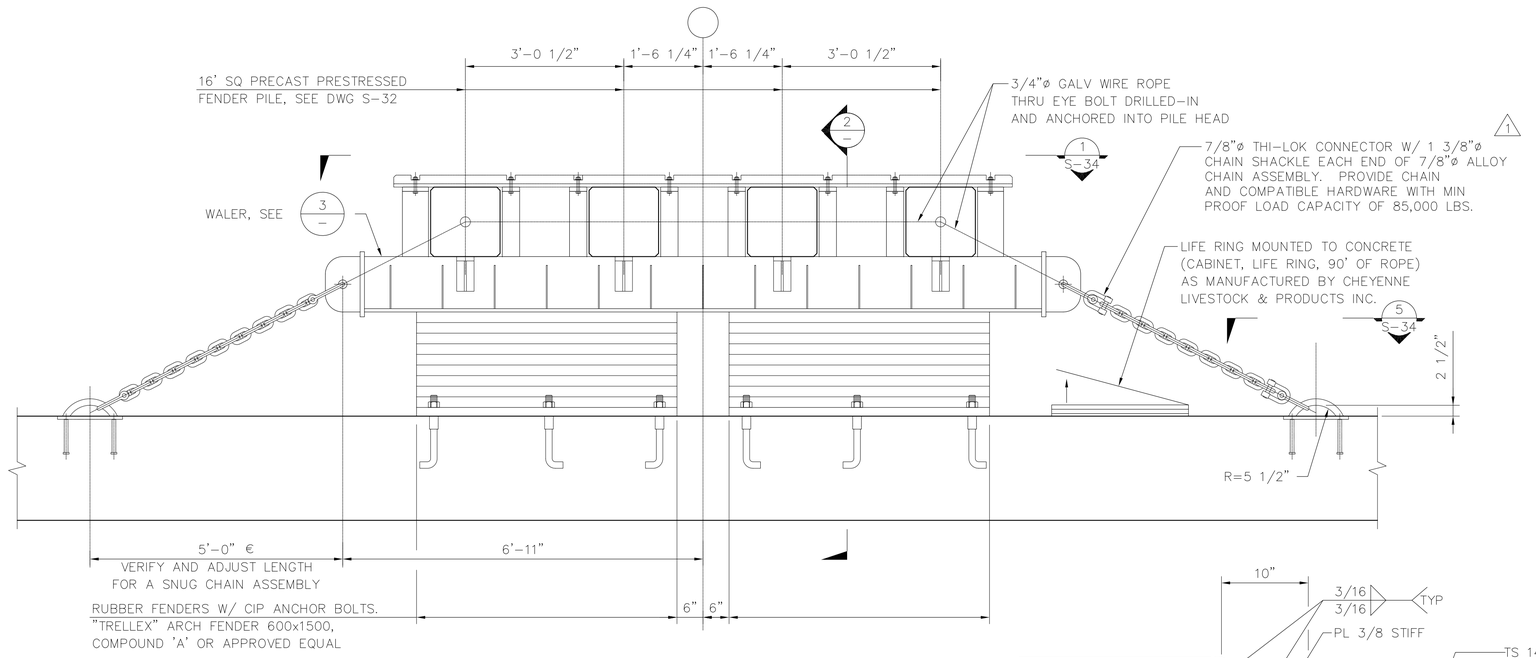
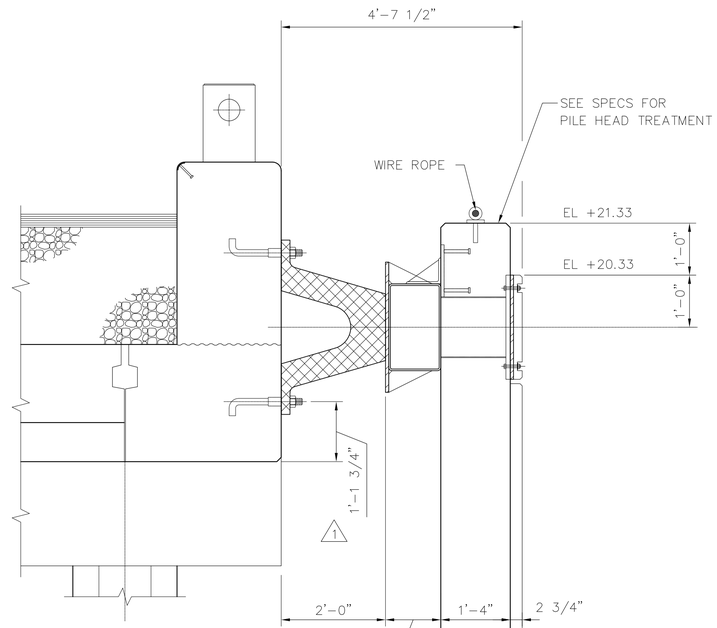
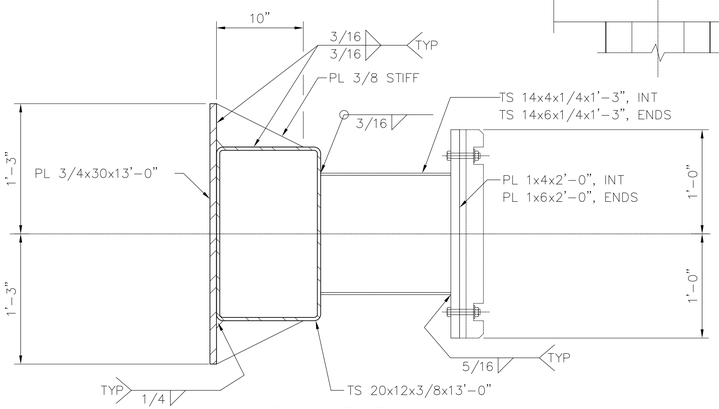
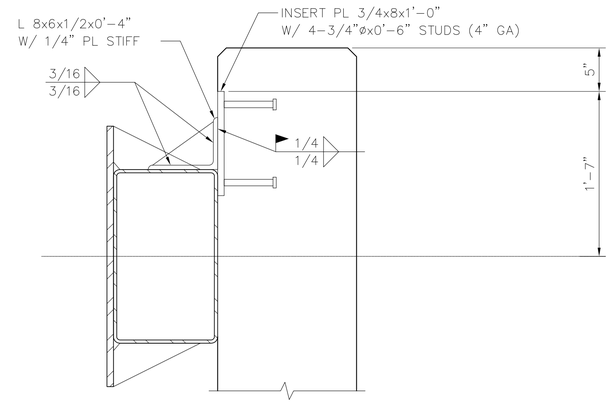


1 S-33 PLAN – FENDER
SCALE: 3/4"=1'-0"

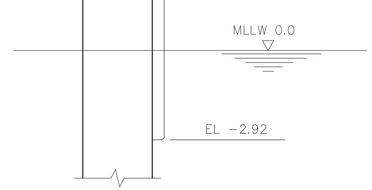




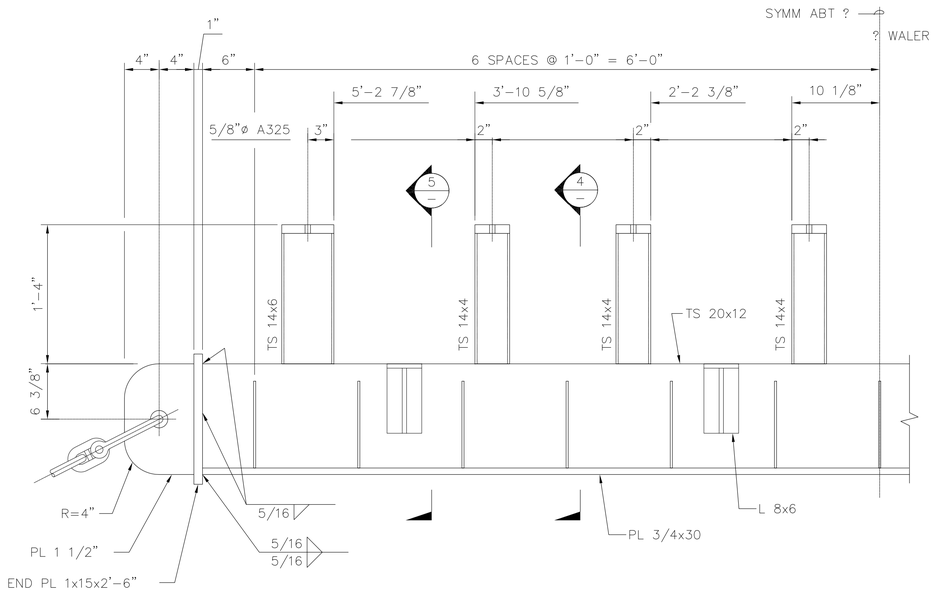
4 S-33 SECTION
SCALE: 1 1/2"=1'-0"



5 S-33 SECTION
SCALE: 1 1/2"=1'-0"



2 S-33 SECTION
SCALE: 3/4"=1'-0"



3 S-33 PLAN – WALER
SCALE: 1 1/2"=1'-0"

AS-BUILT

AUTOCAD FILE NO. 5012S33 | S-33

PORT OF TACOMA
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(206) 383-5841

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FEDERAL WAY, WASHINGTON 98003-6395
(206)431-2300 FAX:(206)431-2250

APPROVED _____ DATE
CURTIS L. RATCLIFFE P.E.
CHIEF ENGINEER

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HYUNDAI MERCHANT MARINE TERMINAL
WHARF
PORT OF TACOMA
FENDER SYSTEM DETAILS - SHEET 1

DRAWING NO. EP-5012-26
CONTRACT NO. 978038
SHEET NO. 44 OF 58

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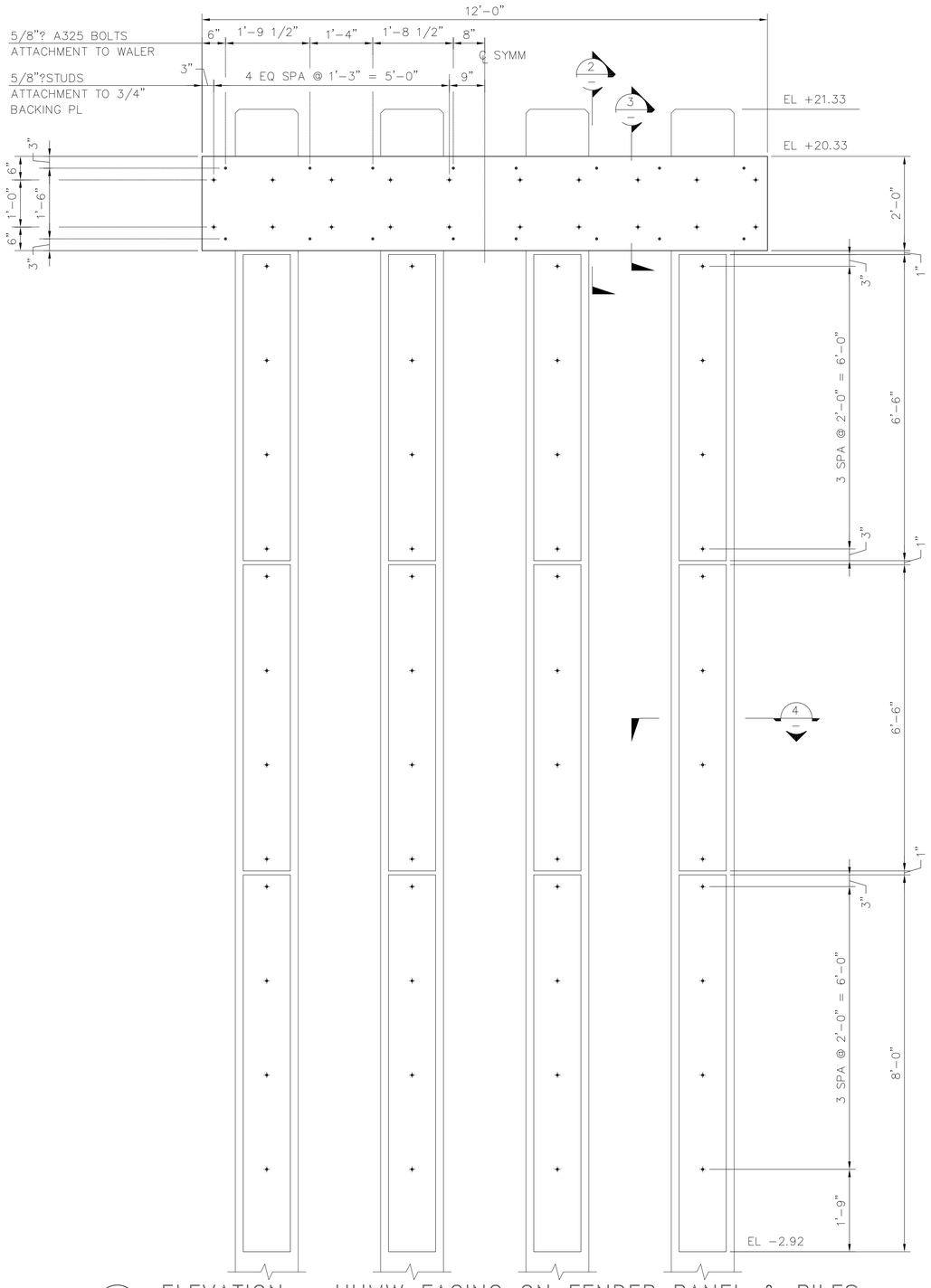
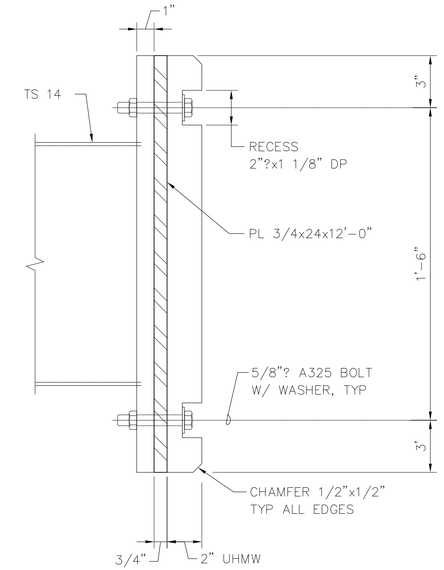
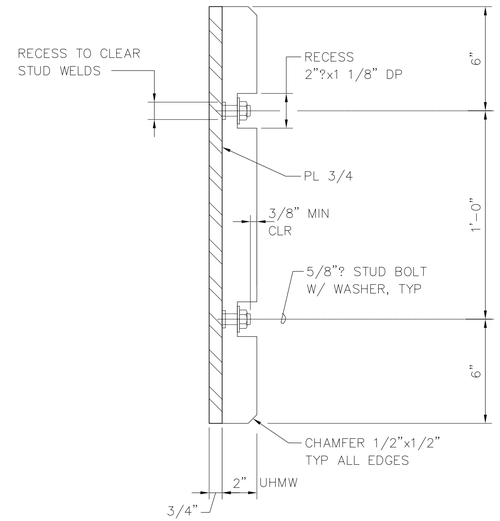


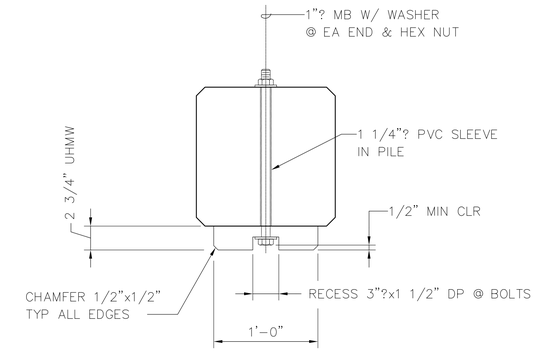
1 S-34 ELEVATION – UHMW FACING ON FENDER PANEL & PILES
SCALE: 3/4"=1'-0"



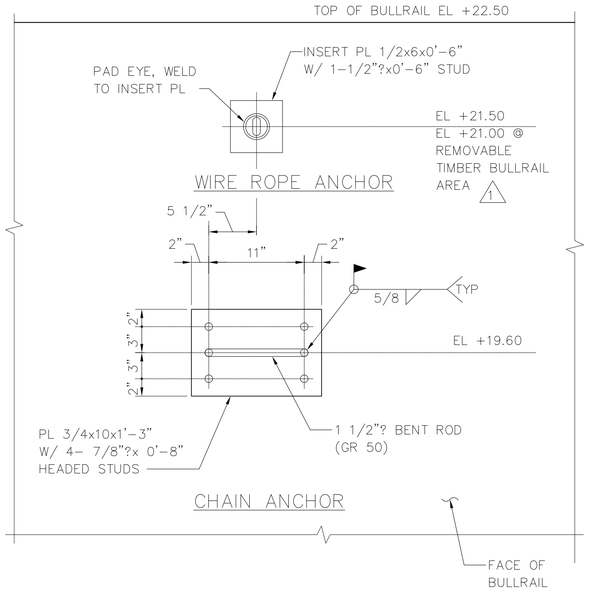
2 S-34 SECTION – FENDER PANEL @ TOP
SCALE: 3"=1'-0"



3 S-34 SECTION – FENDER PANEL @ TOP
SCALE: 3"=1'-0"



4 S-34 SECTION – UHMW ATTACHMENT TO FENDER PILE
SCALE: 1 1/2"=1'-0"



5 S-34 ELEVATION – CHAIN AND WIRE ROPE ANCHOR
SCALE: 1 1/2"=1'-0"

AS-BUILT

AUTOCAD FILE NO. 5012S34 | S-34

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(206) 383-5841

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FEDERAL WAY, WASHINGTON 98003-6395
(206)431-2300 FAX:(206)431-2250

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CHIEF ENGINEER

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HYUNDAI MERCHANT MARINE TERMINAL WHARF
PORT OF TACOMA
FENDER SYSTEM DETAILS - SHEET 2

DRAWING NO. EP-5012-26
CONTRACT NO. 978038
SHEET NO. 45 OF 58

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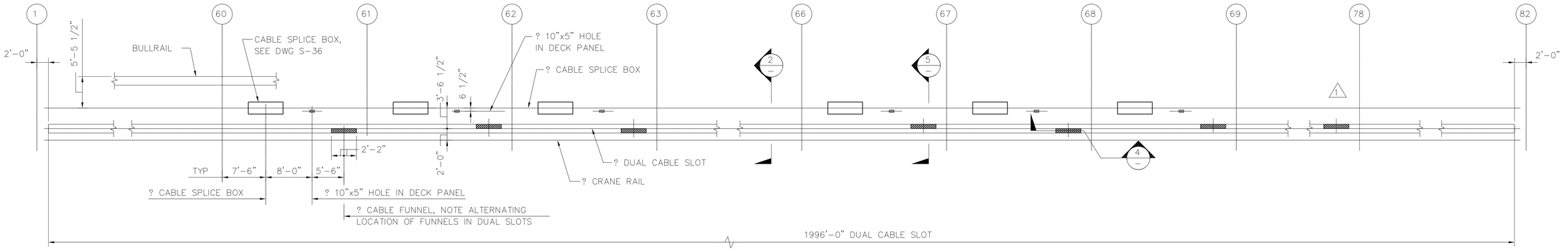
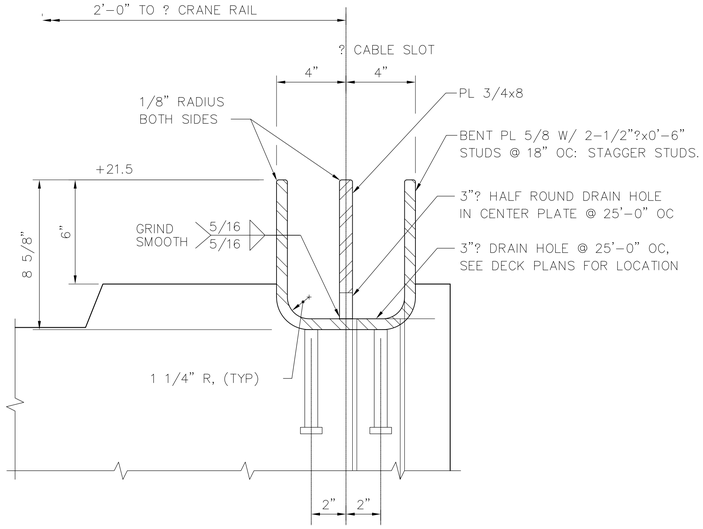
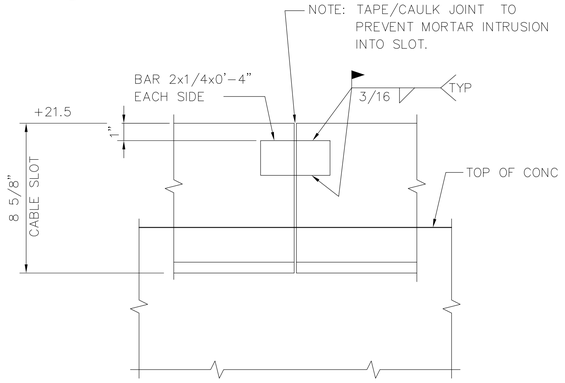


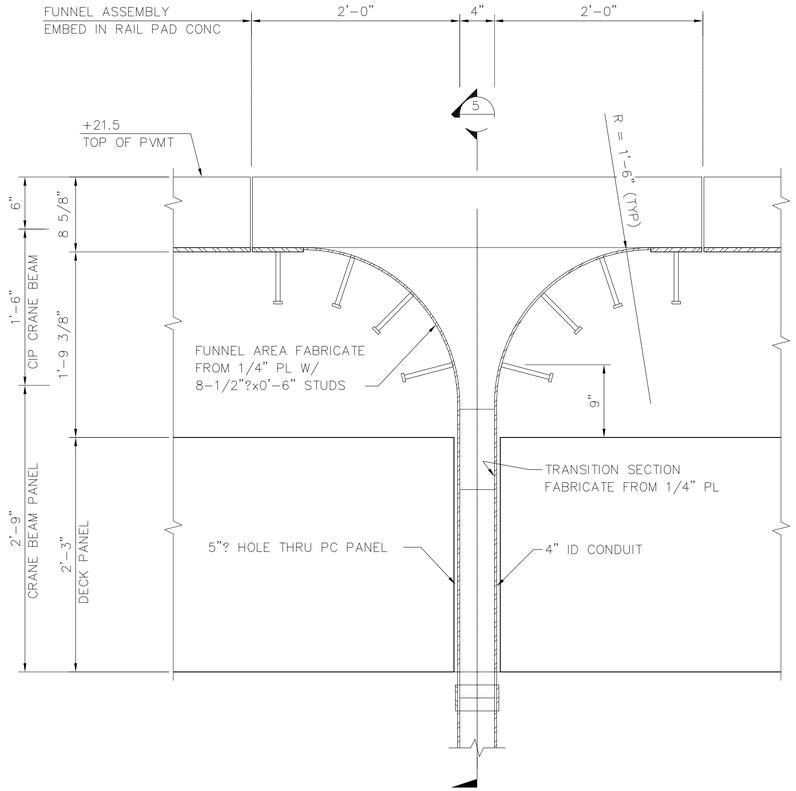
1 S-35 PLAN – CABLE SLOT AND CABLE SPLICE BOXES
SCALE: 1/8"=1'-0"



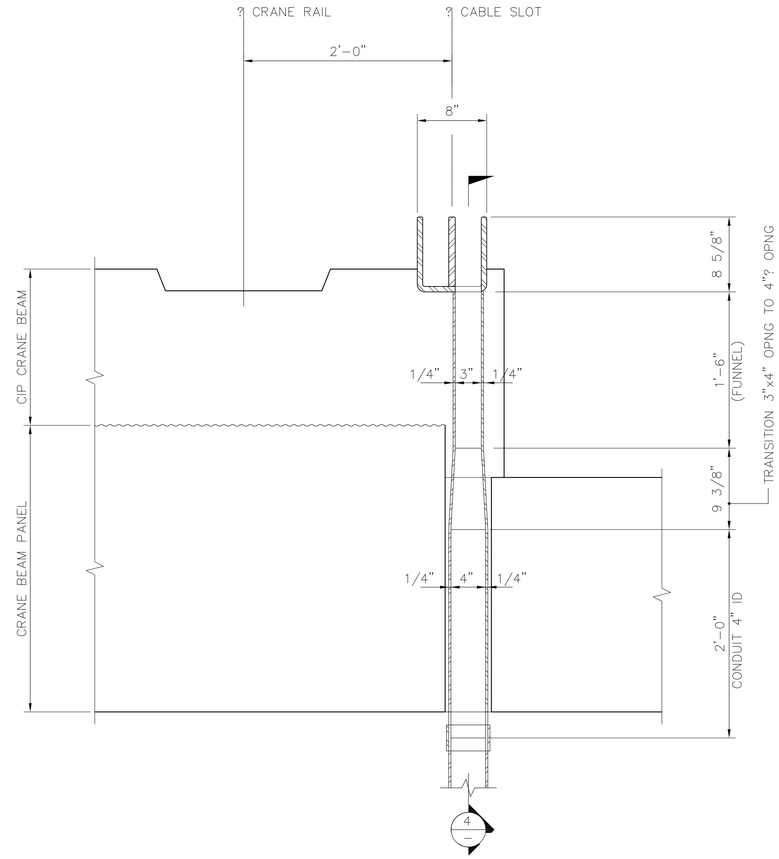
2 S-35 SECTION – DUAL CABLE SLOT
SCALE: 3"=1'-0"



3 S-35 ELEVATION – CABLE SLOT @ SPLICE
SCALE: 3"=1'-0"



4 S-35 SECTION – CABLE FUNNEL
SCALE: 1 1/2"=1'-0"



5 S-35 SECTION – CABLE FUNNEL
SCALE: 1 1/2"=1'-0"

AS-BUILT

AUTOCAD FILE NO. 5012S35 | S-35

PORT of TACOMA U.S.A.

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P.O. BOX 1837 TACOMA, WASHINGTON 98401
(206) 383-5841

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FEDERAL WAY, WASHINGTON 98003-6395
(206)431-2300 FAX:(206)431-2250

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HYUNDAI MERCHANT MARINE TERMINAL WHARF
PORT OF TACOMA
CABLE SLOT DETAILS

DRAWING NO. EP-5012-26
CONTRACT NO. 978038
SHEET NO. 46 OF 58

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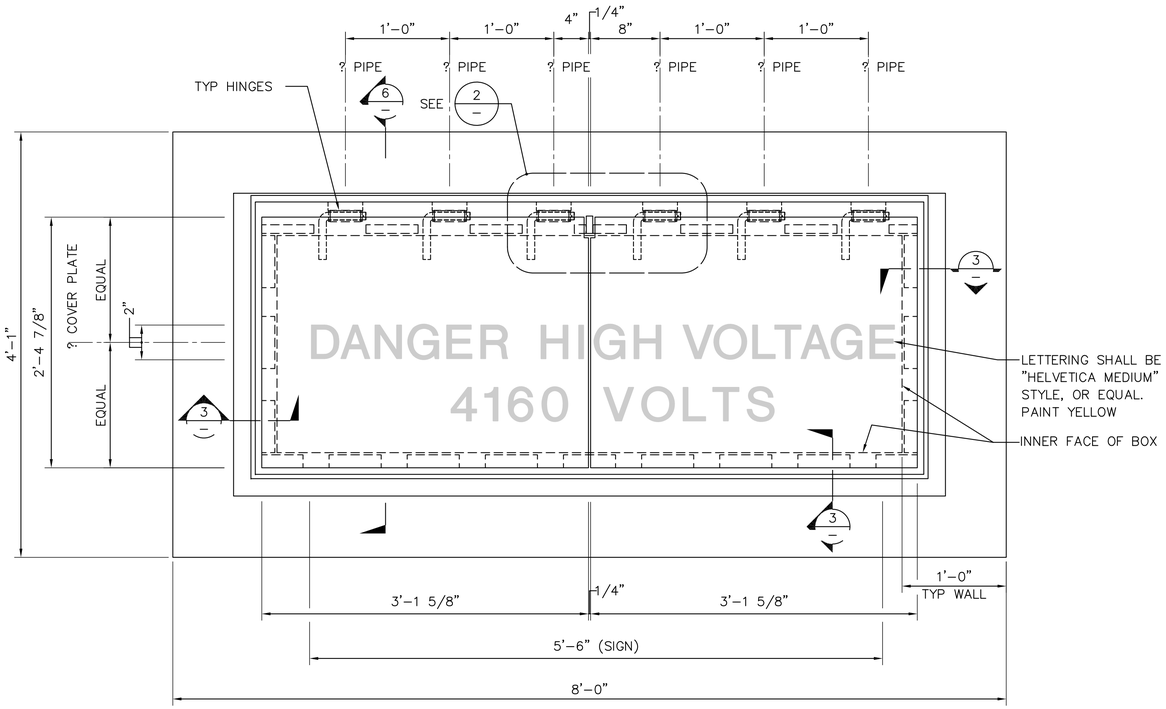
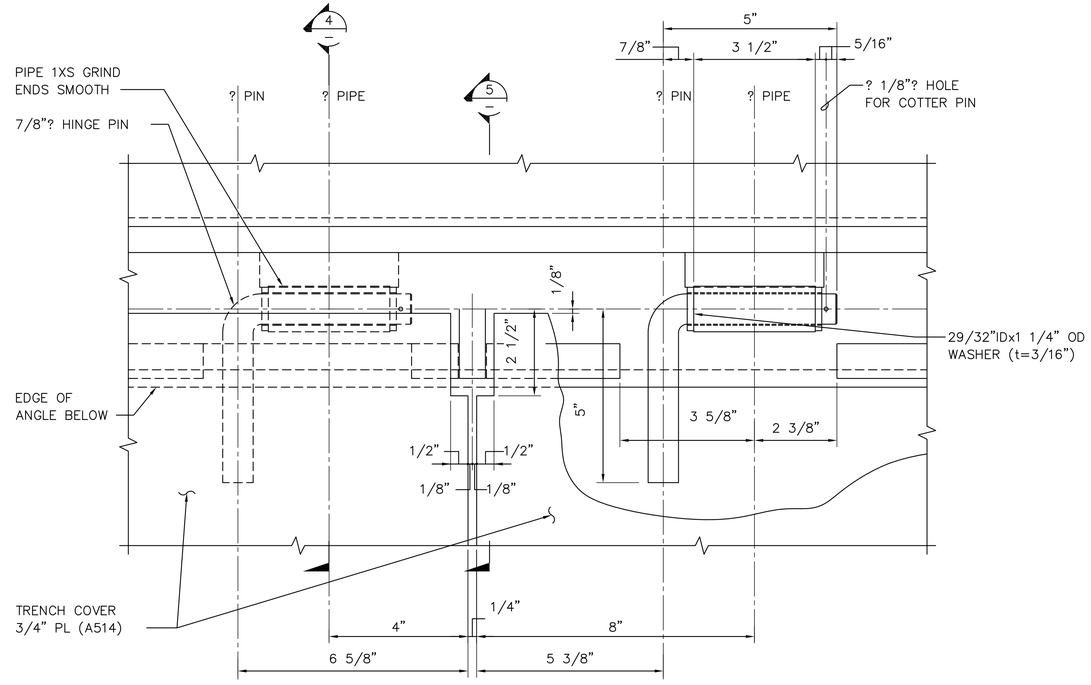
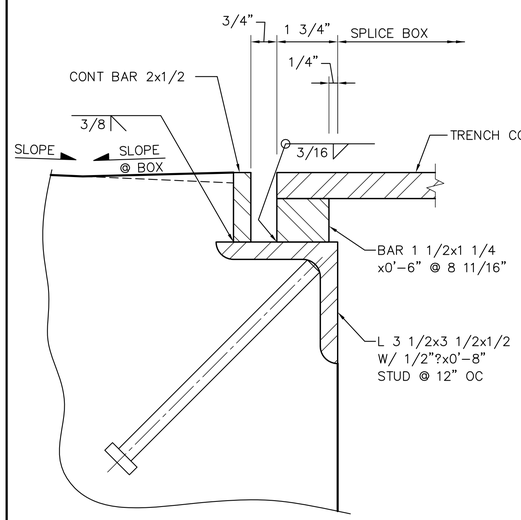


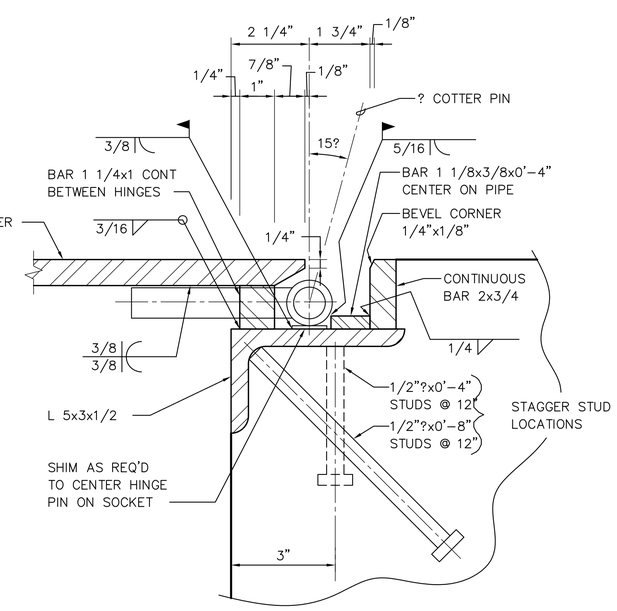
1 S-36 PLAN – CABLE SPLICE BOX COVER
SCALE: 1 1/2"=1'–0"



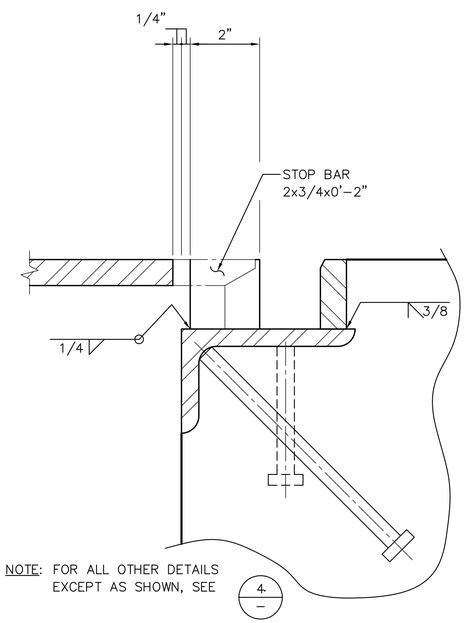
2 S-36 DETAIL
SCALE: 6"=1'–0"



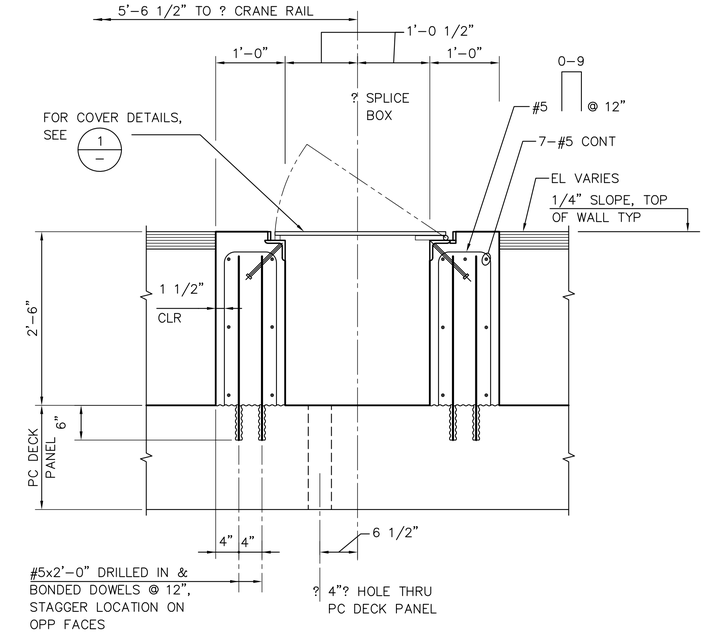
3 S-36 SECTION
SCALE: 3"=1'–0"



4 S-36 SECTION
SCALE: 3"=1'–0"



5 S-36 SECTION
SCALE: 3"=1'–0"



6 S-36 SECTION – CABLE SPLICE BOX
SCALE: 1"=1'–0"

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AUTOCAD FILE NO. 5012S36 | S-36

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FEDERAL WAY, WASHINGTON 98003-6395
(206)431-2300 FAX: (206)431-2250

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CHIEF ENGINEER

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HYUNDAI MERCHANT MARINE TERMINAL WHARF
PORT OF TACOMA
SPLICE BOX DETAILS

DRAWING NO. EP-5012-26
CONTRACT NO. 978038
SHEET NO. 47 OF 58

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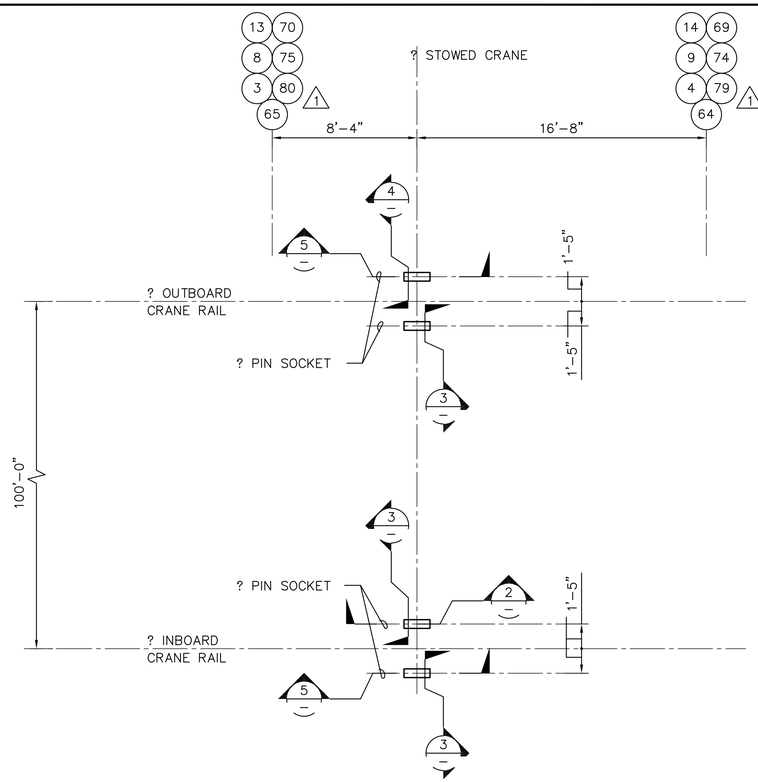
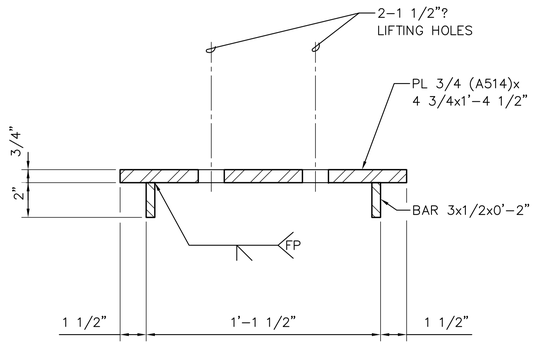
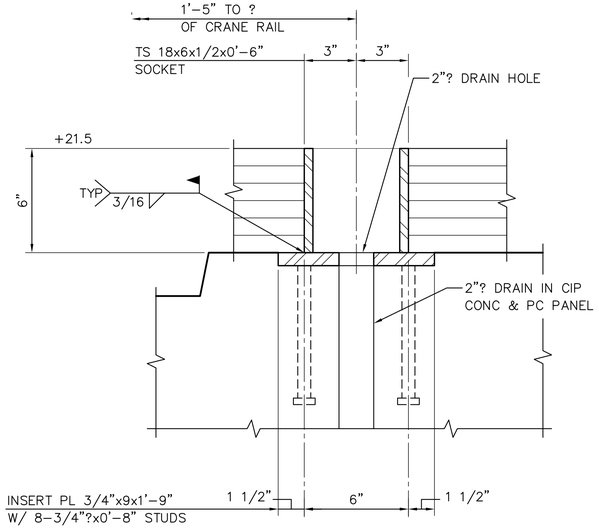


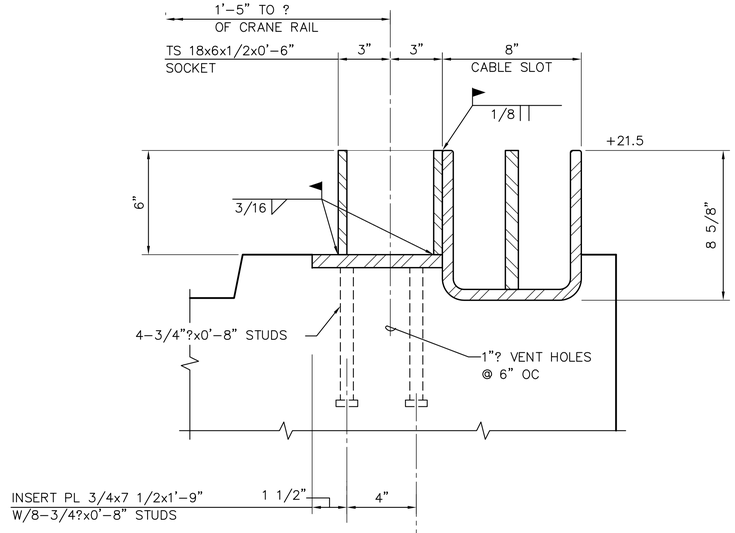
1 S-37 PLAN – PIN SOCKET @ STOWED CRANE LOCATIONS
SCALE: 1/4"=1'–0"



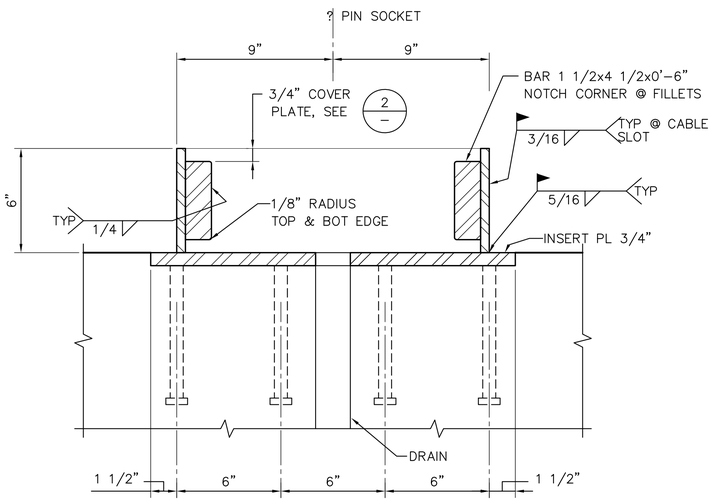
2 S-37 DETAIL – PIN SOCKET COVER
SCALE: 3"=1'–0"



3 S-37 SECTION – PIN SOCKETS: INBOARD CRANE RAIL & LANDSIDE OF OUTBOARD CRANE RAIL
SCALE: 3"=1'–0"



4 S-37 SECTION – PIN SOCKETS: WATERSIDE OF OUTBOARD CRANE RAIL
SCALE: 3"=1'–0"



5 S-37 SECTION – TYPICAL PIN SOCKET
SCALE: 3"=1'–0"

AS-BUILT

AUTOCAD FILE NO. 5012S37 | S-37

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ENGINEERS INC.
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FEDERAL WAY, WASHINGTON 98003-6395
(206)431-2300 FAX:(206)431-2250

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HYUNDAI MERCHANT MARINE TERMINAL
WHARF
PORT OF TACOMA
CRANE PIN SOCKET DETAILS

DRAWING NO. EP-5012-26
CONTRACT NO. 978038
SHEET NO. 48 OF 58

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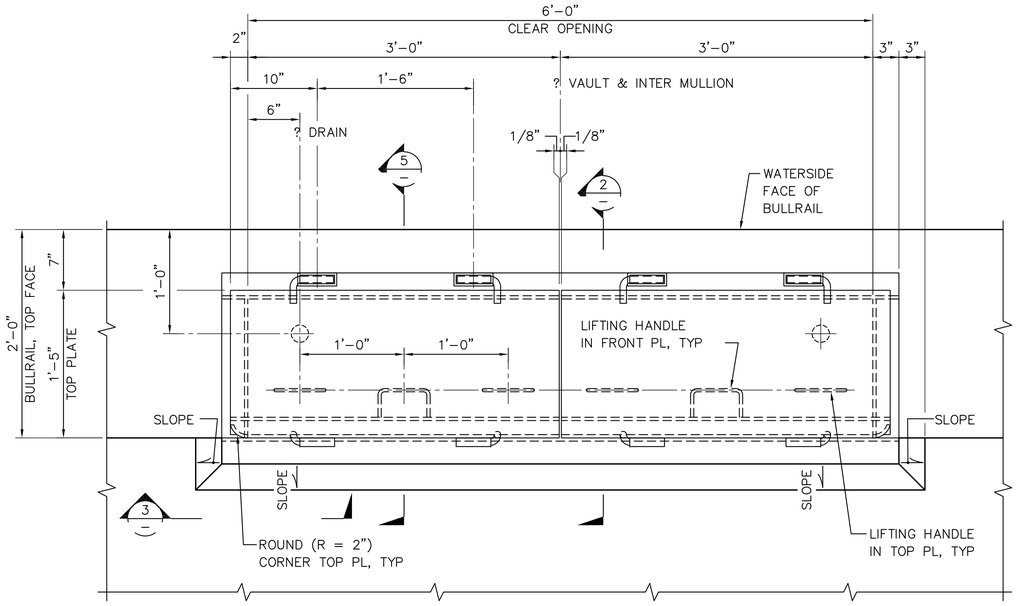
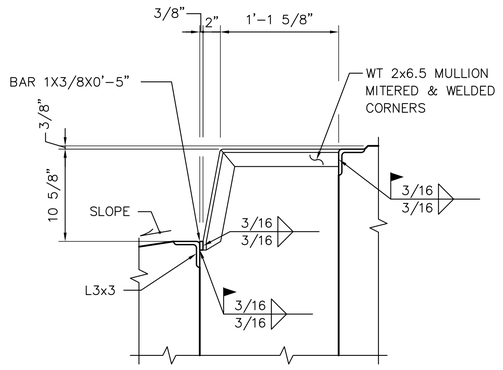
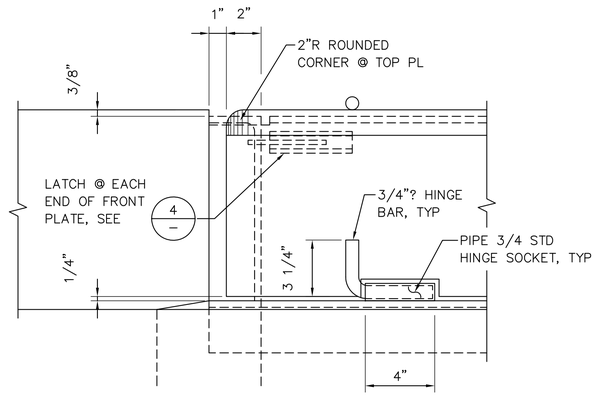


1 S-38 PLAN – UTILITY VAULT
SCALE: 1 1/2"=1'-0"

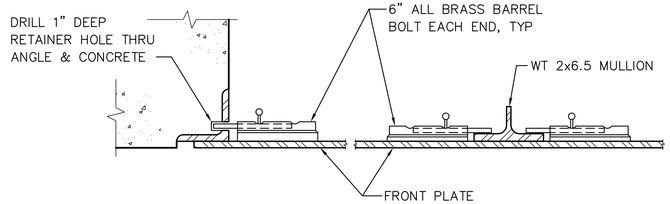
NOTE: PAINT DESIGNATOR SIGNS – "WATER" & "ELECTRICAL" ON TOP OF RESPECTIVE VAULTS. DETAIL AS SHOWN ON 1 S-36



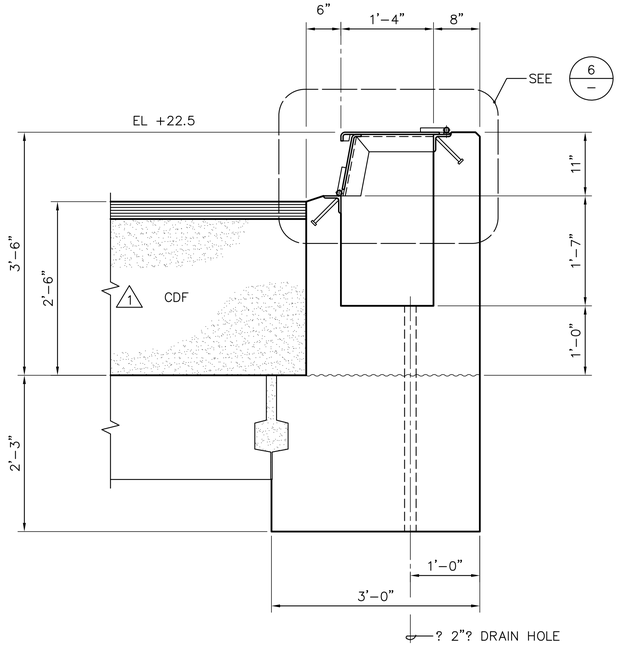
2 S-38 DETAIL – INTERMEDIATE MULLION
SCALE: 1 1/2"=1'-0"



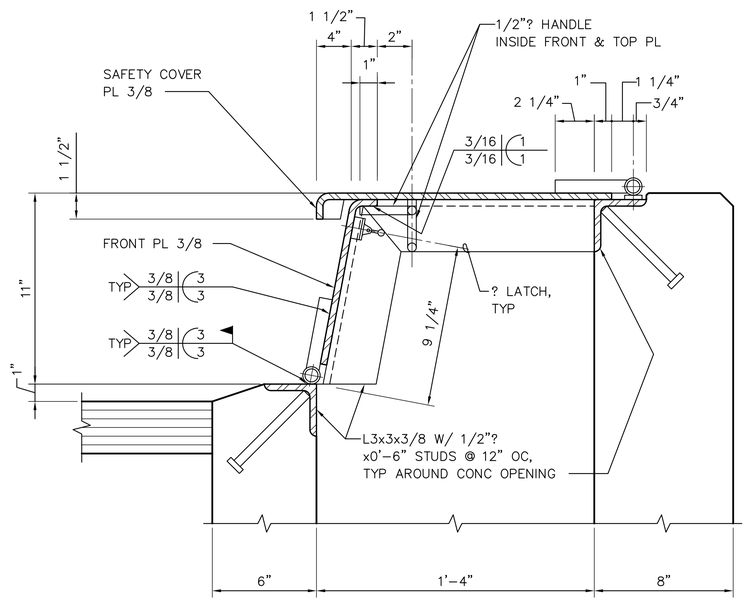
3 S-38 ELEVATION – FRONT PLATE
SCALE: 3"=1'-0"



4 S-38 PLAN – LATCH DETAIL
SCALE: 3"=1'-0"



5 S-38 SECTION – UTILITY VAULT
SCALE: 1"=1'-0"



6 S-38 DETAIL – VAULT COVER
SCALE: 3"=1'-0"

AS-BUILT

AUTOCAD FILE NO. 5012S38 | S-38

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(206) 383-5841

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HYUNDAI MERCHANT MARINE TERMINAL WHARF
PORT OF TACOMA
UTILITY VAULT DETAILS

DRAWING NO. EP-5012-26
CONTRACT NO. 978038
SHEET NO. 49 OF 58

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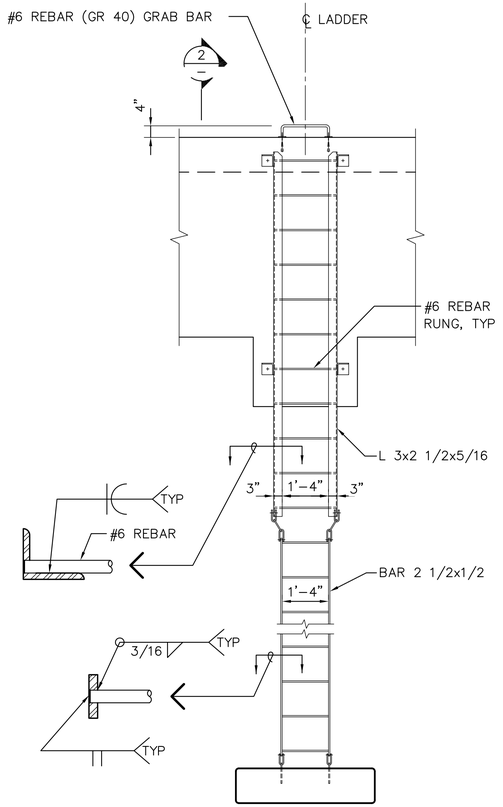
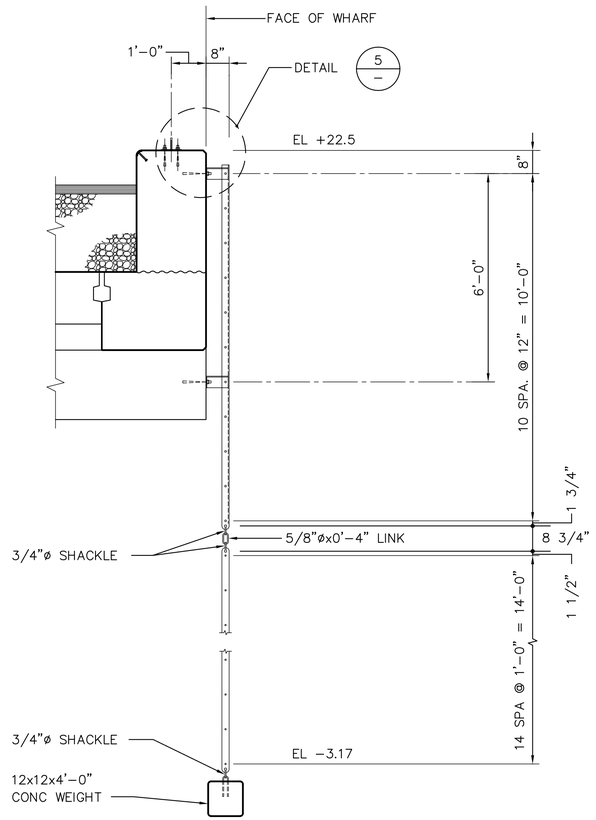
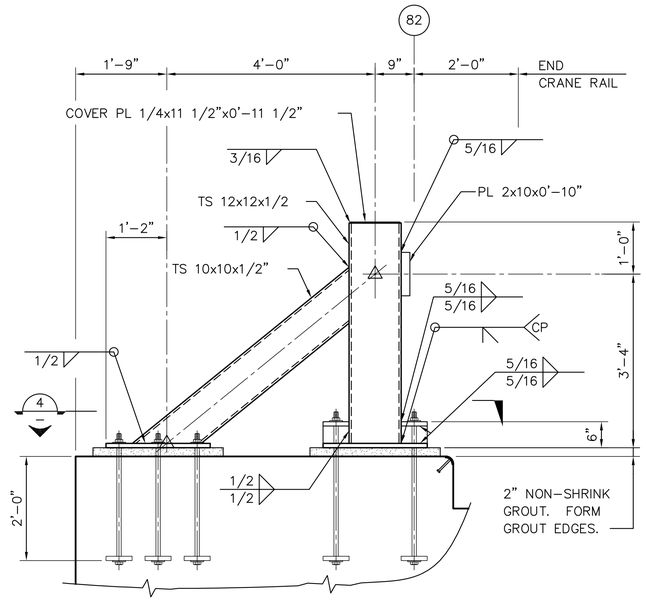


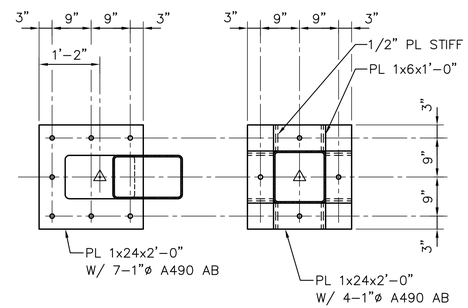
1 S-39 ELEVATION – LADDER
SCALE: 1/2"=1'-0"



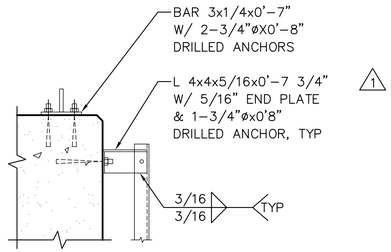
2 S-39 SECTION – LADDER
SCALE: 1/2"=1'-0"



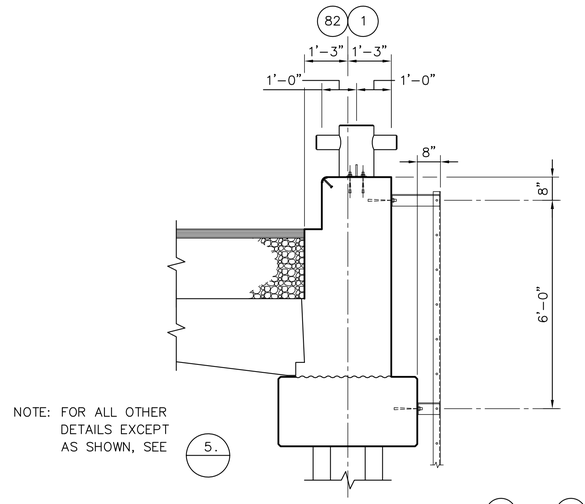
3 S-39 ELEVATION – CRANE STOP
SCALE: 3/4"=1'-0"



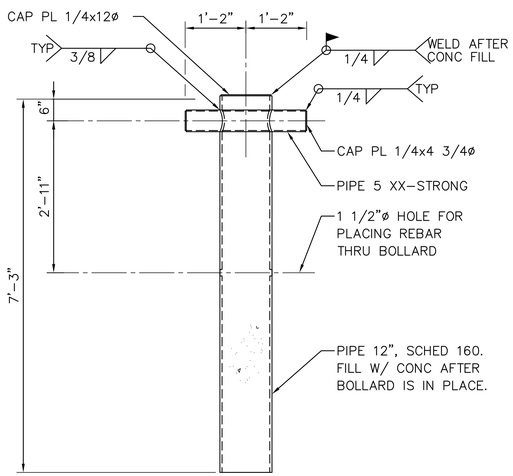
4 S-39 SECTION
SCALE: 3/4"=1'-0"



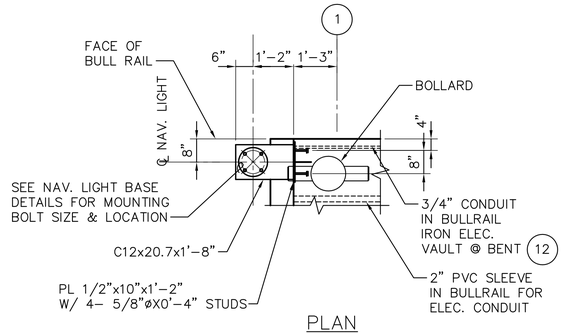
5 S-39 DETAIL
SCALE: 1"=1'-0"



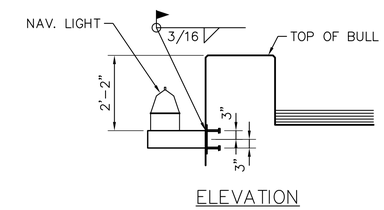
6 S-39 SECTION – LADDER @ BENTS 1 & 82
SCALE: 1/2"=1'-0"



7 S-39 DETAIL – PERMANENT BOLLARD
SCALE: 3/4"=1'-0"



PLAN



ELEVATION

8 S-39 DETAIL – NAVIGATION LIGHT
SCALE: 3/4"=1'-0"

AS-BUILT

AUTOCAD FILE NO. 5012S39 | S-39

PORT of TACOMA U.S.A. ★★★★
PORT OF TACOMA
P.O. BOX 1837 TACOMA, WASHINGTON 98401
(206) 383-5841

BERGER/ABAM
ENGINEERS INC.
33301 9TH AVENUE SOUTH
FEDERAL WAY, WASHINGTON 98003-6395
(206)431-2300 FAX:(206)431-2250

APPROVED _____ DATE
CURTIS L. RATCLIFFE P.E.
CHIEF ENGINEER

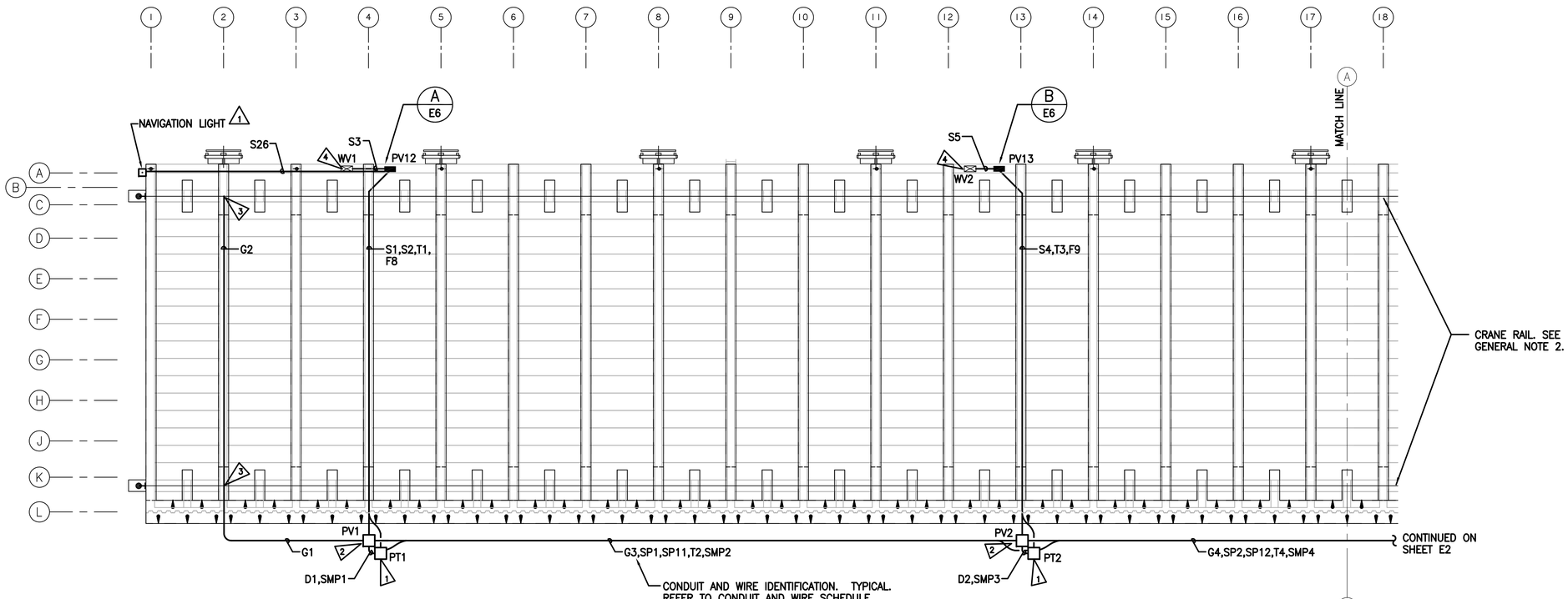
BTH	9/97	BCM	9/97		
DRAWN BY	DATE	CHECKED BY	DATE		
	9/97	JAS	9/97		
DESIGNED BY	DATE	PROJ ENGR	DATE		

MARK	REVISION	BY	APP.	DATE
1	AS-BUILT	RDD	JAS	1/4/99

HYUNDAI MERCHANT MARINE TERMINAL
WHARF
PORT OF TACOMA
MISCELLANEOUS STEEL DETAILS

DRAWING NO. EP-5012-26
CONTRACT NO. 978038
SHEET NO. 50 OF 58

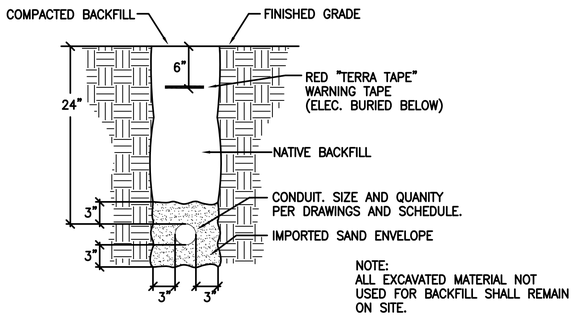
Last Saved on Tue Jun 10 2008 at 11:32AM by Lovochin File Name: O:\2008\FAMAT-08-127\CADD\A97093\5012S39.dwg Scale: 24



PARTIAL WHARF ELECTRICAL PLAN

SCALE: 1"=20'-0"

N



TYPICAL CONDUIT TRENCHING

NO SCALE

ELECTRICAL NOTES:

1. TELEPHONE VAULTS PT1 THRU PT11 SHALL BE SIMILAR TO PIPE INC., #4484 TCA. VAULT, COVER AND LID SHALL BE DESIGNED FOR 100 KIP WHEEL LOAD (100 PSI TIRE PRESSURE). PROVIDE VAULTS WITH GALVANIZED "C" CHANNEL FOR MOUNTING ON ALL SIDES, GALVANIZED PULLING IRONS, BONDING RIBBON, AND ENTRY LADDER. THE CENTER LINE OF THE VAULT SHALL BE 11'-0" FROM GRID LINE L. PROVIDE 12" PEA GRAVEL BED UNDER AND AROUND ALL VAULTS.
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GENERAL NOTES:

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AS-BUILT

PORT OF TACOMA U.S.A.
PORT OF TACOMA
P.O. BOX 1837 TACOMA, WASHINGTON 98401
(206) 383-5841

CROSS ENGINEERS, INC.
260 South Fifth St. (253) 383-2544
Tacoma, Washington 98402 (FAX) 272-5846
Cross@halcyon.com

APPROVED _____ DATE
CURTIS L. RATCLIFFE P.E.
CHIEF ENGINEER

NEA	9/23/97	GLW/JAB	9/23/97
DRAWN BY	DATE	CHECKED BY	DATE
GLW	9/23/97	GLW	9/23/97
DESIGNED BY	DATE	PROJ ENGR	DATE

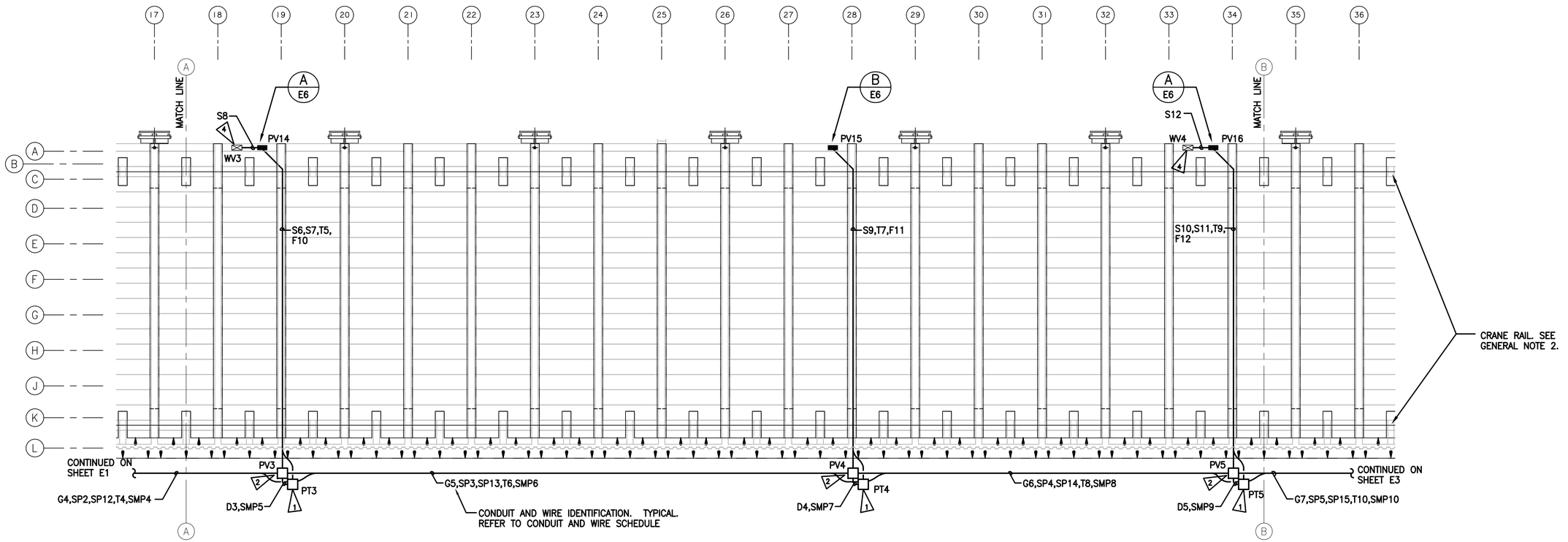
MARK	REVISION	BY	APP.	DATE
1	AS-BUILT	RNG	GLW	1/4/99

HYUNDAI MERCHANT MARINE TERMINAL
WHARF
PORT OF TACOMA
PARTIAL ELECTRICAL PLAN

AUTOCAD FILE NO. 5012E1

E1

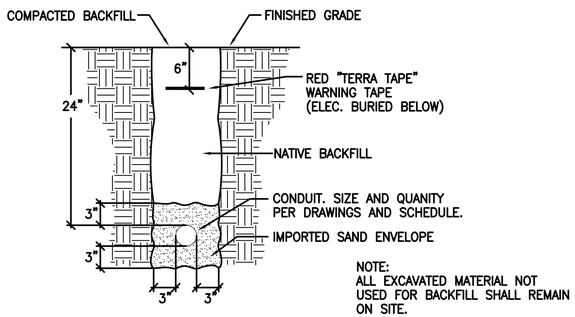
DRAWING NO. EP-5012-26
CONTRACT NO. 978038
SHEET NO. 51 OF 58



PARTIAL WHARF ELECTRICAL PLAN

SCALE: 1"=20'-0"

N



TYPICAL CONDUIT TRENCHING

NO SCALE

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AS-BUILT

AUTOCAD FILE NO. 5012E2

E2

PORT OF TACOMA
P.O. BOX 1837 TACOMA, WASHINGTON 98401
(206) 383-5841

CROSS ENGINEERS, INC.
250 South Fifth St. Tacoma, Washington 98402
(253) 383-2544 (FAX) 272-5846
Cross@halcyon.com

APPROVED

DATE

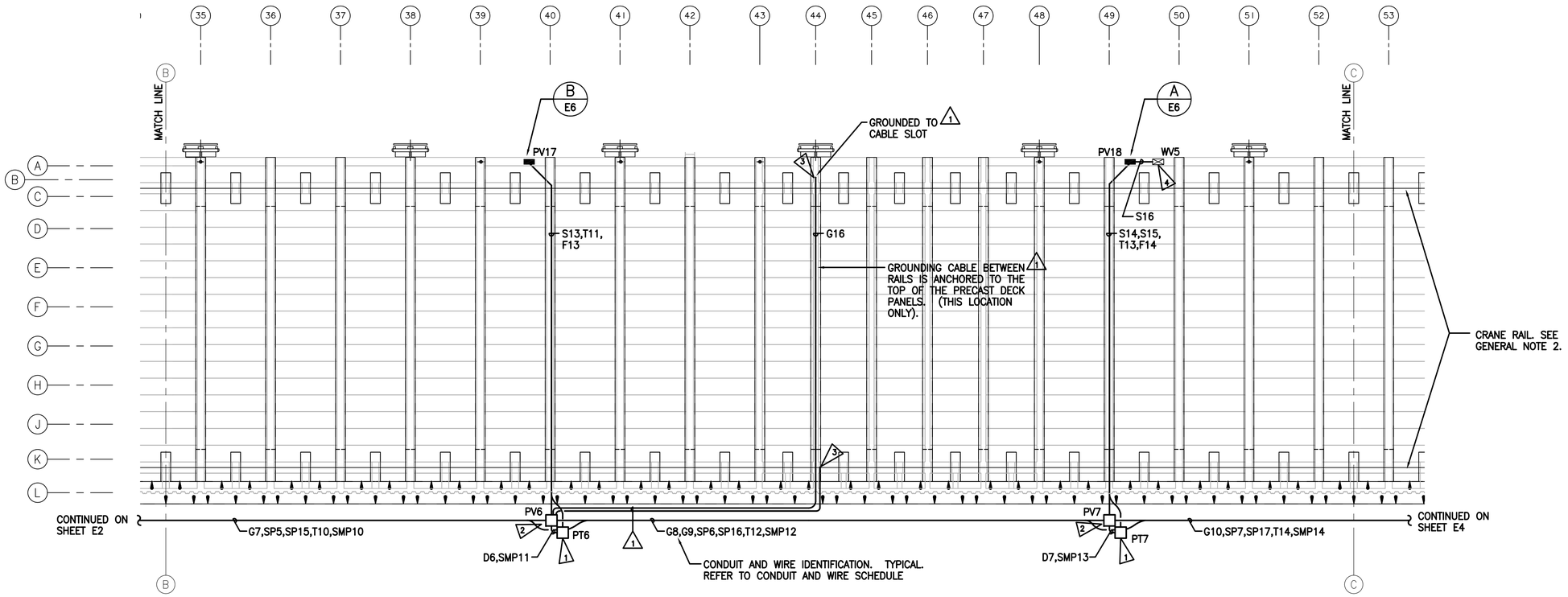
CURTIS L. RATCLIFFE P.E.
CHIEF ENGINEER

NEA	9/23/97	GLW/JAB	9/23/97
DRAWN BY	DATE	CHECKED BY	DATE
GLW	9/23/97	GLW	9/23/97
DESIGNED BY	DATE	PROJ ENGR	DATE

MARK	REVISION	BY	APP.	DATE
1	AS-BUILT	RNG	GLW	1/4/99

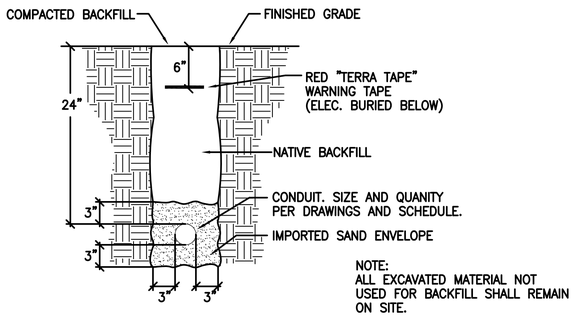
HYUNDAI MERCHANT MARINE TERMINAL
WHARF
PORT OF TACOMA
PARTIAL ELECTRICAL PLAN

DRAWING NO. EP-5012-26
CONTRACT NO. 978038
SHEET NO. 52 OF 58



PARTIAL WHARF ELECTRICAL PLAN

SCALE: 1"=20'-0"



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AS-BUILT

AUTOCAD FILE NO. 5012E3 | E3

PORT of TACOMA U.S.A.

PORT OF TACOMA
P.O. BOX 1837 TACOMA, WASHINGTON 98401
(206) 383-5841

CROSS ENGINEERS, INC.
260 South Fifth St. (253) 383-2544
Tacoma, Washington 98402 (FAX) 272-5846
Cross@halcyon.com

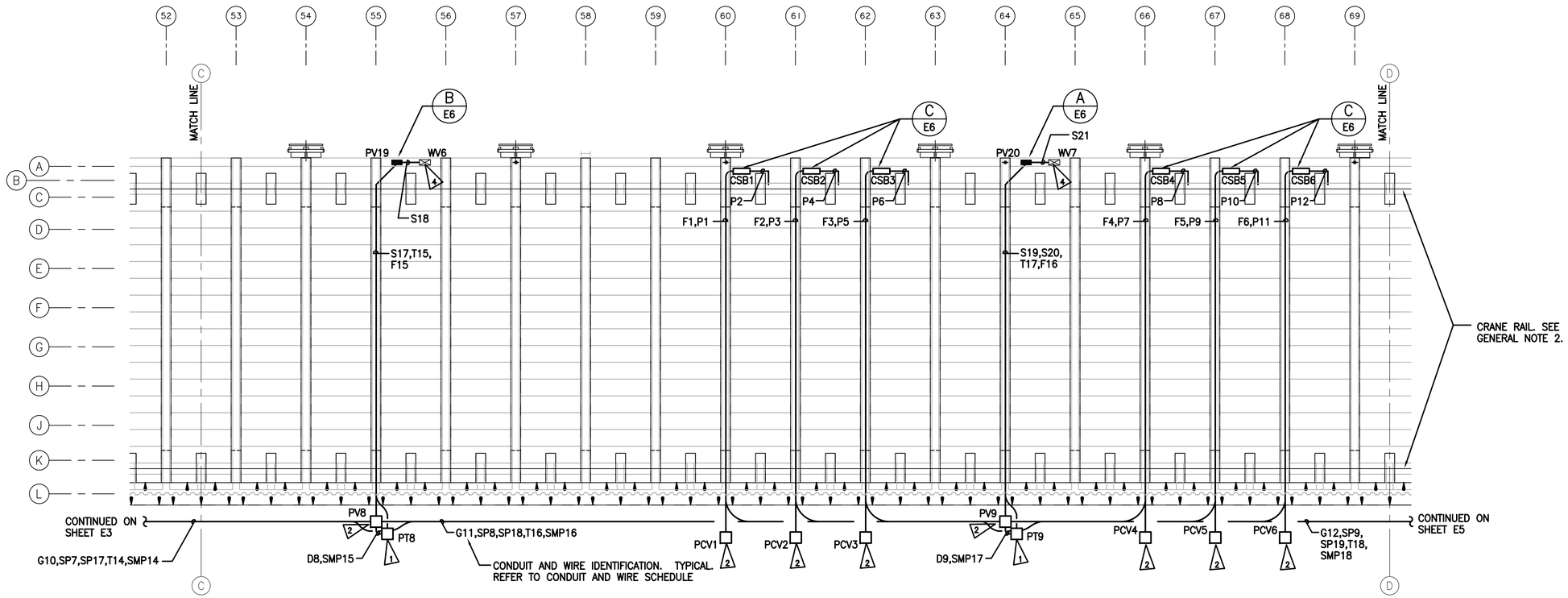
APPROVED _____ DATE
CURTIS L. RATCLIFFE P.E.
CHIEF ENGINEER

NEA	9/23/97	GLW/JAB	9/23/97
DRAWN BY	DATE	CHECKED BY	DATE
GLW	9/23/97	GLW	9/23/97
DESIGNED BY	DATE	PROJ ENGR	DATE

MARK	REVISION	BY	APP.	DATE
1	AS-BUILT	RNG	GLW	1/4/99

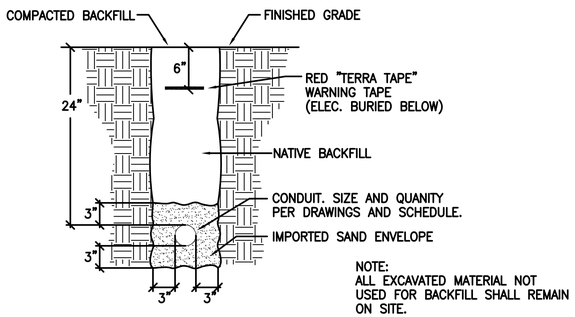
HYUNDAI MERCHANT MARINE TERMINAL
WHARF
PORT OF TACOMA
PARTIAL ELECTRICAL PLAN

DRAWING NO. EP-5012-26
CONTRACT NO. 978038
SHEET NO. 53 OF 58



PARTIAL WHARF ELECTRICAL PLAN

SCALE: 1"=20'-0"



TYPICAL CONDUIT TRENCHING

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AS-BUILT

AUTOCAD FILE NO.	
5012E4	E4

PORT OF TACOMA
P.O. BOX 1837 TACOMA, WASHINGTON 98401
(206) 383-5841

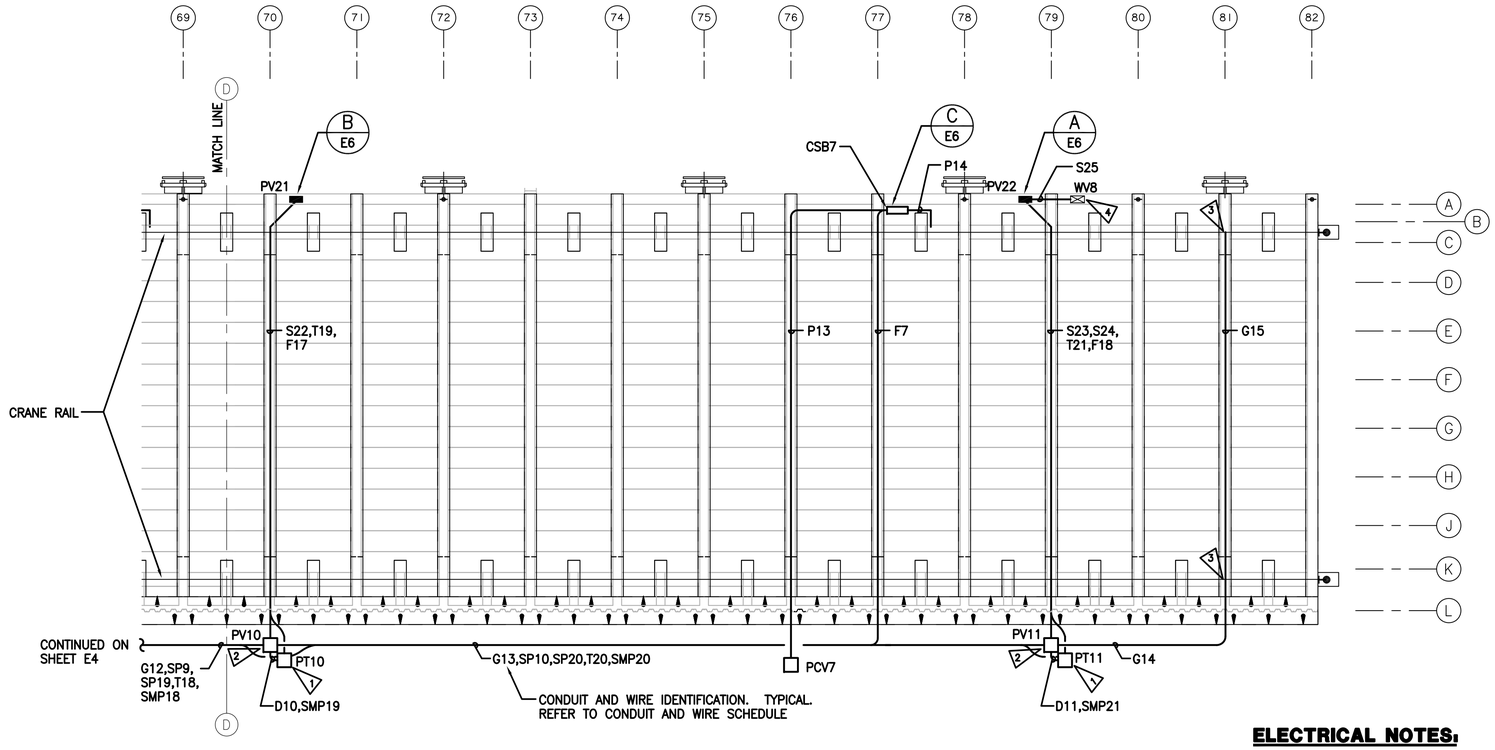
CROSS ENGINEERS, INC.
260 South Fifth St. (253) 383-2544
Tacoma, Washington 98402 (FAX) 272-5846
Cross@halcyon.com

APPROVED _____ DATE
CURTIS L. RATCLIFFE P.E.
CHIEF ENGINEER

NEA	9/23/97	GLW/JAB	9/23/97								
DRAWN BY	DATE	CHECKED BY	DATE								
GLW	9/23/97	GLW	9/23/97								
DESIGNED BY	DATE	PROJ ENGR	DATE	MARK	REVISION	BY	APP.	DATE			
				1	AS-BUILT	RNG	GLW	1/4/99			

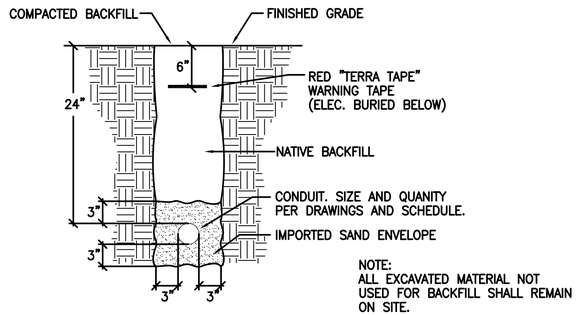
HYUNDAI MERCHANT MARINE TERMINAL
WHARF
PORT OF TACOMA
PARTIAL ELECTRICAL PLAN

DRAWING NO. EP-5012-26
CONTRACT NO. 978038
SHEET NO. 54 OF 58



PARTIAL WHARF ELECTRICAL PLAN

SCALE: 1"=20'-0"



TYPICAL CONDUIT TRENCHING

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AS-BUILT

PORT of TACOMA U.S.A.

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260 South Fifth St. Tacoma, Washington 98402
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APPROVED									
CURTIS L. RATCLIFFE P.E.	DATE	NEA	9/23/97	GLW/JAB	9/23/97	⚠	AS-BUILT	RNG	GLW 1/4/99
CHIEF ENGINEER		DRAWN BY	DATE	CHECKED BY	DATE				
		GLW	9/23/97	GLW	9/23/97				
		DESIGNED BY	DATE	PROJ ENGR	DATE	MARK	REVISION	BY	APP. DATE

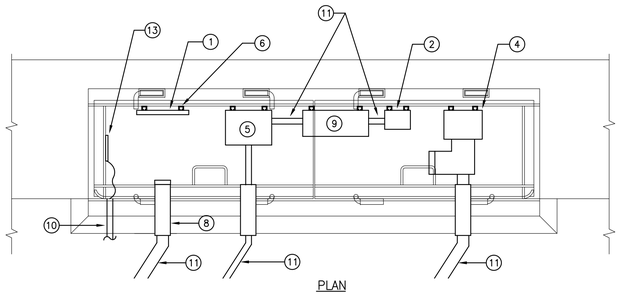
HYUNDAI MERCHANT MARINE TERMINAL
WHARF
PORT OF TACOMA
PARTIAL ELECTRICAL PLAN

AUTOCAD FILE NO. 5012E5 | E5

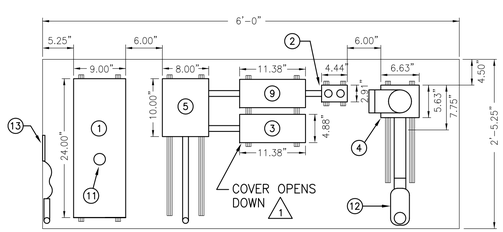
DRAWING NO. EP-5012-26
CONTRACT NO. 978038
SHEET NO. 55 OF 58

ELECTRICAL DETAIL NOTES:

1. 3/4"x9"x24" THREE HOUR FIRE RATED EXTERIOR PLYWOOD MOUNTING PLATE FOR TELEPHONE COMPANY.
2. 120V, 1 PHASE, 20 AMP GFI DUPLEX RECEPTACLE AND BOX.
3. 240V, 1 PHASE, 20 AMP RECEPTACLE WITH LOCKOUT SWITCH.
4. 100A, 480V, 3 PHASE, 5 WIRE RECEPTACLE AND BOX.
5. JUNCTION BOX WITH NEOPRENE GASKET, WITH UNION HUBS IN BOTTOM AND THREADED TAPPINGS INSIDE. CROUSE HINDS WCB SERIES.
6. PROVIDE MINIMUM 1-5/8"x1-5/8" GALVANIZED STEEL CHANNEL FOR MOUNTING ELECTRICAL EQUIPMENT TYPICAL.
7. TERMINATE CONDUIT AT BASE OF TELEPHONE BOARD.
8. 3" CONDUIT SLEEVE. GROUT AFTER CONDUIT INSTALLED.
9. MOTOR RATED TOGGLE SWITCH WITH PILOT LIGHT IN NEMA 4 HOUSING.
10. 1"C-#4 CU XHHW BACK TO CRANE RAIL. PROVIDE EXOTHERMIC WELD TO CRANE RAIL.
11. SEE CONDUIT AND WIRE SCHEDULE, SHEET E7.
12. TYPE L CONDUIT BODY.
13. 4"H x 1/2"W x 8"L SOLID BARE COPPER GROUND BUS WITH 6 SCREW DOWN LUGS SIZED FOR #10 THRU #4 CU WIRE. PROVIDE #6 CU THW GROUND WIRE FROM THE GROUND BUS TO THE VAULT LID FRAME, AND THE ELECTRICAL EQUIPMENT MOUNTING CHANNEL.



PLAN

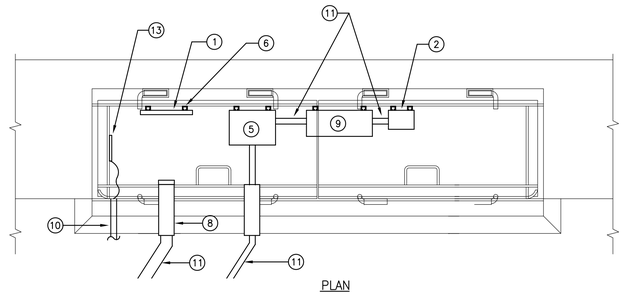


ELEVATION

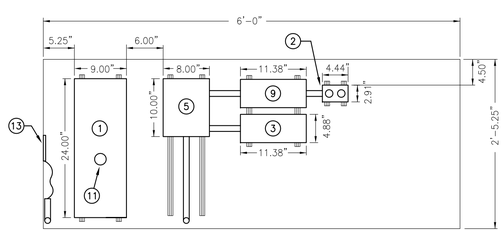
WHARF POWER VAULT WITH 100A SERVICE
VAULTS PV12, 14, 16, 18, 20, 22

SCALE: 1"=1'-0"

A / E6



PLAN

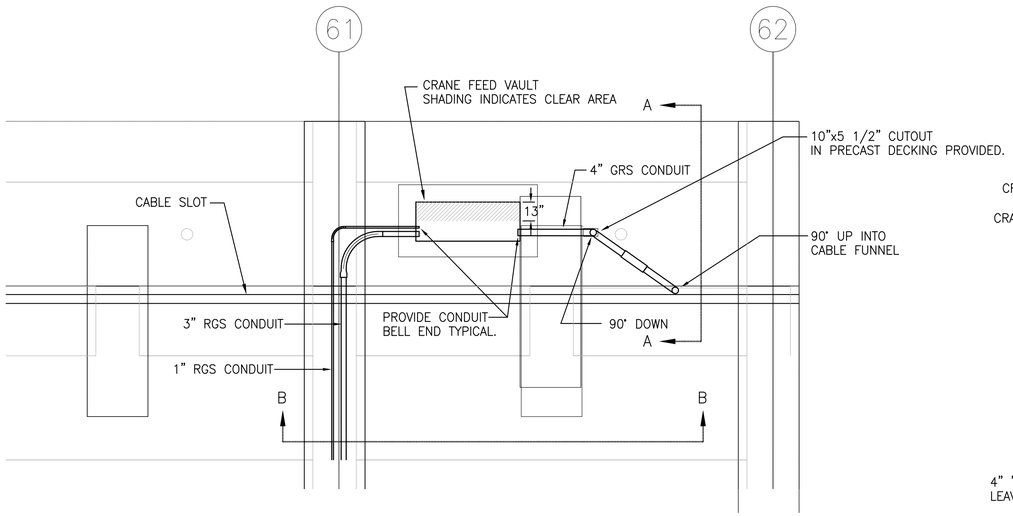


ELEVATION

WHARF POWER VAULT WITHOUT 100A SERVICE
VAULTS PV13, 15, 17, 19, 21

SCALE: 1"=1'-0"

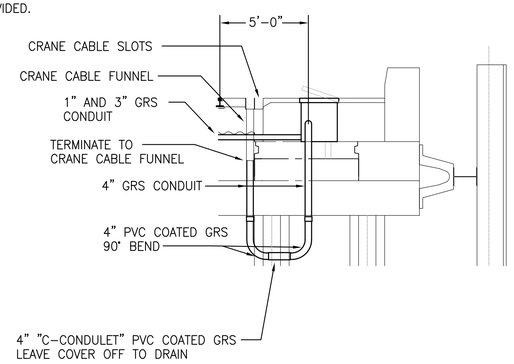
B / E6



TYPICAL CRANE FEED VAULT - TOP VIEW

SCALE: 1/4"=1'-0"

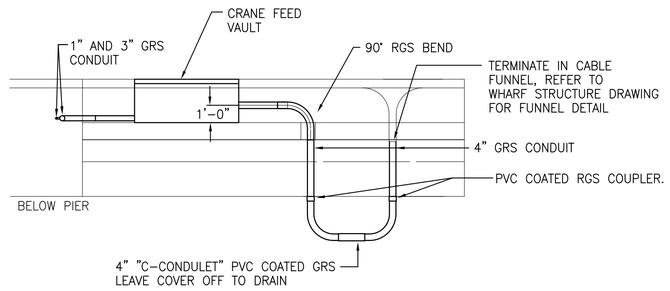
C / E6



CONDUIT ROUTING A-A

SCALE: 1/4"=1'-0"

D / E6



CONDUIT ROUTING B-B

SCALE: 1/4"=1'-0"

E / E6

AS-BUILT

AUTOCAD FILE NO. 5012E6 | E6

PORT of TACOMA U.S.A.

PORT OF TACOMA
P.O. BOX 1837 TACOMA, WASHINGTON 98401
(206) 383-5841

CROSS ENGINEERS, INC.
260 South Fifth St. (253) 383-2544
Tacoma, Washington 98402 (FAX) 272-5846
Cross@halcyon.com

APPROVED _____ DATE
CURTIS L. RATCLIFFE P.E.
CHIEF ENGINEER

NEA	9/23/97	GLW/JAB	9/23/97
DRAWN BY	DATE	CHECKED BY	DATE
GLW	9/23/97	GLW	9/23/97
DESIGNED BY	DATE	PROJ ENGR	DATE

MARK	REVISION	BY	APP.	DATE
1	AS-BUILT	RNG	GLW	1/4/99

HYUNDAI MERCHANT MARINE TERMINAL
WHARF
PORT OF TACOMA
DETAILS

DRAWING NO. EP-5012-26
CONTRACT NO. 978038
SHEET NO. 56 OF 58

CONDUIT AND CONDUCTOR SCHEDULE

CONDUIT ID	CONDUIT NO.	CONDUIT SIZE	CONDUIT TYPE	CONDUCTOR NO.	CONDUCTOR SIZE	CONDUCTOR TYPE	FROM	TO	REMARKS
D1	1	4"	②	–	–	–	PV1	PT1	⑤
D2	1	4"		–	–	–	PV2	PT2	
D3	1	4"		–	–	–	PV3	PT3	
D4	1	4"		–	–	–	PV4	PT4	
D5	1	4"		–	–	–	PV5	PT5	
D6	1	4"		–	–	–	PV6	PT6	
D7	1	4"		–	–	–	PV7	PT7	
D8	1	4"		–	–	–	PV8	PT8	
D9	1	4"		–	–	–	PV9	PT9	
D10	1	4"		–	–	–	PV10	PT10	
D11	1	4"	②	–	–	–	PV11	PT11	⑤
F1	1	1"	②③①	–	–	–	PT9	CSB1	
F2	1	1"		–	–	–	PT9	CSB2	
F3	1	1"		–	–	–	PT9	CSB3	
F4	1	1"		–	–	–	PT9	CSB4	
F5	1	1"		–	–	–	PT9	CSB5	
F6	1	1"		–	–	–	PT9	CSB6	
F7	1	1"		–	–	–	PT10	CSB7	
F8	1	1"		–	–	–	PT1	PV12	
F9	1	1"		–	–	–	PT2	PV13	
F10	1	1"		–	–	–	PT3	PV14	
F11	1	1"		–	–	–	PT4	PV15	
F12	1	1"		–	–	–	PT5	PV16	
F13	1	1"		–	–	–	PT6	PV17	
F14	1	1"		–	–	–	PT7	PV18	
F15	1	1"		–	–	–	PT8	PV19	
F16	1	1"		–	–	–	PT9	PV20	
F17	1	1"		–	–	–	PT10	PV21	
F18	1	1"	②③①	–	–	–	PT11	PV22	
G1	1	1"	②	1	4	XHHW	PV1	FLEX TRANSITION	
G2	1	1"	①	1	4		FLEX TRANSITION	CRANE RAILS	
G3	1	1"	②	1	4		PV2	PV1	
G4	1	1"		1	4		PV3	PV2	
G5	1	1"		1	4		PV4	PV3	
G6	1	1"		1	4		PV5	PV4	
G7	1	1"		1	4		PV6	PV5	
G8	1	1"		1	4		PV7	PV6	
G9	1	1"		1	4		PV6	FLEX TRANSITION	
G10	1	1"		1	4		PV8	PV7	
G11	1	1"		1	4		PV9	PV8	
G12	1	1"		1	4		PV10	PV9	
G13	1	1"		1	4		PV11	PV10	
G14	1	1"	②	1	4		PV11	FLEX TRANSITION	
G15	1	1"	①	1	4		FLEX TRANSITION	CRANE RAILS	
G16	1	1"	①	1	4	XHHW	FLEX TRANSITION	CRANE RAILS	
P1	1	3"	②③①	–	–	–	PCV1	CSB1	
P2	1	4"	①	–	–	–	CSB1	CABLE FUNNEL	SEE DETAIL C, SHEET E6 ④
P3	1	3"	②③①	–	–	–	PCV2	CSB2	
P4	1	4"	①	–	–	–	CSB2	CABLE FUNNEL	SEE DETAIL C, SHEET E6
P5	1	3"	②③①	–	–	–	PCV3	CSB3	
P6	1	4"	①	–	–	–	CSB3	CABLE FUNNEL	SEE DETAIL C, SHEET E6
P7	1	3"	②③①	–	–	–	PCV4	CSB4	
P8	1	4"	①	–	–	–	CSB4	CABLE FUNNEL	SEE DETAIL C, SHEET E6
P9	1	3"	②③①	–	–	–	PCV5	CSB5	
P10	1	4"	①	–	–	–	CSB5	CABLE FUNNEL	SEE DETAIL C, SHEET E6
P11	1	3"	②③①	–	–	–	PCV6	CSB6	
P12	1	4"	①	–	–	–	CSB6	CABLE FUNNEL	SEE DETAIL C, SHEET E6
P13	1	3"	①	–	–	–	PCV7	CSB6	
P14	1	4"	①	–	–	–	C7B7	CABLE FUNNEL	SEE DETAIL C, SHEET E6 ④
S1	1	2"	②③①	4	1/0	XHHW	PV1	PV12	
				1	8 G				
S2	1	1"	②③①	3 / 4	8 / 10		PV1	PV12	
				1	10 G				
S3	1	1"	①	2	10		PV12	WV1	
				1	10 G				
S4	1	1"	②③①	3 / 4	8 / 10		PV2	PV13	
				1	10 G				
S5	1	1"	①	2	10		PV13	WV2	
				1	10 G				
S6	1	2"	②③①	4	1/0		PV3	PV14	
				1	8 G				
S7	1	1"	②③①	3 / 4	8 / 10		PV3	PV14	
				1	10 G				
S8	1	1"	①	2	10		PV14	WV3	
				1	10 G				
S9	1	1"	②③①	4	10		PV4	PV15	
				1	10 G				
S10	1	2"	②③①	4	1/0		PV5	PV16	
				1	8 G				
S11	1	1"	②③①	3 / 4	8 / 10		PV5	PV16	
				1	10 G				
S12	1	1"	①	2	10		PV16	WV4	
				1	10 G				
S13	1	1"	②③①	4	10		PV6	PV17	
				1	10 G				
S14	1	2"	②③①	4	1/0		PV7	PV18	
				1	8 G				
S15	1	1"	②③①	3 / 4	8 / 10		PV7	PV18	
				1	10 G				
S16	1	1"	①	2	10		PV18	WV5	
				1	10 G				
S17	1	1"	②③①	3 / 4	8 / 10		PV8	PV19	
				1	10 G				
S18	1	1"	①	2	8		PV19	WV6	
				1	10 G				
S19	1	2"	②③①	4	1/0		PV9	PV20	
				1	8 G				
S20	1	1"	②③①	3 / 4	8 / 10		PV9	PV20	
				1	10 G	XHHW			

CONDUIT AND CONDUCTOR SCHEDULE

CIRCUIT NUMBER	CONDUIT NO.	CONDUIT SIZE	CONDUIT TYPE	CONDUCTOR NO.	CONDUCTOR SIZE	CONDUCTOR TYPE	FROM	TO	REMARKS
S21	1	1"	①	2	10	XHHW	PV9	WV7	
				1	10 G				
S22	1	1"	②③①	3	10		PV10	PV21	
				1	10 G				
S23	1	2"	②③①	4	1/0		PV11	PV22	
				1	8 G				
S24	1	1"	②③①	3 / 4	8 / 10		PV11	PV22	
				1	10 G				
S25	1	1"	①	2	10		PV22	WV8	
				1	10 G				
S26	1	3/4"	①	2	10				
				1	12 G	XHHW			
SMP1	1	1"	②	–	–	–	PV1	PT1	
SMP2	1	2"		–	–	–	PV2	PV1	
SMP3	1	1"		–	–	–	PV2	PT2	
SMP4	1	2"		–	–	–	PV3	PV2	
SMP5	1	1"		–	–	–	PV3	PT3	
SMP6	1	2"		–	–	–	PV4	PV3	
SMP7	1	1"		–	–	–	PV4	PT4	
SMP8	1	2"		–	–	–	PV5	PV4	
SMP9	1	1"		–	–	–	PV5	PT5	
SMP10	1	2"		–	–	–	PV6	PV5	
SMP11	1	1"		–	–	–	PV6	PT6	
SMP12	1	2"		–	–	–	PV7	PV6	
SMP13	1	1"		–	–	–	PV7	PT7	
SMP14	1	2"		–	–	–	PV8	PV7	
SMP15	1	1"		–	–	–	PV8	PT8	
SMP16	1	2"		–	–	–	PV9	PV8	
SMP17	1	1"		–	–	–	PV9	PT9	
SMP18	1	2"		–	–	–	PV10	PV9	
SMP19	1	1"		–	–	–	PV10	PT10	
SMP20	1	2"		–	–	–	PV11	PV10	
SMP21	1	1"	②	–	–	–	PV11	PT11	
SP1	8	4"	②	–	–	–	PV2	PV1	
SP2	8	4"		–	–	–	PV3	PV2	
SP3	8	4"		–	–	–	PV4	PV3	
SP4	8	4"		–	–	–	PV5	PV4	
SP5	8	4"		–	–	–	PV6	PV5	
SP6	8	4"		–	–	–	PV7	PV6	
SP7	8	4"		–	–	–	PV8	PV7	
SP8	8	4"		–	–	–	PV9	PV8	
SP9	8	4"		–	–	–	PV10	PV9	
SP10	8	4"		–	–	–	PV11	PV10	
SP11	6	4"		–	–	–	PT2	PT1	
SP12	6	4"		–	–	–	PT3	PT2	
SP13	6	4"		–	–	–	PT4	PT3	
SP14	6	4"		–	–	–	PT5	PT4	
SP15	6	4"		–	–	–	PT6	PT5	
SP16	6	4"		–	–	–	PT7	PT6	
SP17	6	4"		–	–	–	PT8	PT7	
SP18	6	4"		–	–	–	PT9	PT8	
SP19	6	4"		–	–	–	PT10	PT9	
SP20	6	4"	②	–	–	–	PT11	PT10	
T1	1	2"	②③①	–	–	–	PT1	PV12	④
T2	1	4"	②	–	–	–	PT2	PT1	
T3	1	2"	②③①	–	–	–	PT2	PV13	
T4	1	4"	②	–	–	–	PT3	PT2	
T5	1	2"	②③①	–	–	–	PT3	PV14	
T6	1	4"	②	–	–	–	PT4	PT3	
T7	1	2"	②③①	–	–	–	PT4	PV15	
T8	1	4"	②	–	–	–	PT5	PT4	
T9	1	2"	②③①	–	–	–	PT5	PV16	
T10	1	4"	②	–	–	–	PT6	PT5	
T11	1	2"	②③①	–	–	–	PT6	PV17	
T12	1	4"	②	–	–	–	PT7	PT6	
T13	1	2"	②③①	–	–	–	PT7	PV18	
T14	1	4"	②	–	–	–	PT8	PT7	
T15	1	2"	②③①	–	–	–	PT8	PV19	
T16	1	4"	②	–	–	–	PT9	PT8	
T17	1	2"	②③①	–	–	–	PT9	PV20	
T18	1	4"	②	–	–	–	PT10	PT9	
T19	1	2"	②③①	–	–	–	PT10	PV21	
T20	1	4"	②	–	–	–	PT11	PT10	
T21	1	2"	②③①	–	–	–	PT11	PV22	④

GENERAL NOTES:

1. ALL CONDUCTORS ARE COPPER.
2. CONTRACTOR SHALL LABEL ALL CONDUCTORS IN EACH VAULT WITH SOURCE AND DESTINATION.

LEGEND:

F = FIBEROPTIC
G = GROUNDING
P = PRIMARY
S = SECONDARY
D = DRAIN PIPE
SMP = SUMP PUMP
SP = SPARE CONDUIT
T = TELEPHONE
NUMBERING = INDIVIDUAL CONDUIT IDENTIFICATION

NOTES:

① GRS ENCASED IN CONCRETE, PVC COATED GRS AND CONNECTORS IN WHARF BALLASTS AND WHERE EXPOSED.

② PVC SCHEDULE 80.

③ LIQUIDTIGHT FLEXIBLE METAL CONDUIT WITH PVC COATED CONNECTORS.

④ CONDUCTORS BY OTHERS.

⑤ PROVIDE 1/2"x1/2" MESH SCREEN ON EACH CONDUIT AS CONDUIT ENTERS EACH VAULT. CONDUITS SHALL ENTER EACH VAULT SIDE WALL AS LOW AS POSSIBLE FOR DRAINAGE OF THE VAULTS BY SUMP PUMP LOCATED IN TELEPHONE VAULTS.

AS-BUILT

AUTOCAD FILE NO. 5012E7 | E7

PORT OF TACOMA
P.O. BOX 1837 TACOMA, WASHINGTON 98401
(206) 383-5841

CROSS ENGINEERS, INC.
260 South Fifth St. Tacoma, Washington 98402
(253) 383-2544 (FAX) 272-5846
Cross@halcyon.com

APPROVED _____ DATE
CURTIS L. RATCLIFFE P.E.
CHIEF ENGINEER

NEA	9/23/97	GLW/JAB	9/23/97
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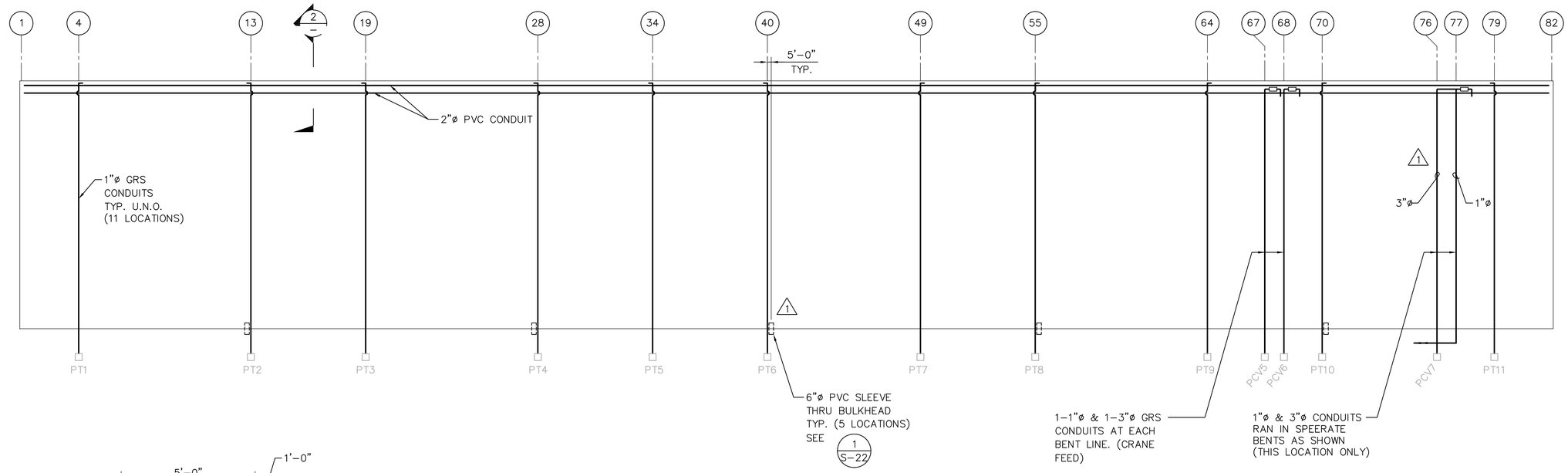
DESIGNED BY	DATE	PROJ ENGR	DATE

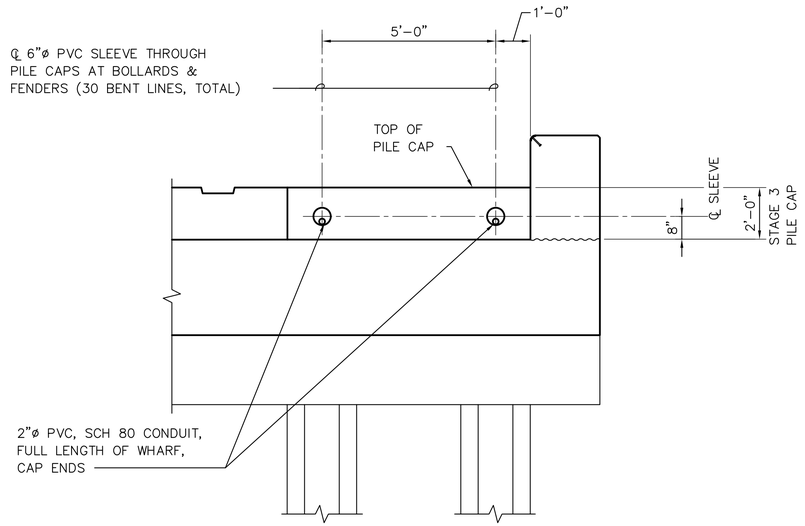
MARK	REVISION	BY	APP.	DATE
1	AS-BUILT	RNG	GLW	1/4/99

HYUNDAI MERCHANT MARINE TERMINAL
WHARF
PORT OF TACOMA
SCHEDULES

DRAWING NO. EP-5012-26
CONTRACT NO. 978038
SHEET NO. 57 OF 58



1 / SP–1 PLAN – SPARE CONDUIT
SCALE: NONE



2 / – SECTION – SPARE CONDUITS
SCALE: NONE

NOTE:
SPARE CONDUITS AND SLEEVES ON THIS DRAWING, ARE TO BE INSTALLED UNDER THIS CONTRACT, AND ARE INTENDED FOR FUTURE USE. THESE FUTURE USE CONDUITS SHALL BE CAPPED AT BOTH ENDS. CONDUITS SHOWN ARE NOT ADDITIONAL TO THOSE SHOWN ON DWG'S S–16, S–18, AND E–1 THROUGH E–5.

AS-BUILT

AUTOCAD FILE NO. 5012SP1 | SP-1

PORT OF TACOMA U.S.A.
PORT OF TACOMA
P.O. BOX 1837 TACOMA, WASHINGTON 98401
(206) 383–5841

BERGER/ABAM
ENGINEERS INC.
33301 9TH AVENUE SOUTH
FEDERAL WAY, WASHINGTON 98003–6395
(206)431–2300 FAX:(206)431–2250

APPROVED
CURTIS L. RATCLIFFE P.E.
CHIEF ENGINEER
DATE

EMR	9/97	AR	9/97	1	AS-BUILT	RDD	JAS	1/4/99
DRAWN BY	DATE	CHECKED BY	DATE					
FDP	9/97	JAS	9/97					
DESIGNED BY	DATE	PROJ ENGR	DATE	MARK	REVISION	BY	APP.	DATE

HYUNDAI MERCHANT MARINE TERMINAL
WHARF
PORT OF TACOMA
SPARE CONDUIT PLAN

DRAWING NO. 978038
CONTRACT NO. 978038
SHEET NO. 58 OF 58

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