

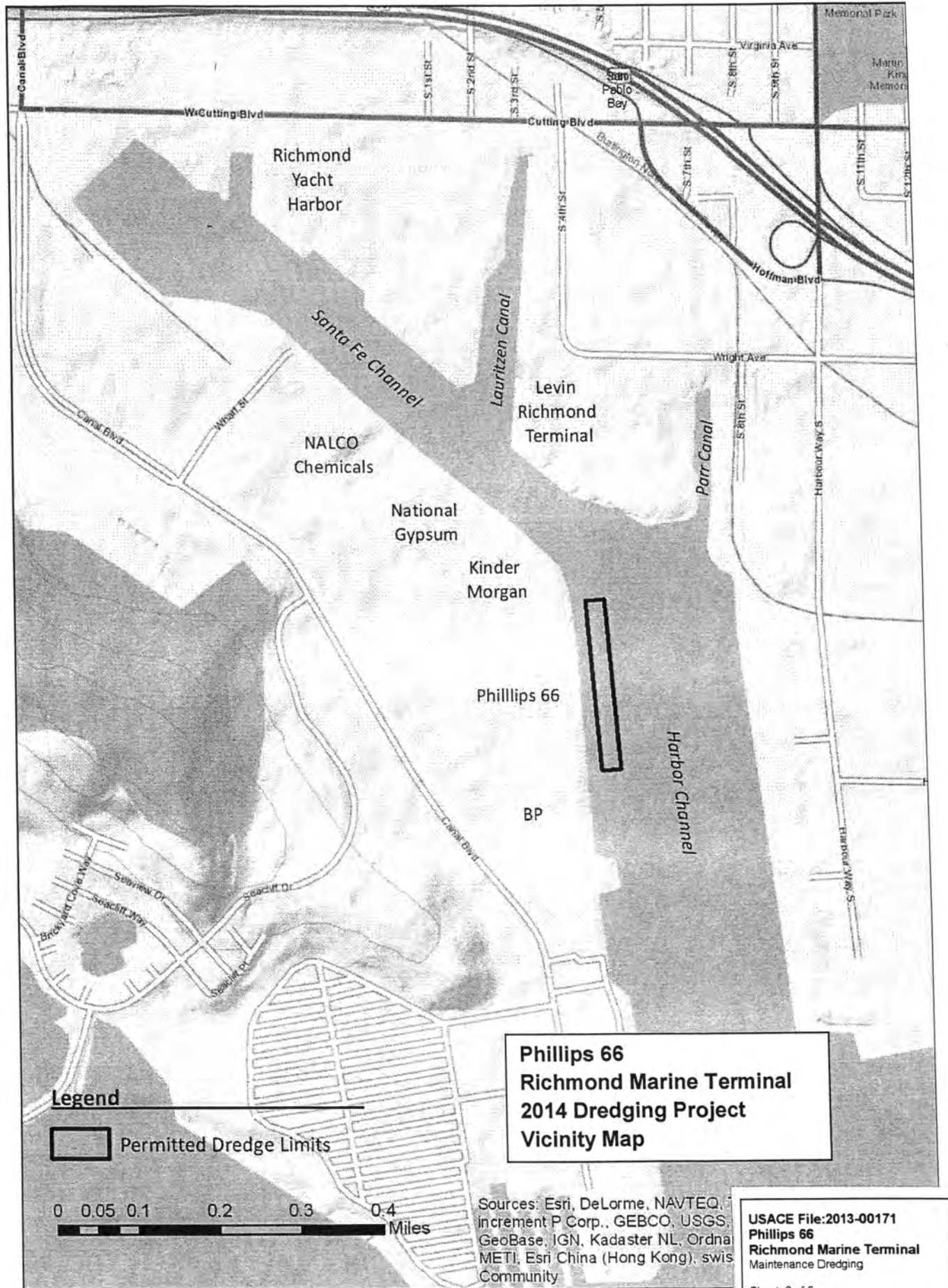
**Phillips 66
Richmond Marine Terminal
2014 Dredging Project
Location Map**

Legend
 Permitted Dredge Limits


0 0.25 0.5 1 1.5 2 Miles

Sources: Esri, DeLorme, NAVTEQ, TomTom, increment P Corp., GEBCO, USGS, FAO, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri China (Hong Kong), swisstopo, Community

**USACE File:2013-00171
Phillips 66
Richmond Marine Terminal
Maintenance Dredging**
 Sheet 1 of 5
 April 2014



Legend

 Permitted Dredge Limits

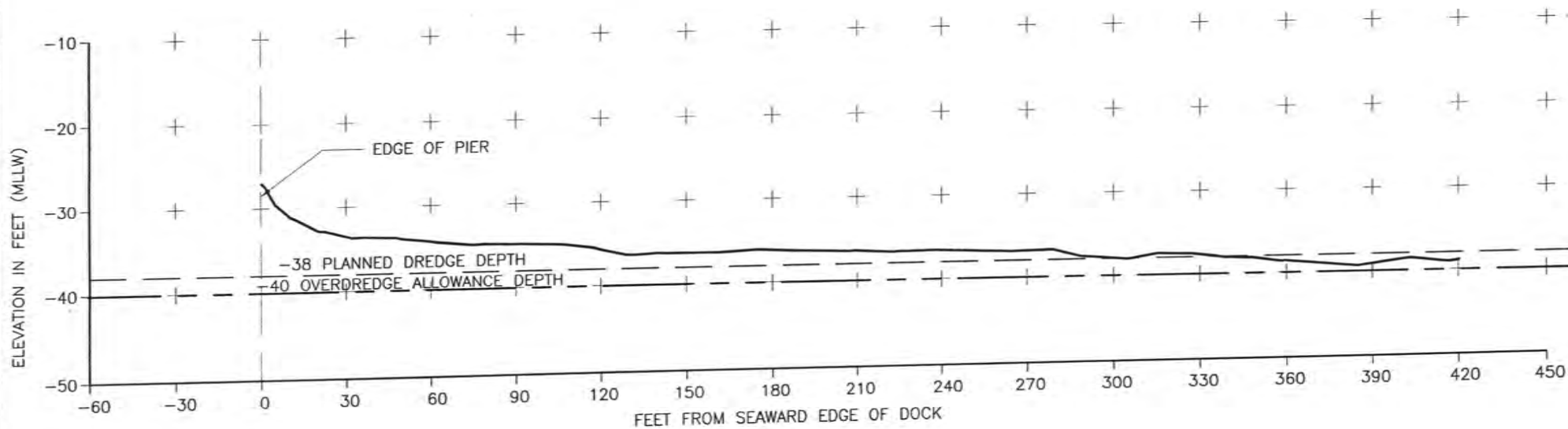
0 0.05 0.1 0.2 0.3 0.4 Miles

**Phillips 66
Richmond Marine Terminal
2014 Dredging Project
Vicinity Map**

Sources: Esri, DeLorme, NAVTEQ, Increment P Corp., GEBCO, USGS, GeoBase, IGN, Kadaster NL, Ordnance METI, Esri China (Hong Kong), swis Community

USACE File: 2013-00171
Phillips 66
Richmond Marine Terminal
 Maintenance Dredging
 Sheet 2 of 5
 April 2014

PHILLIPS 66: RICHMOND MARINE TERMINAL CROSS SECTION 2: STATION 8+50



NOTES:

1. CROSS SECTIONS BASED ON PRE DREDGE HYDROGRAPHIC SURVEY OF PERMITTED DREDGING EPISODE. SURVEYED BY: CONNEXSYS ENG. INC. 3075 RESEARCH DRIVE RICHMOND, CA 94806-5206
2. FOR REFERENCE, A ZERO BASELINE IS ESTABLISHED COINCIDENT WITH THE SEAWARD EDGE OF DOCK.

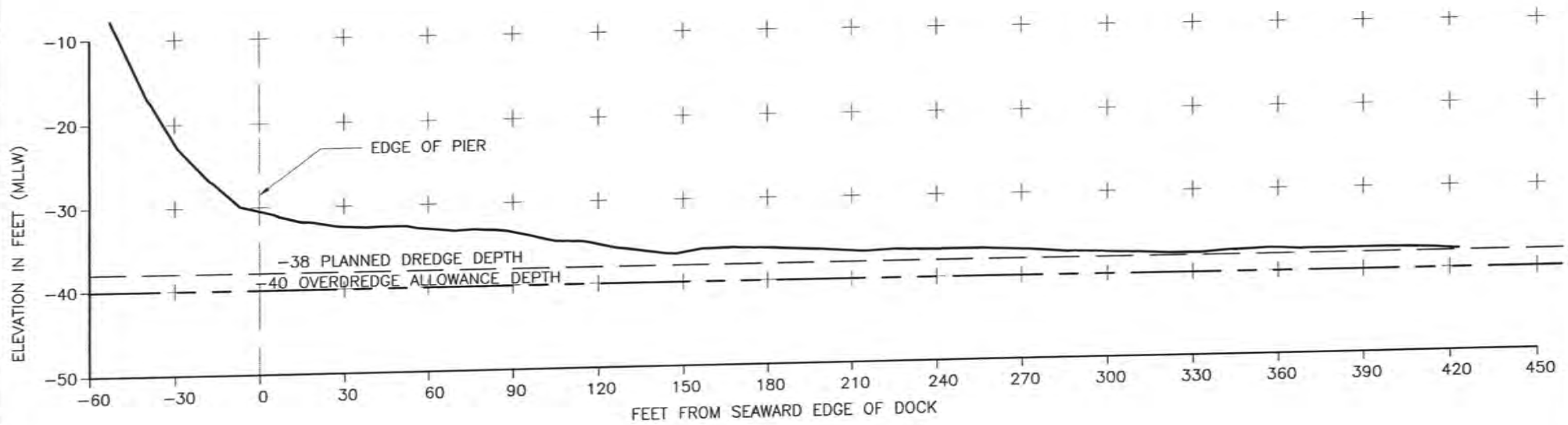
LEGEND

———— SURVEY PERFORMED
JULY 25, 2013

USACE File:2013-00171
Phillips 66
Richmond Marine Terminal
Maintenance Dredging

Sheet 3 of 5
April 2014

PHILLIPS 66: RICHMOND MARINE TERMINAL CROSS SECTION 1: STATION 1+00



NOTES:

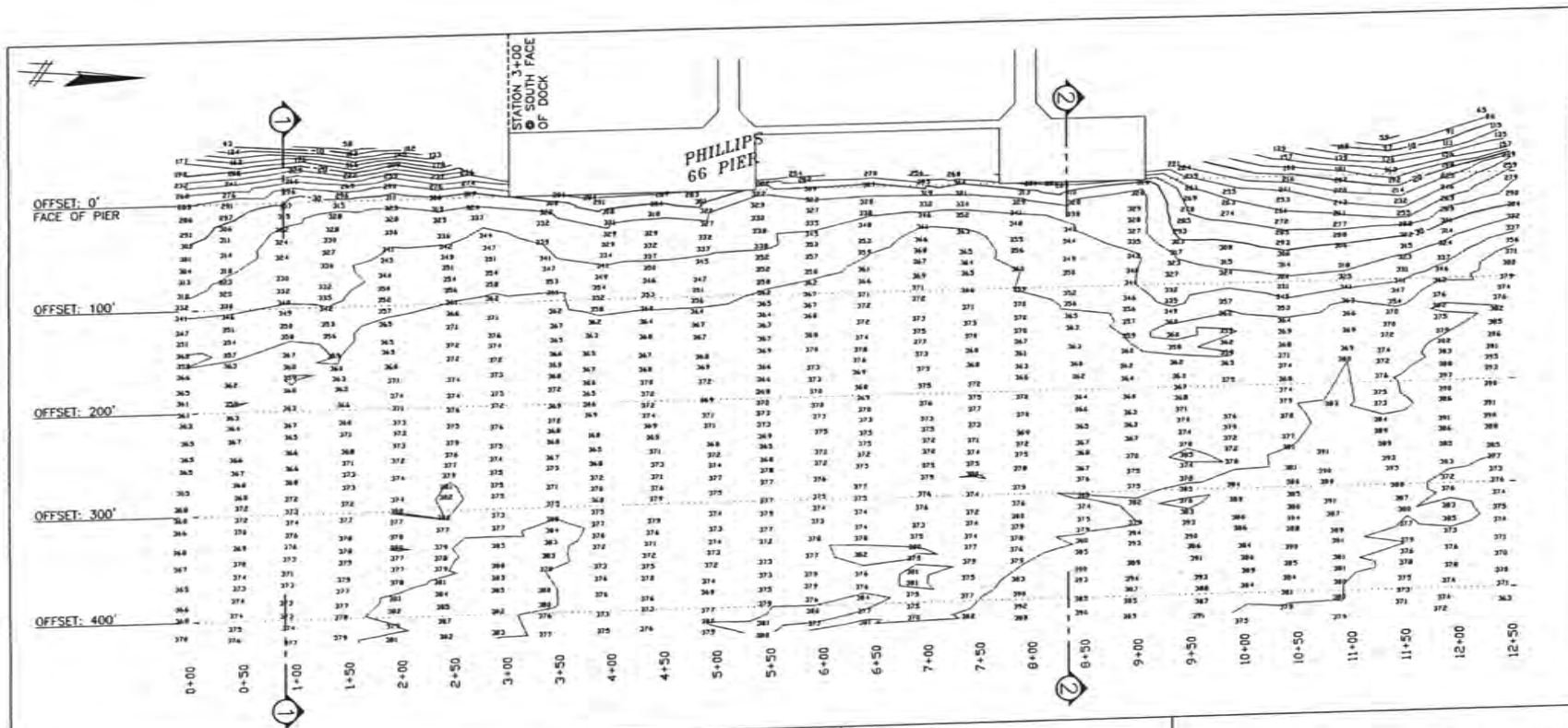
1. CROSS SECTIONS BASED ON PRE DREDGE HYDROGRAPHIC SURVEY OF PERMITTED DREDGING EPISODE. SURVEYED BY: CONNEXSYS ENG. INC. 3075 RESEARCH DRIVE RICHMOND, CA 94806-5206
2. FOR REFERENCE, A ZERO BASELINE IS ESTABLISHED COINCIDENT WITH THE SEAWARD EDGE OF DOCK.

LEGEND

———— SURVEY PERFORMED
JULY 25, 2013

USACE File: 2013-00171
Phillips 66
Richmond Marine Terminal
Maintenance Dredging

Sheet 4 of 5
April 2014



NOTES

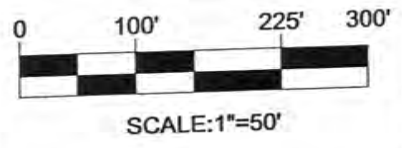
1. NUMBERS SHOWN REPRESENT DEPTHS AT 0.0' TIDE (MLLW DATUM).
2. THE DECIMAL POINT REPRESENTS THE ACTUAL LOCATION OF THE SOUNDING.
3. THE PROJECT BM IS G. OF E. TIDE BOARD AT MANSON PIER, APPROXIMATE CO-ORDINATES N2159187, E6023860.
4. PROJECT IS CALIFORNIA COORDINATE SYSTEM, ZONE 3.
5. EQUIPMENT:
 - A. HORIZONTAL: STARLINK DNV-212 DOPS
 - B. VERTICAL: RAYTHEON 7190 FATHOMETER W/ 3 DEGREE TRANSDUCER
 - C. SOFTWARE: COASTAL OCEANOGRAPHICS "HYPACK"
6. METHODS CONFORM TO COMPS OF ENGINEERS CLASS I SURVEYS
7. SEA FLOOR BOTTOM CONSISTS OF "BAY MUD."

Connexsys Engineering Inc.
 2075 Research Drive
 Richmond, CA
 Ph. (510) 243-2050

SURVEYED: 07-25-2013

Hydrographic Survey
 Phillips 66: Richmond
 Marine Terminal
 Richmond, CA

With Cross Section References



USACE File: 2013-00171
 Phillips 66
 Richmond Marine Terminal
 Maintenance Dredging

Sheet 5 of 5
 April 2014