Port of Tacoma
People. Partnership. Performance.
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Tacoma, WA 98401-1837
www.portoftacoma.com

May 11, 2016

TO: PLANHOLDERS

SUBJECT: PIER 4 PHASE 2 RECONFIGURATION
PROJECT NO. 091251
CONTRACT NO. 070136

ADDENDUM NUMBER FIVE

This addendum is issued to amend the following:

SPECIFICATIONS

A. 03 30 00 – CAST-IN-PLACE CONCRETE

1. REVISE section 2.01.B.4 to read as follows:

4. Fly ash, if used, shall meet the requirements of ASTM C 618, Type F, with the added provision that the loss on ignition shall not exceed ~~1~~ 1.5 percent, and that the fly ash is stored in a separate silo from the cement. Split bins are not acceptable.

B. 03 40 00 – PRECAST CONCRETE

1. ADD the following to 1.03 REFERENCE STANDARDS:

G. Standard Specifications for Road, Bridge, and Municipal Construction, M41-10, 2016 edition, by Washington State Department of Transportation (2016 WSDOT Standard Specifications)

2. ADD the following to 1.05 SUBMITTALS:

I. If Self-Consolidating Concrete (SCC) is to be used for precast deck panels and piling, then submit evidence of the precast plant's use of SCC in the production of precast deck panels or piling on at least 3 previous projects performed within the past 5 years.

3. REVISE 1.05.D to read as follows:

D. Proposed concrete mix design, indicating material contents per cubic yard including test certificates for compressive strength, yield, air content, slump, admixtures, etc. Include manufacturer's data sheets for all proposed admixtures, release agents, curing compounds, epoxy grout, etc. If Self-Consolidating Concrete (SCC) is used for the deck panels or piling, then also include test results as specified per Section 6-02.3(2)A2 of the 2016 WSDOT Standard Specifications. See Section 03 30 00 – Cast-in-Place Concrete.

4. **ADD** the following to paragraph 2.01 CONCRETE:

D. The use of Self-Consolidating Concrete (SCC) is permitted for precast deck panels and piling provided that the mix proportions, performance, and strength requirements specified herein are achieved and in accordance with the following:

1. SCC shall be as defined in Section 6-02.3(2)A2 of the 2016 WSDOT Standard Specifications.

2. The concrete mix submittal for SCC shall include the items specified in Section 6-02.3(2)A2 of the 2016 WSDOT Standard Specifications.

3. The maximum slump requirements specified in Section 03 30 00 CAST-IN-PLACE CONCRETE do not apply to SCC and are instead replaced by the target slump flow and slump flow range specified as part of the SCC mix design.

4. Type III cement may be used in SCC.

5. **ADD** the following to 3.01 FABRICATION:

L. Vibration of SCC shall only be used as described in Section 6-02.3(9) of the 2016 WSDOT Standard Specifications, or as approved by the Engineer.

C. 34 11 13 – TRACK RAILS

1. **DELETE** the last sentence of paragraph 3.02.A as follows:

A. … shall be installed for all field welds. ~~Provide a full-time onsite Certified Welding Inspector (CWI) for all welding.~~

D. 35 42 37 – RIRAP SLOPE PROTECTION

1. **REVISE** paragraph 2.04 to read as follows:

A. Filter Blanket material shall be crushed rock manufactured from rock of the same quality as rock for riprap, meeting the gradation requirements for “Gravel Borrow” as defined in Section 9-03.14(1) of the WSDOT Standard Specifications, except that percent passing the No. 200 sieve shall be 2 percent maximum, and the sand equivalent criteria shall not apply.

E. 07 22 70.01 - FALL PROTECTION DEVICES

1. **ADD** to paragraph 2.01.A the following manufacturer:

A. Provide fall protection system manufactured by GUARDIAN FALL PROTECTION INC., 6305 South 231st Street Kent, WA, phone 800-670-7892; or CRA Commercial Roof Anchor manufactured by Super Anchor Safety, 8522 – 216th Street SE Woodinville, WA., phone 425-488-8868, or equal.

F. 08 41 13.01 - ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS

1. **ADD** to paragraph 2.02.A the following manufacturer:

4. Oldcastle Building Envelope – Series 3000 Thermal Multiplane

G. 23 09 00.01 – STAND ALONE CONTROLS

1. **REVISE** title of paragraph 1.02 to read as follows:

   1.02. ~~SCOPE OF WORK~~ APPROVED MANUFACTURERS

2. **REVISE** paragraph 1.02.A to read as follows:

   A. ~~Scope of Work: Under the base bids, the controls as specified under Section 23 09 00 will be added to the project cope of work as separate bid and pricing package.~~ The following Stand Alone Controls manufacturer are …

DRAWINGS

A. DRAWING E3.3 – ELECTRICAL PLAN - SHEET 1 (SHEET 129)

1. **DELETE** conduits WS174, WS185, and WS196 from key note #6 as denoted. (See Attachment A to this Addendum No. 05)

B. DRAWING E8.4 – CONDUIT AND CONDUCTOR SCHEDULE (SHEET 168)

1. **REVISE** the vault designation in the “TO” column for conduit SD62 to “SDV23” as denoted. (See Attachment B to this Addendum No. 05)

C. DRAWING E8.5 – CONDUIT AND CONDUCTOR SCHEDULE (SHEET 169)

1. **REVISE** the vault designation in the “TO” column for conduits SL101, SL102, and SL103 to “SDV23” as denoted. (See Attachment C to this Addendum No. 05)

D. DRAWING S13.1 SHEET PILE WALL CAP BEAM SECTIONS AND DETAILS (SHEET 253)

1. **REVISE** Detail D Sheet Pile Section as denoted. (See Attachment D to this Addendum No. 05).

E. DRAWING S14.1 – STEEL SHEET PILE DETAILS (SHEET 379)

1. **REVISE** Section A as denoted. (See Attachment E to this Addendum No. 05).

F. DRAWING M1.02 – MARINE BUILDING SCHEDULES (SHEET 471)

1. **ADD** note 6 to Notes For Rooftop Packaged Unit Schedule, apply to RPU-1 and RPU-2 under the Remarks column to read as follows:

   6. Unit shall be provided with Trane Heresite VR502 marine coated coils or approved alternate.

2. **ADD** note 7 to Notes For Rooftop Packaged Unit Schedule, apply to RPU-2 under the Remarks column to read as follows:

   7. Unit shall be provided with powered exhaust.

Receipt for this addendum shall be indicated in the space provided in Section 00 41 00, Bid Form.

END OF SECTION

ATTACHMENTS:

ATTACHMENT A - DRAWING E3.3 – ELECTRICAL PLAN - SHEET 1 (SHEET 129)

ATTACHMENT B - DRAWING E8.4 – CONDUIT AND CONDUCTOR SCHEDULE (SHEET 168)

ATTACHMENT C - DRAWING E8.5 – CONDUIT AND CONDUCTOR SCHEDULE (SHEET 169)

ATTACHMENT D - DRAWING S13.1 - SHEET PILE WALL CAP BEAM SECTIONS AND DETAILS (SHEET 253)

ATTACHMENT E - DRAWING S14.1 – STEEL SHEET PILE DETAILS (SHEET 379)

BINDING EDGE

GENERAL NOTES

1. ALL ELECTRICAL CONNECTIONS IN BULLRAIL VAULTS TO USE NO-OX CORROSION INHIBITING LUBRICANT, OR APPROVED EQUAL.
2. REFER TO CIVIL DRAWINGS FOR DUCTBANK PLAN AND PROFILE INFORMATION.
3. SEE SHEETS E6.9 AND E6.10 FOR ROUTING CONDUITS IN UTILITY TRENCHES AT BULLRAIL.

KEY NOTES

(1) CRANE POWER VAULT TO SUPPLY CRANES #1, #2.

(2) CONDUITS TO BE RUN IN PILE CAP PER DETAILS ON SHEETS E6.22, E6.23.

(3) CONDUITS TO BE RUN IN UTILITY TRENCH. SEE SHEETS E6.9, E6.10.

(4) CP30, SP118

(5) WS138, WS176, WS197, SP217

(6) SD62, SL101, SL102, SL103, SP163, SP192, SP193 ~~WS174, WS185, WS196~~ (Revision 1)

(7) CP33, SP121

(8) SD63, SD76, SL104, SL105, SL106, SP164, SP190, SP191, SP213, WS170, WS181, WS192

(9) GROUND WIRE CONNECTION AT CRANE RAILS TO BE EXOTHERMIC WELD. SEE STRUCTURAL SHEETS FOR CRANE RAIL DETAILS.

(10) SL98, SL99, SL100

(11) SD61, SP182, SP183, WS104, WS178, WS199, WIFIP16

(12) SL89, SL90, SL91, WIFIP13

(13) SEE SPECIFICATION 26 56 36 FLOOD LIGHTING FIXTURES FOR QUANTITY OF LIGHTING FIXTURES EXISTING ON THE POLE AND QUANTITY OF FIXTURES REQUIRED AT POLE. SEE SHEET S45.1 FOR LIGHTING POLE BASE DETAIL.

(14) CP36, SP124

(15) CRANE POWER VAULT TO SUPPLY CRANES #3, #4.

(16) PROVIDE COMMUNICATIONS CABINET, 36"Hx30"Wx8"D, 316L STAINLESS STEEL, WITH PAINTED STEEL PANEL, GASKETING, CONTINUOUS HINGE ON DOOR AND STAINLESS STEEL DOOR CLAMPS. CONNECT TO CIRCUIT MPZ-WYL03/15. MOUNT CABINET AT POLE TO STRUT CHANNELS MOUNTED VERTICALLY AND HORIZONTALLY, WITH VERTICAL CHANNELS ANCHORED TO THE POLE WITH STAINLESS STEEL STRAPS. STRAPS TO BE BY PANDUIT, OR APPROVED EQUAL, LENGTH AS REQUIRED. PROVIDE CORNING TYPE SPH, WALL MOUNTABLE HOUSING WITH ONE CORNING TYPE CCH PANEL, MOUNTED IN CABINET.

(17) PROVIDE 3/4"C, 2#12, #12G FROM MPZ TO ADJACENT COMM CABINET AND CONNECT TO DUPLEX RECEPTACLE IN CABINET. CONNECT TO CIRCUIT MPZ-WYL03/17. PROVIDE GROUND ROD IN GROUND WELL ADJACENT TO POLE AND CONNECT TO MPZ WITH 1"C, 1#6G. MOUNT MPZ AT POLE TO STRUT CHANNELS MOUNTED VERTICALLY AND HORIZONTALLY, WITH THE VERTICAL CHANNELS ANCHORED TO THE POLE WITH STAINLESS STEEL STRAPS. STRAPS TO BE BY PANDUIT, OR APPROVED EQUAL, LENGTH AS REQUIRED.

(18) 3/4"C, 1#4G FROM CRANE RAILS TO CRANE PIN SOCKETS, TYPICAL. SEE SHEET S3.1 FOR PIN SOCKET LOCATIONS.

(19) 3/4"C, 1#4G FROM CRANE RAILS TO CRANE TIE DOWNS, TYPICAL. SEE SHEET S3.1 FOR TIE DOWN LOCATIONS.

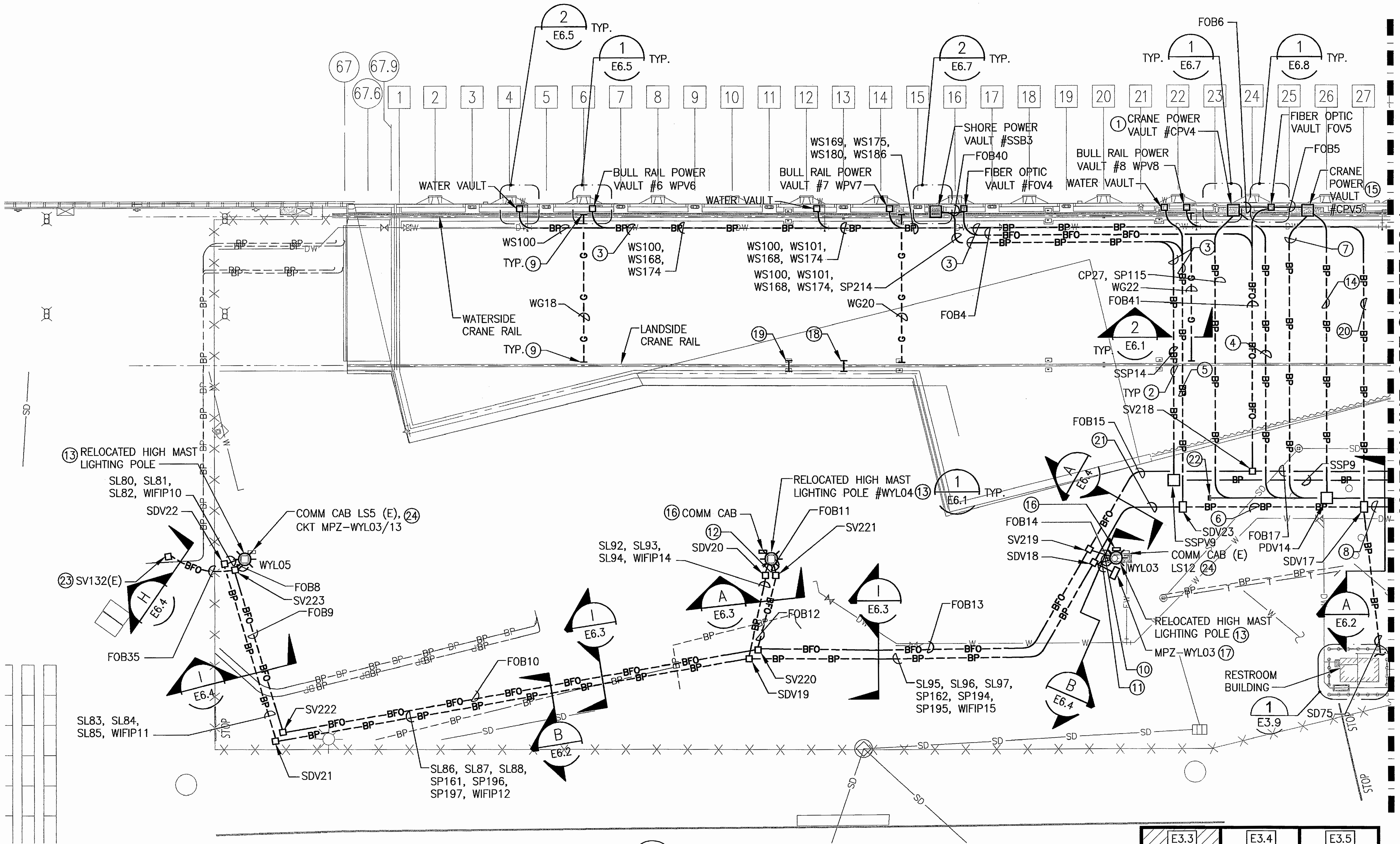
(20) WS169, WS180, WS191

(21) SD82, SL145, SL146, SL147, SP175, SP180, SP181, WS103, WS177, WS198

(22) CAP (5) 4" C.O. FOR FUTURE USE FOR REEFER TRANSFORMER, CRANE (SPARE) AND FUTURE LOAD.

(23) REFER TO SPECIFICATION 01 14 00 "WORK RESTRICTIONS" FOR ELECTRICAL WORK IN THIS AREA.

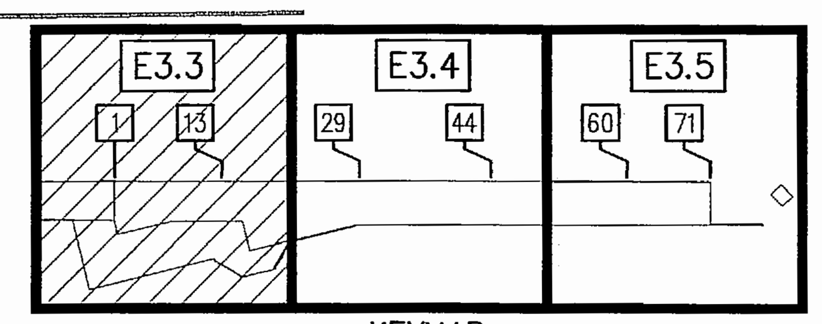
(24) REMOVE EXISTING FIBER OPTIC TERMINATION HOUSING IN CABINET AND PROVIDE A CORNING TYPE SPH WALL MOUNTABLE HOUSING WITH ONE CORNING TYPE CCH PANEL MOUNTED IN CABINET.



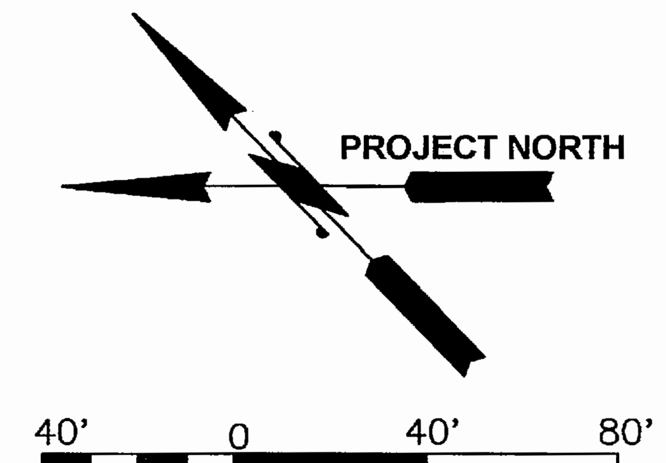
1 ELECTRICAL PLAN - SHEET 1

E3.2

SCALE: 1"=40'



KEYMAP



40' 0 40' 80'
20' 60'

SCALE: 1"=40'

Port of Tacoma
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MARK:	REVISION:	BY:	APPR:	DATE:
1	PER ADDENDUM #5	HAS	DKS	5/10/16

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DIMITRIOS K. SIATERLIS, STATE OF WASHINGTON, REGISTERED PROFESSIONAL ENGINEER
2/19/16

APPROVED: 5-11-16
CHECKED BY DATE
DIRECTOR ENG. DATE
PROJ. ENGR DATE
PRINTED BY: Derek May 10, 2016
PORT ADDRESS: ONE SITCUM PLAZA, TACOMA, WA 98401-1837

PIER 4 PHASE 2 RECONFIGURATION
ELECTRICAL PLAN - SHEET 1

TOWNSHIP:	RANGE:	SECTION:
DAT-HRZ: WA83-SF	VERT: MLLW 19.39' @ Tide 22 1933	
PARCEL:		DRAWING SCALE: AS NOTED

6552
E3.3
SH 129 OF 499

CONT/CONS: 070136
M. ID: 091251
PHASE: BID

PORT OF TACOMA FILE: R:\5650-041.01\Dwgs\091251-E303

BINDING EDGE

CONDUIT AND CONDUCTOR SCHEDULE

CONDUIT NUMBER	CONDUIT NO.	CONDUIT SIZE	CONDUIT TYPE	CONDUCTOR NO.	CONDUCTOR SIZE	CONDUCTOR TYPE	FROM	TO	REMARKS
SD1	1	2.5"	(2)(3)	3/1	0000/6	XHHW-2	PANEL 4WA	VAULT PV106	(4) (8)
SD2	1	2.5"	(2)(3)	3/1	0000/6	XHHW-2	VAULT PV106	PANEL 4MA	(4)
SD3	1	4"	(2)(3)	4	600	XHHW-2	SUBSTATION #4 SWBD #1	PV102	
SD4	1	4"	(2)	4	600	XHHW-2	PV102	PV103	
SD5	1	4"	(2)	4	600	XHHW-2	PV103	PV104	
SD6	1	4"	(2)	4	600	XHHW-2	PV104	PV113	
SD7	1	4"	(2)	4	600	XHHW-2	PV113	PV114	
SD8	1	4"	(2)	4	600	XHHW-2	PV114	PANEL 4G	
SD9	1	4"	(2)(3)	4	250	XHHW-2	SUBSTATION #4 SWBD #1	PV101	
SD10	1	4"	(2)	4	250	XHHW-2	PV101	PANEL 4M	
SD11	1	.75"	(3)	2/1	10/12	XHHW-2	PANEL 4G	OG LIGHTING PANEL	HEATER
SD12	1	2"	(2)(3)	3/1	4/8	XHHW-2	PANEL 4BR	PV122	
SD13	1	2"	(2)	3/1	4/8	XHHW-2	PV122	PV121	
SD14	1	2"	(2)	3/1	4/8	XHHW-2	PV121	PV120	
SD15	1	2"	(2)	3/1	4/8	XHHW-2	PV120	SEWAGE LIFT STATION	
SD16	1	2"	(2)(3)	–	–	–	PANEL 4WA		
SD17	–	–	–	–	–	–	–	–	NOT USED
SD21	1	2"	(2)(3)	2/1	8/8	XHHW-2	PANEL 2GA	PV114	(8)
SD22	1	2"	(2)	2/1	8/8	XHHW-2	PV114	PV115	
SD23	1	2"	(2)	2/1	8/8	XHHW-2	PV115	PV117	
SD24	1	2"	(2)(3)	2/1	8/8	XHHW-2	PV117	POLE YL25	
SD25	1	2"	(2)(3)	–	–	–	PANEL 2WA		
SD27	1	2"	(2)(3)	2/1	8/6	XHHW-2	PV118	SECURITY CAMERA POLE	
SD28	1	1"	(2)(3)	2/1	8/8	XHHW-2	PANEL 2BR	PV122	
SD29	1	1"	(2)	2/1	8/8	XHHW-2	PV122	PV123	
SD30	1	1"	(2)	2/1	8/8	XHHW-2	PV123	PV124	
SD31	1	1"	(2)	2/1	8/8	XHHW-2	PV124	PV125	
SD32	1	1"	(2)	2/1	8/8	XHHW-2	PV125	PV126	
SD33	1	1"	(2)	2/1	8/8	XHHW-2	PV126	PV202	
SD34	1	1"	(2)(3)	2/1	8/8	XHHW-2	PV202	WHARF WATER VAULT	
SD35	5	1"	(2)(3)	3/1	8/8	XHHW-2	PANEL 2WA	PV203	
SD36	1	1"	(2)	3/1	8/8	XHHW-2	PV203	PV204	
SD37	4	1"	(2)	3/1	8/8	XHHW-2	PV203	PV205	
SD38	2	1"	(2)	3/1	8/8	XHHW-2	PV205	PV206	
SD39	1	1"	(2)	3/1	8/8	XHHW-2	PV206	PV207	
SD40	–	–	–	–	–	–	–	–	NOT USED
SD1									
SD2									
SD46	1	3/4"	(10)	2/1	12/12	XHHW-2	CAPSTAN 120V J-BOX	CAPSTAN REC	CAPSTAN REC
SD47	1	1"	(10)	2/1	8/8	XHHW-2	CAPSTAN 120V J-BOX	CAPSTAN LTG FIXT	CAPSTAN J-BOX & LTG
SD48	1	2"	(2)(10)	3/1	8/8	XHHW-2	SDV15	CAPSTAN 120V J-BOX	CAPSTAN LTG & REC
SD49	1	2"	(2)(10)	3/1	8/8	XHHW-2	PANEL HP	SDV15	CAPSTAN LTG & REC
SD50	1	2"	(2)(10)(6)	3/1	4/4	XHHW-2	SDV15	CAPSTAN 480V J-BOX	CAPSTAN MOTOR
SD51	1	2"	(2)	3/1	4/4	XHHW-2	SDV14	SDV15	CAPSTAN MOTOR
SD52	1	2"	(2)	3/1	4/4	XHHW-2	SDV12	SDV14	CAPSTAN MOTOR
SD53	1	2"	(2)	3/1	4/4	XHHW-2	SDV10	SDV12	CAPSTAN MOTOR
SD54	1	2"	(2)	3/1	4/4	XHHW-2	SDV9	SDV10	CAPSTAN MOTOR
SD55	1	2"	(2)	3/1	4/4	XHHW-2	SDV8	SDV9	CAPSTAN MOTOR
SD56	1	2"	(2)	3/1	4/4	XHHW-2	SDV7	SDV8	CAPSTAN MOTOR
SD57	1	2"	(10)	3/1	4/4	XHHW-2	SWBD P44	SDV7	CAPSTAN MOTOR
SD58	1	2"	(6)	4/1	0/6	XHHW-2	480V-208/120V XFMR	PANEL P42	PANEL P42
SD59	1	1"	(6)	3/1	4/8	XHHW-2	SWBD P44	480V-208/120V XFMR	480V-208/120V XFMR
SD60	4	4"	(10)	4/1	600/0	XHHW-2	13.8KV-480V SITE XFMR	SWBD P44	SWBD P44
SD61	1	2"	(2)(10)	2/1	2/8	XHHW-2	SDV18	~~MPZ-WYL03~~ △1	MPZ-WYL03
SD62	1	2"	(2)	2/1	2/8	XHHW-2	SDV17	~~SDV18~~ SDV23	MPZ-WYL03
SD63	1	2"	(2)	2/1	2/8	XHHW-2	SDV16	~~SDV17~~	MPZ-WYL03
SD64	1	2"	(2)	2/1	2/8	XHHW-2	SDV8	SDV16	MPZ-WYL03
SD65	1	2"	(2)	2/1	2/8	XHHW-2	SDV7	SDV8	MPZ-WYL03
SD66	1	2"	(10)	2/1	2/8	XHHW-2	SWBD P44	SDV7	MPZ-WYL03
SD67	1	2"	(10)	2/1	2/8	XHHW-2	SDV13	MPZ-YL05	MPZ-YL05
SD68	1	2"	(2)	2/1	2/8	XHHW-2	SDV12	SDV13	MPZ-YL05
SD69	1	2"	(2)	2/1	2/8	XHHW-2	SDV10	SDV12	MPZ-YL05
SD70	1	2"	(2)	2/1	2/8	XHHW-2	SDV9	SDV10	MPZ-YL05
SD71	1	2"	(2)	2/1	2/8	XHHW-2	SDV8	SDV9	MPZ-YL05
SD72	1	2"	(2)	2/1	2/8	XHHW-2	SDV7	SDV8	MPZ-YL05
SD73	1	2"	(10)	2/1	2/8	XHHW-2	SWBD P44	SDV7	MPZ-YL05
SD74	1	2"	(10)	3/1	000/4	XHHW-2	480V-120/240V XFMR	RESTROOM BLDG PANEL	RESTROOM BLDG
SD75	1	2"	(2)	2/1	1/6	XHHW-2	SDV17	480V-120/240V XFMR	RESTROOM BLDG
SD76	1	2"	(2)	2/1	1/6	XHHW-2	SDV16	SDV17	RESTROOM BLDG
SD77	1	2"	(2)	2/1	1/6	XHHW-2	SDV8	SDV16	RESTROOM BLDG
SD78	1	2"	(2)	2/1	1/6	XHHW-2	SDV7	SDV8	RESTROOM BLDG
SD79	1	2"	(2)(10)	2/1	1/6	XHHW-2	SWBD P44	SDV7	RESTROOM BLDG
SD80	1	3/4"	(10)	2/1	12/12	XHHW-2	PANEL P42	LTG CONTROL CAB	HEATER
SD81	1	2"	(2)(10)	2/1	4/8	XHHW-2	PANEL H1 (MARINE BLDG)	MPZ	MPZ NEAR POLE YL01
SD82	1	2"	(2)	2/1	2/8	XHHW-2	SDV23	SDV18	MPZ-WYL03
SD83	1	3/4"	(7)	2/1	12/12	XHHW-2	PANEL P42	SWBD P44	SWBD HEATER
SD84	1	2"	(2)	6/1	10/10	XHHW-2	LIFT STATION CONTROL CONTROLLER	LIFTSTATION	
SD85	1	2"	(2)	6/1	(12)	XHHW-2	LIFT STATION CONTROL CONTROLLER	LIFTSTATION	

GENERALNOTES

1. SEE DRAWING E8.1 FOR LEGEND AND GENERAL NOTES.

SCHEDULE KEY NOTES

(1) SEE SEPARATE HUSKY TERMINAL WIFI SYSTEM PROJECT DRAWINGS FOR COMMUNICATIONS CONDUCTORS AND SITE PLANS. PORT OF TACOMA JOB #6323-04.

(2) PVC SHCEDULE 80.

(3) GRS CONDUIT.

(4) CONDUIT(S) CUT. ABANDONED IN PLACE.

(5) COORDINATE WORK WITH TACOMA POWER.

(6) PROVIDE LIQUID TIGHT FLEXIBLE METAL CONDUIT AT ALL LIGHT POLE LOCATIONS.

(7) LIQUID TIGHT FLEXIBLE METAL CONDUIT.

(8) CIRCUIT (CONDUIT) NUMBER FROM TERMINAL 3 & 4 REDEVELOPMENT PROJECT, CONTRACT NO. 998203.

(9) CIRCUIT (CONDUIT) NUMBER FROM PIER 3 UPGRADE PROJECT, CONTRACT NO. 069458.

(10) PVC COATED GRS CONDUIT.

(11) EXTEND DUCTBANK TO VAULT SV212.

(12) CONDUIT TO CONTAIN LIFT STATION FLOAT CABLES. CABLES FURNISHED WITH LIFT STATION, INSTALLED BY CONTRACTOR.

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MARK:	REVISION:	BY:	APPR:	DATE:
1	PER ADDENDUM #5	HAS	DKS	5/10/16

DIMITRIOS K. SIATERLIS — STATE OF WASHINGTON — 23791 — REGISTERED PROFESSIONAL ENGINEER — 2/19/16

APPROVED: 5-11-16
DIRECTOR ENG. DATE | CHECKED BY DATE | PROJ. ENGR DATE

PRINTED BY: Derek May 10, 2016
PORT ADDRESS: ONE SITCUM PLAZA TACOMA, WA 98401-1837

PIER 4 PHASE 2 RECONFIGURATION
CONDUIT AND CONDUCTOR SCHEDULE

TOWNSHIP: | RANGE: | SECTION:
DAT-HRZ: WA83-SF | VERT: MLLW 19.39' @ Tide 22 1933
PARCEL: | DRAWING SCALE: AS NOTED

6552
E8.4
SH 168 OF 499

CONT/CONS: 070136
M. ID: 091251
PHASE: BID

BINDING EDGE

CONDUIT AND CONDUCTOR SCHEDULE

CONDUIT NUMBER	CONDUIT NO.	CONDUIT SIZE	CONDUIT TYPE	CONDUCTOR NO.	CONDUCTOR SIZE	CONDUCTOR TYPE	FROM	TO	REMARKS
SL1	4	2"	(3)	3/1	0/6	XHHW-2	PANEL 4G	LIGHTING CONTROL OG	(8)
SL2	4	2"	(2)(3)	3/1	0/6	XHHW-2	LIGHTING CONTROL OG	PV114	
SL3	2	2"	(2)(3)	3/1	0/6	XHHW-2	PV114	PV113	
SL4	2	2"	(2)(3)	3/1	0/6	XHHW-2	PV113	POLE YL09	
SL5	2	2"	(2)(3)	3/1	0/6	XHHW-2	PV113	PV112	
SL6	2	2"	(2)(3)	3/1	0/6	XHHW-2	PV112	POLE YL08	(12)
SL7	3	2"	(2)(3)	3/1	0/6	XHHW-2	PV114	PV115	
SL8	2	2"	(2)(3)	3/1	0/6	XHHW-2	PV115	POLE YL10	
SL9	2	2"	(2)(3)	3/1	0/6	XHHW-2	PV115	PV117	
SL10	1	2"	(2)(3)	3/1	0/6	XHHW-2	PV117	POLE YL25	
SL11	2	2"	(2)(3)	3/1	0/6	XHHW-2	PV115	PV116	
SL12	2	2"	(2)(3)	3/1	0/6	XHHW-2	PV116	POLE YL11	
SL13	2	2"	(2)(3)	3/1	0/6	XHHW-2	PV115	PV111	
SL14	2	2"	(2)(3)	3/1	0/6	XHHW-2	PV111	POLE YL07	
SL15	2	2"	(2)(3)	3/1	0/6	XHHW-2	PV111	PV110	
SL16	2	2"	(2)(3)	3/1	0/6	XHHW-2	PV110	POLE YL06	
SL17	2	2"	(2)(3)	3/1	0/6	XHHW-2	PV110	PV109	(4)
SL18	2	2"	(2)(3)	3/1	0/6	XHHW-2	PV109	POLE YL05	(4)
SL19	4	2"	(2)(3)	3/1	0/6	XHHW-2	PANEL 4BR	LIGHTING CONTROL PANEL	
SL20	4	2"	(2)	3/1	0/6	XHHW-2	LIGHTING CONTROL PANEL	PV122	
SL21	2	2"	(2)	3/1	0/6	XHHW-2	PV122	PV123	
SL22	2	2"	(2)	3/1	0/6	XHHW-2	PV123	POLE YL22	
SL23	2	2"	(2)	3/1	0/6	XHHW-2	PV123	PV124	
SL24	2	2"	(2)	3/1	0/6	XHHW-2	PV124	POLE YL23	
SL25	2	2"	(2)	3/1	0/6	XHHW-2	PV124	PV125	
SL26	2	2"	(2)	3/1	0/6	XHHW-2	PV125	POLE YL24	
SL27	2	2"	(2)	3/1	0/6	XHHW-2	PV122	PV121	
SL28	2	2"	(2)	3/1	0/6	XHHW-2	PV121	POLE YL19	
SL29	2	2"	(2)	3/1	0/6	XHHW-2	PV121	PV120	
SL30	2	2"	(2)	3/1	0/6	XHHW-2	PV120	POLE YL18	
SL31	2	2"	(2)	3/1	0/6	XHHW-2	PV122	PV121	
SL32	2	2"	(3)	3/1	0/6	XHHW-2	PV121	PV130	
SL33	2	2"	(2)	3/1	0/6	XHHW-2	PV130	POLE YL21	
SL34	2	2"	(2)	3/1	0/6	XHHW-2	PV130	PV131	
SL35	2	2"	(2)	3/1	0/6	XHHW-2	PV131	POLE YL20	
SL36	2	2"	(2)	3/1	0/6	XHHW-2	LIGHTING CONTROL PANEL	PV129	
SL37	2	2"	(2)	3/1	0/6	XHHW-2	PV129	PV128	
SL38	2	2"	(2)	3/1	0/6	XHHW-2	PV128	PV127	
SL39	2	2"	(2)	3/1	0/6	XHHW-2	PV127	POLE WYL10	
SL40	2	2"	(2)	3/1	0/6	XHHW-2	PV127	PV126	
SL41	2	2"	(2)	3/1	0/6	XHHW-2	PV126	POLE WYL11	
SL42	2	2"	(2)	3/1	0/6	XHHW-2	PV119	PV108	
SL43	2	2"	(2)	3/1	0/6	XHHW-2	PV108	POLE WYL01	
SL44	–	–	–	–	–	–	–	–	NOT USED
SL45	2	2"	(2)	–	–	–		POLE WYL02	(8)
SL46	2	2"	(2)	3/1	0/6	XHHW-2	SUBSTATION #8418 LTG. CONT.	PV132	(8)
SL47	–	–	–	–	–	–	–	–	NOT USED
SL48	2	2"	(2)	3/1	0/6	XHHW-2	PV133	POLE WYL09	(8)
SL49	3	2"	(2)	3/1	0/6	XHHW-2	SUBSTATION #8418 LTG. CONT.	PV132	
SL50	3	2"	(2)	3/1	0/6	XHHW-2	PV132	PV134	
SL51	3	2"	(2)	3/1	0/6	XHHW-2	PV134	PV135	
SL52	2	2"	(2)	3/1	0/6	XHHW-2	PV135	POLE YL16	
SL53	2	2"	(2)	3/1	0/6	XHHW-2	PV135	PV136	
SL54	2	2"	(2)	3/1	0/6	XHHW-2	PV136	POLE YL17	
SL55	3	2"	(2)(3)	–	–	–	SUB. #8410 LIGHTING CABINET		
SL56	3	2"	(2)(3)	3/1	0/6	XHHW-2	SUB. #8410 LIGHTING CABINET	EXISTING 480V PULLBOX	
SL57	1	2"	(2)(3)	6/1	0/6	XHHW-2	LIGHTING POLE WYL04	VAULT AT BENT 92	YARD & SECURITY LTG (4)
SL58	1	1-1/2"	(3)	3/1	0/6	XHHW-2	LIGHTING CONTROL CABINET	PULLBOX T1	WHARF LTG
SL59	1	2"	(3)	6/1	0/6	XHHW-2	LIGHTING CONTROL CABINET	PULLBOX T1	YARD & SECURITY LTG
SL60	1	1-1/2"	(3)	3/1	0/6	XHHW-2	PULLBOX T1	PULLBOX T2	WHARF LTG
SL61	1	2"	(3)	6/1	0/6	XHHW-2	PULLBOX T1	PULLBOX T2	YARD & SECURITY LTG
SL62	1	2"	(2)(3)	3/1	0/6	XHHW-2	PULLBOX T2	LIGHTING POLE WYL02	WHARF LTG
SL63	1	2"	(2)(3)	6/1	0/6	XHHW-2	PULLBOX T2	LIGHTING POLE WYL02	YARD & SECURITY LTG
SL64	1	1-1/2"	(3)	3/1	0/6	XHHW-2	PULLBOX T2	PULLBOX T3	WHARF LTG
SL65	1	2"	(3)	6/1	0/6	XHHW-2	PULLBOX T2	PULLBOX T3	YARD & SECURITY LTG
SL66	1	2"	(2)(3)	3/1	0/6	XHHW-2	PULLBOX T3	PV119	WHARF LTG
SL67	1	2"	(2)(3)	6/1	0/6	XHHW-2	PULLBOX T3	PV119	YARD & SECURITY LTG
SL1 THRU SL15									(9)
SL80	1	2"	(10)	3/1	0/6	XHHW-2	SDV22	POLE WYL05	WHARF LTG
SL81	1	2"	(10)	3/1	0/6	XHHW-2	SDV22	POLE WYL05	YARD LTG
SL82	1	2"	(10)	3/1	0/6	XHHW-2	SDV22	POLE WYL05	SECURITY LTG
SL83	1	2"	(2)	3/1	0/6	XHHW-2	SDV21	SDV22	WHARF LTG
SL84	1	2"	(2)	3/1	0/6	XHHW-2	SDV21	SDV22	YARD LTG
SL85	1	2"	(2)	3/1	0/6	XHHW-2	SDV21	SDV22	SECURITY LTG
SL86	1	2"	(2)	3/1	0/6	XHHW-2	SDV19	SDV21	WHARF LTG
SL87	1	2"	(2)	3/1	0/6	XHHW-2	SDV19	SDV21	YARD LTG
SL88	1	2"	(2)	3/1	0/6	XHHW-2	SDV19	SDV21	SECURITY LTG
SL89	1	2"	(10)	3/1	0/6	XHHW-2	SDV20	POLE WYL04	WHARF LTG
SL90	1	2"	(10)	3/1	0/6	XHHW-2	SDV20	POLE WYL04	YARD LTG
SL91	1	2"	(10)	3/1	0/6	XHHW-2	SDV20	POLE WYL04	SECURITY LTG
SL92	1	2"	(2)	3/1	0/6	XHHW-2	SDV19	SDV20	WHARF LTG
SL93	1	2"	(2)	3/1	0/6	XHHW-2	SDV19	SDV20	YARD LTG
SL94	1	2"	(2)	3/1	0/6	XHHW-2	SDV19	SDV20	SECURITY LTG
SL95	1	2"	(2)	3/1	0/6	XHHW-2	SDV18	SDV19	WHARF LTG
SL96	1	2"	(2)	3/1	0/6	XHHW-2	SDV18	SDV19	YARD LTG
SL97	1	2"	(2)	3/1	0/6	XHHW-2	SDV18	SDV19	SECURITY LTG

CONDUIT AND CONDUCTOR SCHEDULE

CONDUIT NUMBER	CONDUIT NO.	CONDUIT SIZE	CONDUIT TYPE	CONDUCTOR NO.	CONDUCTOR SIZE	CONDUCTOR TYPE	FROM	TO	REMARKS
SL98	1	2"	(2)(10)	3/1	0/6	XHHW-2	SDV18	POLE WYL03	WHARF LTG
SL99	1	2"	(2)(10)	3/1	0/6	XHHW-2	SDV18	POLE WYL03	YARD LTG
SL100	1	2"	(2)(10)	3/1	0/6	XHHW-2	SDV18	~~POLE WYL03~~	SECURITY LTG
SL101	1	2"	(2)	3/1	0/6	XHHW-2	SDV17	~~SDV18~~ SDV23	WHARF LTG
SL102	1	2"	(2)	3/1	0/6	XHHW-2	SDV17	~~SDV18~~ SDV23 (1)	YARD LTG
SL103	1	2"	(2)	3/1	0/6	XHHW-2	SDV17	~~SDV18~~ SDV23	SECURITY LTG
SL104	1	2"	(2)	3/1	0/6	XHHW-2	SDV16	~~SDV17~~	WHARF LTG
SL105	1	2"	(2)	3/1	0/6	XHHW-2	SDV16	SDV17	YARD LTG
SL106	1	2"	(2)	3/1	0/6	XHHW-2	SDV16	SDV17	SECURITY LTG
SL107	1	2"	(2)	3/1	0/6	XHHW-2	SDV8	SDV16	WHARF LTG
SL108	1	2"	(2)	3/1	0/6	XHHW-2	SDV8	SDV16	YARD LTG
SL109	1	2"	(2)	3/1	0/6	XHHW-2	SDV8	SDV16	SECURITY LTG
SL110	1	2"	(10)	3/1	0/6	XHHW-2	SDV13	POLE YL05	WHARF LTG
SL111	1	2"	(10)	3/1	0/6	XHHW-2	SDV13	POLE YL05	YARD LTG
SL112	1	2"	(10)	3/1	0/6	XHHW-2	SDV13	POLE YL05	SECURITY LTG
SL113	1	2"	(2)	3/1	0/6	XHHW-2	SDV12	SDV13	WHARF LTG
SL114	1	2"	(2)	3/1	0/6	XHHW-2	SDV12	SDV13	YARD LTG
SL115	1	2"	(2)	3/1	0/6	XHHW-2	SDV12	SDV13	SECURITY LTG
SL116	1	2"	(2)	3/1	0/6	XHHW-2	SDV10	SDV12	WHARF LTG
SL117	1	2"	(2)	3/1	0/6	XHHW-2	SDV10	SDV12	YARD LTG
SL118	1	2"	(2)	3/1	0/6	XHHW-2	SDV10	SDV12	SECURITY LTG
SL119	1	2"	(10)	3/1	0/6	XHHW-2	SDV11	POLE WYL01	WHARF LTG
SL120	1	2"	(10)	3/1	0/6	XHHW-2	SDV11	POLE WYL01	YARD LTG
SL121	1	2"	(10)	3/1	0/6	XHHW-2	SDV11	POLE WYL01	SECURITY LTG
SL122	1	2"	(2)	3/1	0/6	XHHW-2	SDV10	SDV11	WHARF LTG
SL123	1	2"	(2)	3/1	0/6	XHHW-2	SDV10	SDV11	YARD LTG
SL124	1	2"	(2)	3/1	0/6	XHHW-2	SDV10	SDV11	SECURITY LTG
SL125	1	2"	(2)	3/1	0/6	XHHW-2	SDV9	SDV10	WHARF LTG
SL126	1	2"	(2)	3/1	0/6	XHHW-2	SDV9	SDV10	YARD LTG
SL127	1	2"	(2)	3/1	0/6	XHHW-2	SDV9	SDV10	SECURITY LTG
SL128	1	2"	(2)	3/1	0/6	XHHW-2	SDV8	SDV9	WHARF LTG
SL129	1	2"	(2)	3/1	0/6	XHHW-2	SDV8	SDV9	YARD LTG
SL130	1	2"	(2)	3/1	0/6	XHHW-2	SDV8	SDV9	SECURITY LTG
SL131	1	2"	(2)	3/1	0/6	XHHW-2	SDV7	SDV8	WHARF LTG
SL132	1	2"	(2)	3/1	0/6	XHHW-2	SDV7	SDV8	YARD LTG
SL133	1	2"	(2)	3/1	0/6	XHHW-2	SDV7	SDV8	SECURITY LTG
SL134	1	2"	(10)	3/1	0/6	XHHW-2	SDV7	POLE WYL02	WHARF LTG
SL135	1	2"	(10)	3/1	0/6	XHHW-2	SDV7	POLE WYL02	YARD LTG
SL136	1	2"	(10)	3/1	0/6	XHHW-2	SDV7	POLE WYL02	SECURITY LTG
SL137	1	2"	(10)	3/1	0/6	XHHW-2	WHARF CONTACTOR ENCLOSURE	SDV7	WHARF LTG
SL138	1	2"	(10)	3/1	0/6	XHHW-2	WHARF CONTACTOR ENCLOSURE	SDV7	YARD LTG
SL139	1	2"	(10)	3/1	0/6	XHHW-2	WHARF CONTACTOR ENCLOSURE	SDV7	SECURITY LTG
SL140	1	2"	(10)	3/1	0/6	XHHW-2	SWBD P44	WHARF CONTACTOR ENCLOSURE	WHARF LTG
SL141	1	2"	(10)	3/1	0/6	XHHW-2	SWBD P44	WHARF CONTACTOR ENCLOSURE	YARD LTG
SL142	1	2"	(10)	3/1	0/6	XHHW-2	SWBD P44	WHARF CONTACTOR ENCLOSURE	SECURITY LTG
SL143	1	2"	(2)	3/1	0/6	XHHW-2	SDV9	LTG POLE #YL12	YARD LTG
SL144	1	2"	(2)	3/1	0/6	XHHW-2	SDV9	LTG POLE #YL12	SECURITY LTG
SL145	1	2"	(2)	3/1	0/6	XHHW-2	SDV23	SDV18	WHARF LTG
SL146	1	2"	(2)	3/1	0/6	XHHW-2	SDV23	SDV18	YARD LTG
SL147	1	2"	(2)	3/1	0/6	XHHW-2	SDV23	SDV18	SECURITY LTG

GENERAL NOTES

1. SEE DRAWING E8.1 FOR LEGEND AND GENERAL NOTES.

SCHEDULE KEY NOTES

(1) SEE SEPARATE HUSKY TERMINAL WIFI SYSTEM PROJECT DRAWINGS FOR COMMUNICATIONS CONDUCTORS AND SITE PLANS. PORT OF TACOMA JOB #6323-04.

(2) PVC SHCEDULE 80.

(3) GRS CONDUIT.

(4) CONDUIT(S) CUT. ABANDONED IN PLACE.

(5) COORDINATE WORK WITH TACOMA POWER.

(6) PROVIDE LIQUID TIGHT FLEXIBLE METAL CONDUIT AT ALL LIGHT POLE LOCATIONS.

(7) LIQUID TIGHT FLEXIBLE METAL CONDUIT.

(8) CIRCUIT (CONDUIT) NUMBER FROM TERMINAL 3 & 4 REDEVELOPMENT PROJECT, CONTRACT NO. 998203.

(9) CIRCUIT (CONDUIT) NUMBER FROM PIER 3 UPGRADE PROJECT, CONTRACT NO. 069458.

(10) PVC COATED GRS CONDUIT.

(11) EXTEND DUCTBANK TO VAULT SV212.

(12) PROVIDE 2#10, #10G IN EXISTING CONDUIT FOR COMM CAB LS6 POWER.

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

ELCON ASSOCIATES, INC
ENGINEERS - CONSULTANTS
16300 CHRISTENSEN ROAD, SUITE 330
SEATTLE, WASHINGTON 98188
TEL (206) 243-5022
FAX (206) 243-5205

MARK:	REVISION:	BY:	APPR:	DATE:
1	PER ADDENDUM #5	HAS	DKS	5/10/16

DIMITRIOS K. SIATERLIS, STATE OF WASHINGTON, REGISTERED PROFESSIONAL ENGINEER 23791 — 2/19/16

APPROVED: 5-11-16
DIRECTOR ENG. DATE | CHECKED BY DATE | PROJ. ENGR DATE

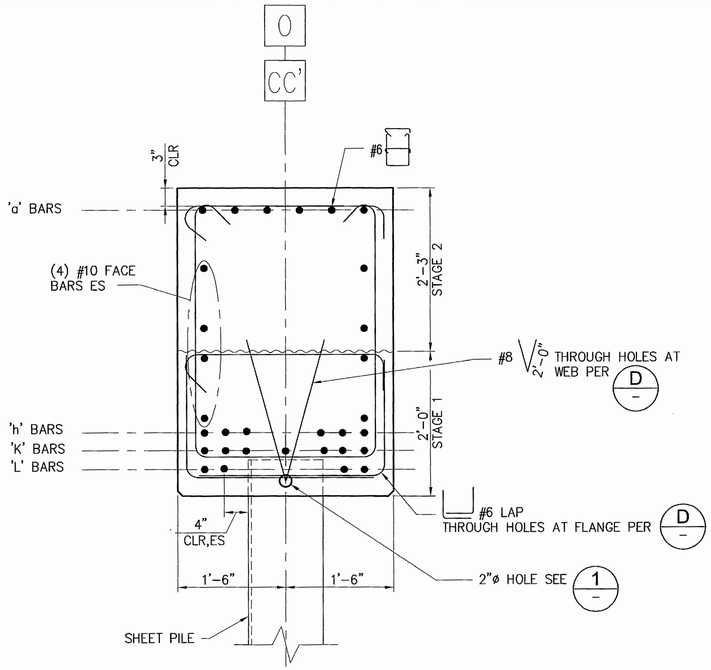
PRINTED BY: Derek May 10, 2016
PORT ADDRESS: ONE SITCUM PLAZA
TACOMA, WA 98401-1837

PIER 4 PHASE 2 RECONFIGURATION
CONDUIT AND CONDUCTOR SCHEDULE

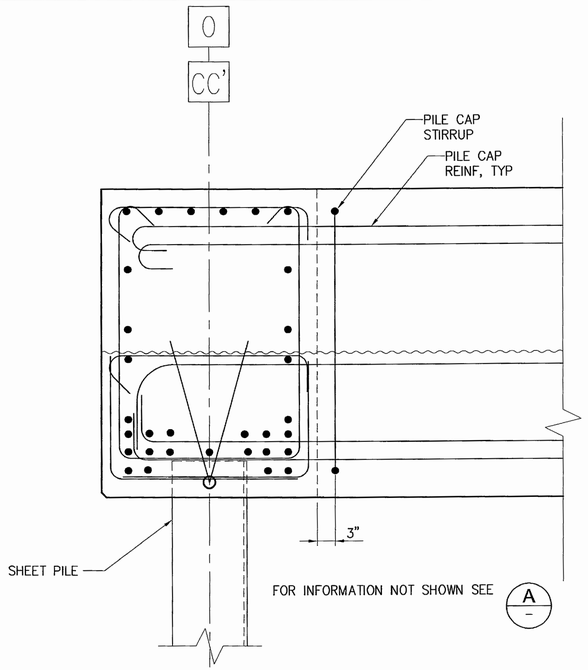
6552
E8.5
SH 169 OF 499

CONT/CONS: 070136	TOWNSHIP:	RANGE:	SECTION:
M. ID: 091251	DAT-HRZ: WA83-SF	VERT: MLLW 19.39' @ Tide 22 1933	
PHASE: BID	PARCEL:	DRAWING SCALE: AS NOTED	

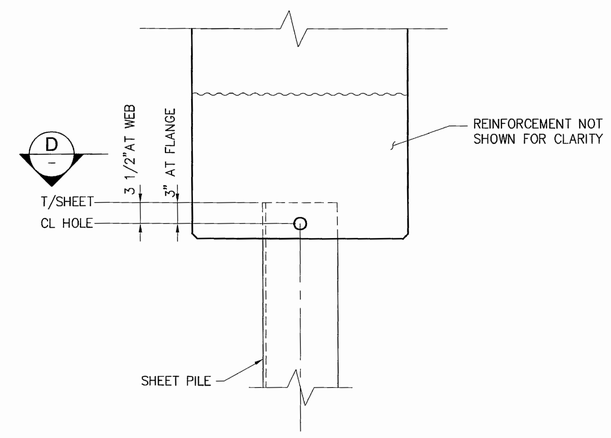
PORT OF TACOMA FILE: R:\5650-041.01\Dwgs\091251-E805



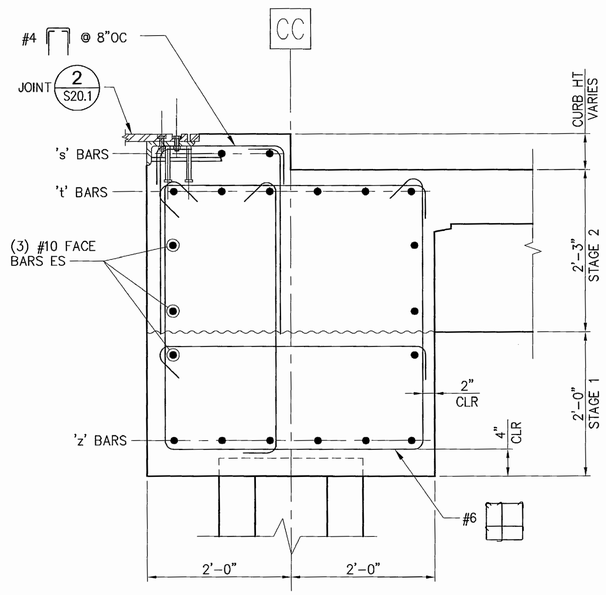
A S12.1 **SHEET PILE CAP TYPICAL SECTION**
1"=1'-0"



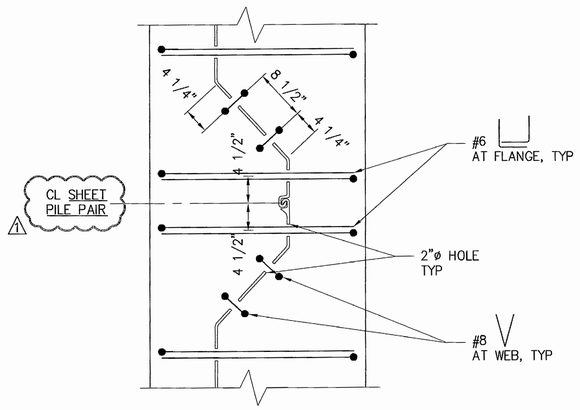
B S12.1 **SHEET PILE CAP SECTION AT PILE CAP**
1"=1'-0"



1 **DETAIL**
1"=1'-0"



C S12.1 **EDGE BEAM SECTION AT CC**
1"=1'-0"



D – **SHEET PILE SECTION**
1"=1'-0"

NOTES:

1. FOR PILE CAP REINFORCEMENT SEE SHEETS S9.1 – S9.16

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:
1	PER ADDENDUM #5	TAH	SEK	5/10/16

SCOTT E. KOEPELER 38536 REGISTERED STRUCTURAL ENGINEER PROFESSIONAL ENGINEER STATE OF WASHINGTON 5-11-16

APPROVED: DIRECTOR ENG. 5-11-16 DATE

SEK CHECKED BY
TAH PROJ. ENGR
DATE

PIER 4 PHASE 2
RECONFIGURATION
SHEET PILE WALL CAP BEAM SECTIONS AND DETAILS

6552
S13.1
SH 253 OF 499

CONT/CONS: 070136	TOWNSHIP: 21N	RANGE: 3E	SECTION: 27
M. ID: 091251	DAT-HRZ: WA83-SF	VERT: MLLW 19.39' @ Title 22 1933	
PHASE: BID	PARCEL:	DRAWING SCALE: AS NOTED	

PRINTED BY: tlemons May 10, 2016
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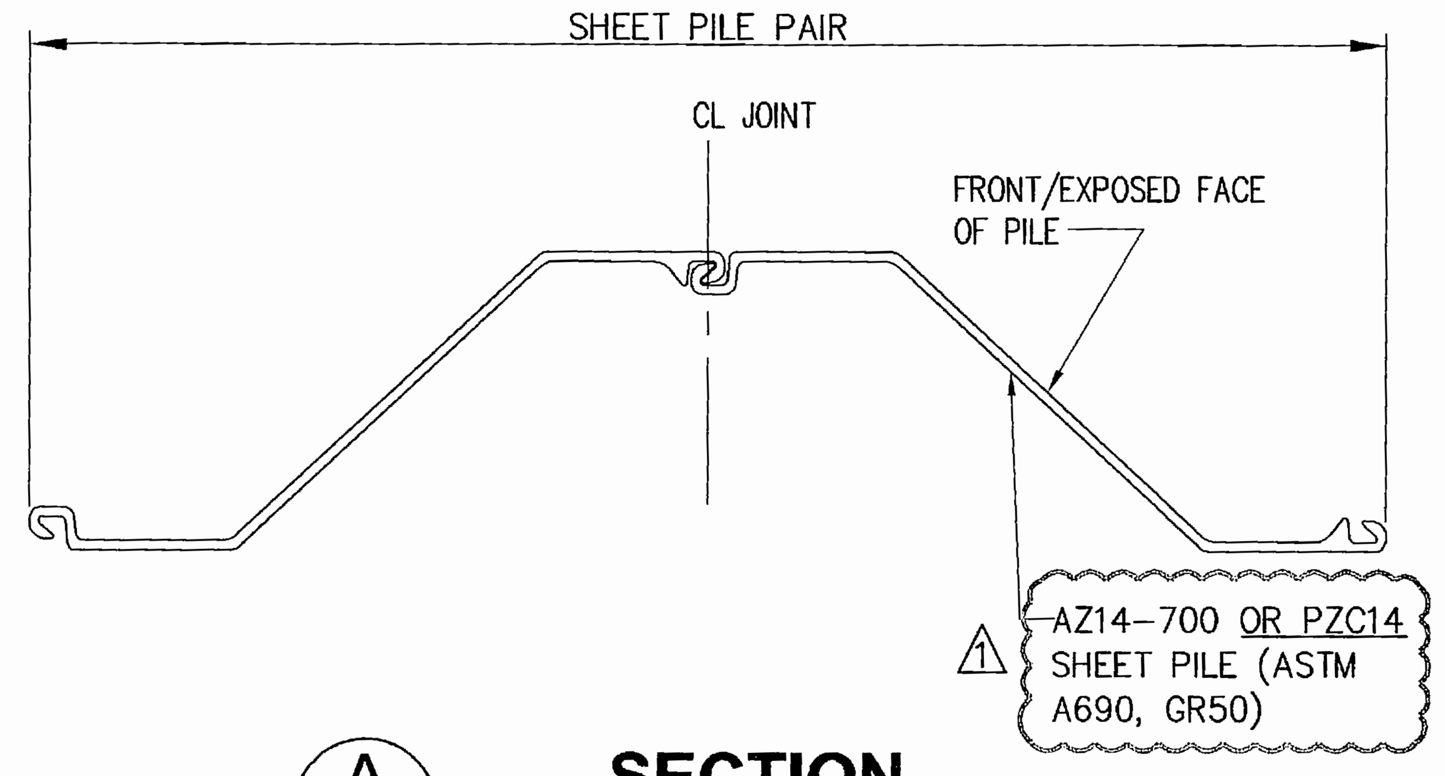
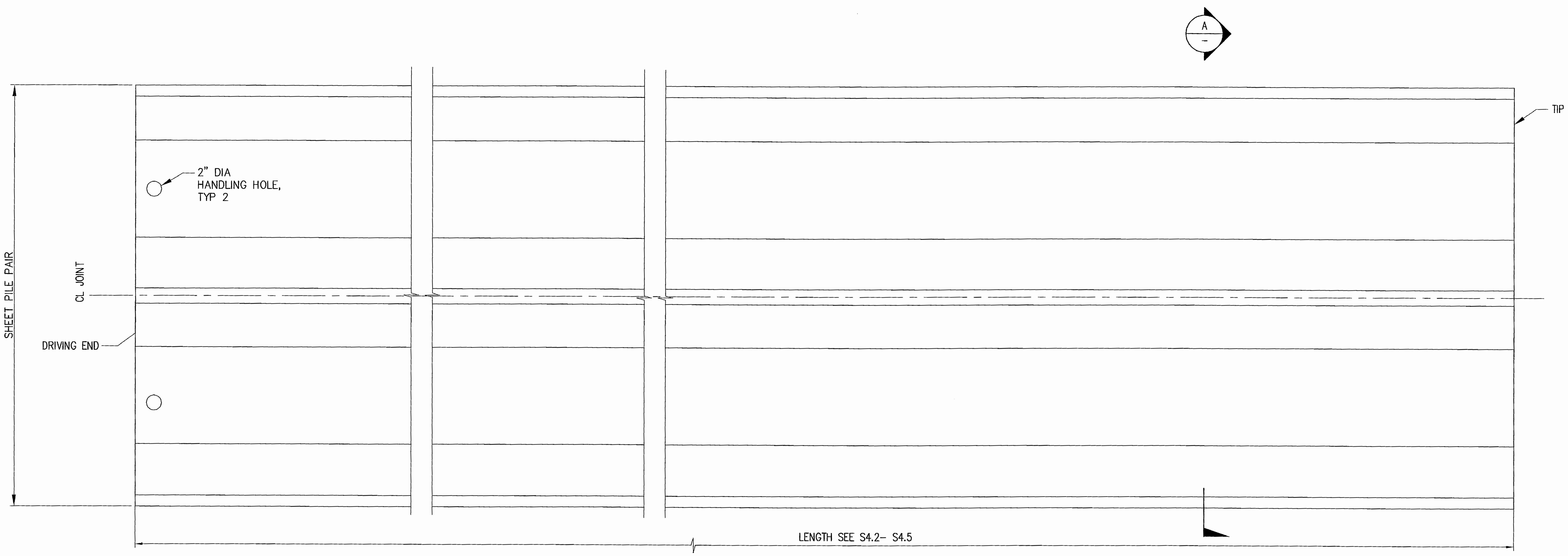


A SECTION
1 1/2" = 1'-0"



1 TYPICAL SHEET PILE PAIR
S4.1, S4.2, S4.3, S4.4, S4.5
1 1/2"=1'-0"

PORT OF TACOMA FILE: N:\Struct\114-114096 (POT Pier 4)\Drawings\Current\Phase 2_091251\091251-S41.1

BINDING EDGE

Port of Tacoma

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

MARK:	REVISION:	BY:	APPR:	DATE:
1	PER ADDENDUM #5	TAH	SEK	5/10/16

APPROVED: 5-11-16 DIRECTOR ENG. DATE
SEK CHECKED BY DATE
TAH PROJ. ENGR DATE
PRINTED BY: tlemons May 10, 2016
PORT ADDRESS: ONE SITCUM PLAZA TACOMA, WA 98401-1837

PIER 4 PHASE 2 RECONFIGURATION
STEEL SHEET PILE DETAILS

TOWNSHIP: 21N | RANGE: 3E | SECTION: 27
DAT-HRZ: WA83-SF | VERT: MLLW 19.39 @ Tide 22 1933
PARCEL: | DRAWING SCALE: AS NOTED

6552
S41.1
SH 379 OF 499
CONT/CONS: 070136
M. ID: 091251
PHASE: BID