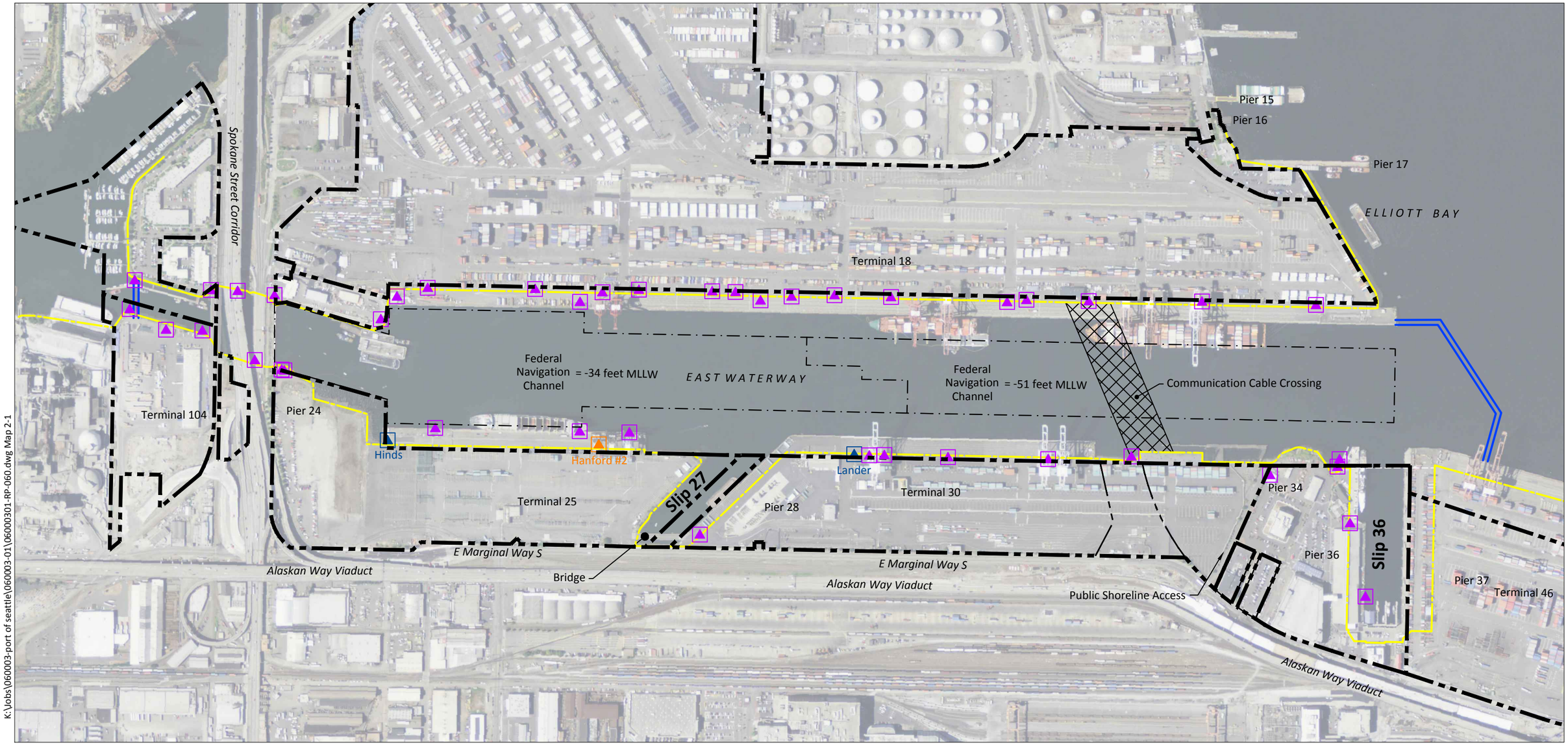


K:\Jobs\060003-port of seattle\060003-01\06000301-RP-060.dwg Map 2-1

Aug 23, 2013 11:44am epipkin

NOTES:

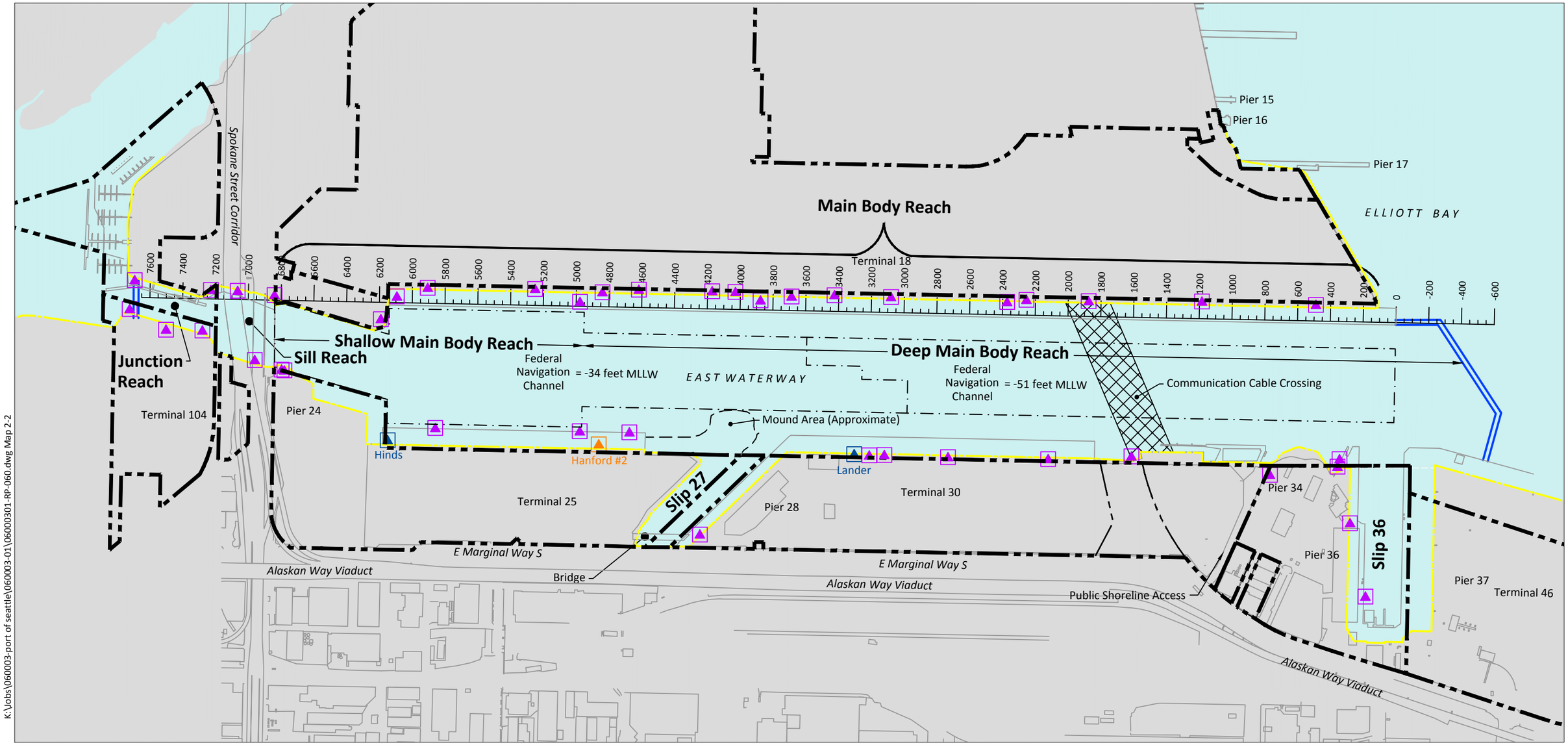
1. Aerial Photo, NAIP 2011.
2. Previously established station locations for the East Waterway are shown along the western shoreline for reference.

LEGEND:

- Property Line
- East Waterway Study Boundary
- MHHW Line
- Terminal 25 Federal Navigation Channel
- CSO
- Storm Drain
- CSO/Storm Drain

0 600
Scale in Feet

Map 2-1
East Waterway Aerial Photo
Supplemental Remedial Investigation
East Waterway Study Area



K:\Jobs\060003-port of seattle\060003-01\06000301-RP-060.dwg Map 2-2

Aug 23, 2013 11:44am epipkin

NOTES:

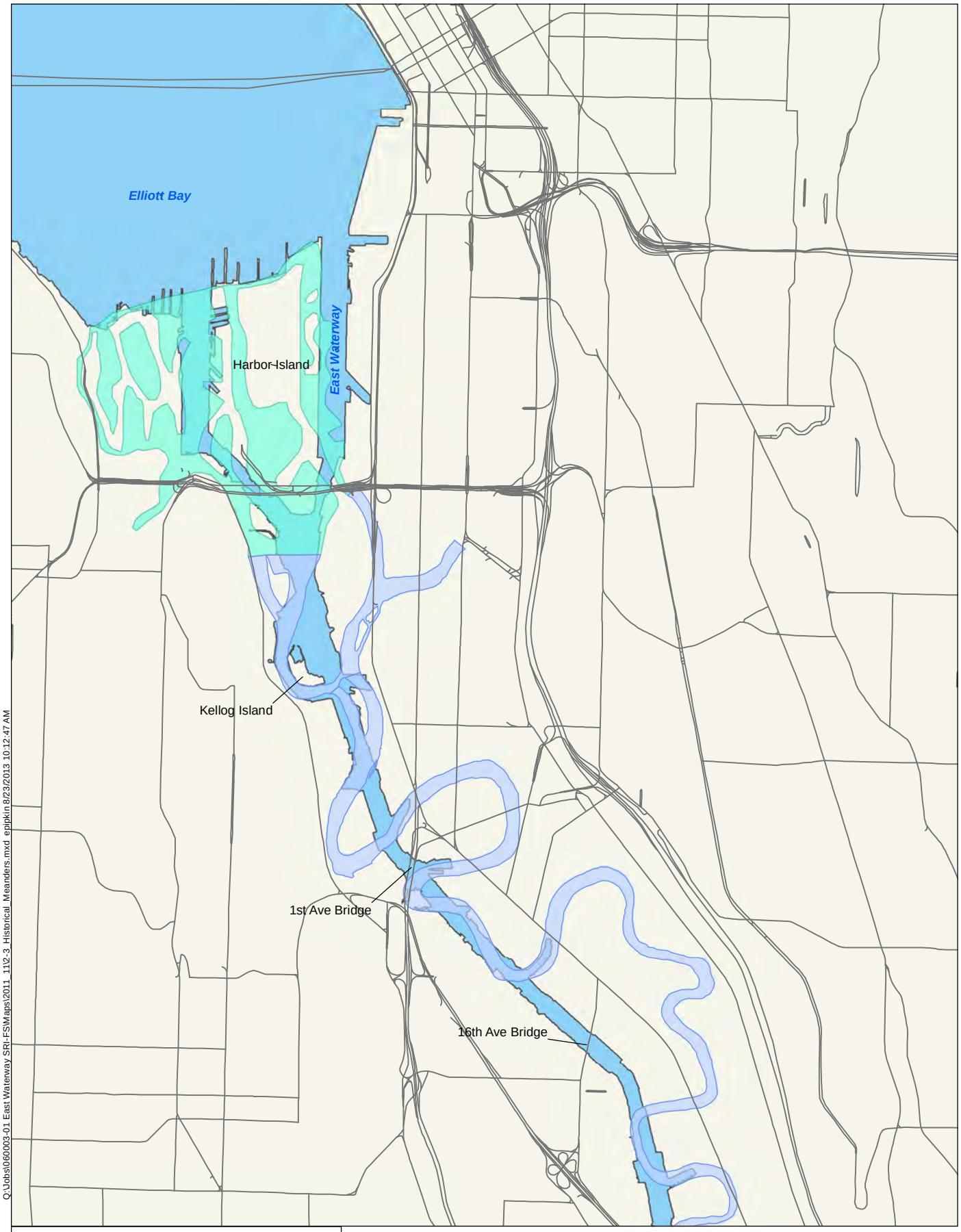
1. Aerial by USGS 2009.
2. Previously established station locations for the East Waterway are shown along the western shoreline for reference.

LEGEND:

- Property Line
- East Waterway Study Boundary
- MHHW Line
- Terminal 25 Federal Navigation Channel
- CSO
- Storm Drain
- CSO/Storm Drain

0 600
Scale in Feet

Map 2-2
Major East Waterway Features
Supplemental Remedial Investigation
East Waterway Study Area



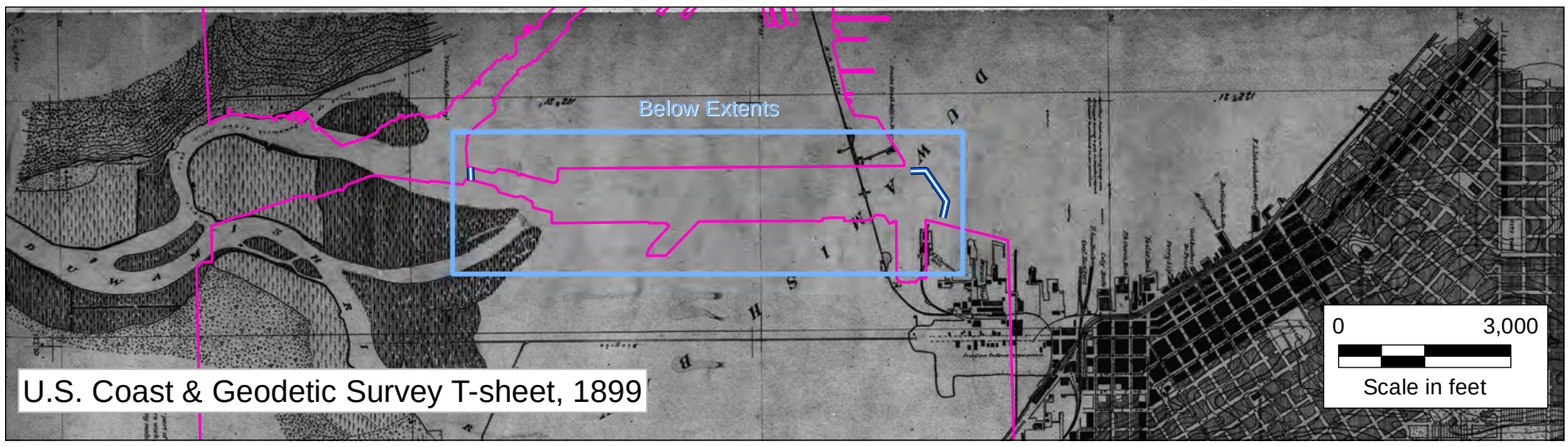
Historical LDW Meander (ca. 1850)
Historical LDW Meander (ca. 1909)
Source: The Seattle Times
Current Waterbody

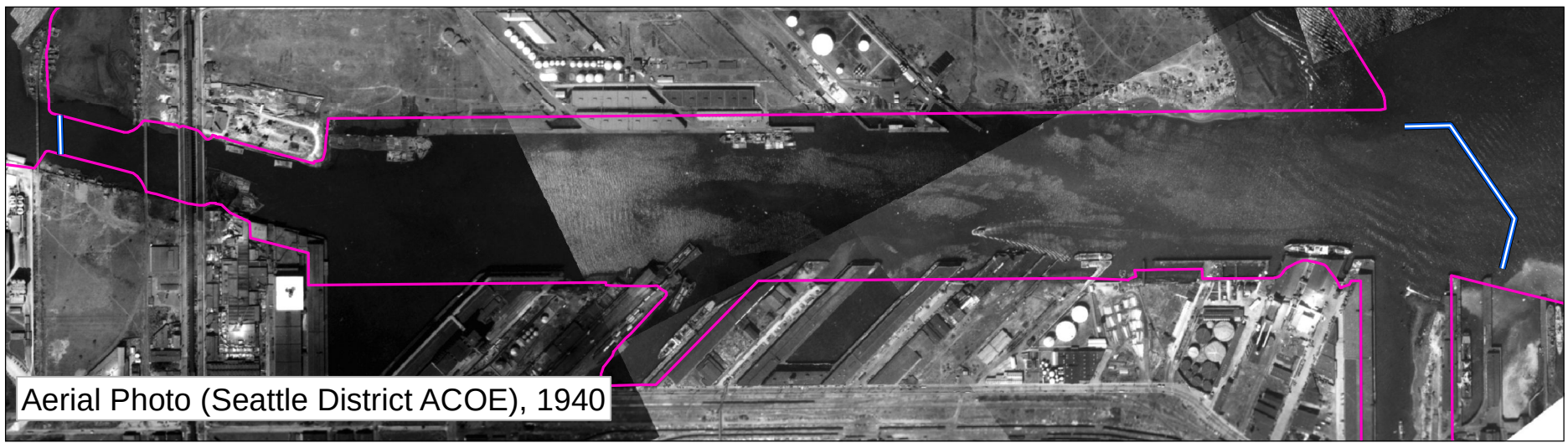
N

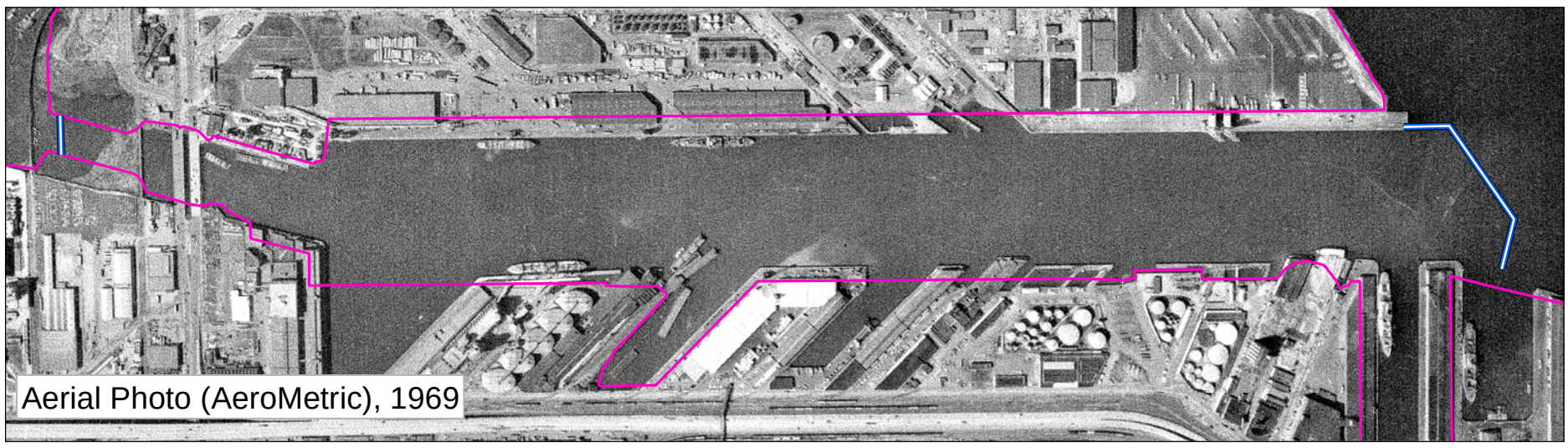
0 2,000 4,000
Scale in Feet

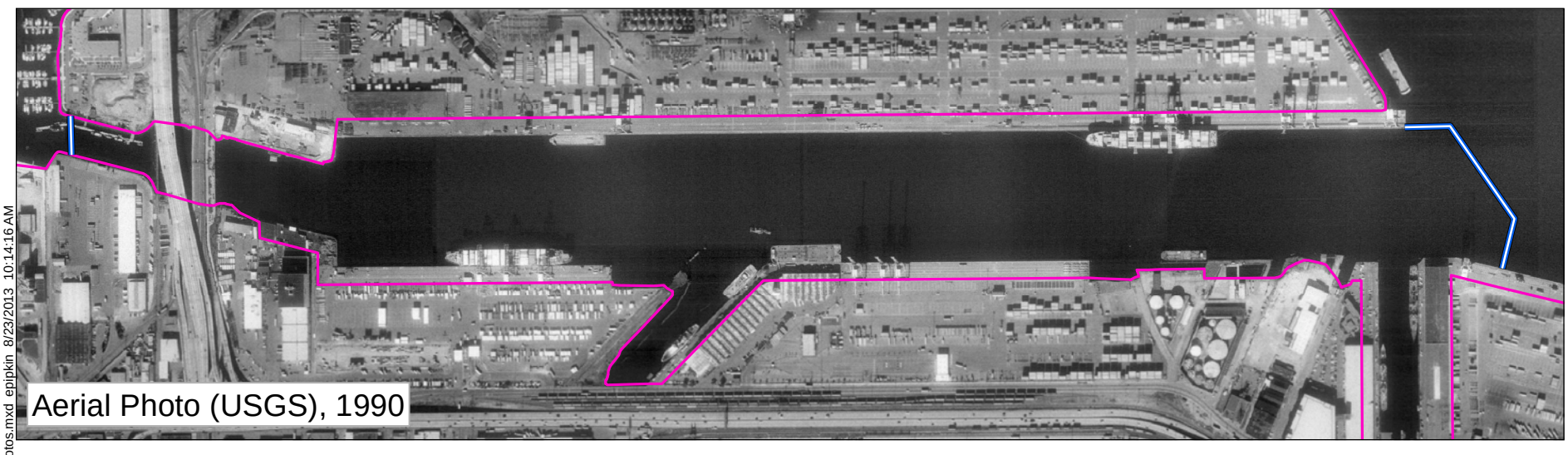
Map 2-3
Lower Duwamish River Historical Meanders
Supplemental Remedial Investigation
East Waterway Study Area

Q:\Jobs\060003-01 East Waterway SRI-FS\Maps\2011_1112-3_Historical_Meanders.mxd epipkin 8/23/2013 10:12:47 AM







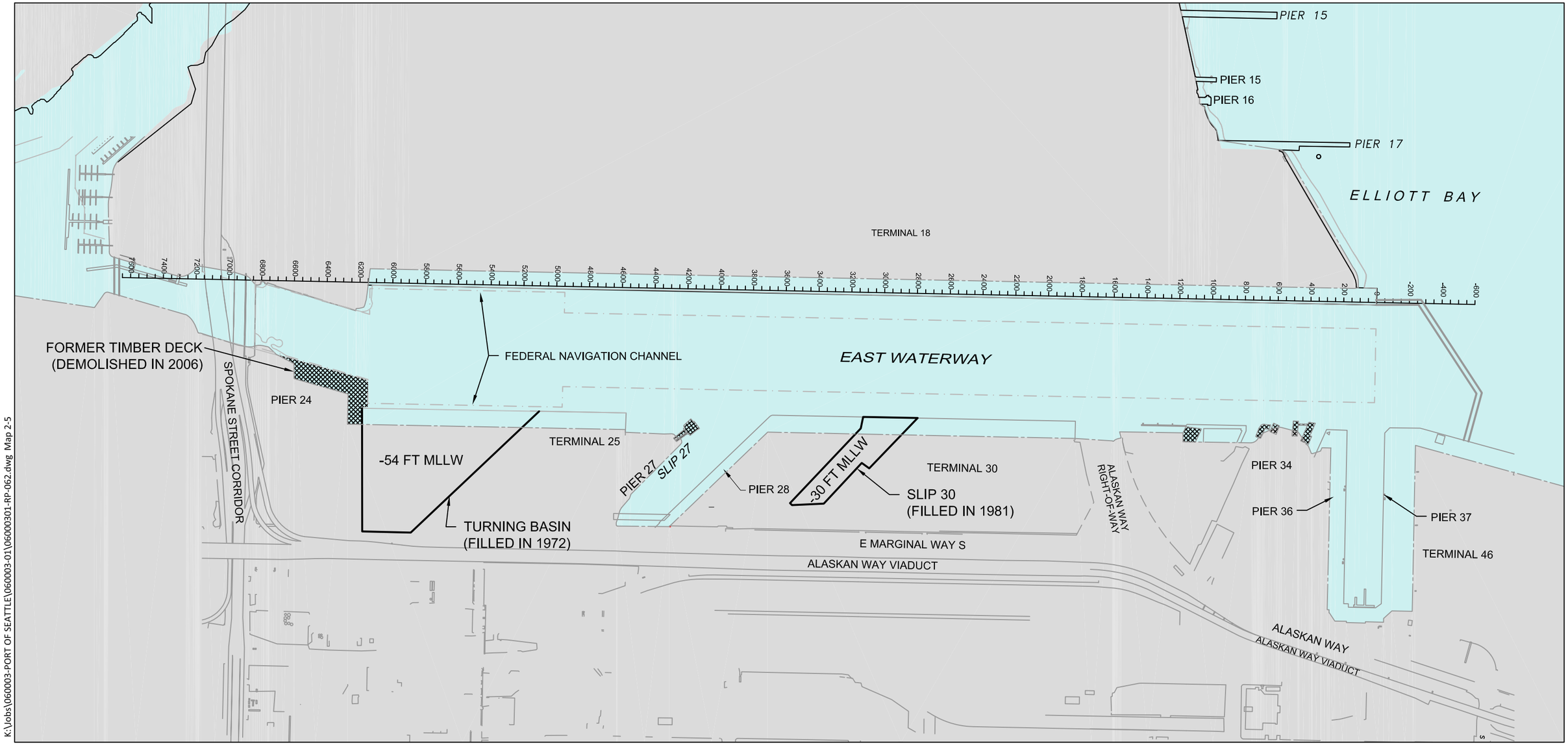


Q:\Jobs\060003-01 East Waterway SRI-FS\Maps\2011_12\Historic Maps and Photos.mxd epipkin 8/23/2013 10:14:16 AM

East Waterway Study Area Boundary
Present Day EW Region (MHHW)

0 1,000
Scale in feet

Map 2-4
Historical Site Development
Supplemental Remedial Investigation
East Waterway Study Area



K:\Jobs\060003-PORT OF SEATTLE\06000301-01\06000301-RP-062.dwg Map 2-5

Aug 27, 2013 3:34pm epipkin

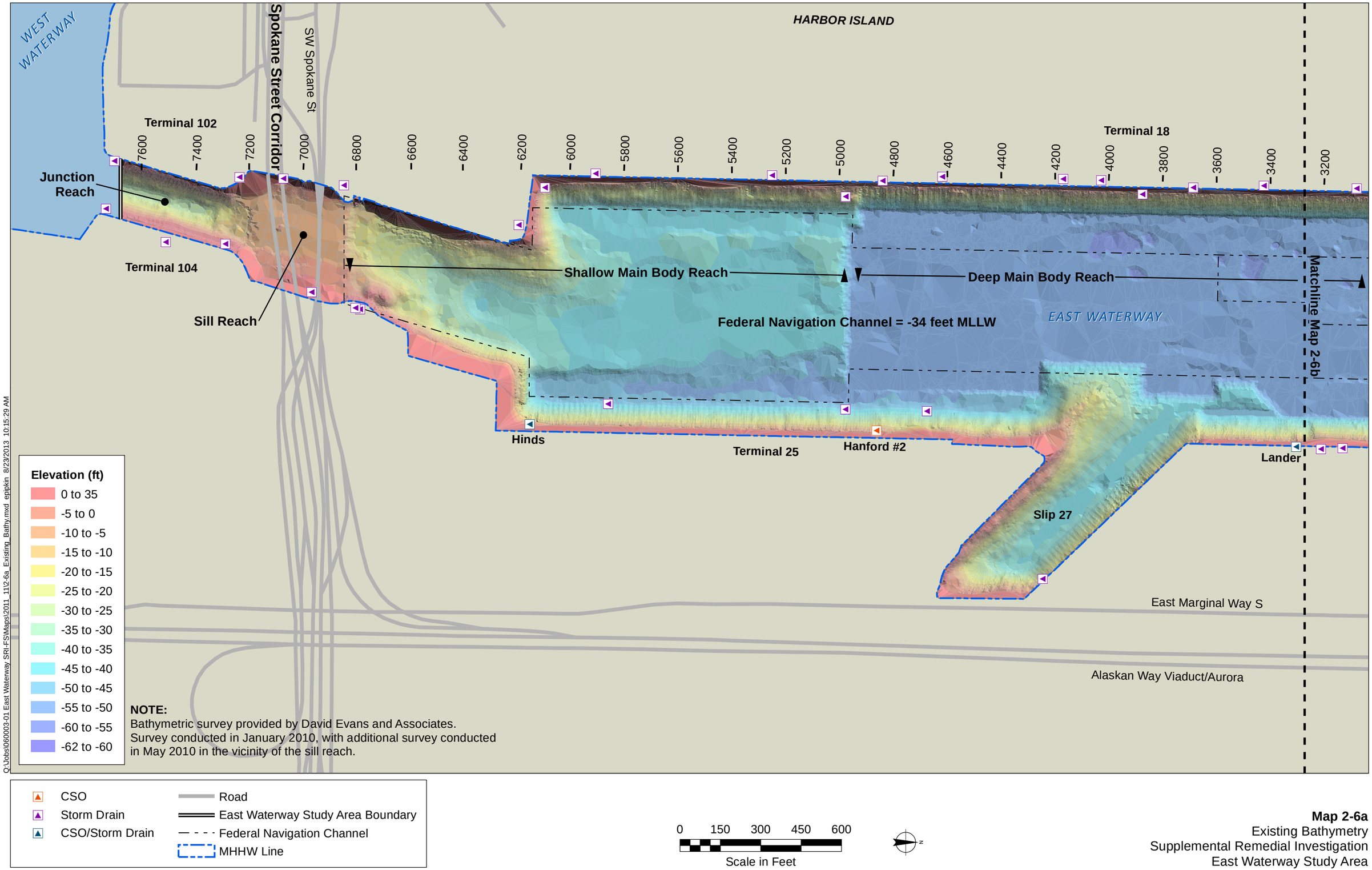
HORIZONTAL DATUM: Washington State Plane North, NAD83.
VERTICAL DATUM: Mean Lower Low Water (MLLW).

NOTE:
Previously established station locations for the East Waterway are shown along the western shoreline for reference.

LEGEND:
East Waterway Study Boundary
MHHW Line
Former Structures

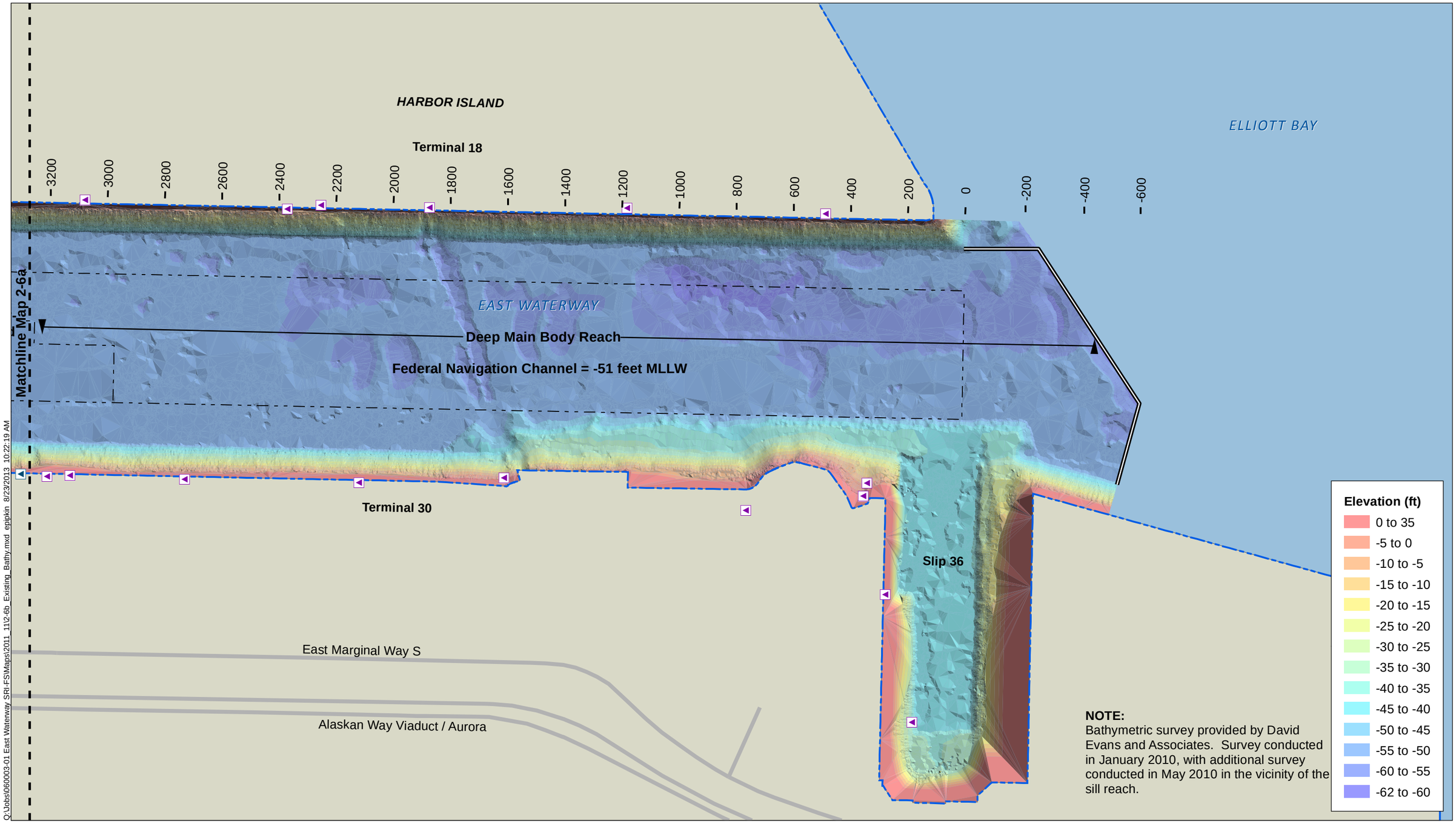
0 600
Scale in Feet

Map 2-5
Historical East Waterway Features
Supplemental Remedial Investigation
East Waterway Study Area



Q:\Jobs\060003-01 East Waterway SRI-FS\Maps\2011_1112-6a_Existing_Bathy.mxd epipkin 8/23/2013 10:15:29 AM

Map 2-6a
Existing Bathymetry
Supplemental Remedial Investigation
East Waterway Study Area

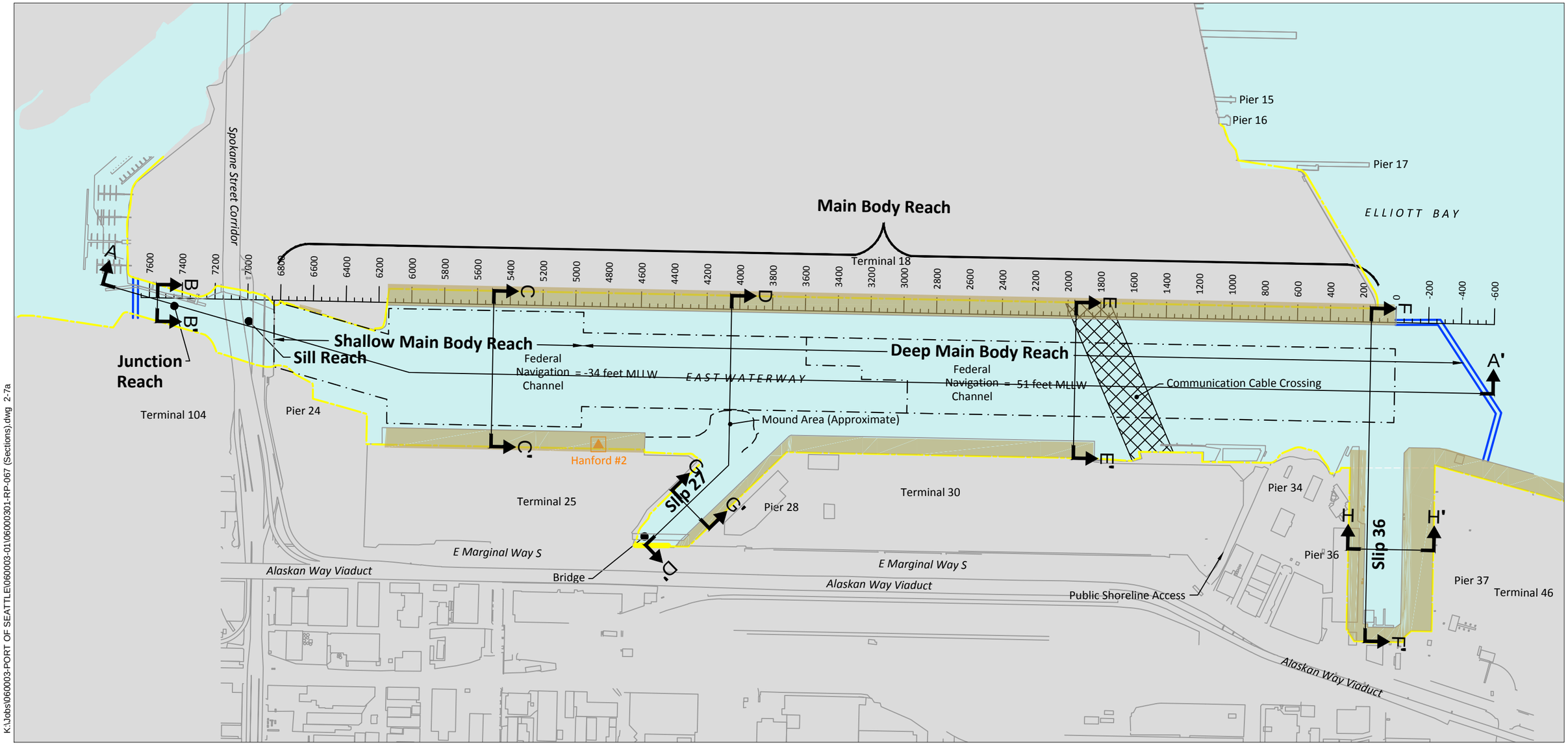


Q:\Jobs\060003-01 East Waterway SRI-FS\Maps\2011_11\2-6b_Existing_Bathy.mxd epipkin 8/23/2013 10:22:19 AM

CSO
Storm Drain
CSO/Storm Drain
Road
East Waterway Study Area Boundary
Federal Navigation Channel
MHHW Line

0 150 300 450 600
Scale in Feet

Map 2-6b
Existing Bathymetry
Supplemental Remedial Investigation
East Waterway Study Area



LEGEND:

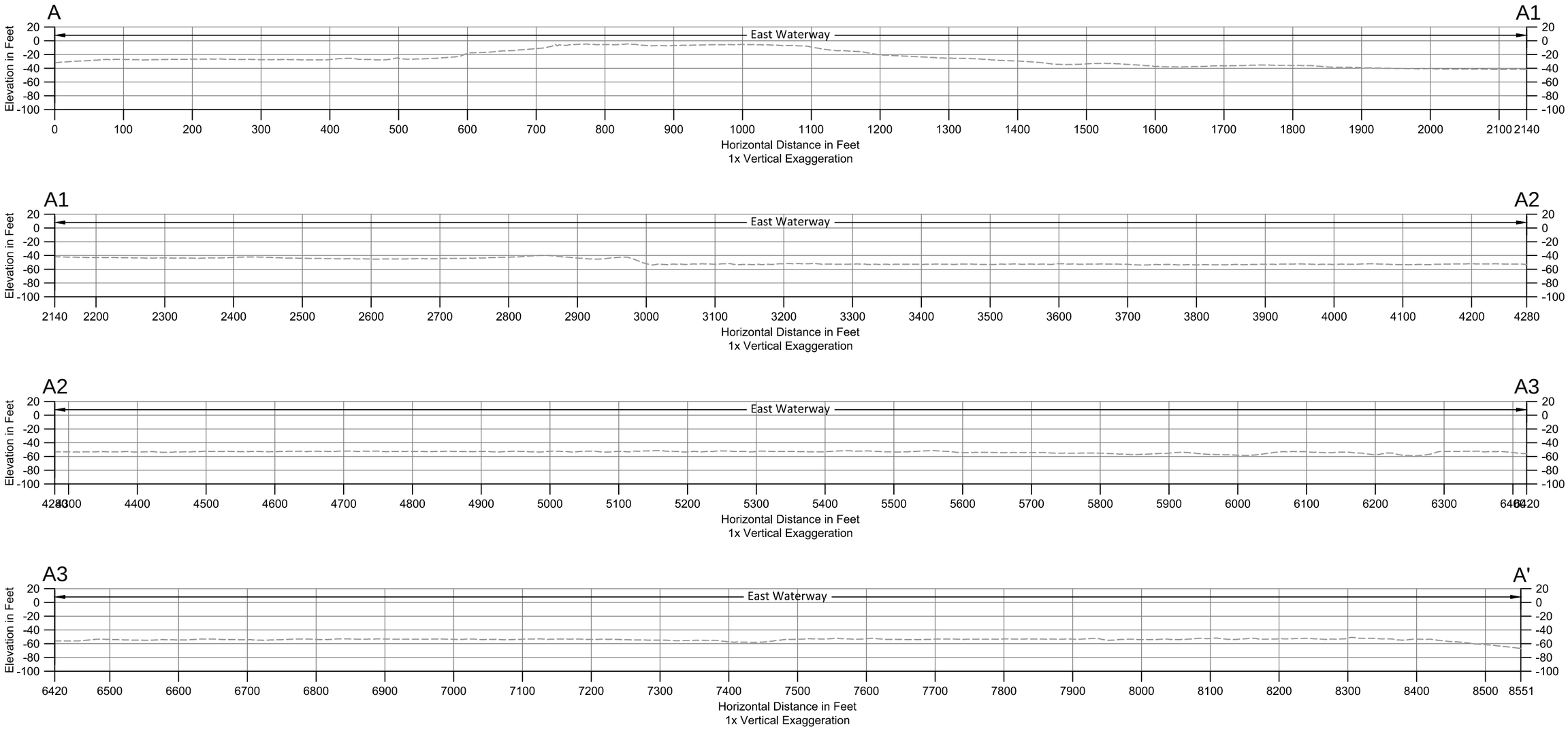
- East Waterway Study Boundary
- MHHW Line
- Federal Navigation Channel
- Overwater Pier Above Riprap

0 600
Scale in Feet

K:\Jobs\060003-PORT OF SEATTLE\060003-01\06000301-RP-067 (Sections).dwg 2-7a

Aug 23, 2013 11:23am epipkin

Map 2-7a
Cross-section Plan View
Supplemental Remedial Investigation
East Waterway Study Area



SOURCE: Existing bathymetry survey provided by David Evans and Associates.
VERTICAL DATUM: Mean Lower Low Water (MLLW).

LEGEND:

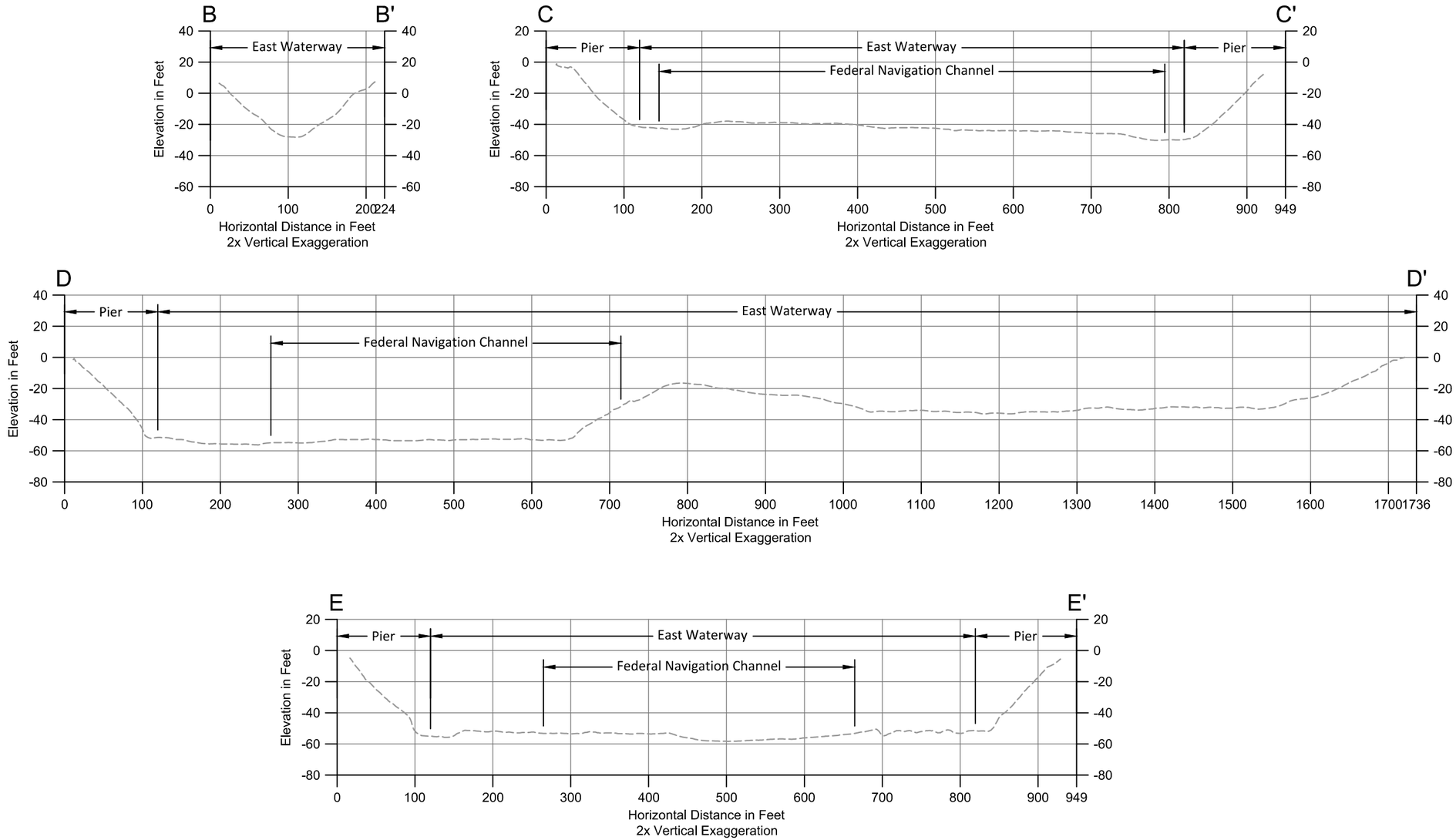
- - - - - - - Existing Mudline

0 150
Scale in Feet

K:\Jobs\060003-PORT OF SEATTLE\060003-01\06000301-RP-067 (Sections).dwg 2-7b

Aug 23, 2013 11:24am epipkin

Map 2-7b
Cross-Sections
Supplemental Remedial Investigation
East Waterway Study Area



SOURCE: Existing bathymetry survey provided by David Evans and Associates.
VERTICAL DATUM: Mean Lower Low Water (MLLW).

LEGEND:

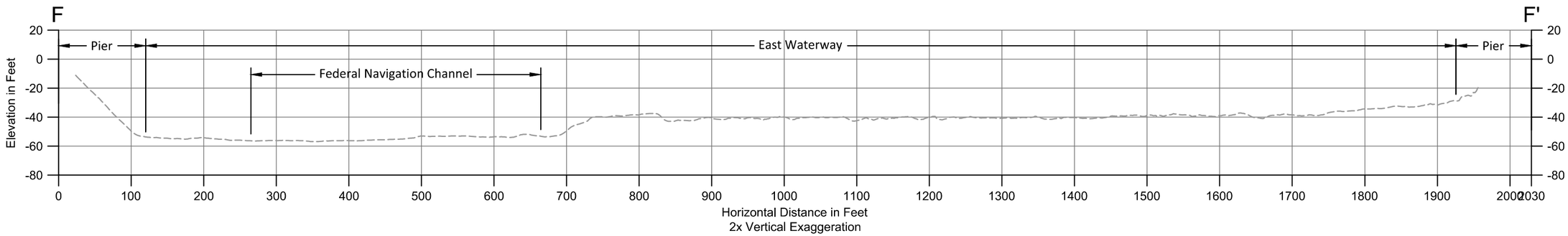
Existing Mudline

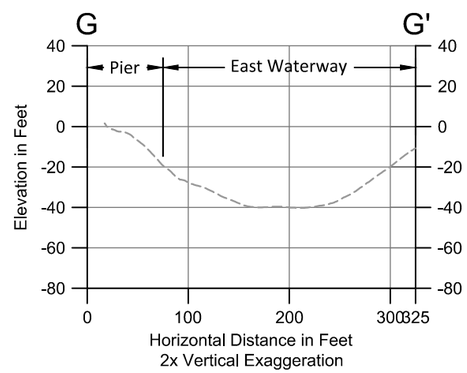
0 150
Scale in Feet

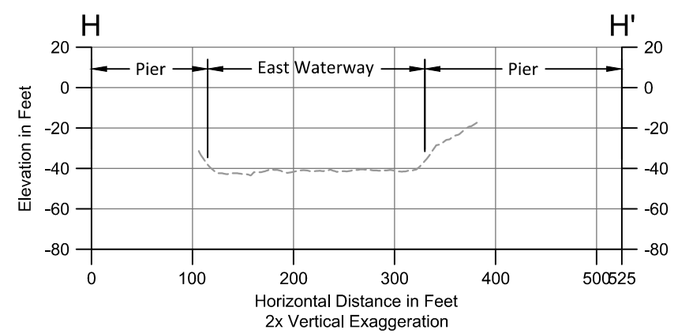
K:\Jobs\060003-PORT OF SEATTLE\060003-01\06000301-RP-067 (Sections).dwg 2-7c

Aug 23, 2013 11:26am epipkin

Map 2-7c
Cross-Sections
Supplemental Remedial Investigation
East Waterway Study Area







K:\Jobs\060003-PORT OF SEATTLE\060003-01\06000301-RP-067 (Sections).dwg 2-7d

Aug 23, 2013 11:26am epipkin

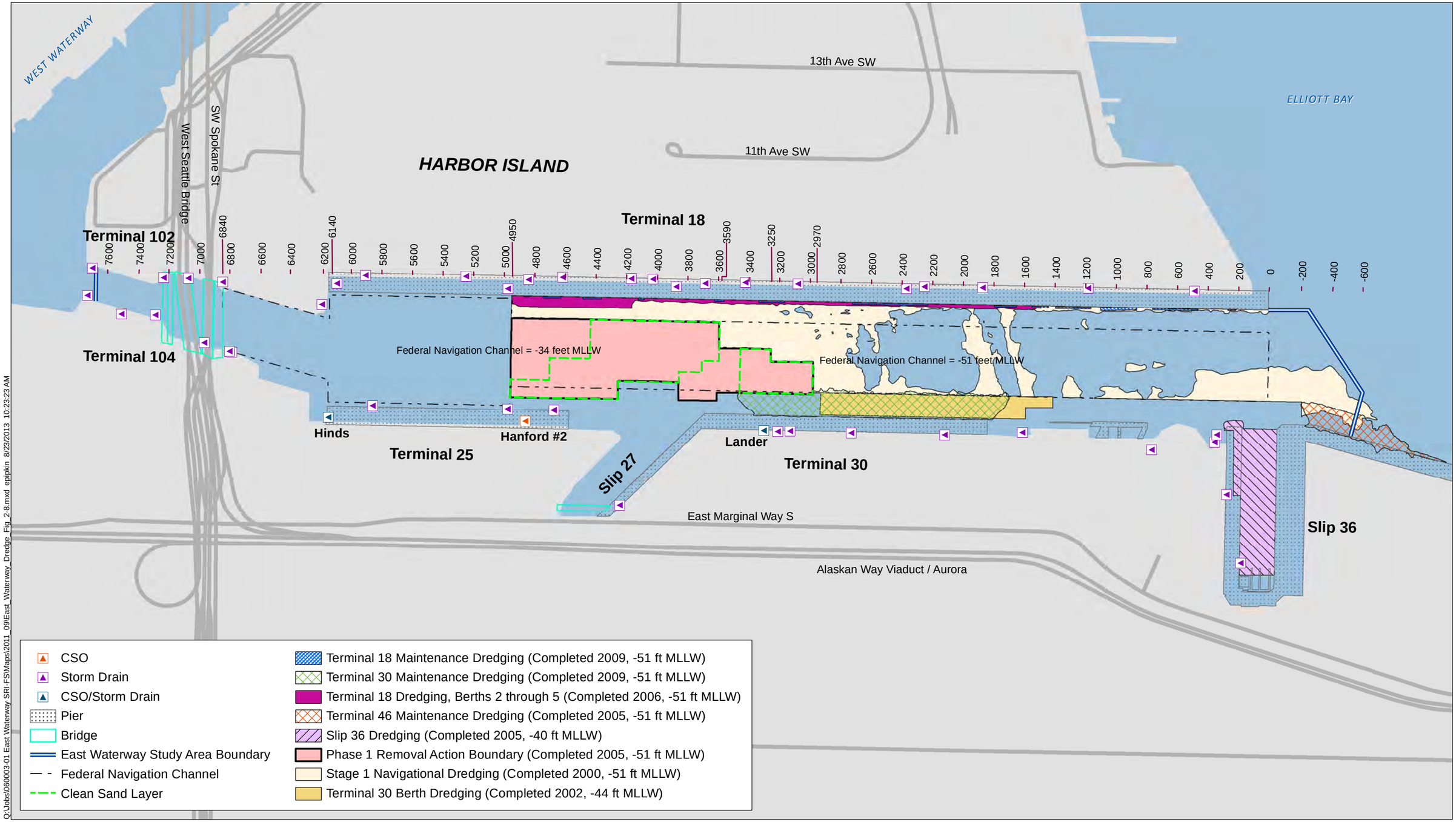
SOURCE: Existing bathymetry survey provided by David Evans and Associates.
VERTICAL DATUM: Mean Lower Low Water (MLLW).

LEGEND:

−−−−−−− Existing Mudline

0 150
Scale in Feet

Map 2-7d
Cross-Sections
Supplemental Remedial Investigation
East Waterway Study Area

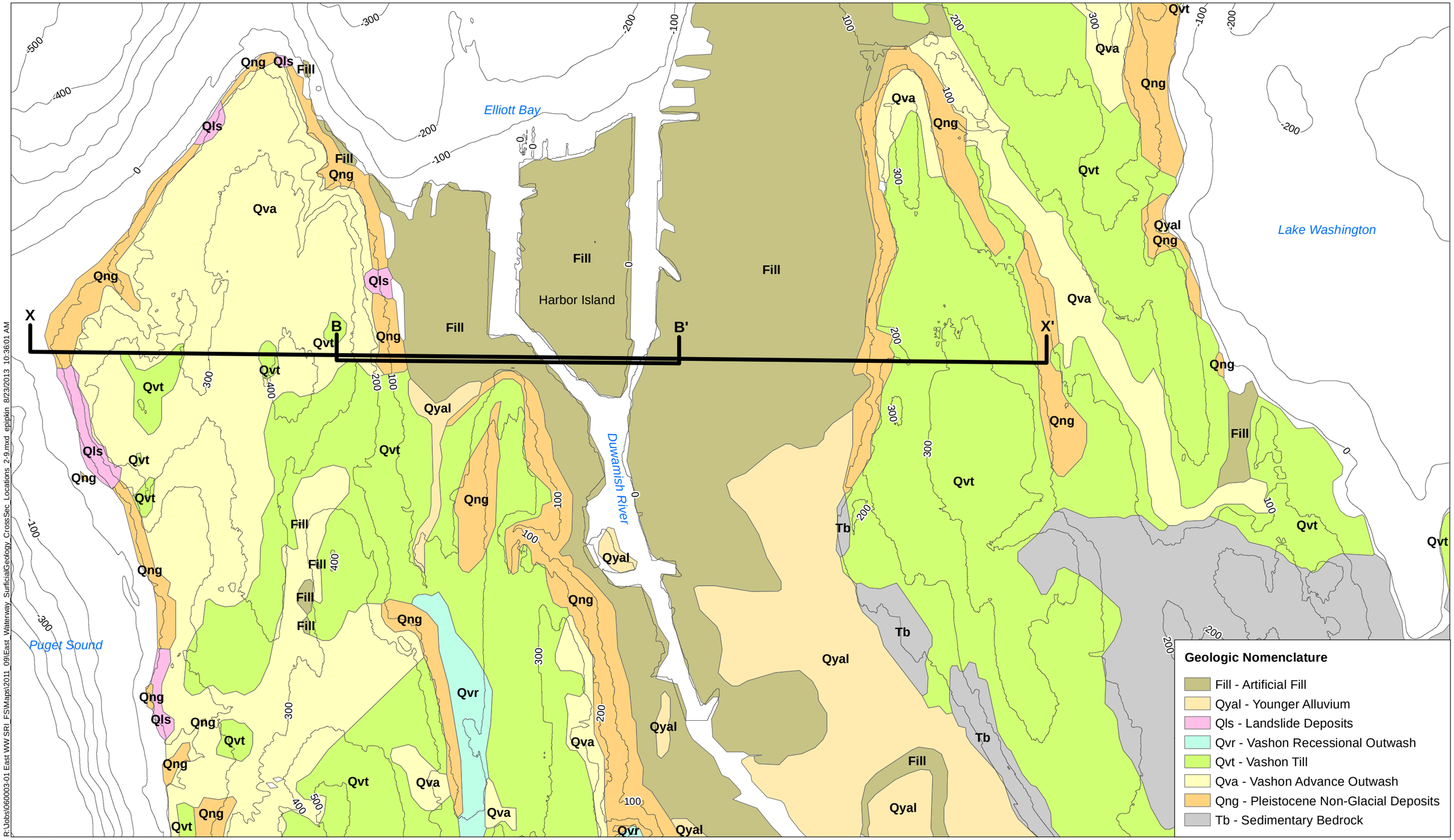


Q:\Jobs\060003-01 East Waterway SRI-FS\Maps\2011_09\East_Waterway_Dredge_Fig_2-8.mxd epipkin 8/23/2013 10:23:23 AM

NOTES:
1. Previously established station locations for the East Waterway are shown along the western shoreline for reference.
2. Dredge activities listed indicate events since 2000.

0 300 600 900 1,200
Scale in Feet

Map 2-8
Recent Dredge History
Supplemental Remedial Investigation
East Waterway Study Area



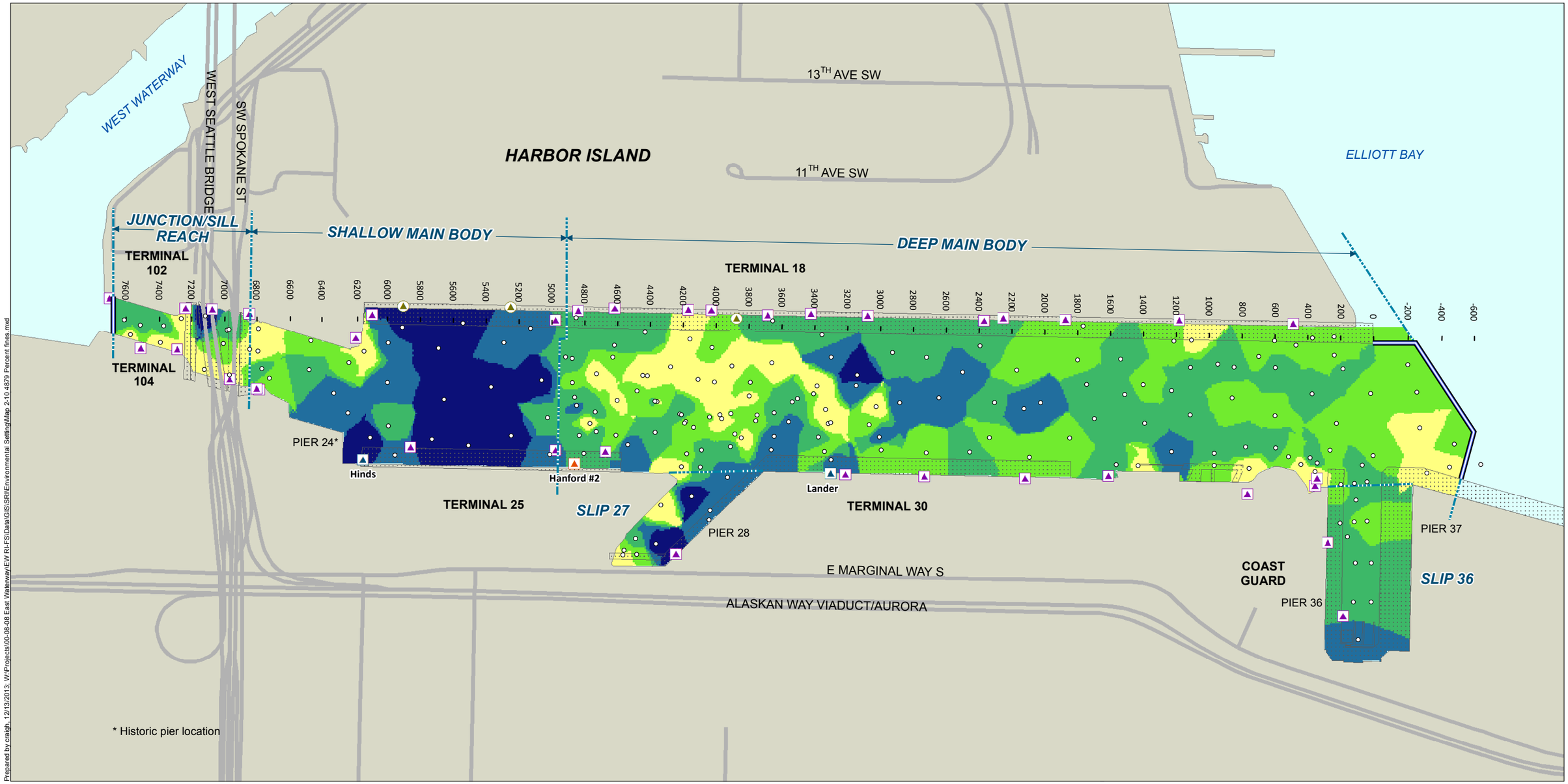
R:\Jobs\060003-01 East WW SRI_FS\Maps\2011_09\East_Waterway_SurficialGeology_CrossSec_Locations_2-9.mxd epiplin 8/23/2013 10:36:01 AM

NOTES:

1. Cross section locations are approximated from Booth and Herman (1998). Cross sections are shown on Figure 2-1.
2. Surficial geologic GIS data layer acquired from USGS (http://ngmdb.usgs.gov/Prodesc/proddesc_82852.htm).
3. Geologic unit nomenclature was revised from USGS to correspond with Booth and Herman (1998).
4. Qng includes units Qtb (transitional beds), Qob (Olympia beds), and Q(B)f (fine grained deposits) of Booth and Herman (1998).
5. Topograhic contour GIS data layer acquired from King County (http://www5.kingcounty.gov/gisdataportal/Default.aspx).

0 0.5 1
Miles

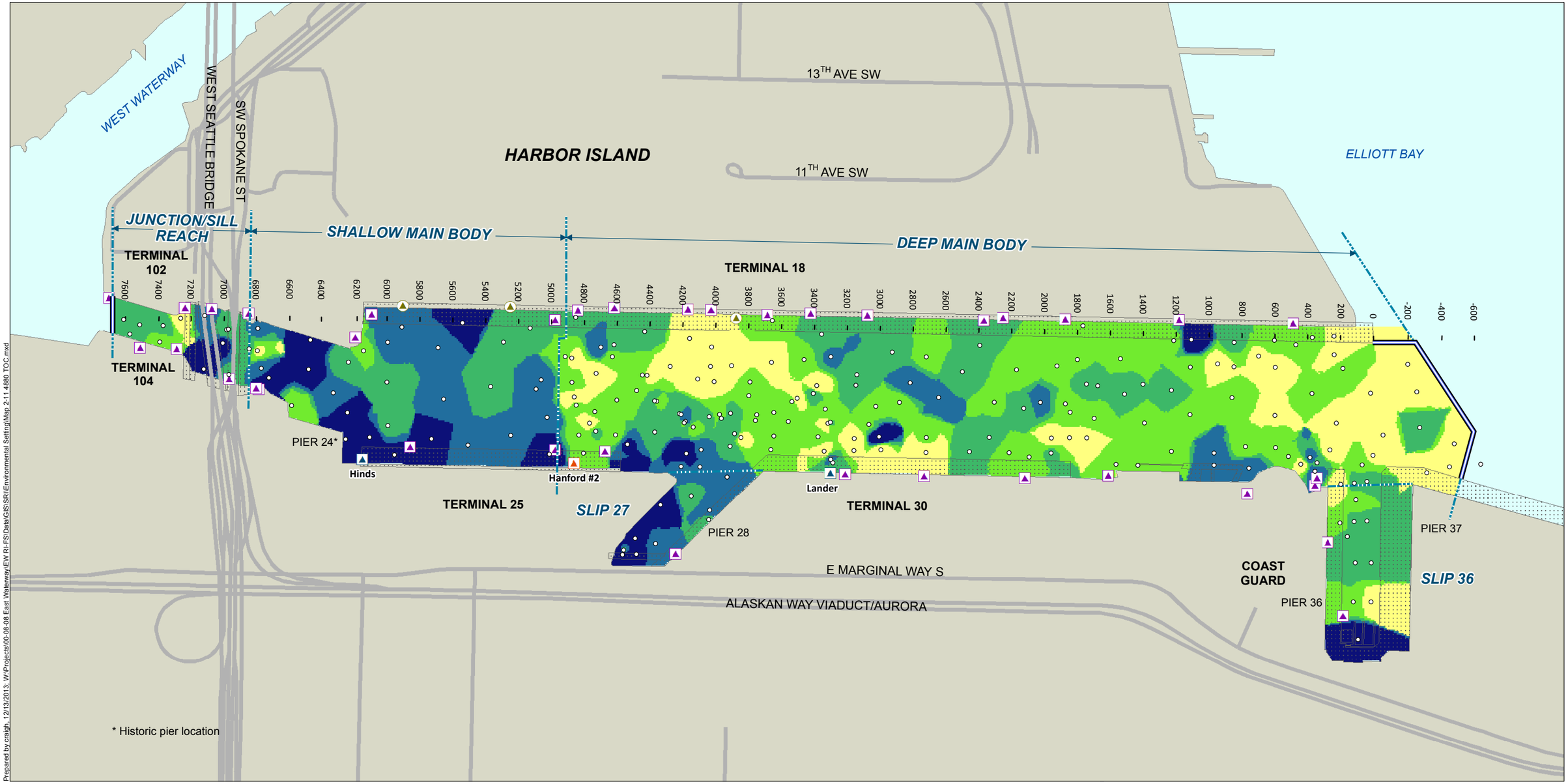
Map 2-9
Surficial Geology with Cross Section Locations
Supplemental Remedial Investigation
East Waterway Study Area



Fines (% dw)
- > 80%
- > 60% and ≤ 80%
- > 40% and ≤ 60%
- > 20% and ≤ 40%
- ≤ 20%
- Fines Sampling Location
- CSO
- Storm Drain
- CSO/Storm Drain
- Unknown Outfall
- Dock/Pier/Bridge
- Road
- East Waterway Study Area Boundary

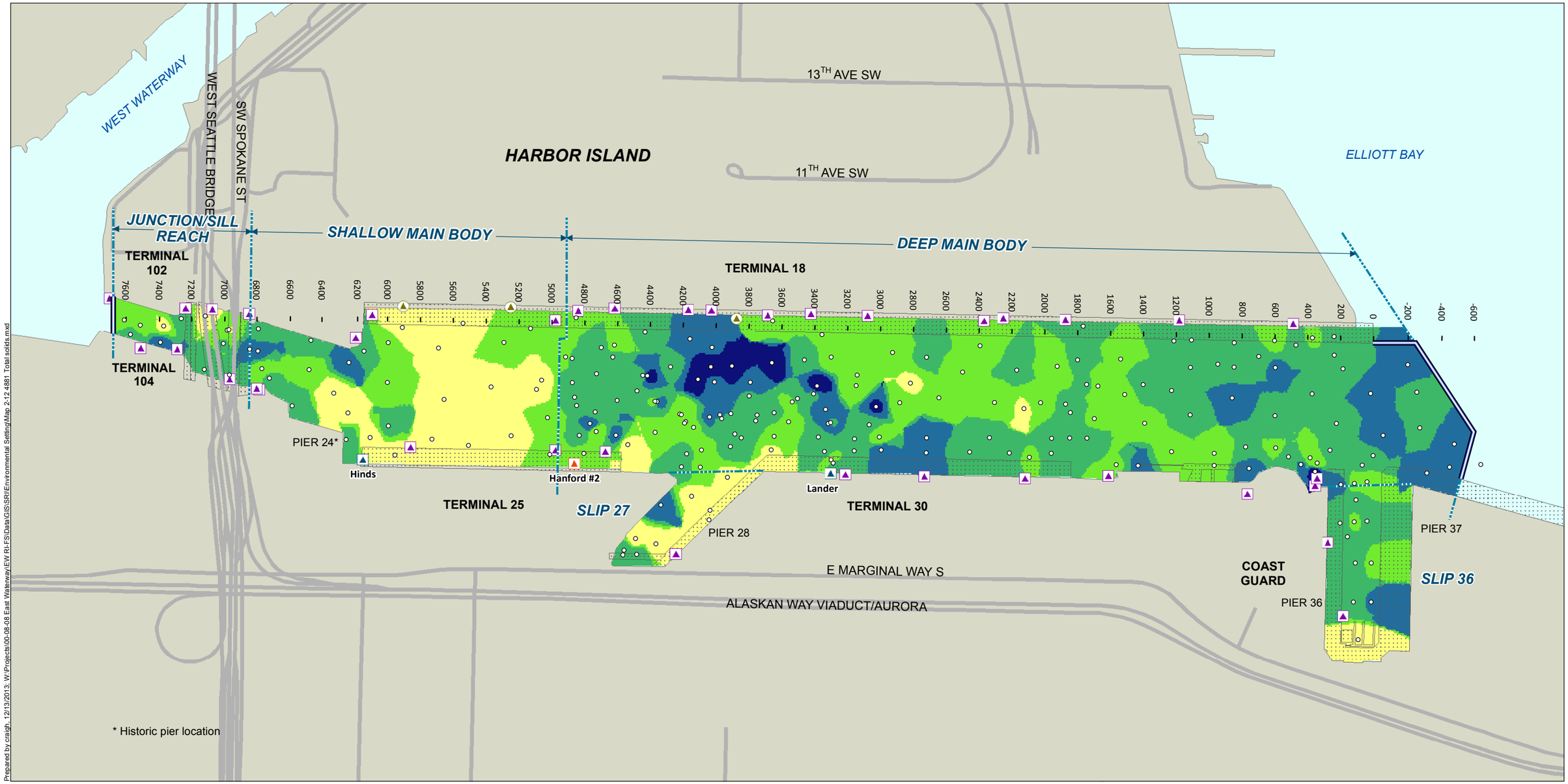
0 600
Scale in feet

Map 2-10
Percent Fines in Surface Sediment (0 to 10 cm)
Supplemental Remedial Investigation
East Waterway Study Area



Prepared by craigh, 12/13/2013; W:\Projects\00-08-08 East Waterway\EW RI-FS\Data\GIS\SRI\Environmental Setting\Map 2-11 4880 TOC.mxd

Map 2-11
Total Organic Carbon in Surface Sediment (0 to 10 cm)
Supplemental Remedial Investigation
East Waterway Study Area

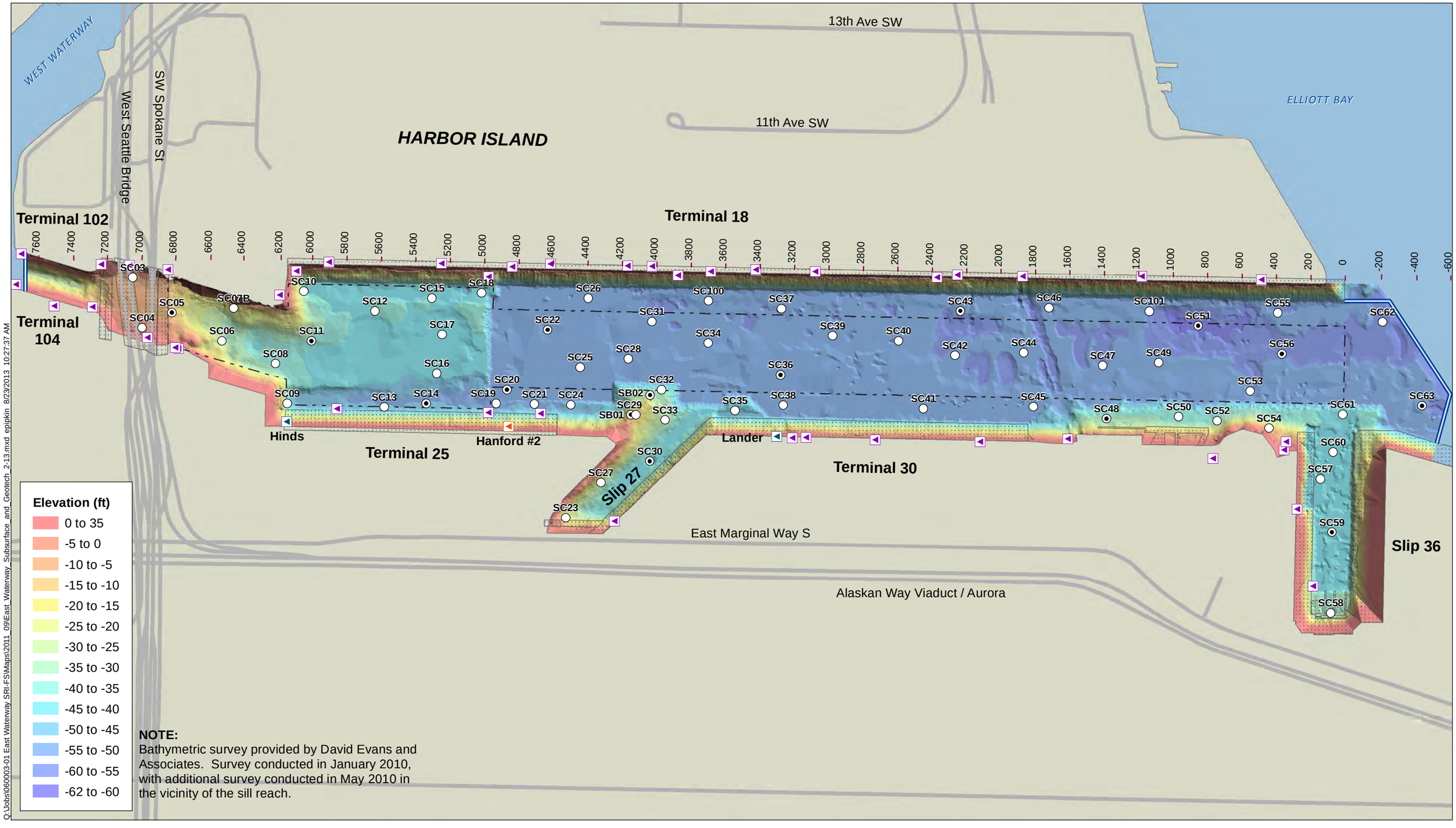


Total Solids (% ww)

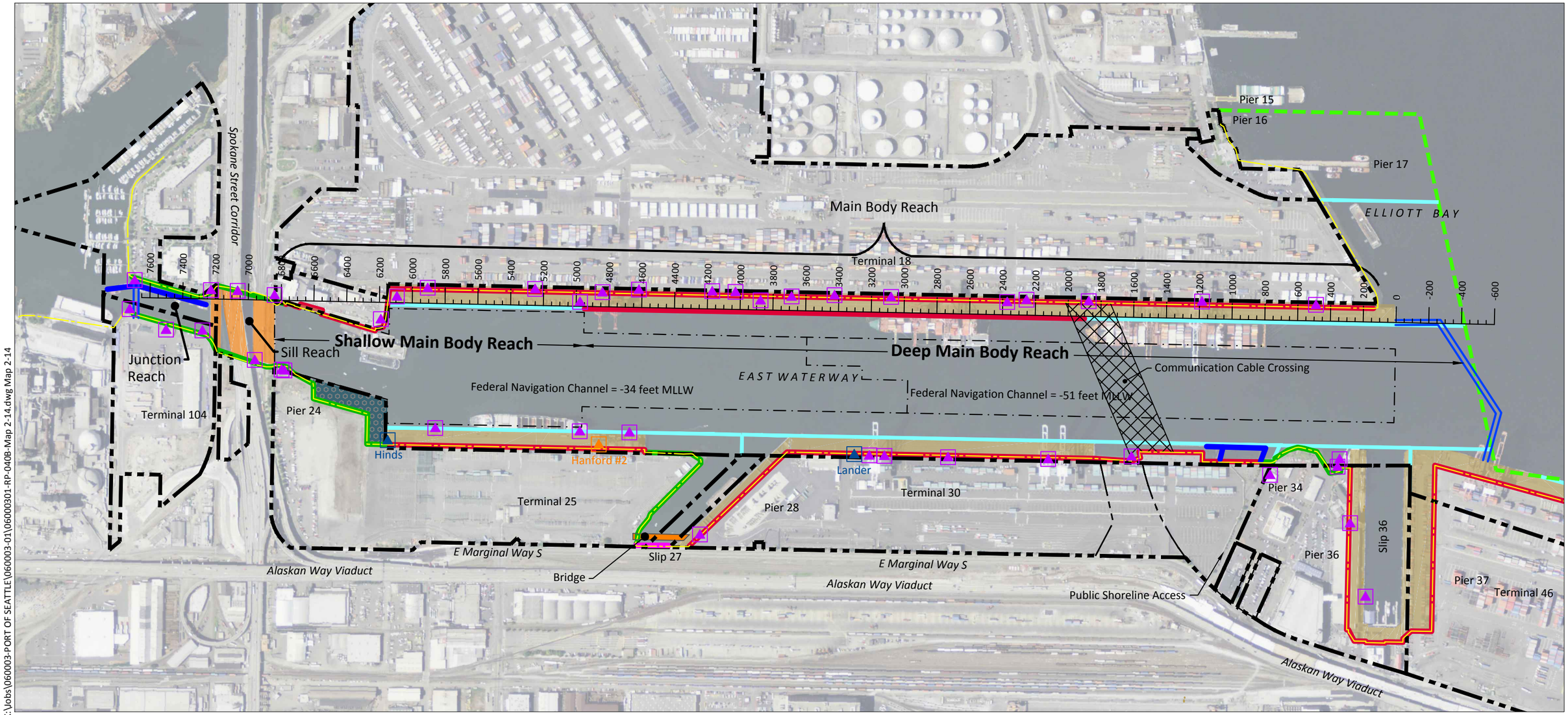
- > 80%
- > 70% and ≤ 80%
- > 60% and ≤ 70%
- > 50% and ≤ 60%
- ≤ 50%
- Total Solids Sampling Location
- CSO
- Storm Drain
- CSO/Storm Drain
- Unknown Outfall
- Dock/Pier/Bridge
- Road
- East Waterway Study Area Boundary

0 600
Scale in feet

Map 2-12
Total Solids in Surface Sediment (0 to 10 cm)
Supplemental Remedial Investigation
East Waterway Study Area



Map 2-13
SRI Subsurface and Geotechnical Sampling Locations
Supplemental Remedial Investigation
East Waterway Study Area



K:\Jobs\060003-PORT OF SEATTLE\060003-01\06000301-RP-040B-Map 2-14.dwg Map 2-14

Aug 23, 2013 11:39am epipkin

NOTES:

1. Previously established station locations for the East Waterway are shown along the western shoreline for reference.
2. Values along Westside of East Waterway are station reference values.
3. Aerial photo, NAIP 2011.

LEGEND:

- Property Line
- East Waterway Study Boundary
- MHHW Line
- Pierhead Line
- Outer Harbor Line
- Federal Navigation Channel
- Piling Field
- Sheetpile Wall
- Exposed Riprap
- Overwater Pier Above Riprap
- Concrete or Timber Bulkhead
- Bridge
- Timber Dock
- CSO
- Storm Drain
- CSO/Storm Drain Location

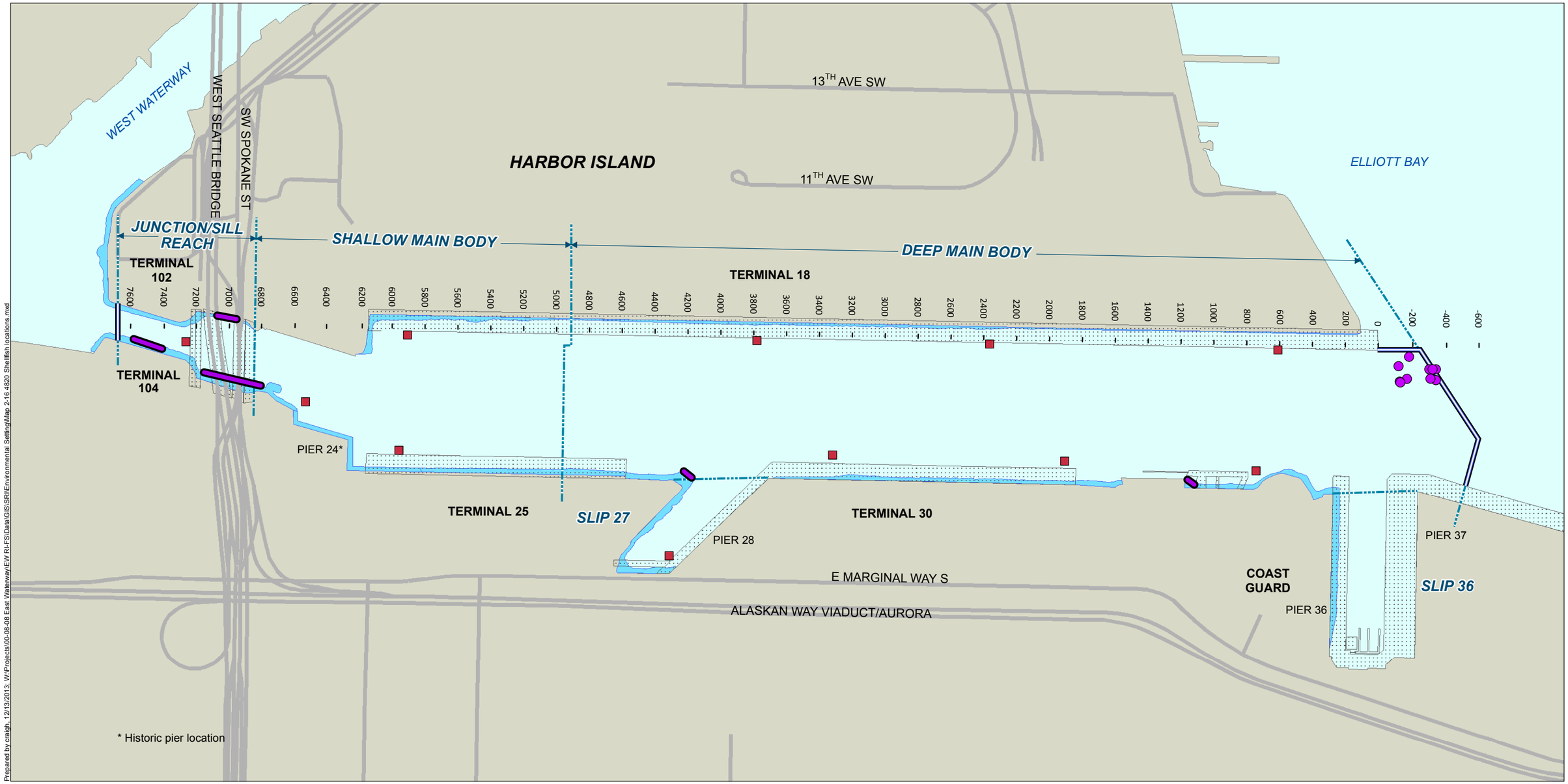
0 600
Scale in Feet

Map 2-14
Shoreline Structures
Supplemental Remedial Investigation
East Waterway Study Area

Q:\Jobs\060003-01 East Waterway SRI-FS\Maps\2011_09\East_Waterway_FlowTideStations_2-15.mxd epipkin 8/23/2013 10:33:59 AM

River
Basin Boundary
NOAA Tide Station
USGS Flow Gage Station

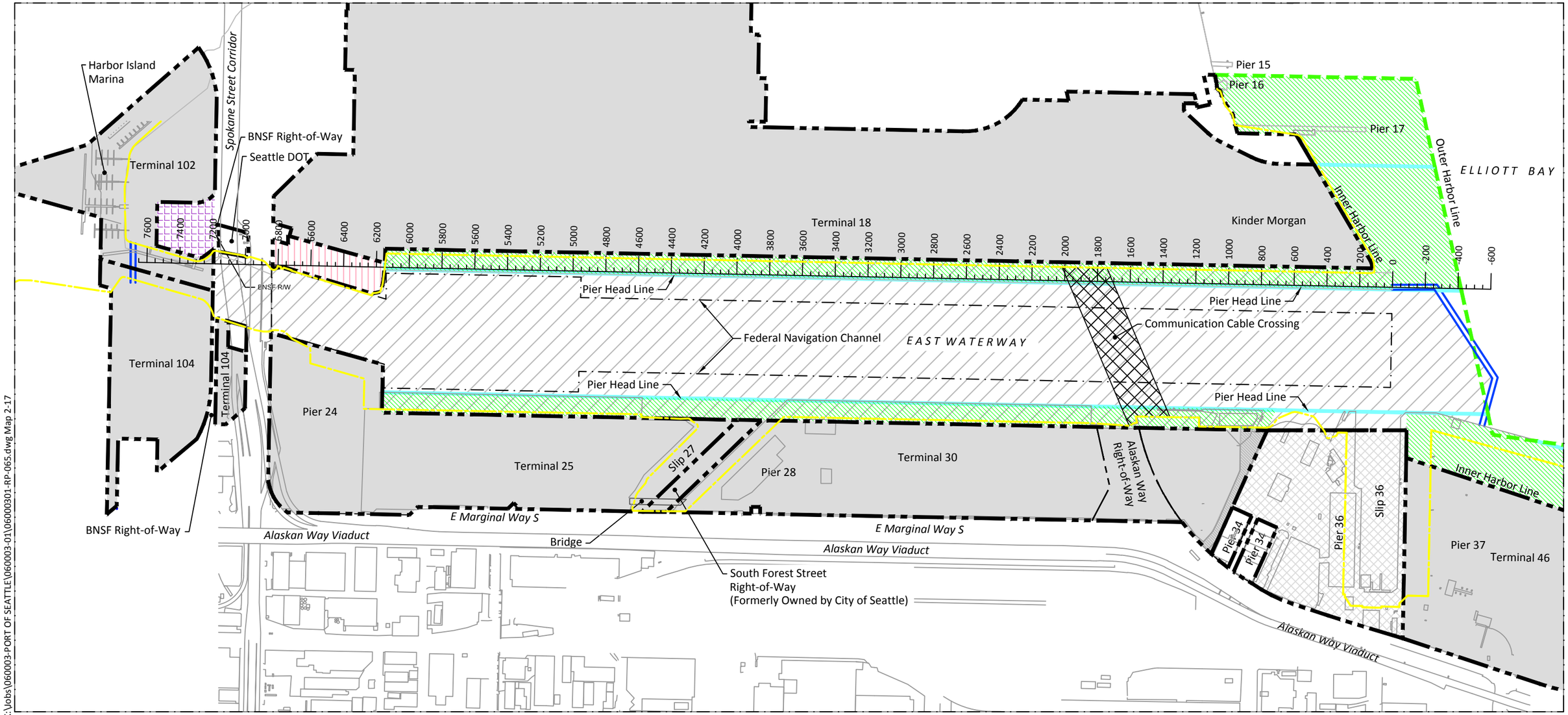
Map 2-15
Flow and Tide Gage Stations within the Green/Duwamish River Watershed
Supplemental Remedial Investigation
East Waterway Study Area



- Clam Collection Beach
- Geoduck Sampling Location
- Mussel Sampling Location
- Intertidal zone
- Dock/Pier/Bridge
- Road
- East Waterway Study Area Boundary

0 600
Scale in feet

Map 2-16
East Waterway Shellfish Sampling Locations
Supplemental Remedial Investigation
East Waterway Study Area



K:\Jobs\060003-PORT OF SEATTLE\060003-01\06000301-RP-065.dwg Map 2-17

Aug 23, 2013 11:49am epipkin

NOTES:

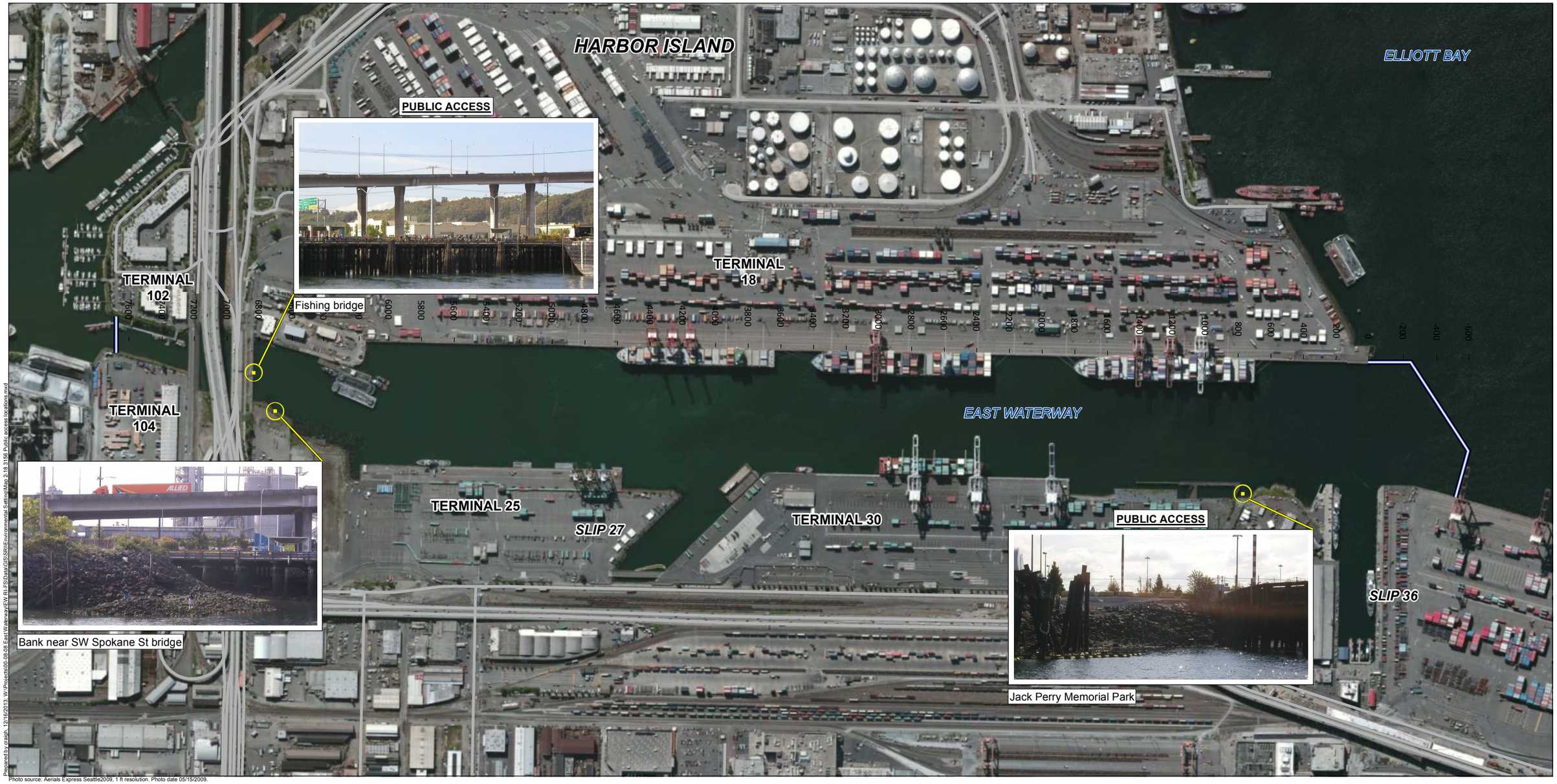
1. Previously established station locations for the East Waterway are shown along the western shoreline for reference.
2. Olympic Tug and Barge operates as a subsidiary to Harley Marine Services.

LEGEND:

- Property Line
- East Waterway Study Boundary
- MHHW Line
- Pier Head Line
- Outer Harbor Line
- Federal Navigation Channel
- Port of Seattle
- Harbor Real Estate
- Duwamish Properties, operated by Harley Marine Services
- US Coast Guard
- State-owned Land Managed by the Port of Seattle Under Current Port Management Agreement (PMA) with DNR
- State-owned Land Within East Waterway
- Communication Cable Crossing
- Park/Public Space

0 600
Scale in Feet

Map 2-17
Upland and Aquatic Ownership
Supplemental Remedial Investigation
East Waterway Study Area



Prepared by cnaph, 12/16/2013; W:\Projects\00-08-08 East Waterway\EW RI-FS\Data\GIS\SRI\Environmental Setting\Map 2-18 3156 Public access locations.mxd

Photo source: Aerials Express Seattle2009, 1 ft resolution. Photo date 05/15/2009.

0 600
Scale in feet

Photo Locations
East Waterway Study Area

Map 2-18
Public Access Locations Within the East Waterway
Supplemental Remedial Investigation
East Waterway Study Area

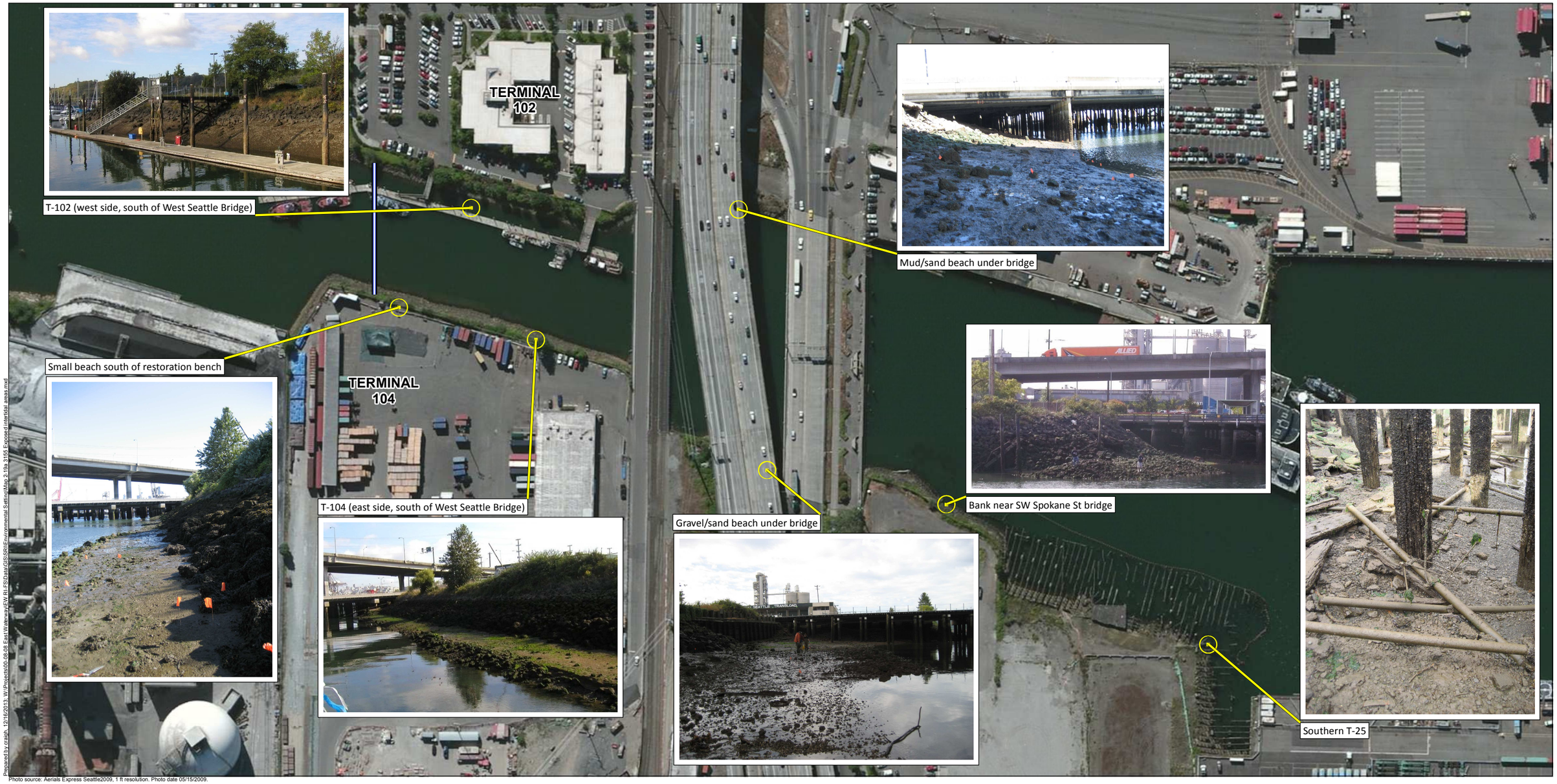


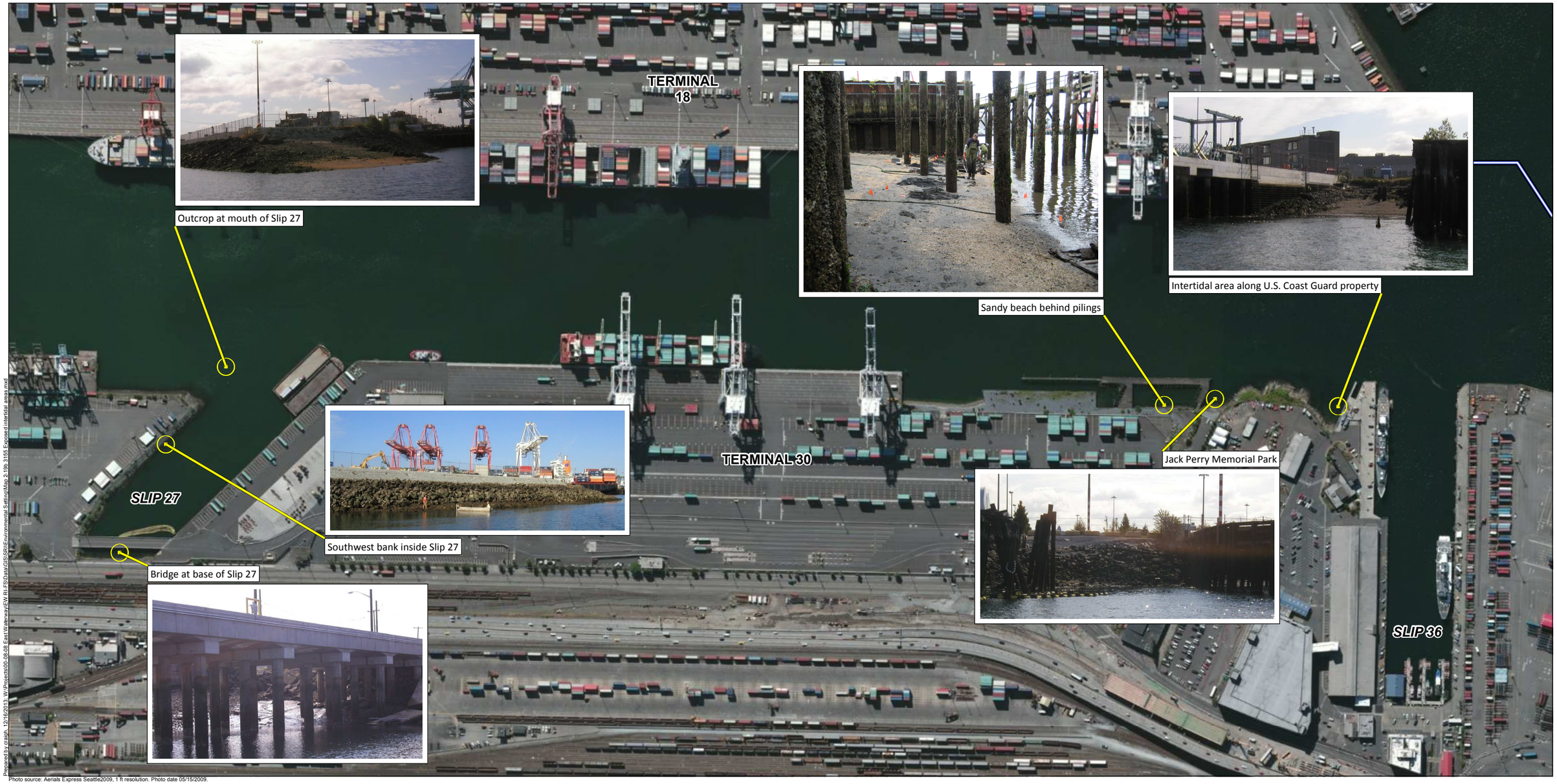
Photo source: Aerials Express Seattle2009, 1 ft resolution. Photo date 05/15/2009.

Prepared by craigh, 12/16/2013; W:\Projects\00-08-08 East Waterway\EW RI-FS\Data\GIS\SRI\Environmental Setting\Map 2-19a 3155 Exposed intertidal areas.mxd

0 300
Scale in feet

Photo Locations
East Waterway Study Area

Map 2-19a
Exposed Intertidal Areas Within the East Waterway
Supplemental Remedial Investigation
East Waterway Study Area



Prepared by craigh, 12/16/2013; W:\Projects\00-08-08 East Waterway\EW RI-FS\Data\GIS\SSRI\Environmental Settings\Map 2-19b 3155 Exposed intertidal areas.mxd

Photo source: Aerials Express Seattle2009, 1 ft resolution. Photo date 05/15/2009.

0 600
Scale in feet

Photo Locations
East Waterway Study Area

Map 2-19b
Exposed Intertidal Areas Within the East Waterway
Supplemental Remedial Investigation
East Waterway Study Area