PORT OF TACOMA

SHORELINE STABILIZATION
PROJECT NO. 091407
CONTRACT NO. 070107

PORT COMMISSIONERS:

CONSTANCE T. BACON
DON MEYER
DONALD C. JOHNSON
RICHARD P. MARZANO
CLARE PETRICH

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Chief Facilities Development Officer

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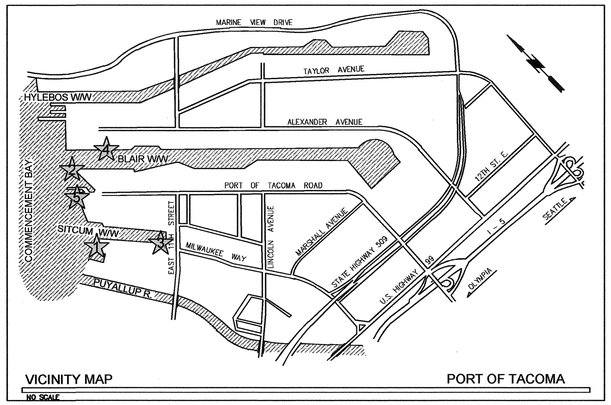
Director of Engineering

PEDRO REYES, PE
Project Manager



VICINITY MAP — PORT OF TACOMA

NO SCALE

PROJECT WORK AREAS	
1	APM TERMINAL
2	HUSKY TERMINAL
3	SITCUM WATERWAY
4	TOTE OCEAN TRAILER EXPRESS TERMINAL
5	OLYMPIC CONTAINER TERMINAL

ABBREVIATIONS:

APPROX	APPROXIMATE
ASPH	ASPHALT
BMP	BEST MANAGEMENT PRACTICE
CB	CATCH BASIN
CF	CUBIC FEET
CL	CENTER LINE
CONC	CONCRETE
COT	CITY OF TACOMA
DEMO	DEMOLITION
DIA	DIAMETER
ELEV	ELEVATION
EX	EXISTING
IN	INCHES
LWD	LARGE WOODY DEBRIS
MH	MANHOLE
MHHW	MEAN HIGHER HIGH WATER
MLLW	MEAN LOWER LOW WATER (EL 0.0')
NTS	NOT TO SCALE
OHWM	ORDINARY HIGH WATER MARK
POT	PORT OF TACOMA
SPECS	SPECIFICATIONS
SF	SQUARE FEET
TESC	TEMPORARY EROSION AND SEDIMENTATION CONTROL
WAC	WASHINGTON ADMINISTRATIVE CODE
WDFW	WASHINGTON DEPARTMENT OF FISH AND WILDLIFE
WSDOT	WASHINGTON STATE DEPARTMENT OF TRANSPORTATION

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DRAWING LIST		
SHEET DESIGNATION	SHEET #	SHEET TITLE
G1	1	COVER SHEET
G2	2	KEY PLAN
G3	3	CONSTRAINTS AND SEQUENCING
G4	4	CONSTRAINTS AND SEQUENCING
C1	5	GENERAL AND TESC NOTES
C2	6	DEMO AND TESC - APM
C3	7	DEMO AND TESC - HUSKY
C4	8	DEMO AND TESC - SITCUM
C5	9	DEMO AND TESC - TOTE
C6	10	DEMO AND TESC - OCT
C7	11	DEMO PHOTO SHEET
C8	12	PLAN - APM
C9	13	PROFILE - APM
C10	14	PROFILE - APM
C11	15	PLAN - HUSKY
C12	16	PROFILE - HUSKY
C13	17	PLAN - SITCUM
C14	18	PROFILE - SITCUM
C15	19	PLAN - TOTE
C16	20	PROFILE - TOTE
C17	21	PLAN - OCT
C18	22	PROFILE - OCT
C19	23	PHOTO SHEET 1
C20	24	PHOTO SHEET 2
C21	25	PHOTO SHEET 3

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WADE VAN DEVEY
STATE OF WASHINGTON
45745
6/22/15
PROFESSIONAL ENGINEER REGISTERED

APPROVED: 9-8-15
DIRECTOR ENG. DATE

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PORT OF TACOMA
SHORELINE STABILIZATION
COVER SHEET

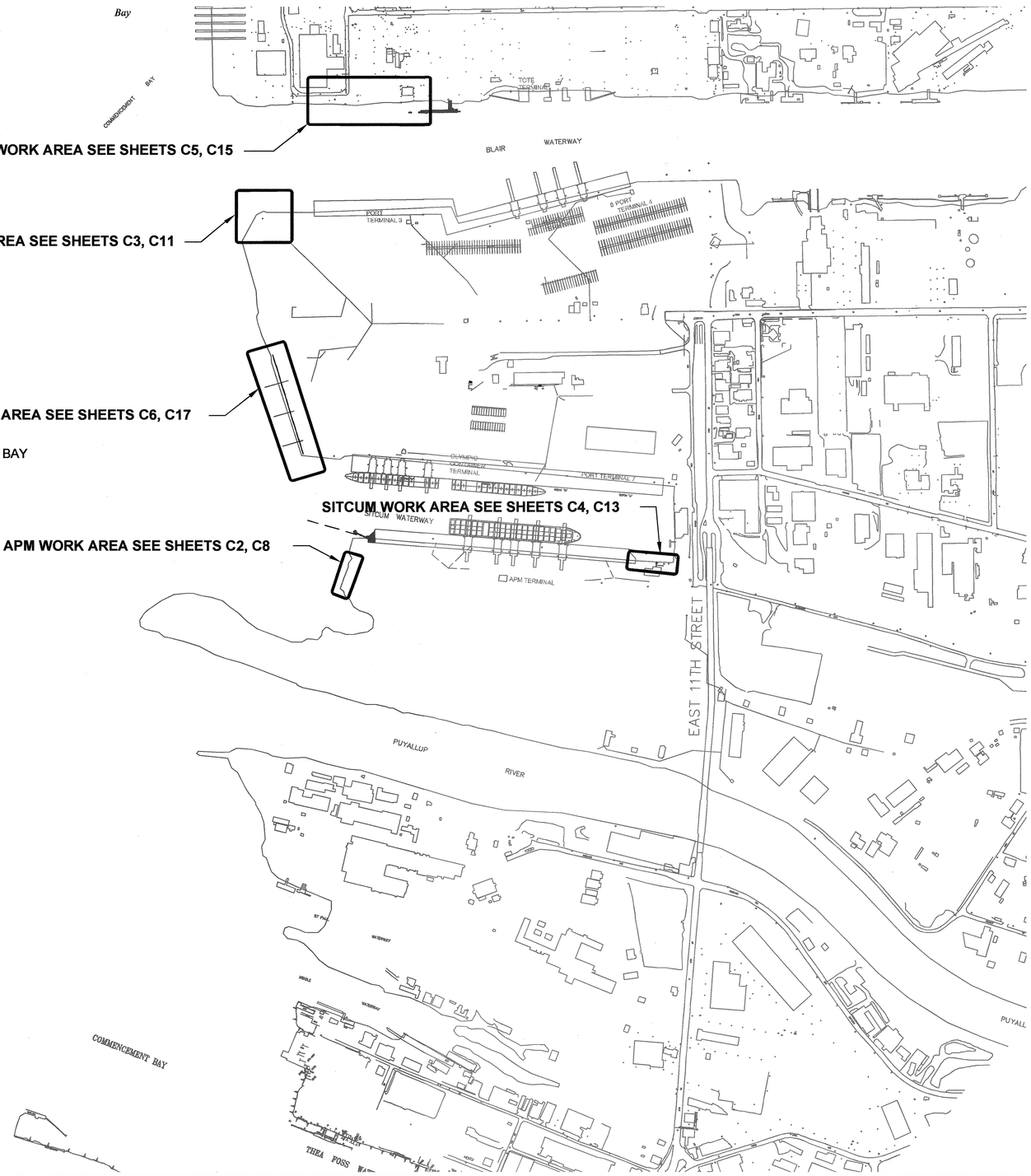
6531
G1
SHEET 1 OF 25

CONT/CONS: TOWNSHIP: 21 RANGE: 03 SECTION: 34
M. ID: DAT-HRZ: NAD83/07 VERT: MLLW
PHASE: FINAL PARCEL: – DRAWING SCALE: AS NOTED

BINDING EDGE

PORT OF TACOMA FILE: N:\Civil\113-\113151 PoT Bank Stabilization\Part 3 - KPFF Design\3.13 Drawings\113151-G1

BINDING EDGE



500' 0 500' 1000'
250' 750'
SCALE: 1"=500'

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PORT OF TACOMA
SHORELINE STABILIZATION
KEY PLAN

6531
G2
SHEET 2 OF 25

CONT/CONS:	TOWNSHIP: 21	RANGE: 03	SECTION: 34
M. ID:	DAT-HRZ: NAD83/07	VERT: MLLW	
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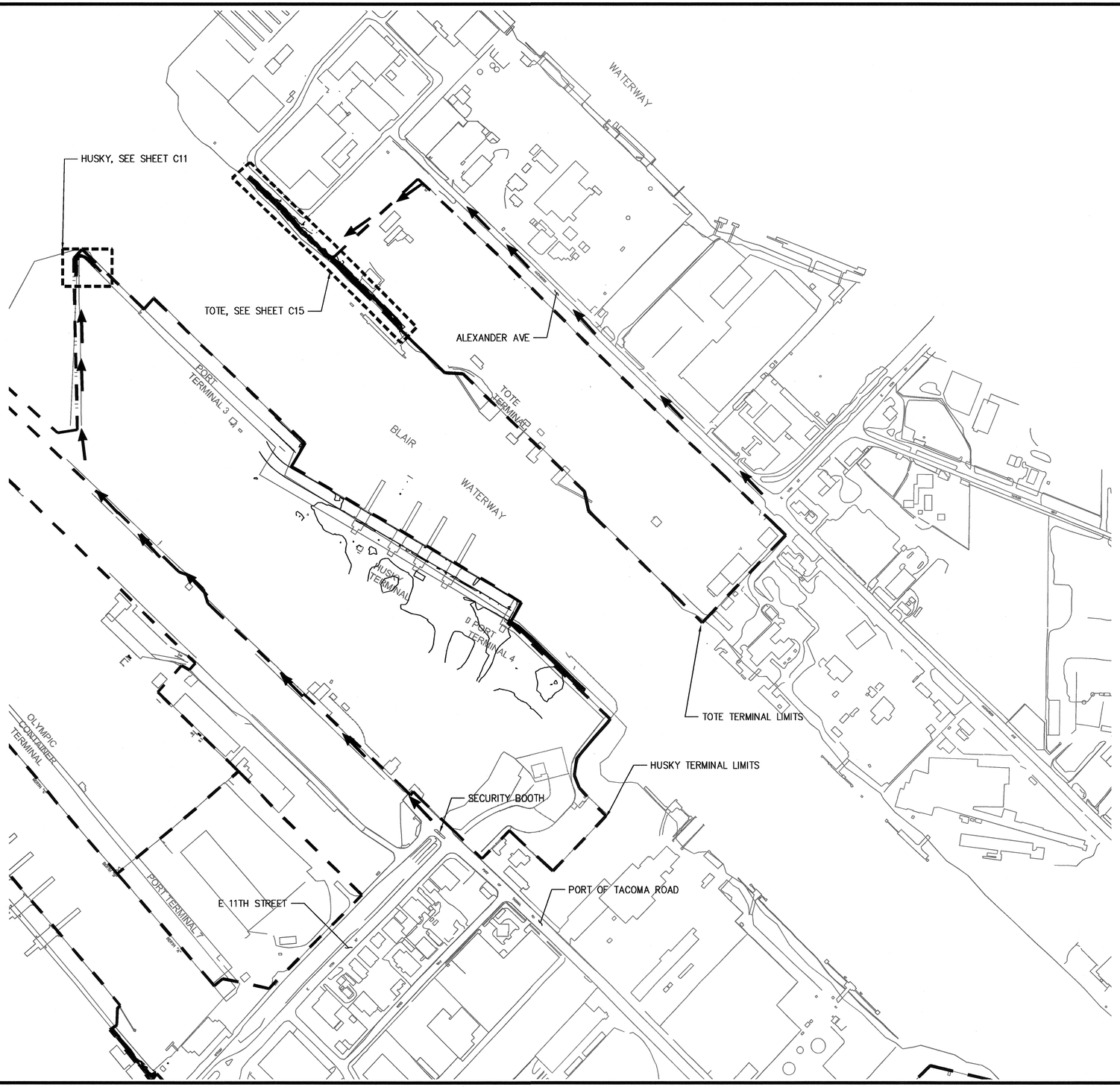

NOTES:

1. CONTRACTOR SHALL COORDINATE WORK ACTIVITY THOUGH THE PORT, INCLUDING SCHEDULING ALL WORK AND WORK CHANGES.
2. WORK SCHEDULE AT EACH SITE MUST BE COORDINATED WITH THE PORT, AND ARRANGED TO ACCOMPLISH CONSTRUCTION WORK DURING PERIOD OF LOW ACTIVITY AT THE SITE. CONTRACTOR SHALL MAKE A REASONABLE EFFORT TO ADAPT WORK SCHEDULE TO FIT PREFERRED WORK PERIODS IDENTIFIED BY THE PORT AND TENANTS.
3. CONTRACTOR SHALL MAINTAIN 12' UNOBSTRUCTED ACCESS AT ALL TIMES WITHIN TERMINAL OR PARKING DRIVE AISLE.
4. THE PORT AND TENANT MUST APPROVE A CONTRACTOR PROVIDED WORK PLAN ADDRESSING AT A MINIMUM, SCHEDULE ANTICIPATED SEQUENCE OF WORK, CONSTRUCTION ROUTES, ACTIVITIES, MATERIAL STORAGE AREAS, PRIOR TO BEGINNING WORK AT EACH SITE.
5. CONTRACTOR SHALL PROVIDE TEMPORARY TRAFFIC CONTROL BARRIERS TO PROTECT WORK AREAS FROM TERMINAL TRAFFIC.
6. TRANSPORTATION WORKER IDENTIFICATION CREDENTIALS (TWIC) IS REQUIRED FOR ANY PERSONNEL NEEDING UNESCORTED ACCESS TO SECURE AND RESTRICTED AREAS OF PORT FACILITIES SUBJECT TO 33 CFR 105, INCLUDING TRUCKERS, SURVEYORS, CONSTRUCTION PERSONNEL AND DELIVERY PERSONNEL.

300' 0 300' 600'
150' 450'
SCALE: 1"=300'

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PORT OF TACOMA
SHORELINE STABILIZATION
CONSTRAINTS AND SEQUENCING

6531
G3
SHEET 3 OF 25

CONT/CONS:	TOWNSHIP: 21	RANGE: 03	SECTION: 34
M. ID:	DAT-HRZ: NAD83/07	VERT: MLLW	
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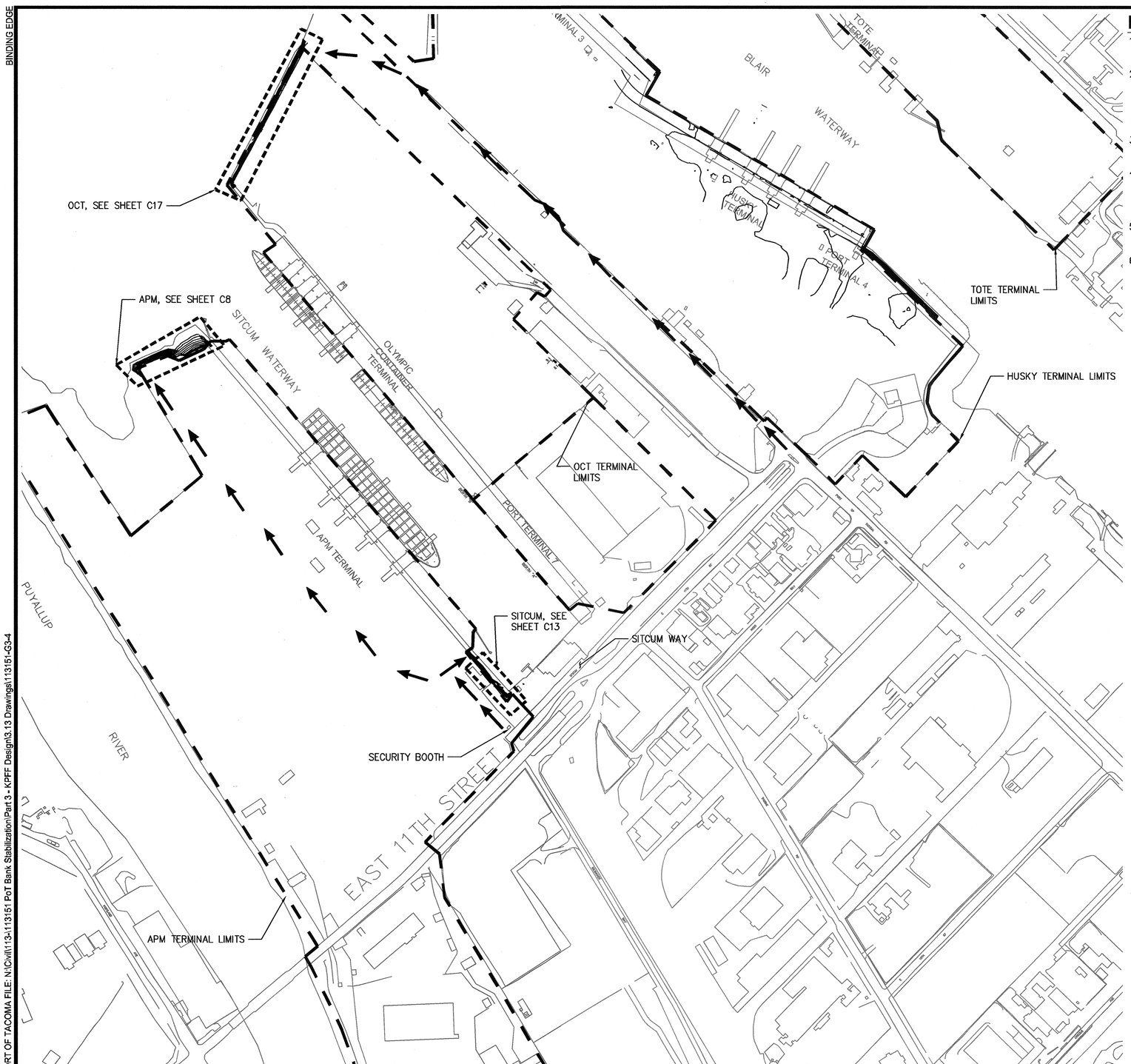

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150' 450'
SCALE: 1"=300'

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PORT OF TACOMA
SHORELINE STABILIZATION
CONSTRAINTS AND SEQUENCING

TOWNSHIP: 21	RANGE: G3	SECTION: 34	
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6531
G4
SHEET 4 OF 25

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PHASE: FINAL

BINDING EDGE

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BINDING EDGE

GENERAL NOTES:

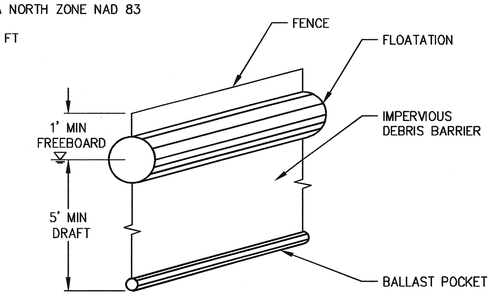
1. ALL WORK SHALL CONFORM TO THESE PLANS AND SPECIFICATIONS. ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE PROJECT PERMITS AND ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS PERTAINING TO DEMOLITION AND DISPOSAL.
2. CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A DETAILED WORK PLAN, INCLUDING, DEMOLITION PRIOR TO COMMENCING WORK, SEE SPECIFICATIONS.
3. THE CONTRACT DOCUMENTS AND SPECIFICATIONS REPRESENT THE SCOPE OF WORK. UNLESS OTHERWISE SHOWN THEY DO NOT INDICATE THE METHOD OF WORK. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND HE SHALL BE SOLELY RESPONSIBLE FOR ALL MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES.
4. THE CONTRACTOR SHALL KEEP ALL STREETS, TERMINAL AREAS, AND VEHICULAR TRAFFIC AREAS CLEAN.
5. CONTRACTOR IS RESPONSIBLE FOR ANY TRAFFIC CONTROLS REQUIRED DURING THE DURATION OF THIS PROJECT, SEE SPECIFICATIONS.
6. THE CONTRACTOR SHALL INSTALL AND MAINTAIN PERIMETER FENCING AS REQUIRED TO MAINTAIN SECURITY OF SITES.
7. 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 .
8. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO STRICTLY CONTAIN THE WORK WITHIN THE LIMITS SHOWN ON THE DRAWINGS, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. ANY DAMAGE TO UTILITIES, OTHER FACILITIES, OR EQUIPMENT DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE PROMPTLY REPAIRED AT HIS EXPENSE. THIS INCLUDES ITEMS OUTSIDE THE WORK AREA THAT ARE DAMAGED BY CONSTRUCTION ACTIVITIES DURING EXECUTION OF THIS CONTRACT.
9. ALL LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN HEREIN HAVE BEEN ESTABLISHED BY FIELD OBSERVATIONS OR OBTAINED FROM REVIEW OF AVAILABLE RECORDS AND SHOULD, THEREFORE, BE CONSIDERED APPROXIMATE ONLY AND NOT NECESSARILY COMPLETE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INDEPENDENTLY VERIFY THE ACCURACY OF ALL UTILITY LOCATIONS SHOWN AND TO FURTHER DISCOVER AND AVOID OTHER UTILITIES NOT SHOWN HEREIN WHICH MAY BE AFFECTED BY THE IMPLEMENTATION OF THIS PLAN. THE CONTRACTOR SHALL BRING ANY CONFLICTS BETWEEN EXISTING UTILITIES AND NEW WORK TO THE ENGINEERS ATTENTION.
10. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO COMMENCING WORK IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS.
11. EXTENT OF DEBRIS REMOVAL AND CLEAR AND GRUB VEGETATION IS APPROXIMATE AND IS TO BE VERIFIED BY THE ENGINEER PRIOR TO COMPLETION OF WORK. WOOD DEBRIS LARGER THAN 12"ø WITHIN WORK CLEARING LIMITS MUST REMAIN IN PLACE. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
12. EXTENT OF SLOPE PROTECTION MAINTENANCE IS APPROXIMATE AND IS TO BE VERIFIED BY THE ENGINEER PRIOR TO COMPLETION OF WORK. SEE SHEETS C8 AND C22 FOR ADDITIONAL INFORMATION.
13. THE INTENT OF THE DEMOLITION PLANS AND PHOTOS ARE TO SHOW GENERAL SCOPE OF ITEMS TO BE DEMOLISHED. THE PHOTOS HIGHLIGHT ITEMS IN THE FOREGROUND TO BE DEMOLISHED. ITEMS IN THE BACKGROUND THAT ARE TO BE DEMOLISHED ARE NOT NECESSARILY IDENTIFIED. THE CONTRACTOR SHALL VISIT THE SITE AND SURVEY THE SCOPE OF DEMOLITION PRIOR TO SUBMITTING A BID.
14. PRIOR TO SITE DEMOLITION, THE CONTRACTOR SHALL MARK ITEMS TO BE PROTECTED WITH TAPE OR MARKING PAINT. SITE DEMOLITION SHALL NOT PROCEED UNTIL MARKING IS REVIEWED AND APPROVED BY THE ENGINEER.
15. PRIOR TO COMMENCING DEMOLITION ACTIVITIES CONTRACTOR SHALL IMPLEMENT TEMPORARY EROSION AND SEDIMENTATION CONTROLS. NO DEMOLITION MATERIALS OR DEBRIS SHALL BE ALLOWED TO ENTER THE WATERWAY, SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

TEMPORARY EROSION AND SEDIMENT CONTROL (TESC) GENERAL NOTES:

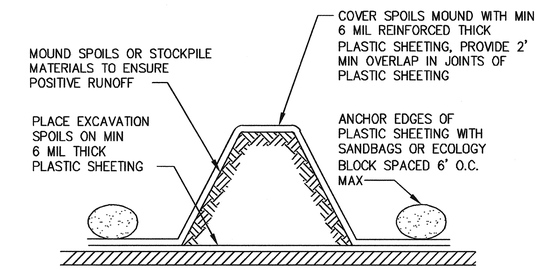
1. THE IMPLEMENTATION OF THESE PLANS AND THE CONSTRUCTION, REGULAR REVIEW, MAINTENANCE, REPLACEMENT, AND CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN (SWPPP), AND UPGRADING THESE FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR IN ACCORDANCE WITH PROJECT SPECIFICATIONS AND PLANS UNTIL ALL CONSTRUCTION IS APPROVED AND ACCEPTED BY THE ENGINEER.
2. THE TESC FACILITIES SHOWN ON THIS PLAN SHALL BE CONSTRUCTED PRIOR TO ALL CLEARING AND DEMOLITION SO AS TO ENSURE THAT TRANSPORT OF SEDIMENT TO SURFACE WATERS, DRAINAGE SYSTEMS, AND ADJACENT PROPERTIES IS MINIMIZED. THE TYPICAL WET SEASON RUNS FROM OCTOBER 1 THROUGH APRIL 30, AND THE DRY SEASON FROM MAY 1 THROUGH SEPTEMBER 30.
3. THE TESC FACILITIES SHALL BE INSPECTED DAILY BY THE TESC SUPERVISOR AND MAINTAINED TO ENSURE CONTINUED PROPER FUNCTIONING IN ACCORDANCE WITH THE SPECIFICATIONS. WRITTEN RECORDS SHALL BE KEPT OF TESC INSPECTIONS WEEKLY DURING THE WET SEASON AND MONTHLY DURING THE DRY SEASON.
4. CONTRACTOR SHALL MAINTAIN EROSION CONTROL MEASURES SHALL BE MAINTAINED AT ALL TIMES TO THE REQUIREMENTS OF THE PERMITS, SPECIFICATIONS AND MINIMUM REQUIREMENTS SHOWN IN PLANS.
5. THE TESC MEASURES SHOWN ON THESE PLANS ARE MINIMUM REQUIREMENTS. SHOULD TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES, AS SHOWN ON THE PLANS BECOME INADEQUATE, THE CONTRACTOR SHALL INSTALL BMPS AND/OR FACILITIES AS NECESSARY TO PROTECT ADJACENT PROPERTIES, WATERBODIES, CITY OF TACOMA DRAINAGE SYSTEM, AND EXISTING PORT DRAINAGE SYSTEMS MEETING THE APPROVAL OF THE ENGINEER.
6. AS A GENERAL RULE, ANY AREAS OF EXPOSED SOILS, INCLUDING EMBANKMENTS, THAT WILL NOT BE DISTURBED FOR TWO DAYS DURING THE WET SEASON OR SEVEN DAYS DURING THE DRY SEASON SHALL BE IMMEDIATELY STABILIZED WITH THE APPROVED TESC BMP METHODS.
7. INLET PROTECTION SHALL BE INSPECTED AFTER EACH STORM EVENT AND CLEANED OR REPLACED WHEN ⅓ FULL.
8. THE CONTRACTOR SHALL PROTECT STOCKPILE AND EXCAVATION AREAS FROM THE RELEASE OF SEDIMENT. STOCKPILES SHALL BE COVERED AT ALL ITEMS WHILE NOT IN USE TO KEEP THE STORED MATERIAL DRY, AS SHOWN IN DETAIL.
9. ALL NON-SALVAGED MATERIAL REMOVED FROM THE SITE SHALL BE PLACED OR DISPOSED OF AT A PERMITTED SITE. CONTRACTOR SHALL OBTAIN CHARACTERIZATION DOCUMENTATION FROM THE ENGINEER FOR ALL MATERIAL PRIOR TO HAUL AND DISPOSAL.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FULL COMPLIANCE WITH THE WASHINGTON STATE DROPPING LOAD OR OTHER MATERIALS COVERING LAWS (RCW 46.51.655.3/4).
11. PAVED AREAS SHALL BE SWEPT AS NECESSARY TO PREVENT SEDIMENT AND DUST TRACKING ONTO THE PAVED AREAS.
12. PREVENTATIVE MEASURES TO MINIMIZE THE WIND TRANSPORT OF SOIL SHALL BE TAKEN WHEN SEDIMENT TRANSPORTED BY THE WIND IS LIKELY TO BE DEPOSITED IN DRAINAGE WAYS, WATER RESOURCES, OR NON-PORT PROPERTY.
13. ALL TESC MEASURES SHALL BE REMOVED AND DISPOSED OF AT AN APPROVED SITE UPON PROJECT COMPLETION.

DATUM INFORMATION:

1. HORIZONTAL DATUM: WA NORTH ZONE NAD 83
2. VERTICAL DATUM: MLLW FT



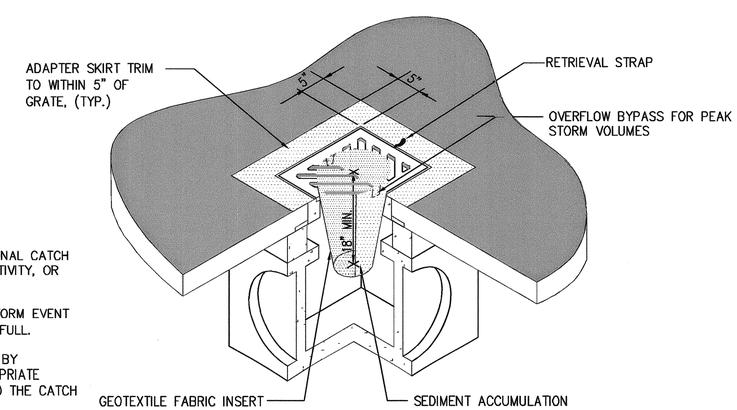
1 / C2 **SILT CURTAIN**
NTS



2 / C2 **STOCKPILE PROTECTION DETAIL**
NTS

NOTES:

1. INSERT SHALL BE INSTALLED IN ALL OPERATIONAL CATCH BASINS PRIOR TO CLEARING AND GRADING ACTIVITY, OR UPON PLACEMENT OF A NEW CATCH BASIN.
2. FILTERS SHALL BE INSPECTED AFTER EACH STORM EVENT AND CLEANED OR REPLACED WHEN IT IS 1/3 FULL.
3. SEDIMENT REMOVAL SHALL BE ACCOMPLISHED BY REMOVING THE INSERT, EMPTYING INTO APPROPRIATE DISPOSAL LOCATION, AND REINSERTING IT INTO THE CATCH BASIN.



3 / C2 **INLET PROTECTION DETAIL**
NTS

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WADE MINCHEY STATE OF WASHINGTON 22415 REGISTERED PROFESSIONAL ENGINEER 6/22/15

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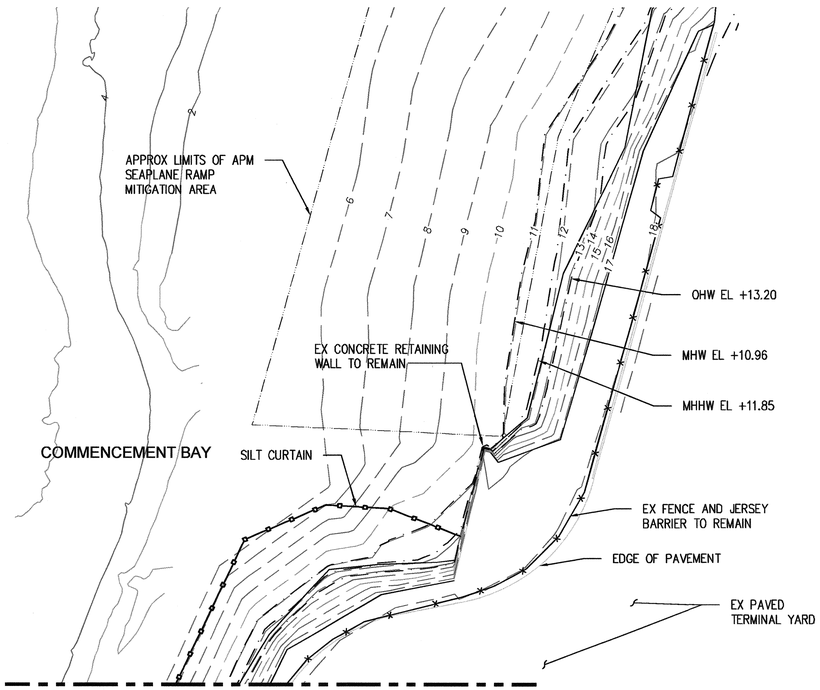
PORT OF TACOMA
SHORELINE STABILIZATION
GENERAL AND TESC NOTES

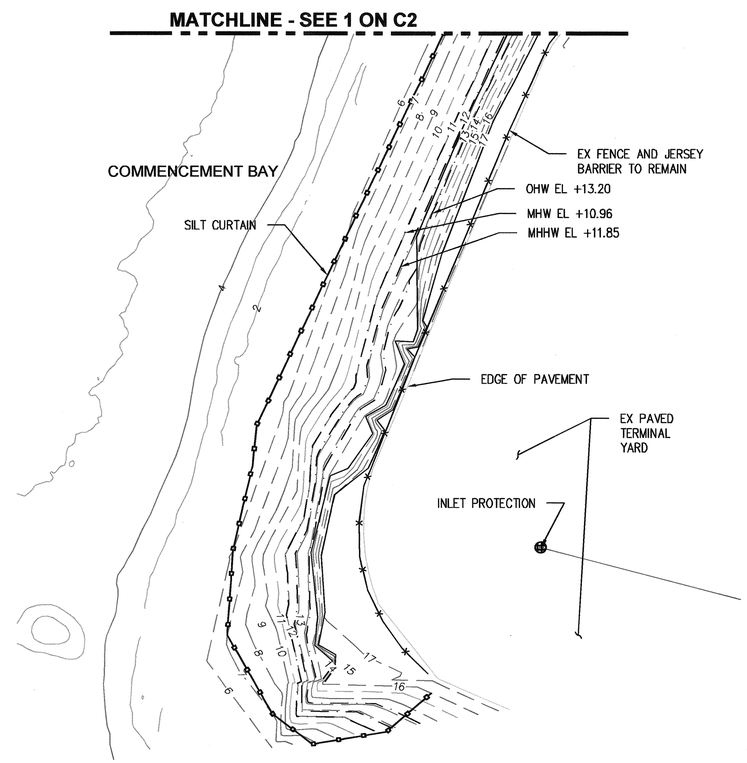
6531
C1
SHEET 5 OF 25

CONT/CONS:	TOWNSHIP: 21	RANGE: 03	SECTION: 34
M. ID:	DAT-HRZ: NAD83/07	VERT: MLLW	
PHASE: FINAL	PARCEL: –	DRAWING SCALE: AS NOTED	

BINDING EDGE



1 C2 **PLAN**
SCALE: 1"=20'



2 C2 **PLAN**
SCALE: 1"=20'

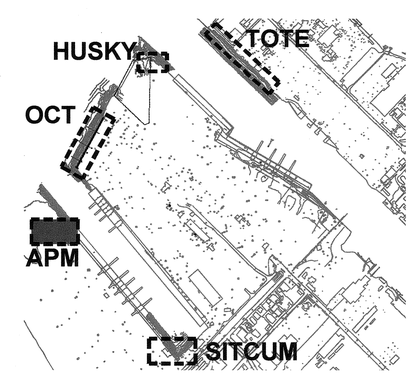
LEGEND:

- EXISTING BUILDING
- EXISTING OVERWATER STRUCTURE
- SILT CURTAIN (1 / C1)
- EXISTING GRADE, MINOR (KPFF SURVEY, 2013)
- EXISTING GRADE, MAJOR (KPFF SURVEY, 2013)
- EXISTING GRADE, MINOR (POT BATHEMETRY)
- EXISTING GRADE, MAJOR (POT BATHEMETRY)
- OHW/MHW/MHHW LINE
- EXISTING FENCE
- EXISTING EDGE OF PAVEMENT

NOTES:

1. ORDINARY HIGH WATER IS APPROXIMATE AND IS BASED ON FIELD EXAMINATION.

20' 0 20' 40'
10' 30'
SCALE: 1"=20'



KEY PLAN
NTS

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PORT OF TACOMA
SHORELINE STABILIZATION
DEMO AND TESC - APM

6531
C2
SHEET 6 OF 25

CONT/CONS:	TOWNSHIP: 21	RANGE: 03	SECTION: 34
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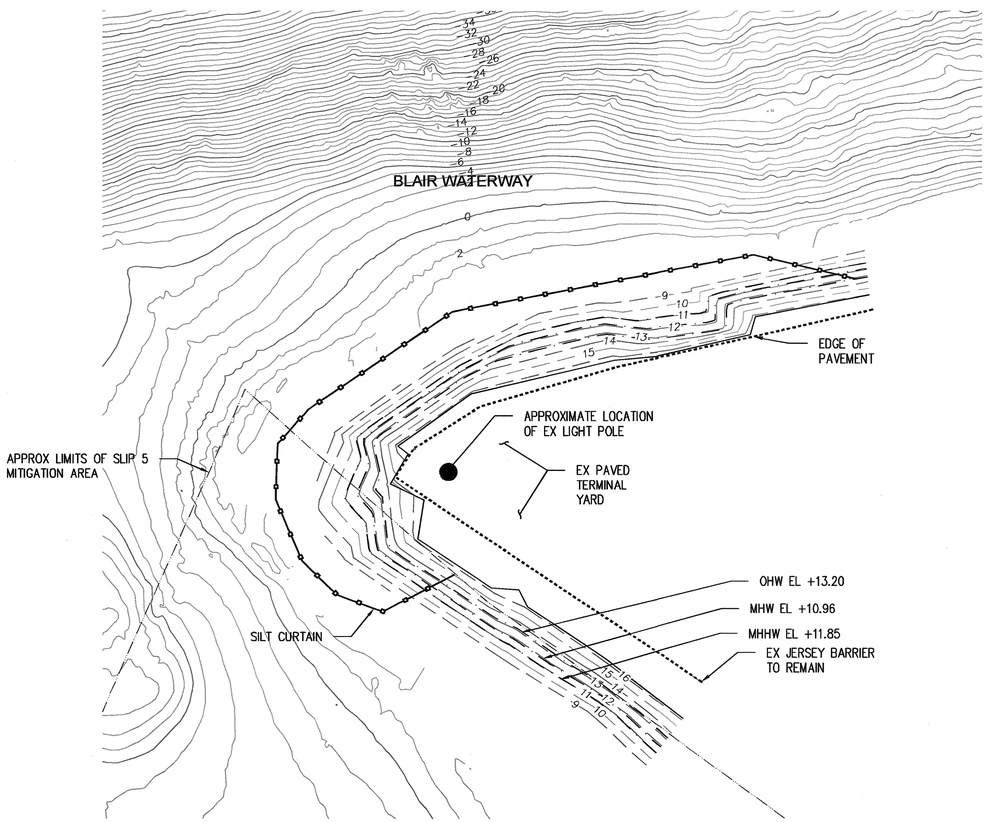


1 / C3 **PLAN**
SCALE: 1"=20'

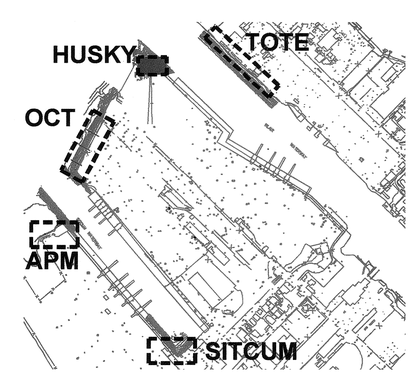
LEGEND:

- EXISTING BUILDING
- EXISTING OVERWATER STRUCTURE
- SILT CURTAIN (1 / C1)
- EXISTING GRADE, MINOR (KPFF SURVEY, 2013)
- EXISTING GRADE, MAJOR (KPFF SURVEY, 2013)
- EXISTING GRADE, MINOR (POT BATHEMETRY)
- EXISTING GRADE, MAJOR (POT BATHEMETRY)
- OHW/MHW/MHHW LINE
- EXISTING FENCE
- EXISTING EDGE OF PAVEMENT

NOTES:

1. ORDINARY HIGH WATER IS APPROXIMATE AND IS BASED ON FIELD EXAMINATION.

20' 0 20' 40'
10' 30'
SCALE: 1"=20'



KEY PLAN
NTS

Port of Tacoma
P.O. BOX 1837 TACOMA, WA 98401 (253)383-5841

kpff
2407 North 31st Street, Suite 100
Tacoma, Washington 98407
(253) 396-0150 Fax (253) 396-0162

MARK:	REVISION:	BY:	APPR:	DATE:

WADE KINGSLEY SURVEY
STATE OF WASHINGTON
6/22/15
REGISTERED PROFESSIONAL ENGINEER

APPROVED: 9-8-15
DIRECTOR ENG. DATE

SWK	6/22/2015		
CHECKED BY	DATE		
RGC	6/22/2015		
PROJ. ENGR	DATE		
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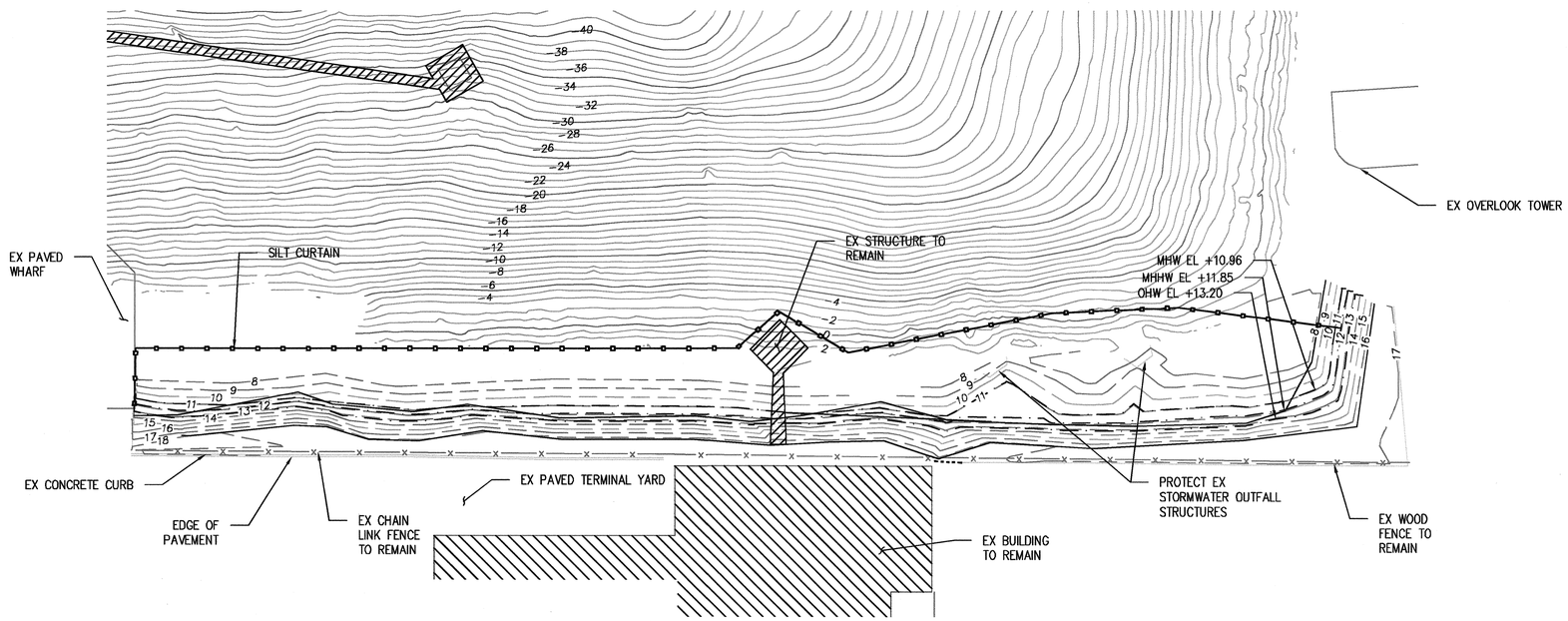
PORT OF TACOMA
SHORELINE STABILIZATION
DEMO AND TESC - HUSKY

6531
C3
SHEET 7 OF 25

CONT/CONS:	TOWNSHIP: 21	RANGE: 03	SECTION: 34
M. ID:	DAT-HRZ: NAD83/07	VERT: MLLW	
PHASE: FINAL	PARCEL: 2275200810	DRAWING SCALE: AS NOTED	

BINDING EDGE



1 / C4 **PLAN**

SCALE: 1"=20'

LEGEND:

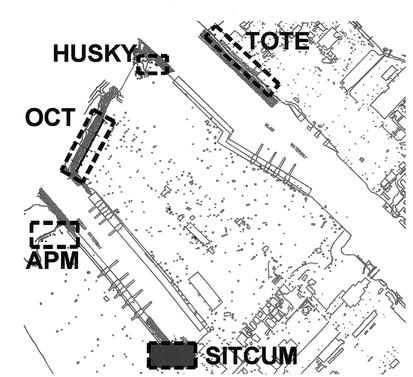
- EXISTING BUILDING
- EXISTING OVERWATER STRUCTURE
- SILT CURTAIN (1 / C1)
- EXISTING GRADE, MINOR (KPFF SURVEY, 2013)
- EXISTING GRADE, MAJOR (KPFF SURVEY, 2013)
- EXISTING GRADE, MINOR (POT BATHEMETRY)
- EXISTING GRADE, MAJOR (POT BATHEMETRY)
- OHW/MHW/MHHW LINE
- EXISTING FENCE
- EXISTING EDGE OF PAVEMENT

NOTES:

1. ORDINARY HIGH WATER IS APPROXIMATE AND IS BASED ON FIELD EXAMINATION.

20' 0 20' 40'
10' 30'

SCALE: 1"=20'



KEY PLAN

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WADE MINCHOLEY STATE OF WASHINGTON 6/22/15 REGISTERED PROFESSIONAL ENGINEER

APPROVED: 9-8-15
DIRECTOR ENG. DATE

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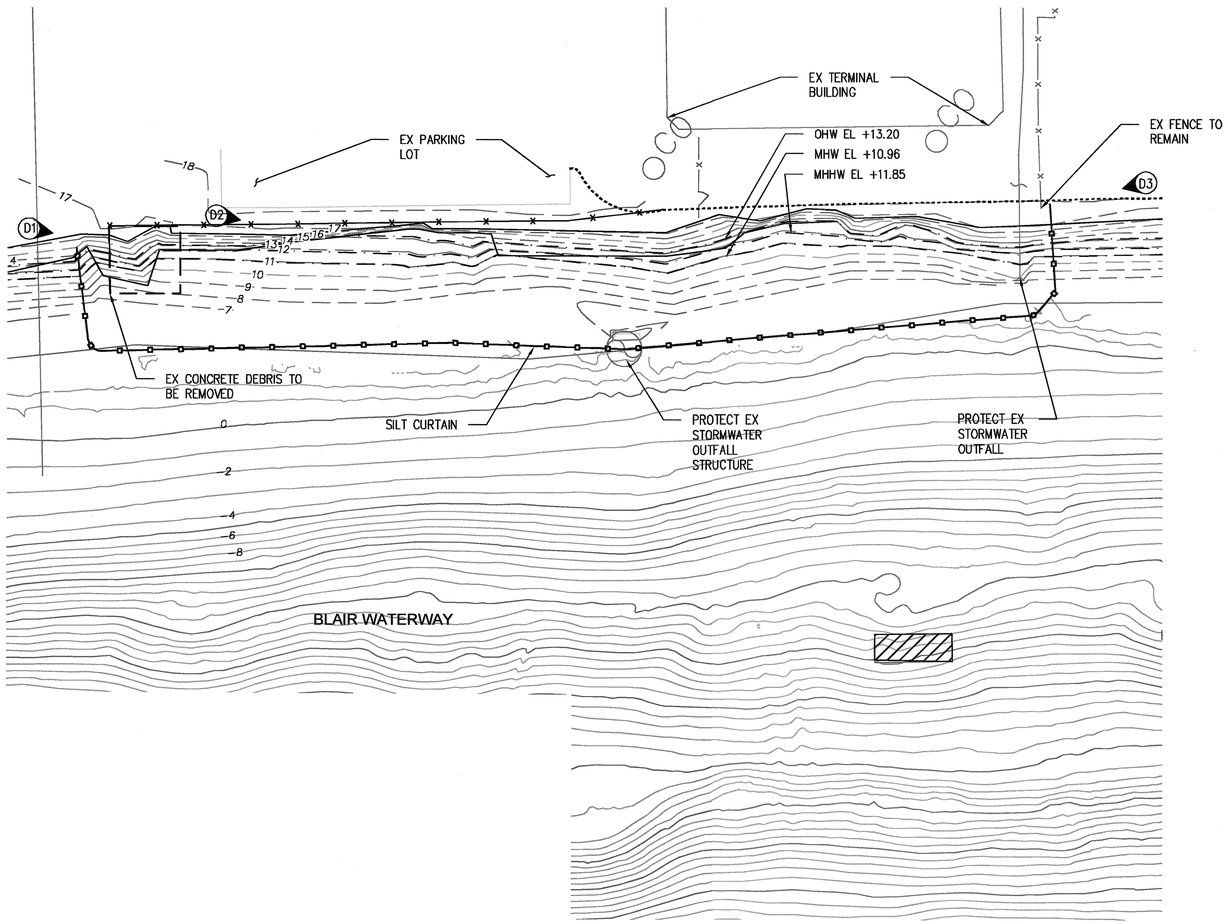
PORT OF TACOMA
SHORELINE STABILIZATION
DEMO AND TESC - SITCUM

CONT/CONS:	TOWNSHIP: 21	RANGE: 03	SECTION: 34
M. ID:	DAT-HRZ: NAD83/07	VERT: MLLW	
PHASE: FINAL	PARCEL: 8950000061	DRAWING SCALE: AS NOTED	

6531
C4
SHEET 8 OF 25

PORT OF TACOMA FILE: N:\Civil\113-\113151 PoT Bank Stabilization\Part 3 - KPFF Design\3.13 Drawings\113151-C2-3-4-5-6

BINDING EDGE



1 / C5 **PLAN**
SCALE: 1"=20'

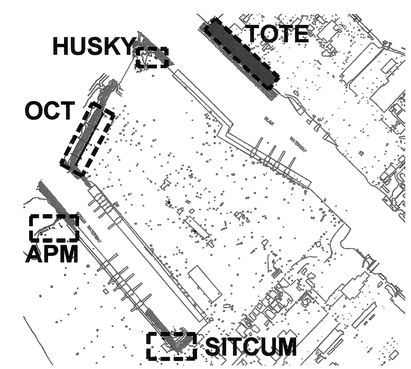
LEGEND:

- EXISTING BUILDING
- EXISTING OVERWATER STRUCTURE
- SILT CURTAIN (1 / C1)
- EXISTING GRADE, MINOR (KPFF SURVEY, 2013)
- EXISTING GRADE, MAJOR (KPFF SURVEY, 2013)
- EXISTING GRADE, MINOR (POT BATHEMETRY)
- EXISTING GRADE, MAJOR (POT BATHEMETRY)
- OHW/MHW/MHHW LINE
- EXISTING FENCE
- EXISTING EDGE OF PAVEMENT

NOTES:

1. ORDINARY HIGH WATER IS APPROXIMATE AND IS BASED ON FIELD EXAMINATION.

20' 0 20' 40'
10' 30'
SCALE: 1"=20'



KEY PLAN
NTS

Port of Tacoma
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kpff
2407 North 31st Street, Suite 100
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MARK:	REVISION:	BY:	APPR:	DATE:

WADE MINCHEY STATE OF WASHINGTON 22315 REGISTERED PROFESSIONAL ENGINEER
6/22/15

APPROVED: 6-22-15
DIRECTOR ENG.

SWK	6/22/2015		
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PROJ. ENGR	DATE		
PRINTED BY:	rchandler Jun 23, 2015		
PORT ADDRESS:	ONE SITCUM PLAZA, TACOMA, WA 98401-1837		

PORT OF TACOMA
SHORELINE STABILIZATION
DEMO AND TESC - TOTE

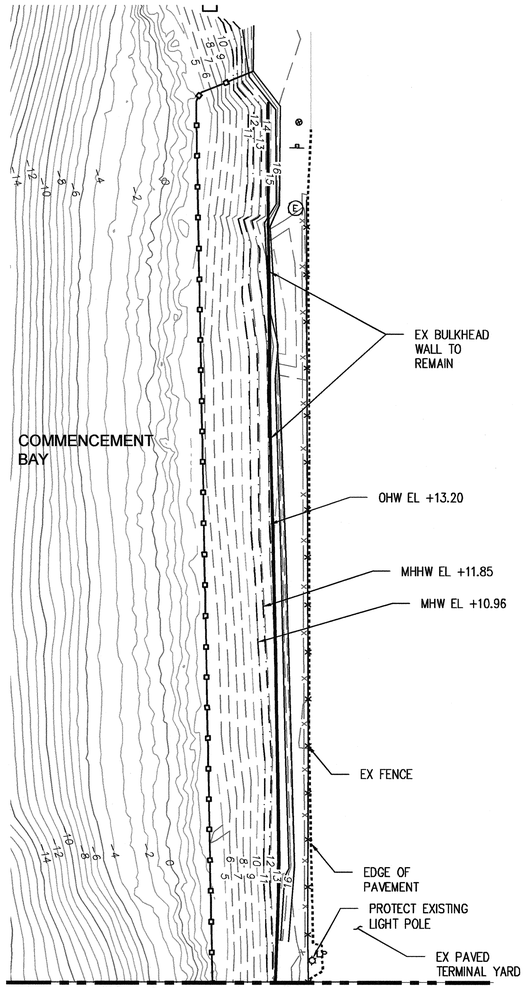
TOWNSHIP: 21	RANGE: 03	SECTION: 34	
DAT-HRZ: NAD83/07	VERT: MLLW		
PARCEL: 5000350011	DRAWING SCALE: AS NOTED		

6531
C5
SHEET 9 OF 25

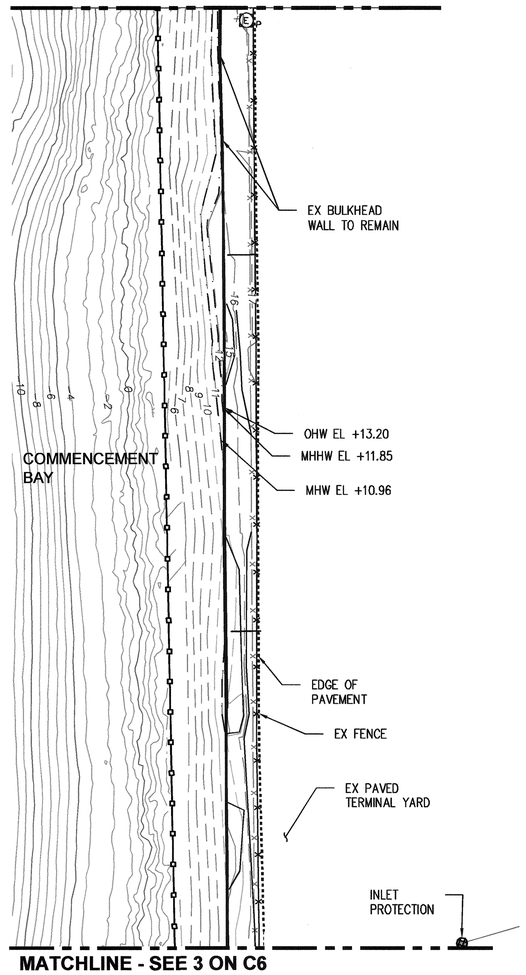
CONT/CONS:
M. ID:
PHASE: FINAL

PORT OF TACOMA FILE: N:\Civil\113-113151 PoT Bank Stabilization\Part 3 - KPFF Design\3.13 Drawings\113151-C2-3-4-5-6

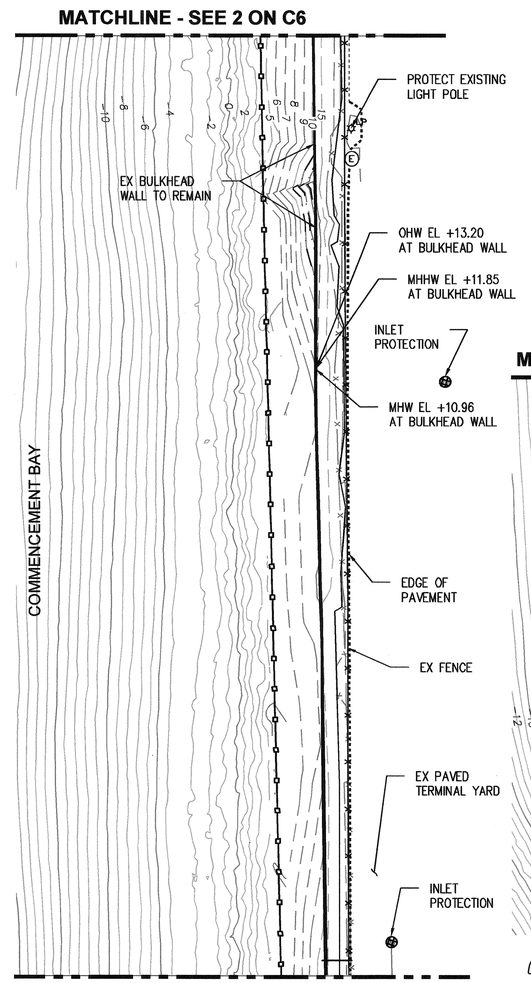
BINDING EDGE



1 C6 **PLAN**
SCALE: 1"=20'



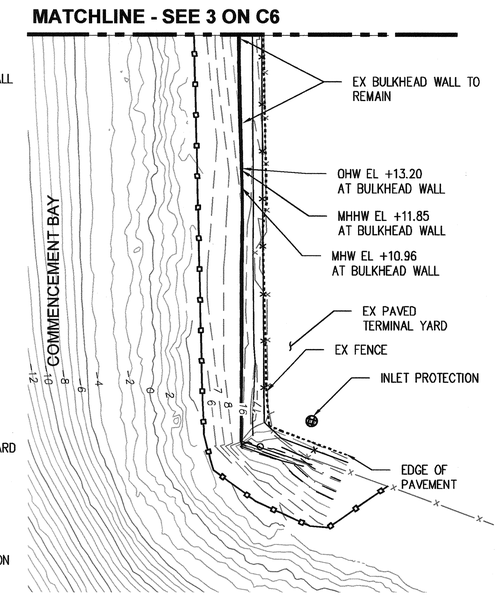
2 C6 **PLAN**
SCALE: 1"=20'



3 C6 **PLAN**
SCALE: 1"=20'

LEGEND:

- EXISTING BUILDING
- EXISTING OVERWATER STRUCTURE
- SILT CURTAIN (1 / C1)
- EXISTING GRADE, MINOR (KPFF SURVEY, 2013)
- EXISTING GRADE, MAJOR (KPFF SURVEY, 2013)
- EXISTING GRADE, MINOR (POT BATHEMETRY)
- EXISTING GRADE, MAJOR (POT BATHEMETRY)
- OHW/MHW/MHHW LINE
- EXISTING FENCE
- EXISTING EDGE OF PAVEMENT

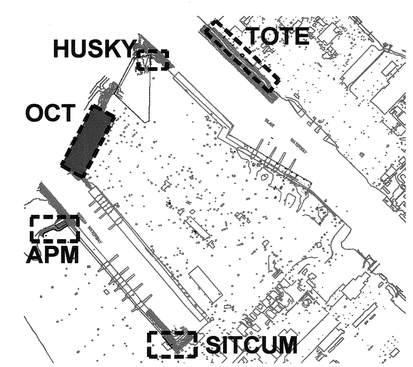


4 C6 **PLAN**
SCALE: 1"=20'

NOTES:

1. ORDINARY HIGH WATER IS APPROXIMATE AND IS BASED ON FIELD EXAMINATION.

20' 0 20' 40'
10' 30'
SCALE: 1"=20'



KEY PLAN
NTS

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P.O. BOX 1837 TACOMA, WA 98401 (253)383-5841

kpff
2407 North 31st Street, Suite 100
Tacoma, Washington 98407
(253) 396-0150 Fax (253) 396-0162

MARK:	REVISION:	BY:	APPR:	DATE:

WADE KINGSLEY ENGINEER REGISTERED PROFESSIONAL STATE OF WASHINGTON 22275 6/22/15

APPROVED: 9-8-15
DIRECTOR ENG. DATE

SMK 6/22/2015
CHECKED BY DATE
RGC 6/22/2015
PROJ. ENGR DATE
PRINTED BY: rchandler Jun 23, 2015
PORT ADDRESS: ONE SITCUM PLAZA
TACOMA, WA 98401-1837

PORT OF TACOMA
SHORELINE STABILIZATION
DEMO AND TESC - OCT

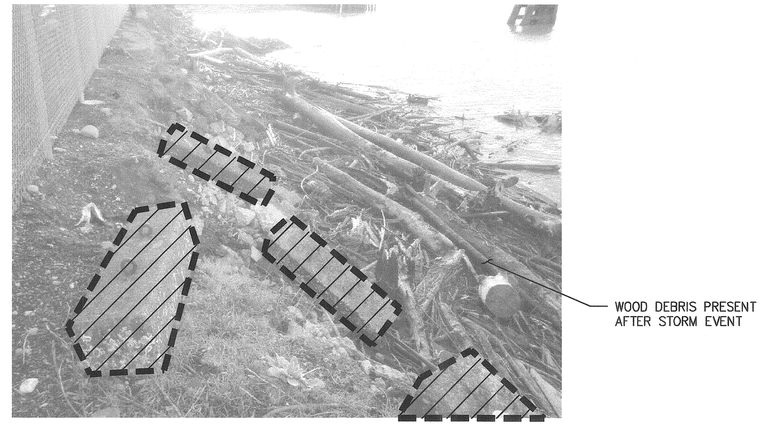
6531
C6
SHEET 10 OF 25

CONT/CONS:	TOWNSHIP: 21	RANGE: 03	SECTION: 34
M. ID:	DAT-HRZ: NAD83/07	VERT: MLLW	
PHASE: FINAL	PARCEL: 2275200633	DRAWING SCALE: AS NOTED	

PORT OF TACOMA FILE: N:\Civil\113-\113151 PoT Bank Stabilization\Part 3 - KPFF Design\3.13 Drawings\113151-C2-3-4-5-6

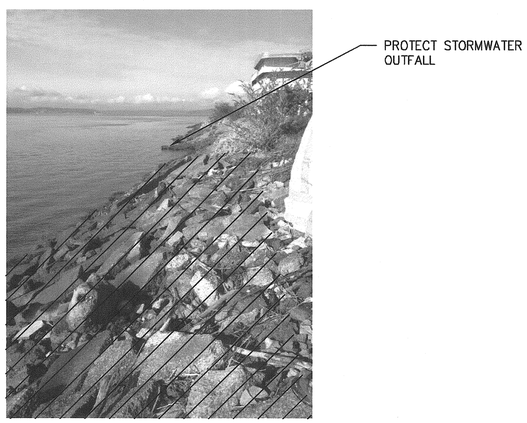
D1 PHOTO

-



D2 PHOTO

-



D3 PHOTO

-

NOTES:

1. DEMOLITION BOUNDARY ILLUSTRATES APPROXIMATE EXTENTS OF ABOVE GROUND DEMOLITION AND DEBRIS REMOVAL. DEMOLITION AND DEBRIS REMOVAL INCLUDES MATERIAL ABOVE AND BELOW OHW.
2. THE INTENT OF THE DEMOLITION PLAN AND PHOTOS ARE TO SHOW GENERAL SCOPE OF ITEMS TO BE DEMOLISHED. THE PHOTOS HIGHLIGHT ITEMS IN THE FOREGROUND TO BE DEMOLISHED. ITEMS IN THE BACKGROUND THAT ARE TO BE DEMOLISHED ARE NOT NECESSARILY IDENTIFIED.

LEGEND:

DEMOLITION BOUNDARY (SEE NOTE 1)

DEBRIS REMOVAL

Port of Tacoma
P.O. BOX 1837 TACOMA, WA 98401 (253)383-5841

kpff
2407 North 31st Street, Suite 100
Tacoma, Washington 98407
(253) 396-0120 Fax (253) 396-0162

MARK:	REVISION:	BY:	APPR:	DATE:

WADE KINCHELOE
STATE OF WASHINGTON
45715
6/22/15
REGISTERED PROFESSIONAL ENGINEER

SWK 6/22/2015
CHECKED BY DATE
RGC 6/22/2015
PROJ. ENGR DATE

APPROVED:
9-8-15
DIRECTOR ENG. DATE

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TACOMA, WA 98401-1837

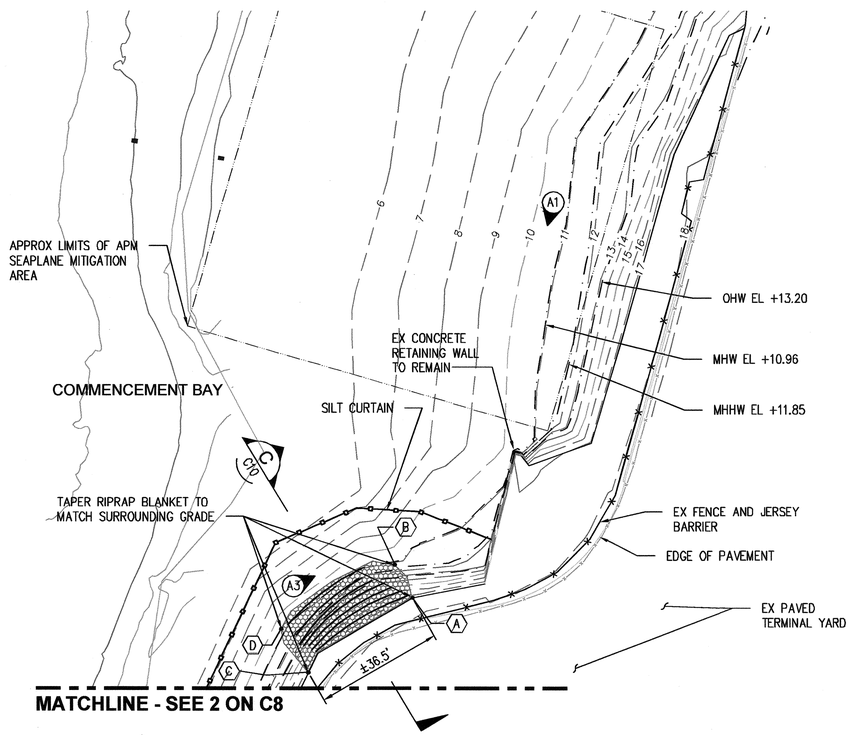
PORT OF TACOMA
SHORELINE STABILIZATION
DEMO PHOTO SHEET

6531
C7
SHEET 11 OF 25

CONT/CONS:	TOWNSHIP: 21	RANGE: 03	SECTION: 34
M. ID:	DAT-HRZ: NAD83/07	VERT: MLLW	
PHASE: FINAL	PARCEL: 8950200404	DRAWING SCALE: AS NOTED	

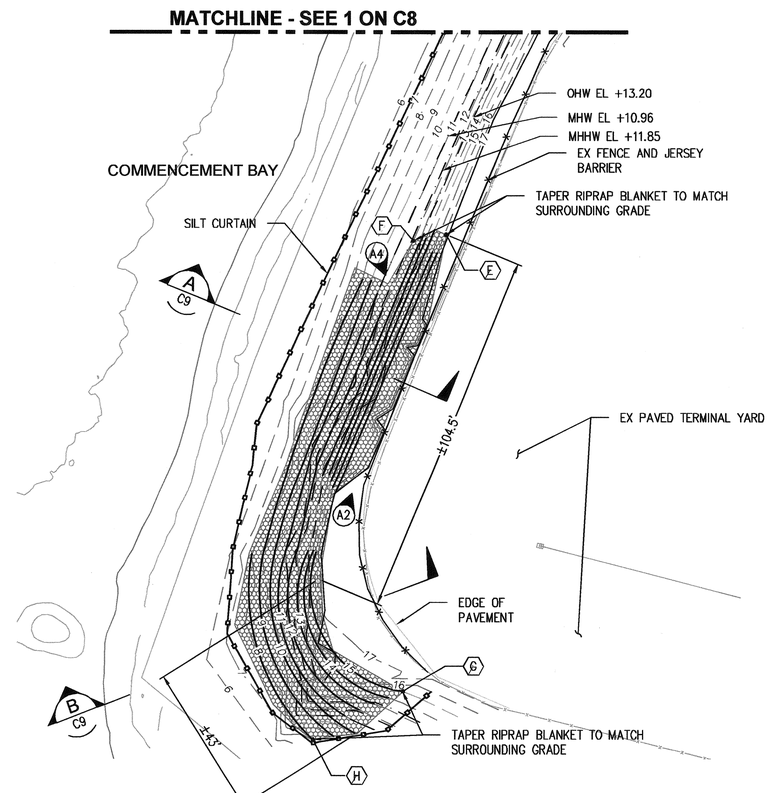
BINDING EDGE

PORT OF TACOMA FILE: N:\Civil\113-\113151 PoT Bank Stabilization\Part 3 - KPFF Design\3.13 Drawings\113151-C7



1 C8 **PLAN**

SCALE: 1"=20'



2 C8 **PLAN**

SCALE: 1"=20'

LEGEND:

- EXISTING BUILDING
- EXISTING OVERWATER STRUCTURE
- SILT CURTAIN
- PROPOSED GRADING
- RIPRAP RESTORATION
- EXISTING GRADE, MINOR (KPFF SURVEY, 2013)
- EXISTING GRADE, MAJOR (KPFF SURVEY, 2013)
- EXISTING GRADE, MINOR (POT BATHEMETRY)
- EXISTING GRADE, MAJOR (POT BATHEMETRY)
- OHW/MHW/MHHW LINE
- EXISTING FENCE
- EXISTING EDGE OF PAVEMENT
- PHOTO LOCATION

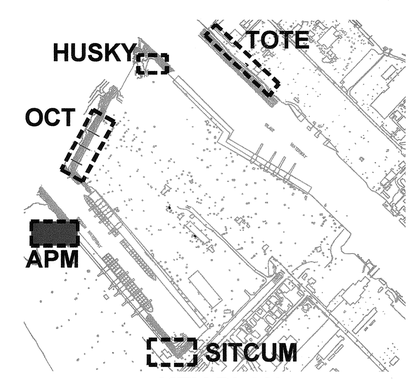
NOTES:

1. CONTRACTOR SHALL FIELD MARK LIMITS OF RIPRAP REPLACEMENT A MINIMUM OF 7 DAYS PRIOR TO BEGINNING WORK, AND NOTIFY ENGINEER WHEN FIELD MARKING IS COMPLETE. ENGINEER SHALL REVIEW AND VERIFY FIELD MARKINGS WITHIN 4 DAYS OF NOTIFICATION.

APM HORIZONTAL CONTROL TABLE

	NORTHING	EASTING
A	712106	1163445
B	712006	1163247
C	712112	1163409
D	712126	1163412
E	712089	1163347
F	712094	1163339
G	712006	1163247
H	712014	1163219

20' 0 20' 40'
10' 30'
SCALE: 1"=20'



KEY PLAN

NTS

Port of Tacoma
P.O. BOX 1837 TACOMA, WA 98401 (253)383-5841

kpff
2407 North 31st Street, Suite 100
Tacoma, Washington 98407
(253) 396-0150 Fax (253) 396-0162

MARK:	REVISION:	BY:	APPR:	DATE:

WADE MINCHEY STATE OF WASHINGTON 45761 REGISTERED PROFESSIONAL ENGINEER 6/22/15

SWK	6/22/2015	
CHECKED BY	DATE	
RGC	6/22/2015	
PROJ. ENGR	DATE	

APPROVED: 4-8-15
DIRECTOR ENG. DATE

PRINTED BY: rchandler Jun 23, 2015
PORT ADDRESS: ONE SITCUM PLAZA
TACOMA, WA 98401-1837

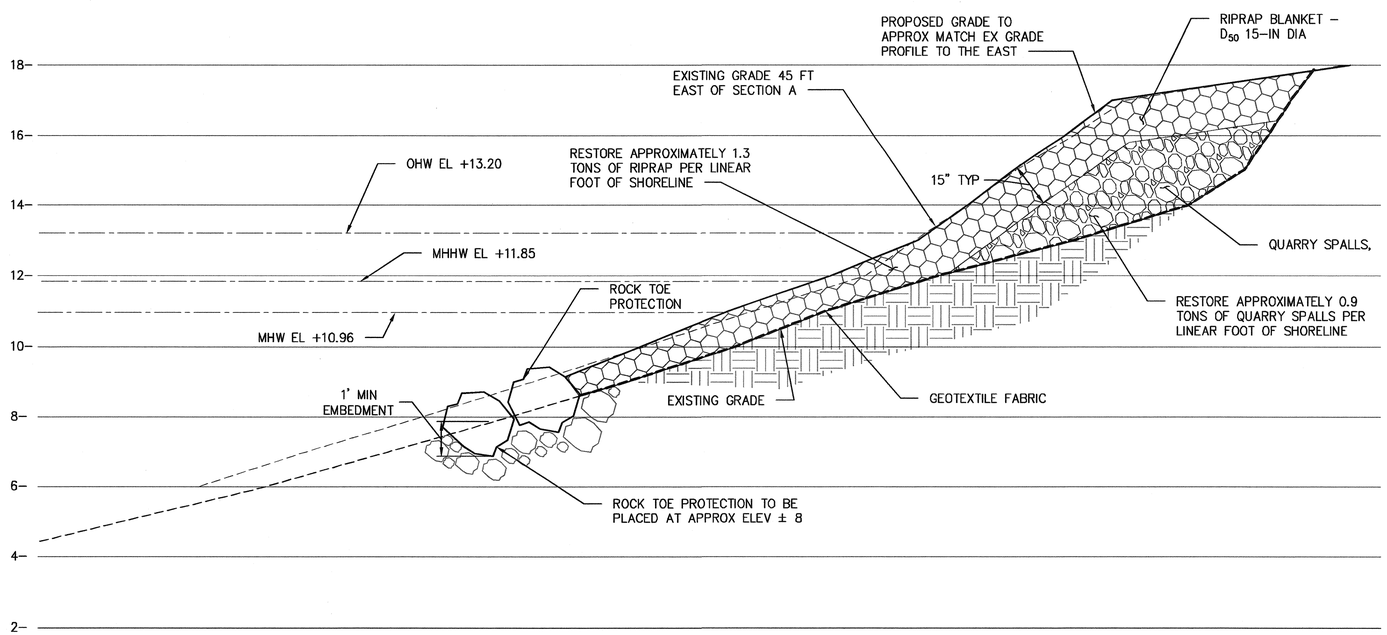
PORT OF TACOMA
SHORELINE STABILIZATION
PLAN - APM

6531
C8
SHEET 12 OF 25

CONT/CONS:	TOWNSHIP: 21	RANGE: 03	SECTION: 34
M. ID:	DAT-HRZ: NAD83/07	VERT: MLLW	
PHASE: FINAL	PARCEL: 8950000061	DRAWING SCALE: AS NOTED	

BINDING EDGE

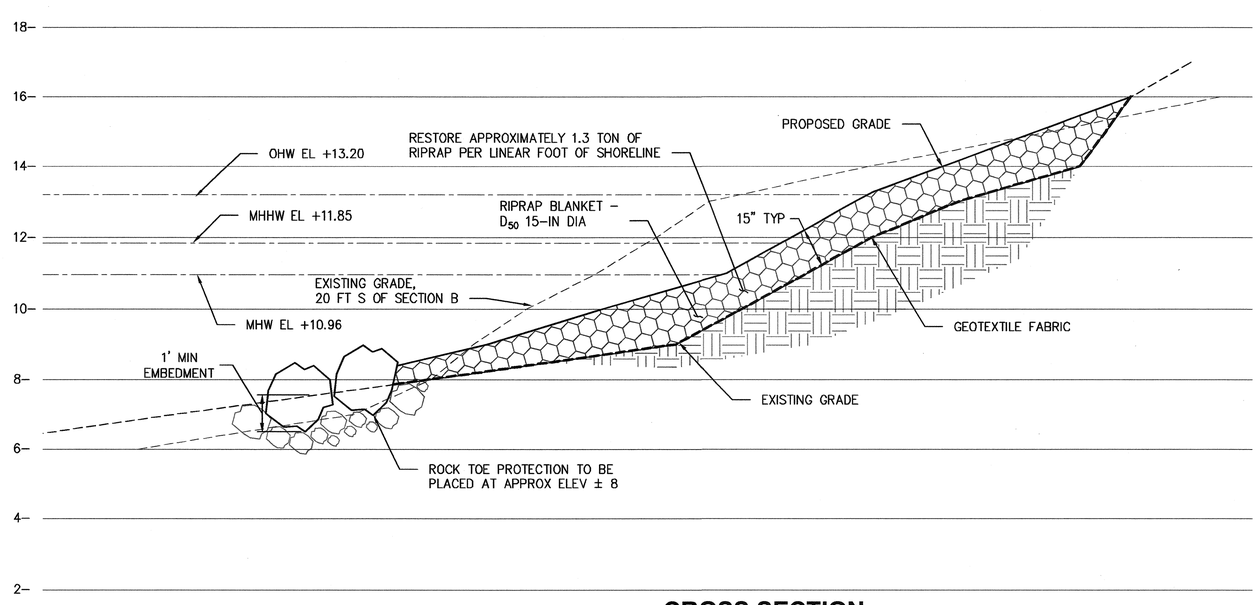
PORT OF TACOMA FILE: N:\Civil\113-\113151 PoT Bank Stabilization\Part 3 - KPFF Design\3.13 Drawings\113151-C8-11-13-15-17



CROSS SECTION: RIPRAP BLANKET

A / C9

1"=2'



CROSS SECTION: RIPRAP BLANKET

B / C9

1"=2'

NOTES:

1. ROCK TOE PROTECTION SHALL BE EMBEDDED OR NESTED WITHIN EXISTING SLOPE PROTECTION ROCK SUCH THAT A MINIMUM EMBEDMENT OF 1 FOOT IS PROVIDED.

2' 0 2' 4'
1' 3'
SCALE: 1"=2'

Port of Tacoma
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(253) 396-0150 Fax (253) 396-0162

MARK: | REVISION: | BY: | APPR: | DATE:

WADE KINGSLEY SURVEY
STATE OF WASHINGTON
45849
6/22/15
REGISTERED PROFESSIONAL ENGINEER

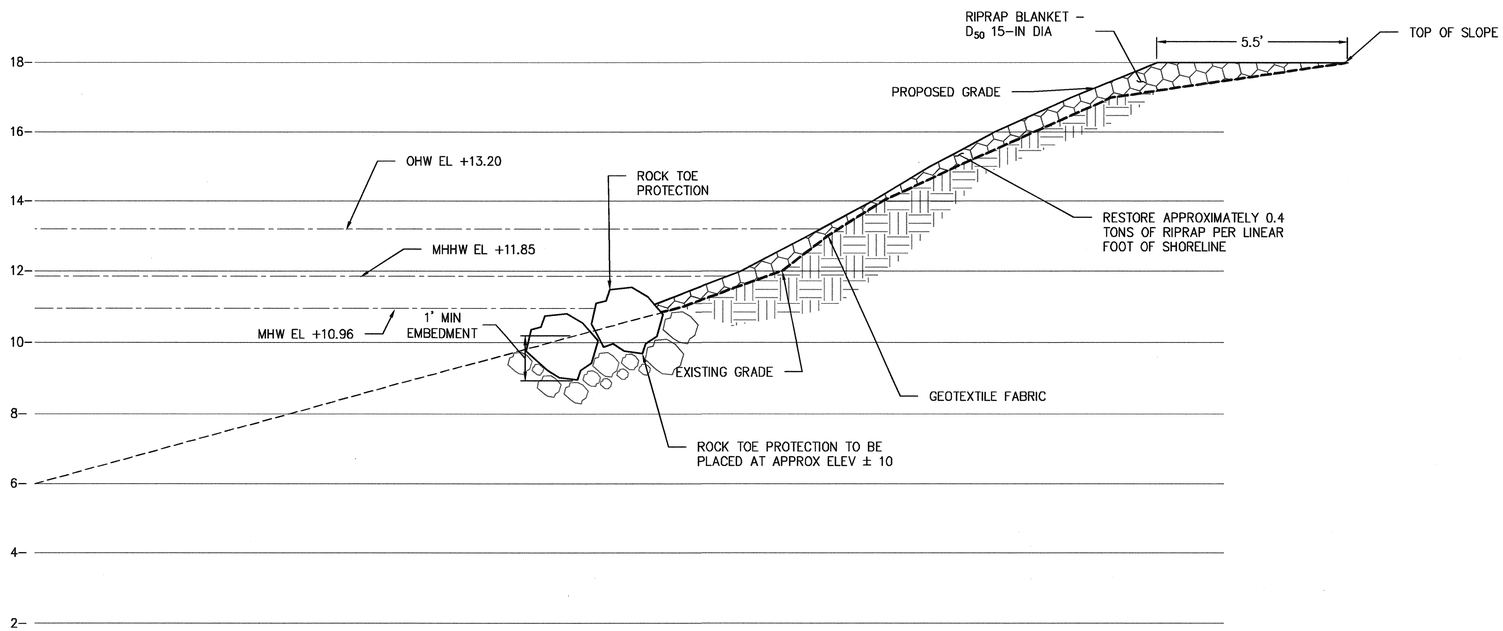
SWK 6/22/2015
CHECKED BY DATE
RGC 6/22/2015
PROJ. ENGR DATE
PRINTED BY: rchandler Jun 23, 2015
PORT ADDRESS: ONE SITCUM PLAZA
TACOMA, WA 98401-1837

APPROVED: 9-8-15
DIRECTOR ENG. DATE

PORT OF TACOMA
SHORELINE STABILIZATION
PROFILE - APM

6531
C9
SHEET 13 OF 25

CONT/CONS: | TOWNSHIP: 21 | RANGE: 03 | SECTION: 34
M. ID: | DAT-HRZ: NAD83/07 | VERT: MLLW
PHASE: FINAL | PARCEL: 8950000061 | DRAWING SCALE: AS NOTED



CROSS SECTION: RIPRAP BLANKET

C / C10

1"=2'

NOTES:

1. ROCK TOE PROTECTION SHALL BE EMBEDDED OR NESTED WITHIN EXISTING SLOPE PROTECTION ROCK SUCH THAT A MINIMUM EMBEDMENT OF 1 FOOT IS PROVIDED.

2' 0 2' 4'
1' 3'
SCALE: 1"=2'

Port of Tacoma
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2407 North 31st Street, Suite 100
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MARK:	REVISION:	BY:	APPR:	DATE:

WADE MINCKLEY STATE OF WASHINGTON 23215 REGISTERED PROFESSIONAL ENGINEER

SWK	6/22/2015	
CHECKED BY	DATE	
RGC	6/22/2015	
PROJ. ENGR	DATE	

APPROVED: 4-8-15
DIRECTOR ENG. DATE

PRINTED BY: rchandler Jun 23, 2015
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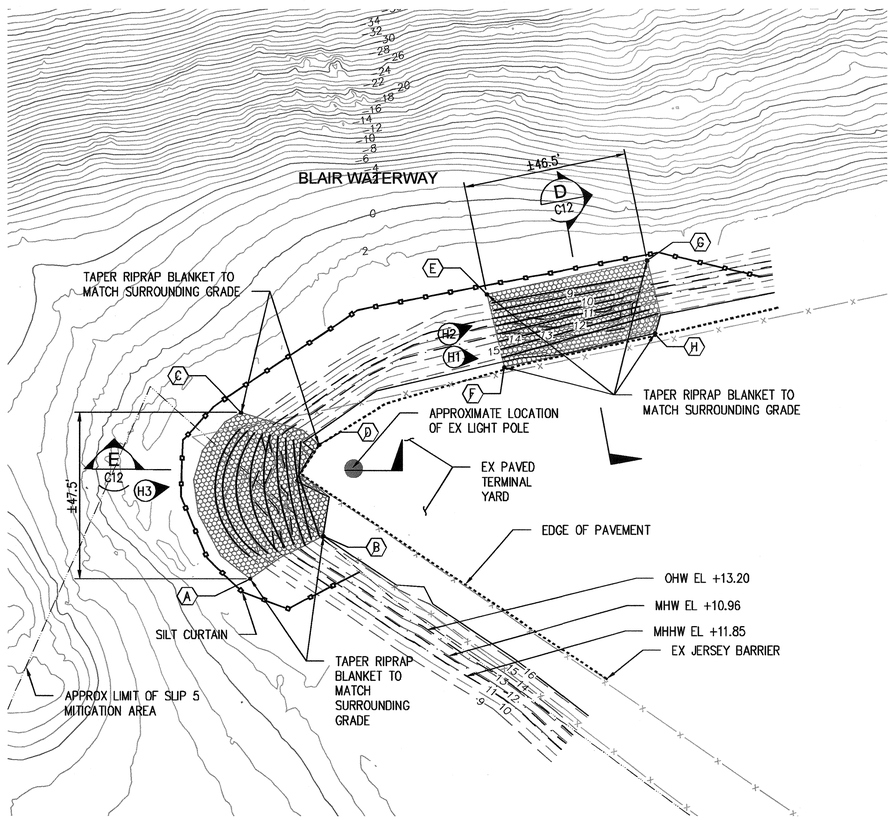
PORT OF TACOMA
SHORELINE STABILIZATION
PROFILE - APM

CONT/CONS:	TOWNSHIP: 21	RANGE: 03	SECTION: 34
M. ID:	DAT-HRZ: NAD83/07	VERT: MLLW	
PHASE: FINAL	PARCEL: 8950000061	DRAWING SCALE: AS NOTED	

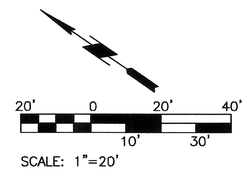
6531
C10
SHEET 14 OF 25



1
C11

PLAN

SCALE: 1"=20'



SCALE: 1"=20'

LEGEND:

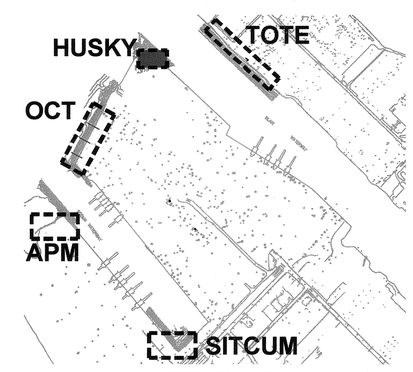
- EXISTING BUILDING
- EXISTING OVERWATER STRUCTURE
- SILT CURTAIN
- PROPOSED GRADING
- RIPRAP RESTORATION
- EXISTING GRADE, MINOR (KPFF SURVEY, 2013)
- EXISTING GRADE, MAJOR (KPFF SURVEY, 2013)
- EXISTING GRADE, MINOR (POT BATHEMETRY)
- EXISTING GRADE, MAJOR (POT BATHEMETRY)
- OHW/MHW/MHHW LINE
- EXISTING FENCE
- EXISTING EDGE OF PAVEMENT
- A1 PHOTO LOCATION

NOTES:

1. CONTRACTOR SHALL FIELD MARK LIMITS OF RIPRAP REPLACEMENT A MINIMUM OF 7 DAYS PRIOR TO BEGINNING WORK, AND NOTIFY ENGINEER WHEN FIELD MARKING IS COMPLETE. ENGINEER SHALL REVIEW AND VERIFY FIELD MARKINGS WITHIN 4 DAYS OF NOTIFICATION.

HUSKY HORIZONTAL CONTROL TABLE

	NORTHING	EASTING
A	714793	1164929
B	714782	1164951
C	714822	1164967
D	714798	1164972
E	714783	1165034
F	714767	1165020
G	714750	1165068
H	714738	1165057



KEY PLAN

NTS

Port of Tacoma
P.O. BOX 1837 TACOMA, WA 98401 (253)383-5841

kpff
2407 North 31st Street, Suite 100
Tacoma, Washington 98407
(253) 396-0150 Fax (253) 396-0152

MARK:	REVISION:	BY:	APPR:	DATE:

WADE MACKSEY STATE OF WASHINGTON 22215 REGISTERED PROFESSIONAL ENGINEER
6/22/15

SWK 6/22/2015 CHECKED BY DATE
RGC 6/22/2015 PROJ. ENGR DATE

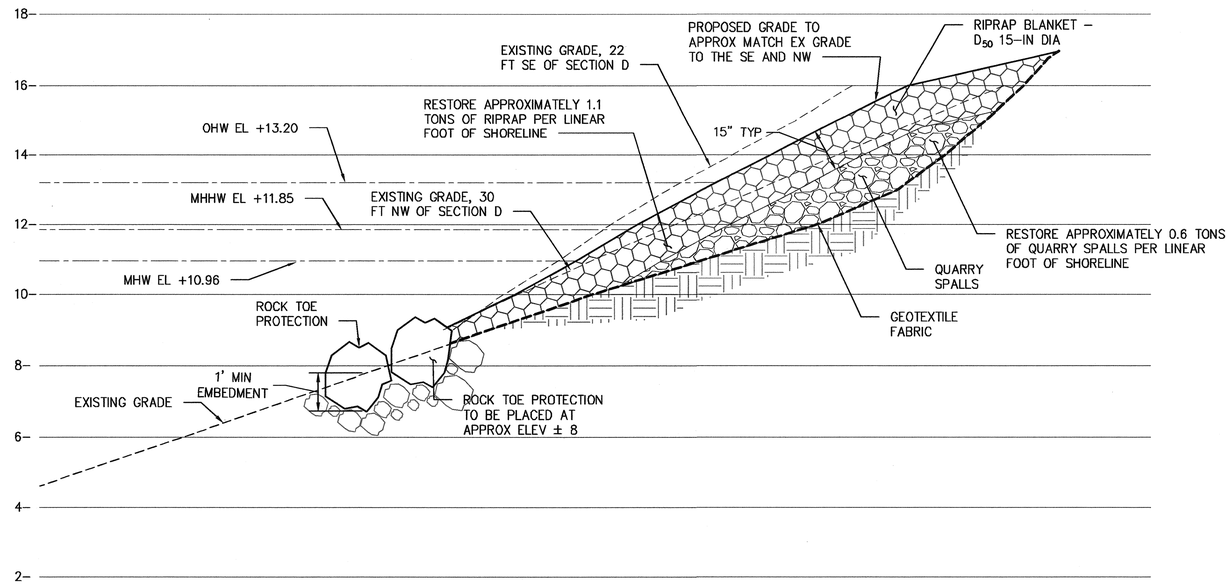
APPROVED: 9-8-15
DIRECTOR ENG. DATE

PRINTED BY: rchandler Jun 23, 2015
PORT ADDRESS: ONE SITCUM PLAZA TACOMA, WA 98401-1837

PORT OF TACOMA
SHORELINE STABILIZATION
PLAN - HUSKY

6531
C11
SHEET 15 OF 25

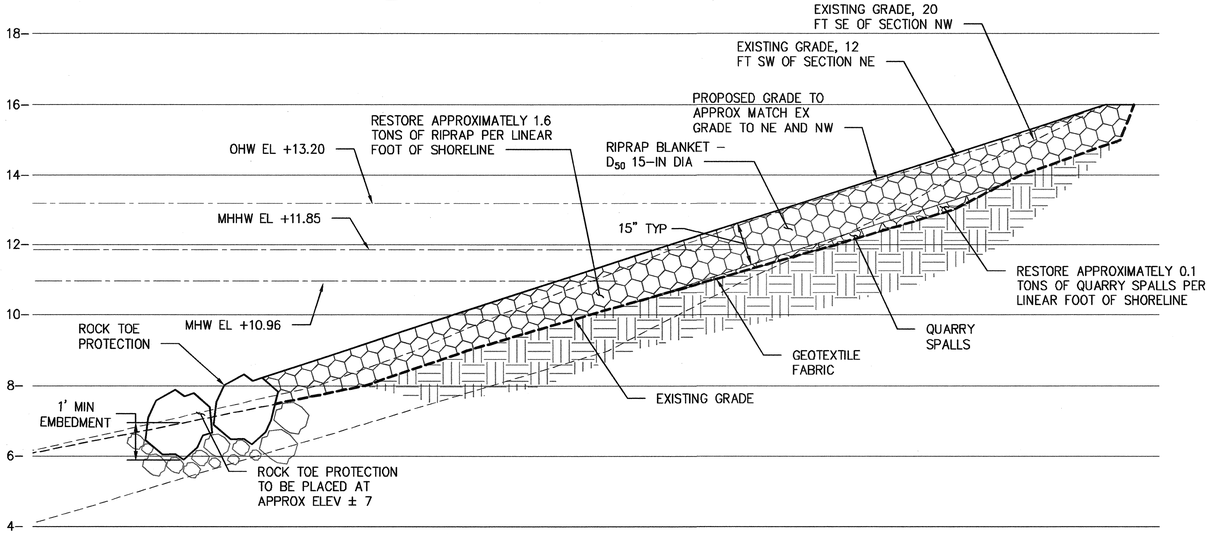
CONT/CONS:	TOWNSHIP: 21	RANGE: 03	SECTION: 34
M. ID:	DAT-HRZ: NAD83/07	VERT: MLLW	
PHASE: FINAL	PARCEL: 2275200610	DRAWING SCALE: AS NOTED	



CROSS SECTION: RIPRAP BLANKET

D / C12

1"=2'



CROSS SECTION: RIPRAP BLANKET

E / C12

1"=2'

NOTES:

1. ROCK TOE PROTECTION SHALL BE EMBEDDED OR NESTED WITHIN EXISTING SLOPE PROTECTION ROCK SUCH THAT A MINIMUM EMBEDMENT OF 1 FOOT IS PROVIDED.

2' 0 2' 4'
1' 3'
SCALE: 1"=2'

Port of Tacoma
P.O. BOX 1837 TACOMA, WA 98401 (253)383-5841

kpff
2407 North 31st Street, Suite 100
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(253) 396-0150 Fax (253) 396-0152

MARK:	REVISION:	BY:	APPR:	DATE:

WADE KINGSLEY ENGINEERING
STATE OF WASHINGTON
REGISTERED PROFESSIONAL ENGINEER
6/22/15

SWK	CHECKED BY	6/22/2015 DATE
RGC	PROJ. ENGR	6/22/2015 DATE
rchandler Jun 23, 2015		
PORT ADDRESS:ONE SITCUM PLAZA TACOMA, WA 98401-1837		

APPROVED: 4-8-15
DIRECTOR ENG. DATE

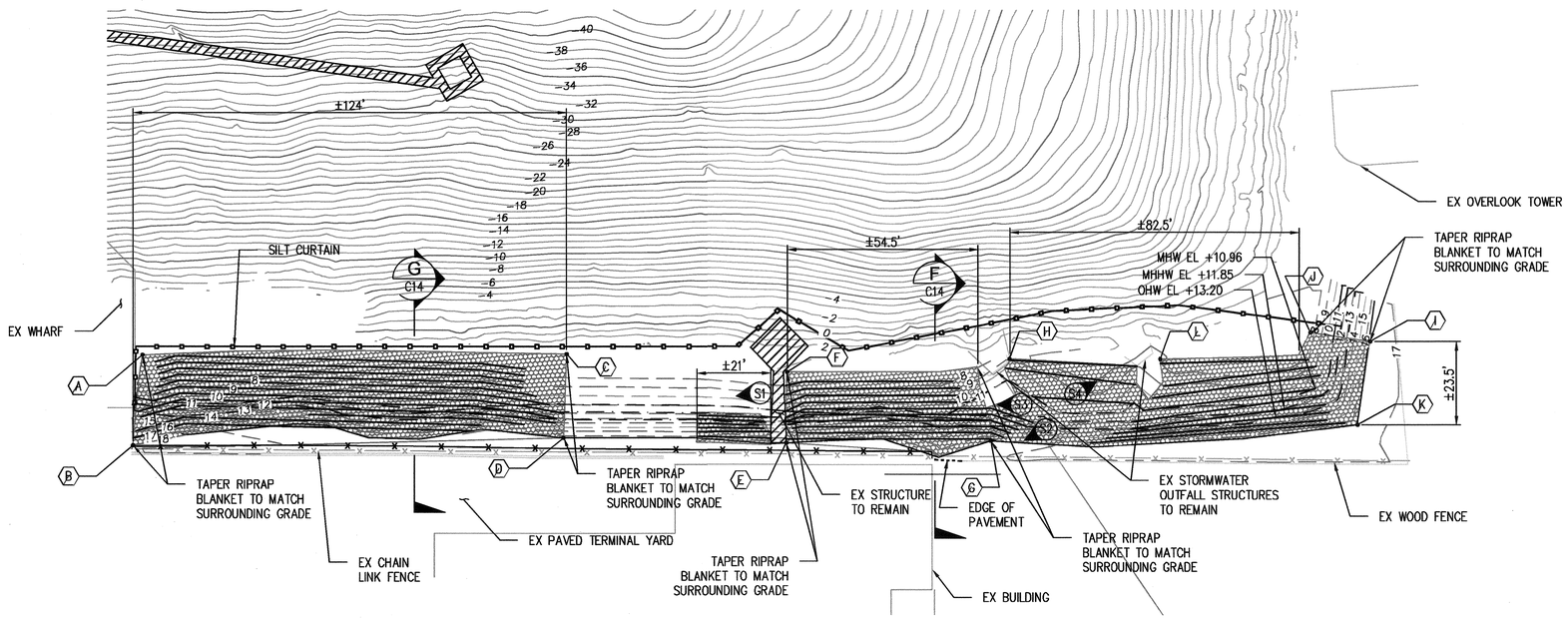
PORT OF TACOMA
SHORELINE STABILIZATION
PROFILE - HUSKY

TOWNSHIP: 21	RANGE: 03	SECTION: 34	
DAT–HRZ: NAD83/07	VERT: MLLW		
PARCEL: 2275200610	DRAWING SCALE: AS NOTED		

6531
C12
SHEET 16 OF 25

CONT/CONS:
M. ID:
PHASE: FINAL

BINDING EDGE



1 C13 **PLAN**
SCALE: 1"=20'

LEGEND:

- EXISTING BUILDING
- EXISTING OVERWATER STRUCTURE
- SILT CURTAIN
- PROPOSED GRADING
- RIPRAP RESTORATION
- EXISTING GRADE, MINOR (KPFF SURVEY, 2013)
- EXISTING GRADE, MAJOR (KPFF SURVEY, 2013)
- EXISTING GRADE, MINOR (POT BATHEMETRY)
- EXISTING GRADE, MAJOR (POT BATHEMETRY)
- OHW/MHW/MHHW LINE
- EXISTING FENCE
- EXISTING EDGE OF PAVEMENT
- A1 PHOTO LOCATION

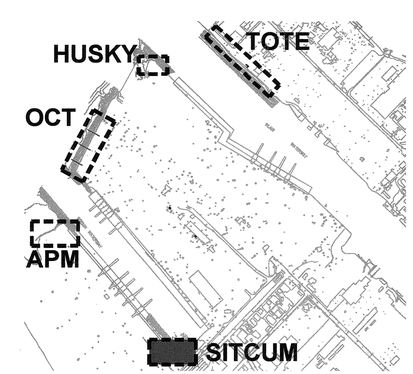
NOTES:

1. CONTRACTOR SHALL FIELD MARK LIMITS OF RIPRAP REPLACEMENT A MINIMUM OF 7 DAYS PRIOR TO BEGINNING WORK, AND NOTIFY ENGINEER WHEN FIELD MARKING IS COMPLETE. ENGINEER SHALL REVIEW AND VERIFY FIELD MARKINGS WITHIN 4 DAYS OF NOTIFICATION.

SITCUM HORIZONTAL CONTROL TABLE

	NORTHING	EASTING
A	710410	1165161
B	710395	1165139
C	710318	1165240
D	710303	1165222
E	710254	1165262
F	710267	1165277
G	710210	1165301
H	710222	1165315
I	710146	1165393
J	710161	1165384
K	710134	1165373
L	710188	1165350

20' 0 20' 40'
10' 30'
SCALE: 1"=20'



KEY PLAN
NTS

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Tacoma, Washington 98407
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MARK:	REVISION:	BY:	APPR:	DATE:

STATE OF WASHINGTON WADE KINGSLEY FENNER REGISTERED PROFESSIONAL ENGINEER 22215

SWK	6/22/2015	CHECKED BY DATE
RGC	6/22/2015	PROJ. ENGR DATE

APPROVED: 4-8-15
DIRECTOR ENG. DATE

PRINTED BY: rchandler Jun 23, 2015
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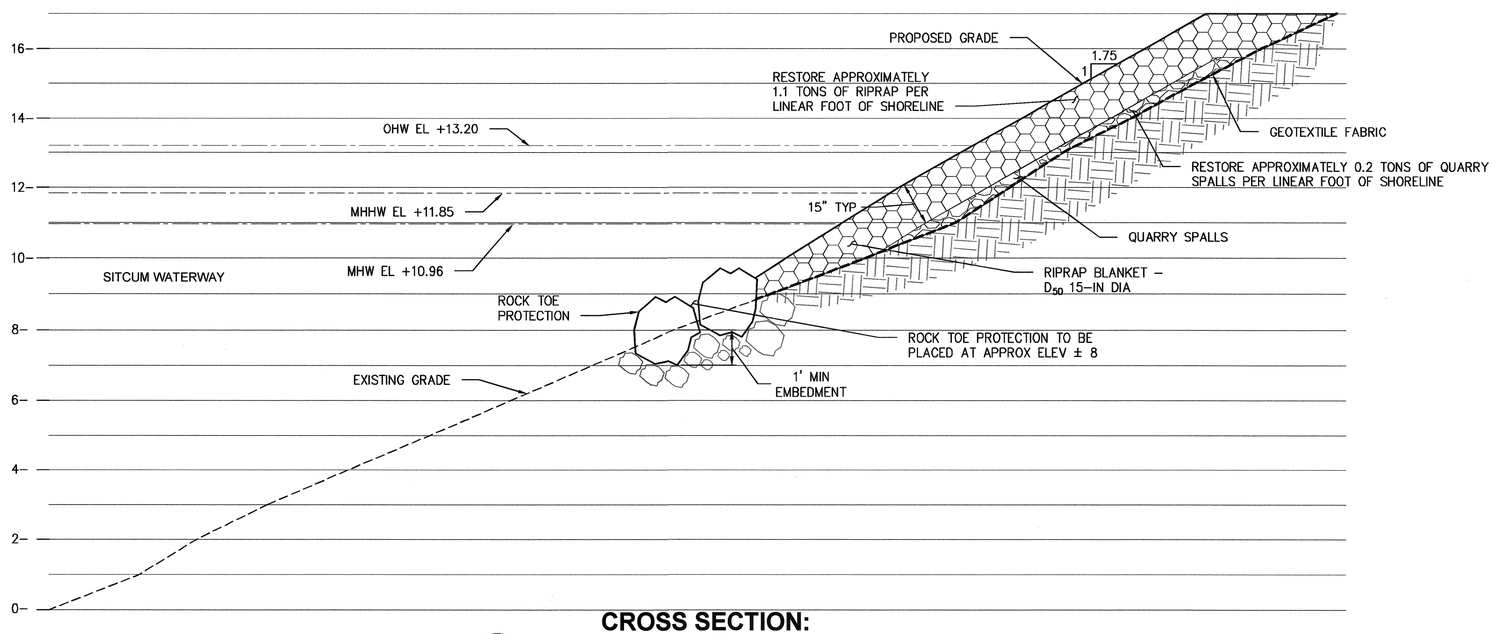
PORT OF TACOMA
SHORELINE STABILIZATION
PLAN - SITCUM

6531
C13
SHEET 17 OF 25

CONT/CONS:	TOWNSHIP: 21	RANGE: 03	SECTION: 34
M. ID:	DAT-HRZ: NAD83/07	VERT: MLLW	
PHASE: FINAL	PARCEL: 8950000061	DRAWING SCALE: AS NOTED	

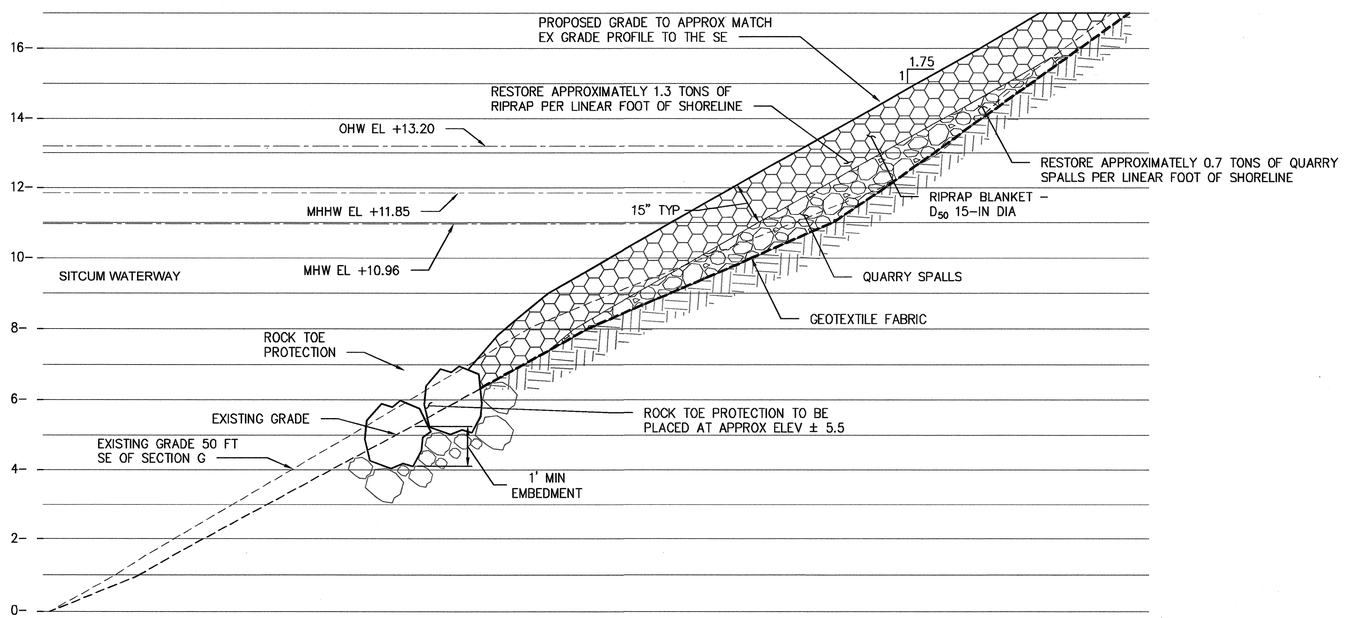
PORT OF TACOMA FILE: N:\Civil\113-113151 PoT Bank Stabilization\Part 3 - KPFF Design\3.13 Drawings\113151-C8-11-13-15-17



CROSS SECTION: RIPRAP BLANKET

F / C14

1"=2'



CROSS SECTION: RIPRAP BLANKET

G / C14

1"=2'

NOTES:

1. ROCK TOE PROTECTION SHALL BE EMBEDDED OR NESTED WITHIN EXISTING SLOPE PROTECTION ROCK SUCH THAT A MINIMUM EMBEDMENT OF 1 FOOT IS PROVIDED.

2' 0 2' 4'
1' 3'
SCALE: 1"=2'

Port of Tacoma
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WADE MINCHEY STATE OF WASHINGTON 6/22/15 REGISTERED PROFESSIONAL ENGINEER

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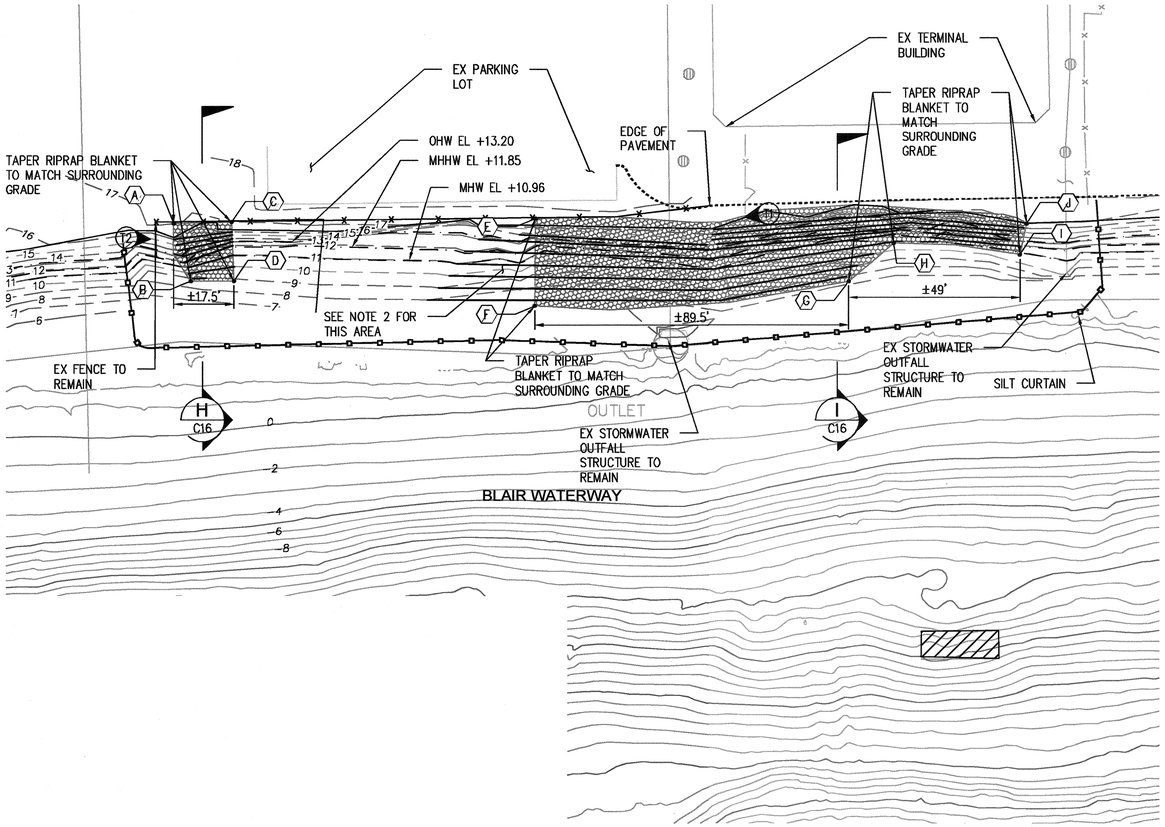
	RGC	6/22/2015
	PROJ. ENGR	DATE
APPROVED: 9-8-15	rchandler Jun 23, 2015	
DIRECTOR ENG. DATE	PRINTED BY:	
	PORT ADDRESS:ONE SITCUM PLAZA	
	TACOMA, WA 98401-1837	

PORT OF TACOMA
SHORELINE STABILIZATION
PROFILE - SITCUM

6531
C14
SHEET 18 OF 25

CONT/CONS:	TOWNSHIP: 21	RANGE: 03	SECTION: 34
M. ID:	DAT–HRZ: NAD83/07	VERT: MLLW	
PHASE: FINAL	PARCEL: 8950000061	DRAWING SCALE: AS NOTED	



1 C15 **PLAN**
SCALE: 1"=20'

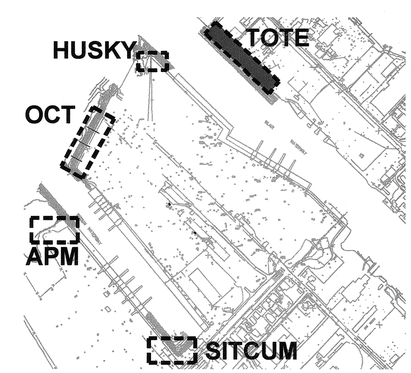
TOTE HORIZONTAL CONTROL TABLE		
	NORTHING	EASTING
A	714776	1166452
B	714760	1166444
C	714764	1166464
D	714752	1166453
E	714704	1166526
F	714686	1166508
G	714628	1166577
H	714619	1166586
I	714599	1166617
J	714604	1166624

LEGEND:

- EXISTING BUILDING
- EXISTING OVERWATER STRUCTURE
- SILT CURTAIN
- PROPOSED GRADING
- RIPRAP RESTORATION
- EXISTING GRADE, MINOR (KPFF SURVEY, 2013)
- EXISTING GRADE, MAJOR (KPFF SURVEY, 2013)
- EXISTING GRADE, MINOR (POT BATHEMETRY)
- EXISTING GRADE, MAJOR (POT BATHEMETRY)
- OHW/MHW/MHHW LINE
- EXISTING FENCE
- EXISTING EDGE OF PAVEMENT
- A1 PHOTO LOCATION

NOTES:

1. CONTRACTOR SHALL FIELD MARK LIMITS OF RIPRAP REPLACEMENT A MINIMUM OF 7 DAYS PRIOR TO BEGINNING WORK, AND NOTIFY ENGINEER WHEN FIELD MARKING IS COMPLETE. ENGINEER SHALL REVIEW AND VERIFY FIELD MARKINGS WITHIN 4 DAYS OF NOTIFICATION.
2. THIS AREA HAS BEEN RECENTLY REPAIRED, CONTRACTOR TO MATCH GRADE WITH NEW MATERIAL IN PLACE.



KEY PLAN
NTS

20' 0 20' 40'
10' 30'
SCALE: 1"=20'

Port of Tacoma
P.O. BOX 1837 TACOMA, WA 98401 (253)383-5841

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MARK:	REVISION:	BY:	APPR:	DATE:

WADE MINCHEW STATE OF WASHINGTON 23215 REGISTERED PROFESSIONAL ENGINEER

APPROVED: 9-8-15
DIRECTOR ENG. DATE

PORT OF TACOMA
SHORELINE STABILIZATION
PLAN - TOTE

6531
C15
SHEET 19 OF 25

CONT/CONS:	TOWNSHIP: 21	RANGE: 03	SECTION: 34
M. ID:	DAT-HRZ: NAD83/07	VERT: MLLW	
PHASE: FINAL	PARCEL: 5000350011	DRAWING SCALE: AS NOTED	

SWK 6/22/2015 CHECKED BY DATE
RGC 6/22/2015 PROJ. ENGR DATE
PRINTED BY: rchandler Jun 23, 2015
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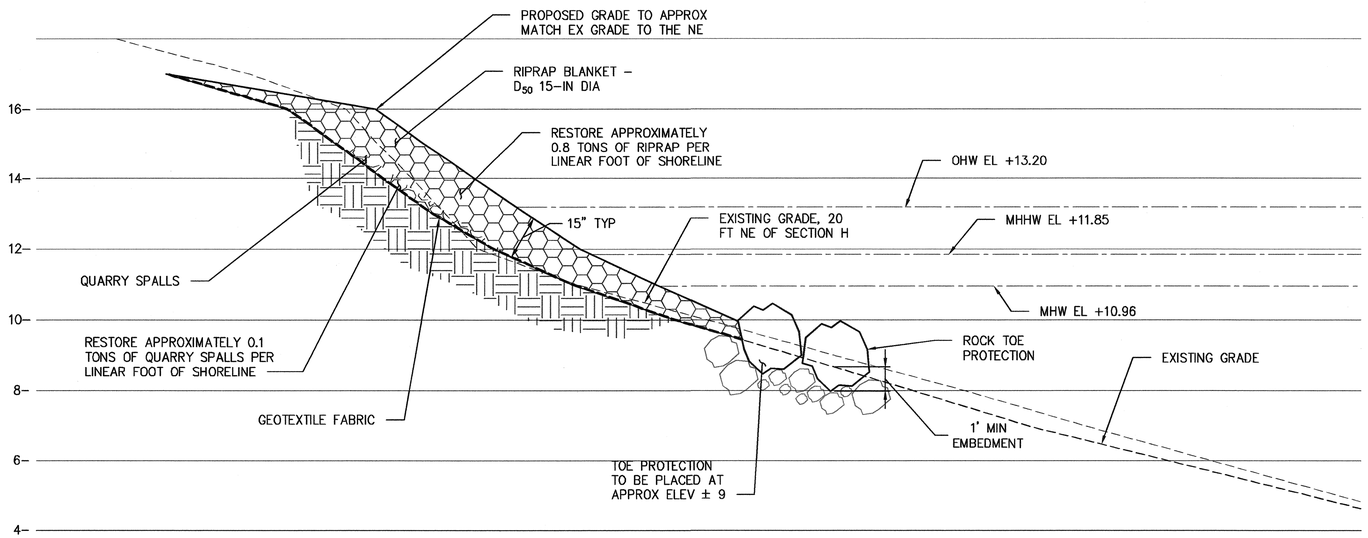
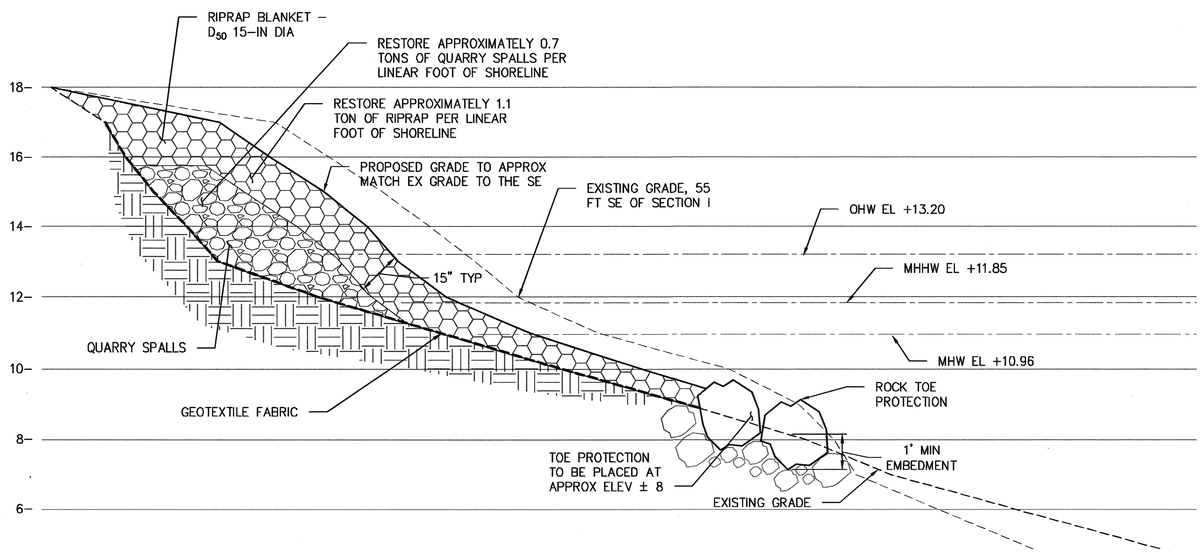
BINDING EDGE

PORT OF TACOMA FILE: N:\Civil\113-\113151 PoT Bank Stabilization\Part 3 - KPFF Design\3.13 Drawings\113151-C8-11-13-15-17



CROSS SECTION: RIPRAP BLANKET

H / C16 — 1"=2'



CROSS SECTION: RIPRAP BLANKET

I / C16 — 1"=2'

NOTES:

1. ROCK TOE PROTECTION SHALL BE EMBEDDED OR NESTED WITHIN EXISTING SLOPE PROTECTION ROCK SUCH THAT A MINIMUM EMBEDMENT OF 1 FOOT IS PROVIDED.

2' 0 2' 4'
1' 3'
SCALE: 1"=2'

Port of Tacoma
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2407 North 31st Street, Suite 100
Tacoma, Washington 98407
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MARK:	REVISION:	BY:	APPR:	DATE:

WADE KINGSLEY ... STATE OF WASHINGTON ... 6/22/15 ... REGISTERED PROFESSIONAL ENGINEER

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PROJ. ENGR	DATE	

APPROVED: 9-8-15
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PRINTED BY: rchandler Jun 23, 2015
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PORT OF TACOMA
SHORELINE STABILIZATION
PROFILE - TOTE

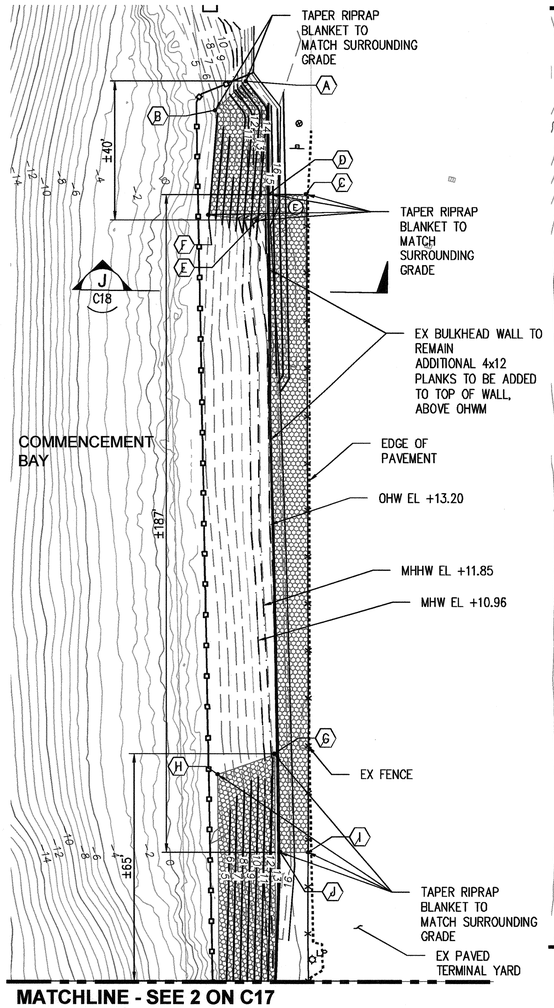
TOWNSHIP: 21 | RANGE: 03 | SECTION: 34
DAT-HRZ: NAD83/07 | VERT: MLLW
PARCEL: 5000350011 | DRAWING SCALE: AS NOTED

6531
C16
SHEET 20 OF 25
CONT/CONS:
M. ID:
PHASE: FINAL

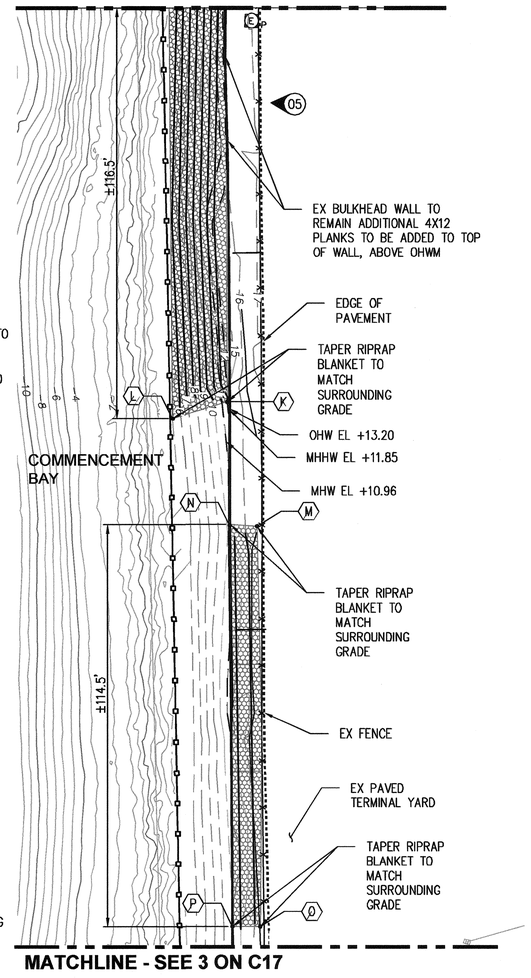
BINDING EDGE

PORT OF TACOMA FILE: N:\Civil\113-\113151 PoT Bank Stabilization\Part 3 - KPFF Design\3.13 Drawings\113151-C16

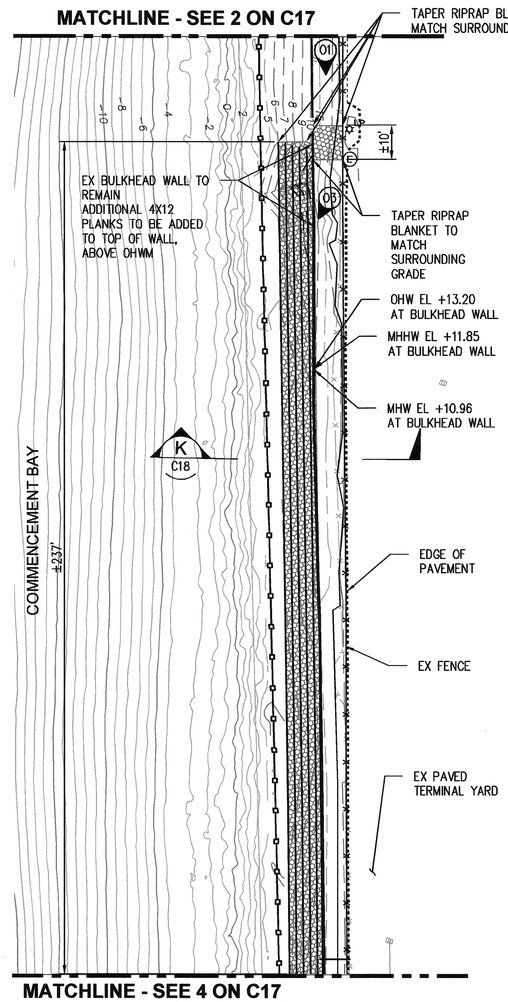
BINDING EDGE



1 C17 **PLAN**
SCALE: 1"=20'



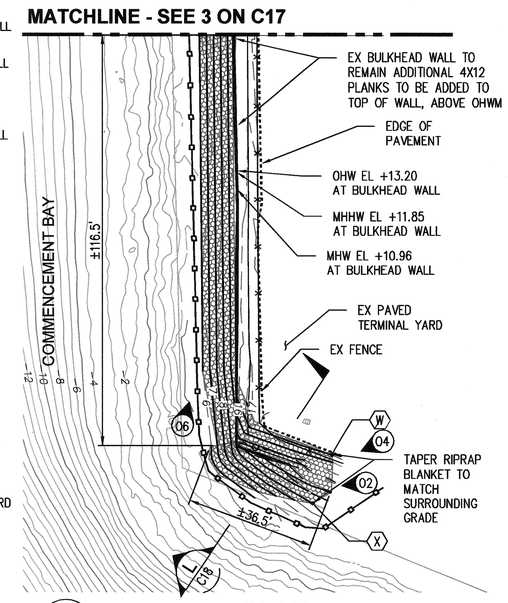
2 C17 **PLAN**
SCALE: 1"=20'



3 C17 **PLAN**
SCALE: 1"=20'

NOTES:

1. CONTRACTOR SHALL FIELD MARK LIMITS OF RIPRAP REPLACEMENT A MINIMUM OF 7 DAYS PRIOR TO BEGINNING WORK, AND NOTIFY ENGINEER WHEN FIELD MARKING IS COMPLETE. ENGINEER SHALL REVIEW AND VERIFY FIELD MARKINGS WITHIN 4 DAYS OF NOTIFICATION.
2. CONTRACTOR TO REPLACE SEVERELY DAMAGED PLANKS WITHIN BULKHEAD WALL.



4 C17 **PLAN**
SCALE: 1"=20'

OCT HORIZONTAL CONTROL TABLE		
	NORTHING	EASTING
A	713905	1164203
B	713902	1164191
C	713868	1164202
D	713873	1164193
E	713868	1164186
F	713876	1164175
G	713732	1164118
H	713735	1164101

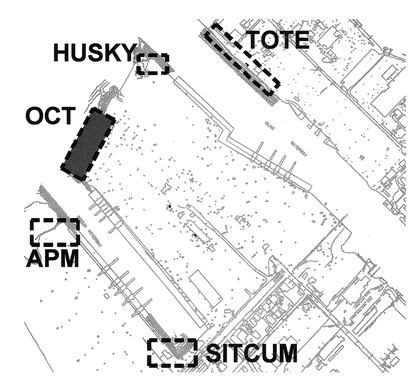
OCT HORIZONTAL CONTROL TABLE CONT		
	NORTHING	EASTING
I	713703	1164113
J	713707	1164106
K	713577	1164035
L	713580	1164019
M	713542	1164025
N	713546	1164018
O	713441	1163971
P	713445	1163964

OCT HORIZONTAL CONTROL TABLE CONT		
	NORTHING	EASTING
Q	713414	1163958
R	713418	1163950
S	713413	1163947
T	713418	1163939
U	713405	1163953
V	713409	1163945
W	713086	1163805
X	713076	1163793

LEGEND:

- EXISTING BUILDING
- EXISTING OVERWATER STRUCTURE
- SILT CURTAIN
- 8 PROPOSED GRADING
- RIPRAP RESTORATION
- EXISTING GRADE, MINOR (KPFF SURVEY, 2013)
- EXISTING GRADE, MAJOR (KPFF SURVEY, 2013)
- EXISTING GRADE, MINOR (POT BATHEMETRY)
- EXISTING GRADE, MAJOR (POT BATHEMETRY)
- OHW/MHW/MHHW LINE
- EXISTING FENCE
- EXISTING EDGE OF PAVEMENT
- A1 PHOTO LOCATION

20' 0 20' 40'
10' 30'
SCALE: 1"=20'



KEY PLAN
NTS

Port of Tacoma
P.O. BOX 1837 TACOMA, WA 98401 (253)383-5841

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Tacoma, Washington 98407
(253) 396-0130 Fax (253) 396-0162

MARK:	REVISION:	BY:	APPR:	DATE:

WADE KINGSLEY SENNEWALD, STATE OF WASHINGTON, REGISTERED PROFESSIONAL ENGINEER, 23425

SWK	6/22/2015	
CHECKED BY	DATE	
RGC	6/22/2015	
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APPROVED: 4-8-15
DIRECTOR ENG. DATE

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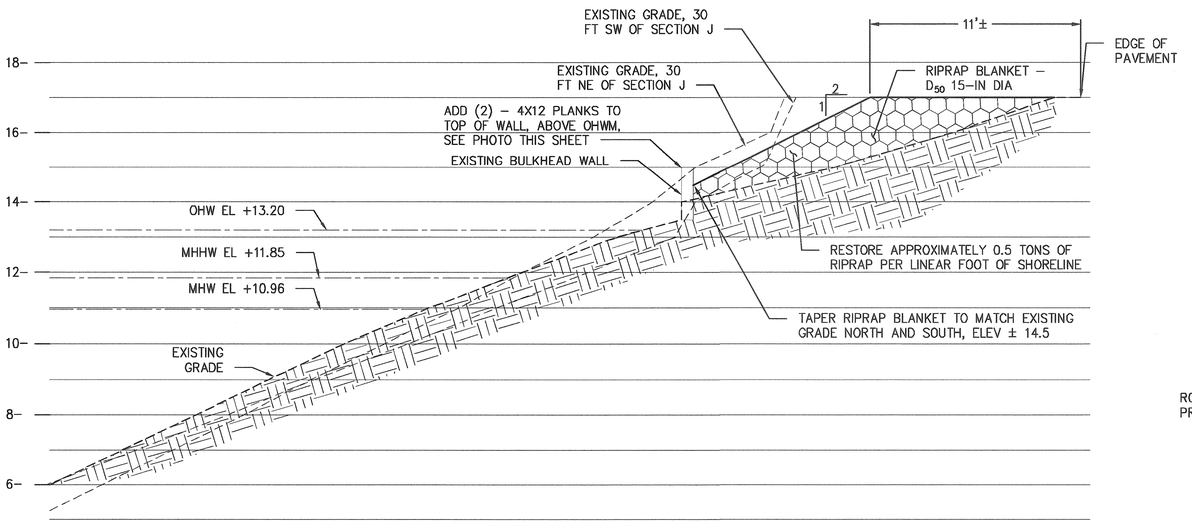
PORT OF TACOMA
SHORELINE STABILIZATION
PLAN - OCT

6531
C17
SHEET 21 OF 25

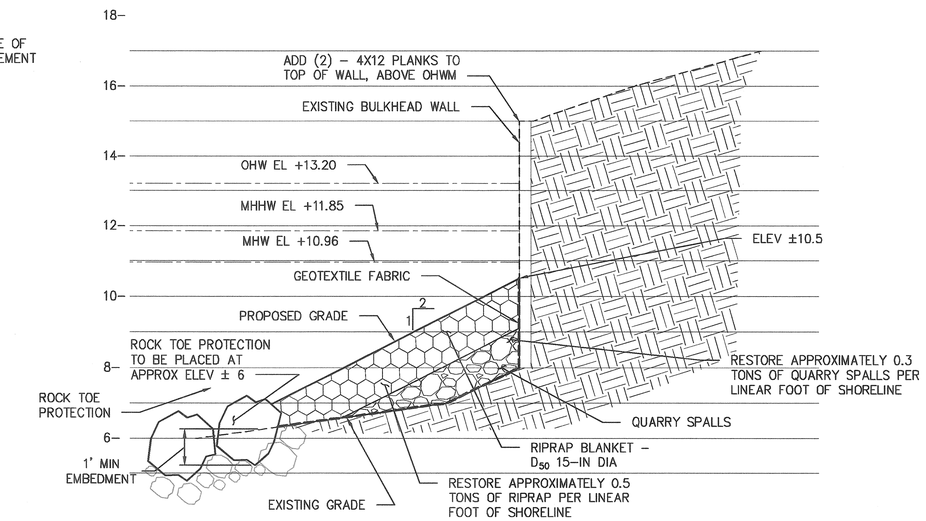
CONT/CONS:	TOWNSHIP: 21	RANGE: 03	SECTION: 34
M. ID:	DAT-HRZ: NAD83/07	VERT: MLLW	
PHASE: FINAL	PARCEL: 2275200633	DRAWING SCALE: AS NOTED	

PORT OF TACOMA FILE: N:\Civil\113-\113151 PoT Bank Stabilization\Part 3 - KPFF Design\3.13 Drawings\113151-C8-11-13-15-17



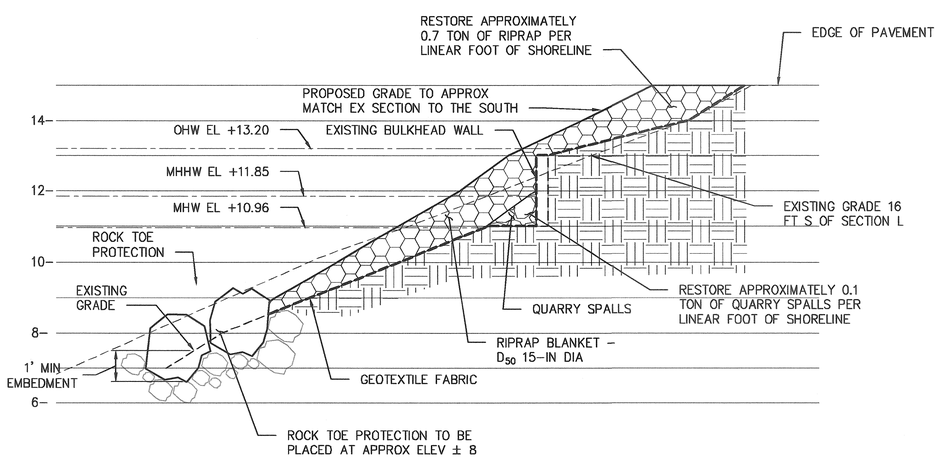
CROSS SECTION: RIPRAP BLANKET

J / C18 — 1"=2'



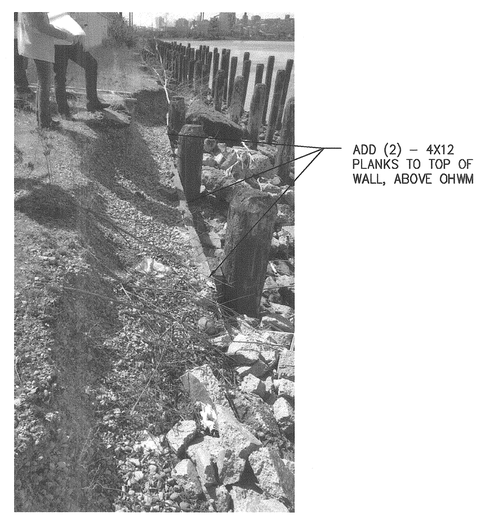
CROSS SECTION: RIPRAP BLANKET

K / C18 — 1"=2'



CROSS SECTION: RIPRAP BLANKET

L / C18 — 1"=2'



PHOTO

-

NOTES:

1. ROCK TOE PROTECTION SHALL BE EMBEDDED OR NESTED WITHIN EXISTING SLOPE PROTECTION ROCK SUCH THAT A MINIMUM EMBEDMENT OF 1 FOOT IS PROVIDED.

2' 0 2' 4'
1' 3'
SCALE: 1"=2'

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2407 North 31st Street, Suite 100
Tacoma, Washington 98407
(253) 396-0150 Fax (253) 396-0152

MARK:	REVISION:	BY:	APPR:	DATE:

WADE A. KINCHELOE — STATE OF WASHINGTON — 22245 — REGISTERED PROFESSIONAL ENGINEER — 6/22/2015

APPROVED: 1-8-15
DIRECTOR ENG. DATE

SMK	6/22/2015
CHECKED BY	DATE
RGC	6/22/2015
PROJ. ENGR	DATE
PRINTED BY: rchandler Jun 23, 2015	
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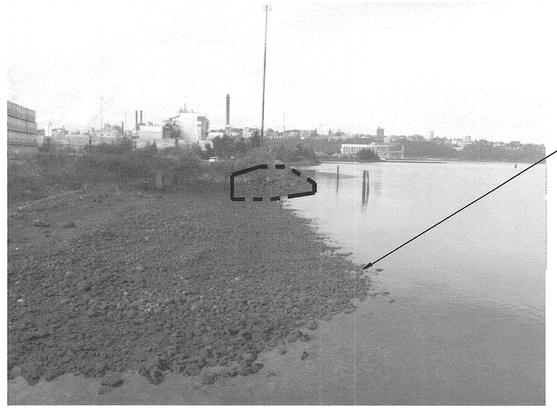
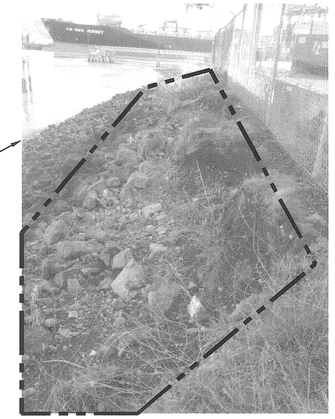
PORT OF TACOMA
SHORELINE STABILIZATION
PROFILE - OCT

6531
C18
SHEET 22 OF 25

CONT/CONS:	TOWNSHIP: 21	RANGE: 03	SECTION: 34
M. ID:	DAT–HRZ: NAD83/07	VERT: MLLW	
PHASE: FINAL	PARCEL: 2275200633	DRAWING SCALE: AS NOTED	

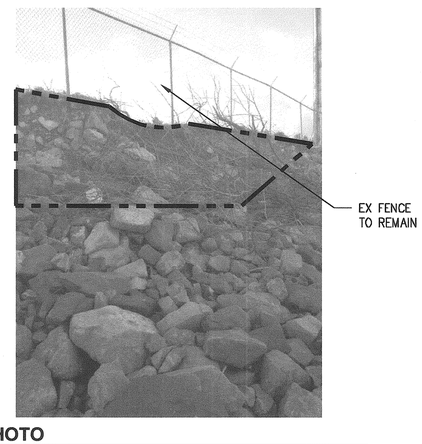


A1 PHOTO



A2 PHOTO

A3 PHOTO



A4 PHOTO

H1 PHOTO

H2 PHOTO

H3 PHOTO

NOTES:

1. RESTORATION BOUNDARY ILLUSTRATES APPROXIMATE EXTENTS OF VISIBLE ABOVE GROUND RIRPRAP REPLACEMENT. ADDITIONAL RIPRAP REPLACEMENT IS REQUIRED BELOW WATERLINE SHOWN IN PHOTOS, SEE SPECIFICATIONS.
2. THE INTENT OF THE RESTORATION PLAN AND PHOTOS ARE TO SHOW GENERAL SCOPE OF ITEMS TO BE REPLACED. THE PHOTOS HIGHLIGHT ITEMS IN THE FOREGROUND TO BE REPLACED. ITEMS IN THE BACKGROUND THAT ARE TO BE REPLACED ARE NOT NECESSARILY IDENTIFIED.

LEGEND:

— - - — RESTORATION BOUNDARY (SEE NOTE 1)

Port of Tacoma
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2407 North 31st Street, Suite 100
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MARK:	REVISION:	BY:	APPR:	DATE:

WADE KINCOVEY
STATE OF WASHINGTON
NAME 43715
PROFESSIONAL ENGINEER
REGISTERED

SWK 6/22/2015
CHECKED BY DATE
RCC 6/22/2015
PROJ. ENGR DATE
PRINTED BY: rchandler Jun 23, 2015
PORT ADDRESS:ONE SITCUM PLAZA
TACOMA, WA 98401-1837

APPROVED:
4-8-15
DIRECTOR ENG. DATE

PORT OF TACOMA
SHORELINE STABILIZATION
PHOTO SHEET 1

6531
C19
SHEET 23 OF 25

CONT/CONS:	TOWNSHIP: 21	RANGE: 03	SECTION: 34
M. ID:	DAT-HRZ: NAD83/07	VERT: MLLW	
PHASE: FINAL	PARCEL: 8950200404	DRAWING SCALE: AS NOTED	

BINDING EDGE

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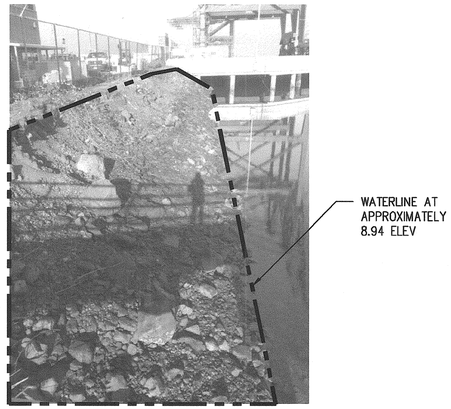
BINDING EDGE



S1 PHOTO

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S2 PHOTO

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S3 PHOTO

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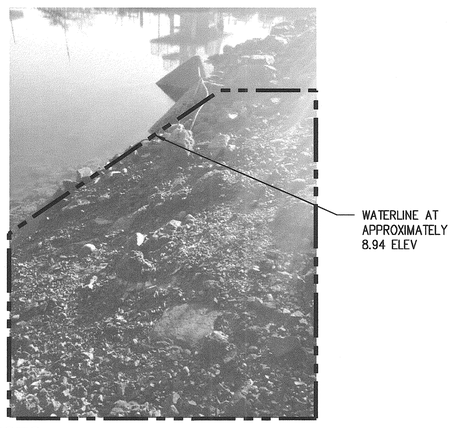

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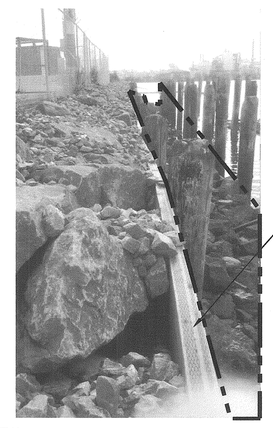

O1 PHOTO

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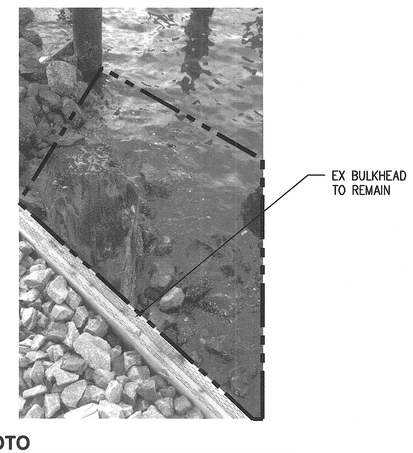

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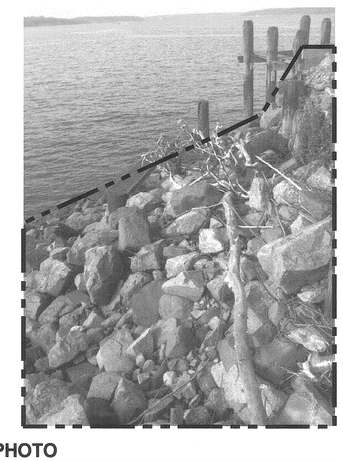

O4 PHOTO

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NOTES:

1. RESTORATION BOUNDARY ILLUSTRATES APPROXIMATE EXTENTS OF VISIBLE ABOVE GROUND RIRPRAP REPLACEMENT. ADDITIONAL DEMOLITION AND DEBRIS REMOVAL IS REQUIRED BELOW GROUND AND WATERLINE SHOWN IN PHOTOS, SEE SPECIFICATIONS.
2. THE INTENT OF THE RESTORATION PLAN AND PHOTOS ARE TO SHOW GENERAL SCOPE OF ITEMS TO BE REPLACED. THE PHOTOS HIGHLIGHT ITEMS IN THE FOREGROUND TO BE REPLACED. ITEMS IN THE BACKGROUND THAT ARE TO BE REPLACED ARE NOT NECESSARILY IDENTIFIED.

LEGEND:

RESTORATION BOUNDARY (SEE NOTE 1)

Port of Tacoma
P.O. BOX 1837 TACOMA, WA 98401 (253)383-5841

kpff
2407 North 31st Street, Suite 100
Tacoma, Washington 98407
(253) 396-0129 Fax (253) 396-0162

MARK:	REVISION:	BY:	APPR:	DATE:

WADE KINGSLEY ENGINEER REGISTERED PROFESSIONAL STATE OF WASHINGTON 6/22/15

SWK	6/22/2015	
CHECKED BY	DATE	
RGC	6/22/2015	
PROJ. ENGR	DATE	
rchandler Jun 23, 2015		
SITCUM PLAZA		
TACOMA, WA 98401-1837		

APPROVED: 4-8-15
DIRECTOR ENG. DATE

PORT OF TACOMA
SHORELINE STABILIZATION
PHOTO SHEET 2

TOWNSHIP: 21	RANGE: 03	SECTION: 34	
DAT-HRZ: NAD83/07	VERT: MLLW		
PARCEL: 8950200404	DRAWING SCALE: AS NOTED		

6531
C20
SHEET 24 OF 25

CONT/CONS:
M. ID:
PHASE: FINAL

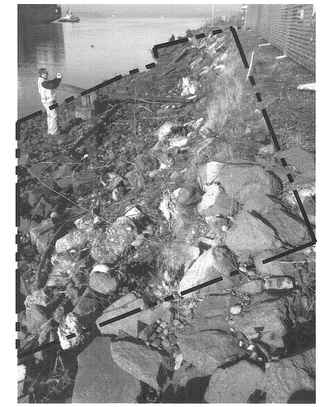
PORT OF TACOMA FILE: N:\Civil\113-\113151 PoT Bank Stabilization\Part 3 - KPFF Design\3.13 Drawings\113151-C20

O5 PHOTO

-

06 PHOTO

-



T1 PHOTO

T2 PHOTO

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NOTES:

1. RESTORATION BOUNDARY ILLUSTRATES APPROXIMATE EXTENTS OF VISIBLE ABOVE GROUND RIPRAP REPLACEMENT. ADDITIONAL RIPRAP REPLACEMENT IS REQUIRED BELOW WATERLINE SHOWN IN PHOTOS, SEE SPECIFICATIONS.
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— - - — RESTORATION BOUNDARY (SEE NOTE 1)

Port of Tacoma
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kpff
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(253) 396-0150 Fax (253) 396-0162

MARK:	REVISION:	BY:	APPR:	DATE:

WADE MINCKOFF STATE OF WASHINGTON 6/22/15 REGISTERED PROFESSIONAL ENGINEER

SWK	6/22/2015	APPROVED: 4-8-15	
CHECKED BY	DATE	DIRECTOR ENG.	DATE
RGC	6/22/2015	PROJ. ENGR	DATE
PRINTED BY: rchandler Jun 23, 2015			
PORT ADDRESS:ONE SITCUM PLAZA			
TACOMA, WA 98401-1837			

PORT OF TACOMA
SHORELINE STABILIZATION
PHOTO SHEET 3

6531
C21
SHEET 25 OF 25

CONT/CONS:	TOWNSHIP: 21	RANGE: 03	SECTION: 34
M. ID:	DAT-HRZ: NAD83/07	VERT: MLLW	
PHASE: FINAL	PARCEL: 8950200404	DRAWING SCALE: AS NOTED	