

# SAN DIEGO SHIPYARD SEDIMENT SITE REMEDIATION OF SOUTH SHIPYARD

SAN DIEGO BAY ENVIRONMENTAL RESTORATION FUND - SOUTH TRUST

VICINITY MAP



NOTE: BASE MAP PREPARED FROM ESRI, 2013.

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ONE INCH  
AT FULL SIZE, IF NOT ONE  
INCH SCALE ACCORDINGLY



REVISIONS					
REV	DATE	BY	APP'D	DESCRIPTION	

DESIGNED BY: T. MERRITTS  
 DRAWN BY: M. PRATTSCHNER  
 CHECKED BY: M. WHELAN  
 APPROVED BY: J. VERDUIN  
 SCALE: AS INDICATED  
 DATE: AUGUST 27, 2013

**SAN DIEGO SHIPYARD SEDIMENT SITE  
SOUTH SHIPYARD**

**COVER SHEET**

**T-1**

SHEET NO. 1 OF 20

**GENERAL CONSTRUCTION NOTES:**

- CONTRACT DOCUMENTS REFER TO THESE DRAWINGS, CONSTRUCTION PERMITS AND TECHNICAL SPECIFICATIONS.
- CHANGES TO THE SPECIFICATIONS AND/OR CONSTRUCTION SHOWN ON THESE DRAWINGS SHALL NOT BE MADE WITHOUT APPROVAL FROM THE ENGINEER.
- CONTRACTOR SHALL FURNISH ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY TO COMPLETE ALL WORK AS INDICATED ON THE CONTRACT DOCUMENTS.
- CONTRACTOR SHALL VISIT THE JOB SITE AND BE RESPONSIBLE FOR ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS, AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION.
- ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK.
- THE CONTRACTOR SHALL RECEIVE, IN WRITING, AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY INDICATED OTHERWISE BY THE ENGINEER OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
- ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES.
- CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THIS CONTRACT.
- CONTRACTOR SHALL KEEP JOB SITE AREA CLEAN AND HAZARD-FREE. CONTRACTOR SHALL DISPOSE OF ALL DIRT, DEBRIS, AND RUBBISH FOR DURATION OF THE WORK. UPON COMPLETION OF WORK, CONTRACTOR SHALL REMOVE ALL MATERIAL AND EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY.
- NOTES AND DETAILS ON THE CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE OVER GENERAL NOTES HEREON.
- DIMENSION CALLOUTS SHALL TAKE PRECEDENCE OVER SCALES SHOWN ON THE CONTRACT DOCUMENTS.
- THE CONTRACT DOCUMENTS REPRESENT THE FINISHED SITE CONDITIONS. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT SITE CONDITIONS, EXISTING STRUCTURES, WORKERS, AND THE PUBLIC DURING CONSTRUCTION.
- TRAFFIC CONTROL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR THROUGHOUT THE DURATION OF THE PROJECT AND SUBJECT TO ALL LOCAL, STATE, AND/OR FEDERAL REGULATIONS.
- ALL WORK SHALL SATISFY CONDITIONS AND REQUIREMENTS OF LOCAL, STATE, AND FEDERAL PERMITS, AS APPLICABLE. IN CASES WHERE CONDITIONS AND/OR REQUIREMENTS VARY FROM PERMIT TO PERMIT, THE MOST STRINGENT CONDITION AND/OR REQUIREMENT SHALL BE EMPLOYED.
- INFORMATION DISPLAYED, INCLUDING PROPERTY BOUNDARIES, IS BASED ON AVAILABLE RECORDS PROVIDED BY THE SHIPYARD. THE CONTRACTOR IS TO VERIFY ALL SITE AND UTILITY INFORMATION PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER PRIOR TO COMMENCING WORK.
- CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO COMMENCING WORK IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS.
- UNLESS NOTED OTHERWISE, ALL DEMOLISHED STRUCTURES MATERIAL AND DEBRIS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF AT AN APPROVED DISPOSAL FACILITY OR RECYCLING FACILITY IN ACCORDANCE WITH APPLICABLE FEDERAL AND STATE LAWS AND REGULATORS GOVERNING DISPOSAL.

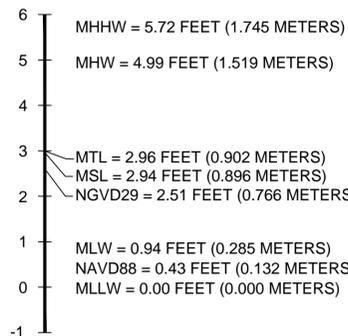
**GENERAL CONSTRUCTION NOTES: (CONT.)**

- IN-WATER WORK IS SUBJECT TO ENVIRONMENTAL CLOSURE WINDOW - ALLOWABLE IN-WATER WORK DATES ARE PROVIDED IN THE SPECIFICATIONS.
- IN-WATER WORK IN THE VICINITY OF THE DRYDOCK SHALL BE PROHIBITED UNTIL THE CURRENTLY DOCKED VESSEL, USS ESSEX, IS UNDOCKED AND APPROVAL TO PROCEED FROM OWNER IS OBTAINED. UNDOCKING CURRENTLY SCHEDULED FOR OCTOBER 22, 2013 IS SUBJECT TO CHANGE.
- CONTRACTOR SHALL PROVIDE THE ENGINEER WITH ALL APPLICABLE PRE-CONSTRUCTION SUBMITTALS, SUBJECT TO OWNER AND ENGINEER APPROVAL, PRIOR TO COMMENCING WORK. ADDITIONAL SUBMITTAL REQUIREMENTS ARE PROVIDED IN THE SPECIFICATIONS.
- CONTRACTOR SHALL PROTECT IN-PLACE ALL STRUCTURES, UTILITIES, AND OBJECTS NOT CALLED OUT AS BEING DEMOLISHED ON THE PLANS. ANY DAMAGE TO ITEMS NOT BEING DEMOLISHED SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF THE SIZE AND LOCATION OF ALL EXISTING ABOVE AND UNDERGROUND UTILITIES. EXISTING UTILITIES SHOWN HAVE BEEN OBTAINED FROM AVAILABLE RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL UTILITY LOCATIONS NOT SHOWN. CARE SHOULD BE TAKEN TO AVOID DAMAGE OR DISTURBANCE TO EXISTING UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED BY HIS ACTIVITIES.
- NO IN-WATER STOCKPILING OF SEDIMENT OR DEBRIS IS ALLOWED.
- CONTRACTOR SHALL COMPLETE DREDGING ACTIVITIES ACCORDING TO SEQUENCING REQUIREMENTS SHOWN ON DRAWINGS AND DESCRIBED IN THE SPECIFICATIONS.
- CONTRACTOR SHALL MAINTAIN COMPLIANCE WITH ALL REGULATORY PERMITS THROUGHOUT THE COURSE OF THE PROJECT.

CONTROL POINT	NORTHING	EASTING	ELEVATION IN FT (MLLW)	SHEET NO.
BAE 101	1832671.63	6287091.01	15.23	NOT SHOWN
NASSCO TIDE GAGE BM	1832564.03	6286833.58	12.11	NOT SHOWN
BAE 104	1833384.02	6286410.96	14.95	NOT SHOWN
CLE 100	1832071.33	6287095.56	12.5	C-1

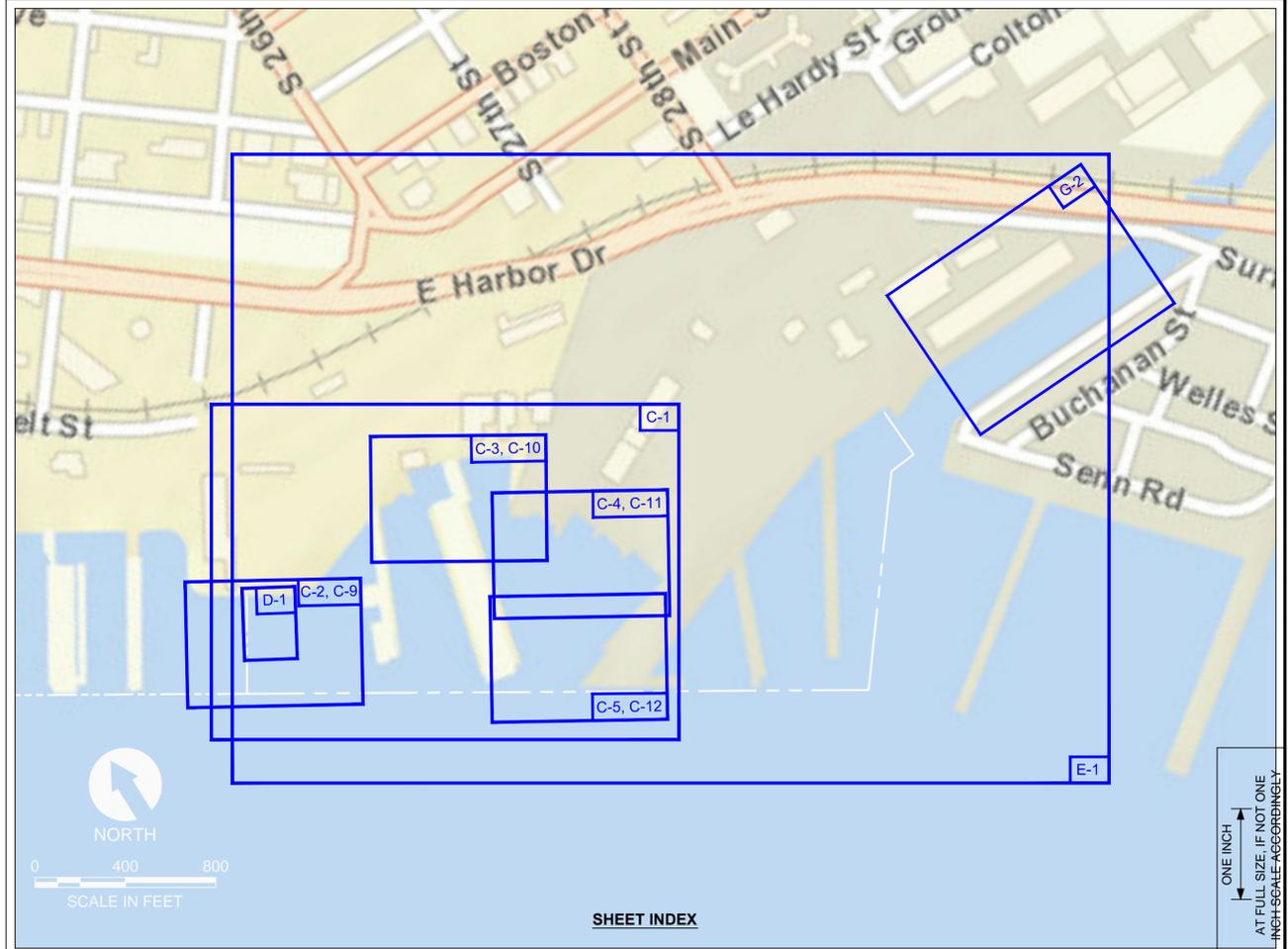
**PROJECT DATUMS:**

- HORIZONTAL DATUM: CALIFORNIA STATE PLANE, ZONE 6, NAD 83, U.S. FEET.
- IN WATER VERTICAL DATUM: MEAN LOWER LOW WATER (MLLW).
- UPLAND VERTICAL DATUM: MLLW.
- UPLAND TOPOGRAPHY PROVIDED BY SHIPYARD, DATED MARCH 08, 2013; VERIFIED BY ENVIRONMENTAL DATA SOLUTIONS APRIL 10-11, 2013 IN SMA AREA ONLY.
- BATHYMETRY SHOWN WITHIN THE REMEDIAL BOUNDARIES WAS PERFORMED BY ENVIRONMENTAL DATA SOLUTIONS BETWEEN APRIL 10-11, 2013.



**LEGEND:**

- REQUIRED HAUL ROUTE (E. HARBOR DR. TO INTERSTATE 5)
- REMEDIATION AREA
- SEDIMENT MANAGEMENT AREA
- SHEET NUMBER



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REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION

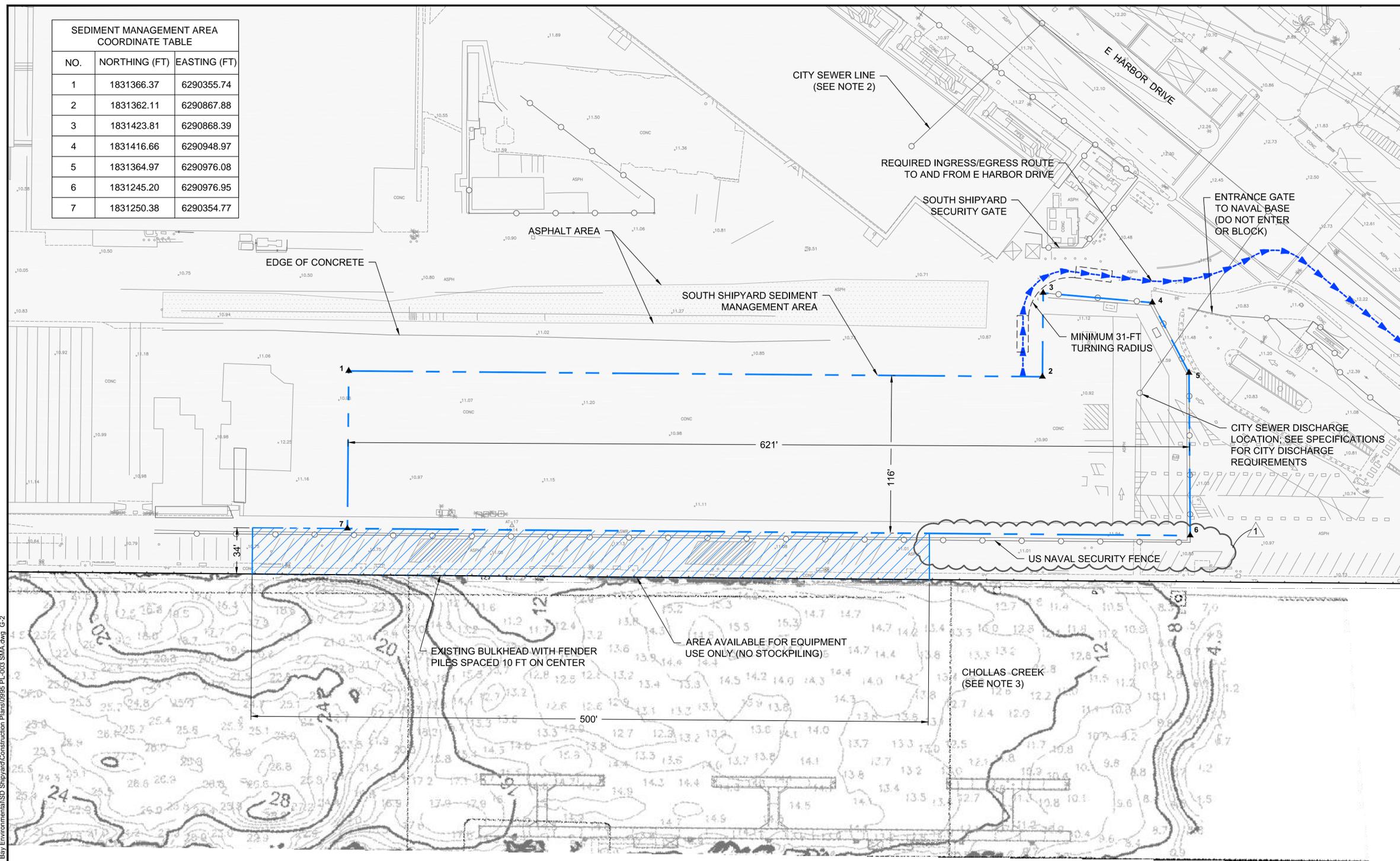
DESIGNED BY: T MERRITTS  
 DRAWN BY: M PRATSCHNER  
 CHECKED BY: M WHELAN  
 APPROVED BY: J VERDUIN  
 SCALE: AS INDICATED  
 DATE: AUGUST 27, 2013

**SEDIMENT REMEDIAL ACTION  
 AT SOUTH SHIPYARD**

**GENERAL NOTES & HAUL ROUTE**

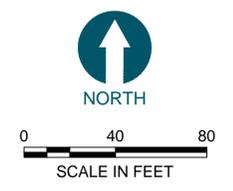
**G-1**

SEDIMENT MANAGEMENT AREA COORDINATE TABLE		
NO.	NORTHING (FT)	EASTING (FT)
1	1831366.37	6290355.74
2	1831362.11	6290867.88
3	1831423.81	6290868.39
4	1831416.66	6290948.97
5	1831364.97	6290976.08
6	1831245.20	6290976.95
7	1831250.38	6290354.77



- NOTES:**
1. UPLAND TOPOGRAPHY PROVIDED BY NASSCO DATED MARCH 11, 2013; VERIFIED BY ENVIRONMENTAL DATA SOLUTIONS APRIL 17, 2013 IN SEDIMENT MANAGEMENT AREA.
  2. APPROXIMATE LOCATION OF CITY OF SAN DIEGO SEWERS PROVIDED BY R. CROSS (CITY OF SAN DIEGO) ON APRIL 15, 2013.
  3. BATHYMETRIC CONTOURS PROVIDED BY CONTRACT DRAWING H-1 - HYDROGRAPHIC SURVEY, CHOLLAS CREEK, PIER 1 & 2, NAVAL BASE SAN DIEGO, CALIFORNIA, NAVFAC DWG. NO. 18086973, SHEET 2 OF 8.
  4. TEMPORARY ACCESS FROM SEDIMENT MANAGEMENT AREA TO SEAWALL IS AVAILABLE FOR EQUIPMENT.
  5. CONTRACTOR SHALL REMAIN 15 FEET FROM SEAWALL WITH HEAVY EQUIPMENT.
  6. CONTRACTOR SHALL REMAIN 8 FEET FROM MANHOLES WITH HEAVY EQUIPMENT.
  7. CONTRACTOR SHALL VERIFY STABILITY OF THE SEAWALL BASED ON PLANNED EQUIPMENT USE AT SEDIMENT MANAGEMENT AREA.
  8. THIS DRAWING SHOWS THE ONLY AVAILABLE SEDIMENT MANAGEMENT AREA ON-SITE. IF THE CONTRACTOR DESIRES TO USE AN ALTERNATIVE, OFF-SITE LOCATION, THEY SHALL SUBMIT DETAILS OF THIS LOCATION TO THE OWNER AND ENGINEER FOR APPROVAL. NOTE THAT AN ALTERNATIVE SITE MAY REQUIRE PERMIT REVISIONS, WHICH, OWING TO TIME CONSTRAINTS, MAY NOT BE FEASIBLE.
  9. ALL REMOVABLE RACKS AND CONTAINERS WILL BE RELOCATED OUT OF THE SEDIMENT MANAGEMENT AREA BY THE OWNER PRIOR TO CONSTRUCTION, IF REQUESTED TO DO SO IN WRITING BY THE CONTRACTOR.
  10. THE TEMPORARY EROSION AND SEDIMENT CONTROL (TESC) NOTES AND DETAILS SHOWN IN THE DRAWINGS AND SPECIFICATIONS ARE MINIMUM REQUIREMENTS FOR THE ANTICIPATED SITE CONDITIONS DURING THE CONSTRUCTION PERIOD. DURING THE CONSTRUCTION PERIOD, THE CONTRACTOR SHALL, AT NO ADDITIONAL COST TO THE OWNER, UPGRADE THE TESC FACILITIES AS NEEDED FOR UNEXPECTED STORM EVENTS AND MODIFY THESE FACILITIES FOR CHANGING SITE CONDITIONS (SUCH AS RELOCATION OF SILT FENCES).
  11. THE TESC FACILITIES ON ACTIVE SITES SHALL BE INSPECTED DAILY BY THE CONTRACTOR--AND MAINTAINED, REPAIRED, OR AUGMENTED AS NECESSARY--TO ENSURE THEIR CONTINUED FUNCTIONALITY.
  12. SEDIMENT STOCKPILES MUST BE STABILIZED AND PROTECTED WITH SEDIMENT-TRAPPING MEASURES. THE CONTRACTOR SHALL MANAGE ITS STOCKPILE HEIGHT AND PLACEMENT TO PREVENT LOSS OF SEDIMENT/SOIL/DEBRIS OUTSIDE OF THE ENCLOSED STOCKPILE AREA, AND TO LIMIT THE STOCKPILE HEIGHT TO PREVENT INSTABILITY THAT COULD CAUSE SPILLAGE OF STOCKPILE MATERIAL OUTSIDE OF THE ENCLOSED STOCKPILE AREA.
  13. TRUCK TRAFFIC SHALL NOT INTERFERE WITH TRAFFIC INGRESS AND EGRESS TO AND FROM SAN DIEGO NAVAL BASE, NOR ANY BUSINESSES OR RESIDENCES ALONG THE HAUL ROUTE.

- LEGEND:**
- SEDIMENT MANAGEMENT AREA
  - MAJOR CONTOUR (4' INTERVAL)
  - MINOR CONTOUR (1' INTERVAL)
  - HAUL ROUTE
  - CITY SEWER
  - US NAVAL SECURITY FENCE
  - TEMPORARY ACCESS AREA



- PROJECT DATUMS:**
1. HORIZONTAL DATUM: CALIFORNIA STATE PLANE, ZONE 6, NAD 83, U.S. FEET.
  2. IN WATER VERTICAL DATUM: MEAN LOWER LOW WATER (MLLW).
  3. UPLAND VERTICAL DATUM: MLLW

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REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION
1	8/27	MP	MPW	FINAL DESIGN AT SMA

DESIGNED BY: T MERRITTS  
 DRAWN BY: M PRATSCHNER  
 CHECKED BY: M WHELAN  
 APPROVED BY: J VERDUIN  
 SCALE: AS INDICATED  
 DATE: AUGUST 27, 2013

**SAN DIEGO SHIPYARD SEDIMENT SITE SOUTH SHIPYARD**

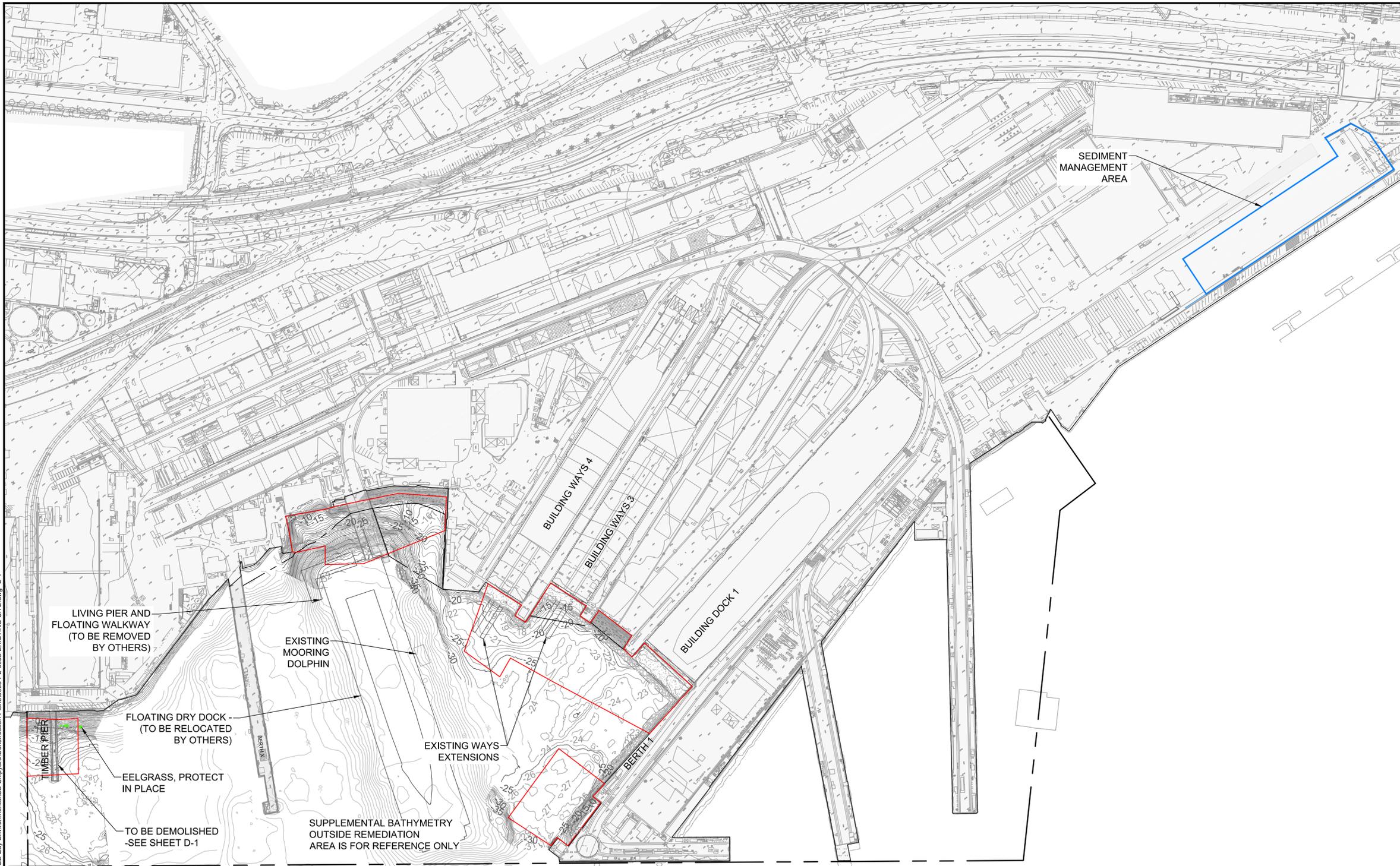
**SEDIMENT MANAGEMENT AREA PLAN**

**G-2**

SHEET NO. 3 OF 20

ONE INCH AT FULL SIZE; IF NOT ONE INCH SCALE ACCORDINGLY

L:\AutocAD Project Files\Projects\0995-SD Bay Environmental\SD Shipyard\Construction Plans\0995 PL-0038 EXISTING SITE.dwg E-1



LIVING PIER AND FLOATING WALKWAY (TO BE REMOVED BY OTHERS)

EXISTING MOORING DOLPHIN

FLOATING DRY DOCK (TO BE RELOCATED BY OTHERS)

EELGRASS, PROTECT IN PLACE

TO BE DEMOLISHED -SEE SHEET D-1

SUPPLEMENTAL BATHYMETRY OUTSIDE REMEDIATION AREA IS FOR REFERENCE ONLY

EXISTING WAYS EXTENSIONS

SEDIMENT MANAGEMENT AREA

- LEGEND:
- 40— MAJOR CONTOUR (5' INTERVAL)
  - 38— MINOR CONTOUR (1' INTERVAL)
  - EXISTING RIPRAP (APPROXIMATE LIMITS)
  - - - LEASE HOLD LINE
  - REMEDIATION AREA
  - EXISTING EELGRASS
  - - - UNDERWATER PIPELINE
  - SEDIMENT MANAGEMENT AREA



0 150 300  
SCALE IN FEET

- NOTES:
- HORIZONTAL DATUM: CALIFORNIA STATE PLANE, ZONE 6, NAD 83, U.S. FEET.
  - VERTICAL DATUM: MLLW

ONE INCH  
AT FULL SIZE, IF NOT ONE  
INCH SCALE ACCORDINGLY



REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION

DESIGNED BY: T MERRITTS  
 DRAWN BY: M PRATSCHNER  
 CHECKED BY: M WHELAN  
 APPROVED BY: J VERDUIN  
 SCALE: AS INDICATED  
 DATE: AUGUST 27, 2013

**SEDIMENT REMEDIAL ACTION  
AT SOUTH SHIPYARD**

**EXISTING CONDITIONS SITE PLAN**

**E-1**

SHEET NO. 4 OF 20

**TIMBER PIER DESCRIPTION**

THE PIER IS APPROXIMATELY 180 FT LONG AND 18 FT WIDE AND CONSISTS OF A TIMBER DECK SUPPORTED BY PAIRS OF STEEL HP14 PILES SPACED AT APPROX. 30 FT CENTERS. THE STEEL PILES 'STRADDLE' THE PIER AND WOULD HAVE BEEN INSTALLED SOME TIME AFTER THE ORIGINAL PIER CONSTRUCTION TO REPLACE THE ORIGINAL TIMBER PILES THAT HAD DETERIORATED OR WERE REMOVED. THE PIER DECK, CONSISTING OF TIMBER PLANKS AND LONGITUDINAL TIMBER STRINGERS, BEAR ON TRANSVERSE STEEL BEAMS (PILE CAPS) THAT ARE IN TURN WELDED TO AND SUPPORTED ON THE STEEL HP14 PILES. THE LENGTHS OF THE STEEL PILES ARE NOT KNOWN. THE TIMBER STRINGERS ARE APPROX. 4" X 14" IN SIZE AND SPACED AT BETWEEN 12 AND 16 INCHES ON CENTER. THE EDGE BEAMS ON THE PIER ARE LARGER IN SECTION, APPROX. 10 TO 12 INCHES WIDE. AT THE INSHORE END OF THE PIER, THERE ARE TWO ADDITIONAL PILE BENTS THAT PROVIDE SUPPORT TO THE PIER DECK. CLOSEST TO THE SHORE THERE ARE 6 TIMBER PILES, 14 TO 16 INCH IN DIAMETER, THAT ARE SUPPORTED BY A CONCRETE PEDESTAL. SEVERAL FEET SEAWARD OF THE TIMBER PILES THERE IS A BENT WITH 4 STEEL RAIL PILES THAT ARE ALSO SUPPORTED BY A CONCRETE PEDESTAL.

**DEMOLITION NOTES**

1. DIMENSIONS, LAYOUT AND DETAILS OF THE EXISTING STRUCTURE ARE BASED ON VISUAL OBSERVATION. CONTRACTOR SHALL VERIFY DIMENSIONS AND CONFIGURATION PRIOR TO ANY DEMOLITION AND REMOVAL AND BRING ANY DISCREPANCIES OR POTENTIAL CONFLICTS TO THE ATTENTION OF THE ENGINEER. NO REFERENCE DRAWINGS ARE AVAILABLE FOR THIS STRUCTURE.
2. ALL DEMOLISHED MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF AT AN APPROVED DISPOSAL FACILITY OFF SHIPYARD PROPERTY.
3. PRIOR TO COMMENCING DEMOLITION ACTIVITIES CONTRACTOR SHALL IMPLEMENT TEMPORARY EROSION AND SEDIMENT CONTROLS. NO DEMOLITION MATERIALS OR DEBRIS SHALL BE ALLOWED TO ENTER THE BAY, SEE TECHNICAL SPECIFICATIONS FOR MORE INFORMATION.
4. ALL DEMOLITION SHALL BE COMPLETE PRIOR TO DREDGING IN THE AREA.
5. PILES SHALL BE REMOVED COMPLETELY. PILES THAT BREAK OR CANNOT BE REMOVED COMPLETELY SHALL BE CUT BELOW FINAL REQUIRED GRADE OR AS OTHERWISE DIRECTED BY THE ENGINEER.
6. CONTRACTOR SHALL PROTECT IN PLACE ALL STRUCTURES, UTILITIES AND OBJECTS NOT CALLED OUT AS BEING DEMOLISHED ON THE PLANS. ANY DAMAGE TO ITEMS NOT BEING DEMOLISHED SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.
7. ENVIRONMENTAL CONTROL INSTALLATION REQUIRED FOR EELGRASS PROTECTION SHALL BE CONDUCTED IN ACCORDANCE WITH SECTION 015-719-TEMPORARY ENVIRONMENTAL CONTROLS.

**EXISTING CONDITIONS PHOTOGRAPHS**



PHOTOGRAPH 1



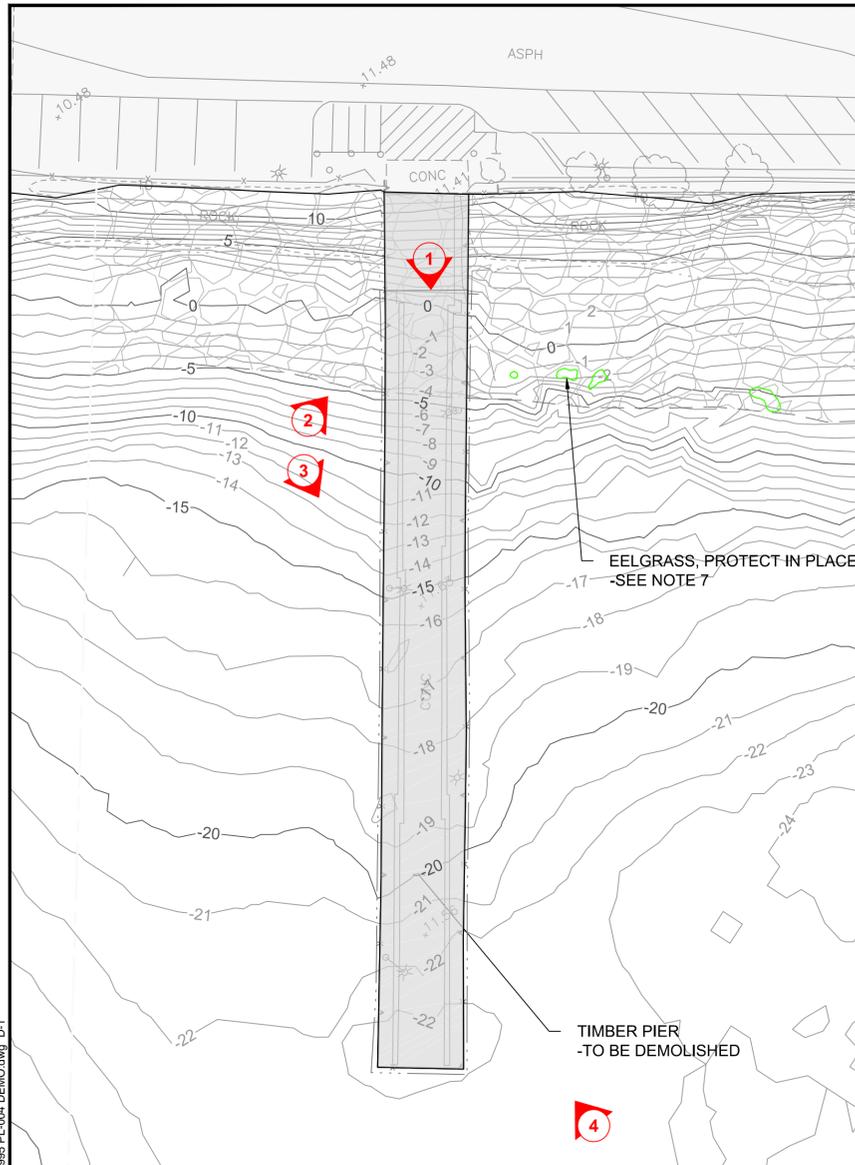
PHOTOGRAPH 2



PHOTOGRAPH 3

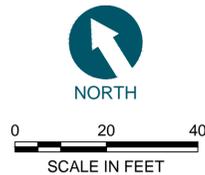


PHOTOGRAPH 4



- LEGEND:**
- PHOTOGRAPH NUMBER
  - 40 - MAJOR CONTOUR (5' INTERVAL)
  - 38 - MINOR CONTOUR (1' INTERVAL)
  - EXISTING EELGRASS
  - EXISTING RIPRAP (APPROXIMATE LIMITS)

- PROJECT DATUMS:**
1. HORIZONTAL DATUM: CALIFORNIA STATE PLANE, ZONE 6, NAD 83, U.S. FEET.
  2. IN WATER VERTICAL DATUM: MEAN LOWER LOW WATER (MLLW).
  3. UPLAND VERTICAL DATUM: NAVD88 FEET



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REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION

DESIGNED BY: T. MERRITTS  
 DRAWN BY: M. PRATTSCHNER  
 CHECKED BY: M. WHELAN  
 APPROVED BY: J. VERDUIN  
 SCALE: AS INDICATED  
 DATE: AUGUST 27, 2013

**SEDIMENT REMEDIAL ACTION  
AT SOUTH SHIPYARD**

**TIMBER PIER DEMOLITION PLAN**

**D-1**

ONE INCH  
AT FULL SIZE; IF NOT ONE  
INCH SCALE ACCORDINGLY

SOUTH SHIPYARD IDENTIFIED DEBRIS NO.			
IDENTIFIED DEBRIS NO.	DESCRIPTION	NORTHING	EASTING
1	DEBRIS PILE AT END OF EXTENDED RAILWAY	1831591.24	6288113.01
2	DEBRIS FIELD WITH TIRES	1831159.02	6288444.71
3	UNIDENTIFIED OBJECT, POSSIBLY METALLIC IN NATURE	1831912.15	6288184.49
4	DEBRIS FIELD - VARIOUS LINEAR OBJECTS, TIRES, CONSTRUCTION DEBRIS, APPROXIMATELY 4,220 SF	1831999.85	6287060.61

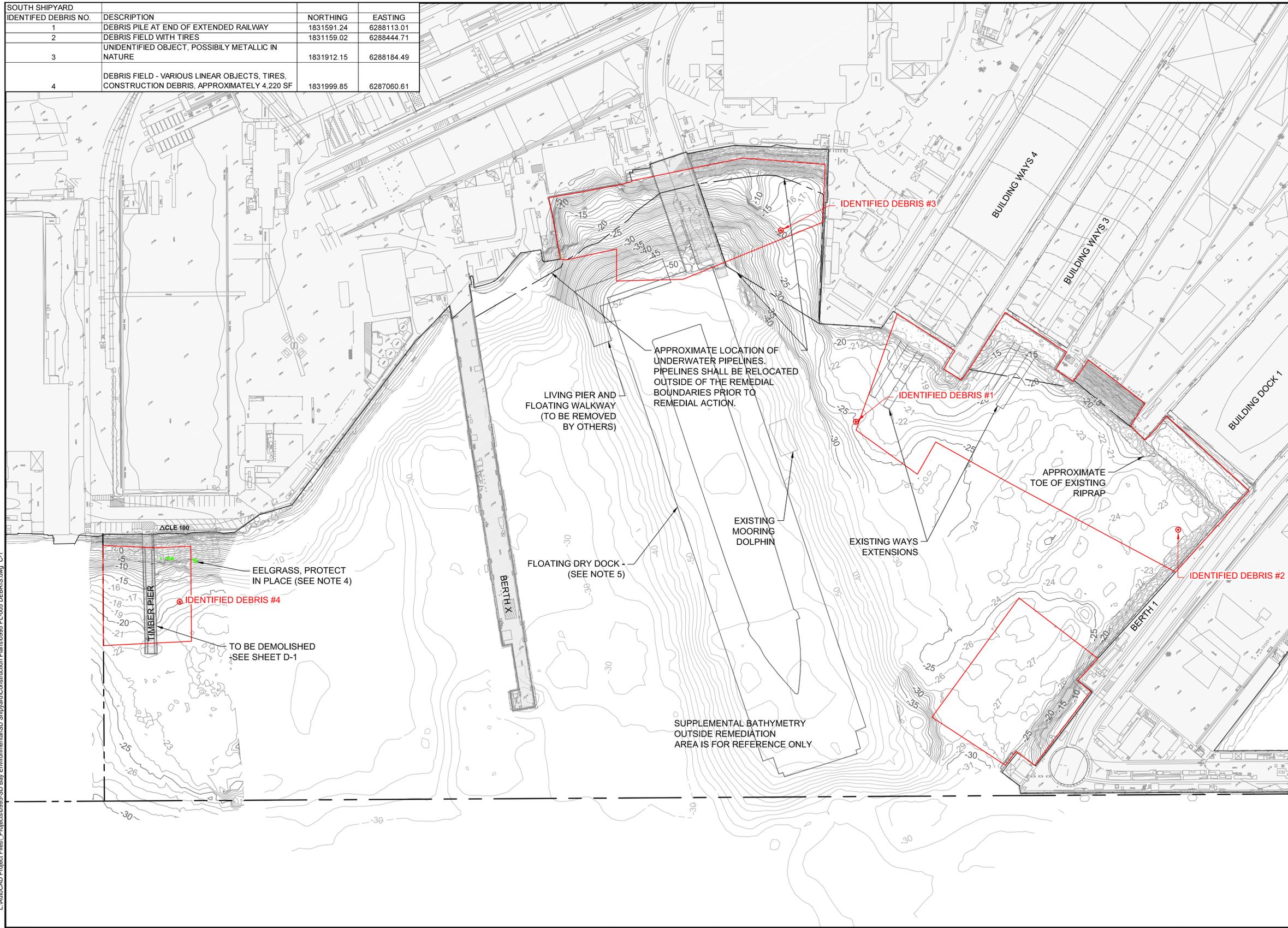
SURVEY CONTROL POINT			
POINT ID	SOURCE	NORTHING	EASTING
CLE 100	EDS	1832071.33	6287095.56

- NOTES:
- IDENTIFIED DEBRIS SHALL BE REMOVED PRIOR TO DREDGING.
  - IDENTIFIED DEBRIS TARGETED FOR REMOVAL IS BASED ON RESULTS OF SIDE SCAN SURVEY PERFORMED IN APRIL 2013. REFER TO APPENDIX B IN BASIS OF DESIGN MEMORANDUM.
  - LOCATION OF EELGRASS PROVIDED BY MERKEL & ASSOCIATES FROM SURVEY DATED MAY 6, 2013.
  - DREDGING SEQUENCING, SETBACKS AND ENVIRONMENTAL CONTROL INSTALLATION REQUIRED FOR EELGRASS PROTECTION SHALL BE CONDUCTED IN ACCORDANCE WITH SECTION 015079-TEMPORARY ENVIRONMENTAL CONTROLS AND SECTION 352023-DREDGING.
  - DEBRIS REMOVAL OPERATIONS IN THE VICINITY OF THE DRYDOCK SHALL BE PROHIBITED UNTIL THE CURRENTLY DOCKED VESSEL, USS ESSEX, IS UNDOCKED AND APPROVAL TO PROCEED FROM OWNER IS OBTAINED. UNDOCKING CURRENTLY SCHEDULED FOR OCTOBER 22, 2013 IS SUBJECT TO CHANGE.

- LEGEND:
- IDENTIFIED DEBRIS LOCATION
  - IDENTIFIED DEBRIS #
  - MAJOR CONTOUR (5' INTERVAL)
  - MINOR CONTOUR (1' INTERVAL)
  - EXISTING RIPRAP (APPROXIMATE LIMITS)
  - LEASE HOLD LINE
  - REMEDIATION AREA
  - EXISTING EELGRASS
  - UNDERWATER PIPELINE



- NOTES:
- HORIZONTAL DATUM: CALIFORNIA STATE PLANE, ZONE 6, NAD 83, U.S. FEET.
  - VERTICAL DATUM: MLLW



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Aug 28, 2013 11:02am mpratschner



REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION

DESIGNED BY: T MERRITTS  
 DRAWN BY: M PRATSCHNER  
 CHECKED BY: M WHELAN  
 APPROVED BY: J VERDUIN  
 SCALE: AS INDICATED  
 DATE: AUGUST 27, 2013

**SEDIMENT REMEDIAL ACTION  
AT SOUTH SHIPYARD**

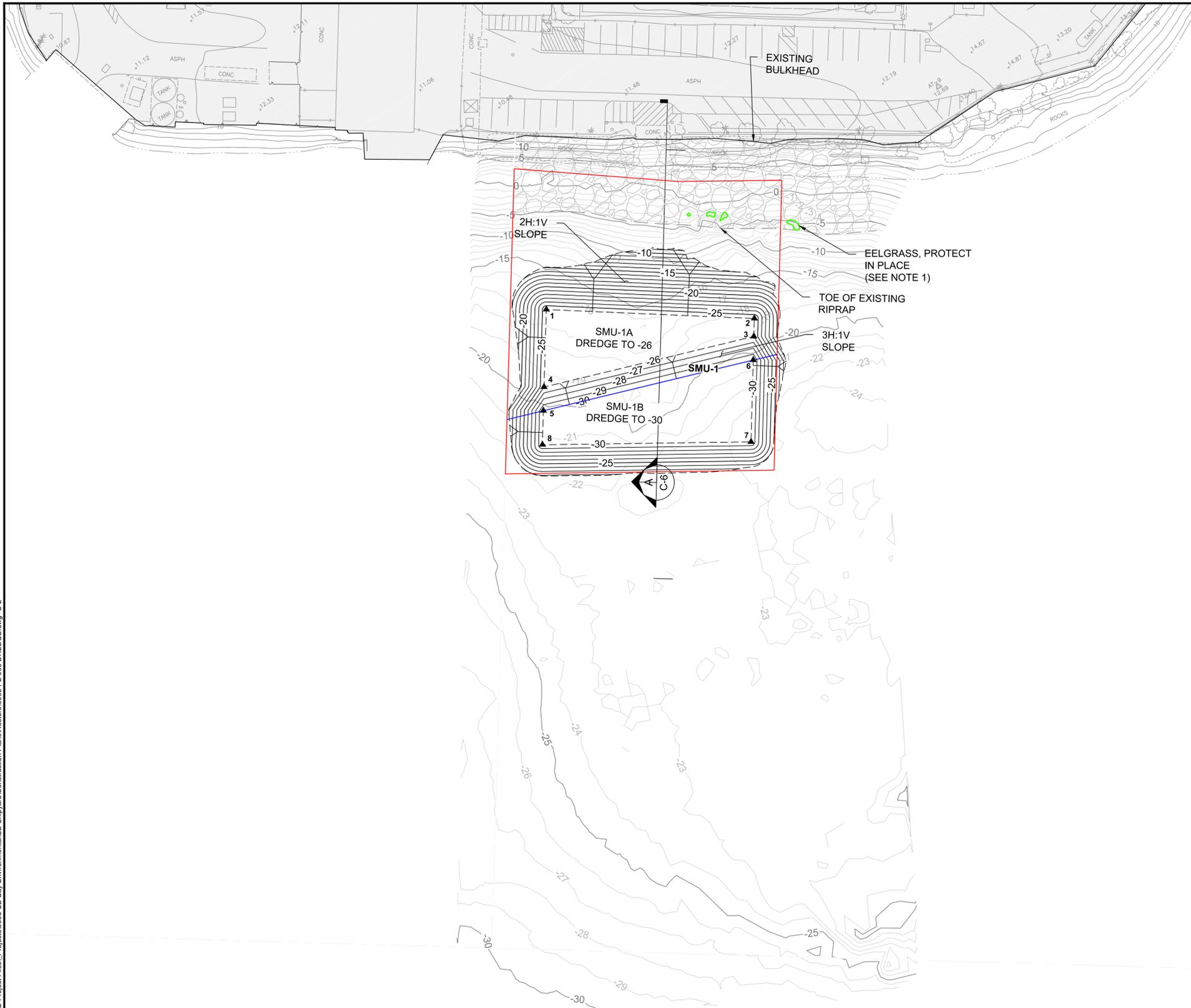
**DEBRIS PLAN**

**C-1**

SHEET NO. 6 OF 20

ONE INCH  
AT FULL SIZE, IF NOT ONE  
INCH SCALE ACCORDINGLY

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COORDINATE TABLE		
NO.	NORTHING (FT)	EASTING (FT)
1	1832030.46	6286976.93
2	1831968.51	6287067.20
3	1831960.67	6287062.00
4	1831996.62	6286954.39
5	1831986.27	6286947.50
6	1831950.31	6287055.13
7	1831914.56	6287031.43
8	1831971.40	6286937.59

1. DREDGING SEQUENCING, SETBACKS AND ENVIRONMENTAL CONTROL INSTALLATION REQUIRED FOR EELGRASS PROTECTION SHALL BE CONDUCTED IN ACCORDANCE WITH SECTION 015079-TEMPORARY ENVIRONMENTAL CONTROLS AND SECTION 352023-DREDGING.

LEGEND:

- 35- REQUIRED DREDGE LINE MAJOR CONTOUR (5' INTERVAL)
- 35- REQUIRED DREDGE LINE MINOR CONTOUR (1' INTERVAL)
- GENERAL AREA DELINEATED FOR REMEDIATION PER CLEANUP AND ABATEMENT ORDER (CAO) R-9-2012-0024
- SMU BOUNDARY
- SMU SUB-BOUNDARY
- 40- EXISTING MAJOR CONTOUR (5' INTERVAL)
- 38- EXISTING MINOR CONTOUR (1' INTERVAL)
- LEASE HOLD LINE
- EXISTING EELGRASS
- EXISTING RIPRAP (APPROXIMATE LIMITS)



PROJECT DATUMS:

1. HORIZONTAL DATUM: CALIFORNIA STATE PLANE, ZONE 6, NAD 83, U.S. FEET.
2. IN WATER VERTICAL DATUM: MEAN LOWER LOW WATER (MLLW).
3. UPLAND VERTICAL DATUM: MLLW

ONE INCH  
AT FULL SIZE, IF NOT ONE  
INCH SCALE ACCORDINGLY



REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION

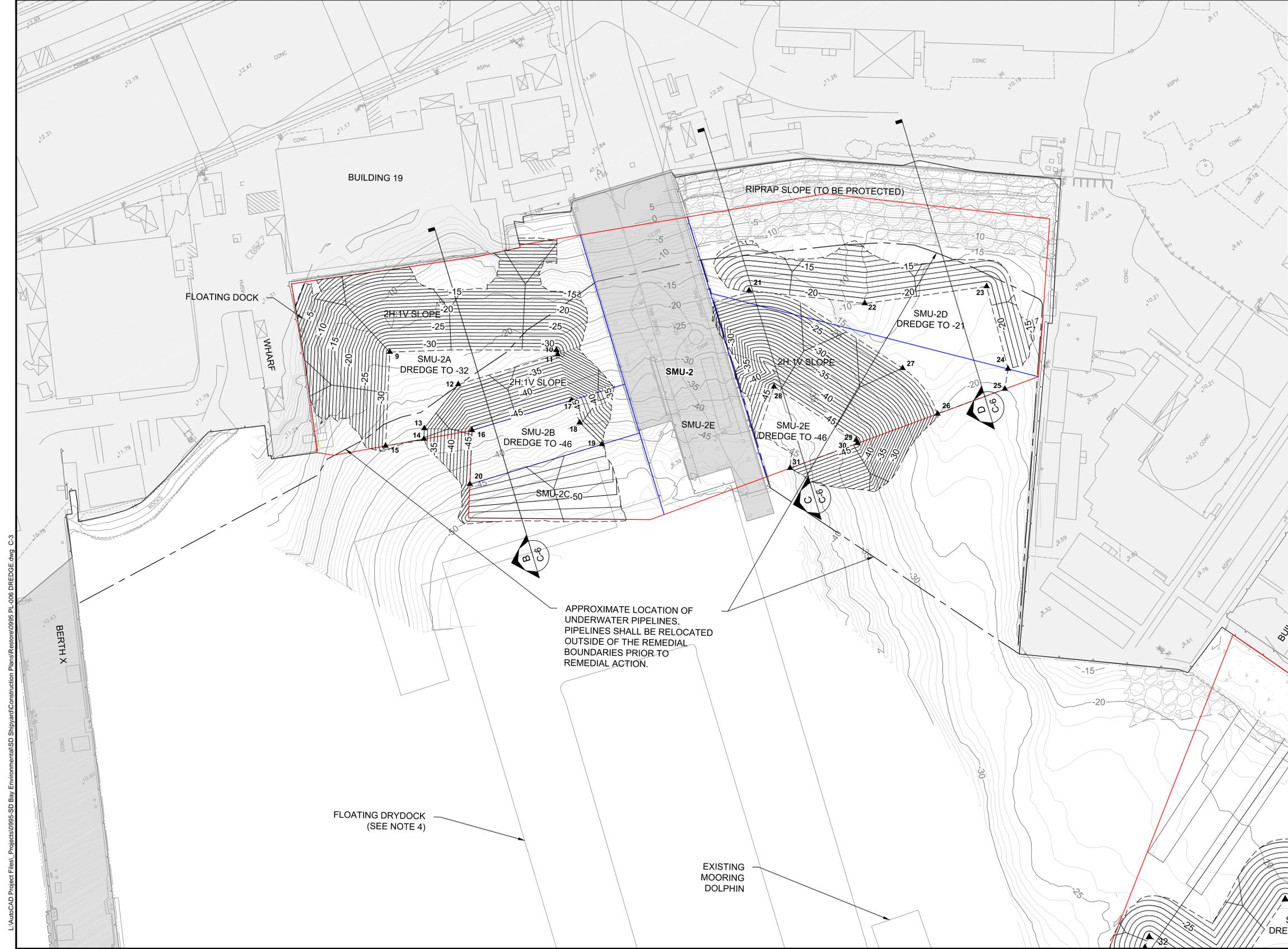
DESIGNED BY: T. MERRITTS  
 DRAWN BY: M. PRATTSCHNER  
 CHECKED BY: M. WHELAN  
 APPROVED BY: J. VERDUIN  
 SCALE: AS INDICATED  
 DATE: AUGUST 27, 2013

**SEDIMENT REMEDIAL ACTION  
AT SOUTH SHIPYARD**

**DREDGE PLAN (1)**

**C-2**

SHEET NO. 7 OF 20



COORDINATE TABLE			COORDINATE TABLE		
NO.	NORTHING (FT)	EASTING (FT)	NO.	NORTHING (FT)	EASTING (FT)
9	1832098.90	6287932.96	21	1832017.85	6288130.52
10	1832048.07	6288016.36	22	1831975.44	6288184.10
11	1832045.59	6288015.68	23	1831946.11	6288249.90
12	1832061.61	6287956.95	24	1831898.56	6288235.01
13	1832050.38	6287926.46	25	1831889.58	6288227.16
14	1832045.21	6287923.01	26	1831898.20	6288186.03
15	1832053.69	6287901.79	27	1831931.63	6288182.78
16	1832034.59	6287949.59	28	1831962.37	6288113.15
17	1832018.58	6288008.31	29	1831910.41	6288137.50
18	1832005.00	6288005.49	30	1831908.45	6288137.09
19	1831987.30	6288009.78	31	1831917.07	6288095.99
20	1832008.56	6287931.82			

**LEGEND:**

- REQUIRED DREDGE LINE MAJOR CONTOUR (5' INTERVAL)
- REQUIRED DREDGE LINE MINOR CONTOUR (1' INTERVAL)
- GENERAL AREA DELINEATED FOR REMEDIATION PER CLEANUP AND ABATEMENT ORDER (CAO) R-9-2012-0024
- SMU BOUNDARY
- SMU SUB-BOUNDARY
- EXISTING MAJOR CONTOUR (5' INTERVAL)
- EXISTING MINOR CONTOUR (1' INTERVAL)
- LEASE HOLD LINE
- EXISTING UNDERWATER PIPE (RELOCATED PRIOR TO REMEDIAL ACTION)
- MARINE STRUCTURE
- EXISTING RIPRAP (APPROXIMATE LIMITS)

NORTH

0      30      60  
SCALE IN FEET

- PROJECT DATUMS:**
- HORIZONTAL DATUM: CALIFORNIA STATE PLANE, ZONE 6, NAD 83, U.S. FEET.
  - IN WATER VERTICAL DATUM: MEAN LOWER LOW WATER (MLLW).
  - UPLAND VERTICAL DATUM: MLLW
  - DREDGING OPERATIONS IN THE VICINITY OF THE DRY DOCK SHALL BE PROHIBITED UNTIL THE CURRENTLY DOCKED VESSEL, USS ESSEX, IS UNDOCKED AND APPROVAL TO PROCEED FROM OWNER IS OBTAINED. UNDOCKING CURRENTLY SCHEDULED FOR OCTOBER 22, 2013 IS SUBJECT TO CHANGE.

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REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION

DESIGNED BY: T MERRITTS  
 DRAWN BY: M PRATSCHNER  
 CHECKED BY: M WHELAN  
 APPROVED BY: J VERDUIN  
 SCALE: AS INDICATED  
 DATE: AUGUST 27, 2013

**SEDIMENT REMEDIAL ACTION  
AT SOUTH SHIPYARD**

**DREDGE PLAN (2)**

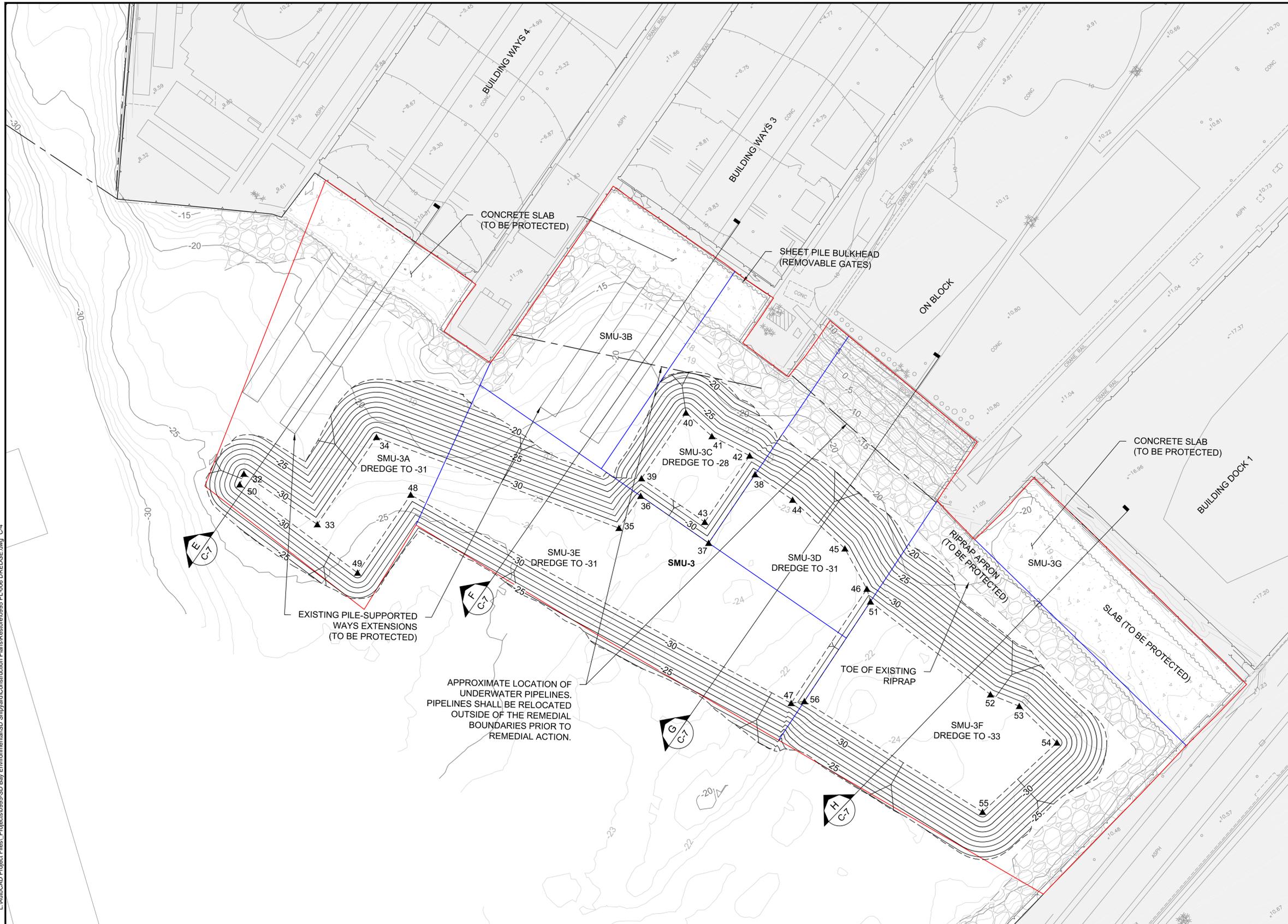
**C-3**

SHEET NO. 8 OF 20

ONE INCH  
AT FULL SIZE; IF NOT ONE  
INCH SCALE ACCORDINGLY

L:\AutocAD Project Files\Projects\0995-SD Bay Environmental\SD Shipyard\Construction Plans\Restoration\0995 PL-006 DREDGE.dwg C-4

Aug 28, 2013 11:56m mpratschner



COORDINATE TABLE		
NO.	EASTING (FT)	NORTHING (FT)
32	1831573.63	6288129.50
33	1831524.58	6288150.88
34	1831550.07	6288208.76
35	1831426.63	6288303.45
36	1831436.03	6288324.73
37	1831390.48	6288344.44
38	1831410.58	6288389.93
39	1831444.68	6288330.70
40	1831463.92	6288374.23
41	1831443.71	6288380.04
42	1831421.82	6288393.10
43	1831402.38	6288349.10
44	1831385.66	6288400.95
45	1831344.24	6288412.12
46	1831316.68	6288410.49
47	1831282.68	6288335.55
48	1831509.88	6288207.87
49	1831487.12	6288156.00
50	1831569.56	6288123.98
51	1831309.08	6288408.25
52	1831223.59	6288439.93
53	1831208.53	6288450.92
54	1831177.96	6288458.50
55	1831166.42	6288398.55
56	1831279.45	6288342.94

LEGEND:

- 35- REQUIRED DREDGE LINE MAJOR CONTOUR (5' INTERVAL)
- REQUIRED DREDGE LINE MINOR CONTOUR (1' INTERVAL)
- GENERAL AREA DELINEATED FOR REMEDIATION PER CLEANUP AND ABATEMENT ORDER (CAO) R-9-2012-0024
- SMU BOUNDARY
- SMU SUB-BOUNDARY
- 40- EXISTING MAJOR CONTOUR (5' INTERVAL)
- 38- EXISTING MINOR CONTOUR (1' INTERVAL)
- LEASE HOLD LINE
- EXISTING UNDERWATER PIPE (RELOCATED PRIOR TO REMEDIAL ACTION)
- EXISTING RIPRAP (APPROXIMATE LIMITS)



PROJECT DATUMS:

1. HORIZONTAL DATUM: CALIFORNIA STATE PLANE, ZONE 6, NAD 83, U.S. FEET.
2. IN WATER VERTICAL DATUM: MEAN LOWER LOW WATER (MLLW).
3. UPLAND VERTICAL DATUM: MLLW

ONE INCH  
AT FULL SIZE; IF NOT ONE  
INCH SCALE ACCORDINGLY



REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION

DESIGNED BY: T. MERRITTS  
 DRAWN BY: M. PRATSCHNER  
 CHECKED BY: M. WHELAN  
 APPROVED BY: J. VERDUIN  
 SCALE: AS INDICATED  
 DATE: AUGUST 27, 2013

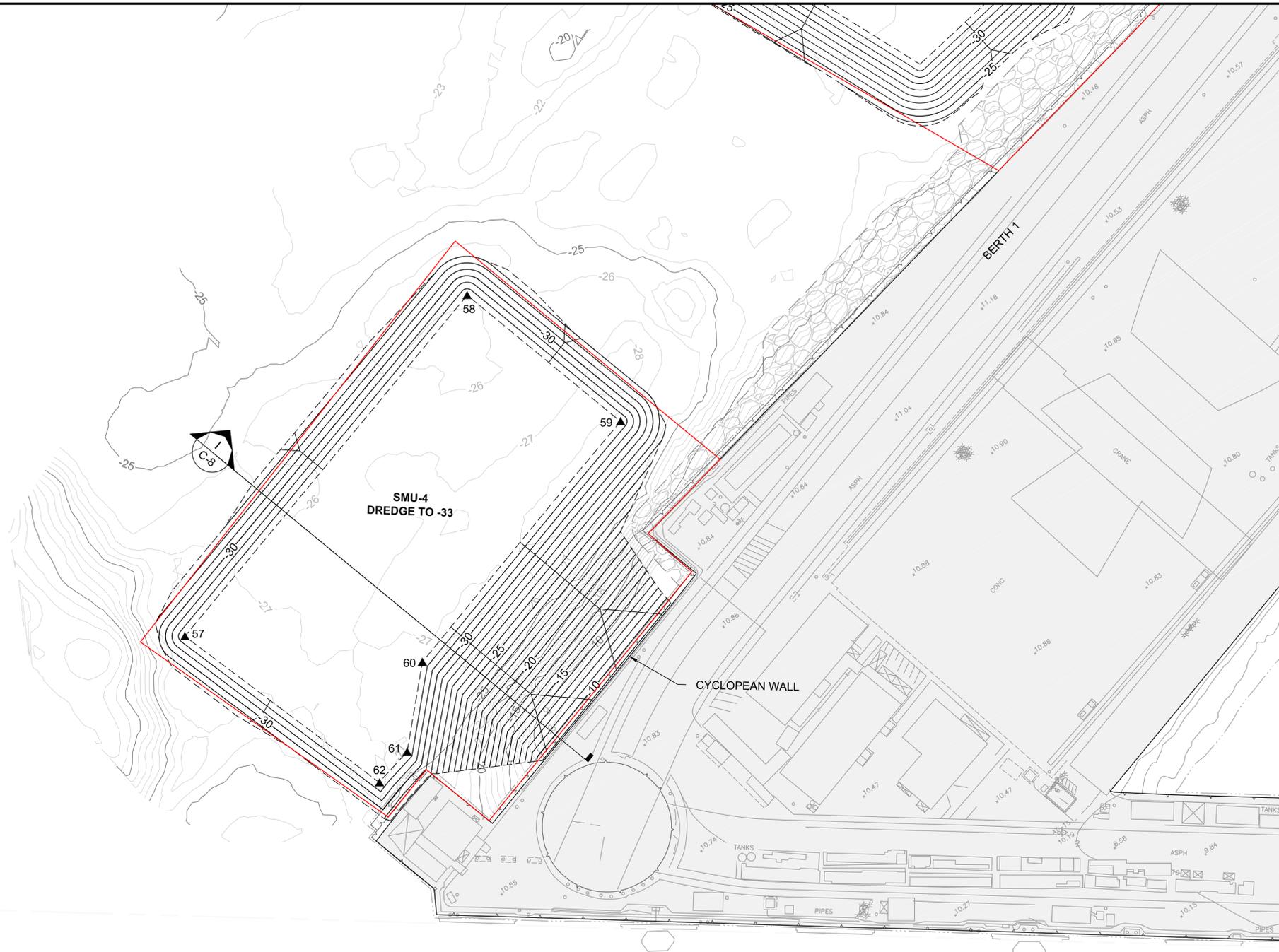
**SEDIMENT REMEDIAL ACTION  
AT SOUTH SHIPYARD**

**DREDGE PLAN (3)**

**C-4**

SHEET NO. 9 OF 20

L:\AutocAD Project Files\Projects\0995-SD Bay Environmental\SD Shipyard\Construction Plans\Restoration\0995 PL-006 DREDGE.dwg C-5



COORDINATE TABLE		
NO.	EASTING (FT)	NORTHING (FT)
57	1831122.54	6287968.80
58	1831187.07	6288163.62
59	1831099.79	6288193.07
60	1831053.98	6288055.95
61	1831022.50	6288027.93
62	1831017.17	6288009.45

**LEGEND:**

- -35 — REQUIRED DREDGE LINE MAJOR CONTOUR (5' INTERVAL)
- — — REQUIRED DREDGE LINE MINOR CONTOUR (1' INTERVAL)
- — — GENERAL AREA DELINEATED FOR REMEDIATION PER CLEANUP AND ABATEMENT ORDER (CAO) R-9-2012-0024
- — — SMU BOUNDARY
- — — SMU SUB-BOUNDARY
- -40 — EXISTING MAJOR CONTOUR (5' INTERVAL)
- -38 — EXISTING MINOR CONTOUR (1' INTERVAL)
- - - LEASE HOLD LINE
- ▨ EXISTING EELGRASS
- ▨ EXISTING RIPRAP (APPROXIMATE LIMITS)

  
 NORTH

  
 SCALE IN FEET

- PROJECT DATUMS:**
- HORIZONTAL DATUM: CALIFORNIA STATE PLANE, ZONE 6, NAD 83, U.S. FEET.
  - IN WATER VERTICAL DATUM: MEAN LOWER LOW WATER (MLLW).
  - UPLAND VERTICAL DATUM: MLLW

ONE INCH  
 AT FULL SIZE, IF NOT ONE  
 INCH SCALE ACCORDINGLY



REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION

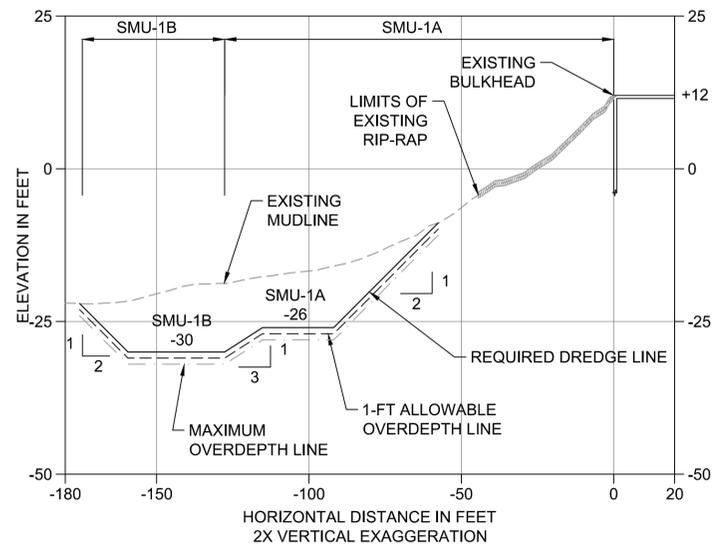
DESIGNED BY: T MERRITTS  
 DRAWN BY: M PRATSCHNER  
 CHECKED BY: M WHELAN  
 APPROVED BY: J VERDUIN  
 SCALE: AS INDICATED  
 DATE: AUGUST 27, 2013

**SEDIMENT REMEDIAL ACTION  
AT SOUTH SHIPYARD**

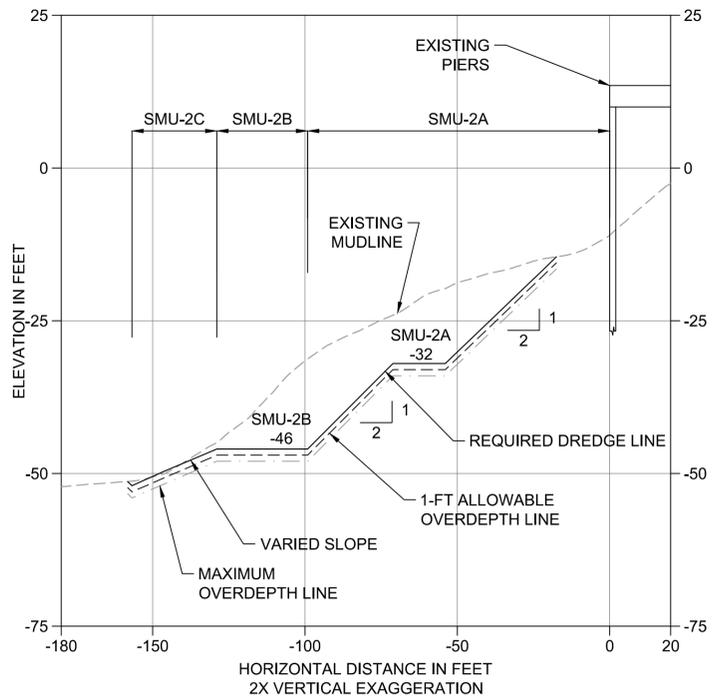
**DREDGE PLAN (4)**

**C-5**

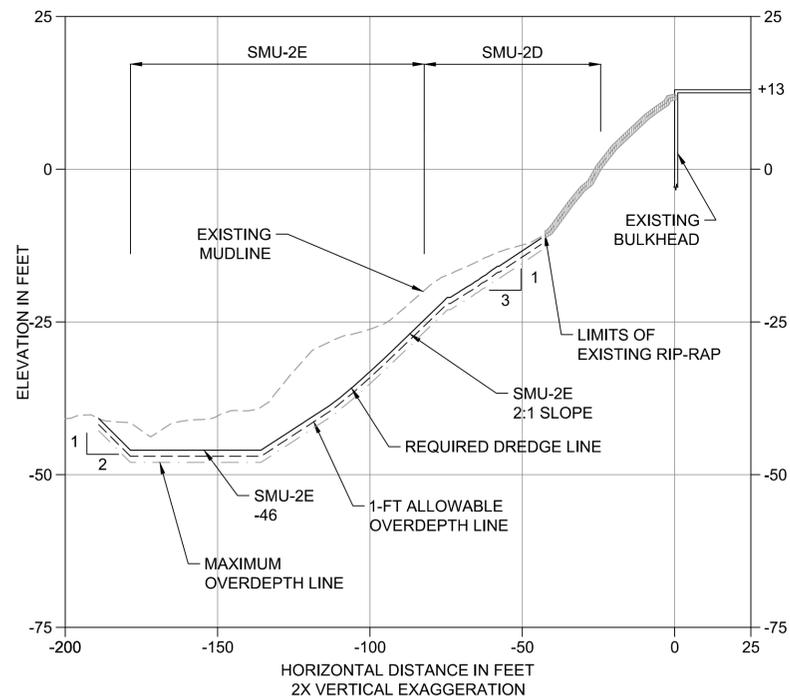
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 Aug 28, 2013 11:21 am mpratschner



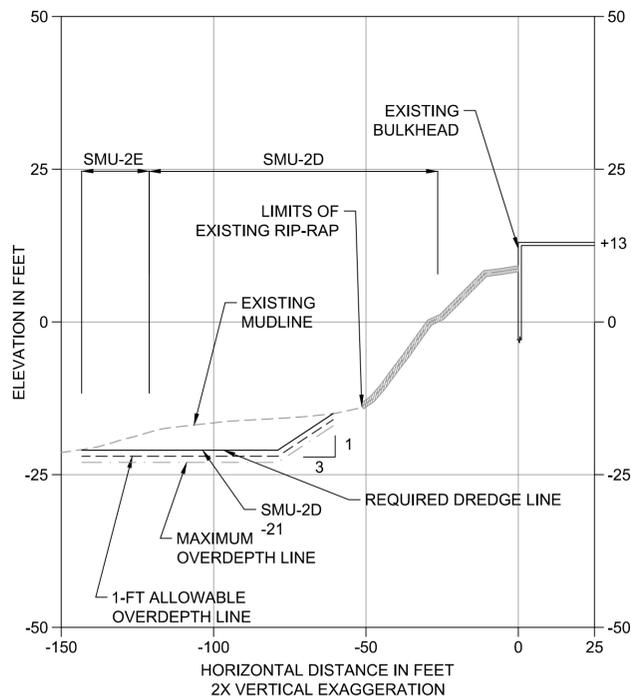
**A SECTION**  
 C-2 HORIZ. SCALE: 1" = 30'  
 VERT. SCALE: 1" = 15'



**B SECTION**  
 C-3 HORIZ. SCALE: 1" = 30'  
 VERT. SCALE: 1" = 15'



**C SECTION**  
 C-3 HORIZ. SCALE: 1" = 30'  
 VERT. SCALE: 1" = 15'



**D SECTION**  
 C-3 HORIZ. SCALE: 1" = 30'  
 VERT. SCALE: 1" = 15'

- LEGEND:**
- REQUIRED DREDGE LINE
  - - - - 1-FT ALLOWABLE OVERDEPTH LINE
  - - - - MAXIMUM OVERDEPTH LINE (2-FT BELOW REQUIRED DREDGE LINE)
  - - - - EXISTING MUDLINE
  - ▬ EXISTING RIPRAP (APPROXIMATE LIMITS)



- PROJECT DATUMS:**
- HORIZONTAL DATUM: CALIFORNIA STATE PLANE, ZONE 6, NAD 83, U.S. FEET.
  - IN WATER VERTICAL DATUM: MEAN LOWER LOW WATER (MLLW).
  - UPLAND VERTICAL DATUM: MLLW
  - DEFINITIONS AND PAYMENT TERMS FOR ALLOWABLE AND MAXIMUM OVERDEPTH LINES SHALL BE AS SPECIFIED IN THE TECHNICAL SPECIFICATIONS.

ONE INCH  
 AT FULL SIZE; IF NOT ONE  
 INCH SCALE ACCORDINGLY



REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION

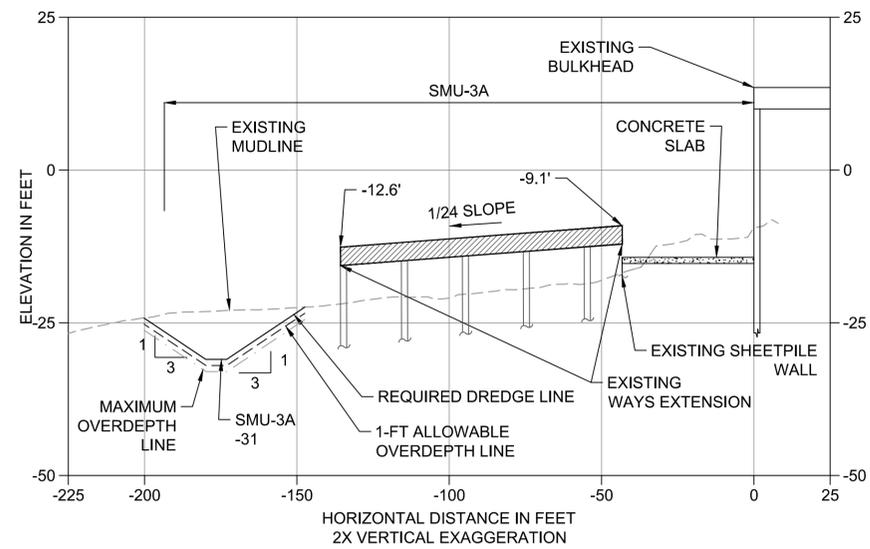
DESIGNED BY: T MERRITTS  
 DRAWN BY: M PRATSCHNER  
 CHECKED BY: M WHELAN  
 APPROVED BY: J VERDUIN  
 SCALE: AS INDICATED  
 DATE: AUGUST 27, 2013

**SEDIMENT REMEDIAL ACTION  
 AT SOUTH SHIPYARD**

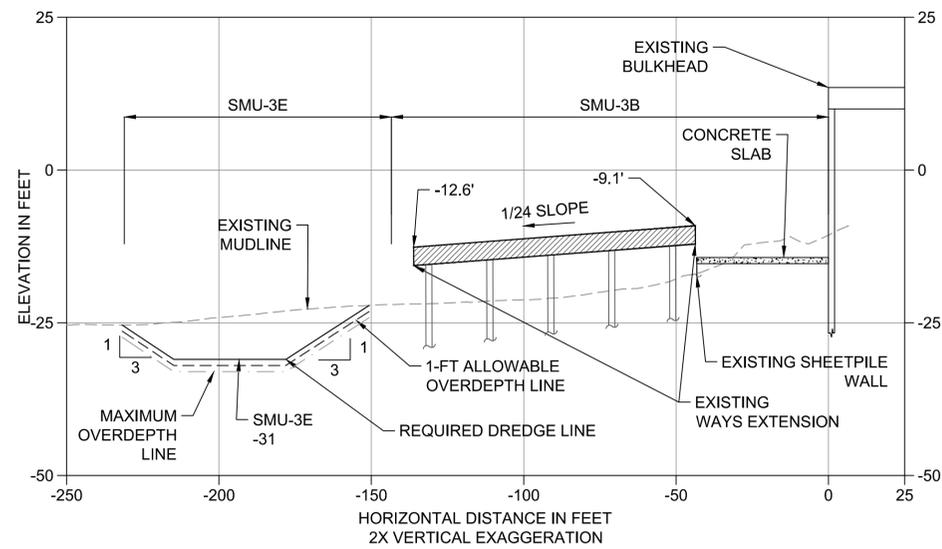
**DREDGING CROSS SECTIONS (1)**

**C-6**

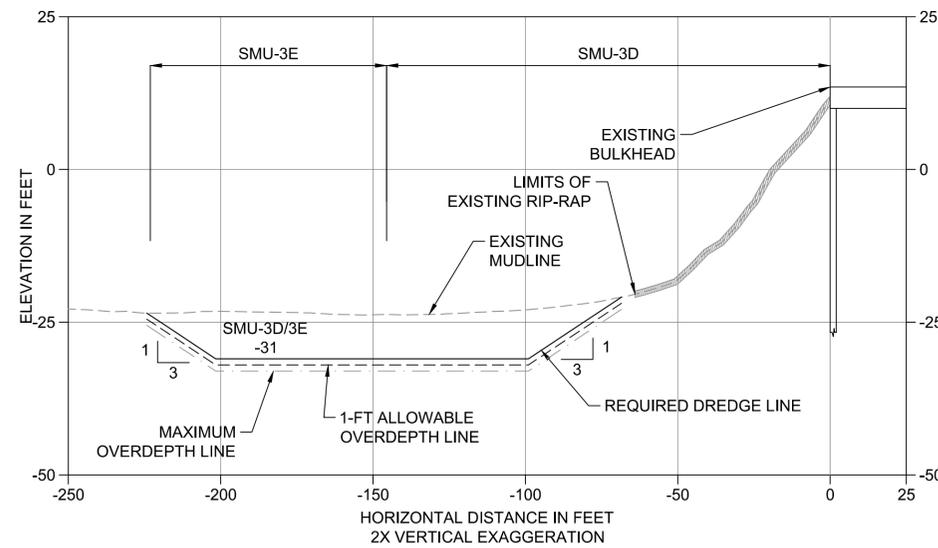
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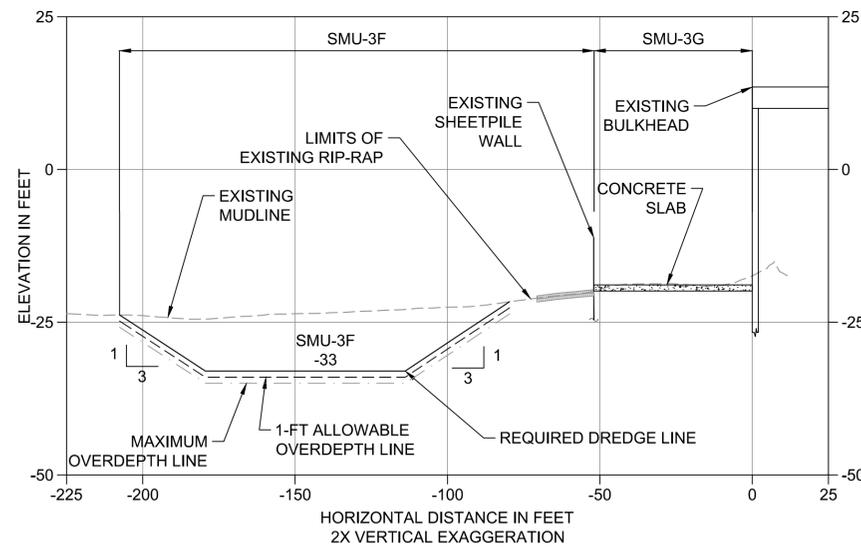
**E SECTION**  
C-4 HORIZ. SCALE: 1" = 30'  
VERT. SCALE: 1" = 15'



**F SECTION**  
C-4 HORIZ. SCALE: 1" = 30'  
VERT. SCALE: 1" = 15'



**G SECTION**  
C-4 HORIZ. SCALE: 1" = 30'  
VERT. SCALE: 1" = 15'



**H SECTION**  
C-4 HORIZ. SCALE: 1" = 30'  
VERT. SCALE: 1" = 15'

- LEGEND:**
- REQUIRED DREDGE LINE
  - - - - 1-FT ALLOWABLE OVERDEPTH LINE
  - - - - MAXIMUM OVERDEPTH LINE (2-FT BELOW REQUIRED DREDGE LINE)
  - - - - EXISTING MUDLINE
  - ▨ EXISTING WAYS EXTENSIONS
  - ▤ EXISTING CONCRETE SLAB
  - ▧ EXISTING RIPRAP (APPROXIMATE LIMITS)



**PROJECT DATUMS:**

1. HORIZONTAL DATUM: CALIFORNIA STATE PLANE, ZONE 6, NAD 83, U.S. FEET.
2. IN WATER VERTICAL DATUM: MEAN LOWER LOW WATER (MLLW).
3. UPLAND VERTICAL DATUM: MLLW
4. DEFINITIONS AND PAYMENT TERMS FOR ALLOWABLE AND MAXIMUM OVERDEPTH LINES SHALL BE AS SPECIFIED IN THE TECHNICAL SPECIFICATIONS.

ONE INCH  
AT FULL SIZE; IF NOT ONE  
INCH SCALE ACCORDINGLY



REVISIONS				
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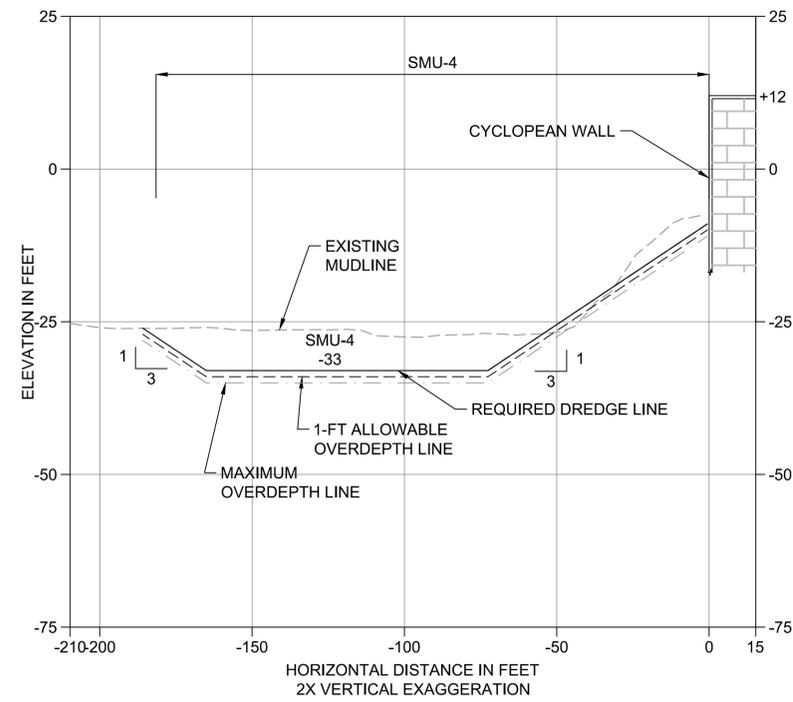
DESIGNED BY: T MERRITTS  
 DRAWN BY: M PRATSCHNER  
 CHECKED BY: M WHELAN  
 APPROVED BY: J VERDUIN  
 SCALE: AS INDICATED  
 DATE: AUGUST 27, 2013

**SEDIMENT REMEDIAL ACTION  
AT SOUTH SHIPYARD**

**DREDGING CROSS SECTIONS (2)**

**C-7**

L:\AutoCAD Project Files\Projects\0995-SD Bay Environmental\SD Shipyard\Construction Plans\Restoration\0995 PL-006 DREDGE.dwg XSEC C-8



**I SECTION**  
 C-5 HORIZ. SCALE: 1" = 30'  
 VERT. SCALE: 1" = 15'

**LEGEND:**

- REQUIRED DREDGE LINE
- - - - - 1-FIT ALLOWABLE OVERDEPTH LINE
- - - - - MAXIMUM OVERDEPTH LINE  
(2-FT BELOW REQUIRED DREDGE LINE)
- - - - - EXISTING MUDLINE



**PROJECT DATUMS:**

1. HORIZONTAL DATUM: CALIFORNIA STATE PLANE, ZONE 6, NAD 83, U.S. FEET.
2. IN WATER VERTICAL DATUM: MEAN LOWER LOW WATER (MLLW).
3. UPLAND VERTICAL DATUM: MLLW
4. DEFINITIONS AND PAYMENT TERMS FOR ALLOWABLE AND MAXIMUM OVERDEPTH LINES SHALL BE AS SPECIFIED IN THE TECHNICAL SPECIFICATIONS.

ONE INCH  
 AT FULL SIZE; IF NOT ONE  
 INCH SCALE ACCORDINGLY



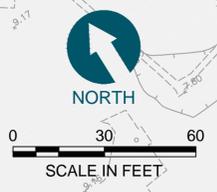
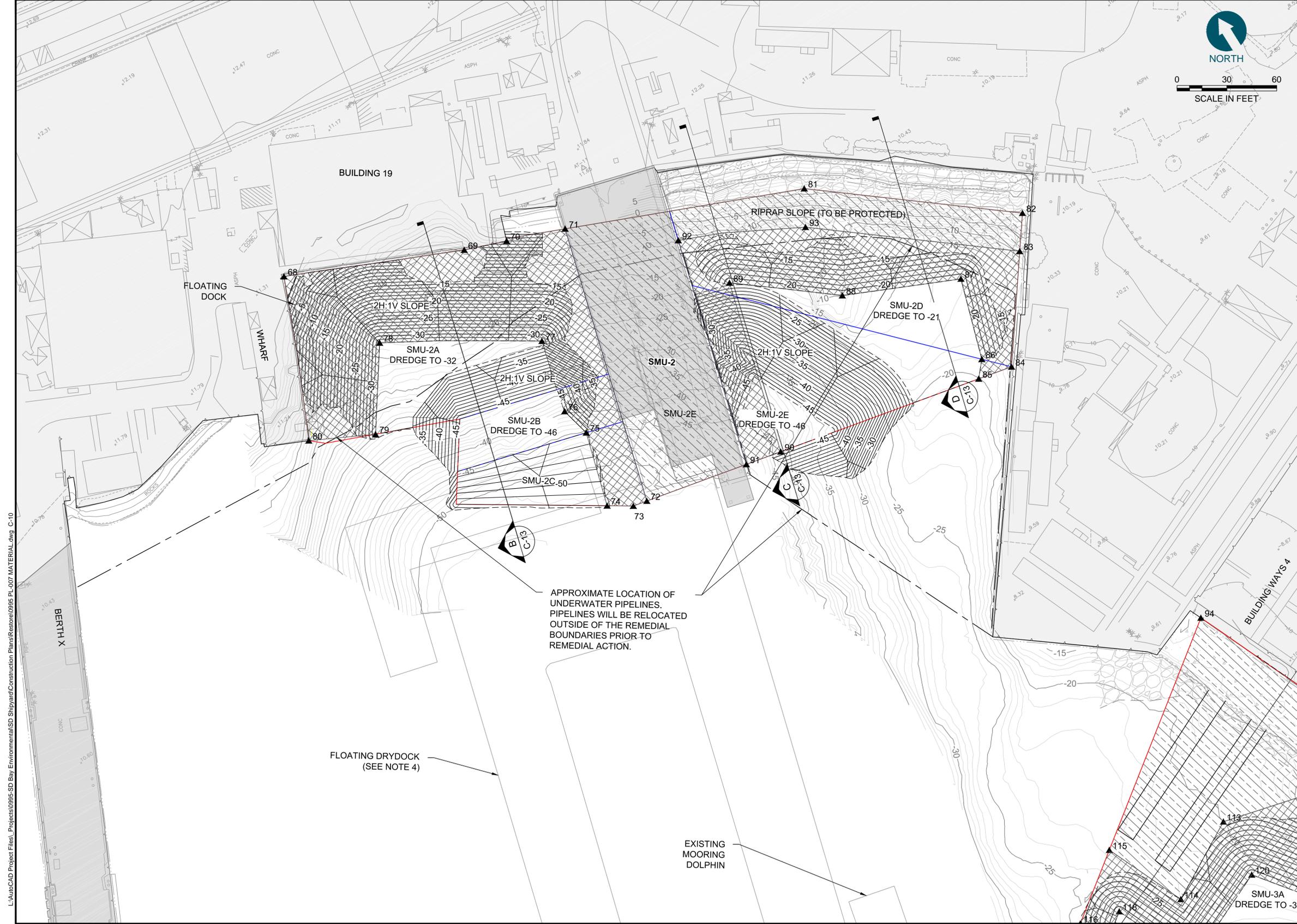
REVISIONS					
REV	DATE	BY	APP'D	DESCRIPTION	

DESIGNED BY: T. MERRITTS  
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 CHECKED BY: M. WHELAN  
 APPROVED BY: J. VERDUIN  
 SCALE: AS INDICATED  
 DATE: AUGUST 27, 2013

**SEDIMENT REMEDIAL ACTION  
 AT SOUTH SHIPYARD**

**DREDGING CROSS SECTIONS (3)**

**C-8**



MATERIAL PLACEMENT COORDINATE TABLE		
NO.	NORTHING (FT)	EASTING (FT)
68	1832163.22	6287905.22
69	1832119.17	6288005.64
70	1832110.26	6288030.14
71	1832097.80	6288063.88
72	1831933.21	6288016.36
73	1831934.98	6288010.53
74	1831943.48	6287997.22
75	1831987.30	6288009.78
76	1832005.00	6288005.49
77	1832048.08	6288016.36
78	1832098.90	6287932.96
79	1832053.69	6287901.79
80	1832071.72	6287865.68
81	1832042.03	6288198.69
82	1831959.97	6288302.24
83	1831941.43	6288288.71
84	1831885.22	6288247.78
85	1831889.58	6288227.16
86	1831898.56	6288235.01
87	1831946.11	6288249.90
88	1831975.44	6288184.10
89	1832017.85	6288130.52
90	1831915.60	6288103.02
91	1831920.12	6288081.42
92	1832055.82	6288117.91
93	1832021.99	6288187.06

- LEGEND:**
- 35— REQUIRED DREDGE LINE MAJOR CONTOUR (5' INTERVAL)
  - — — REQUIRED DREDGE LINE MINOR CONTOUR (1' INTERVAL)
  - GENERAL AREA DELINEATED FOR REMEDIATION PER CLEANUP AND ABATEMENT ORDER (CAO) R-9-2012-0024
  - SMU BOUNDARY
  - SMU SUB-BOUNDARY
  - 40— EXISTING MAJOR CONTOUR (5' INTERVAL)
  - 38— EXISTING MINOR CONTOUR (1' INTERVAL)
  - - - LEASE HOLD LINE
  - [Cross-hatched] GRAVELLY SAND COVER
  - [Diagonal lines] SAND COVER
  - [Solid grey] MARINE STRUCTURE
  - [Dotted] EXISTING RIPRAP (APPROXIMATE LIMITS)
  - - - UNDERWATER PIPELINE (RELOCATED PRIOR TO REMEDIAL ACTION)

- PROJECT DATUMS:**
- HORIZONTAL DATUM: CALIFORNIA STATE PLANE, ZONE 6, NAD 83, U.S. FEET.
  - IN WATER VERTICAL DATUM: MEAN LOWER LOW WATER (MLLW).
  - UPLAND VERTICAL DATUM: MLLW
  - MATERIAL PLACEMENT OPERATIONS IN THE VICINITY OF THE DRY DOCK SHALL BE PROHIBITED UNTIL THE CURRENTLY DOCKED VESSEL, USS ESSEX, IS UNDOCKED AND APPROVAL TO PROCEED FROM OWNER IS OBTAINED. UNDOCKING CURRENTLY SCHEDULED FOR OCTOBER 22, 2013 IS SUBJECT TO CHANGE.

L:\AutCAD Project Files\Projects\0995-SD Bay Environmental\SD Shipyard\Construction Plans\Restoration\0995-PL-007 MATERIAL.dwg C-10

APPROXIMATE LOCATION OF UNDERWATER PIPELINES. PIPELINES WILL BE RELOCATED OUTSIDE OF THE REMEDIAL BOUNDARIES PRIOR TO REMEDIAL ACTION.

FLOATING DRYDOCK (SEE NOTE 4)

EXISTING MOORING DOLPHIN

ONE INCH  
AT FULL SIZE; IF NOT ONE  
INCH SCALE ACCORDINGLY



REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION

DESIGNED BY: T MERRITTS  
 DRAWN BY: M PRATSCHNER  
 CHECKED BY: M WHELAN  
 APPROVED BY: J VERDUIN  
 SCALE: AS INDICATED  
 DATE: AUGUST 27, 2013

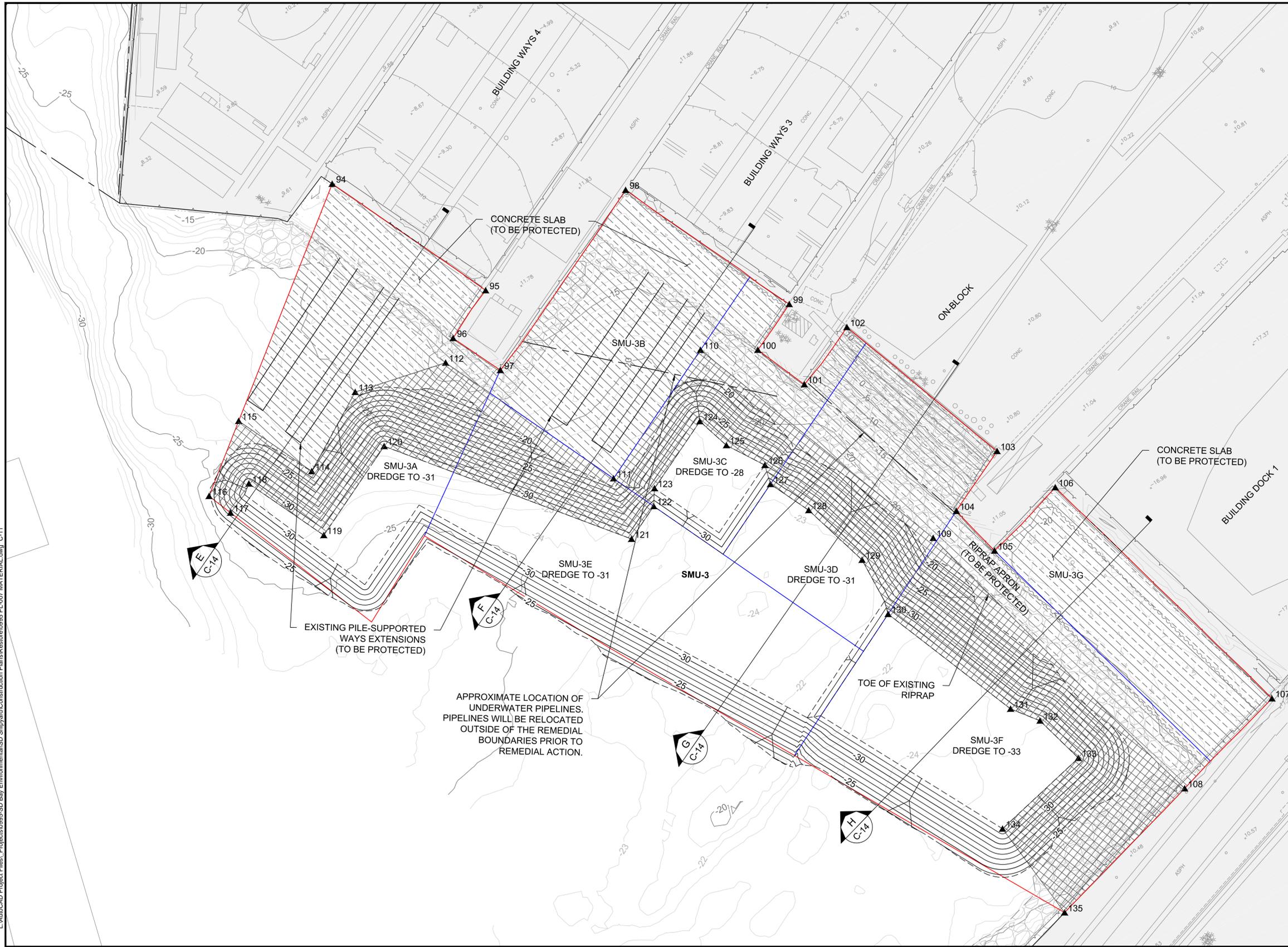
**SEDIMENT REMEDIAL ACTION AT SOUTH SHIPYARD**

**MATERIAL PLACEMENT PLAN (2)**

**C-10**

SHEET NO. 15 OF 20

L:\AutocAD Project Files\Projects\0995-SD Bay Environmental\SD Shipyard\Construction Plans\Restoration\0995-PL-007 MATERIAL.dwg C-11



MATERIAL PLACEMENT COORDINATE TABLE			MATERIAL PLACEMENT COORDINATE TABLE		
NO.	NORTHING (FT)	EASTING (FT)	NO.	NORTHING (FT)	EASTING (FT)
94	1831697.08	6288264.51	115	1831608.08	6288143.93
95	1831596.06	6288307.98	116	1831579.90	6288105.75
96	1831582.41	6288276.86	117	1831564.87	6288111.31
97	1831551.69	6288290.51	118	1831573.63	6288129.50
98	1831602.39	6288409.20	119	1831524.58	6288150.88
99	1831494.42	6288455.36	120	1831550.07	6288208.76
100	1831481.41	6288425.45	121	1831426.63	6288303.45
101	1831449.69	6288437.92	122	1831436.03	6288324.73
102	1831464.94	6288476.97	123	1831444.68	6288330.70
103	1831356.25	6288513.42	124	1831463.92	6288374.23
104	1831339.11	6288474.44	125	1831443.71	6288380.04
105	1831307.44	6288481.16	126	1831421.82	6288393.10
106	1831320.05	6288531.19	127	1831410.58	6288389.93
107	1831147.21	6288573.73	128	1831385.66	6288400.95
108	1831129.66	6288502.11	129	1831344.24	6288412.12
109	1831332.95	6288454.45	130	1831309.08	6288408.25
110	1831499.29	6288396.78	131	1831223.59	6288439.93
111	1831462.41	6288313.31	132	1831208.53	6288450.92
112	1831572.50	6288265.44	133	1831177.96	6288458.50
113	1831586.10	6288211.19	134	1831166.42	6288398.55
114	1831560.21	6288164.80	135	1831105.25	6288403.47

- LEGEND:**
- 35— REQUIRED DREDGE LINE MAJOR CONTOUR (5' INTERVAL)
  - — — REQUIRED DREDGE LINE MINOR CONTOUR (1' INTERVAL)
  - — — GENERAL AREA DELINEATED FOR REMEDIATION PER CLEANUP AND ABATEMENT ORDER (CAO) R-9-2012-0024
  - — — SMU BOUNDARY
  - — — SMU SUB-BOUNDARY
  - 40— EXISTING MAJOR CONTOUR (5' INTERVAL)
  - 38— EXISTING MINOR CONTOUR (1' INTERVAL)
  - - - LEASE HOLD LINE
  - [Cross-hatched] GRAVELLY SAND COVER
  - [Diagonal lines] SAND COVER
  - [Solid grey] MARINE STRUCTURE
  - [Dotted] EXISTING RIPRAP (APPROXIMATE LIMITS)
  - - - EXISTING PILE-SUPPORTED WAYS EXTENSIONS



- PROJECT DATUMS:**
- HORIZONTAL DATUM: CALIFORNIA STATE PLANE, ZONE 6, NAD 83, U.S. FEET.
  - IN WATER VERTICAL DATUM: MEAN LOWER LOW WATER (MLLW).
  - UPLAND VERTICAL DATUM: MLLW

ONE INCH  
AT FULL SIZE; IF NOT ONE  
INCH SCALE ACCORDINGLY



REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION

DESIGNED BY: T MERRITTS  
 DRAWN BY: M PRATSCHNER  
 CHECKED BY: M WHELAN  
 APPROVED BY: J VERDUIN  
 SCALE: AS INDICATED  
 DATE: AUGUST 27, 2013

**SEDIMENT REMEDIAL ACTION  
AT SOUTH SHIPYARD**

**MATERIAL PLACEMENT PLAN (3)**

**C-11**

SHEET NO. 16 OF 20

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MATERIAL PLACEMENT COORDINATE TABLE		
NO.	NORTHING (FT)	EASTING (FT)
136	1831053.98	6288055.95
137	1831104.98	6288207.91
138	1831060.40	6288222.89
139	1831048.95	6288176.34
140	1831023.19	6288184.20
141	1830975.26	6288043.30
142	1831010.71	6288031.15
143	1831001.58	6288004.46
144	1831014.19	6287999.15
145	1831022.50	6288027.93

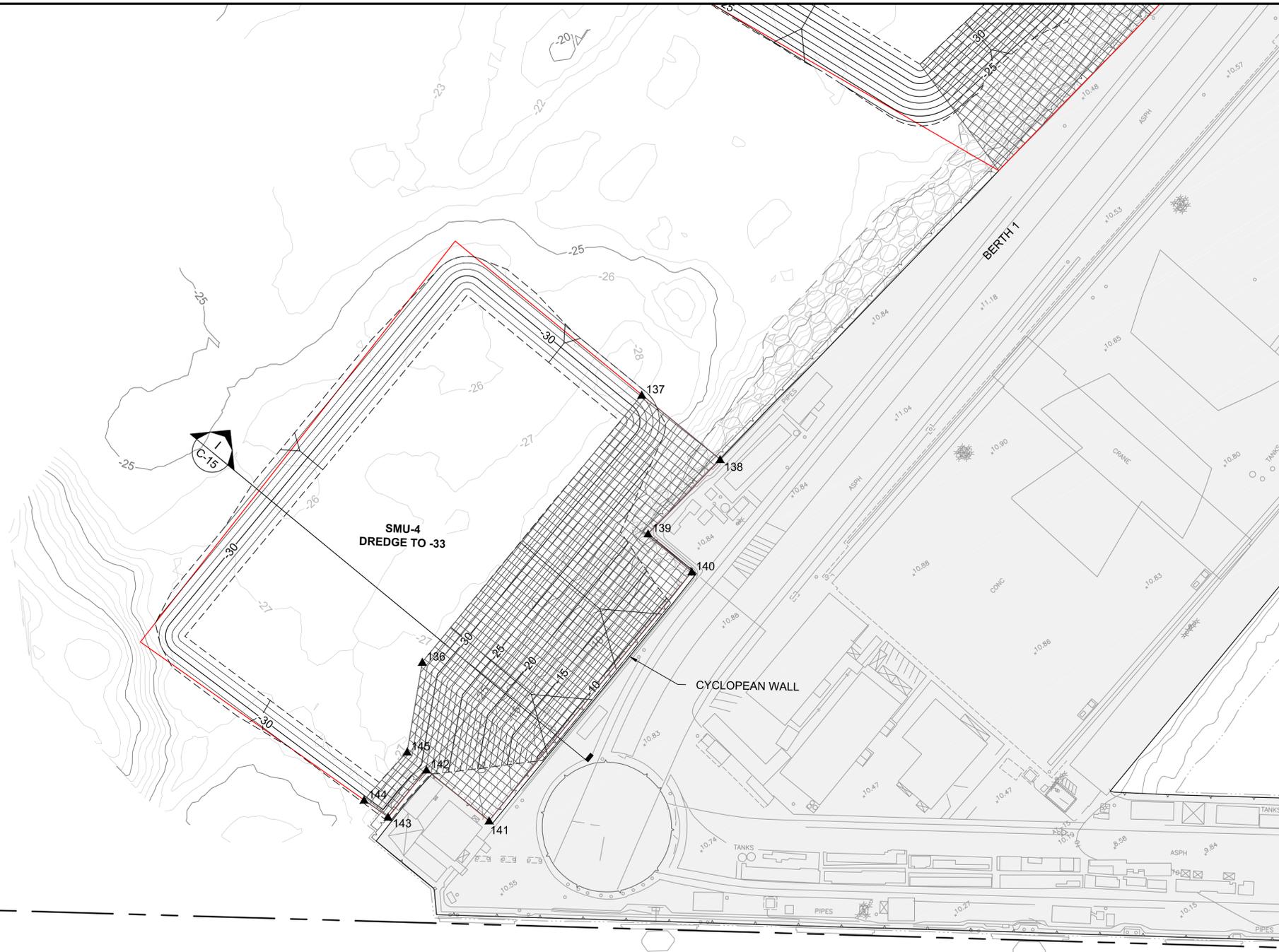
- LEGEND:
- 35- REQUIRED DREDGE LINE MAJOR CONTOUR (5' INTERVAL)
  - REQUIRED DREDGE LINE MINOR CONTOUR (1' INTERVAL)
  - GENERAL AREA DELINEATED FOR REMEDIATION PER CLEANUP AND ABATEMENT ORDER (CAO) R-9-2012-0024
  - SMU BOUNDARY
  - SMU SUB-BOUNDARY
  - 40- EXISTING MAJOR CONTOUR (5' INTERVAL)
  - 38- EXISTING MINOR CONTOUR (1' INTERVAL)
  - LEASE HOLD LINE
  - GRAVELLY SAND COVER
  - EXISTING RIPRAP (APPROXIMATE LIMITS)



PROJECT DATUMS:

1. HORIZONTAL DATUM: CALIFORNIA STATE PLANE, ZONE 6, NAD 83, U.S. FEET.
2. IN WATER VERTICAL DATUM: MEAN LOWER LOW WATER (MLLW).
3. UPLAND VERTICAL DATUM: MLLW

ONE INCH  
AT FULL SIZE, IF NOT ONE  
INCH SCALE ACCORDINGLY



REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION

DESIGNED BY: T MERRITTS  
 DRAWN BY: M PRATSCHNER  
 CHECKED BY: M WHELAN  
 APPROVED BY: J VERDUIN  
 SCALE: AS INDICATED  
 DATE: AUGUST 27, 2013

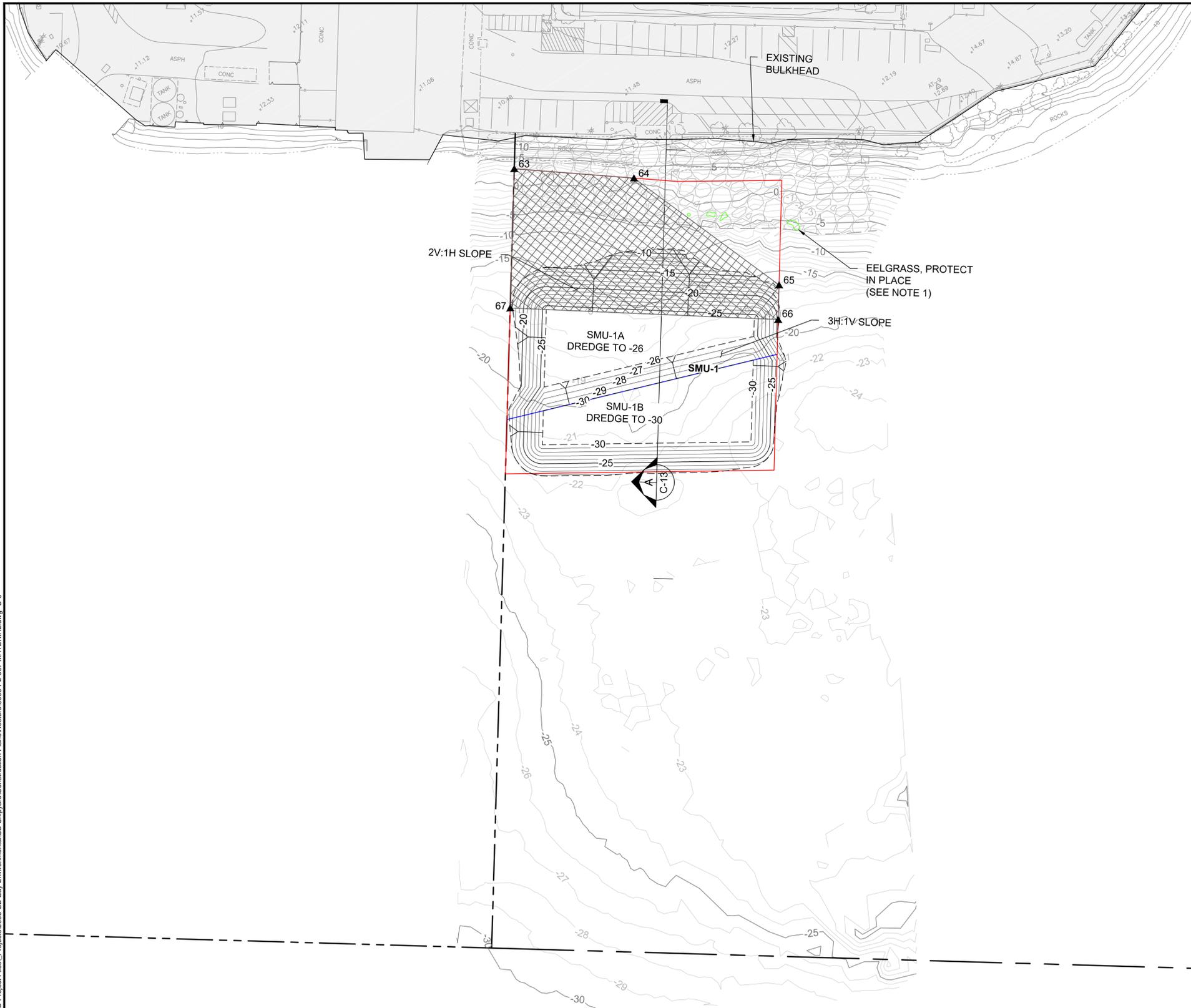
**SEDIMENT REMEDIAL ACTION  
AT SOUTH SHIPYARD**

**MATERIAL PLACEMENT PLAN (4)**

**C-12**

SHEET NO. 17 OF 20

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 Aug 28, 2013 1:13:27am mpratschner



MATERIAL PLACEMENT COORDINATE TABLE		
NO.	NORTHING (FT)	EASTING (FT)
63	1832102.02	6287001.76
64	1832064.51	6287052.57
65	1831976.55	6287087.53
66	1831961.44	6287077.51
67	1832047.65	6286965.55

- ENVIRONMENTAL CONTROL INSTALLATION REQUIRED FOR EELGRASS PROTECTION SHALL BE CONDUCTED IN ACCORDANCE WITH SECTION 015719-TEMPORARY ENVIRONMENTAL CONTROLS.

LEGEND:

- 35- REQUIRED DREDGE LINE MAJOR CONTOUR (5' INTERVAL)
- 35- REQUIRED DREDGE LINE MINOR CONTOUR (1' INTERVAL)
- GENERAL AREA DELINEATED FOR REMEDIATION PER CLEANUP AND ABATEMENT ORDER (CAO) R-9-2012-0024
- SMU BOUNDARY
- SMU SUB-BOUNDARY
- 40- EXISTING MAJOR CONTOUR (5' INTERVAL)
- 38- EXISTING MINOR CONTOUR (1' INTERVAL)
- LEASE HOLD LINE
- EXISTING EELGRASS
- GRAVELLY SAND COVER
- EXISTING RIPRAP (APPROXIMATE LIMITS)



PROJECT DATUMS:

- HORIZONTAL DATUM: CALIFORNIA STATE PLANE, ZONE 6, NAD 83, U.S. FEET.
- IN WATER VERTICAL DATUM: MEAN LOWER LOW WATER (MLLW).
- UPLAND VERTICAL DATUM: MLLW

ONE INCH  
 AT FULL SIZE IF NOT ONE  
 INCH SCALE ACCORDINGLY



REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION

DESIGNED BY: T. MERRITTS  
 DRAWN BY: M. PRATTSCHNER  
 CHECKED BY: M. WHELAN  
 APPROVED BY: J. VERDUIN  
 SCALE: AS INDICATED  
 DATE: AUGUST 27, 2013

**SEDIMENT REMEDIAL ACTION  
 AT SOUTH SHIPYARD**

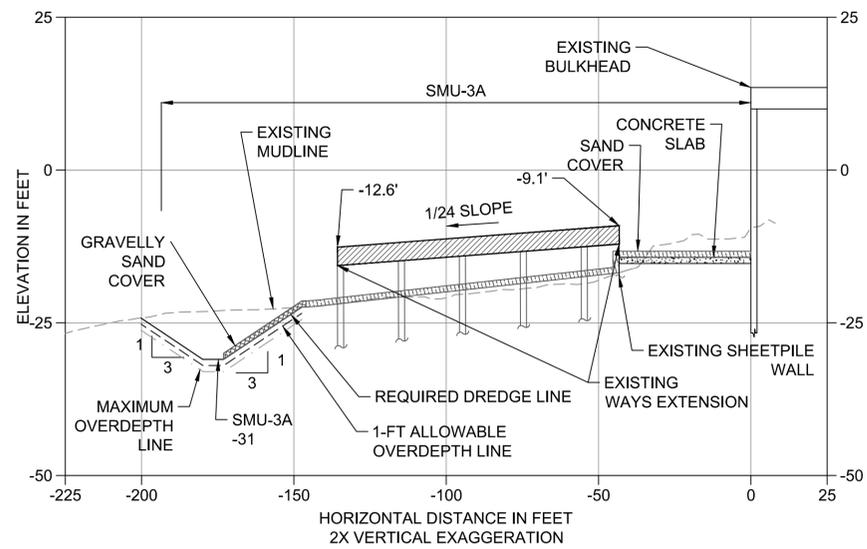
**MATERIAL PLACEMENT PLAN (1)**

**C-9**

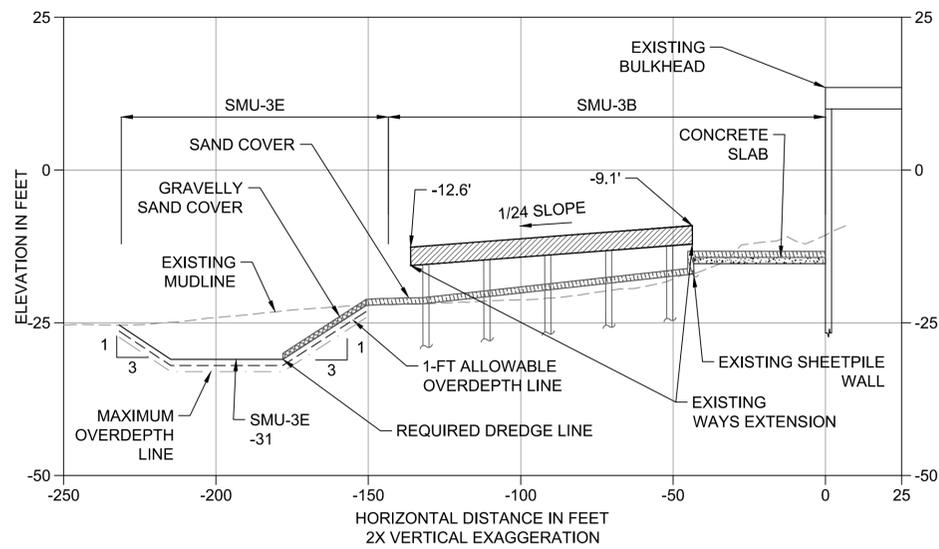
SHEET NO. 14 OF 20



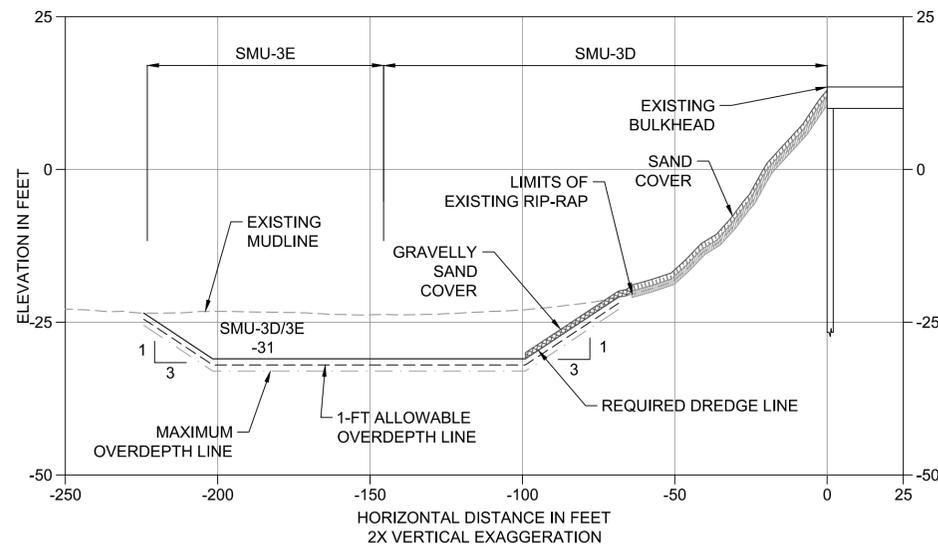
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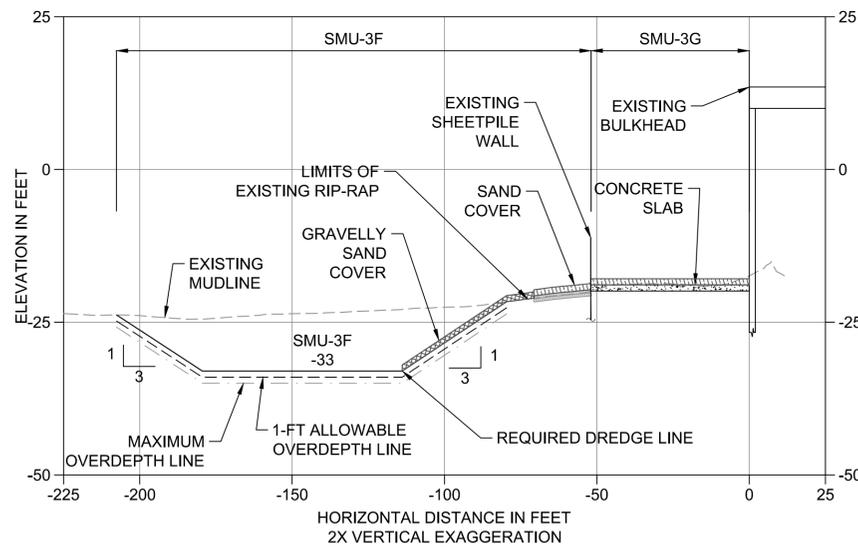
**E SECTION**  
C-11 HORIZ. SCALE: 1" = 30'  
VERT. SCALE: 1" = 15'



**F SECTION**  
C-11 HORIZ. SCALE: 1" = 30'  
VERT. SCALE: 1" = 15'



**G SECTION**  
C-11 HORIZ. SCALE: 1" = 30'  
VERT. SCALE: 1" = 15'



**H SECTION**  
C-11 HORIZ. SCALE: 1" = 30'  
VERT. SCALE: 1" = 15'

- LEGEND:**
- REQUIRED DREDGE LINE
  - - - - 1-FT ALLOWABLE OVERDEPTH LINE
  - - - - MAXIMUM OVERDEPTH LINE (2-FT BELOW REQUIRED DREDGE LINE)
  - - - - EXISTING MUDLINE
  - ▨ GRAVELLY SAND COVER
  - ▩ SAND COVER
  - ▧ CONCRETE SLAB
  - ▨ EXISTING RIPRAP (APPROXIMATE LIMITS)



**PROJECT DATUMS:**

1. HORIZONTAL DATUM: CALIFORNIA STATE PLANE, ZONE 6, NAD 83, U.S. FEET.
2. IN WATER VERTICAL DATUM: MEAN LOWER LOW WATER (MLLW).
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ONE INCH  
AT FULL SIZE; IF NOT ONE  
INCH SCALE ACCORDINGLY



REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION

DESIGNED BY: T MERRITTS  
 DRAWN BY: M PRATSCHNER  
 CHECKED BY: M WHELAN  
 APPROVED BY: J VERDUIN  
 SCALE: AS INDICATED  
 DATE: AUGUST 27, 2013

**SEDIMENT REMEDIAL ACTION  
AT SOUTH SHIPYARD**

**MATERIAL PLACEMENT CROSS SECTIONS (2)**

**C-14**

SHEET NO. 19 OF 20

