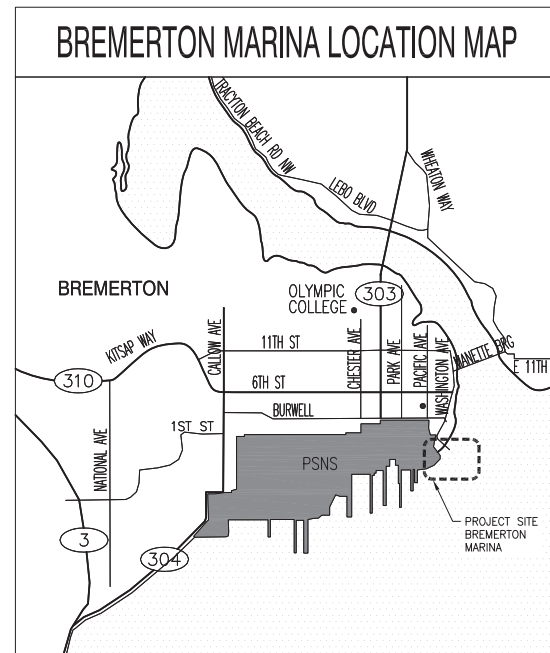
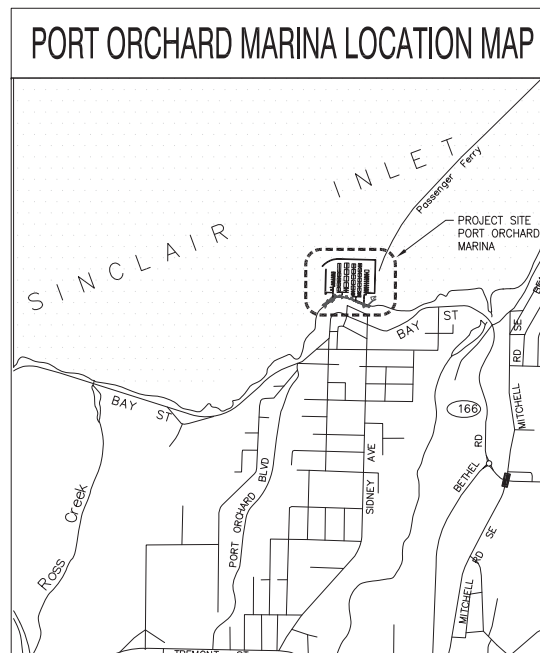
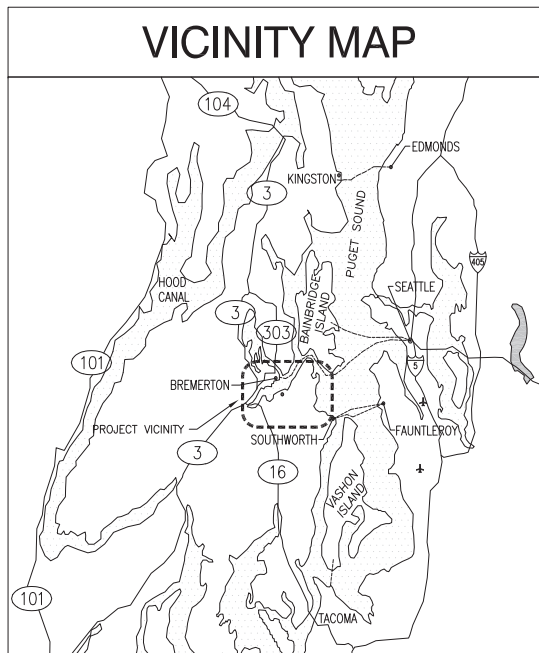


PORT ORCHARD AND BREMERTON MARINAS

PILING REPAIRS AND MAINTENANCE

PORT ORCHARD, WASHINGTON 98366
 BREMERTON, WASHINGTON 98337



FINAL SUBMITTAL
 2021-AUG-19

DRAWING INDEX

1. G-1 TITLE SHEET, LOCATION MAPS, & DRAWING INDEX
2. G-2 GENERAL NOTES, CATHODIC PROTECTION NOTES, & SPECIFICATIONS
3. G-3 SPECIFICATIONS
4. C-1 PORT ORCHARD MARINA KEY PLAN & SCHEDULES
5. C-2 BREMERTON MARINA KEY PLAN & SCHEDULES
6. C-3 DETAILS

SHEET IS 22x34 ANSI D
 IF PRINTING 11x17 USE
 50% SCALE FACTOR

PORT ORCHARD AND BREMERTON MARINAS
 PILING REPAIRS AND MAINTENANCE
 PORT ORCHARD, WASHINGTON 98366
 BREMERTON, WASHINGTON 98337

DRAWN: JHL
 DESIGNED: PRV
 CHECKED: RBC
 ISSUE DATE: 19 AUG 2021
 REVISIONS:

JOB NO: FWPOB107

SHT TITLE: TITLE SHEET, LOCATION MAPS, & DRAWING INDEX

SHT NO: 1 OF 6

G-1

GENERAL NOTES:

- CONNECT ANODE WIRE TO PILE EITHER BY BOLTING OR WELDING. SEE SHEET C-3.
- APPROXIMATE TOTAL AREA OF SURFACE CLEANING AND COATING = 11,600 SQ. FT.
TOTAL NUMBER OF A100 ANODES = 55
TOTAL LINEAL FOOTAGE OF ANODE WIRE = 1925 FT.
- TIDAL DATUMS: BASED ON CONTROL TIDE STATION 9447130 SEATTLE, PUGET SOUND TIDAL EPOCH 1983-2001
EHW: +15 FT
MHHW: +11.739 FT
MHW: +10.860 FT
MTL: +6.854 FT
MSL: +6.824 FT
MLW: +2.848 FT
MLLW: +0 FT
- PILE REPAIR COATING SYSTEM SHALL BE A COATING SYSTEM DESIGNED FOR ADHESION TO WET OR MOIST METAL SURFACES. COATING PRODUCT SHALL BE RESISTANT TO MILD CONCENTRATIONS OF SOLVENTS, CHEMICALS, AND ACIDS. PRODUCT SHALL BE LEAD AND CHROMATE FREE. INTERZONE 954 MODIFIED EPOXY BARRIER. FOLLOW MANUFACTURER APPLICATION INSTRUCTIONS FOR SELECTED PRODUCT.
- DESIGN INTENT IS THAT MARINE GROWTH BE REMOVED AND THEN COATING MAY BE APPLIED OVER ANY EXISTING RUST AND COATINGS. FOLLOW MANUFACTURER INSTRUCTIONS FOR SURFACE PREPARATION REQUIREMENTS. SUBMIT PROPOSED SURFACE CLEANING PLAN TO THE OWNER AND THE ENGINEER PRIOR TO STARTING WORK.
- MINOR DETAIL DIFFERENCES ARE PRESENT BETWEEN PORT ORCHARD MARINA MOORING LINE AND BREMERTON MARINA MOORING LINE. DETAIL IS MINOR ENOUGH TO NOT HAVE AN EFFECT ON COST OR CONSTRUCTION.

CATHODIC PROTECTION NOTES:

SACRIFICIAL ANODE
GALVANIC CATHODIC PROTECTION (GCP)

PART 1 - GENERAL

- FURNISH AND INSTALL COMPLETE AS SPECIFIED ON THE DRAWINGS.
- INSTALLATION BY CONTRACTOR WITH 5 YEARS CATHODIC PROTECTION INSTALLATION EXPERIENCE.
- OWNERS CP SPECIALIST WILL BE AVAILABLE DURING INSTALLATION FOR GUIDANCE.

PART 2 - SUBMITTALS

- RESUME OF PAST CATHODIC PROTECTION MARINE PROJECTS WITH REFERENCES.
- SCHEDULE AND WORK PLAN.
- MANUFACTURER CERTIFICATE OF CONFORMITY. PROOF THAT THE MATERIALS FURNISHED UNDER THIS SECTION CONFORM TO THE SPECIFIED REQUIREMENTS CONTAINED IN THE NACE RP0387. THE LABEL OR LISTING BY THE SPECIFIED AGENCY WILL BE ACCEPTABLE EVIDENCE OF SUCH COMPLIANCE.
- THE CONTRACTOR SHALL ALSO SUBMIT AN ANODE TO CABLE CONNECTION PLAN.

PART 3 - PRODUCTS

ALUMINUM ANODES:

- ANODES SHALL HAVE THE MINIMUM WEIGHTS AND MAXIMUM LENGTH DIMENSIONS AS SHOWN ON THE PLANS.
- ANODES SHALL BE GALVALUME 3 OR EQUAL AND SHALL HAVE THE FOLLOWING MATERIAL COMPOSITION:

ELEMENT	PERCENT BY WEIGHT
ZINC	2.8 - 6.5%
SILICON	0.08 - 0.2%
IRON	0.12% (MAX)
CADMIUM	0.002% (MAX)
MERCURY	0.001% (MAX)
TIN	0.001% (MAX)
INDIUM	0.014 - 0.020%
COPPER	0.006% (MAX)
ALUMINUM	BALANCE

- THE ANODES SHALL BE SUPPLIED IN THE WEIGHTS SHOWN ON THE PLANS. THE LISTED WEIGHTS SHALL BE THE WEIGHT OF THE ANODE MATERIAL NOT INCLUDING THE CORE.
- THE CONTRACTOR SHALL SUBMIT METALLURGICAL ANALYSIS ON SAMPLES FROM EACH HEAT OR BATCH OF ANODES USED ON THIS PROJECT. THE CONTRACTOR SHALL ALSO SUBMIT A MANUFACTURERS DATA SHEET OUTLINING THE CURRENT OUTPUT, CONSUMPTION RATE, AND OPEN CIRCUIT POTENTIAL OF THE ANODES.

PART 4 - INSTALLATION

ANODE INSTALLATION: UNLESS OTHERWISE AUTHORIZED, INSTALLATION SHALL NOT PROCEED WITHOUT THE PRESENCE OF THE OWNER'S REPRESENTATIVE. ANODES OF THE SIZE SPECIFIED SHALL BE INSTALLED AT THE LOCATIONS SHOWN ON THE DRAWINGS.

INTERZONE ® 954 SPECIFICATION

PRODUCT CHARACTERISTICS

SURFACE PREPARATION THE PERFORMANCE OF THIS PRODUCT WILL DEPEND UPON THE DEGREE OF SURFACE PREPARATION. THE SURFACE TO BE COATED MUST BE CLEAN AND FREE FROM CONTAMINATION. PRIOR TO PAINT APPLICATION ALL SURFACES SHOULD BE ASSESSED AND TREATED IN ACCORDANCE WITH ISO 8504:2000.

ACCUMULATED DIRT AND SOLUBLE SALTS MUST BE REMOVED. DRY BRISTLE BRUSHING WILL NORMALLY BE ADEQUATE FOR ACCUMULATED DIRT. SOLUBLE SALTS SHOULD BE REMOVED BY FRESH WATER WASHING.

OIL OR GREASE SHOULD BE REMOVED IN ACCORDANCE WITH SSPC-SP1 SOLVENT CLEANING.

ABRASIVE BLAST CLEANING ABRASIVE BLAST CLEAN TO SSPC-SP6 OR SA2½ (ISO 8501-1:2007). IF OXIDATION HAS OCCURRED BETWEEN BLASTING AND APPLICATION OF INTERZONE 954, THE SURFACE SHOULD BE REBLASTED TO THE SPECIFIED VISUAL STANDARD.

SURFACE DEFECTS REVEALED BY THE BLAST CLEANING PROCESS, SHOULD BE GROUND, FILLED, OR TREATED IN THE APPROPRIATE MANNER.

A SURFACE PROFILE OF 2-3 MILS (50-75 MICRONS) IS RECOMMENDED.

HAND OR POWER TOOL PREPARATION HAND OR POWER TOOL CLEAN TO A MINIMUM ST3 (ISO 8501-1:2007) OR SSPC-SP3 FOR ATMOSPHERIC USE ONLY.

NOTE, ALL SCALE MUST BE REMOVED AND AREAS WHICH CANNOT BE PREPARED ADEQUATELY BY CHIPPING OR NEEDLE GUN SHOULD BE SPOT BLASTED TO A MINIMUM STANDARD OF SA2 (ISO 8501-1:2007) OR SSPC-SP6. TYPICALLY THIS WOULD APPLY TO C OR D GRADE RUSTING IN THIS STANDARD.

ULTRA HIGH PRESSURE HYDROBLASTING / ABRASIVE WET BLASTING MAY BE APPLIED TO SURFACES PREPARED TO SSPC-SP6 OR SA2 (ISO 8501-1:2007) WHICH HAVE FLASH RUSTED TO NO WORSE THAN GRADE HB2M (REFER TO INTERNATIONAL HYDROBLASTING STANDARDS). IT IS ALSO POSSIBLE TO APPLY TO DAMP SURFACES IN SOME CIRCUMSTANCES. FURTHER INFORMATION IS AVAILABLE FROM INTERNATIONAL PROTECTIVE COATINGS.

AGED COATINGS INTERZONE 954 IS SUITABLE FOR OVERCOATING SOME SOUND INTACT AGED COATINGS. TO ENSURE COMPATIBILITY, APPLICATION AND EVALUATION OF A TEST PATCH IS REQUIRED.

PRODUCT CHARACTERISTICS MAXIMUM FILM BUILD IN ONE COAT IS BEST ATTAINED BY AIRLESS SPRAY. WHEN APPLYING BY METHODS OTHER THAN AIRLESS SPRAY, THE REQUIRED FILM BUILD IS UNLIKELY TO BE ACHIEVED. APPLICATION BY AIR SPRAY MAY REQUIRE A MULTIPLE CROSS SPRAY PATTERN TO ATTAIN MAXIMUM FILM BUILD. LOWER OR HIGH TEMPERATURES MAY REQUIRE SPECIFIC APPLICATION TECHNIQUES TO ACHIEVE MAXIMUM FILM BUILD.

WHEN APPLYING INTERZONE 954 BY BRUSH OR ROLLER, IT MAY BE NECESSARY TO APPLY MULTIPLE COATS TO ACHIEVE THE TOTAL SPECIFIED SYSTEM DRY FILM THICKNESS.

SURFACE TEMPERATURE MUST ALWAYS BE A MINIMUM OF 5°F (3°C) ABOVE DEW POINT. DO NOT APPLY AT STEEL TEMPERATURES BELOW 39°F (4°C). THROUGHOUT APPLICATION AND CURING, ENSURE ADEQUATE VENTILATION AND AIR FLOW ARE PRESENT, IN ORDER TO PREVENT 'DEAD SPOTS'; ESPECIALLY WHEN APPLICATION IS IN CONFINED SPACES. IN SPECIAL CASES WHERE OVERCOATING IS REQUIRED AND CURING HAS BEEN AT LOW TEMPERATURES AND HIGH RELATIVE HUMIDITIES ENSURE NO AMINE BLOOM IS PRESENT PRIOR TO APPLICATION OF SUBSEQUENT TOPCOATS.

CONDENSATION OCCURRING DURING OR IMMEDIATELY AFTER APPLICATION MAY RESULT IN A MATTE FINISH AND AN INFERIOR FILM. PREMATURE EXPOSURE TO PONDING WATER WILL CAUSE A COLOR CHANGE, ESPECIALLY IN DARK COLORS.

IN COMMON WITH ALL EPOXIES, INTERZONE 954 WILL CHALK AND DISCOLOR ON EXTERIOR EXPOSURE. WHERE A DURABLE COSMETIC FINISH WITH GOOD GLOSS AND COLOR RETENTION IS REQUIRED, OVERCOAT WITH RECOMMENDED TOPCOATS.

WHEN APPLIED BETWEEN TIDES ON JETTIES, PILING ETC., INTERZONE 954 CAN BE IMMERSED WITHIN 30 MINUTES. THIS WILL LEAD TO WHITENING OF DARK COLORS BUT WILL NOT AFFECT ULTIMATE ANTI-CORROSIVE PERFORMANCE.

FOR USE IN ATMOSPHERIC SERVICE A MINIMUM DRY FILM THICKNESS OF 14 MILS (350 MICRONS) IS REQUIRED IN ONE COAT WHEN APPLIED DIRECT TO STEEL, FOR WATER IMMERSION A MINIMUM OF 18 MILS (450 MICRONS) DRY FILM THICKNESS IS RECOMMENDED. IN EACH CASE PROTECTION CAN BE ACHIEVED IN A SINGLE COAT APPLICATION BY AIRLESS SPRAY. INTERZONE 954 IS SUITABLE FOR STEELWORK EXPOSED UNDER BURIED CONDITIONS (IM3 ACCORDING TO ISO 12944-2)

INTERZONE 954 CAN BE USED AS A NON-SKID DECK SYSTEM BY MODIFICATION WITH ADDITION OF GMA132 (CRUSHED FLINT) AGGREGATE. APPLICATION SHOULD THEN BE TO A SUITABLY PRIMED SURFACE. TYPICAL THICKNESSES WILL BE BETWEEN 20-40 MILS (500-1,000 MICRONS). PREFERRED APPLICATION IS BY A SUITABLE LARGE TIP HOPPER GUN (E.G. SAGOLA 429 OR AIR TEXTURE GUN FITTED WITH A 5-10 MM NOZZLE), TROWEL OR ROLLER CAN BE USED FOR SMALL AREAS. ALTERNATIVELY, A BROADCAST METHOD OF APPLICATION CAN BE USED. CONSULT INTERNATIONAL PROTECTIVE COATINGS FOR FURTHER DETAILS.

INTERZONE 954 IS COMPATIBLE WITH SACRIFICIAL AND IMPRESSED CURRENT CATHODIC PROTECTION SYSTEMS.

ALTERNATIVE CURING AGENT (EA964)

OVERCOATING INTERVAL WITH RECOMMENDED TOPCOATS

TEMPERATURE	TOUCH DRY	HARD DRY	MINIMUM	
50°F (10°C)	14 HOURS	24 HOURS	24 HOURS	14 DAYS
59°F (15°C)	10 HOURS	18 HOURS	18 HOURS	10 DAYS
77°F (25°C)	4 HOURS	8 HOURS	8 HOURS	7 DAYS
104°F (40°C)	90 MINUTES	3 HOURS	3 HOURS	5 DAYS

WORKING POT LIFE 50°F (10°C) 59°F (15°C) 77°F (25°C) 104°F (40°C)
3 HOURS 2 HOURS 90 MINUTES 45 MINUTES **MAXIMUM**

NOTE: VOC VALUES ARE TYPICAL AND ARE PROVIDED FOR GUIDANCE PURPOSE ONLY. THESE MAY BE SUBJECT TO VARIATION DEPENDING ON FACTORS SUCH AS DIFFERENCES IN COLOR AND NORMAL MANUFACTURING TOLERANCES.

LOW MOLECULAR WEIGHT REACTIVE ADDITIVES, WHICH WILL FORM PART OF THE FILM DURING NORMAL AMBIENT CURE CONDITIONS, WILL ALSO AFFECT VOC VALUES DETERMINED USING EPA METHOD 24.



PORT ORCHARD AND BREMERTON MARINAS
PILING REPAIRS AND MAINTENANCE
PORT ORCHARD, WASHINGTON 98366
BREMERTON, WASHINGTON 98337

DRAWN: JHL
DESIGNED: PRV
CHECKED: RBC

ISSUE DATE 19 AUG 2021

REVISIONS

JOB NO FWP0B107

SHT TITLE GENERAL NOTES, CATHODIC PROTECTION NOTES, & SPECIFICATIONS

SHT NO 2 OF 6

G-2

FINAL SUBMITTAL

2021-AUG-19

SHEET IS 22x34 ANSI D
IF PRINTING 11x17 USE
50% SCALE FACTOR

INTERZONE® 954 SPECIFICATION CONT.

SYSTEMS COMPATIBILITY INTERZONE 954 WILL GENERALLY BE APPLIED TO BARE STEEL PREPARED BY DRY ABRASIVE BLASTING, WET ABRASIVE BLASTING OR ULTRA HIGH PRESSURE HYDROBLASTING.

THE FOLLOWING PRIMERS ARE RECOMMENDED FOR INTERZONE 954:

INTERCURE 200	INTERGARD 269 (FOR UNDERWATER USE)
INTERCURE 200HS	INTERLINE 982 (FOR UNDERWATER USE)
INTERGARD 251	INTERZINC 315
INTERZINC 52	INTERZONE 1000

THE FOLLOWING TOPCOATS ARE RECOMMENDED FOR INTERZONE 954:

INTERFINE 629HS	INTERSLEEK 167
INTERFINE 878	INTERTHANE 870
INTERFINE 979	INTERTHANE 990
INTERGARD 740	INTERZONE 954

FOR OTHER SUITABLE PRIMERS/TOPCOATS, CONSULT INTERNATIONAL PROTECTIVE COATINGS.

ADDITIONAL INFORMATION FURTHER INFORMATION REGARDING INDUSTRY STANDARDS, TERMS AND ABBREVIATIONS USED IN THIS DATA SHEET CAN BE FOUND IN THE FOLLOWING DOCUMENTS AVAILABLE AT WWW.INTERNATIONAL-PC.COM:

- DEFINITIONS & ABBREVIATIONS
- SURFACE PREPARATION
- PAINT APPLICATION
- THEORETICAL & PRACTICAL COVERAGE

INDIVIDUAL COPIES OF THESE INFORMATION SECTIONS ARE AVAILABLE UPON REQUEST.

SAFETY PRECAUTIONS THIS PRODUCT IS INTENDED FOR USE ONLY BY PROFESSIONAL APPLICATORS IN INDUSTRIAL SITUATIONS IN ACCORDANCE WITH THE ADVICE GIVEN ON THIS SHEET, THE SAFETY DATA SHEET AND THE CONTAINER(S), AND SHOULD NOT BE USED WITHOUT REFERENCE TO THE SAFETY DATA SHEET (SDS).

ALL WORK INVOLVING THE APPLICATION AND USE OF THIS PRODUCT SHOULD BE PERFORMED IN COMPLIANCE WITH ALL RELEVANT NATIONAL, HEALTH, SAFETY & ENVIRONMENTAL STANDARDS AND REGULATIONS.

IN THE EVENT WELDING OR FLAME CUTTING IS PERFORMED ON METAL COATED WITH THIS PRODUCT, DUST AND FUMES WILL BE EMITTED WHICH WILL REQUIRE THE USE OF APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT AND ADEQUATE LOCAL EXHAUST VENTILATION.

IF IN DOUBT REGARDING THE SUITABILITY OF USE OF THIS PRODUCT, CONSULT INTERNATIONAL PROTECTIVE COATINGS FOR FURTHER ADVICE.

FINAL SUBMITTAL

2021-AUG-19

SHEET IS 22x34 ANSI D
IF PRINTING 11x17 USE
50% SCALE FACTOR



PORT ORCHARD AND BREMERTON MARINAS
PILING REPAIRS AND MAINTENANCE
PORT ORCHARD, WASHINGTON 98366
BREMERTON, WASHINGTON 98337

DRAWN: JHL
DESIGNED: PRV
CHECKED: RBC

ISSUE DATE
19 AUG 2021

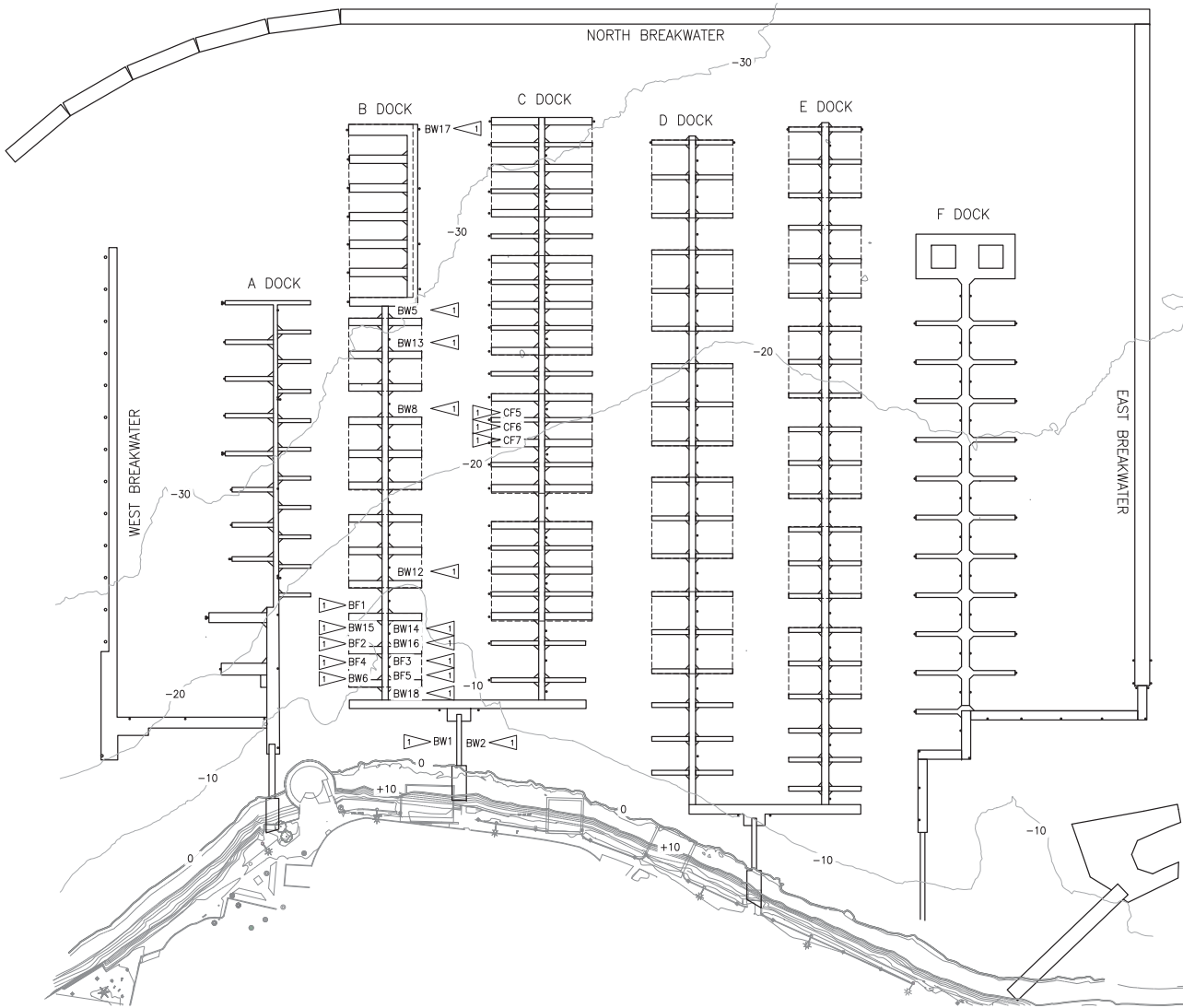
REVISIONS

JOB NO
FWPOB107

SHT TITLE
SPECIFICATIONS

SHT NO 3 OF 6

G-3



1
C-1
PORT ORCHARD MARINA KEY PLAN
SCALE: 1" = 50'-0"

FINAL SUBMITTAL
2021-AUG-19

FLAG NOTES

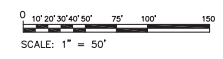
- APPLY REPAIR COATING AND INSTALL ANODE PER SCHEDULE AND DETAIL ON C-3. PILE GETS HYDROBLAST PREP AND INTERZONE 954 EPOXY COAT PER SPECIFICATION ON SHEET G-2.

PORT ORCHARD MOORING LINE SCHEDULE

NO.	MOORING LINE #	LOCATION	ANODE TYPE
1	BRIDLE 3	BRIDLE 3	A30 (PORT ORCHARD TYPE)
2	BRIDLE 9	BRIDLE 9	A30 (PORT ORCHARD TYPE)
3	11	ADDITIONAL BOTTOM	A30 (PORT ORCHARD TYPE)
4	20	ADDITIONAL BOTTOM	A30 (PORT ORCHARD TYPE)
5	25	TOP	A30 (PORT ORCHARD TYPE)
6	25	BOTTOM	A30 (PORT ORCHARD TYPE)
7	26	MIDDLE	A30 (PORT ORCHARD TYPE)
8	27	TOP	A30 (PORT ORCHARD TYPE)
9	28	MIDDLE	A30 (PORT ORCHARD TYPE)
10	31	BOTTOM	A30 (PORT ORCHARD TYPE)
11	34	MIDDLE	A30 (PORT ORCHARD TYPE)
12	38	BOTTOM	A30 (PORT ORCHARD TYPE)
13	39	MIDDLE	A30 (PORT ORCHARD TYPE)
14	40	TOP	A30 (PORT ORCHARD TYPE)
15	42	MIDDLE	A30 (PORT ORCHARD TYPE)
16	43	BOTTOM	A30 (PORT ORCHARD TYPE)
17	45	MIDDLE	A30 (PORT ORCHARD TYPE)
18	47	MIDDLE	A30 (PORT ORCHARD TYPE)
19	47	BOTTOM	A30 (PORT ORCHARD TYPE)
20	53	BOTTOM	A30 (PORT ORCHARD TYPE)
21	54	ADDITIONAL BOTTOM	A30 (PORT ORCHARD TYPE)
22	59	MIDDLE	A30 (PORT ORCHARD TYPE)
23	68	ADDITIONAL BOTTOM	A30 (PORT ORCHARD TYPE)
24	70	ADDITIONAL BOTTOM	A30 (PORT ORCHARD TYPE)
25	70	MIDDLE	A30 (PORT ORCHARD TYPE)

PORT ORCHARD PILE DESIGNATION SCHEDULE

NO.	PILE DESIGNATION	SLIP LOCATION	ANODE REQUIRED
1	BW1	BW	A100 WELDED
2	BW2	BWE	A100 WELDED
3	BW5	B 48	A100 WELDED
4	BW8	B 36	A100 WELDED
5	BW12	B 16	A100 WELDED
6	BW13	B 44	A100 WELDED
7	BF1	B 11	A100 WELDED
8	BW14	B 10	A100 WELDED
9	BW15	B 9	A100 WELDED
10	BW16	B 8	A100 WELDED
11	BF2	B 7	A100 WELDED
12	BF3	B 6	A100 WELDED
13	BF4	B 5	A100 WELDED
14	BF5	B 4	A100 WELDED
15	BW6	B 3	A100 WELDED
16	BW17	B 2b	A100 WELDED
17	BW18	B 2	A100 WELDED
18	CF5	C 43	A100 WELDED
19	CF6	C 41	A100 WELDED
20	CF7	C 39	A100 WELDED



SHEET IS 22x34 ANSI D
IF PRINTING 11x17 USE
50% SCALE FACTOR



PORT ORCHARD AND BREMERTON MARINAS
PILING REPAIRS AND MAINTENANCE
PORT ORCHARD, WASHINGTON 98366
BREMERTON, WASHINGTON 98337

DRAWN: JHL
DESIGNED: PRV
CHECKED: RBC

ISSUE DATE 19 AUG 2021

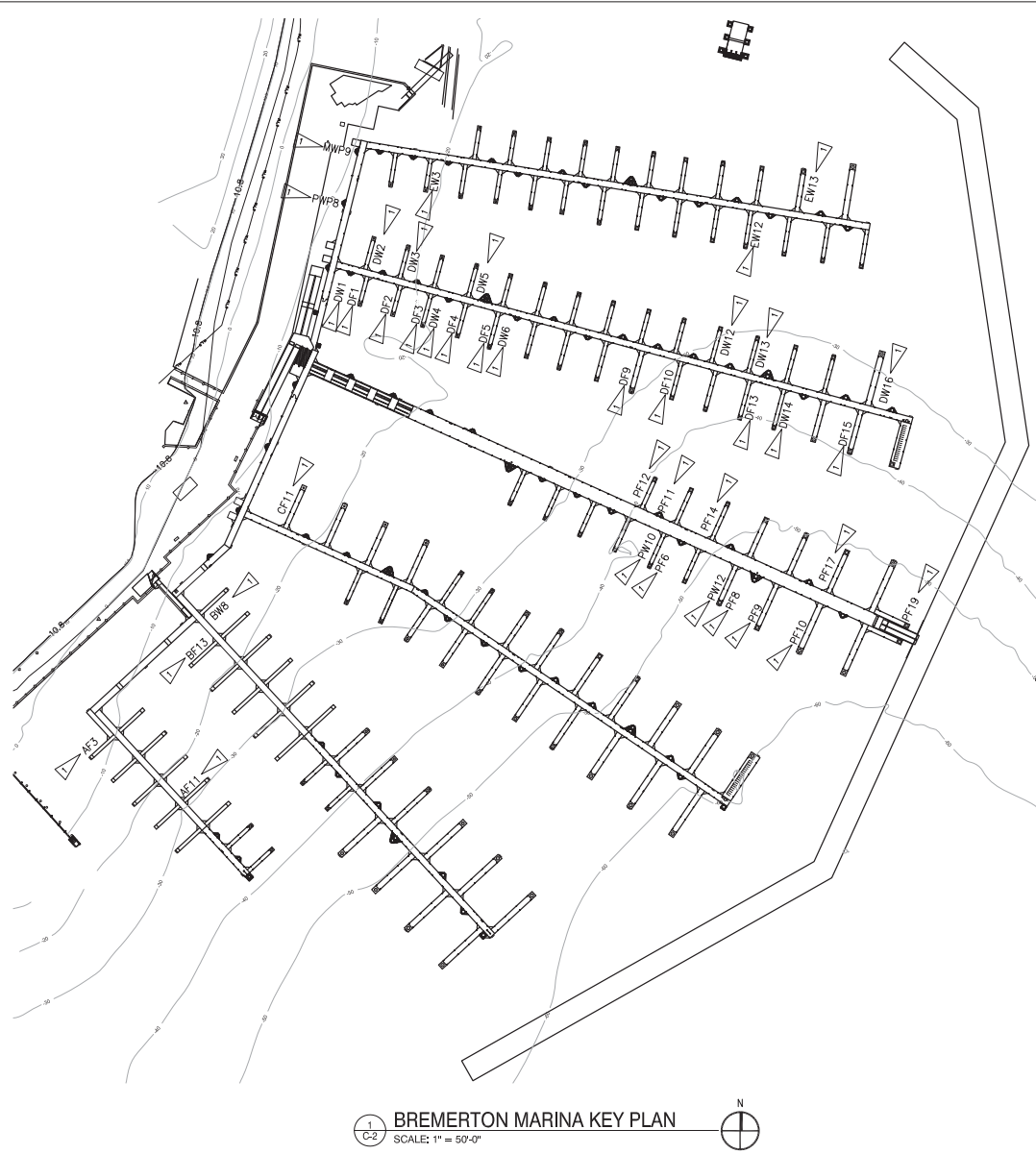
REVISIONS

JOB NO FWPOB107

SHT TITLE PORT ORCHARD MARINA KEY PLAN & SCHEDULES

SHT NO 4 OF 6

C-1



1
C-2
BREMERTON MARINA KEY PLAN
SCALE: 1" = 50'-0"

FINAL SUBMITTAL
2021-AUG-19

FLAG NOTES

▲ APPLY REPAIR COATING AND INSTALL ANODE PER SCHEDULE AND DETAIL ON C-3. PILE GETS HYDROBLAST PREP AND INTERZONE 954 EPOXY COAT PER SPECIFICATION ON SHEET G-2.

BREMERTON PILE DESIGNATION SCHEDULE

NO.	PILE DESIGNATION	SLIP LOCATION	ANODE TYPE
1	AF3	A 26	A100 WELDED
2	AF11	A 15	A100 WELDED
3	BF13	B 44	A100 WELDED
4	BW8	B 45	A100 WELDED
5	CF11	C 49	A100 WELDED
6	PW10	P 24	A100 WELDED
7	PW12	P 16	A100 WELDED
8	PF6	P 22	A100 WELDED
9	PF8	P 14	A100 WELDED
10	PF9	P 12	A100 WELDED
11	PF10	P 8	A100 WELDED
12	PF11	BRIDGE 1	A100 WELDED
13	PF12	P 27	A100 WELDED
14	PF14	P 19	A100 WELDED
15	PF17	P 7	A100 WELDED
16	PF19	BRIDGE 2	A100 WELDED
17	PWP8	MARGINAL E 1	A100 WELDED
18	MWP9	MARGINAL E 2	A100 WELDED
19	DW1	D 64	A100 WELDED
20	DW2	D 59	A100 WELDED
21	DW3	D 55	A100 WELDED
22	DW4	D 52	A100 WELDED
23	DW5	D 47	A100 WELDED
24	DW6	D 44	A100 WELDED
25	DW12	D 19	A100 WELDED
26	DW13	D 15	A100 WELDED
27	DW14	D 12	A100 WELDED
28	DW16	D 3	A100 WELDED
29	DF1	D 62	A100 WELDED
30	DF2	D 58	A100 WELDED
31	DF3	D 54	A100 WELDED
32	DF4	D 50	A100 WELDED
33	DF5	D 46	A100 WELDED
34	DF9	D 30	A100 WELDED
35	DF10	D 26	A100 WELDED
36	DF13	D 14	A100 WELDED
37	DF15	D 6	A100 WELDED
38	EW3	E 49	A100 WELDED
39	EW12	E 13	A100 WELDED
40	EW13	E 10	A100 WELDED

BREMERTON MOORING LINE SCHEDULE

NO.	BREMERTON MOORING LINE #	LOCATION	ANODE TYPE
1	1N	TOP	A30 (BREMERTON TYPE)
2	1N	MIDDLE	A30 (BREMERTON TYPE)
3	1N	BOTTOM	A30 (BREMERTON TYPE)
4	2	MIDDLE	A30 (BREMERTON TYPE)
5	2	BOTTOM	A30 (BREMERTON TYPE)
6	3	TOP	A30 (BREMERTON TYPE)
7	3	MIDDLE	A30 (BREMERTON TYPE)
8	3	BOTTOM	A30 (BREMERTON TYPE)
9	4	MIDDLE	A30 (BREMERTON TYPE)
10	6S	MIDDLE	A30 (BREMERTON TYPE)
11	6S	BOTTOM	A30 (BREMERTON TYPE)
12	6N	MIDDLE	A30 (BREMERTON TYPE)
13	6N	BOTTOM	A30 (BREMERTON TYPE)
14	7	MIDDLE	A30 (BREMERTON TYPE)
15	7	BOTTOM	A30 (BREMERTON TYPE)
16	8	MIDDLE	A30 (BREMERTON TYPE)
17	8	BOTTOM	A30 (BREMERTON TYPE)
18	12	MIDDLE	A30 (BREMERTON TYPE)
19	15	BOTTOM	A30 (BREMERTON TYPE)
20	19	MIDDLE	A30 (BREMERTON TYPE)
21	20S	MIDDLE	A30 (BREMERTON TYPE)
22	20S	BOTTOM	A30 (BREMERTON TYPE)
23	20N	MIDDLE	A30 (BREMERTON TYPE)
24	20N	BOTTOM	A30 (BREMERTON TYPE)
25	22	BOTTOM	A30 (BREMERTON TYPE)
26	27	TOP	A30 (BREMERTON TYPE)
27	28	TOP	A30 (BREMERTON TYPE)
28	29	TOP	A30 (BREMERTON TYPE)
29	30	TOP	A30 (BREMERTON TYPE)
30	31S	BOTTOM	A30 (BREMERTON TYPE)
31	32	TOP	A30 (BREMERTON TYPE)
32	34	MIDDLE	A30 (BREMERTON TYPE)
33	34	BOTTOM	A30 (BREMERTON TYPE)
34	36S	BOTTOM	A30 (BREMERTON TYPE)
35	37	TOP	A30 (BREMERTON TYPE)
36	39	MIDDLE	A30 (BREMERTON TYPE)
37	39	MIDDLE	A30 (BREMERTON TYPE)
38	41	MIDDLE	A30 (BREMERTON TYPE)
39	43	TOP	A30 (BREMERTON TYPE)
40	43	MIDDLE	A30 (BREMERTON TYPE)

0' 10' 20' 30' 40' 50' 75' 100' 150'
SCALE: 1" = 50'

SHEET IS 22x34 ANSI D
IF PRINTING 11x17 USE
50% SCALE FACTOR



**PORT ORCHARD AND BREMERTON MARINAS
PILING REPAIRS AND MAINTENANCE
PORT ORCHARD, WASHINGTON 98366
BREMERTON, WASHINGTON 98337**

DRAWN: JHL
DESIGNED: PRV
CHECKED: RBC

ISSUE DATE: 19 AUG 2021

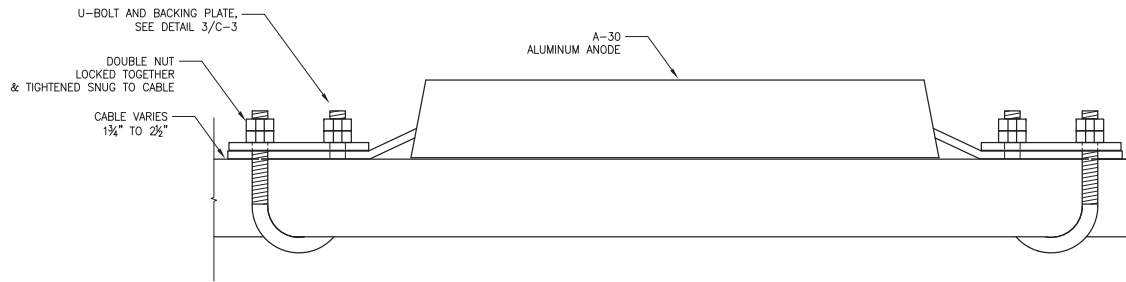
REVISIONS:

JOB NO: FWPOB107

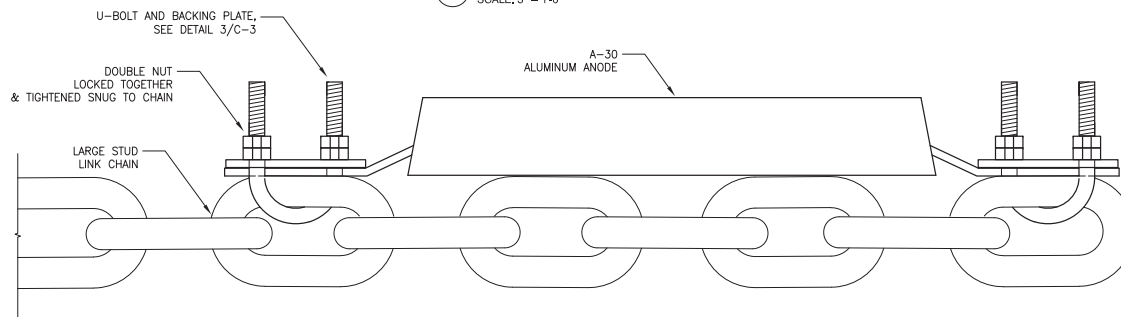
SHT TITLE: BREMERTON MARINA KEY PLAN & SCHEDULES

SHT NO: 5 OF 6

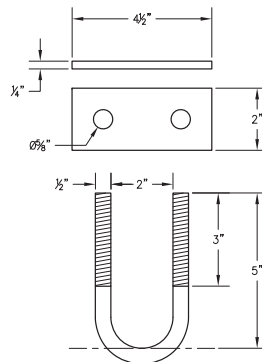
C-2



1
C-3 ANODE TO MOORING LINE CONNECTION DETAIL
SCALE: 3" = 1'-0"



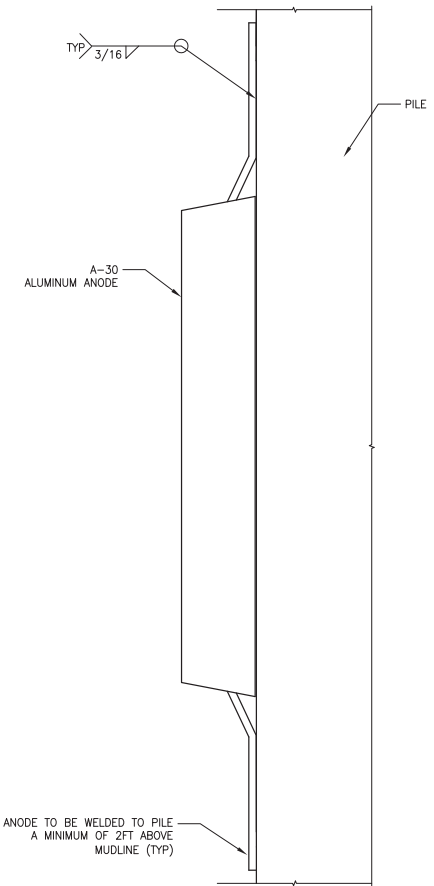
2
C-3 ANODE TO CHAIN CONNECTION DETAIL
SCALE: 3" = 1'-0"



3
C-3 U-BOLT AND PLATE DETAIL
SCALE: 6" = 1'-0"

GENERAL NOTE:

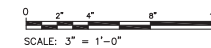
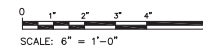
1. ANODE TO BE WELDED TO PILING A MINIMUM OF 2FT ABOVE MUDLINE.
2. FOR BREMERTON MARINA, 1 1/2" STUD LINK CHAIN SEGMENT "C" (P≥60K) OR 2 1/2" STUD LINK CHAIN SEGMENT "C" (P≥90K)
3. FOR BREMERTON MARINA, 1 1/2" WIRE ROPE SEGMENT "B" (P≥60K) OR 2 1/2" WIRE ROPE SEGMENT "B" (P≥90K)



4
C-3 ANODE TO PILE WELDING DETAIL
SCALE: 3" = 1'-0"

FINAL SUBMITTAL

2021-AUG-19



SHEET IS 22x34 ANSI D
IF PRINTING 11x17 USE
50% SCALE FACTOR



PORT ORCHARD AND BREMERTON MARINAS
PILING REPAIRS AND MAINTENANCE
PORT ORCHARD, WASHINGTON 98366
BREMERTON, WASHINGTON 98337

DRAWN: JHL
DESIGNED: PRV
CHECKED: RBC

ISSUE DATE
19 AUG 2021

REVISIONS

JOB NO
FWPOB107

SHT TITLE
DETAILS

SHT NO 6 OF 6

C-3