal, or Reuse

9 Phillips 66 completed LBP and ACM surveys of the wharf structures in February 2013
10 (see Appendix A). Samples were collected and analyzed by a certified technician.
11 Results of the survey indicate that LBP is present on some wharf structures, but found
12 no ACM. Since LBP is present on the wharf, Phillips 66 would retain a licensed lead
13 abatement contractor to address LBP prior to the general deconstruction of the wharf.
14 An LBP Management Plan including health and safety procedures would be prepared
15 and included as part of the Project's Work Plan.

16 Although little, if any, is anticipated, potentially hazardous materials may also be
17 present, including remnants of mercury switches, petroleum product residues, and
18 hydraulic fluids. Prior to commencement of activities to abate these materials at the
19 wharf, Phillips 66 or its contractor would prepare a site-specific Health and Safety Plan
20 for these activities that would comply with applicable State and Federal regulations. If
21 any such equipment is identified, procedures would be implemented to flush, drain, or
22 remove the materials so that the hazardous waste can be safely removed without
23 risking releases. A Water Quality/Storm Water Pollution Prevention Plan would also be
24 prepared to include procedures to prevent a potential release of hazardous materials to
25 the Carquinez Strait, protect water quality, and ensure appropriate handling and
26 disposal of hazardous waste. Equipment such as switches and gauges that contain
27 mercury would be tagged prior to removal for special handling to prevent an inadvertent
28 discharge of mercury on the deck surfaces or in Carquinez Strait waters.

29 2.4.2 Deconstruction Materials and Equipment

30 Anticipated materials and equipment to complete the work are listed in Table 2-1. Work
31 activities at the Project site would be conducted entirely from vessels anchored
32 offshore, adjacent to the wharf structures. One construction derrick barge,
33 approximately 130 feet by 50 feet, would be required. The crane would be mounted on
34 this barge. A second support barge, approximately 80 feet by 40 feet, would also be on
35 site to collect and transport the demolition debris. Proper first-aid and safety stations,

1 portable sanitary stations, an office and break areas would also be located on these
 2 barges. Both barges would be brought to the site by a tugboat, which would stay in the
 3 Project area during deconstruction activities should the barges need to be moved. Each
 4 barge would be anchored with about two to four standard marine anchors. A work boat
 5 launched from the construction barge would transport workers to the Project site and
 6 allow workers to mobilize within the Project site.

7 **Table 2-1. Anticipated Project Materials and Equipment**

<u>Materials</u>	<u>Equipment</u>
<ul style="list-style-type: none"> • Diesel fuel • Gasoline to power small portable equipment • Compressed gases for metal cutting • Penetrating oil to lubricate corroded fittings • Marking paint • Diamond wire cable • Lumber for debris catchment scaffolding • Oil spill booms and sorbent material (on-hand as contingency) • Miscellaneous materials to be identified at the time specifications for deconstruction are developed. 	<ul style="list-style-type: none"> • Cranes (3): one 200-ton; one 20-ton; one Derrick crane • Barges (2): one approximately 50 feet by 130 feet; one approximately 40 feet by 80 feet • Excavator with shear • Concrete drill • Portable electrical generator(s) • Diamond wire saw • Pulverizer • Hydraulic pile cutter • Vibratory pile extractor • Tug boats (2): one 1,000-hp; one 500-hp • Anchor boat • Loader • Compactor • Dump truck • Roll-off bins • Diver support equipment • Hand tools • Miscellaneous equipment to be identified when deconstruction specifications are developed.

8 **2.4.3 Temporary Facilities**

9 Temporary construction facilities in and near the Project site may be required during the
 10 Project to support the safe and efficient execution of the work, including:

- 11 • barge-mounted first-aid and safety stations at the marine work site;
- 12 • barge-mounted portable sanitary stations at the marine work site;
- 13 • barge-mounted office and break areas at the marine work site;
- 14 • barge-mounted secured storage facilities;
- 15 • utilities as required to execute the work; and
- 16 • marker buoys delineating the deconstruction work area.

17 Most temporary facilities would be located on a barge or in the water within the 8.89-
 18 acre Project site. The deconstruction activities would only be conducted from vessels

1 located offshore and at the selected contractor's existing shore base and associated
2 facilities. Incidental temporary facilities such as parking, storage of non-hazardous
3 materials (not used for the deconstruction work on water), and sanitary stations located
4 onshore near the site may also be needed. These would allow for access from onshore
5 locations for the Applicant, its contractors, site monitors, agency representatives or
6 others wishing to observe the operations. A temporary construction easement would be
7 needed within the adjacent uplands to accommodate these temporary facilities. The two
8 proposed locations are approximately 700 feet and 1,600 feet southwest and upland of
9 the Project site on the adjacent TXI property (see Figure 2-2). This property contains
10 existing developed roads and parking areas that can accommodate upland access and
11 the temporary facilities so new facilities would not need to be constructed. Phillips 66
12 and its contractors would work with the property owner prior to the start of
13 deconstruction activities to secure temporary easements to the property. Once parked,
14 individuals would access the Project site on foot, making sure to notify UPRR in
15 advance and taking appropriate precautionary and railroad safety measures. Offsite, the
16 selected contractor's existing shore base and associated facilities may include secured
17 storage facilities, shore-side staging areas, and landings/dock facilities. These facilities
18 already exist, and, should they be needed, are located away from the Project site and
19 would not require any construction.

20 A list of potential offsite contractor facilities that would be used to execute the work has
21 been prepared (refer to Section 2.3.8); however, the analysis considered in this
22 document assumes a worst case that the facilities would not exceed 1.5 acres total and
23 that both temporary facilities identified herein, as shown in Figure 2-2, would be used.

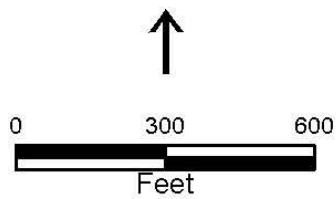
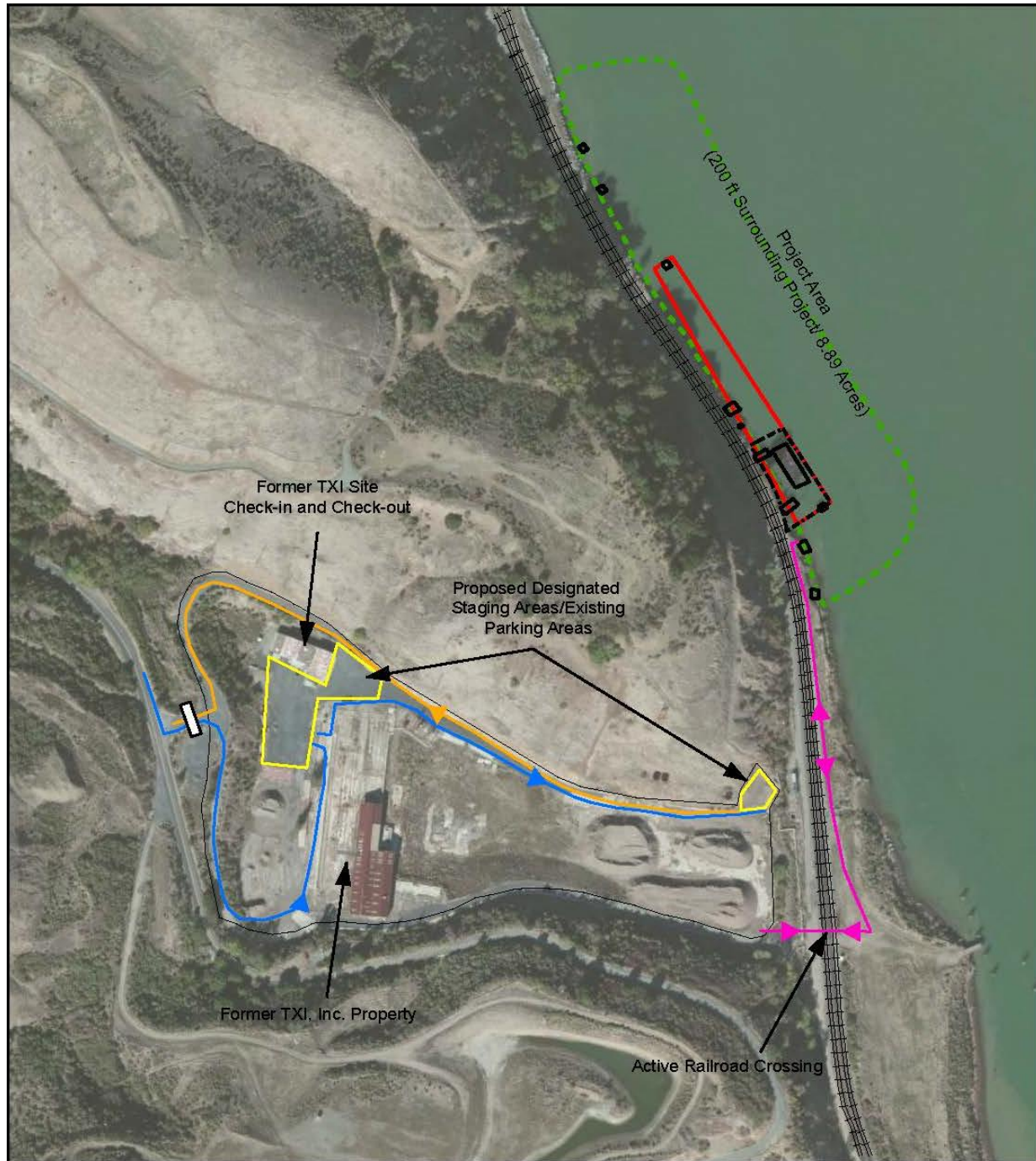
24 **2.5 COMPLIANCE, INSPECTION, AND MONITORING**

25 Environmental controls for the Project would include requirements for controlling and/or
26 mitigating potential impacts to water quality (such as debris and oil spills), air quality,
27 traffic, biological resources, and hazardous materials. An overall Project "Work Plan"
28 would be prepared that would include specific Project plans prepared by Phillips 66 (or its
29 designated contractors) for CSLC approval. The Work Plan would include the following:

- 30 • LBP Management Plan;
- 31 • Marine Safety Plan;
- 32 • Deconstruction and Seafloor Debris Removal Plan;
- 33 • Rigging and Lifting Plan;
- 34 • Traffic Control Plan;
- 35 • Critical Operations and Curtailment Plan;
- 36 • Marine Communication Plan;
- 37 • Marine Transportation Plan;
- 38 • Anchoring Plan; and
- 39 • Water Quality/Storm Water Pollution Prevention Plan.

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Figure 2-2. Potential Onshore Parking and Storage Facilities



- Historic Lease Boundary
 - 200 ft Project Buffer
 - Proposed Staging Areas for Parking, Sanitation Stations and Other Incidental Uses (Not to exceed 1.5 acres) within Existing Parking Areas
 - Ingress
 - Pedestrian Path to Site
 - Entry Gate
- ft = Feet