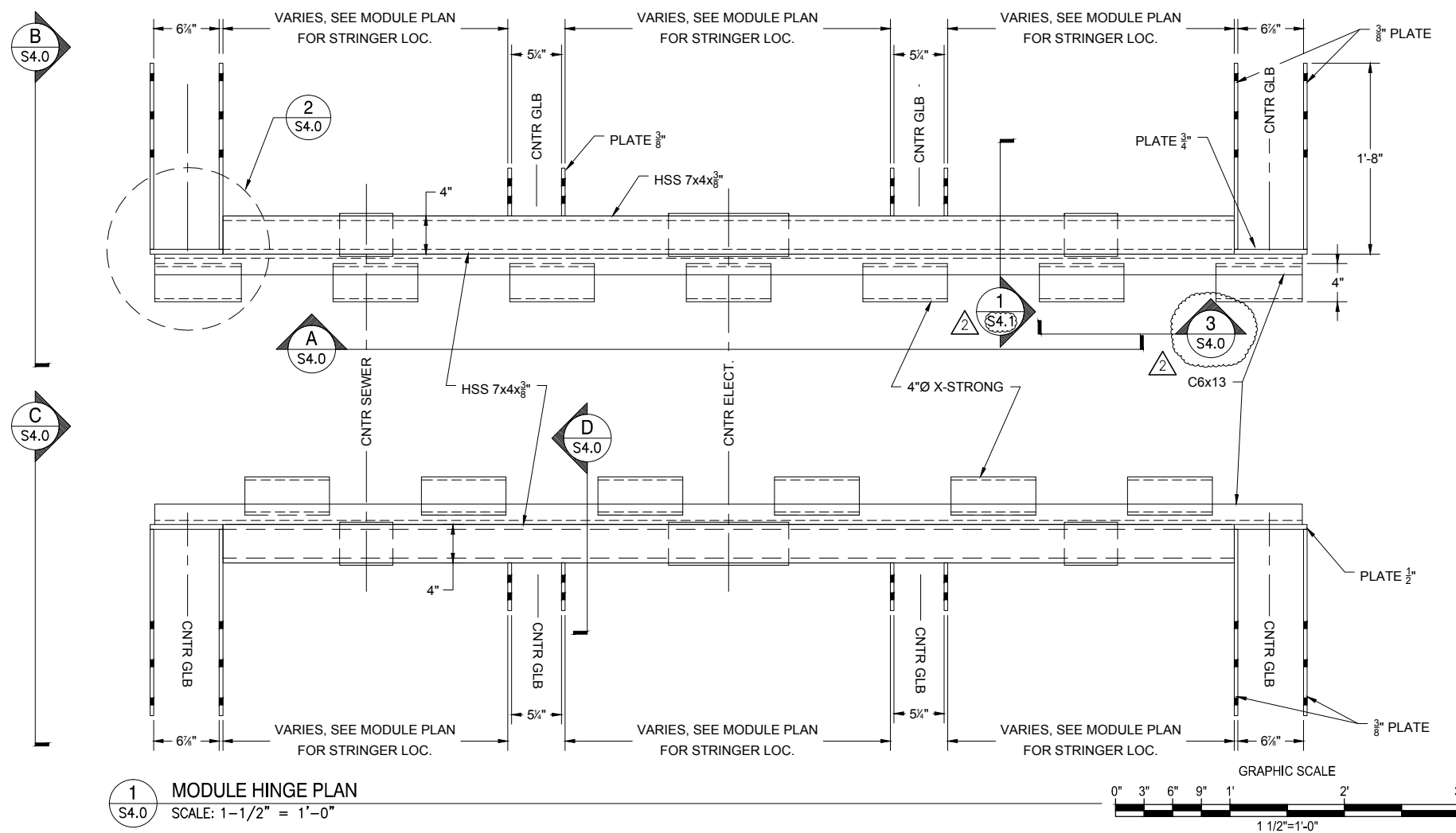
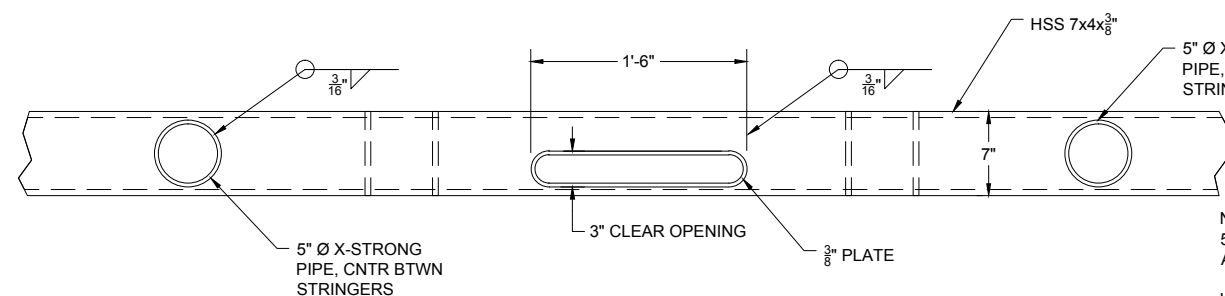


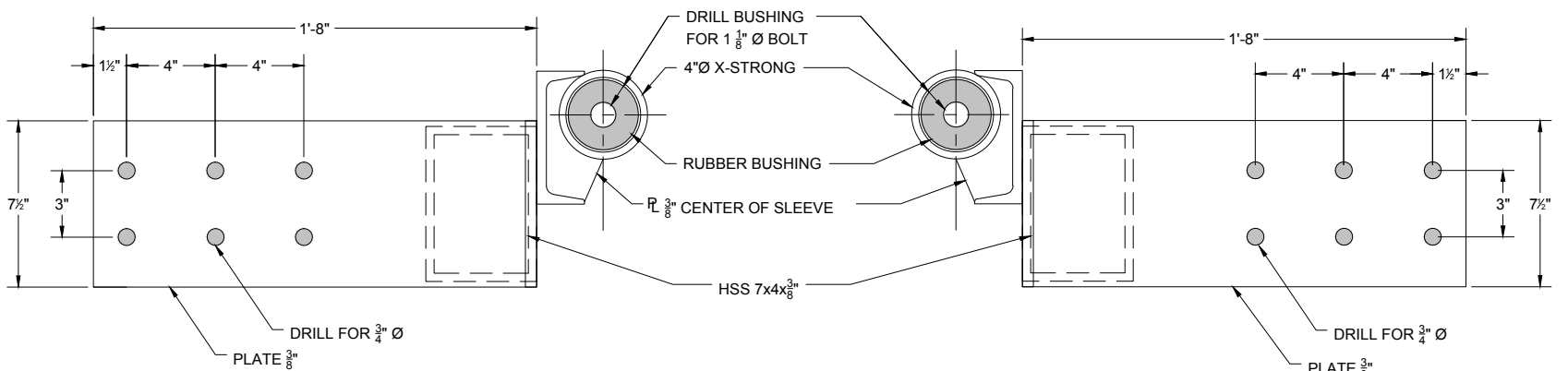
G:\PROJECTS\26220909 SKAGWAY BOAT HARBOR\01 WORKING DRAWINGS\2- S4 - HINGES.DWG : Revised 8/14/2012 12:23:44 PM



1 MODULE HINGE PLAN
SCALE: 1-1/2" = 1'-0"

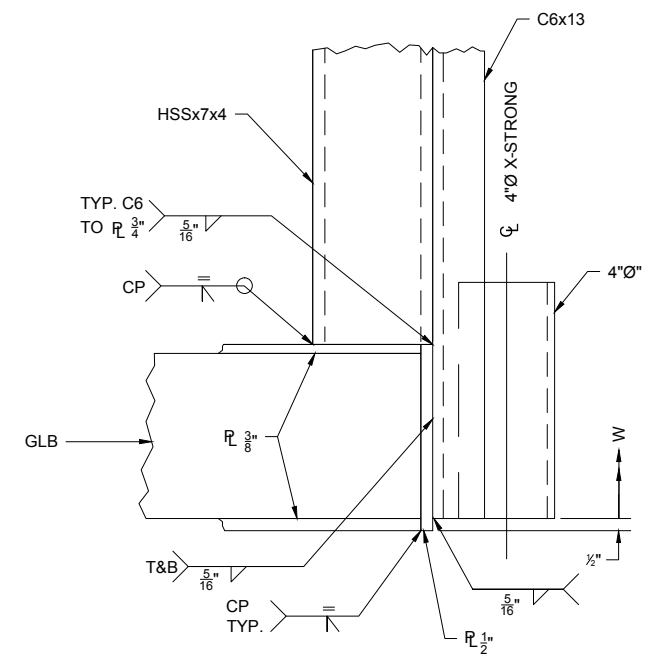


A CROSS BEAM ELEVATION
SCALE: 1-1/2" = 1'-0"

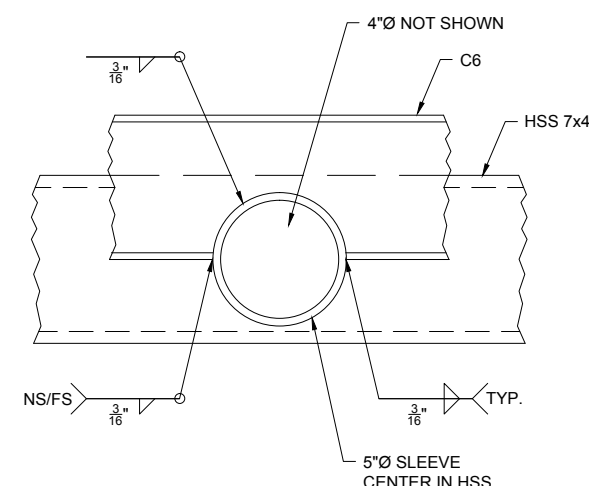


B SECTION THROUGH HINGE
SCALE: 3" = 1'-0"

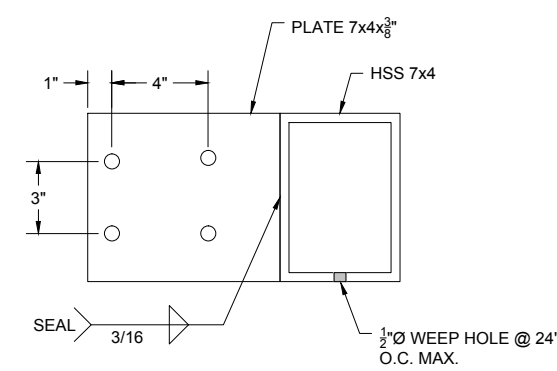
C SECTION THROUGH HINGE
SCALE: 3" = 1'-0"



2 HINGE DETAIL
SCALE: 3" = 1'-0"

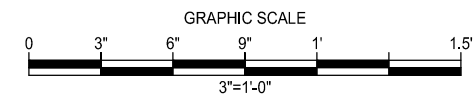


3 SLEEVE DETAIL
SCALE: 3" = 1'-0"

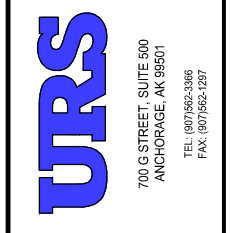


D SECTION THROUGH HSS
SCALE: 3" = 1'-0"

NOTE:
HOT DIP GALVANIZE ASSEMBLY
AFTER FABRICATION.



CONFORMED SET

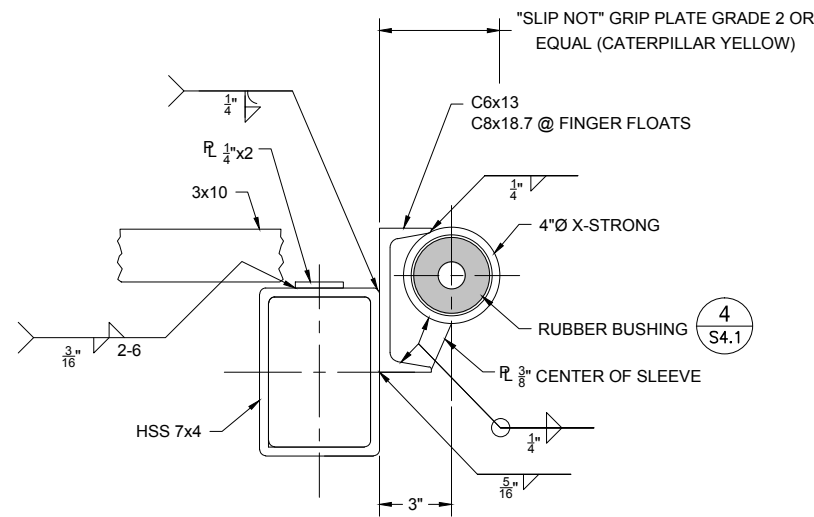


REVISIONS		DESCRIPTION
NO.	BY	DATE
2	URS	8/14/2012
		ADDENDUM 2

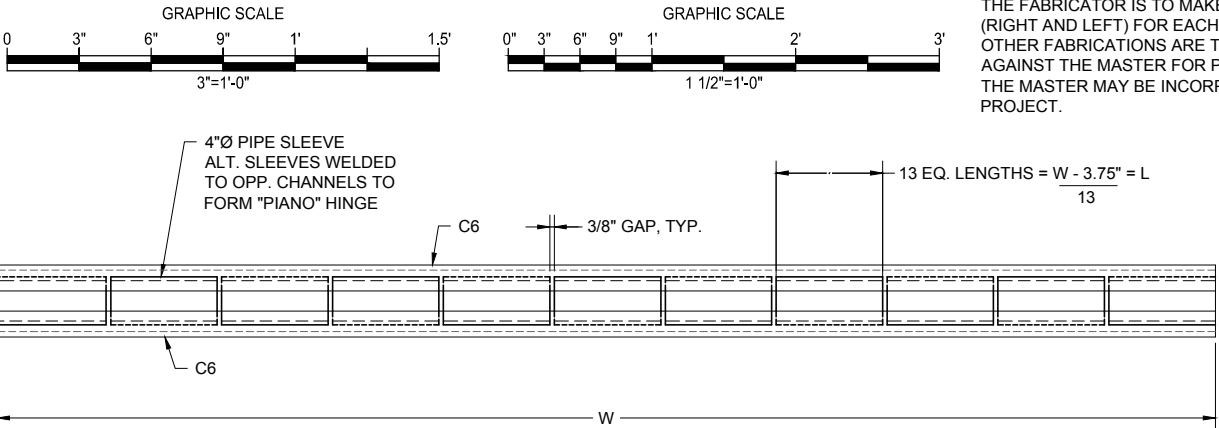
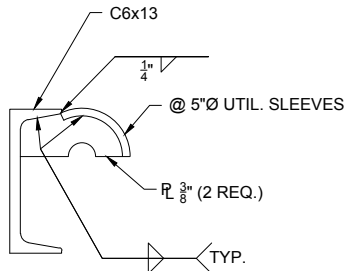
MUNICIPALITY OF SKAGWAY
SKAGWAY SMALL BOAT HARBOR
SKAGWAY, AK
HINGE DETAILS

PROJECT NO:	26220909
DATE:	8/14/2012
DESIGNED BY:	CF
DRAWN BY:	MDS /SJ
CHECKED BY:	CF
SHEET:	S4.0
PAGE:	24 OF 71

REV: 3/2010

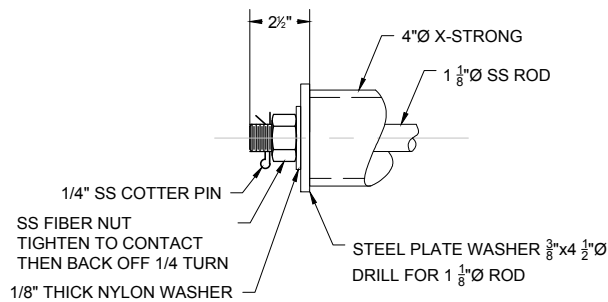


1 SECTION
S4.1 SCALE: 3" = 1'-0"

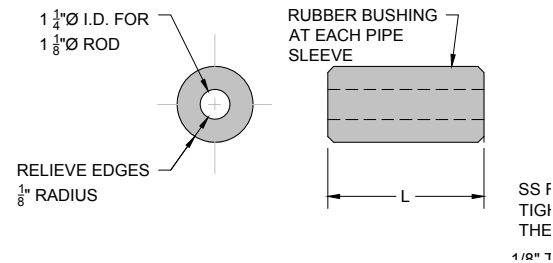


2 HINGE PLAN
S4.1 SCALE: 1-1/2" = 1'-0"

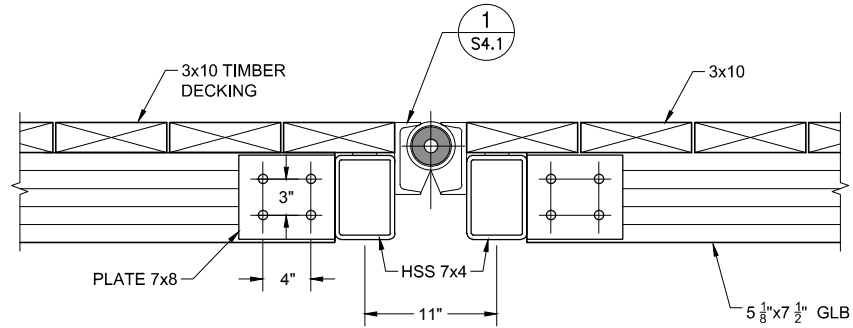
NOTE:
THE FABRICATOR IS TO MAKE TWO MASTERS
(RIGHT AND LEFT) FOR EACH HINGE SIZE. ALL
OTHER FABRICATIONS ARE TO BE CHECKED
AGAINST THE MASTER FOR PROPER FIT-UP.
THE MASTER MAY BE INCORPORATED IN THE
PROJECT.



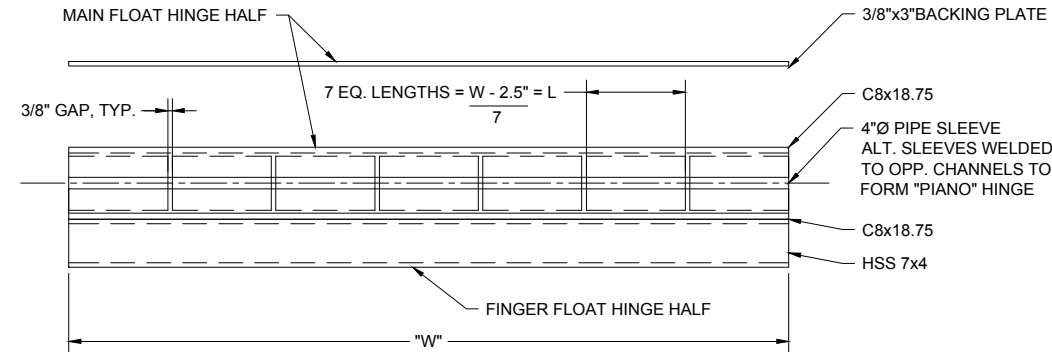
3 DETAIL
S4.1 SCALE: 3" = 1'-0" (TYP. BOTH ENDS)



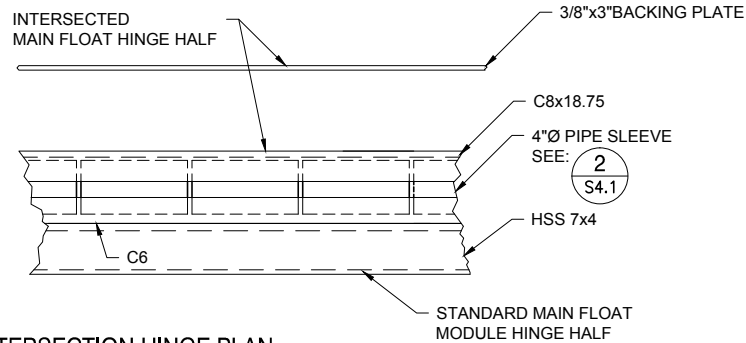
4 RUBBER BUSHING
S4.1 SCALE: 3" = 1'-0"



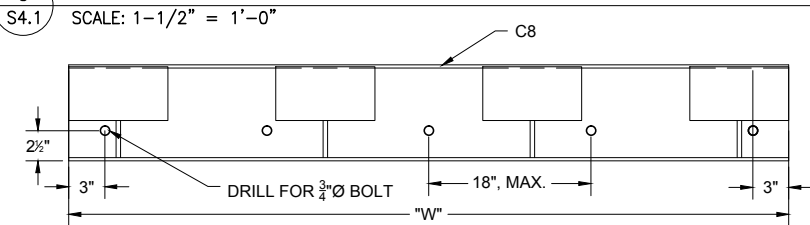
5 MAIN FLOAT MODULE TO MODULE HINGE SECTION
S4.1 SCALE: 1-1/2" = 1'-0"



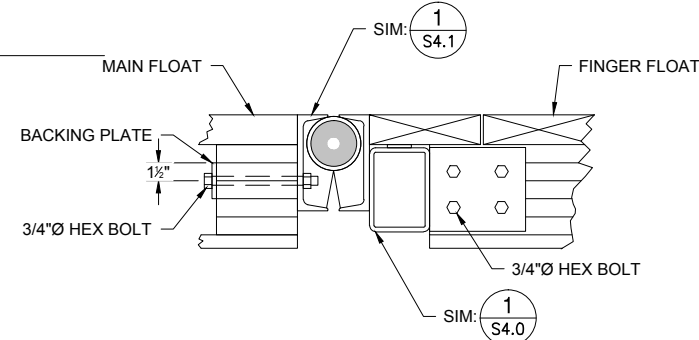
6 FINGER TO MAIN HINGE PLAN
S4.1 SCALE: 1-1/2" = 1'-0"



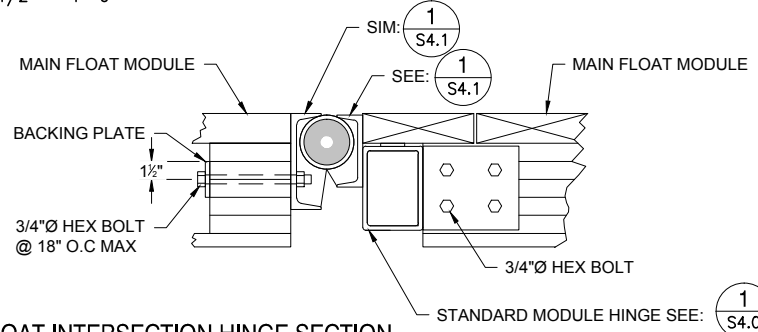
9 MAIN FLOAT INTERSECTION HINGE PLAN
S4.1 SCALE: 1-1/2" = 1'-0"



7 FINGER TO MAIN FLOAT HINGE HALF ELEVATION
S4.1 SCALE: 1-1/2" = 1'-0"



8 FINGER TO MAIN HINGE SECTION
S4.1 SCALE: 1-1/2" = 1'-0"



10 MAIN FLOAT INTERSECTION HINGE SECTION
S4.1 SCALE: 1-1/2" = 1'-0"

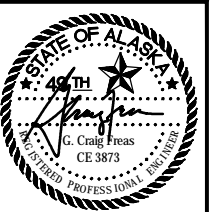
CONFORMED SET



NO.	BY	DATE	REVISIONS	DESCRIPTION

MUNICIPALITY OF SKAGWAY
SKAGWAY SMALL BOAT HARBOR
SKAGWAY, AK
TRANSITION PLATES

PROJECT NO:	26220909
DATE:	8/14/2012
DESIGNED:	CF
DRAWN BY:	SJ
CHECKED BY:	CF
SHEET:	S4.1
PAGE:	25 OF 71



URS

700 G STREET, SUITE 500
ANCHORAGE, AK 99501
TEL: (907) 562-3366
FAX: (907) 562-1287



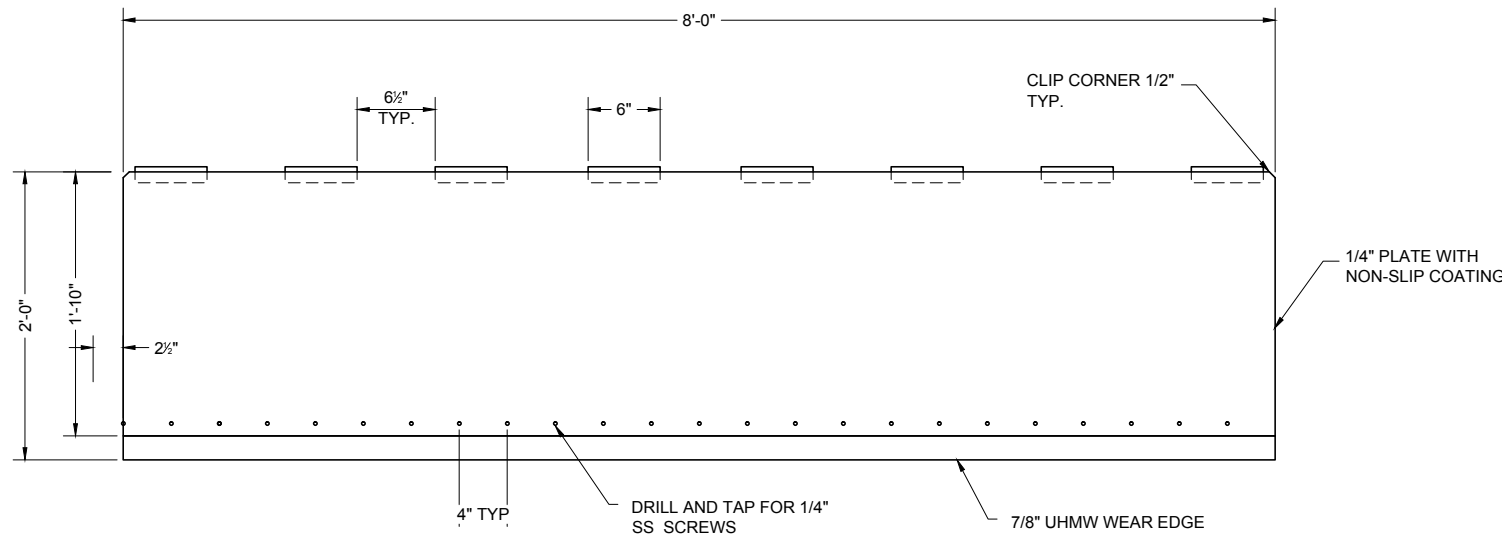
REVISIONS		DESCRIPTION
NO.	BY	DATE

MUNICIPALITY OF SKAGWAY

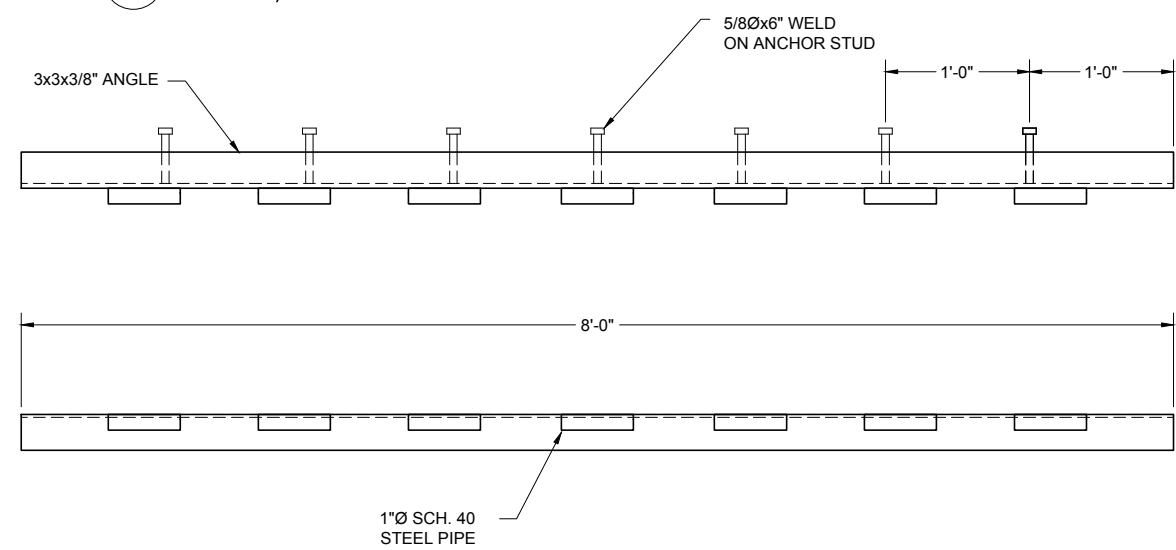
SKAGWAY SMALL BOAT HARBOR
SKAGWAY, AK

TRANSITION PLATES

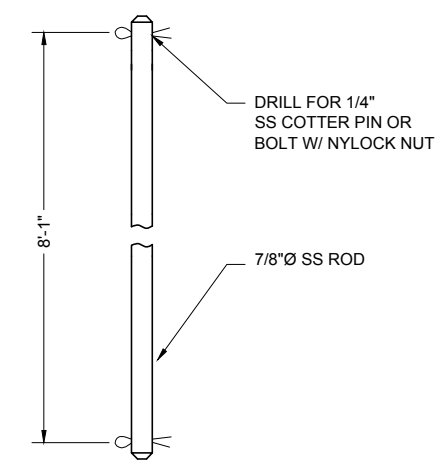
PROJECT NO: 26220909
DATE: 8/14/2012
DESIGNED: CF
DRAWN BY: SJ
CHECKED BY: CF
SHEET: S4.2
PAGE: 26 OF 71



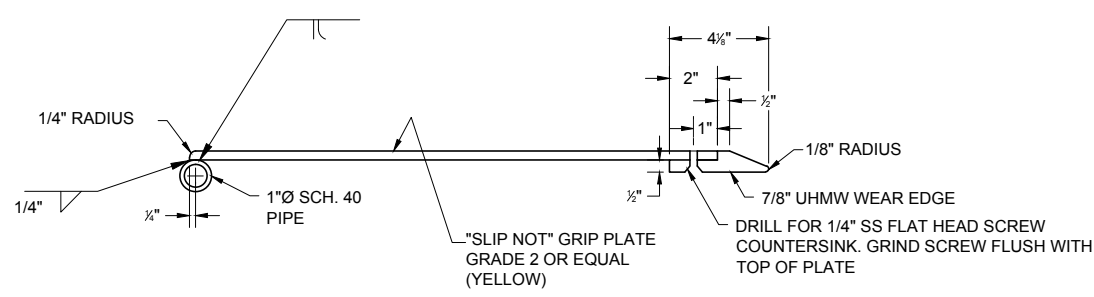
1 TRANSITION PLATE DETAIL
S4.2 SCALE: 1-1/2" = 1'-0"



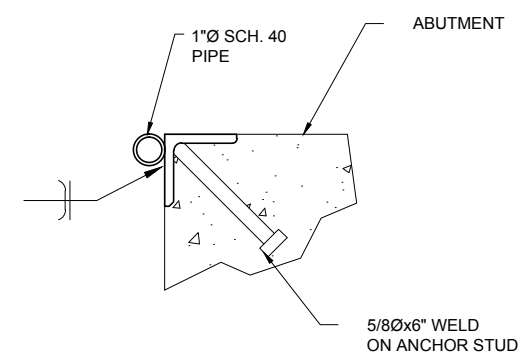
2 MOUNTING PLATE DETAIL
S4.2 SCALE: 1-1/2" = 1'-0"



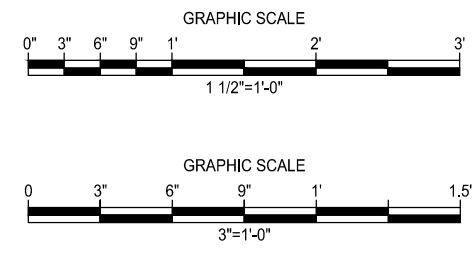
3 HINGE PIN
S4.2 SCALE: 3" = 1'-0"



4 TRANSITION PLATE SECTION
S4.2 SCALE: 3" = 1'-0"

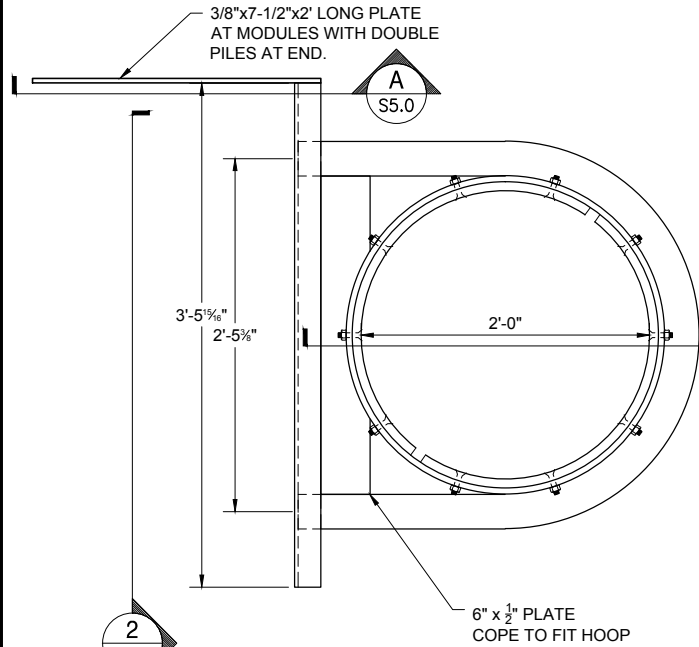


5 MOUNTING PLATE SECTION
S4.2 SCALE: 3" = 1'-0"

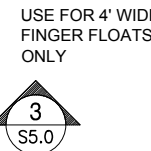


CONFORMED SET

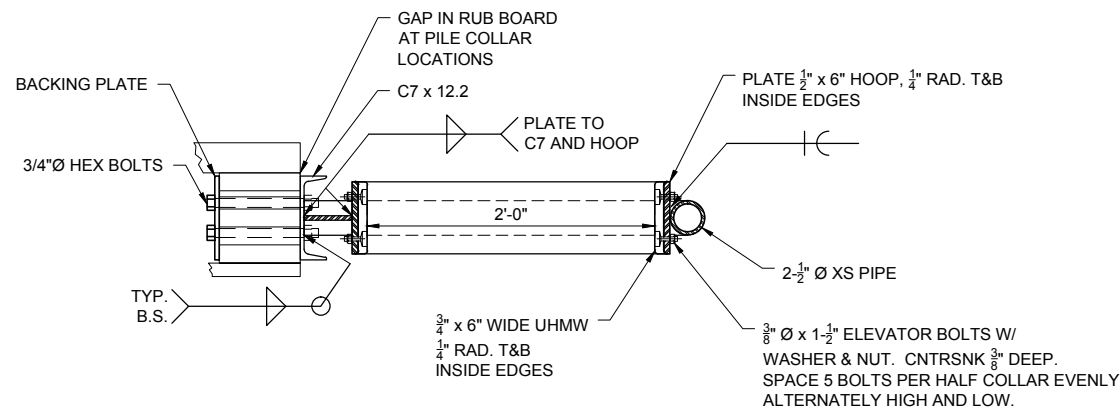
G:\PROJECTS\26220909 SKAGWAY BOAT HARBOR\401 WORKING DRAWINGS\262 - S5.0 - PILE COLLARS.DWG : Revised 7/2012 10:58:15 AM



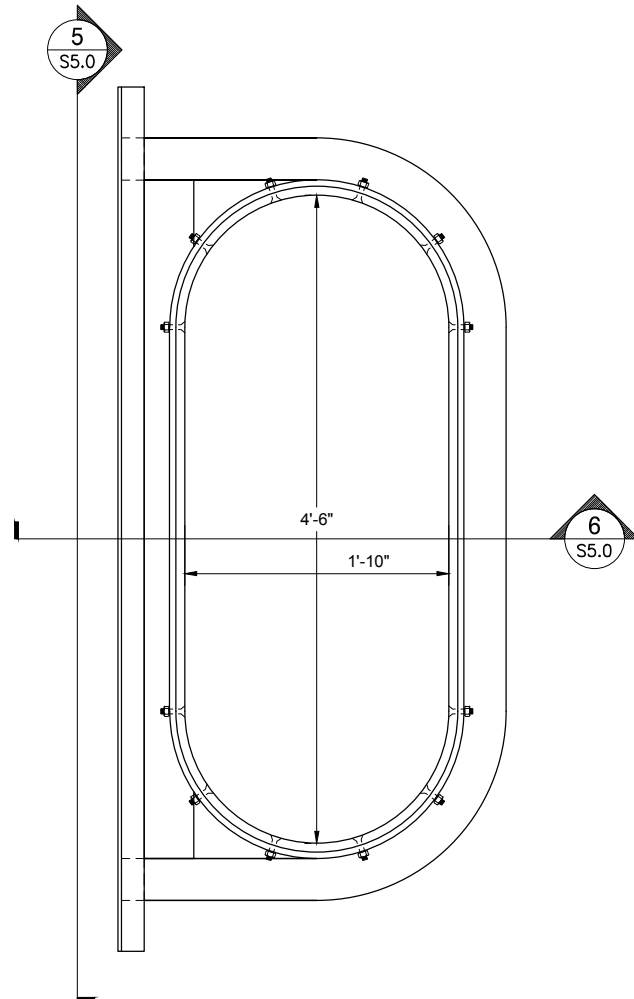
1 18" Ø EXTERNAL PILE HOOP PLAN
SCALE: 1-1/2" = 1'-0"



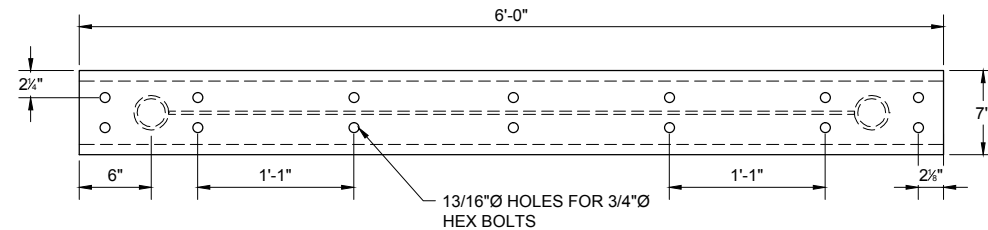
2 18" Ø EXTERNAL PILE HOOP BRACKET
SCALE: 1-1/2" = 1'-0"



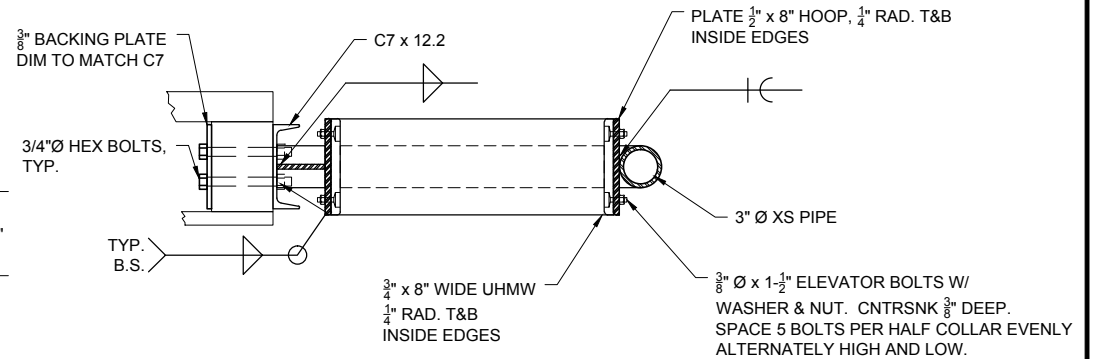
3 18" Ø PILE HOOP SECTION
SCALE: 1-1/2" = 1'-0"



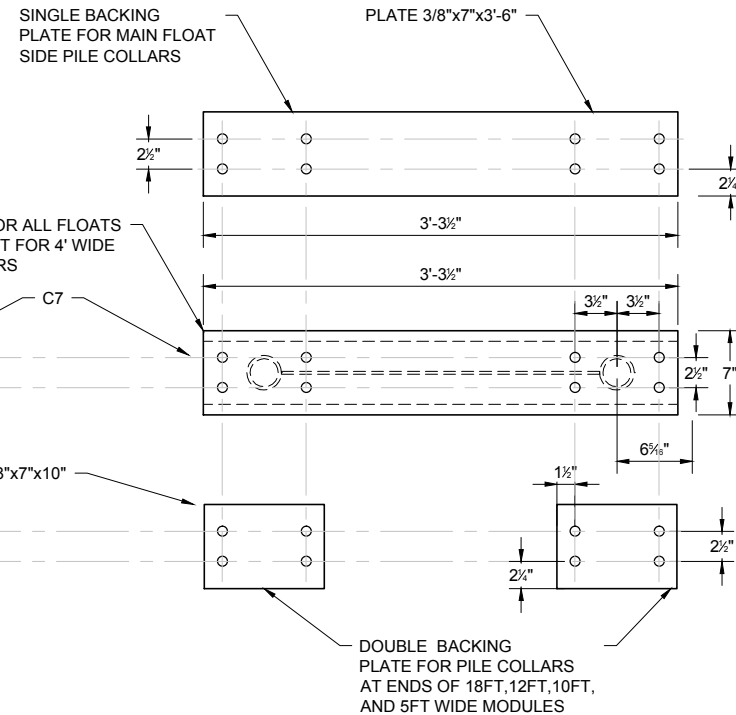
4 LAUNCH RAMP PILE HOOP PLAN
SCALE: 1-1/2" = 1'-0"



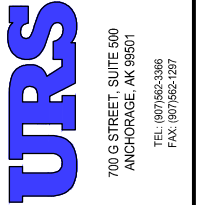
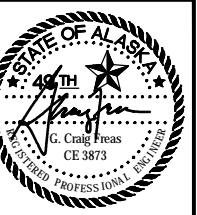
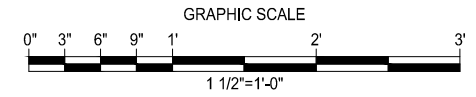
5 LAUNCH RAMP PILE HOOP BRACKET
SCALE: 1-1/2" = 1'-0"



6 LAUNCH RAMP PILE HOOP SECTION
SCALE: 1-1/2" = 1'-0"



NOTE:
SEAL ALL JOINTS BY WELDING.



REVISIONS		DESCRIPTION
NO.	BY	DATE

MUNICIPALITY OF SKAGWAY		SKAGWAY SMALL BOAT HARBOR SKAGWAY, AK
		PILE COLLAR DETAILS

PROJECT NO:	26220909
DATE:	8/14/2012
DESIGNED:	MDS
DRAWN BY:	MDS
CHECKED BY:	CF
SHEET:	S5.0
PAGE:	27 OF 71

CONFORMED SET

NOTE:
SEAL ALL JOINTS BY WELDING.



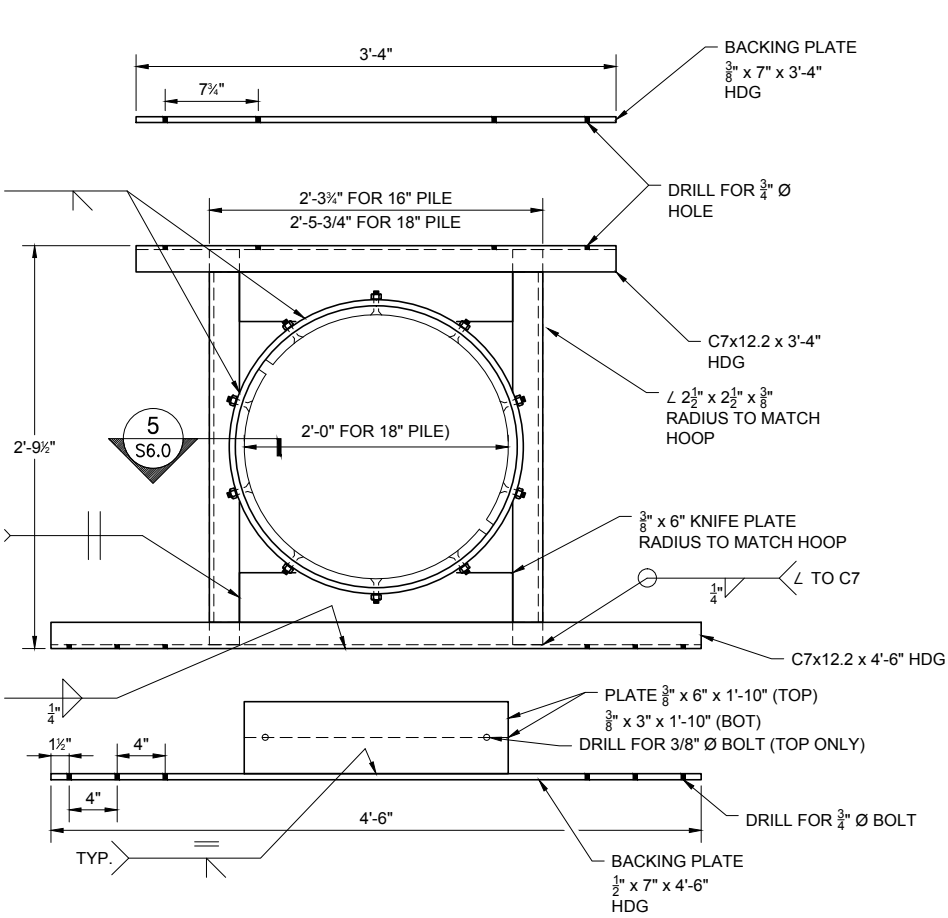
REVISIONS		DESCRIPTION
NO.	BY	DATE

MUNICIPALITY OF SKAGWAY

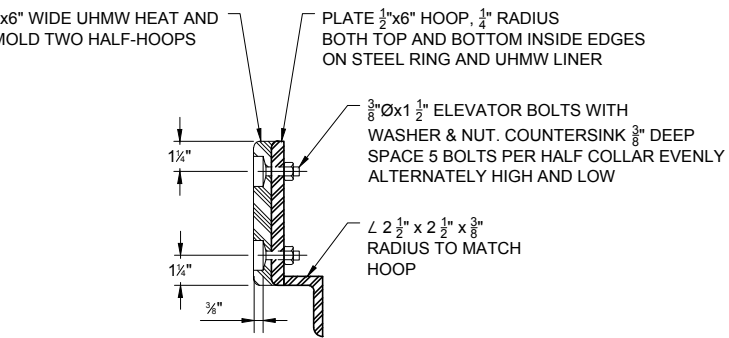
SKAGWAY SMALL BOAT HARBOR
SKAGWAY, AK

INTERNAL PILE COLLAR DETAILS

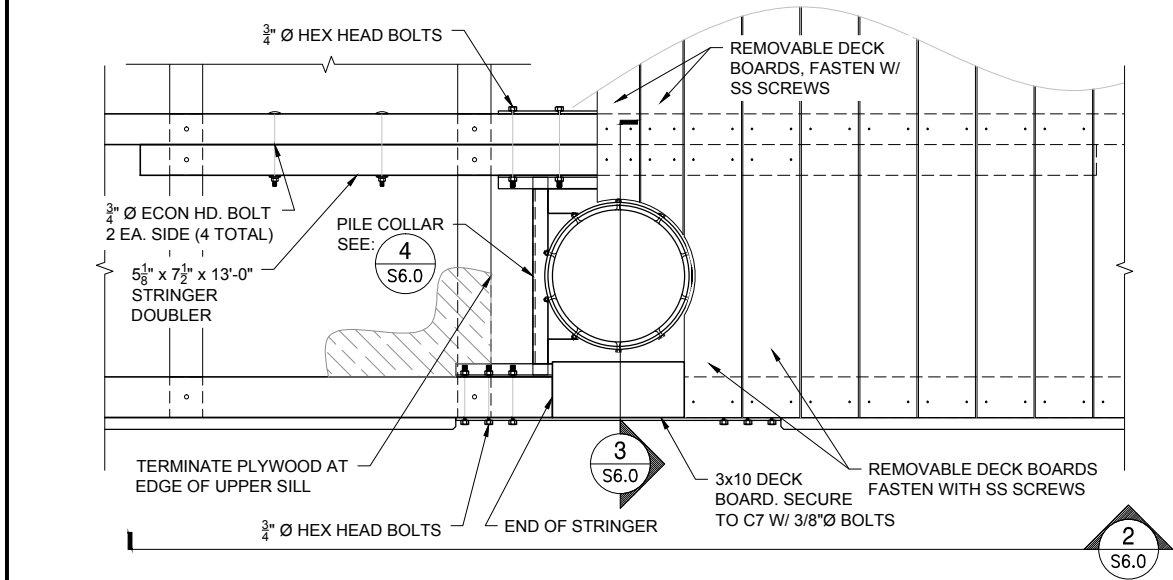
PROJECT NO:	26220909
DATE:	8/14/2012
DESIGNED:	MDS
DRAWN BY:	MDS
CHECKED BY:	CF
SHEET:	S6.0
PAGE:	28 OF 71



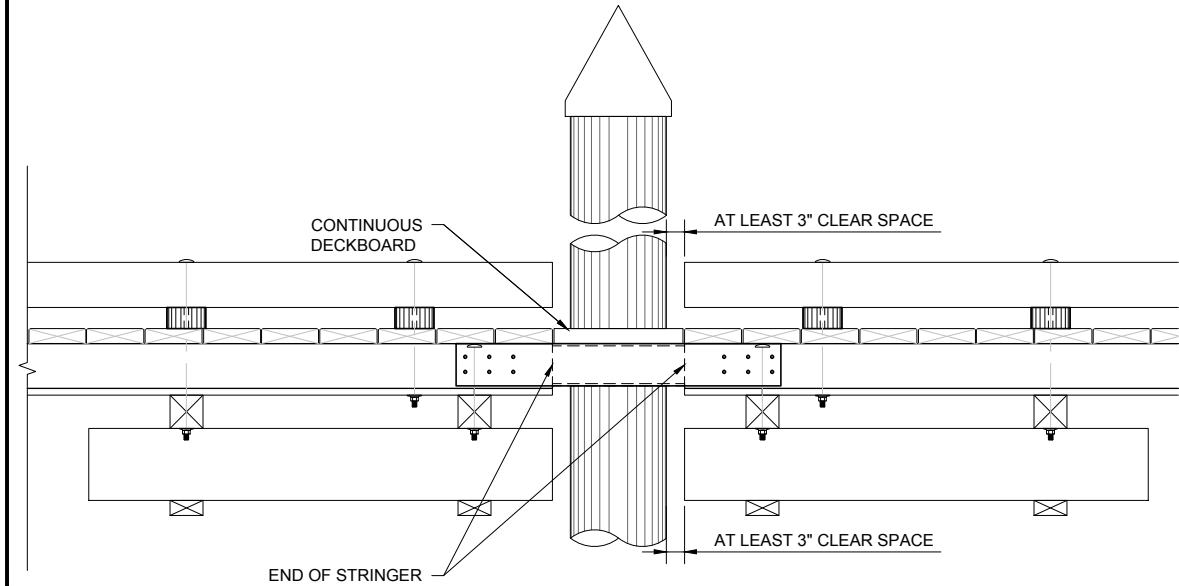
4 INTERNAL PILE DETAIL
SCALE: 1-1/2" = 1'-0"



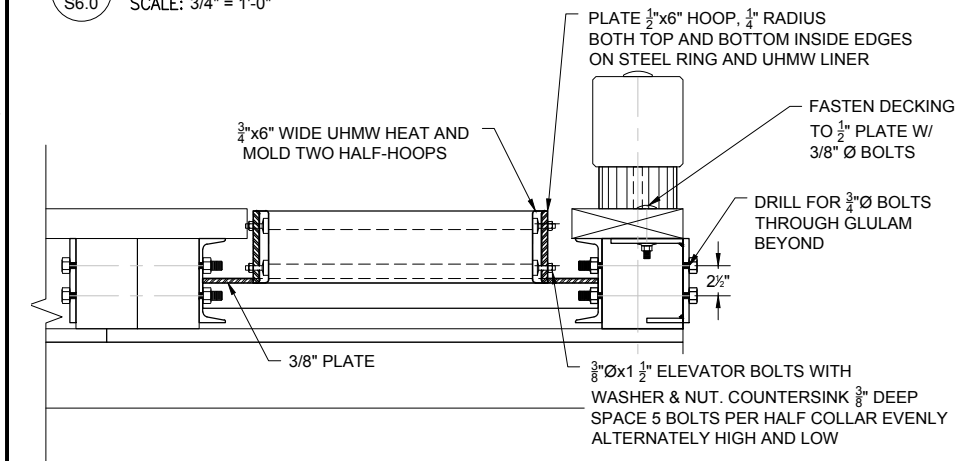
5 HOOP SECTION
SCALE: 3" = 1'-0"



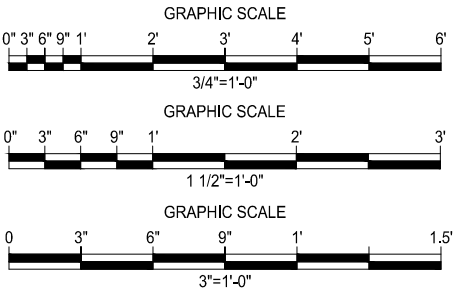
1 INTERNAL PILE HOOP PLAN
SCALE: 3/4" = 1'-0"



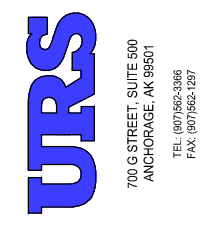
2 INTERNAL PILE HOOP ELEVATION
SCALE: 3/4" = 1'-0"



3 INTERNAL PILE HOOP SECTION
SCALE: 1-1/2" = 1'-0"



CONFORMED SET



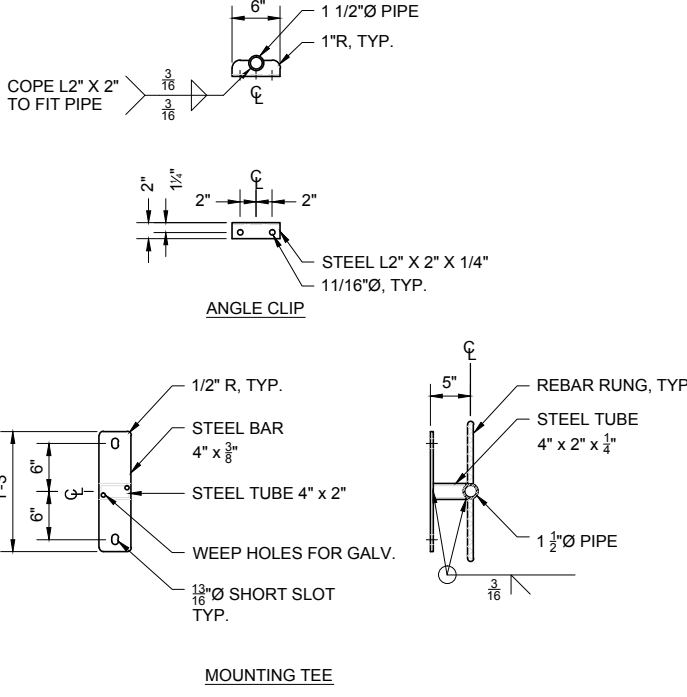
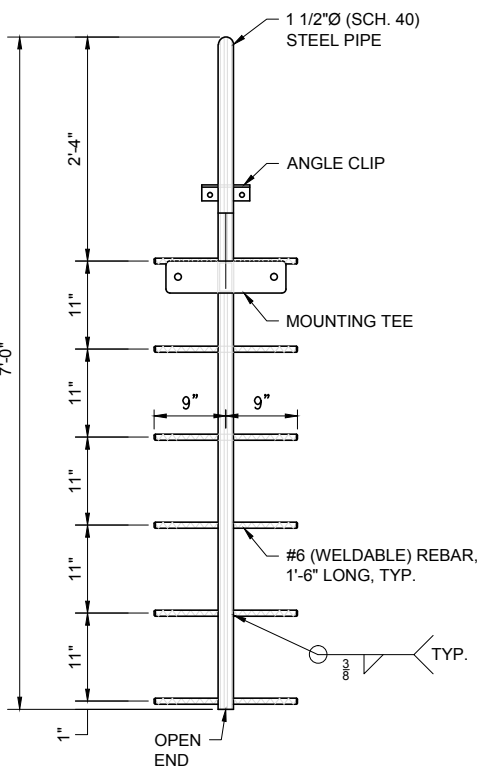
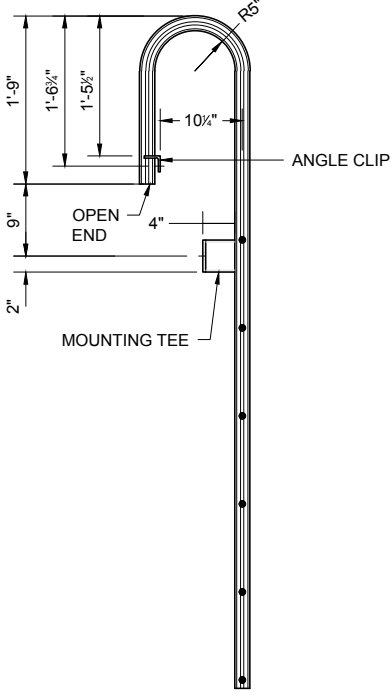
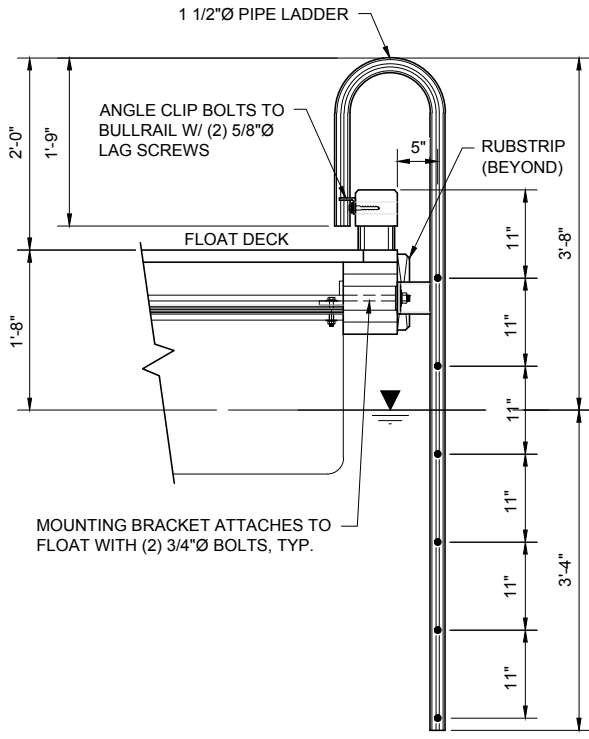
REVISIONS		DESCRIPTION
NO.	BY	DATE

MUNICIPALITY OF SKAGWAY

SKAGWAY SMALL BOAT HARBOR
SKAGWAY, AK

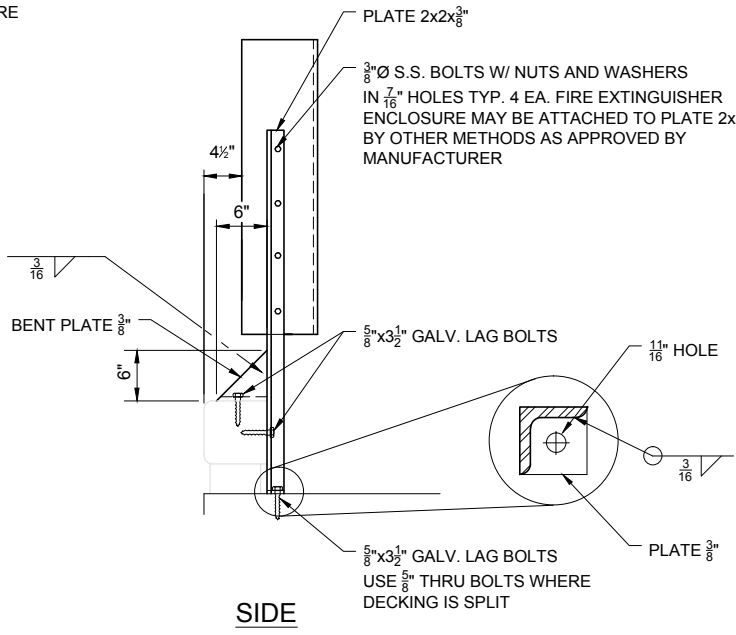
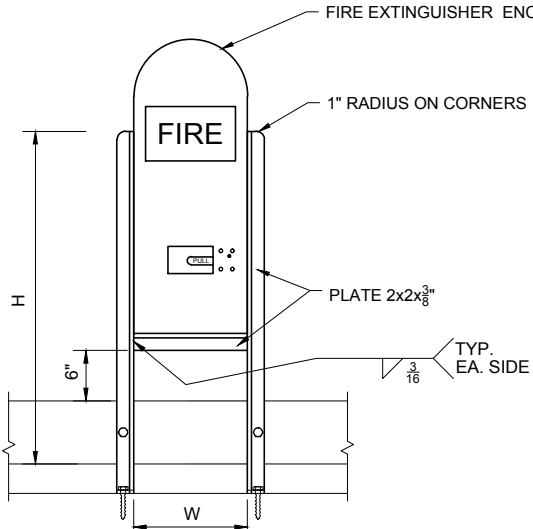
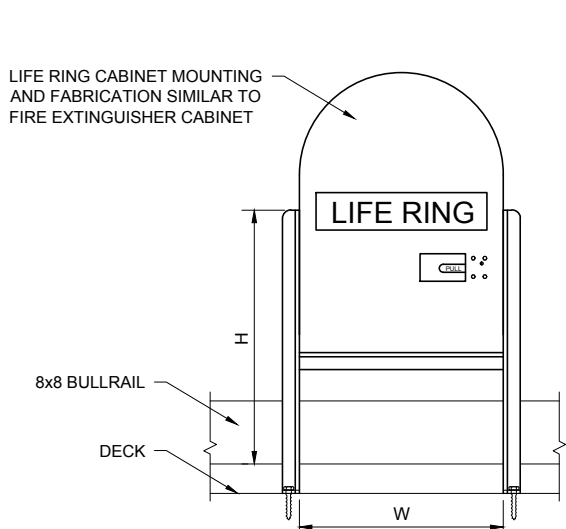
**SAFETY LADDER, FIRE EXTINGUISHER
AND LIFE RING CABINETS**

PROJECT NO:	26220909
DATE:	8/14/2012
DESIGNED BY:	MDS
DRAWN BY:	MDS
CHECKED BY:	CF
SHEET:	S7.0
PAGE:	29 OF 71



NOTE:
FABRICATION DETAILS SHOWN FOR INFORMATION ONLY. SAFETY LADDERS SHALL BE PROVIDED BY FLOAT MANUFACTURER. INSTALLATION CONTRACTOR SHALL INSTALL LADDERS ON FLOATS AS INDICATED.

1
TYPICAL SAFETY LADDER INSTALLATION
SCALE: N.T.S.

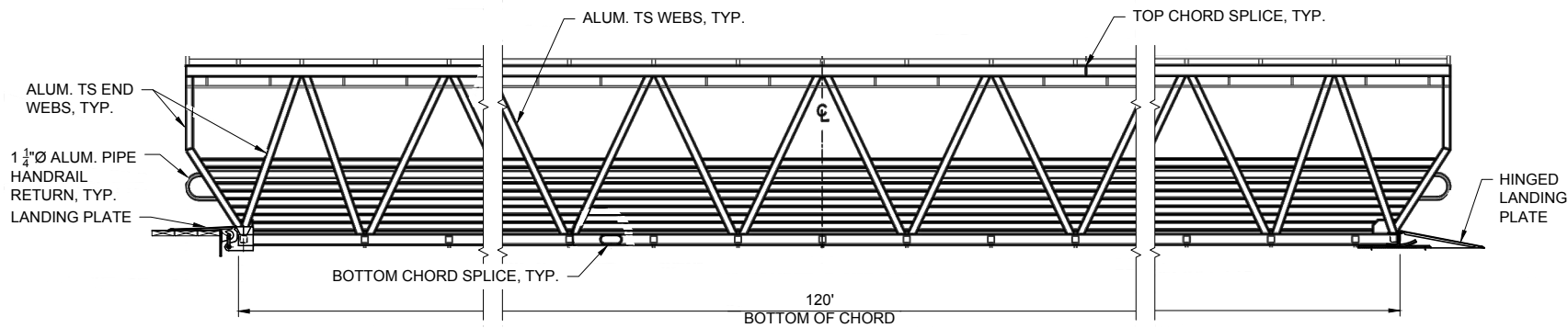


NOTE:
W & H TO BE DETERMINED BY MANUFACTURER, TYP.

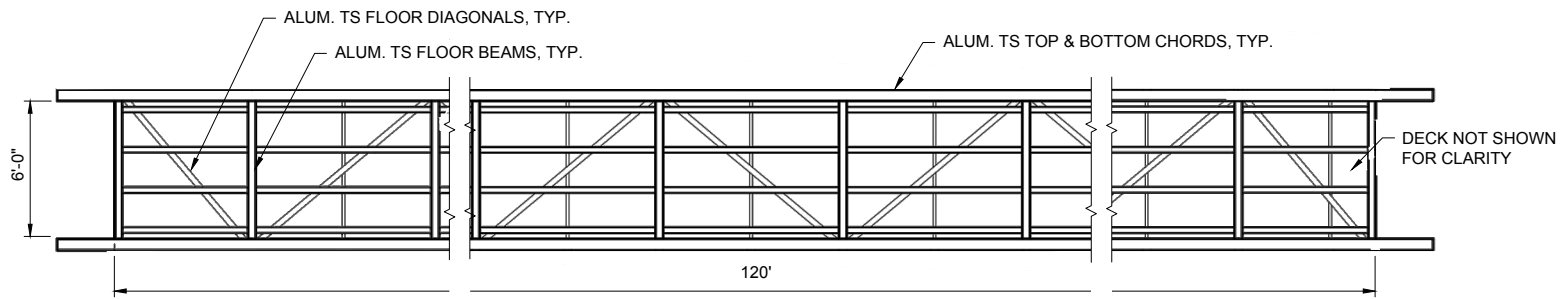
- NOTES:
1. FIRE EXTINGUISHER CABINET WILL BE LOCATED AS GENERALLY NOTED ON PLAN DRAWINGS. CLEAR DISTANCE SHALL BE 2' OR AS APPROVED BY THE ENGINEER. AVOID CONFLICTS WITH UTILITIES AND OTHER FLOAT APPURTENANCES.
 2. LIFE RING CABINETS WILL MEET U.S. COAST GUARD STANDARDS FOR DOCK APPLICATION AND SHALL CONTAIN A THROWABLE PERSONAL FLOTATION DEVICE MEETING USCG REQUIREMENTS. LIFE RING CABINETS WILL BE LOCATED AS GENERALLY NOTED ON DRAWINGS. AVOID CONFLICTS WITH UTILITIES AND OTHER FLOAT APPURTENANCES.

2
TYPICAL FIRE EXTINGUISHER AND LIFE RING CABINETS
SCALE: N.T.S.

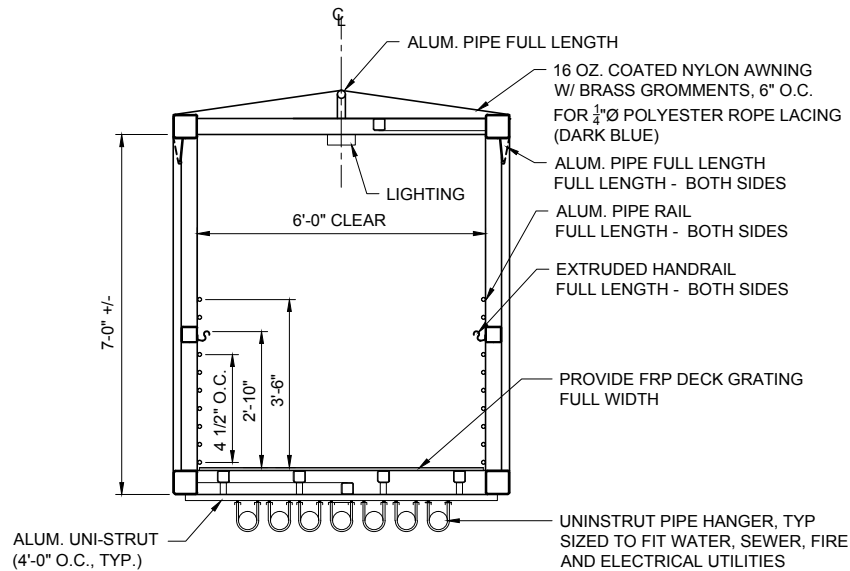
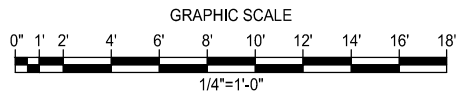
CONFORMED SET



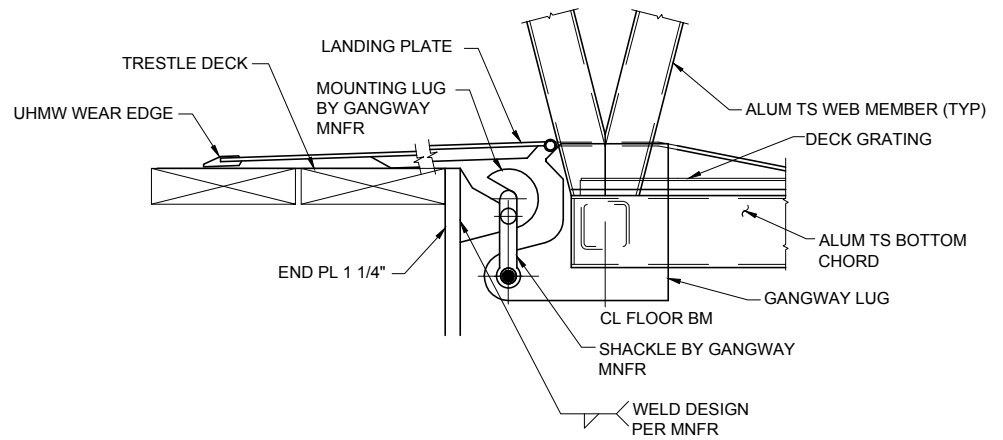
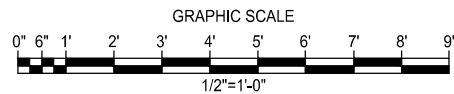
1 GANGWAY ELEVATION
S9.0 SCALE: 1/4" = 1'-0"



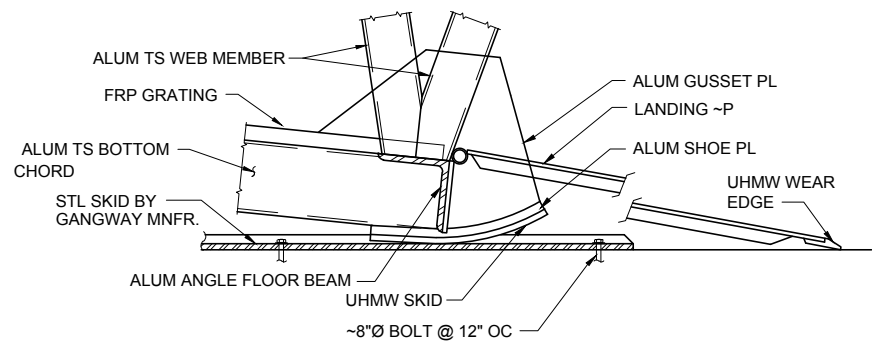
2 GANGWAY PLAN
S9.0 SCALE: 1/4" = 1'-0"



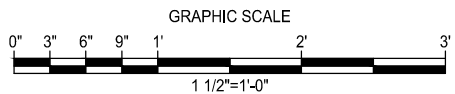
3 END VIEW
S9.0 SCALE: 1/2" = 1'-0"



4 GANGWAY / TRESTLE CONNECTION
S9.0 SCALE: 1-1/2" = 1'-0"



5 GANGWAY / FLOAT CONNECTION
S9.0 SCALE: 1-1/2" = 1'-0"



NOTES:

GENERAL:
ALL GANGWAY DETAILS ARE NOT SHOWN. DESIGN OF GANGWAYS SHALL BE THE RESPONSIBILITY OF THE MANUFACTURER. ALTERNATIVES TO THE GENERAL FEATURES AND MATERIALS NOTED MAY BE PROPOSED FOR APPROVAL BY THE ENGINEER. SUPPORTING DOCUMENTATION AND STRUCTURAL CALCULATIONS SHALL BE PERFORMED BY A REGISTERED ENGINEER IN THE STATE OF ALASKA. DETAILED SHOP DRAWINGS AND CALCULATIONS SHALL BE PROVIDED FOR REVIEW PRIOR TO FABRICATION.

DESIGN CRITERIA:
ALL DESIGN AND FABRICATION SHALL BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING CODES:

1. CONTRACT DOCUMENTS AND TECHNICAL SPECIFICATIONS
2. UNIFORM BUILDING CODE, CURRENT EDITION
3. ALUMINUM DESIGN MANUAL, CURRENT EDITION
4. AASHTO GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES, CURRENT EDITION.
5. AISC STEEL CONSTRUCTION MANUAL (LATEST EDITION)
6. AWS D1.1 & D1.2, STRUCTURAL WELDING CODE (LATEST EDITION)
7. APPLICABLE ASTM STANDARDS

LOADS:
DEAD LOADS - ALL
LIVE LOADS - UNIFORM, 85 PSF, CONCENTRATED, 1,000 LBS
WIND LOAD - 100 MPH, EXPOSURE D
ROOF SNOW LOAD - 60 PSF
ELECTRICAL UTILITY SUPPORTS - 150 LBS/LF
WATER/SEWER UTILITY SUPPORTS - 50 LBS/LF

MATERIALS:
ALUMINUM - ASTM 6061-T6

STRUCTURAL STEEL - PLATES AND SHAPES SHALL BE ASTM A36. PIPE SHALL BE ASTM A53, GRADE B.

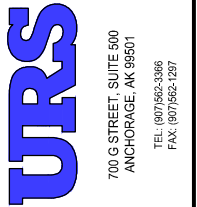
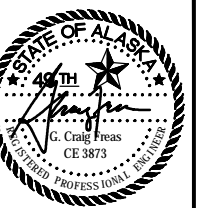
HARDWARE - ALL BOLTS AND HARDWARE SHALL BE ASTM A325 AND HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A123.

DECK GRATING - ADA COMPLIANT FRP DECK GRATING SHALL BE INSTALLED ACROSS THE FULL WIDTH OF THE GANGWAY AS NOTED ON THE DRAWINGS. DECK MATERIALS SHALL BE "FIBERGRATE" BRAND SAFE-T-SPAN T2510 OR APPROVED EQUAL WITH A SLIP RESISTANT GRIT SURFACE.

TRANSITION PLATES - TRANSITION PLATES SHALL BE FULL SIZE ALUMINUM SHEET STOCK WITH A "SLIP-NOT" FINISH OR APPROVED EQUAL.

UHMW POLYETHYLENE - ULTRA HIGH MOLECULAR WEIGHT POLYETHYLENE SHALL BE MADE FROM MATERIALS CONFORMING TO ASTM 4020. MATERIAL SHALL BE CHEMICALLY CROSS LINKED, ULTRA-VIOLET LIGHT STABILIZED, AND SUITABLE FOR LONG TERM EXPOSURE. UHMW SHALL BE BLACK IN COLOR.

FABRIC COVERINGS - GANGWAY COVERINGS SHALL BE CONSTRUCTED OF UV RESISTANT, COATED NYLON FABRIC WITH A MINIMUM WEIGHT OF 16 OZ PER SQUARE FOOT, "HERCULITE" BRAND OR APPROVED EQUAL.



REVISIONS		DESCRIPTION
NO.	BY	DATE

MUNICIPALITY OF SKAGWAY

SKAGWAY SMALL BOAT HARBOR

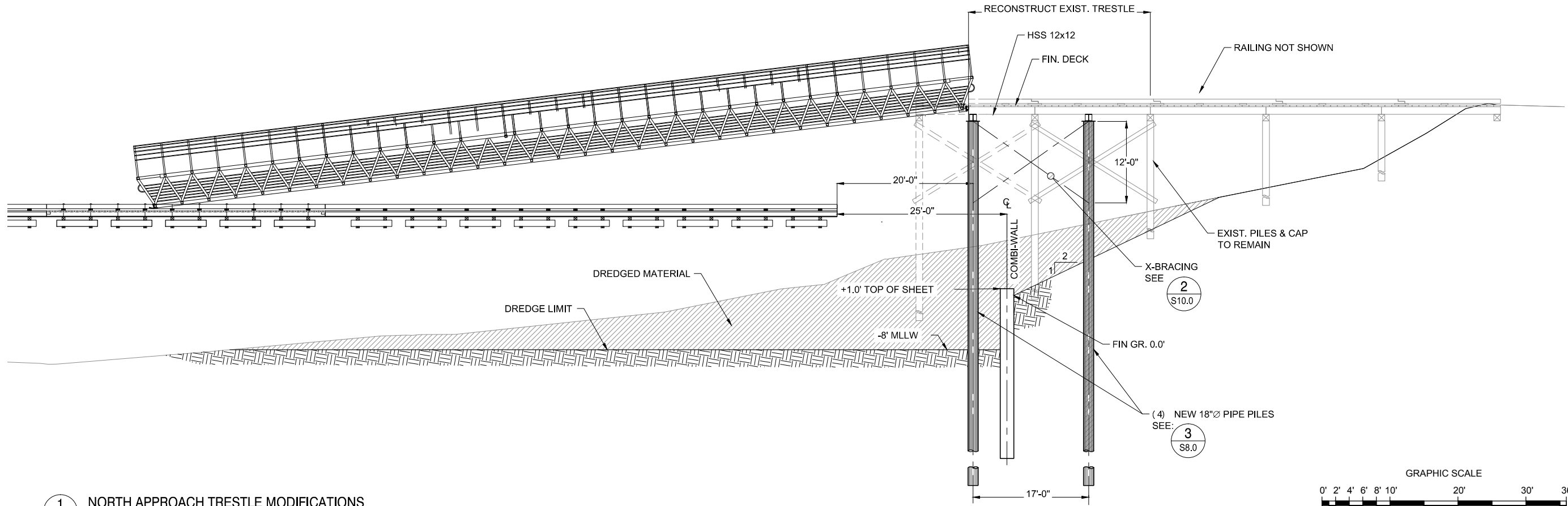
SKAGWAY, AK

GANGWAY PLAN & ELEVATION

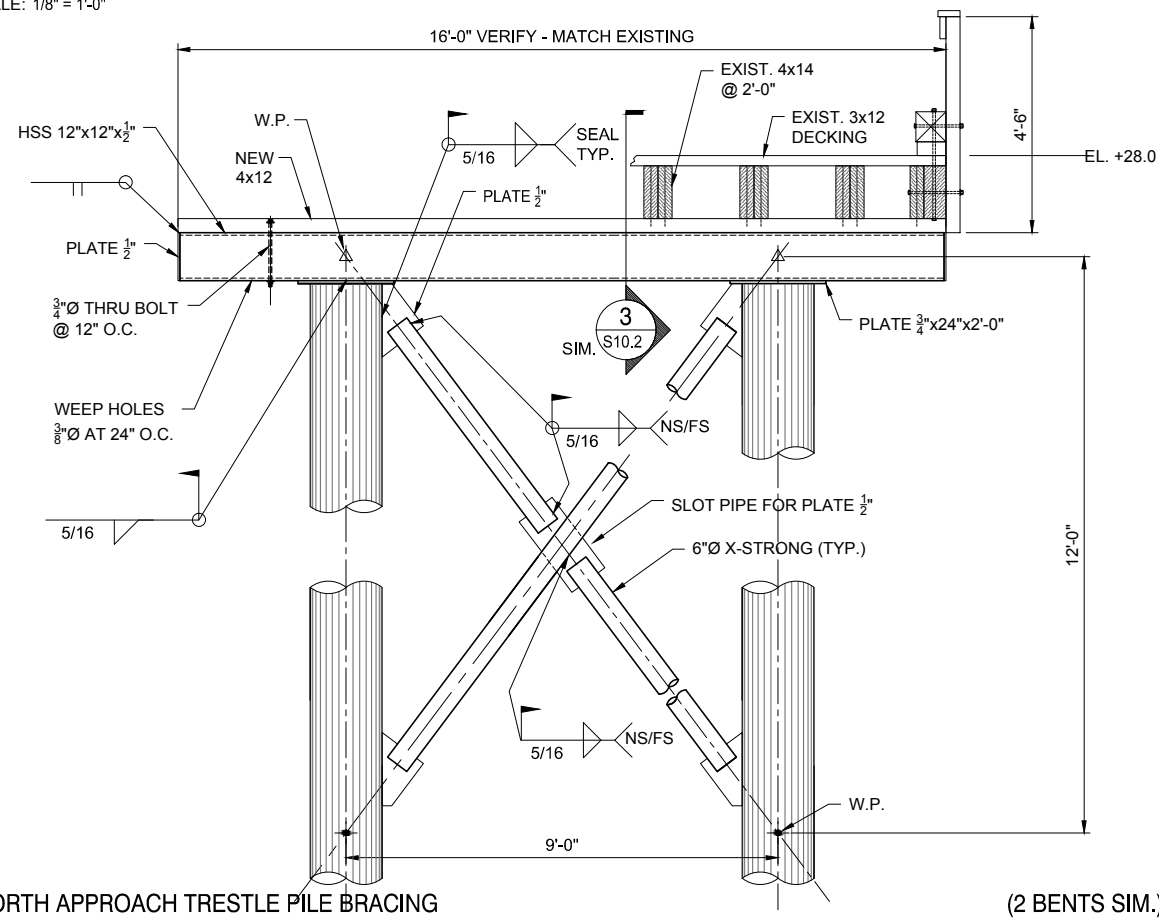
PROJECT NO:	26220909
DATE:	8/14/2012
DESIGNED:	CF
DRAWN BY:	SJ
CHECKED BY:	CF
SHEET:	S9.0
PAGE:	31 OF 71

CONFORMED SET

G:\PROJECTS\26220909 SKAGWAY BOAT HARBOR\401 WORKING DRAWINGS\31 - S10 - TRESTLE MODS.DWG : Revised 7/20/12 11:00:38 AM



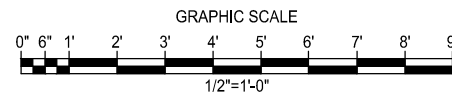
1 NORTH APPROACH TRESTLE MODIFICATIONS
S10.0 SCALE: 1/8" = 1'-0"



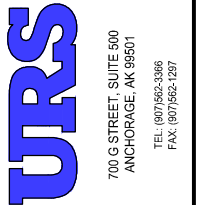
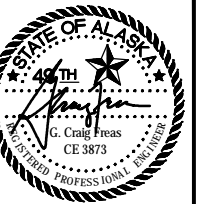
2 NORTH APPROACH TRESTLE PILE BRACING
S10.0 SCALE: 1/2" = 1'-0"

GENERAL NOTES:

1. REMOVE THE LAST (SOUTH) TWO BENTS OF THE EXISTING TIMBER TRESTLE.
2. RECONSTRUCT THE TRESTLE TO THE END OF THE PILE BENT AND CAPS SUPPORTING THE NEW GANGWAY. EXTEND RAILS AND BULLRAILS TO GANGWAY AT END OF TRESTLE.
3. SET NEW 4x12 TIMBER SLEEPERS ON NEW HSS 12x12 CAPS.
4. SPIKE 4x JOISTS TO 4x12 SLEEPERS WITH 4 - 8"x3/8"Ø GALV. SPIKES, 2 EA. SIDE, STAGGER.
5. PROVIDE 3x12 BLOCKING BETWEEN JOISTS @ SUPPORTS.
6. FRAME RECONSTRUCTED SECTION TO MATCH EXISTING.
7. CONTRACTOR MAY REUSE EXISTING TIMBER TO THE EXTENT IT IS NOT DAMAGED.
8. NEW TIMBER MUST BE NO. 1 OR BETTER DOUGLAS FIR, PRESSURE TREATED. MATCH EXISTING TIMBER DIMENSIONS.
9. PILES SHALL HAVE A WORKING CAPACITY OF 20 TONS BASED ON A FACTOR OF SAFETY OF 2.0 AND A MINIMUM PENETRATION OF 20 FEET BELOW THE POST-DREDGE MUDLINE.



CONFORMED SET



REVISIONS		DESCRIPTION
NO.	BY	DATE

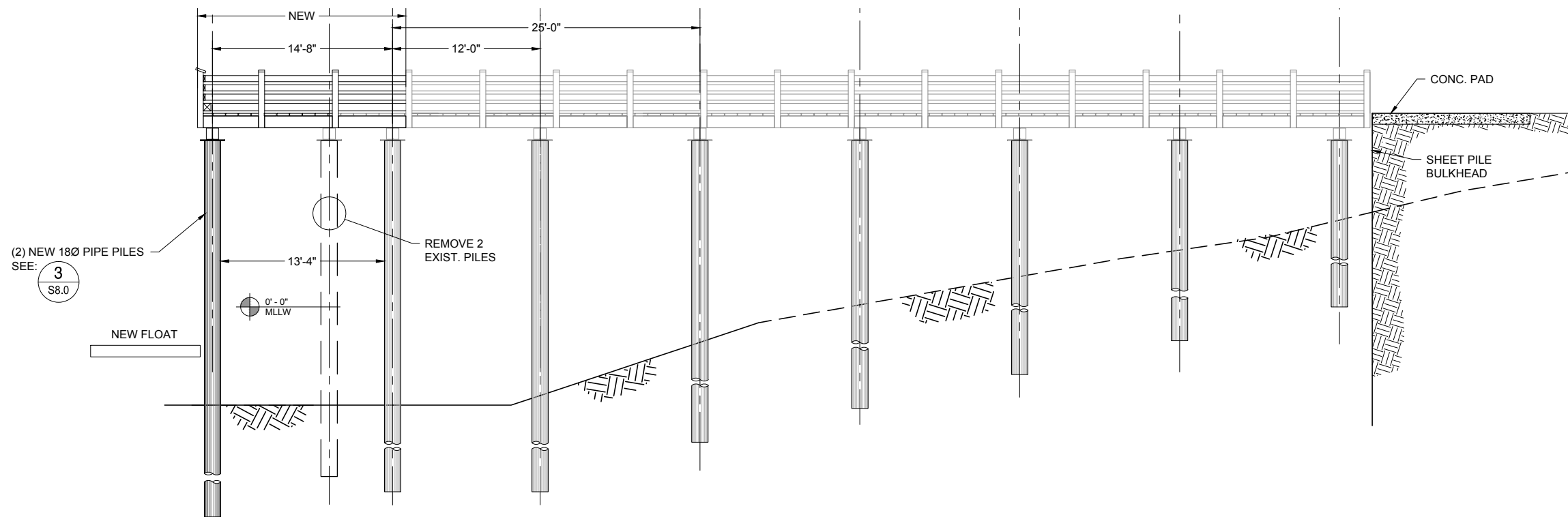
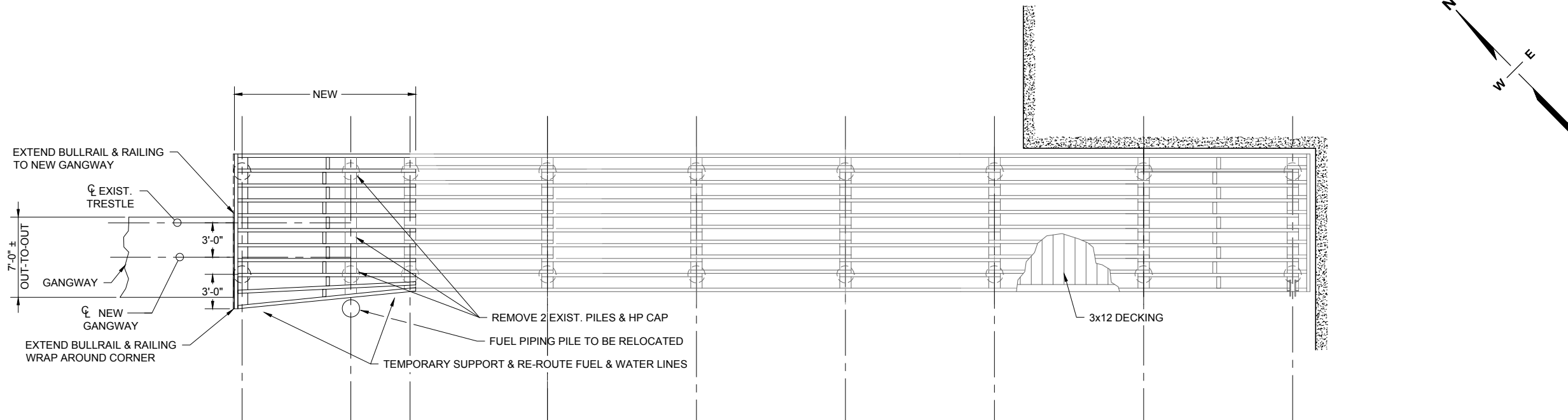
MUNICIPALITY OF SKAGWAY

SKAGWAY SMALL BOAT HARBOR
SKAGWAY, AK

NORTH TRESTLE MODIFICATIONS

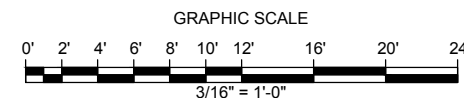
PROJECT NO:	26220909
DATE:	8/14/2012
DESIGNED:	CF
DRAWN BY:	SJ
CHECKED BY:	CF
SHEET:	S10.0
PAGE:	32 OF 71

G:\PROJECTS\26220909 SKAGWAY BOAT HARBOR\401 WORKING DRAWINGS\S10 - TRESTLE MODS.DWG - Revised 7/2/2012 11:00:38 AM

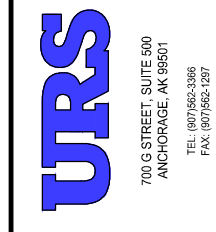
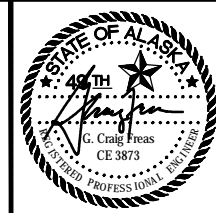


1 SOUTH APPROACH TRESTLE MODIFICATIONS
S10.1 SCALE: 3/16" = 1'-0"

- NOTES:
1. REMOVE ROCK RIPRAP AS REQUIRED TO DRIVE NEW PILES.
 2. REPLACE RIPRAP AROUND PILES AT COMPLETION OF DRIVING.
 3. PILES TO PENETRATE A MINIMUM OF 20 FT. BELOW POST DREDGE MUDLINE.
 4. CONTRACTOR MAY REUSE THE 18"Ø PILES BEING REMOVED AT THE END OF THE EXISTING TRESTLE. THE OWNER MAKES NO REPRESENTATION REGARDING THE CONDITION OF THE PILES FOR REUSE.
 5. PILES SHALL HAVE A WORKING CAPACITY OF 20 TONS BASED ON A FACTOR OF SAFETY OF 2.0 AND A MINIMUM PENETRATION OF 20 FEET BELOW THE POST-DREDGE MUDLINE.



CONFORMED SET



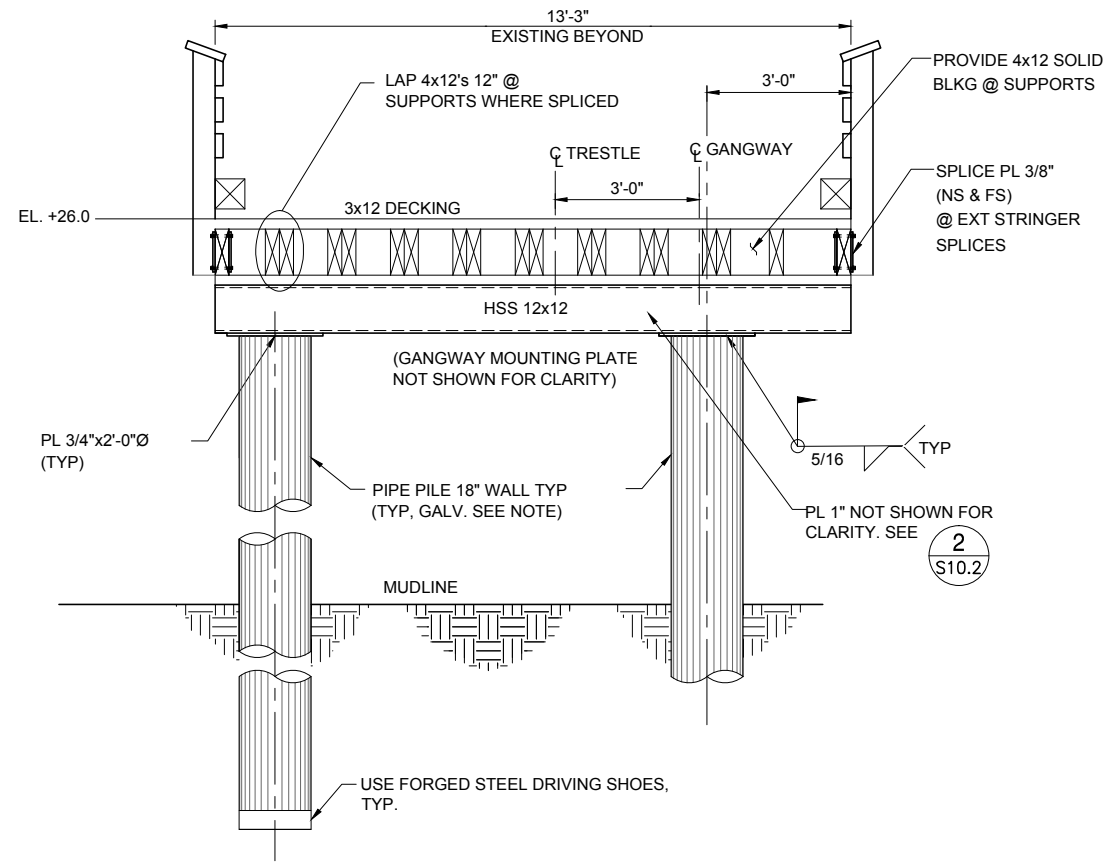
REVISIONS		DESCRIPTION
NO.	BY	DATE

MUNICIPALITY OF SKAGWAY

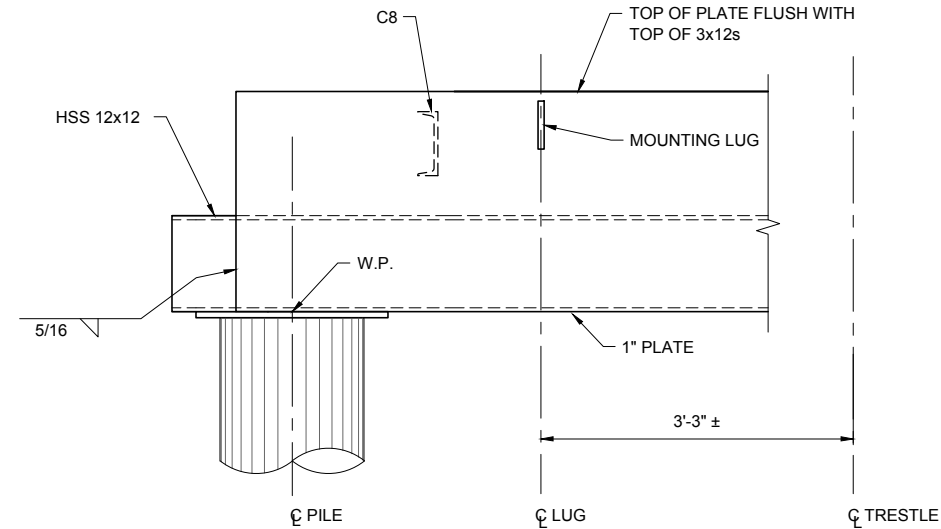
SKAGWAY SMALL BOAT HARBOR
SKAGWAY, AK

SOUTH TRESTLE MODIFICATIONS

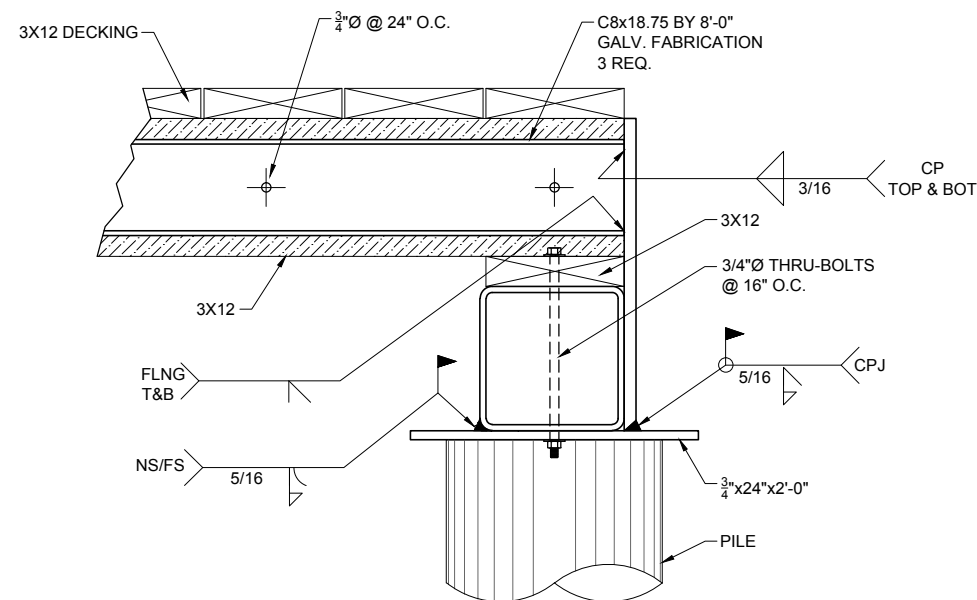
PROJECT NO:	26220909
DATE:	8/14/2012
DESIGNED BY:	CF
DRAWN BY:	SJ
CHECKED BY:	CF
SHEET:	S10.1
PAGE:	33 OF 71



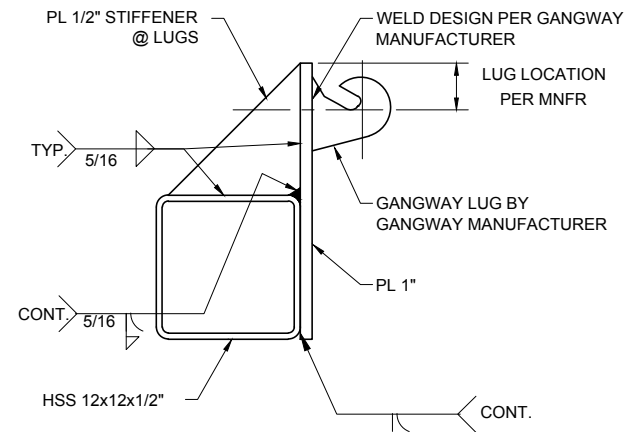
1 GANGWAY NEW SOUTH BENT ELEVATION
S10.2 SCALE: 1/2" = 1'-0"



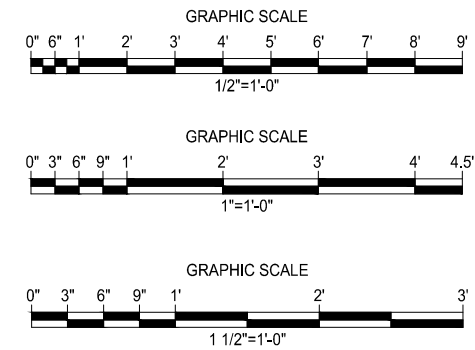
2 GANGWAY CAP TO PILE CONNECTION
S10.2 SCALE: 1" = 1'-0"



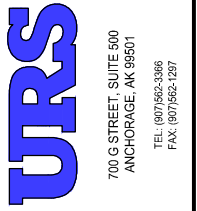
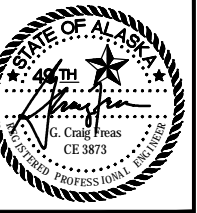
3 GANGWAY CAP TO PILE
S10.2 SCALE: 1 1/2" = 1'-0"



4 GANGWAY LUG
S10.2 SCALE: 1 1/2" = 1'-0"



CONFORMED SET



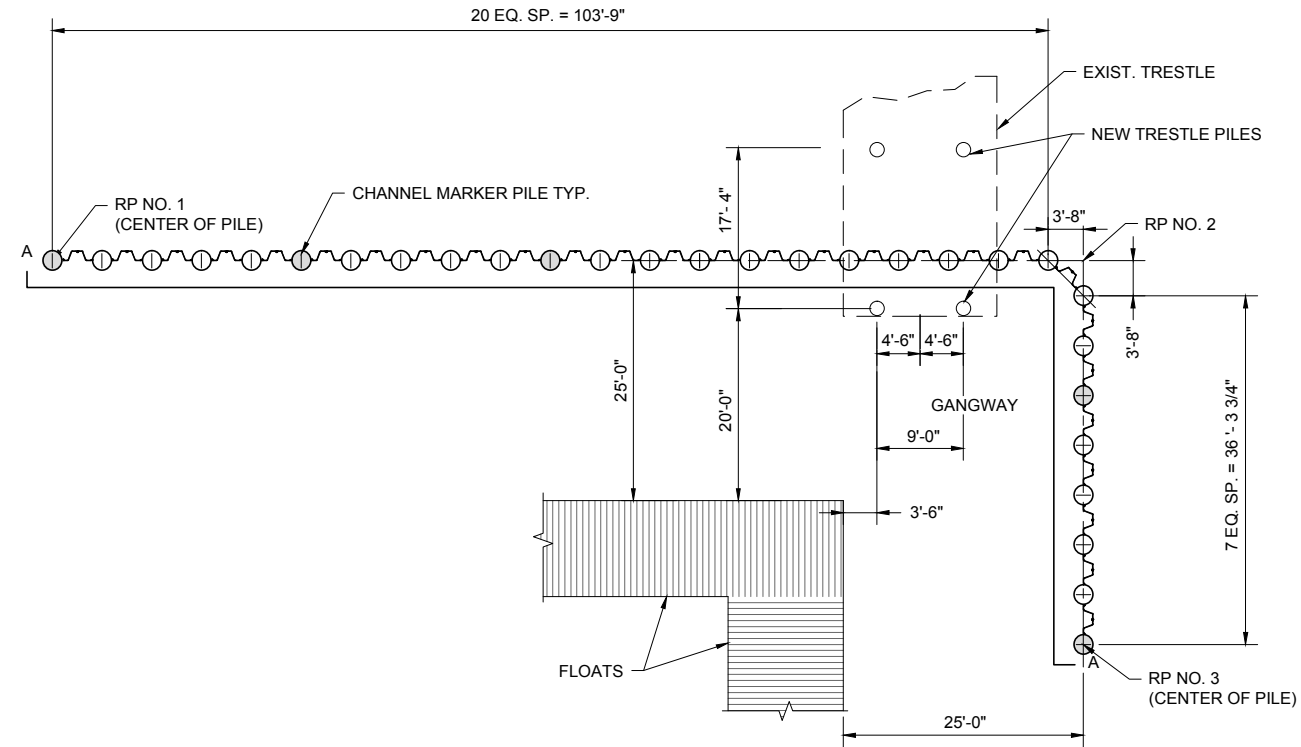
NO.	BY	DATE	DESCRIPTION

MUNICIPALITY OF SKAGWAY

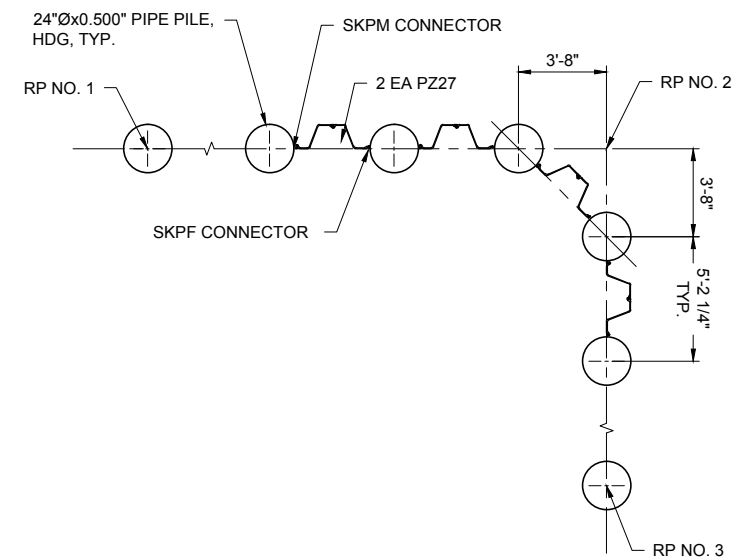
SKAGWAY SMALL BOAT HARBOR
SKAGWAY, AK

TRESTLE DETAILS

PROJECT NO: 26220909
DATE: 8/14/2012
DESIGNED: CF
DRAWN BY: SJ
CHECKED BY: CF
SHEET: **S10.2**
PAGE: 34 OF 71

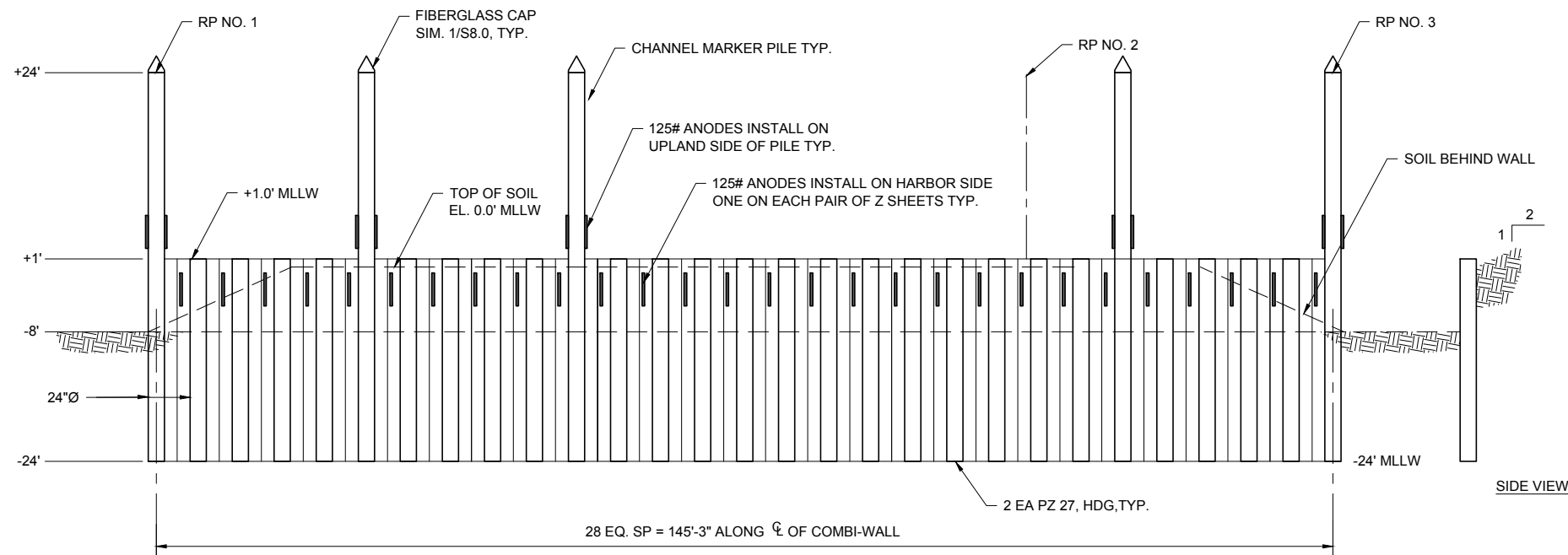


1 PLAN
S10.3 SCALE: 1" = 10'-0"

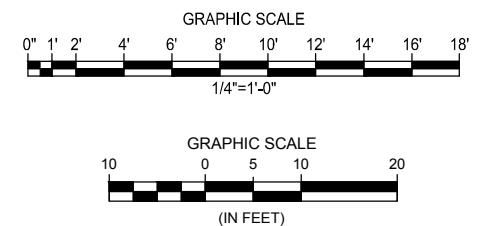


2 SHEET PILE PLAN
S10.3 SCALE: 1/4" = 1'-0"

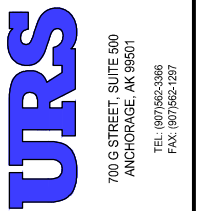
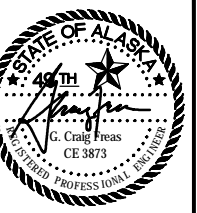
NOTE: HOT DIP GALVANIZE ALL STEEL SHEETS, CONNECTORS, AND PIPE PILES, TYP.



A ELEVATION
S10.3 SCALE: 1" = 10'-0"



CONFORMED SET



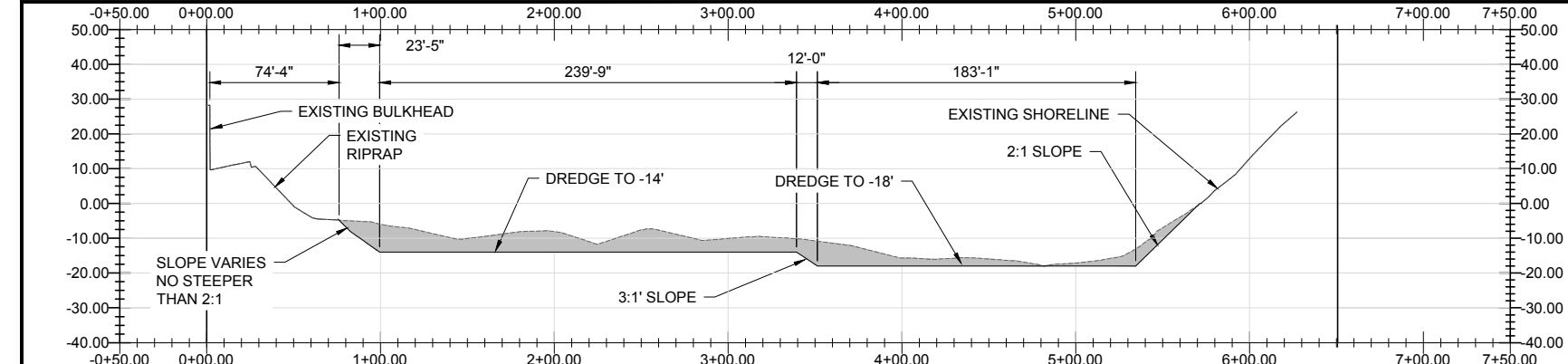
NO.	BY	DATE	REVISIONS	
			DESCRIPTION	ADDENDUM
1	URS	7/19/2012	ADDENDUM 1	

MUNICIPALITY OF SKAGWAY

SKAGWAY SMALL BOAT HARBOR
SKAGWAY, AK

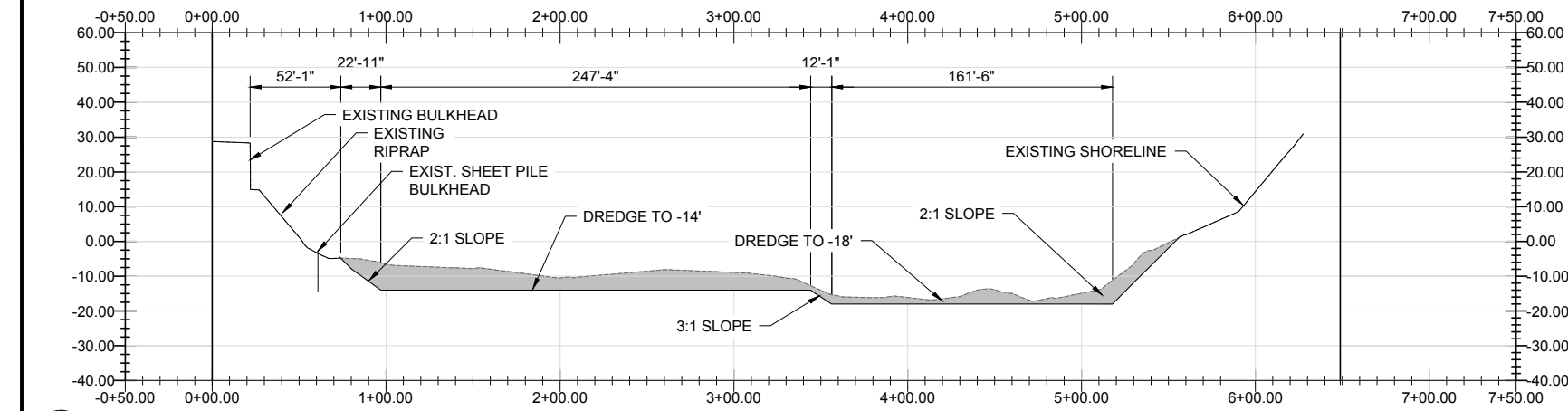
SHEET PILE BULKHEAD

PROJECT NO:	26220909
DATE:	8/14/2012
DESIGNED:	CF
DRAWN BY:	SJ
CHECKED BY:	CF
SHEET:	S10.3
PAGE:	35 OF 71



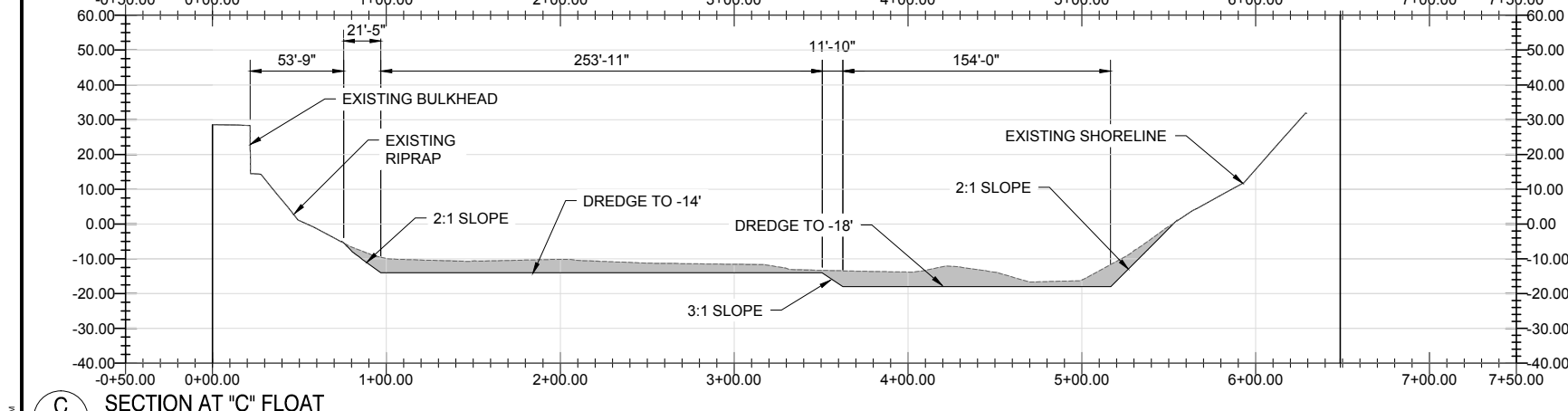
A SECTION AT "A" FLOAT

C2.0 SCALE: H: 1" = 50' / V: 1" = 25'



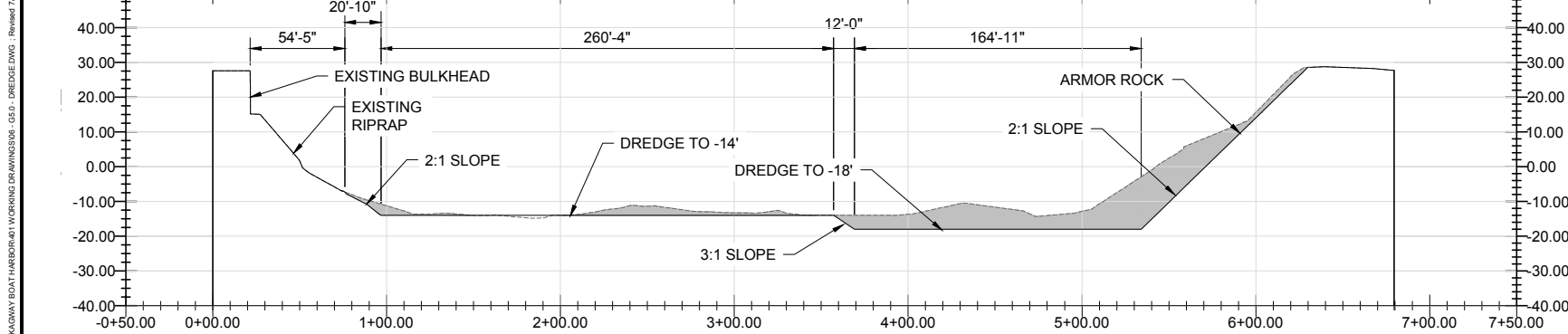
B SECTION AT "B" FLOAT

C2.0 SCALE: H: 1" = 50' / V: 1" = 25'



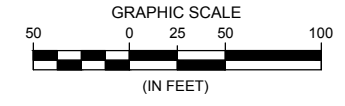
C SECTION AT "C" FLOAT

C2.0 SCALE: H: 1" = 50' / V: 1" = 25'

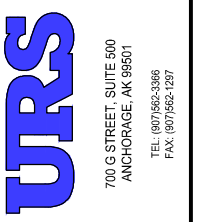
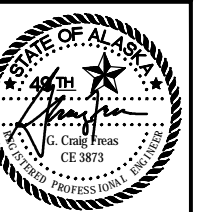


D SECTION AT "D" FLOAT

C2.0 SCALE: H: 1" = 50' / V: 1" = 25'



CONFORMED SET

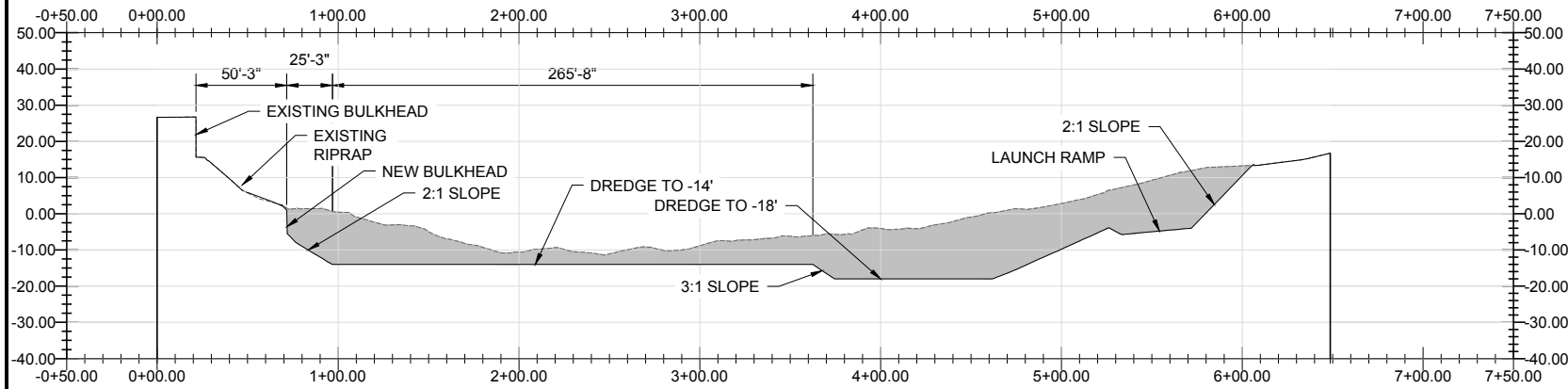


REVISIONS		DESCRIPTION
NO.	BY	DATE

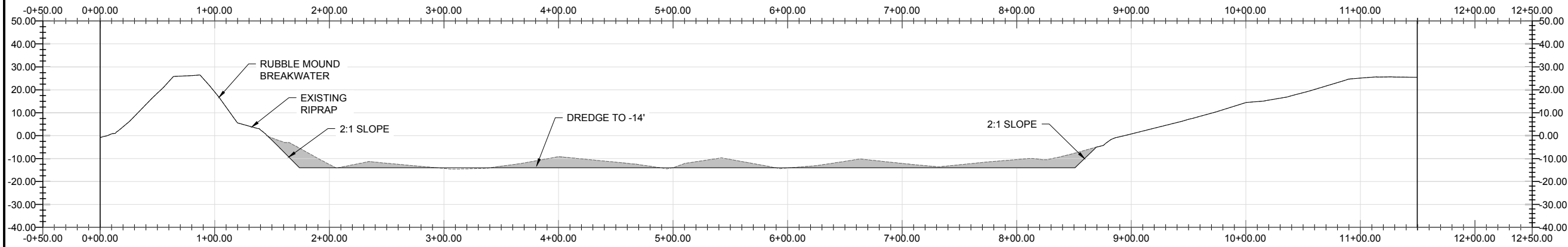
MUNICIPALITY OF SKAGWAY
SKAGWAY SMALL BOAT HARBOR
SKAGWAY, AK
DREDGING SECTIONS

PROJECT NO:	26220909
DATE:	8/14/2012
DESIGNED BY:	MDS
DRAWN BY:	MDS
CHECKED BY:	CF
SHEET:	C2.0
PAGE:	36 OF 71

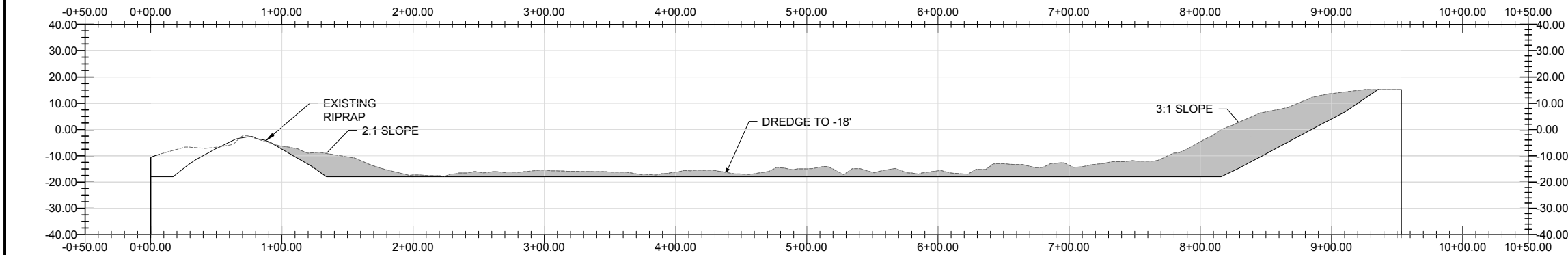
G:\PROJECTS\26220909 SKAGWAY BOAT HARBOR\401 WORKING DRAWINGS\06 - GEO - DREDGE.DWG - Revised 7/2/2012 11:01:54 AM



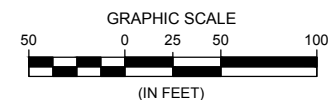
A SECTION AT "E" FLOAT
C2.1 SCALE: H: 1" = 50' / V: 1" = 25'



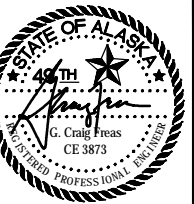
B SECTION AT -14' BENCH
C2.1 SCALE: H: 1" = 50' / V: 1" = 25'



C SECTION AT -18' BENCH
C2.1 SCALE: H: 1" = 50' / V: 1" = 25'



CONFORMED SET



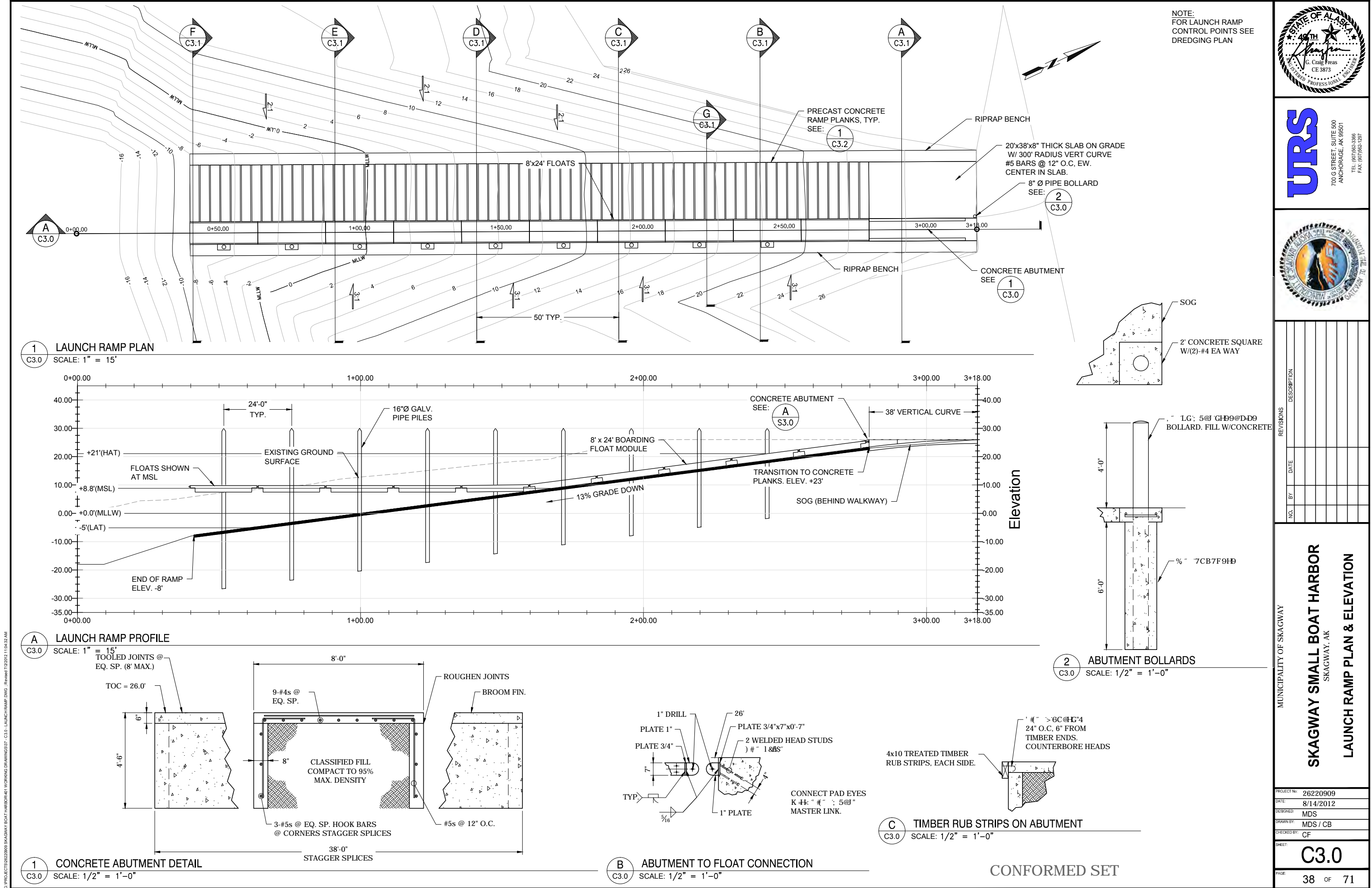
REVISIONS		DESCRIPTION
NO.	BY	DATE

MUNICIPALITY OF SKAGWAY

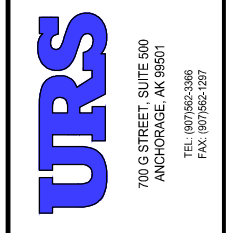
SKAGWAY SMALL BOAT HARBOR
SKAGWAY, AK

DREDGING SECTIONS

PROJECT NO: 26220909
DATE: 8/14/2012
DESIGNED: MDS
DRAWN BY: MDS
CHECKED BY: CF
SHEET: **C2.1**
PAGE: 37 OF 71



NOTE:
FOR LAUNCH RAMP
CONTROL POINTS SEE
DREDGING PLAN



REVISIONS		DESCRIPTION
NO.	BY	DATE

MUNICIPALITY OF SKAGWAY

SKAGWAY SMALL BOAT HARBOR
SKAGWAY, AK

LAUNCH RAMP PLAN & ELEVATION

PROJECT NO: 26220909

DATE: 8/14/2012

DESIGNED: MDS

DRAWN BY: MDS / CB

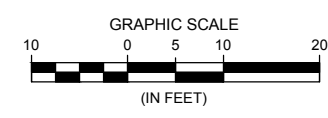
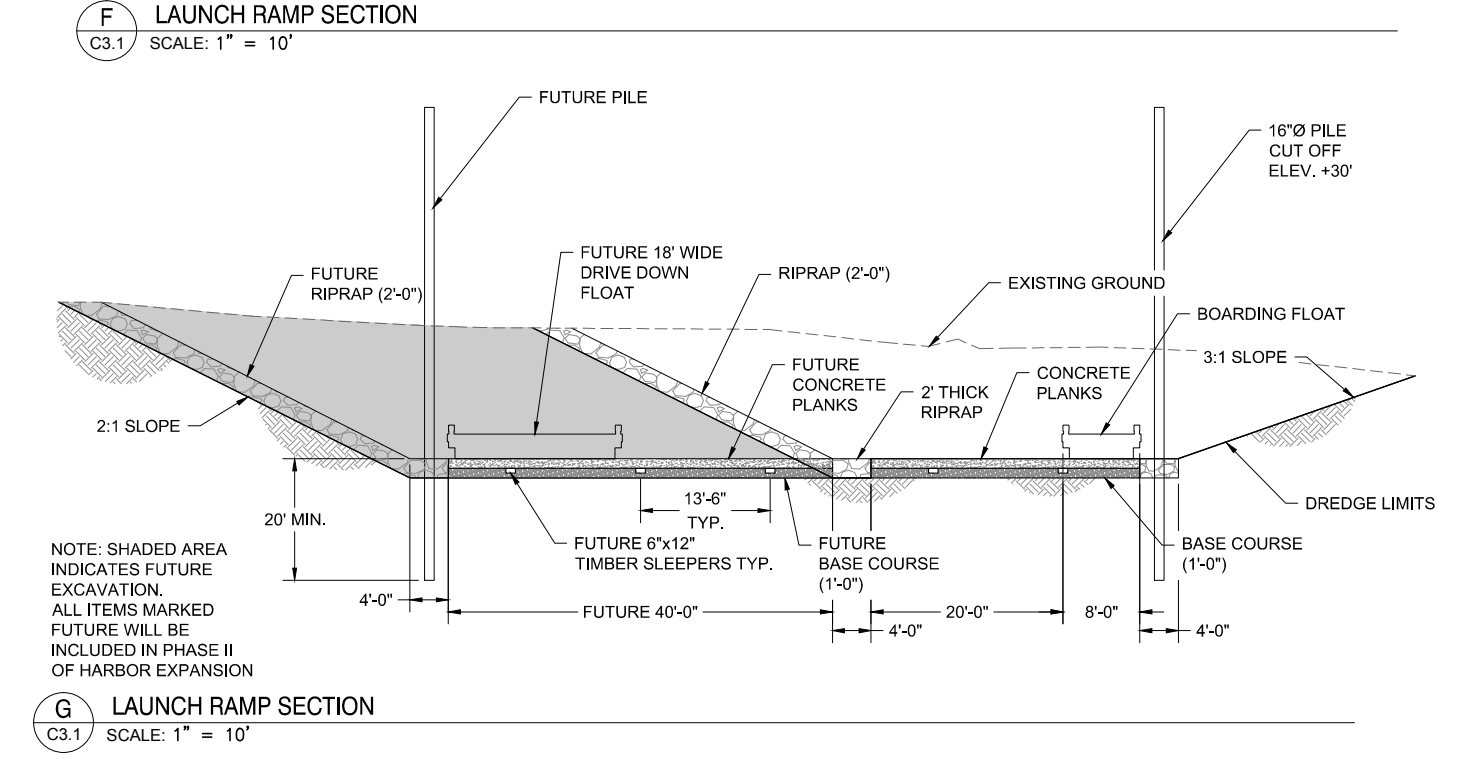
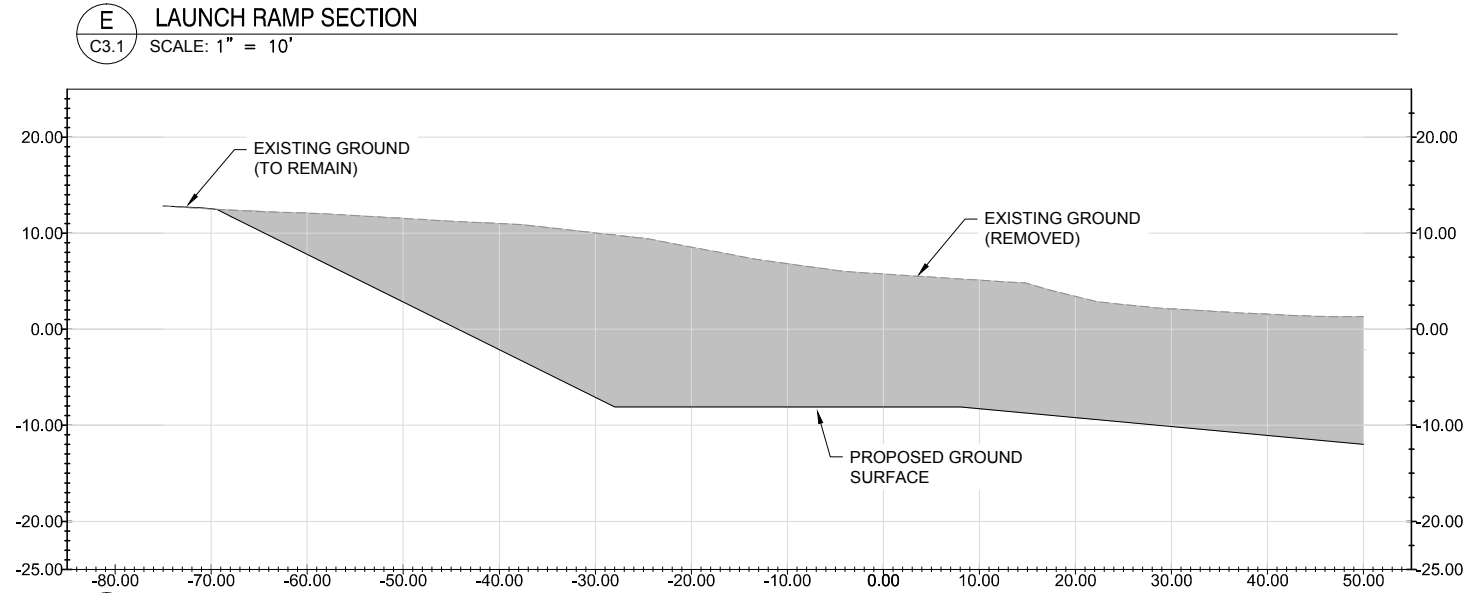
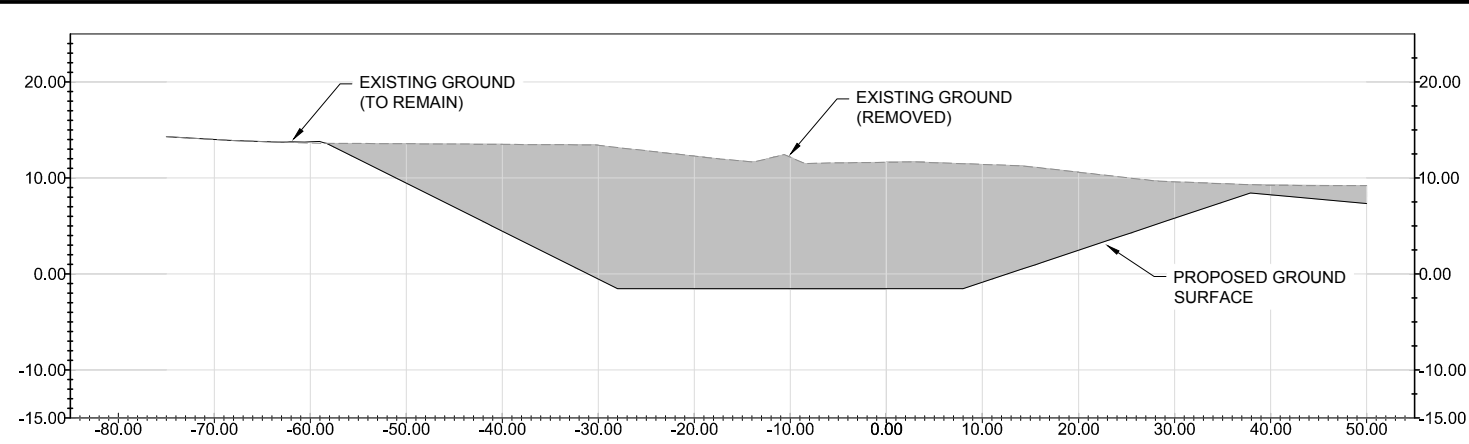
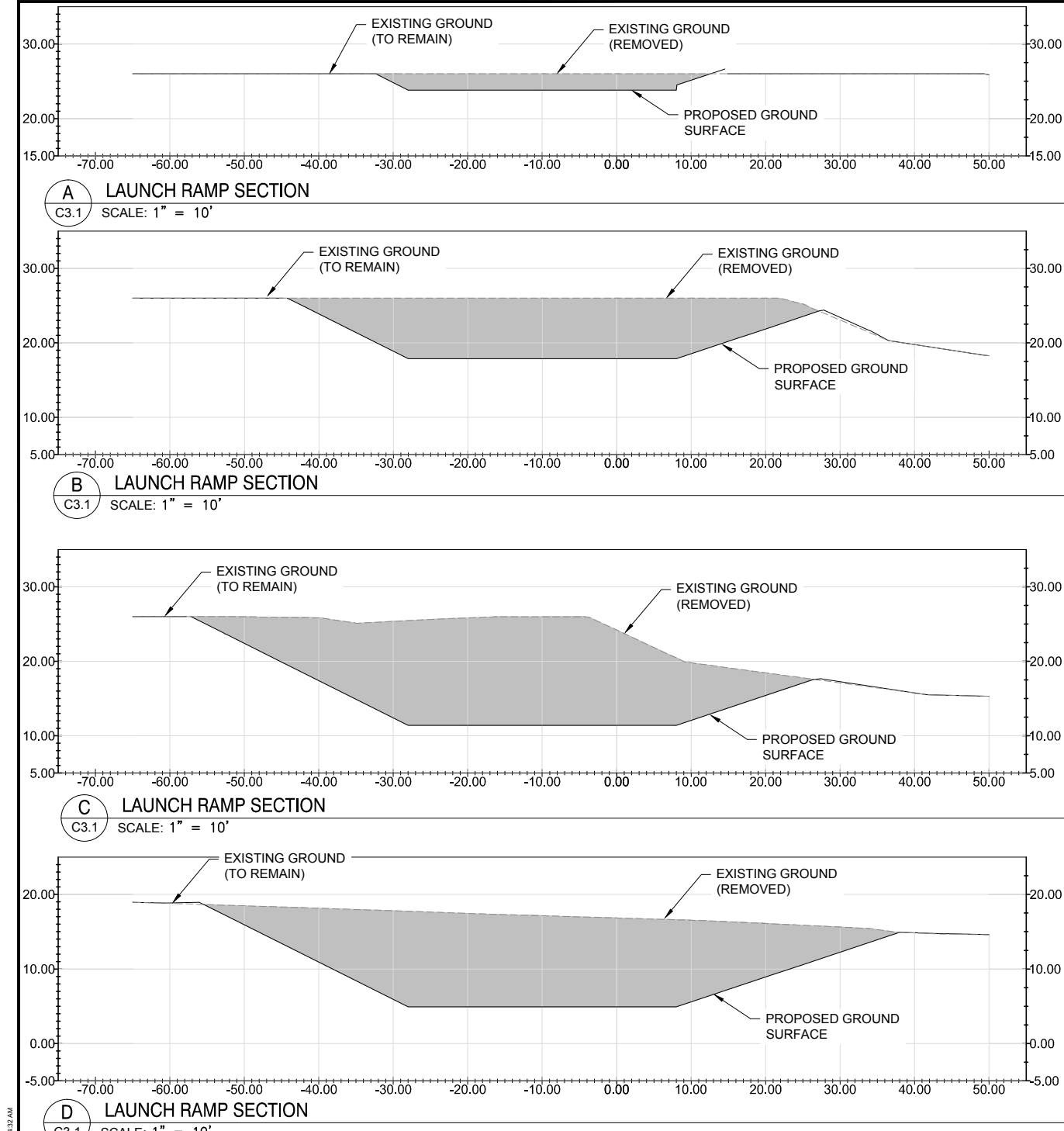
CHECKED BY: CF

SHEET: C3.0

PAGE: 38

OF 71

CONFORMED SET



CONFORMED SET

URS
700 G STREET, SUITE 500
ANCHORAGE, AK 99501
TEL: (907) 562-3366
FAX: (907) 562-1287

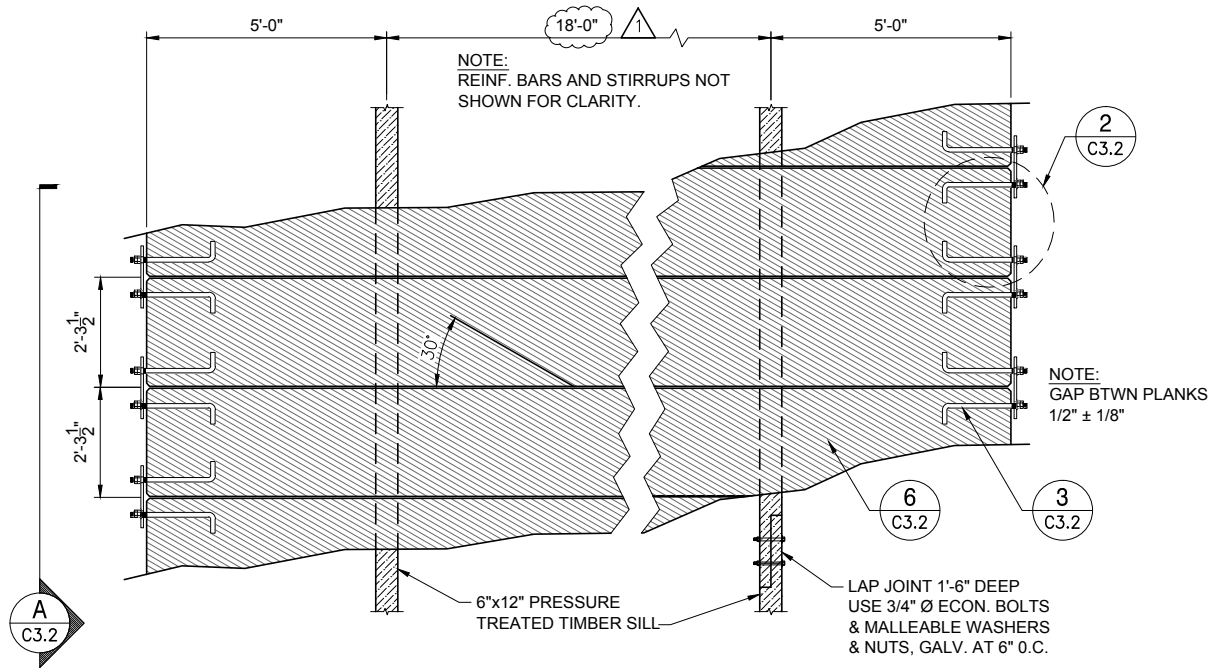
REVISIONS	
NO.	DESCRIPTION

MUNICIPALITY OF SKAGWAY

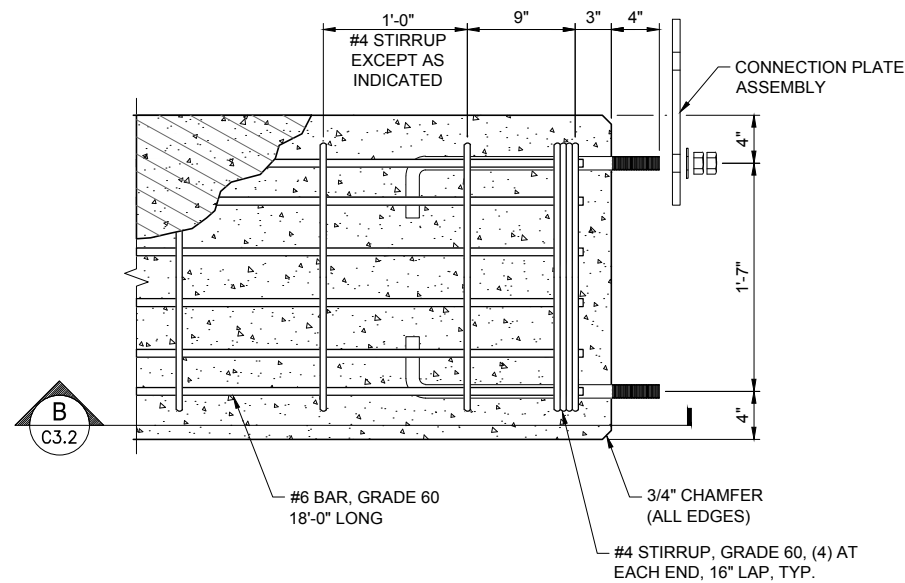
SKAGWAY SMALL BOAT HARBOR
SKAGWAY, AK

LAUNCH RAMP SECTIONS & DETAILS

PROJECT NO:	26220909
DATE:	8/14/2012
DESIGNED BY:	MDS
DRAWN BY:	MDS
CHECKED BY:	CF
SHEET:	C3.1
PAGE:	39 OF 71



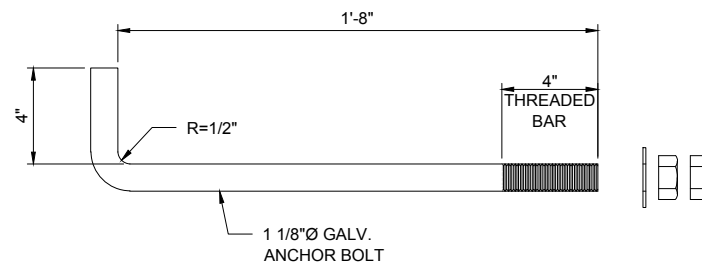
1 PLAN -CONCRETE PLANK ASSEMBLY
SCALE: 1/2" = 1'-0"



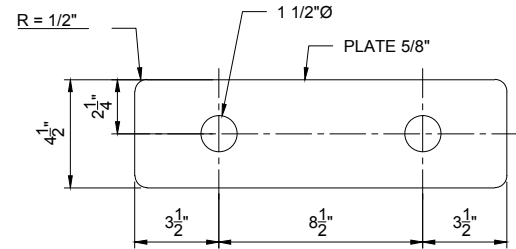
2 DETAIL - CONCRETE PLANK
SCALE: 1 1/2" = 1'-0"

NOTES:

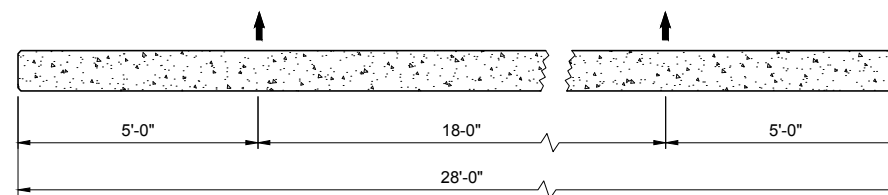
- ALL REINFORCING TO BE EPOXY COATED.
- WRAP OR SEAL ANCHOR BOLTS TO PROTECT THREADS DURING SHIPPING AND LOADING/OFFLOADING.



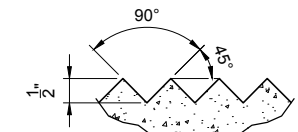
3 DETAIL - ANCHOR BOLT
SCALE: 3" = 1'-0"



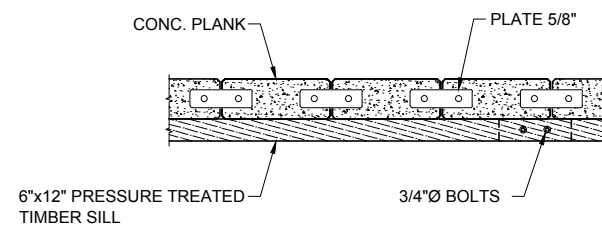
4 DETAIL - CONNECTION PLATE
SCALE: 3" = 1'-0"



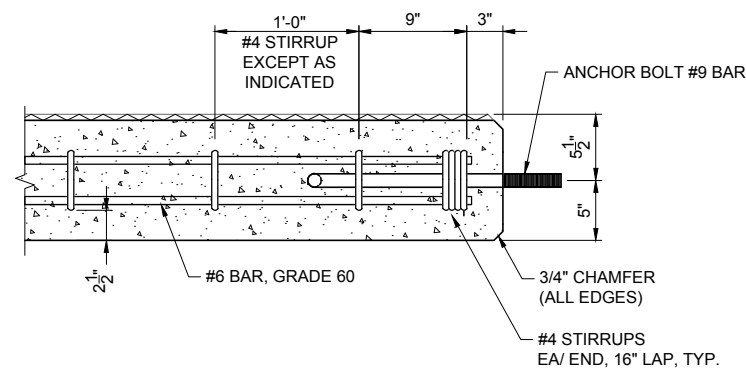
5 DETAIL - CONCRETE PLANK PICK POINTS
SCALE: 1/2" = 1'-0"



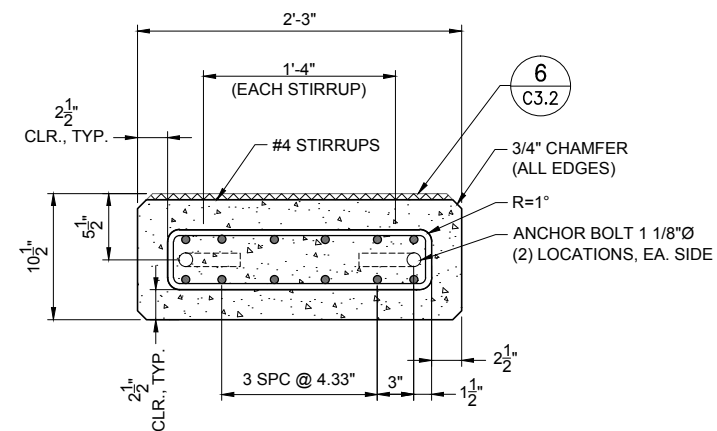
6 DETAIL - V GROOVE
SCALE: NTS



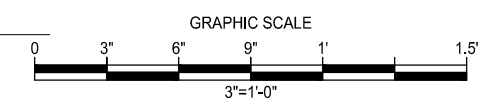
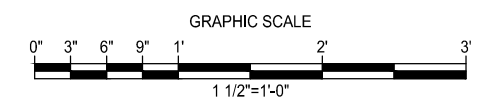
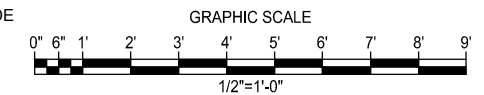
A ELEVATION - CONCRETE PLANK ASSEMBLY
SCALE: 1/2" = 1'-0"



B ELEVATION - CONCRETE PLANK
SCALE: 1 1/2" = 1'-0"



C SECTION - CONCRETE PLANK
SCALE: 1 1/2" = 1'-0"



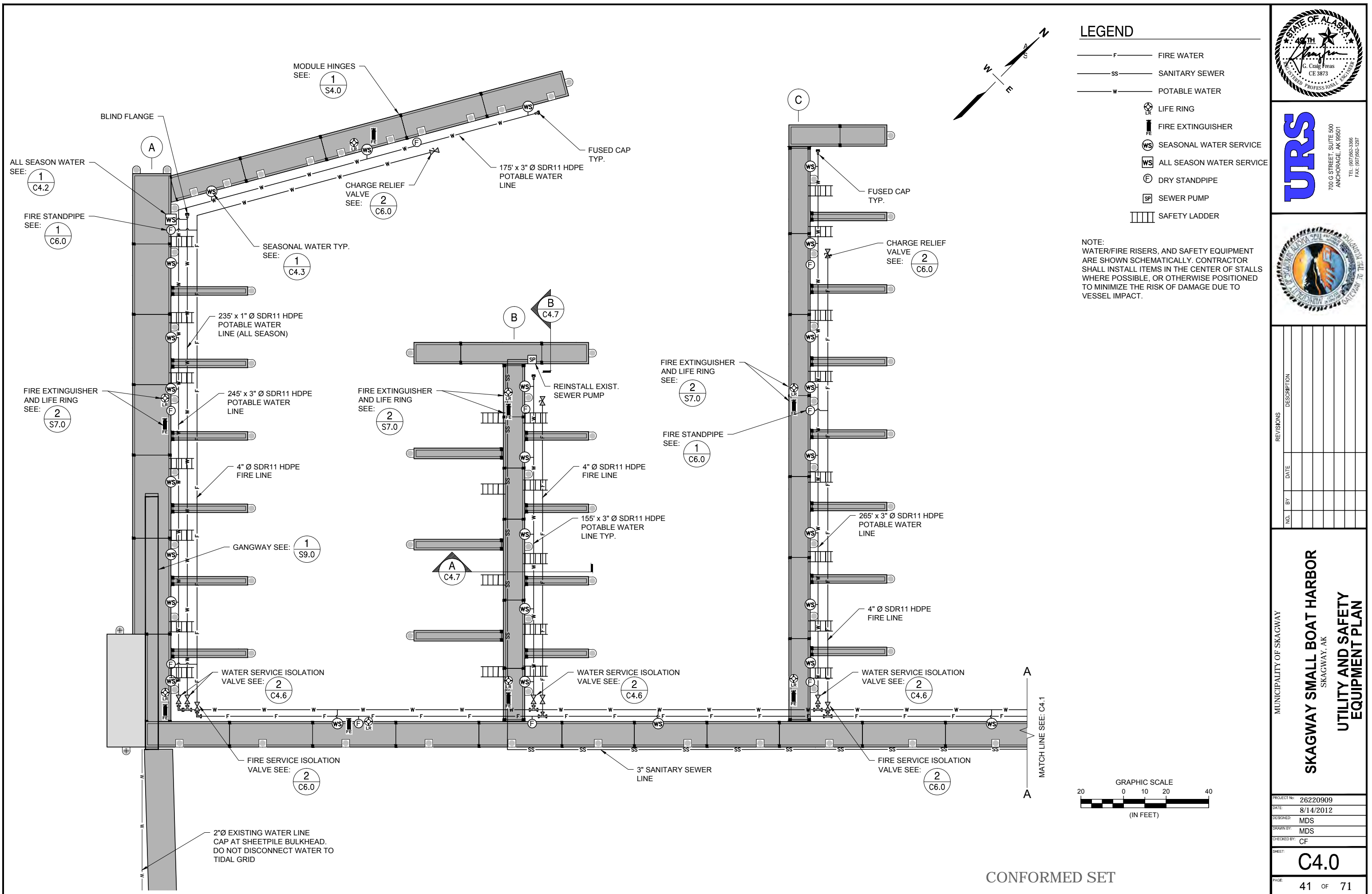
CONFORMED SET



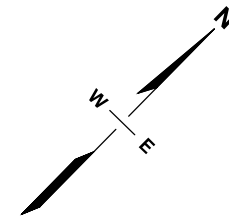
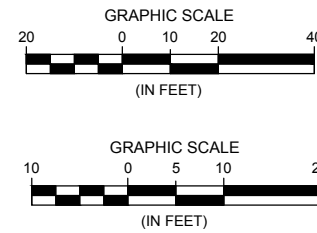
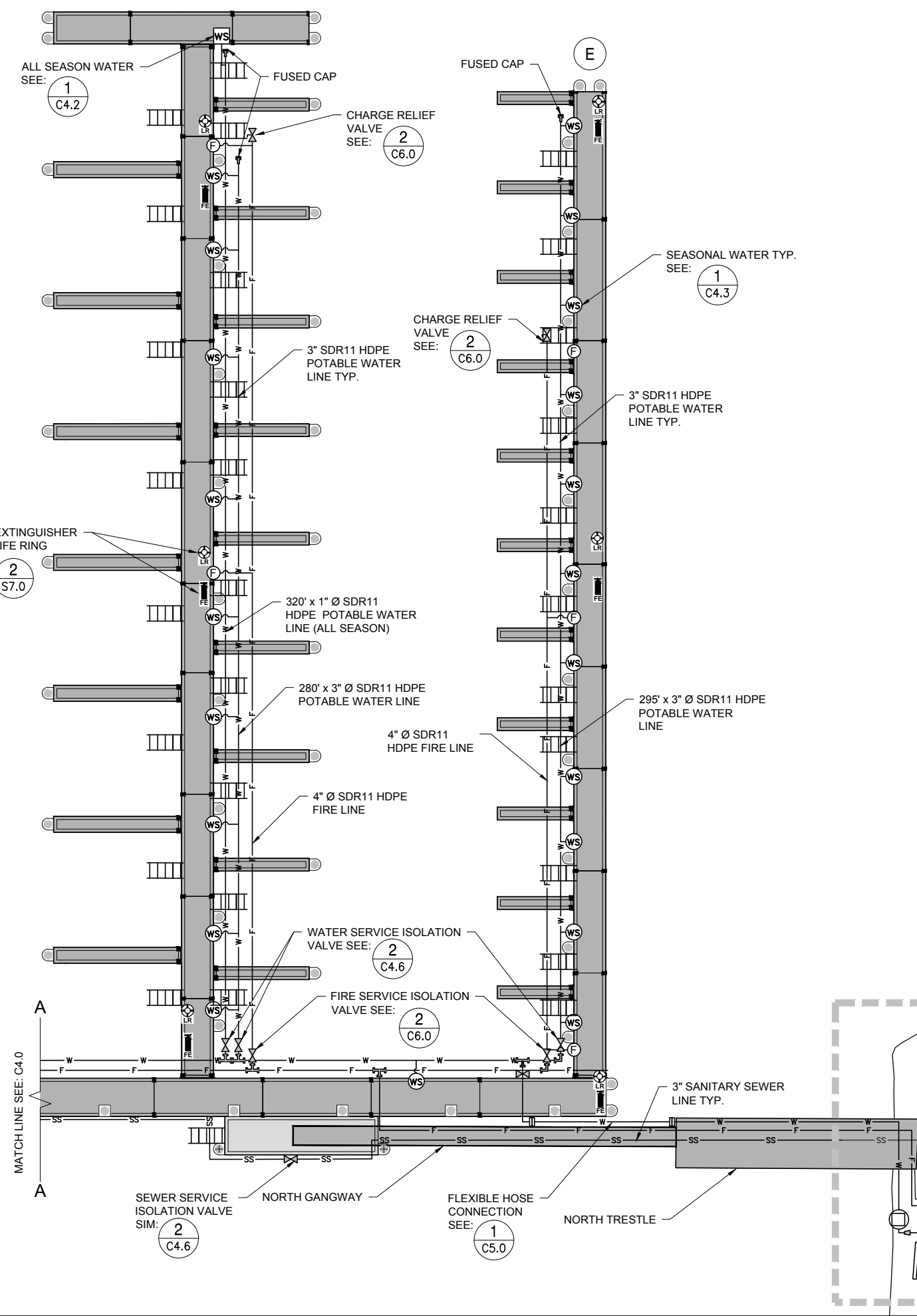
REVISIONS		DESCRIPTION
NO.	BY	DATE
1	URS	7/19/2012
ADDENDUM 1		

SKAGWAY SMALL BOAT HARBOR
SKAGWAY, AK
LAUNCH RAMP PLANK DETAILS

PROJECT NO:	26220909
DATE:	8/14/2012
DESIGNED:	CF
DRAWN BY:	SJ
CHECKED BY:	CF
SHEET:	C3.2
PAGE:	40 OF 71



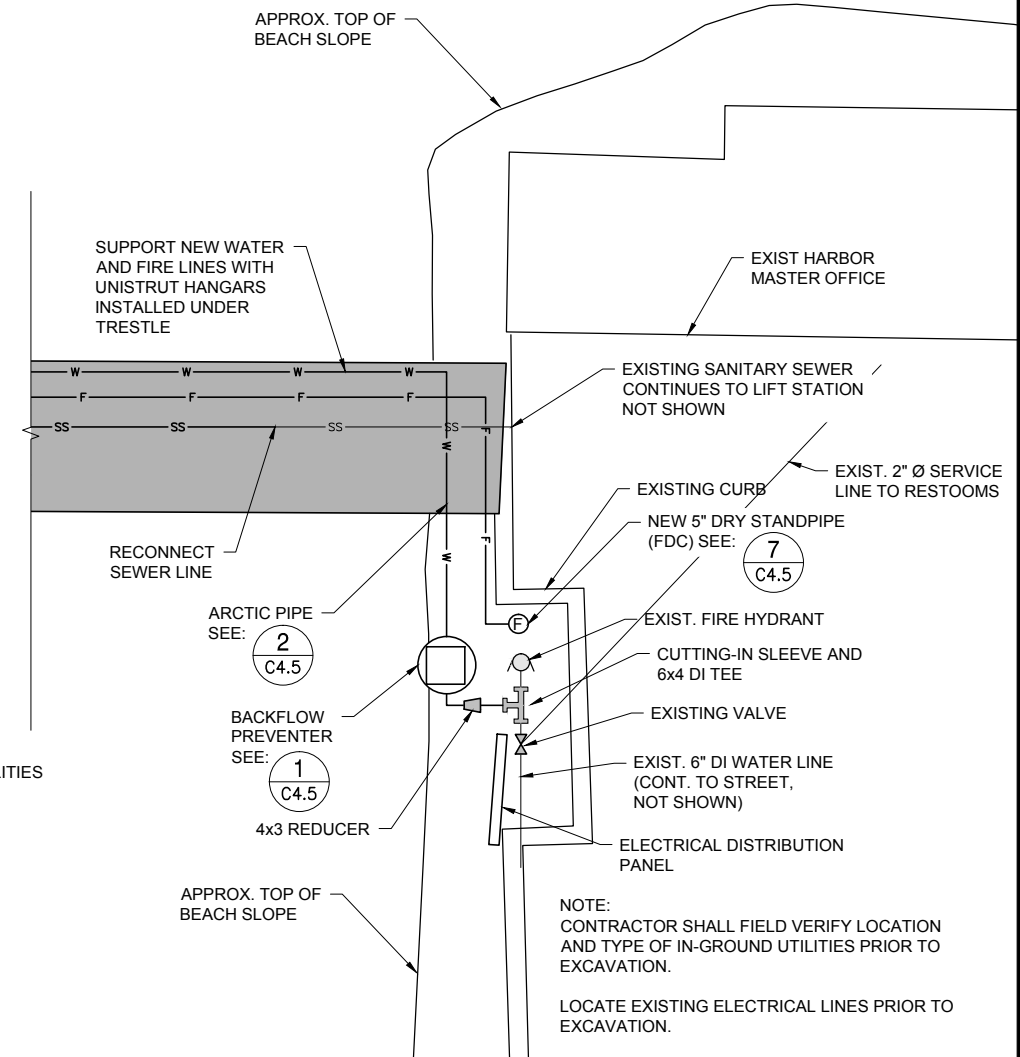
G:\PROJECTS\26220909 SKAGWAY BOAT HARBOR\401 WORKING DRAWINGS\41 - C4.0 - FLT UTIL.DWG - Revised 7/2/2012 11:05:04 AM



LEGEND

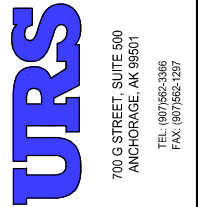
- F FIRE WATER
- SS SANITARY SEWER
- W POTABLE WATER
- LR LIFE RING
- FE FIRE EXTINGUISHER
- WS SEASONAL WATER SERVICE
- WS ALL SEASON WATER SERVICE
- E DRY STANDPIPE
- SP SEWER PUMP
- SAFETY LADDER

NOTE:
WATER/FIRE RISERS, AND SAFETY EQUIPMENT
ARE SHOWN SCHEMATICALLY. CONTRACTOR
SHALL INSTALL ITEMS IN THE CENTER OF STALLS
WHERE POSSIBLE, OR OTHERWISE POSITIONED
TO MINIMIZE THE RISK OF DAMAGE DUE TO
VESSEL IMPACT.



A UPLOADS UTILITY SCHEMATIC
SCALE: 1" = 10'

CONFORMED SET



REVISIONS		DESCRIPTION
NO.	BY	DATE

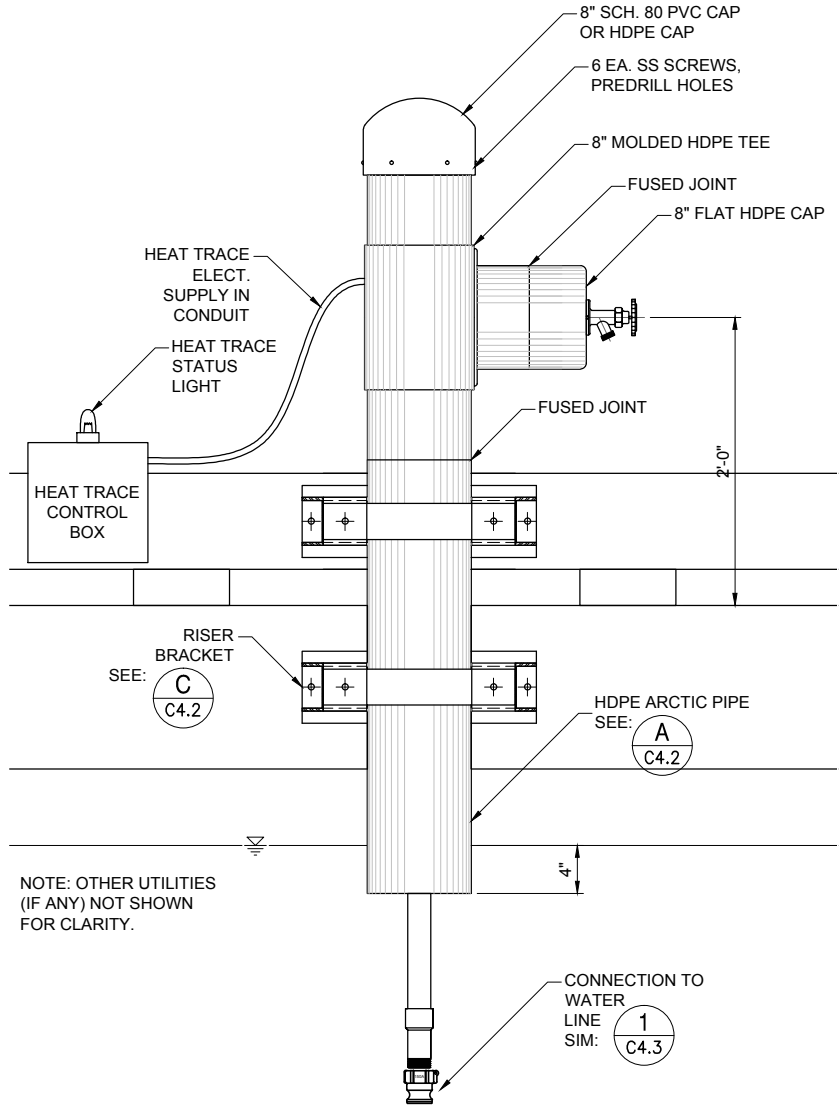
MUNICIPALITY OF SKAGWAY

SKAGWAY SMALL BOAT HARBOR

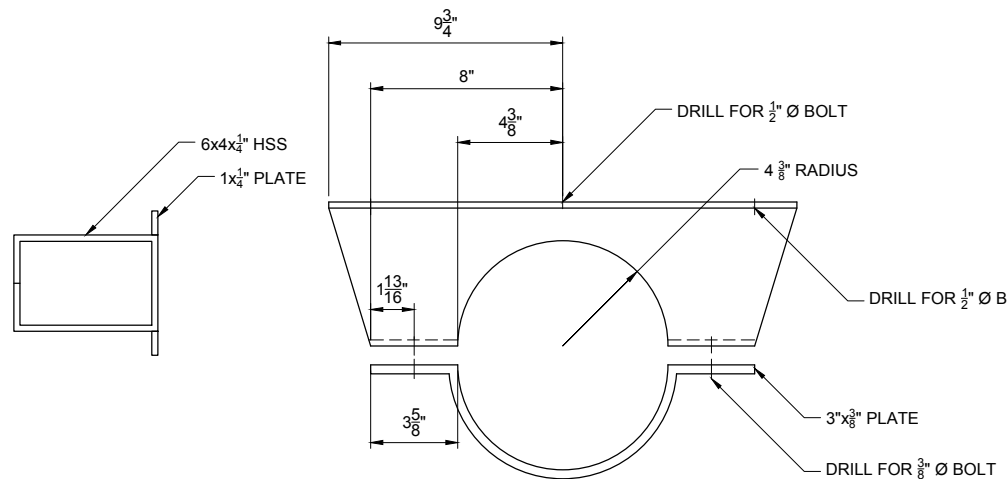
SKAGWAY, AK

UTILITY AND SAFETY EQUIPMENT PLAN

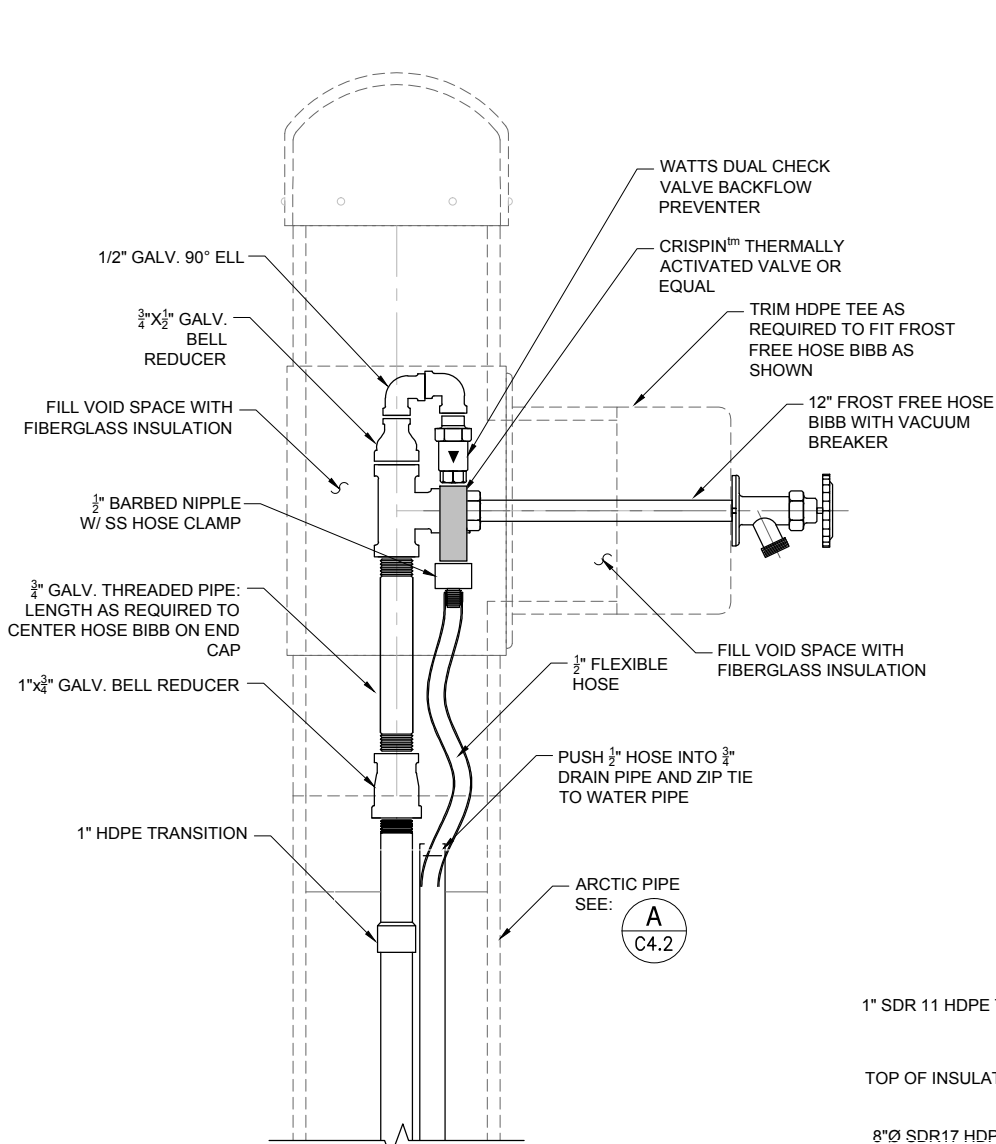
PROJECT NO:	26220909
DATE:	8/14/2012
DESIGNED BY:	MDS
DRAWN BY:	MDS
CHECKED BY:	CF
SHEET:	C4.1
PAGE:	42 OF 71



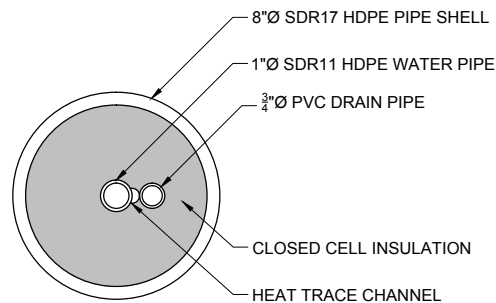
1 ALL SEASON WATER SERVICE
SCALE: 1-1/2"=1'-0"



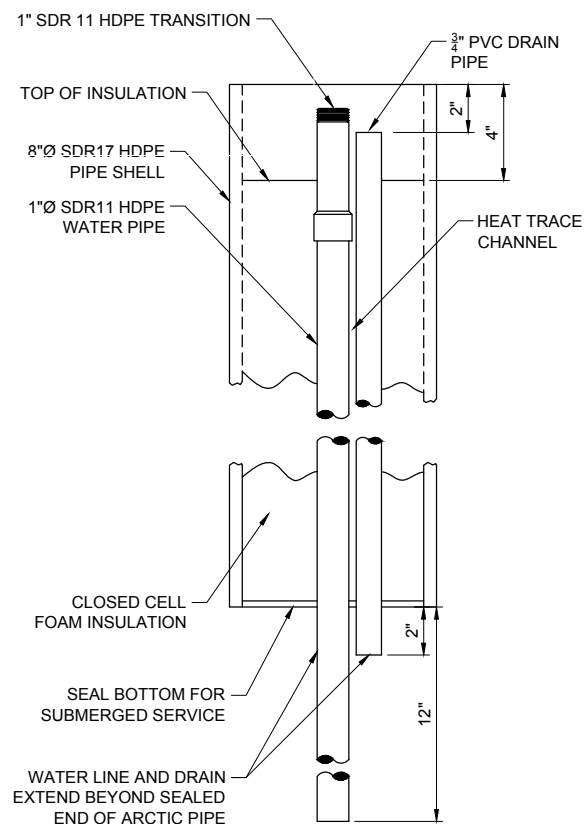
C WATER SERVICE BRACKET DETAIL
SCALE: 3"=1'-0"



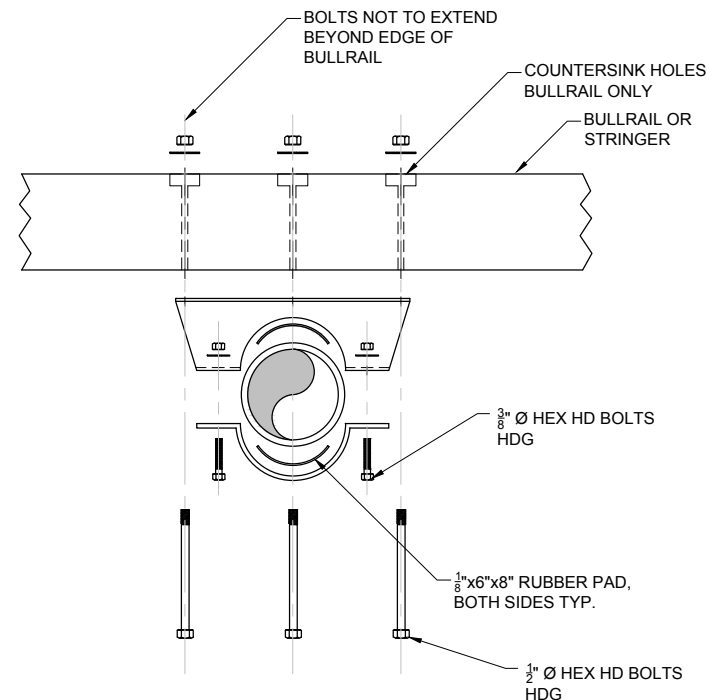
2 PIPING DETAIL
SCALE: 3"=1'-0"



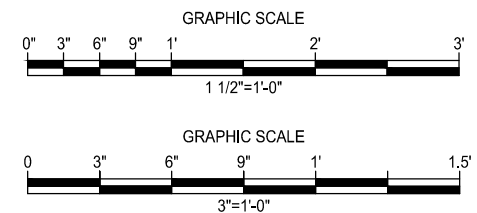
B ARCTIC PIPE SECTION
SCALE: 3"=1'-0"



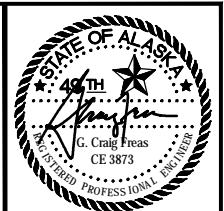
A ARCTIC PIPE ELEVATION
SCALE: 3"=1'-0"



3 EXPLODED INSTALLATION VIEW
SCALE: 1-1/2"=1'-0"



CONFORMED SET



URS
700 G STREET, SUITE 500
ANCHORAGE, AK 99501
TEL: (907) 562-3366
FAX: (907) 562-1237



NO.	BY	DATE	DESCRIPTION

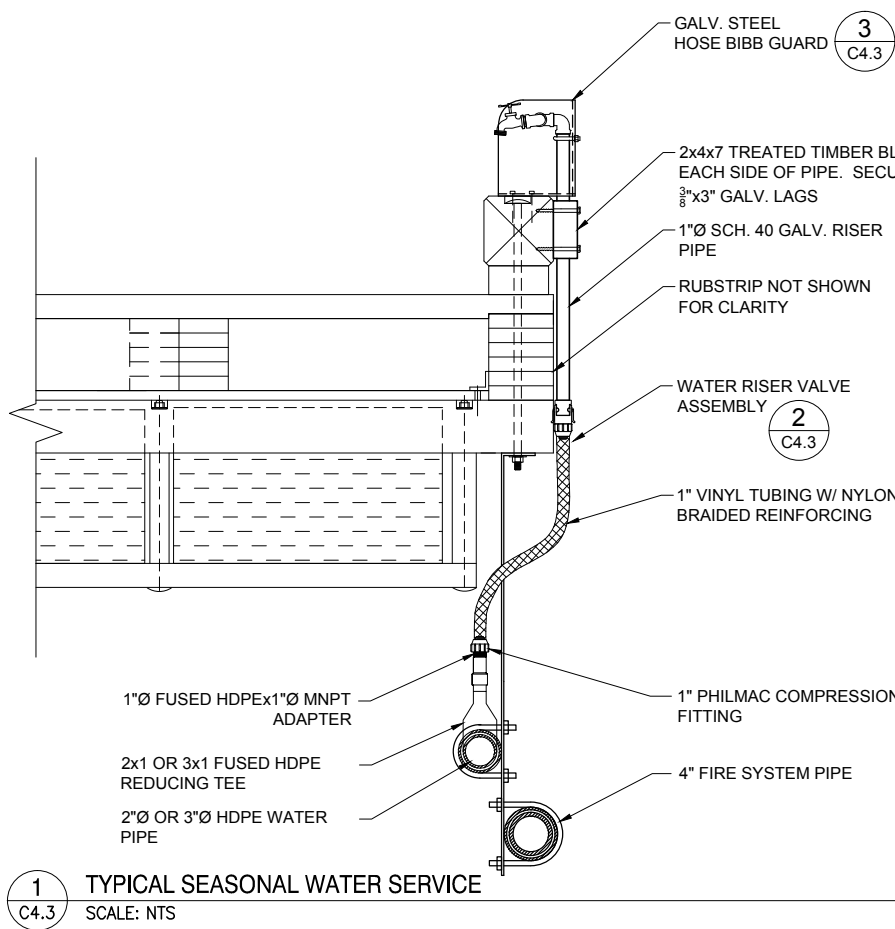
MUNICIPALITY OF SKAGWAY

SKAGWAY SMALL BOAT HARBOR
SKAGWAY, AK

ALL SEASON WATER RISER

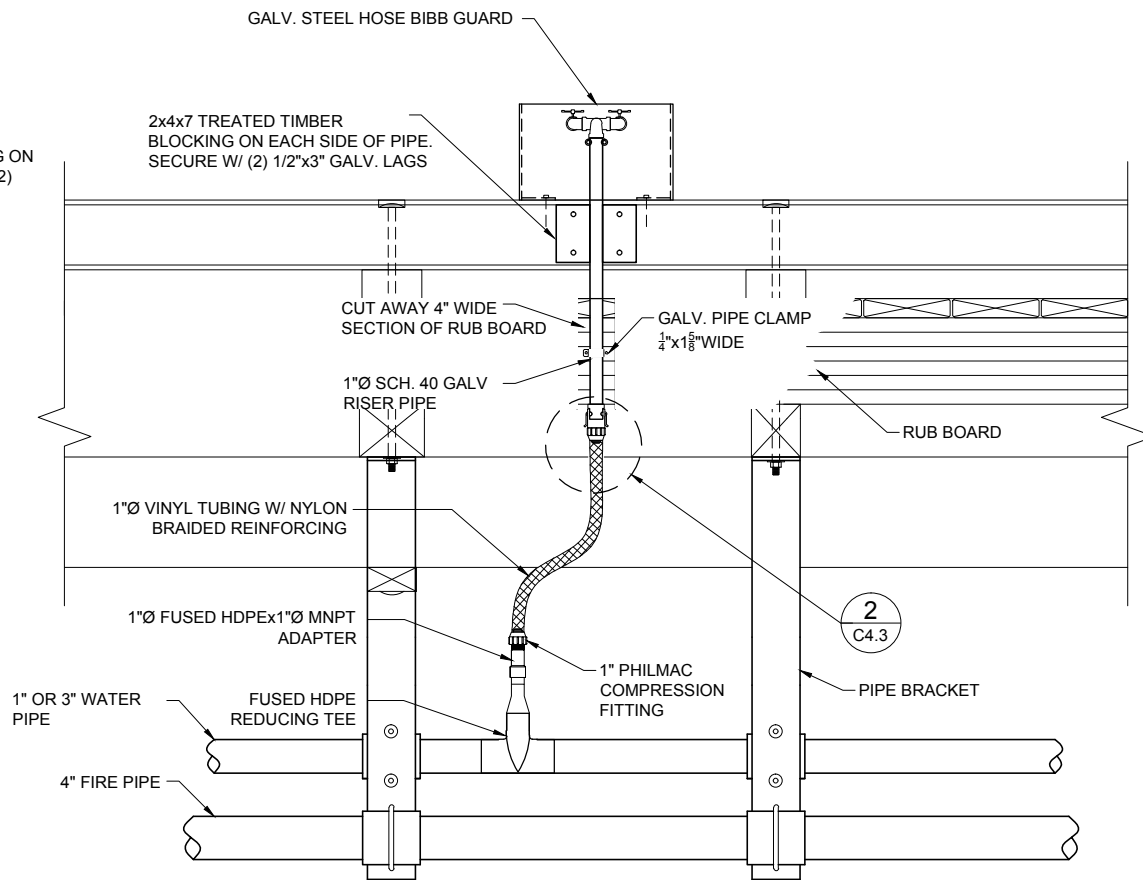
PROJECT NO: 26220909
DATE: 8/14/2012
DESIGNED: MDS
DRAWN BY: MDS
CHECKED BY: CF
SHEET: **C4.2**
PAGE: 43 OF 71

G:\PROJECTS\26220909 SKAGWAY BOAT HARBOR\01 WORKING DRAWINGS\39- C4.3 - WATER DWG - Revised 7/22/2012 11:03:33 AM



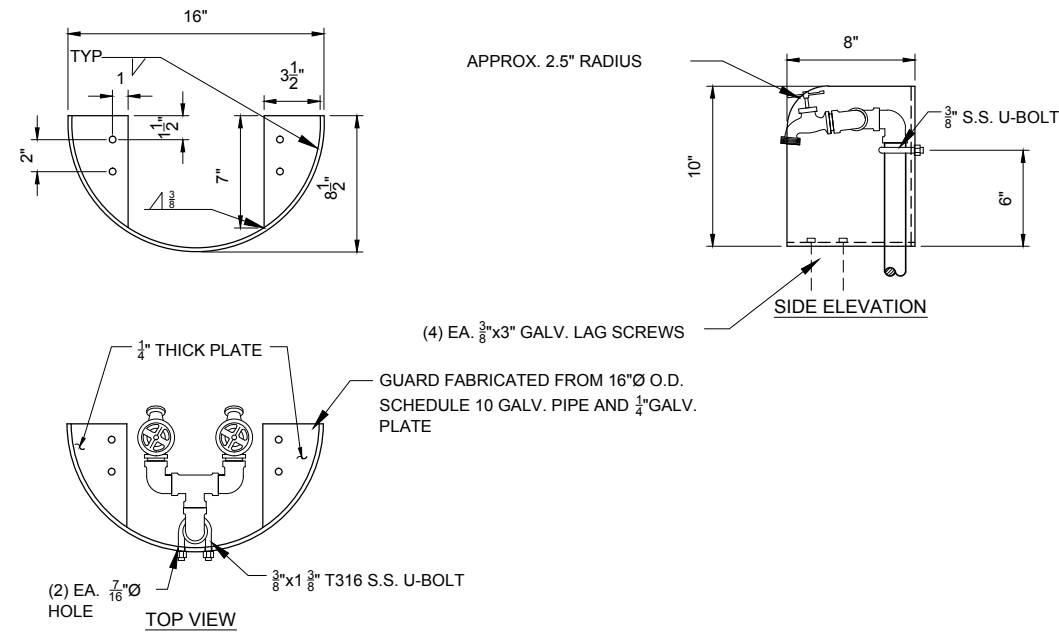
1 TYPICAL SEASONAL WATER SERVICE

SCALE: NTS



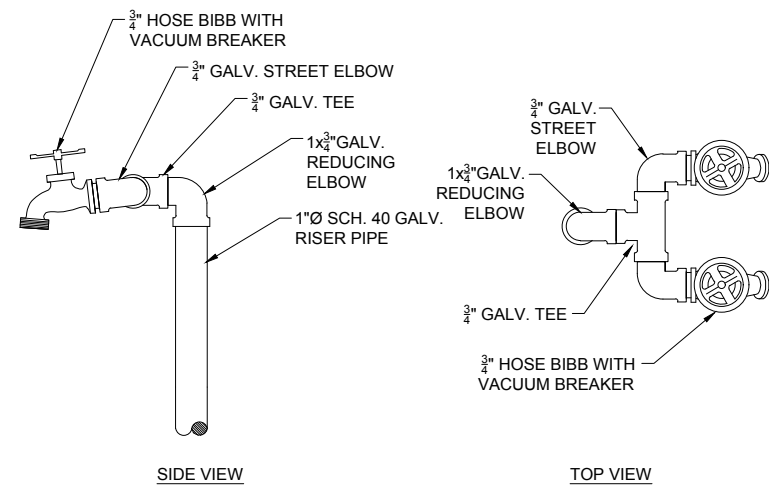
2 TYPICAL WATER RISER ASSEMBLY

SCALE: NTS



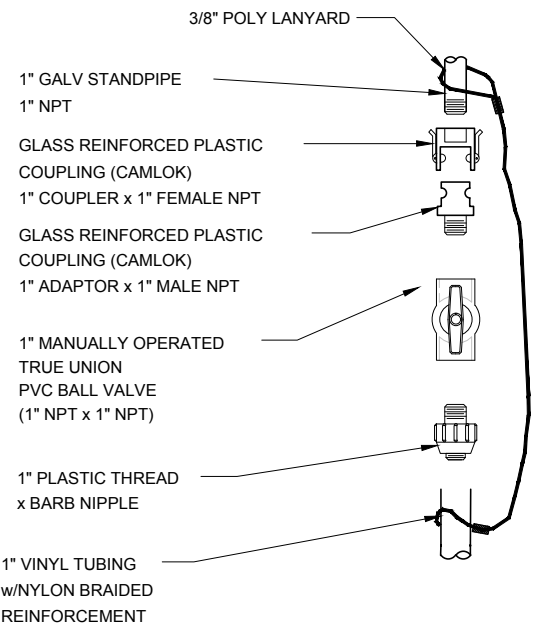
3 HOSE BIBB GUARD

SCALE: NTS



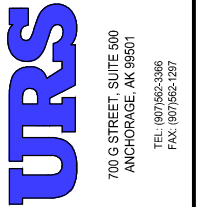
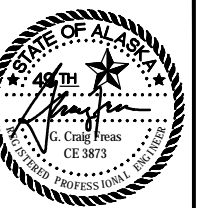
4 HOSE BIBB ASSEMBLY

SCALE: NTS



NOTE:
PROVIDE CAPS FOR PLASTIC COUPLINGS

CONFORMED SET



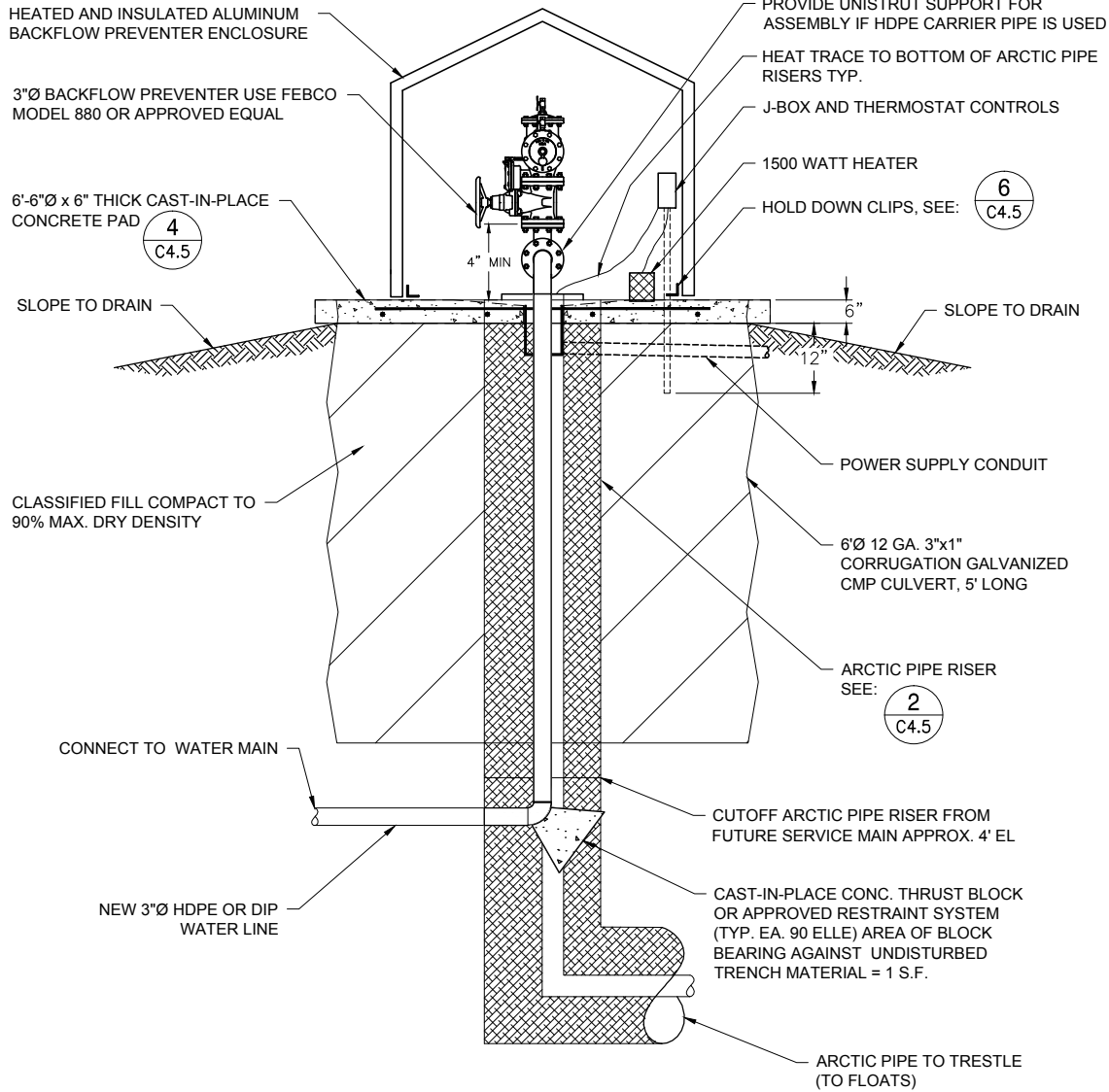
REVISIONS		DESCRIPTION
NO.	BY	DATE

MUNICIPALITY OF SKAGWAY

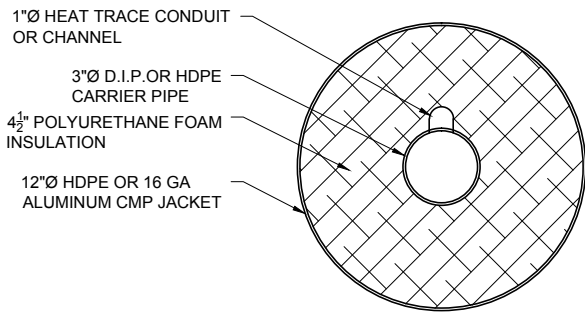
SKAGWAY SMALL BOAT HARBOR
SKAGWAY, AK

SEASONAL WATER RISER

PROJECT NO:	26220909
DATE:	8/14/2012
DESIGNED:	KN
DRAWN BY:	SJ
CHECKED BY:	CF
SHEET:	C4.3
PAGE:	44 OF 71



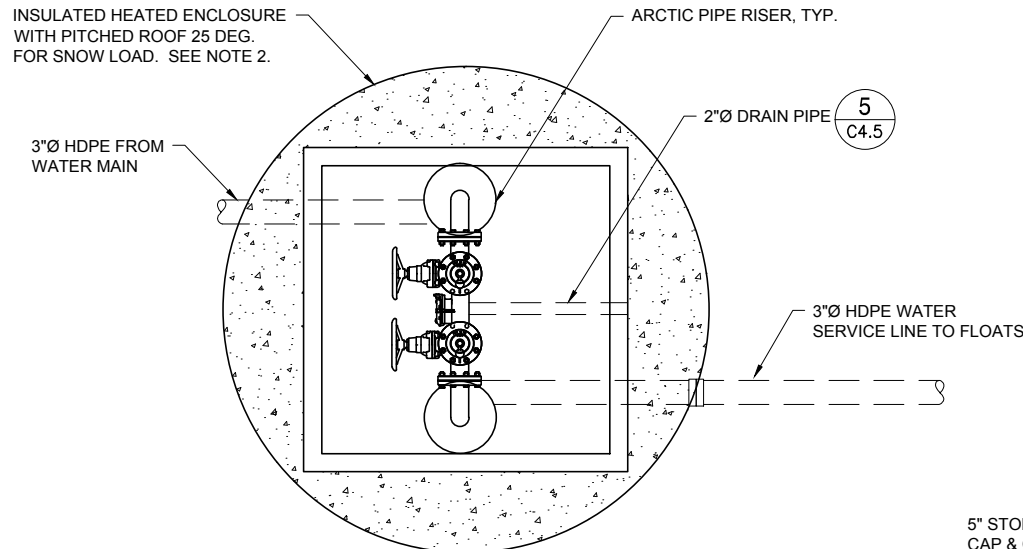
1 BACKFLOW PREVENTER & METER ASSEMBLY - SECTION A-A
SCALE: N.T.S.



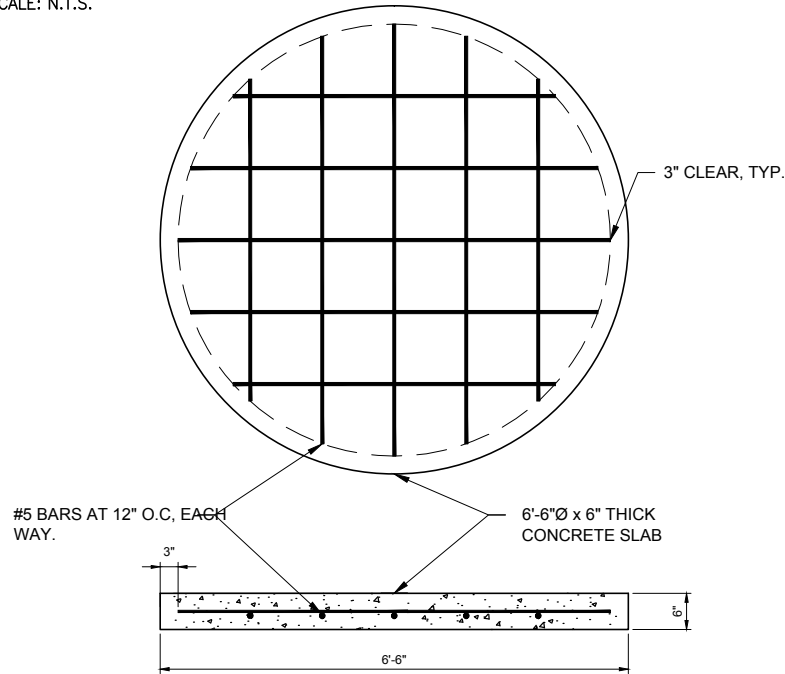
2 TYPICAL ARCTIC PIPE RISER
SCALE: N.T.S.

NOTES:

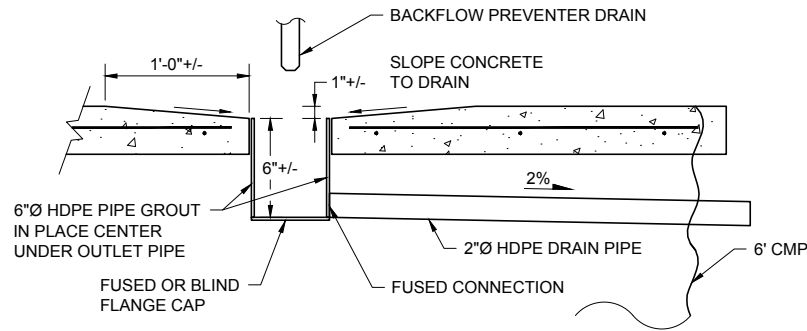
- INSULATION BETWEEN INNER PIPE AND OUTER JACKET SHALL BE A LOW DENSITY RIGID CLOSED-CELL POLYURETHANE FOAM WITH THE FOLLOWING PROPERTIES:
CORE DENSITY RANGE: 2.5 TO 3.5 lbs/ft³
MINIMUM COMPREHENSIVE STRENGTH: 35 psi
MAXIMUM WATER ABSORPTION: 0.05 lb/ft²
- THICKNESS OF CELLULAR INSULATION SHALL COMPLETELY FILL THE ANNULAR SPACE BETWEEN INNER PIPE AND OUTER JACKET



3 BACKFLOW PREVENTER & METER ASSEMBLY - PLAN
SCALE: N.T.S.



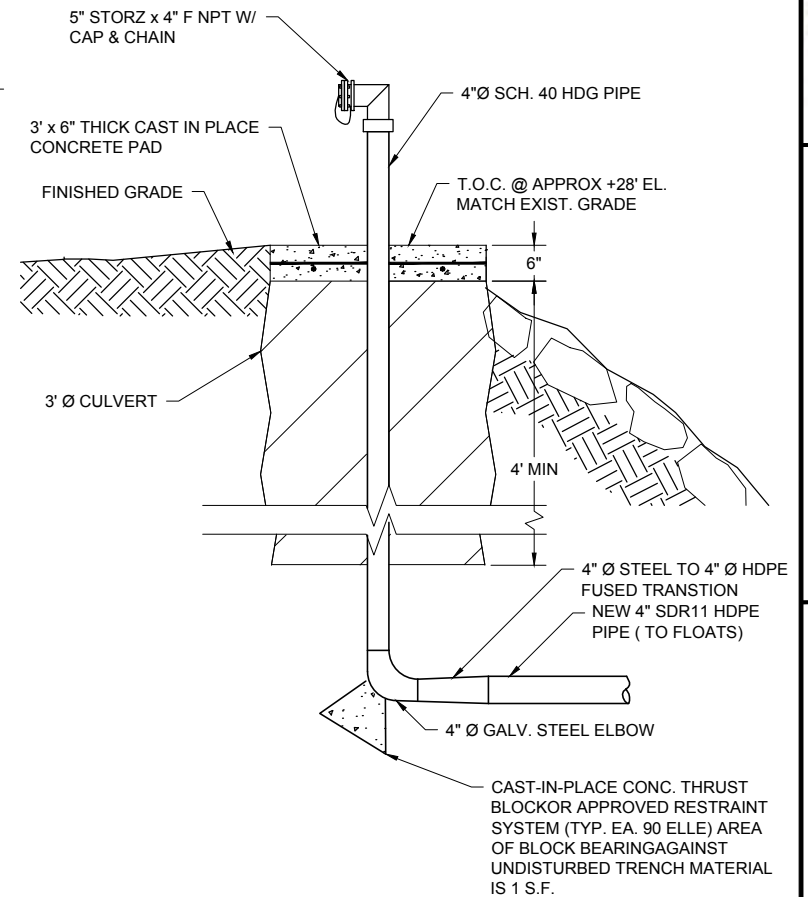
4 CONCRETE SLAB DETAIL
SCALE: 3/4" = 1'-0"



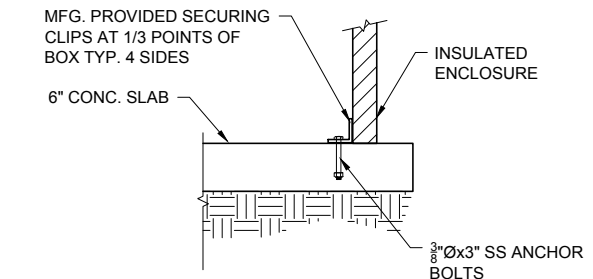
5 FLOOR DRAIN
SCALE: N.T.S.

NOTES:

- BACKFLOW PREVENTER SHALL BE A PRESSURE REDUCING (PRV) TYPE, FEBCO, MODEL 880, OR APPROVED EQUAL, 3-INCH NOMINAL PIPING DIAMETER. VALVE BODY SHALL BE OF BRONZE CONSTRUCTION. ISOLATION VALVES MAY BE GATE VALVES PROVIDING NON-RISING STEMS ARE UTILIZED.
- INSULATED ENCLOSURE SHALL BE OF ALUMINUM CONSTRUCTION WITH OPERABLE LID AND SECURITY LOCK. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF PROPOSED ENCLOSURE INCLUDING SCALE DRAWINGS OF PIPING PLAN AND ELEVATION ENSURING PROPER FIT AND CLEARANCES FOR PIPING AND VALVES. LID SHALL HAVE HINGE-TYPE OPENING AND EQUIPPED WITH MEANS OF LEAVING IN THE RAISED POSITION BY POSITIVE STOPS. INSULATION SHALL BE SPRAY ON POLYURETHANE OR MAY BE RIGID BOARD TYPE PROVIDED BOARDS ARE GLUED OR OTHERWISE SECURELY ATTACHED TO INSIDE OF ENCLOSURE. ENCLOSURE INSULATION SHALL BE A MINIMUM OF 3" IN THICKNESS. PROVIDE THERMOSTATICALLY CONTROLLED 1500 WATT HEAT SOURCE WITHIN ENCLOSURE. THE ROOF OF THE ENCLOSURE SHALL BE PITCHED AND DESIGNED FOR 50 POUNDS PER SQUARE FOOT SNOW LOAD AND 85MPH WIND LOAD EXPOSURE D 30 MINUTE DURATION.
- HEAT TRACE WIRE IN ARCTIC PIPE RISERS SHALL BE SELF-LIMITING HEAT CABLE, 8 WATTS PER LINEAL FOOT, AND UL APPROVED FOR WET CONDITIONS.



7 DRY STANDPIPE (FDC)
SCALE: 3/4" = 1'-0"



6 HOLD DOWN / EDGE DETAIL
SCALE: N.T.S.

CONFORMED SET



NO.	BY	DATE	DESCRIPTION

SKAGWAY SMALL BOAT HARBOR
SKAGWAY, AK
BACKFLOW PREVENTER AND DETAILS

PROJECT NO:	26220909
DATE:	8/14/2012
DESIGNED BY:	CB
DRAWN BY:	CB / MDS
CHECKED BY:	CF
SHEET:	C4.5
PAGE:	45 OF 71

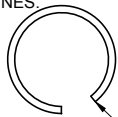


REVISIONS		DESCRIPTION
NO.	BY	DATE

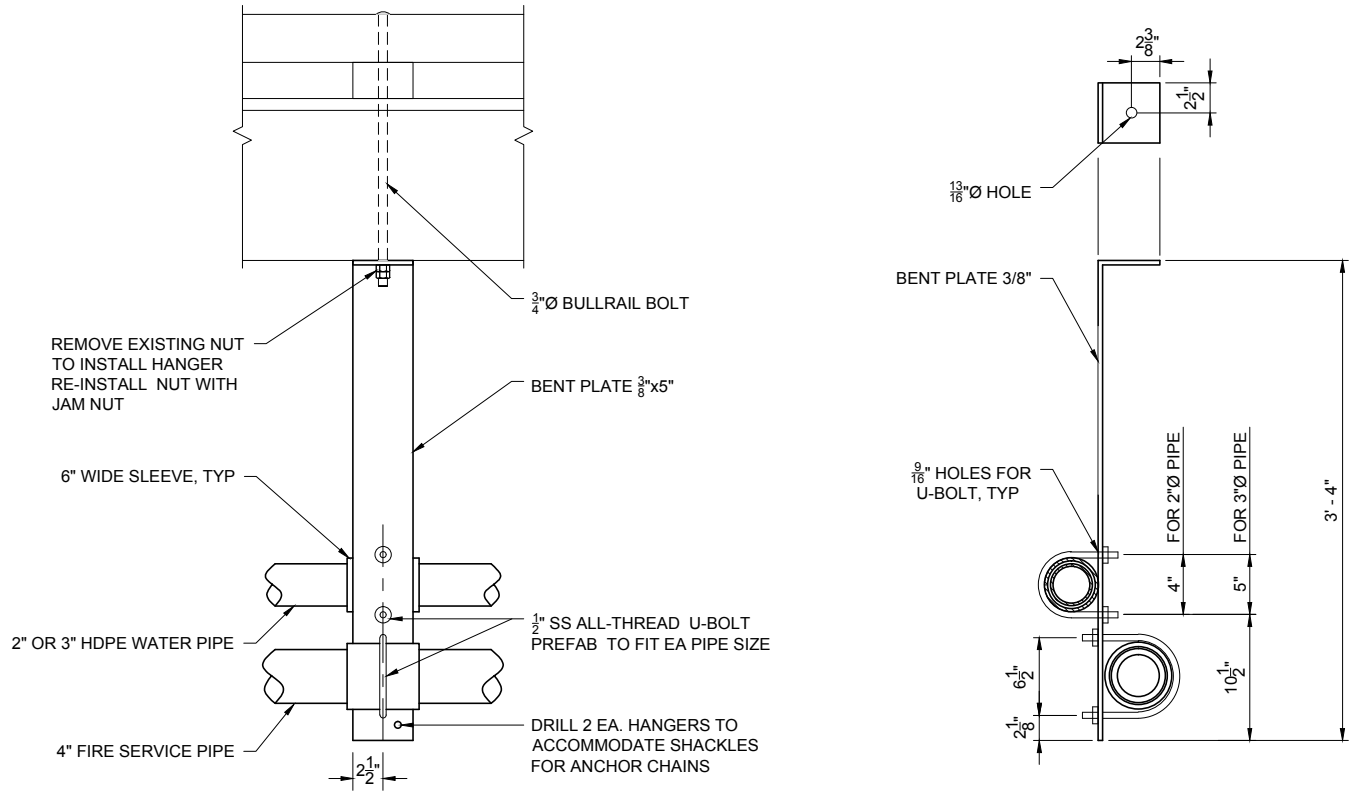
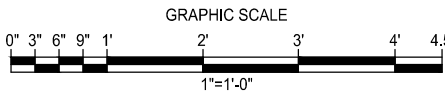
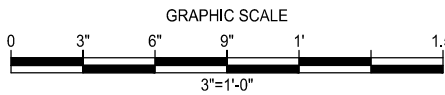
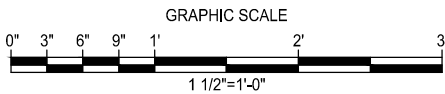
MUNICIPALITY OF SKAGWAY		SKAGWAY SMALL BOAT HARBOR SKAGWAY, AK		WATER & FIRE SYSTEM HANGERS AND VALVES	
PROJECT No: 26220909					
DATE: 8/14/2012					
DESIGNED: KN					
DRAWN BY: MDS					
CHECKED BY: CF					
SHEET: C4.6					
PAGE: 47 OF 71					

SLEEVE SCHEDULE					
PIPE DESCRIPTION	O.D.	SLEEVE	SLEEVE I.D.	FIXED SUPPORT SLEEVE GAP	SLEEVE LENGTH
2"Ø HDPE	2.375"	3" SDR 11 HDPE	3.834"	1"	6"
3"Ø HDPE	3.5"	4" SDR 13.5 HDPE	3.834"	1.5"	6"
4"Ø HDPE	4.5"	5" SDR 11 HDPE	4.551"	1.5"	6"

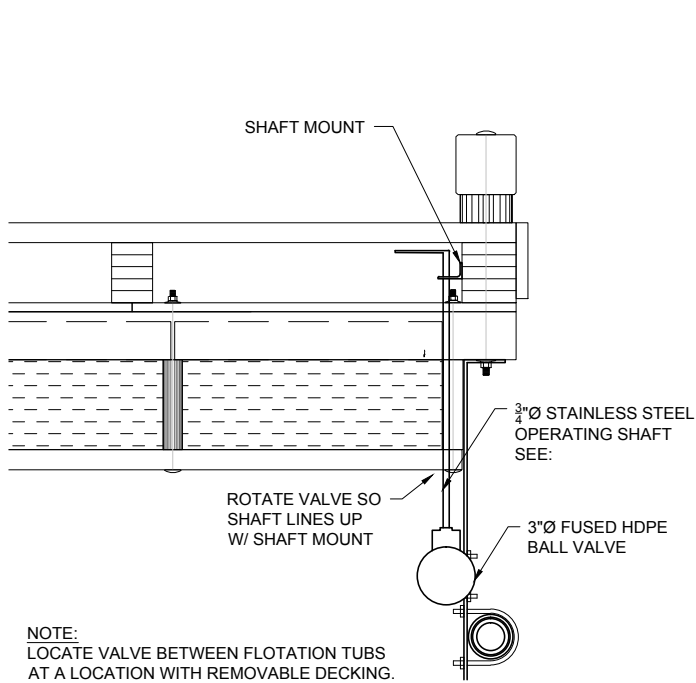
- NOTES:
- SUPPORT STRUTS SHOULD BE INSTALLED ON EXISTING BULLRAIL BOLTS TO A SPACING OF APPROXIMATELY 6'. 2 EA. SUPPORT STRUTS AT THE CONNECTION TEES WILL NEED BOLTS INSTALLED IN THE STRINGERS. THE STRINGER AND BULLRAIL WILL HAVE TO BE DRILLED.
 - TIGHTEN ALL-THREAD U-BOLTS TO ENGAGE THREADS INTO HDPE SLEEVE MATERIAL TO PREVENT SLIPPING.
 - SUPPORT STRUTS SHOULD BE HOT DIP GALVANIZED AFTER FABRICATION.
 - PIPE SUPPORT SHOWN CONCEPTUALLY FOR WATER AND FIRE UTILITIES. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR PIPE SUPPORTS/MOUNTING HARDWARE TO CARRY WATER, FIRE, AND SEWER LINES AS INDICATED ON THE SITE PLAN. THE SEWER LINE SHALL BE INSTALLED ON A SEPARATE BRACKET ON THE OPPOSITE SIDE OF THE FLOAT FROM THE WATER LINES.



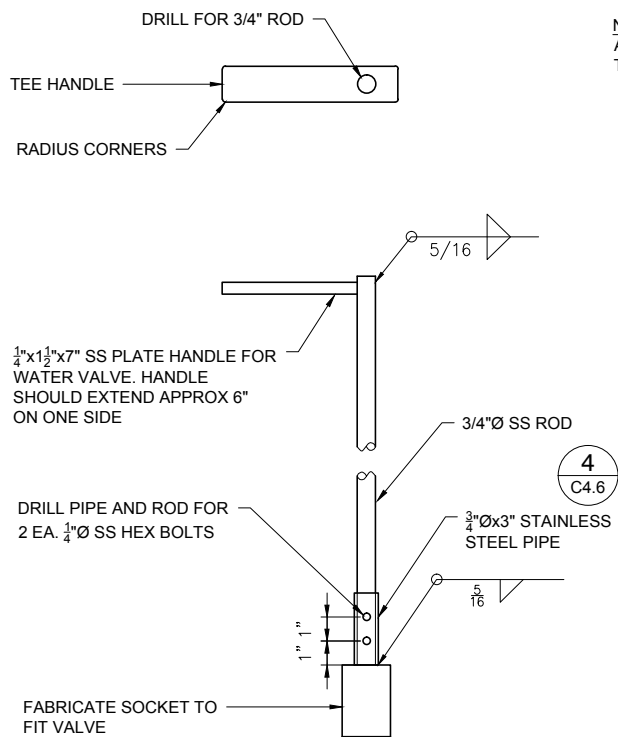
CUT GAP IN SLEEVE PER TABLE



1 WATER AND FIRE UTILITY SUPPORT STRUT
C4.6 SCALE: 1-1/2" = 1'-0"

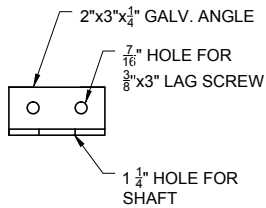


2 WATER SERVICE VALVE
C4.6 SCALE: 1" = 1'-0"

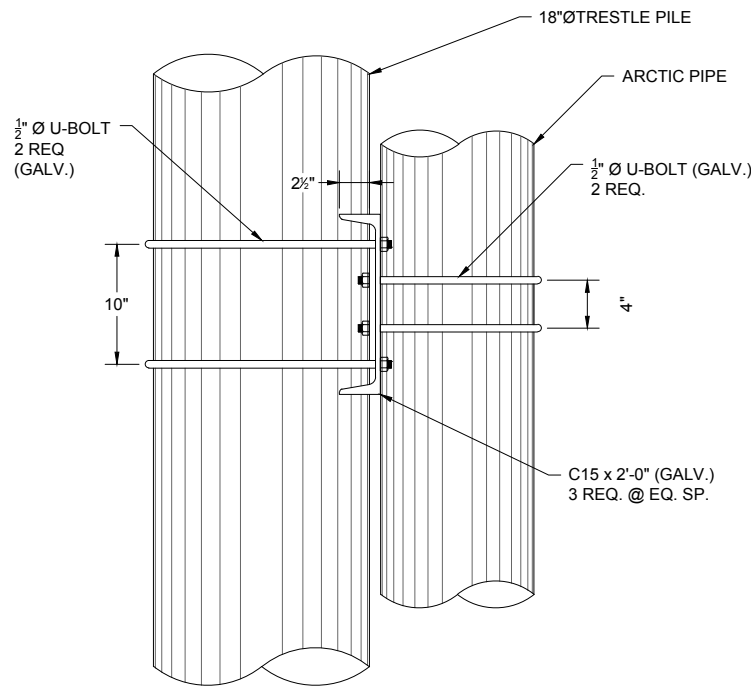


3 VALVE SHAFT
C4.6 SCALE: 3" = 1'-0"

NOTE:
ALL STAINLESS SHALL BE
TYPE 316L.

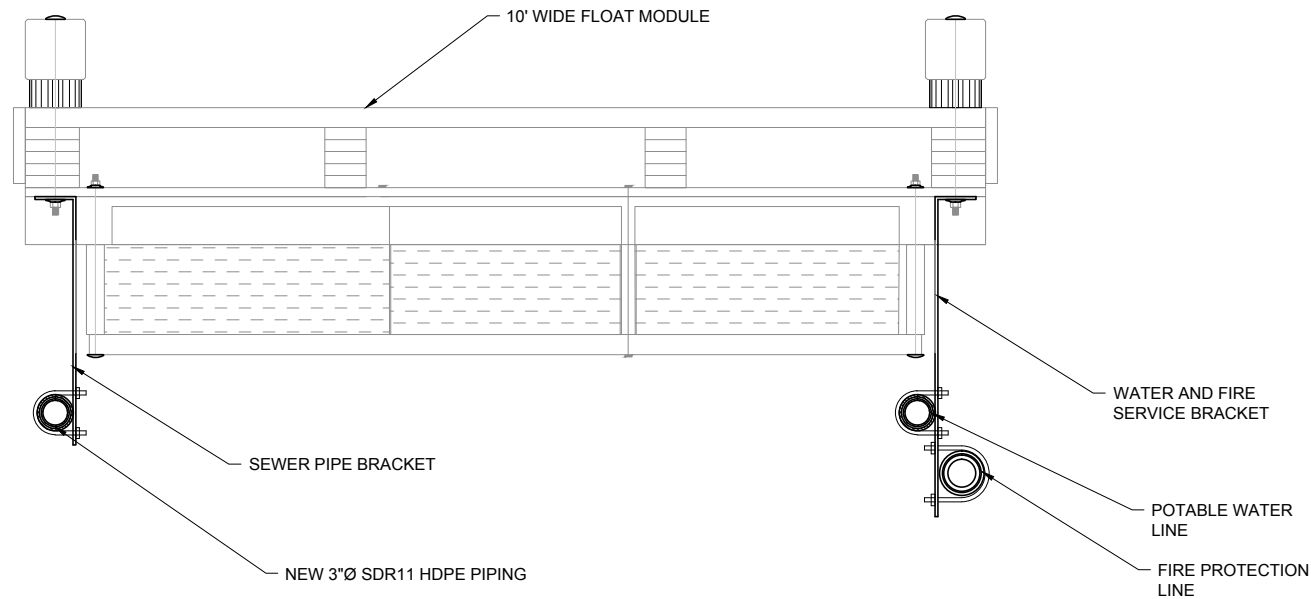


4 SHAFT MOUNT
C4.6 SCALE: 3" = 1'-0"

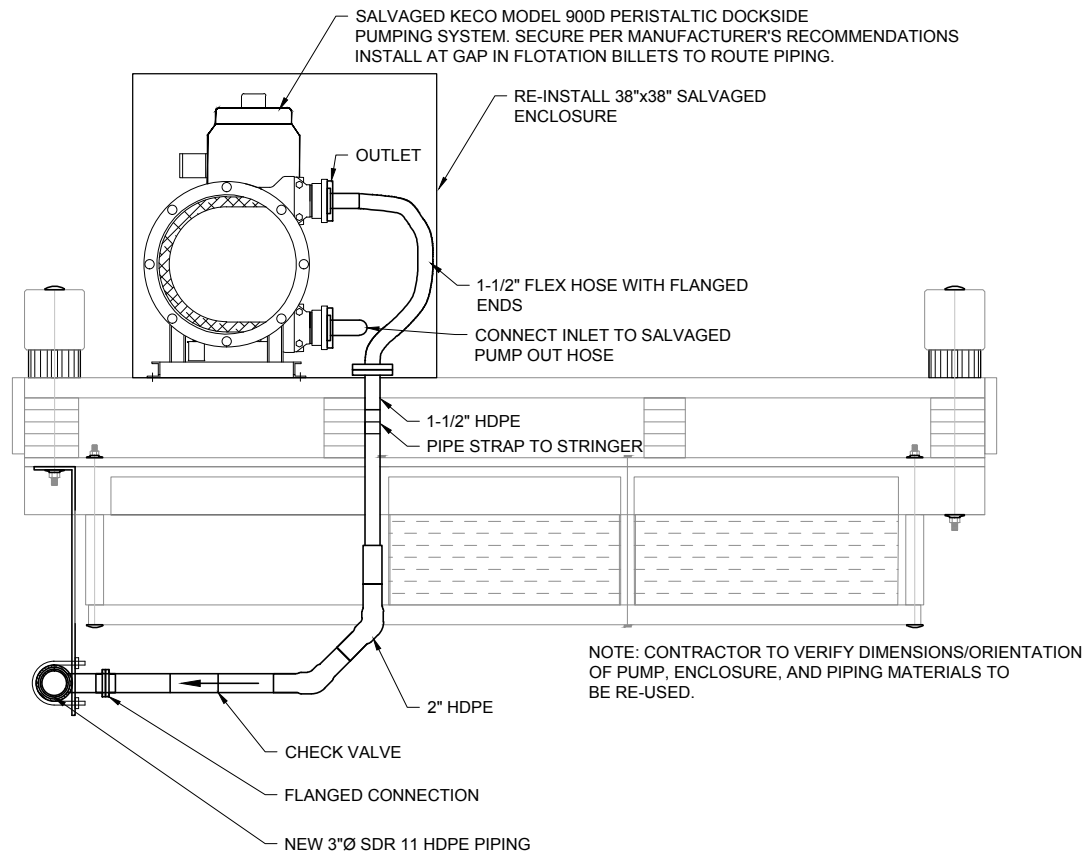


5 ARCTIC PIPE SUPPORT AT PILE
C4.6 SCALE: 1-1/2" = 1'-0"

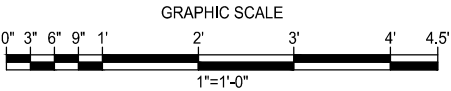
CONFORMED SET



A SEWER PUMPOUT
C4.7 SCALE: 1-1/2" = 1'-0"



B SEWER PUMPOUT
C4.7 SCALE: 1-1/2" = 1'-0"



CONFORMED SET



REVISIONS		DESCRIPTION
NO.	BY	DATE

MUNICIPALITY OF SKAGWAY

SKAGWAY SMALL BOAT HARBOR

SKAGWAY, AK

WATER AND SEWER SYSTEM

TYPICAL SECTIONS AND DETAILS

PROJECT No:

26220909

DATE:

8/14/2012

DESIGNED:

CB

DRAWN BY:

CB

CHECKED BY:

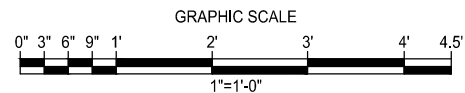
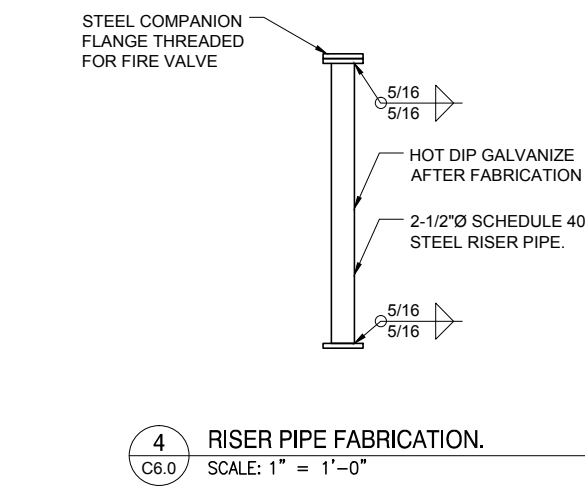
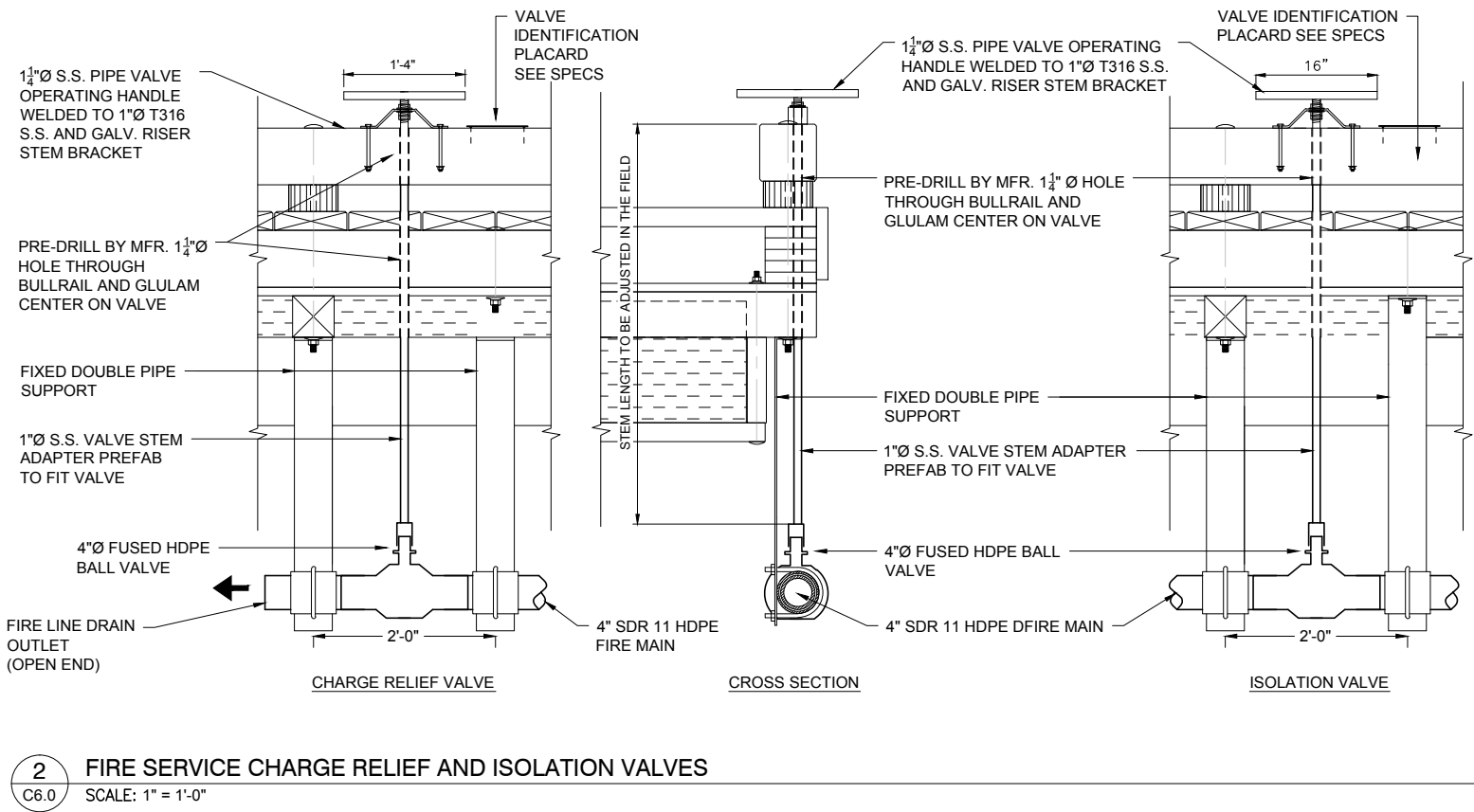
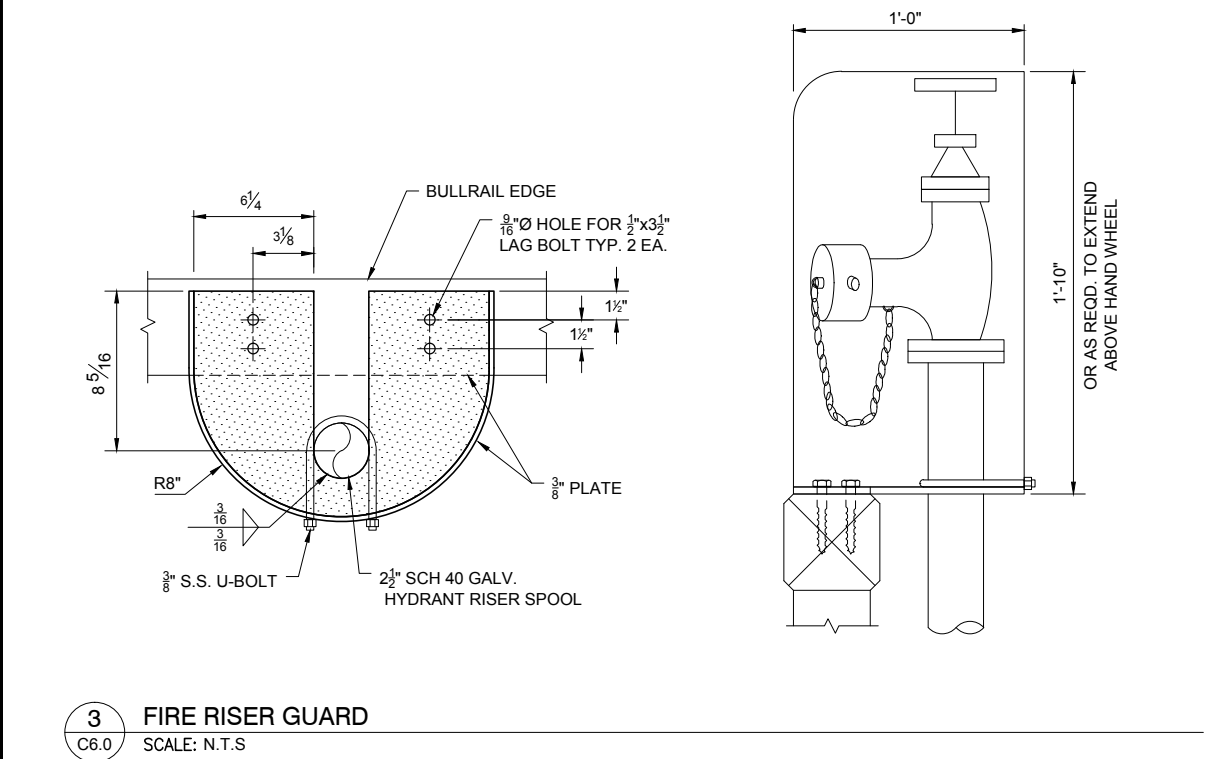
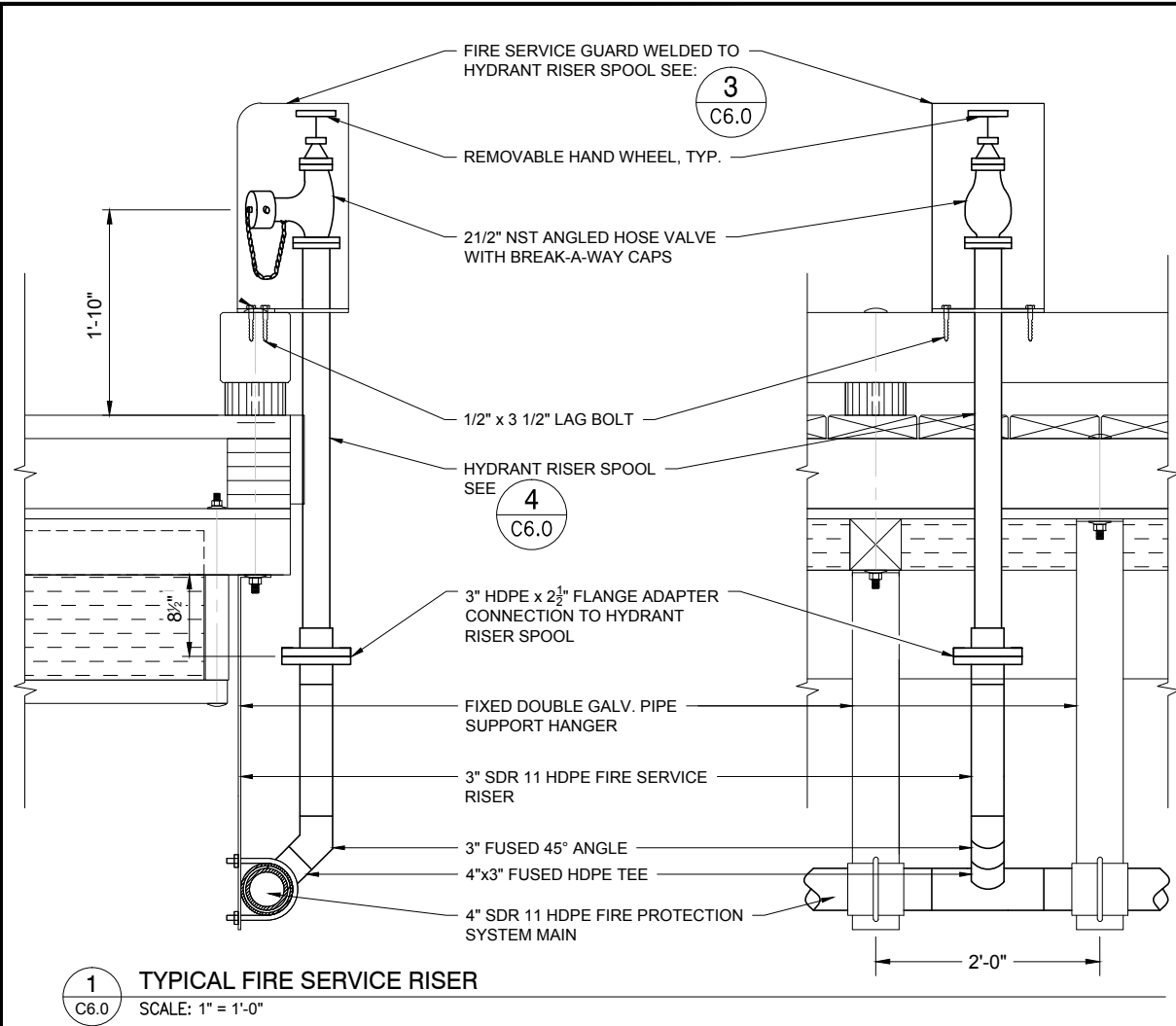
CF

SHEET:

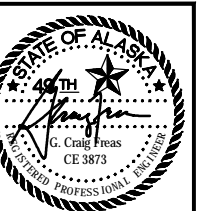
C4.7

PAGE:

47 OF 71



CONFORMED SET



URS
700 G STREET, SUITE 500
ANCHORAGE, AK 99501
TEL: (907) 562-3366
FAX: (907) 562-1237



NO.	BY	DATE	DESCRIPTION

MUNICIPALITY OF SKAGWAY
SKAGWAY SMALL BOAT HARBOR
SKAGWAY, AK
FIRE SYSTEM DETAILS

PROJECT NO:	26220909
DATE:	8/14/2012
DESIGNED:	KN
DRAWN BY:	MDS
CHECKED BY:	CF
SHEET:	C6.0
PAGE:	49 OF 71