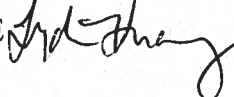


MEMORANDUM

TO: John Prall, Environment and Safety Dept., Port of Oakland

FROM: Lydia Huang, BASELINE 

FILE NO.: Y5306

DATE: 1 August 2005

SUBJECT: Final Disposition Lead-Contaminated Soils from Construction of Berth 30

During construction of Berth 30 in 1992-1993, fill containing lead concentrations that caused the material to be classified as a California hazardous waste ("lead-contaminated fill") was discovered along the Bayfront. The Port undertook an investigation to define the extent of the lead-contaminated fill and implemented a procedure for excavating, stockpiling, and sampling of the material. This memorandum summarizes this procedure and the final disposition of the lead-contaminated fill.

The Port retained Geomatrix Consultants to conduct the investigation to define the extent of the lead-contaminated fill. Geomatrix also prepared an excavation and stockpiling plan for the material. The plan consisted of transporting all suspected lead-contaminated fill to the area that later was constructed as the Berth 30 yard, screening materials that contained a significant portion of large cobbles and boulders to separate the soil from the large-sized fraction, collecting and analyzing samples of the stockpiles of soil, and then determining the appropriate waste classification for each stockpile. Soil stockpiles determined to be a nonhazardous waste were reused; BASELINE has not researched where the nonhazardous waste soil from this effort was ultimately reused within the Port.¹

The Port pursued a two part strategy for the final disposition of the soil that was determined to be a California hazardous waste because of lead. The first part was to apply to the Department of Toxic Substances Control ("DTSC") to reclassify the lead-contaminated fill from a California hazardous waste to a nonhazardous waste. The second part of the strategy was to create a permanent waste management unit in the Berth 30 yard to encapsulate the reclassified nonhazardous waste soils. The Port submitted a Report of Waste Discharge to the Regional Water Quality Control Board ("RWQCB") and prepared construction plans for the waste management unit (provided in Attachment A to this memorandum). If approved and implemented, the Port would have placed up to 4.5 feet of compacted lead-contaminated fill on top of a PVC liner within a prescribed area in the Berth 30 yard, and capping the waste management unit with asphalt.

¹ In the excavation and stockpiling plan, Geomatrix indicated that the soil determined to be a nonhazardous waste would be removed from the site and used as fill elsewhere in the Port. Subsequently, Geomatrix prepared two reports documenting the sampling results for the soil that was determined to be a nonhazardous waste. In one of these reports, Geomatrix stated that it was their understanding that the soil would be used in the Berth 30 yard.

Mr. Prall
page 2
1 August 2005

In a letter dated 10 June 1993, the DTSC approved reclassification of the lead-contaminated fill from a California hazardous waste to a nonhazardous waste and approved the disposal of the fill in the proposed waste management unit in the Berth 30 yard. However, the Port reconsidered the on-site disposal option, and instead of pursuing the on-site waste management unit option, requested permission from the DTSC to dispose of the reclassified lead-contaminated soil at Forward Landfill in Stockton, which is a Class II landfill. The DTSC approved the disposal of the reclassified soil at Forward Landfill in a letter dated 17 August 1993, and the RWQCB concurred with Forward Landfill's assessment that the soil could be accepted at Forward in a letter dated 26 August 1993. The Port chose to implement the off-site disposal option and retained Dillard Trucking to transport 28,610 tons of lead-contaminated fill, reclassified as a nonhazardous waste, to Forward Landfill in 1993. Therefore, the waste management unit in the Berth 30 yard was never constructed.

Attachment A

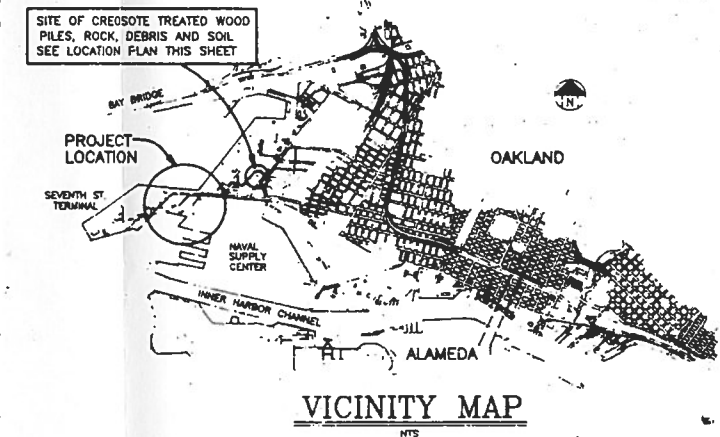
**Plans for Construction of a Waste Management Unit at Berth 30
(not constructed)**

SEVENTH STREET TERMINAL CONSTRUCTION OF CONTAINMENT FACILITY AND PLACEMENT OF LEAD CONTAMINATED SOIL AT BERTH 30

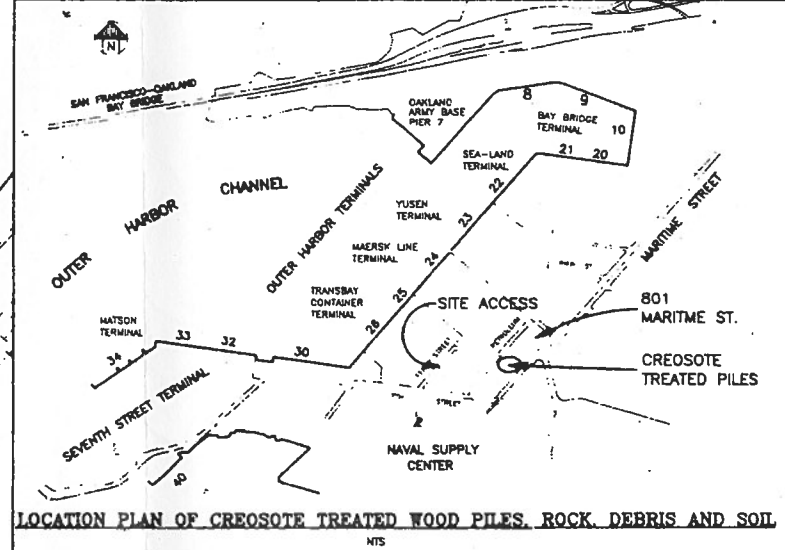


LOCATION PLAN

SCALE: 1"=100'



VICINITY MAP



LOCATION PLAN OF CREOSOTE TREATED WOOD PILES, ROCK, DEBRIS AND SOIL

INDEX OF DRAWINGS

1. TITLE SHEET
2. EXISTING CONDITIONS, X-SECTIONS, AND CONTROL PLAN
3. GRADING PLAN AND X-SECTIONS

SYMBOL LEGEND

- SECTION IDENTIFICATION LETTER
SHEET NUMBER ON WHICH SECTION IS DRAWN
SHEET NUMBER FROM WHICH SECTION IS TAKEN
- SECTION IDENTIFICATION LETTER
SECTION IS TAKEN AND DRAWN ON SAME SHEET
- DETAIL IDENTIFICATION NUMBER
SHEET NUMBER ON WHICH DETAIL IS DRAWN
SHEET NUMBER FROM WHICH DETAIL IS TAKEN
- DETAIL IDENTIFICATION NUMBER
DETAIL IS TAKEN AND DRAWN ON SAME SHEET

REFERENCES

1. OAKLAND ASSEMBLY YARD DRAWINGS PORT FILE #11-9
2. APPLICATION FOR RECLASSIFICATION OF HAZARDOUS SOIL, VOLS. I & II MARCH 1993
3. REPORT OF WASTE DISCHARGE, LANDFILL DESIGN, AND CLOSURE AND POST-CLOSURE MAINTENANCE PLAN VOLS. I, II & III MAY 1993
4. BERTH 30 CONSTRUCTION DOCUMENTS - YARD & BUILDING DRAWINGS PREPARED BY JWD

NO.	REVISIONS	DATE	APP'D

REVIEWED	DESIGNED	CHECKED	REVIEWED

PORT OF OAKLAND
530 WATER STREET OAKLAND, CALIFORNIA

CHIEF ENGINEER <i>F. Daniels</i>	C 17439
APPROVED <i>[Signature]</i>	C 18853
RECOMMENDED <i>[Signature]</i>	C 32172

SEVENTH STREET TERMINAL
CONSTRUCTION OF CONTAINMENT FACILITY AND
PLACEMENT OF LEAD CONTAMINATED SOIL AT BERTH 30
TITLE SHEET

DATE: 5/20/93	SCALE: AS SHOWN
SHEET 1 OF 3 SHEETS	FILE AA-3172



CUT EXISTING FENCE AND INSTALL TEMPORARY GATE.

APPROXIMATE LOCATION OF STOCKPILED LEAD CONTAMINATED SOIL.

APPROXIMATE LOCATION OF STOCKPILED LEAD CONTAMINATED SOIL.

EXISTING FENCE

SITE ACCESS

LIMITS OF CONTAINMENT FACILITY

EXCAVATE TO EL. 8.0 TO EXPOSE (E) PILE STUBS. REMOVE (E) PILE STUBS SEE SPECS. TYPICAL.

(E) GRADES VARY FROM EL. 11 TO EL. 12.5±

YARD CONSTRUCTION BY OTHERS

ELEVATION OF FILL BY OTHERS

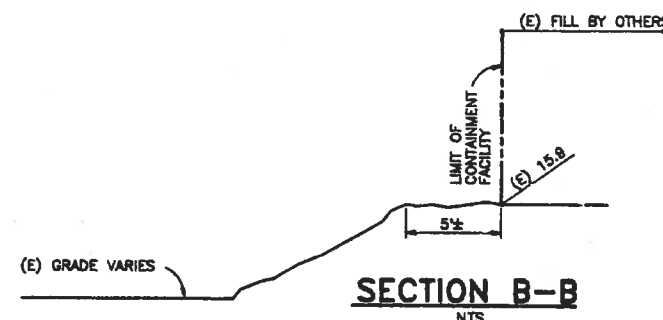
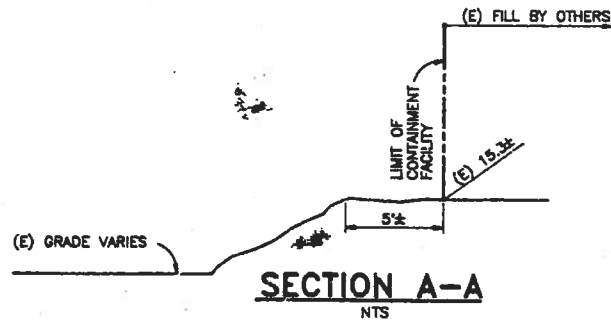
SEVENTH STREET (REALIGNED)

CONTAINMENT LIMIT POINTS		
POINT NO.	NORTHING	EASTING
A	481791.1275	1472484.1625
B	481718.7451	1473001.0125
C	481584.1920	1472979.3681
D	481577.1369	1472764.3572
E	481570.4838	1472711.3028
F	481627.2517	1472305.9491
G	481750.4557	1472323.2032
H	481728.1300	1472475.4800

LINE	BEARING	LENGTH
L1	S82°01'40"E	521.93
L2	S07°58'20"W	158.07
L3	N86°33'17"W	215.42
L4	S82°51'08"W	53.47
L5	N82°01'40"W	409.34
L6	N07°58'20"E	124.42
L7	S82°01'40"E	153.77
L8	N07°58'20"E	62.60

NOTE: BEARINGS AND COORDINATES ARE THE CALIFORNIA COORDINATE SYSTEM OF 1927, ZONE 3, NAD '27. DISTANCES SHOWN ARE GROUND DISTANCES. MULTIPLY DISTANCES BY 0.9999297 TO OBTAIN GRID DISTANCES.

SCALE: 1" = 50'



NOTES:

- EXISTING GRADES WITHIN AND OUTSIDE THE LIMITS OF THE CONTAINMENT FACILITY ARE SUBJECT TO CHANGE FROM THOSE DEPICTED ON THIS SHEET DUE TO THE YARD CONSTRUCTION ACTIVITIES BY OTHERS.
- COORDINATE CONTRACTOR STAGING AREA WITH THE ENGINEER.

FILMED BY DATA IMAGE SYSTEMS CORP

1. 06-29-93 9:00 A.M.

NO.	REVISIONS	DATE	APP'D

REVIEWED:	FACILITIES DEPARTMENT	DRAWN:	S.S./staff
REVIEWED:	CONSTRUCTION DEPARTMENT	DESIGNED:	<i>[Signature]</i>
REVIEWED:	PROJECT PLANNING DEPARTMENT	CHECKED:	<i>[Signature]</i>
REVIEWED:			

PORT OF OAKLAND

530 WATER STREET OAKLAND, CALIFORNIA

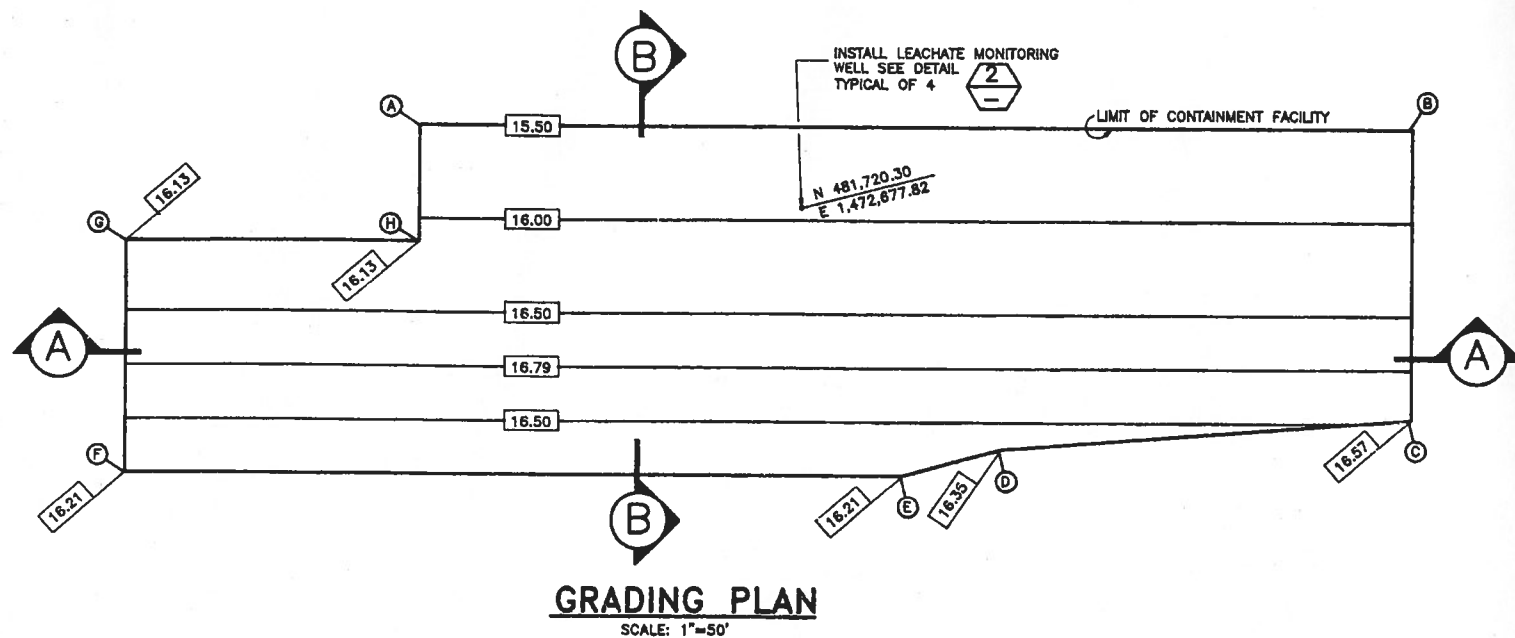
CHIEF ENGINEER	<i>[Signature]</i>	C 17439
APPROVED:	<i>[Signature]</i>	C 18853
RECOMMENDED:	<i>[Signature]</i>	C 32172

SEVENTH STREET TERMINAL
CONSTRUCTION OF CONTAINMENT FACILITY AND PLACEMENT OF LEAD CONTAMINATED SOIL AT BERTH 30
EXISTING CONDITIONS, X-SECTIONS, AND CONTROL PLAN

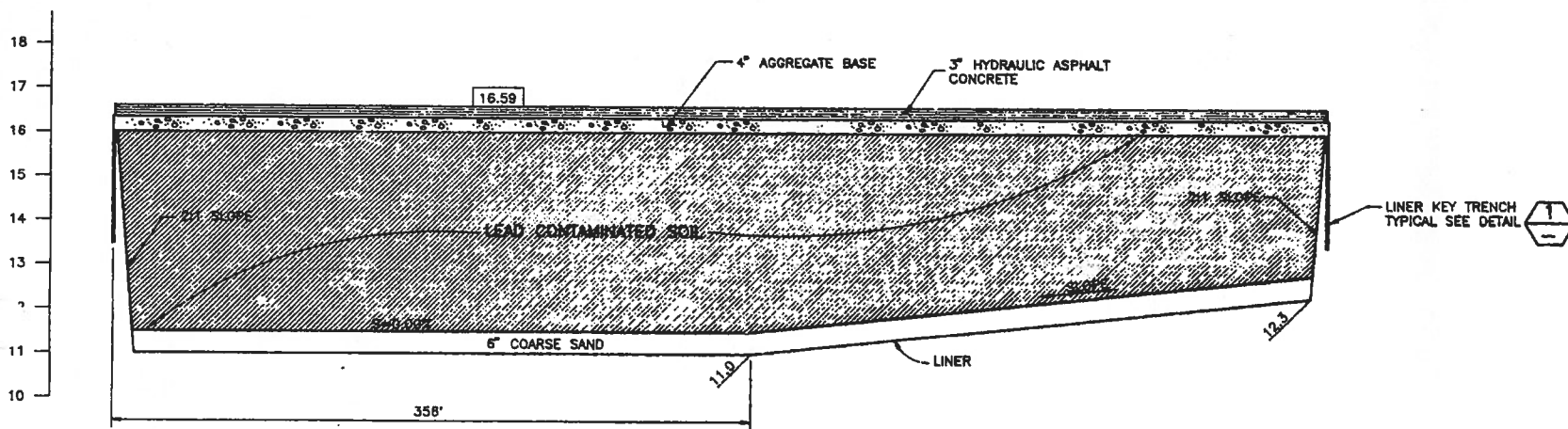
DATE	6/30/1993
SCALE	AS SHOWN
SHEET	2 OF 3 SHEETS
FILE	AA-3172

CAUTION: THIS PLAN MAY BE REDUCED

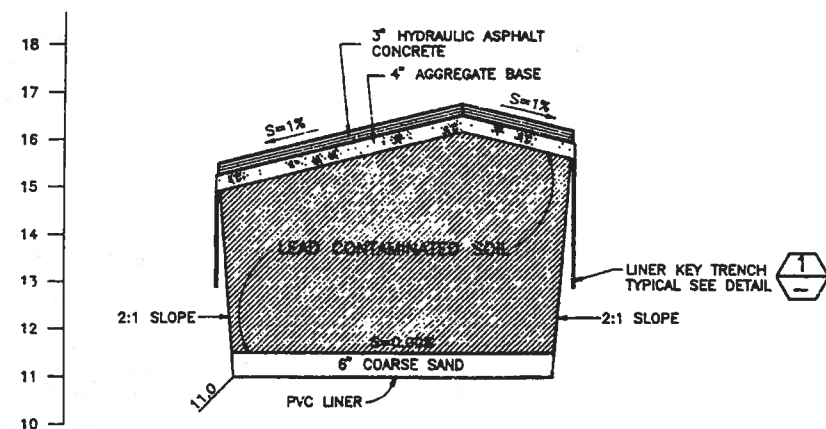
9 1" ORIGINAL SCALE



GRADING PLAN
SCALE: 1"=50'



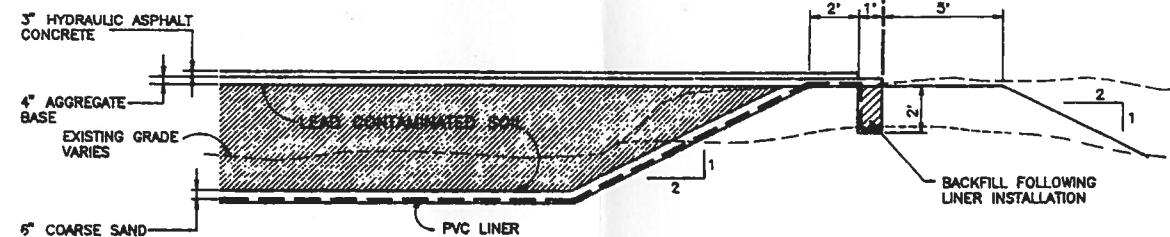
SECTION A-A
SCALE: VERT. 1"=2'
HORIZ. 1"=50'



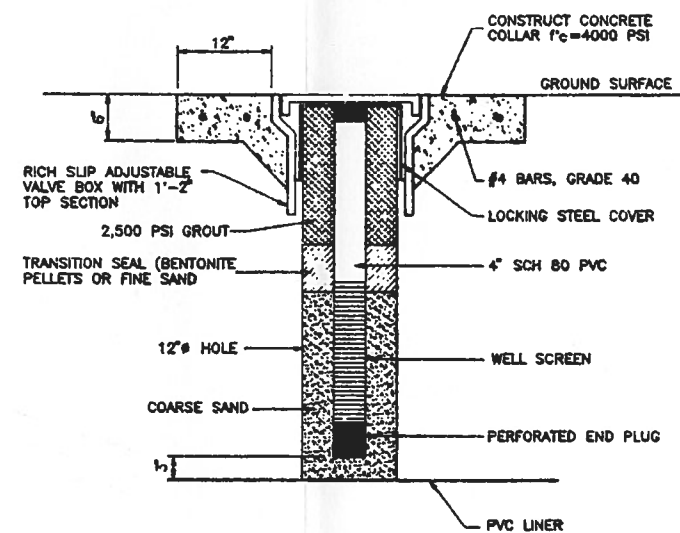
SECTION B-B
SCALE: VERT. 1"=2'
HORIZ. 1"=50'

LEGEND

16.57
FINISH GRADE OF HYDRAULIC ASPHALT CONCRETE



1
DETAIL
NTS



2
LEACHATE MONITORING WELL DETAIL
NTS

NOTES:

1. INSTALL LEACHATE MONITORING WELLS FOLLOWING LEAD-CONTAMINATED SOIL PLACEMENT. DIG HOLES BY HAND, EXERCISE CARE TO AVOID DAMAGING LINER.
2. FURNISH AND INSTALL 4 LEACHATE MONITORING WELLS. LOCATE AS DIRECTED BY THE ENGINEER.

FILMED BY
DATA IMAGE SYSTEMS CORP

50 06-04-93 1:45 P.M.

NO.	REVISIONS	DATE	APP'D

REVIEWED:	FACILITIES DEPARTMENT
REVIEWED:	CONSTRUCTION DEPARTMENT
REVIEWED:	PROJECT PLANNING DEPARTMENT

DRAWN:	STAFF
DESIGNED:	<i>Fred [Signature]</i>
CHECKED:	<i>Fred [Signature]</i>
REVIEWED:	<i>[Signature]</i>

PORT OF OAKLAND
530 WATER STREET OAKLAND, CALIFORNIA

CHIEF ENGINEER	<i>[Signature]</i>	C 17439
APPROVED:	<i>[Signature]</i>	C 18853
RECOMMENDED:	<i>[Signature]</i>	C 32172

SEVENTH STREET TERMINAL
CONSTRUCTION OF CONTAINMENT FACILITY AND
PLACEMENT OF LEAD CONTAMINATED SOIL AT BERTH 30
GRADING PLAN AND X-SECTIONS

DATE	6/30/1993
SCALE	AS SHOWN
SHEET	3 OF 3 SHEETS
FILE	AA-3172

CAUTION: THIS PLAN MAY BE REDUCED

0 1" 2" ORIGINAL SCALE