

IMPROVEMENT PLANS

AT

10 COLD STORAGE ROAD

FOR

THE TOWN OF ST. GEORGE, MAINE



LOCATION MAP

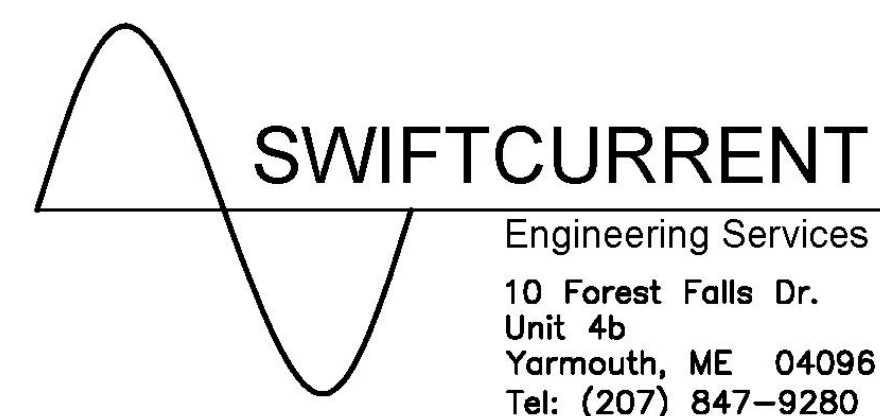
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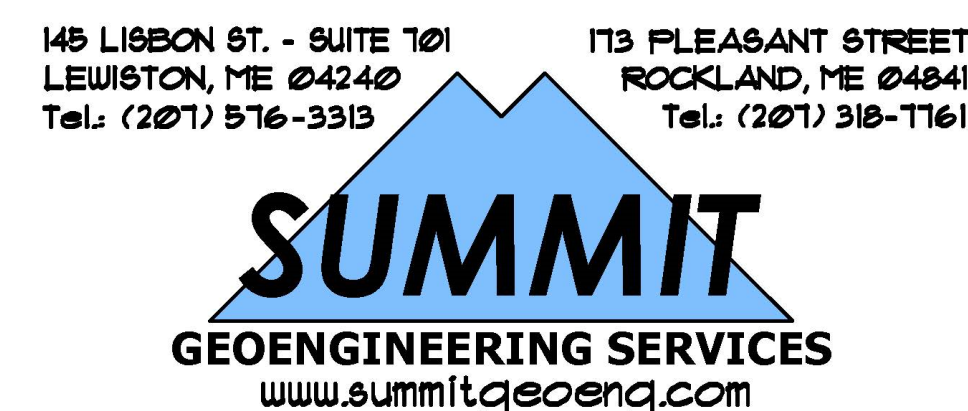
DATE:
MARCH 13, 2020

REVISION:
BID PLANS

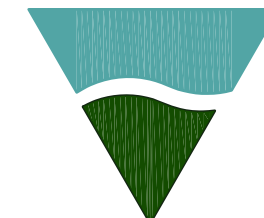
ELECTRICAL ENGINEERS:



GEOTECHNICAL ENGINEERS:



CIVIL ENGINEERS:



G.F. Johnston & Associates
Consulting Civil Engineers
P.O. Box 197
Southwest Harbor, Maine 04679
207-244-1200

PROJECT MANAGER:

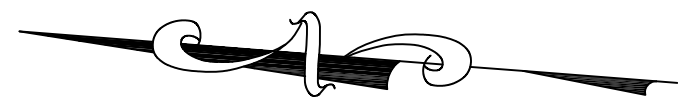


Planning & Economic Development · Permitting · Project Management

OWNERS:

TOWN OF ST. GEORGE
3 SCHOOL STREET
P.O. BOX 131
TENANTS HARBOR, ME,
04860-0131





EX.CONCRETE INFILL REMOVED

CONCRETE TO BE BROKEN INTO 6'X6' BLOCKS
USED IN INFILL IN LOWER 1/3RD OF SECTION

TIMBER CRIBWORK TO REMAIN

EXISTING CONCRETE
TO BE REMOVED
CONCRETE MAY BE
SET FLUSH AND IN
INFILL AREAS IN
LOWER THIRD OF FILL

EXISTING BOAT RAMP

EXISTING CONCRETE TO BE REMOVED
CONCRETE MAY BE SET FLUSH AND IN
INFILL AREAS IN LOWER THIRD OF FILL

STORMWATER AND EROSION CONTROL NOTES:

- 1.CLEANING AND MAINTENANCE OF EQUIPEMENT MUST OCCUR
OUTSIDE OF 75' FROM HIGHWATERLINE.
NO DEGREASERS, POWERWASHING OR FUELING MAY OCCUR
ADJACENT TO WATER.
2. EROSION CONTROL MEASURES SUCH AS SILT FENCE AND HAY
BALES SHALL BE INSTALLED AND *MAINTAINED* DOWNGRADIENT OF
ALL DISTURBED SOILS. ALL EROSION CONTROL TO BE INSPECTED
BEFORE AND FOLLOWING ALL RAIN EVENTS.
3. WITHIN 7 CALENDER DAYS FOLLOWING THE COMPLETION OF ANY
SOIL DISTURBANCE, AND PRIOR TO ANY STORM EVENT, MULCH
MUST BE SPREAD ON ANY EXPOSED SOILS.
3. SITE CONSTRUCTION MUST ADHERE TO MAINE DEP BEST
MANAGEMENT PRACTICES FOR EROSION CONTROL, OCTOBER 2016,
OR AS AMENDED.
5. ENGINEERS INSPECTION REQUIRED DURING CONSTRUCTION.

NOTE:

1. THIS PLAN SHOWS MAJOR DEMOLITION TASKS. THERE
WILL BE MINOR PREPARATION OF INDIVIDUAL AREAS
REQUIRED FOR FULL PROJECT INSTALLATION.
2. THE SEQUENCING OF DEMOLITION SHALL BE PROVIDED
IN WORK PLAN PROVIDED BY CONTRACTOR FOLLOWING
CONTRACT SIGNING AND AS PART OF THE PRE
CONSTRUCTION DOCUMENTATION OF THE PROJECT. NOT
ALL PORTIONS OF DEMOLITION ARE REQUIRED TO BE
PERFORMED CONSECUTIVELY
3. CONTRACTOR SHALL INCLUDE 6 FT CHAIN LINK
SECURITY FENCING AND GATES. WHICH WILL BE MODULAR
AND MOVED AROUND THE WORK AREA TO ACCOMODATE
THE USE OF THE EXISTING CONCRETE WHARF AREA TO
REMAIN.

PLAN NOTES:

1. SITE ELEVATION DATUM IS NGVD 29.
2. TIDAL CONTOURS SHOWN IN MINUS (-) DESIGNATION
ARE MINUS INDICATED FEET FROM MEAN WATER. HIGHEST
ANNUAL TIDE ON NGVD DATUM IS ELEV + 6.89'. MEAN
LOW OF THE LOWEST WATERS MLLW IS ELEV. -5.61'

GRAPHIC SCALE



1" = 20'

NORTH

SOUTH

WEST

EAST

**SAW CAUT AND REMOVE EXISTING
PAVEMENT**

EXISTING EXISTING PAVEMENT TO REMAIN UNTIL
CONSTRUCTION COMPLETE. SAW CUT AT CONNECTION
WITH COLD STORAGE ROAD AND PAVEMENT REMOVED
ALONG EXISTING PARKING AREA.

NOTE ADDITIONAL SAWCUT AND PAVEMENT FOR TRENCH OF WATERMAIN
REQUIRED INTO COLD STORAGE ROAD.

EX. RIP RAP EMBANKMENT

EXISTING LARGE DIA. RIP RAP REMOVED
DOWN TO EL. 6.0 TO CONFORM WITH R-2
OF SHEETING PILE PLAN. TOP 48" OF INFILL TO
MATCH WATERMAIN TRENCH DETAIL AND PAVING
DETAIL TO PREPARE SUBGRADE FOR PAVING AND
PREVENT STONE BREAKTHROUGH AND DIFFERENTIAL
SETTLEMENT AT NEW AND EXISTING INTERFACE.

**SEDIMENTATION
CONTROL**

TURBIDITY CURTAIN INSTALLED AND MAINTAINED
DURING LAND BASED ACTIVITIES.
TRITON HD-TYPE 3 OR APPROVED EQUAL
CONTINUOUS FOR FULL PROJECT FRONTAGE
CONTAINMENT. SUBMITTAL REQ'D

**PORT
CLYDE
HARBOR**

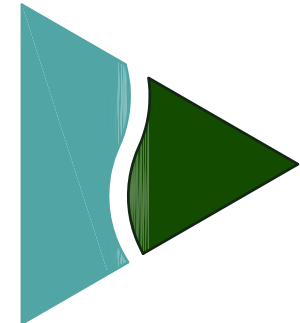
**CUT AND REMOVE EXISTING
CONCRETE CURBING**

EXISTING CONCRETE CURBING TO BE CUT AND
REMOVED. CONCRETE CAN BE USED AS BASE
FOR AREAS OF INFILL. ALL WOOD AND STEEL REMOVED
FROM SITE AND LAWFULLY DISPOSED OF.

**EXISTING AND DEMOLITION PLAN
10 COLD STORAGE ROAD**

RECORD OWNER
TOWN OF ST. GEORGE,
KNOX COUNTY, MAINE

G.F. Johnston & Associates
Consulting Civil Engineers
P.O. Box 197
Southwest Harbor, Maine 04679
207-244-1200



DATE:
MARCH 13TH, 2020

SCALE:
1" = 20'

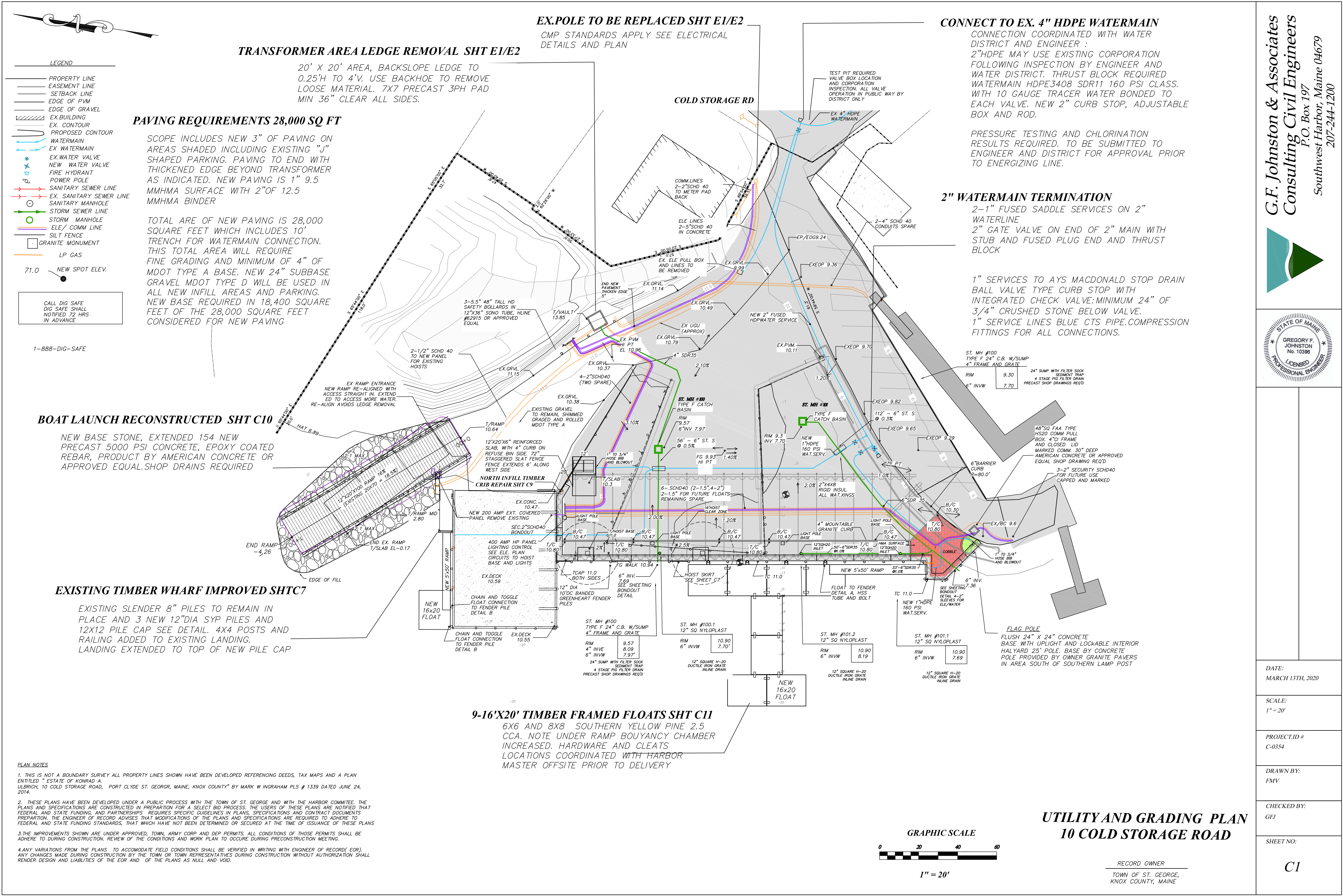
PROJECT ID #
C-0354

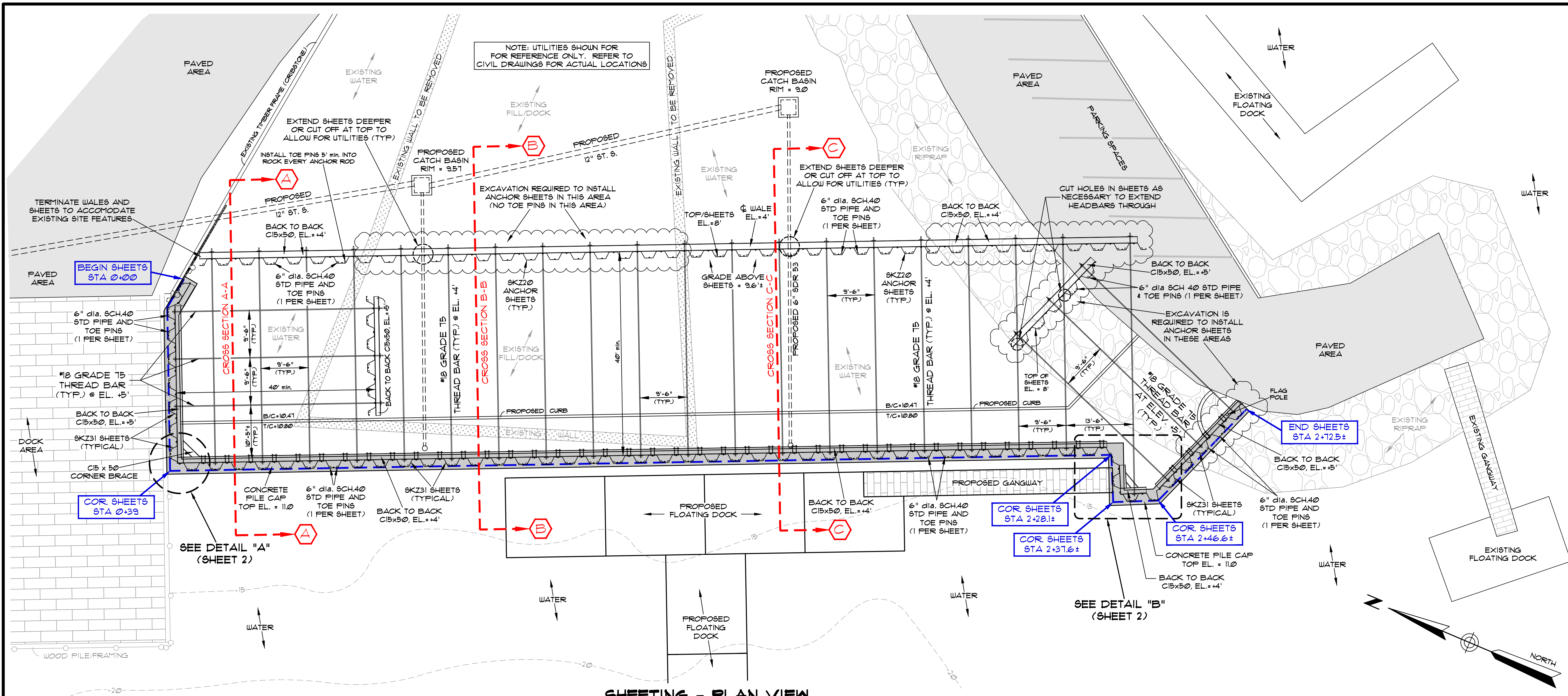
DRAWN BY:
FMV

CHECKED BY:
GFI

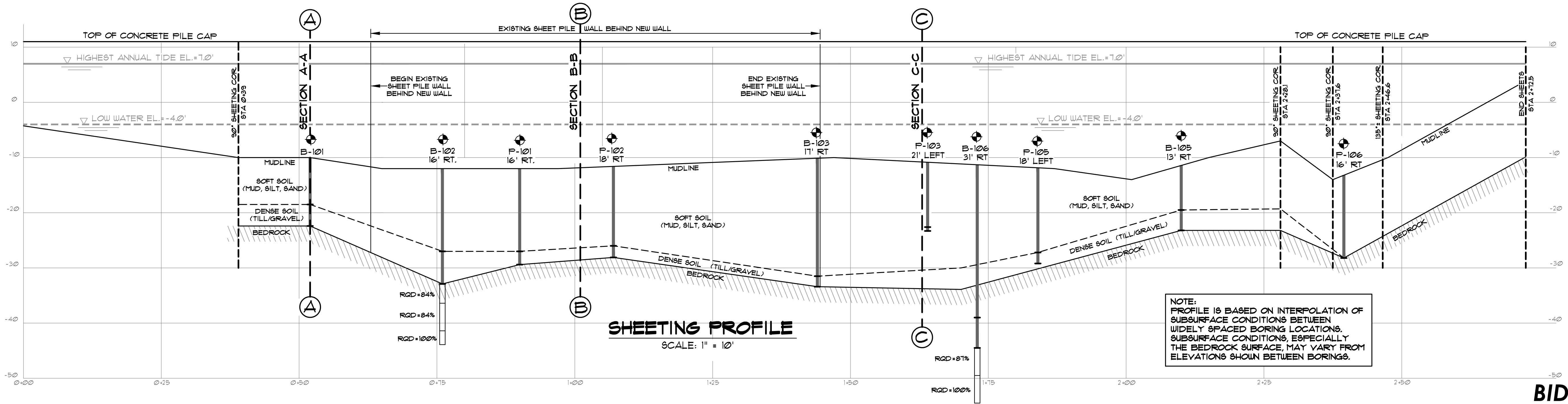
SHEET NO:

D-1





SHEETING - PLAN VIEW
SCALE: 1" = 10'

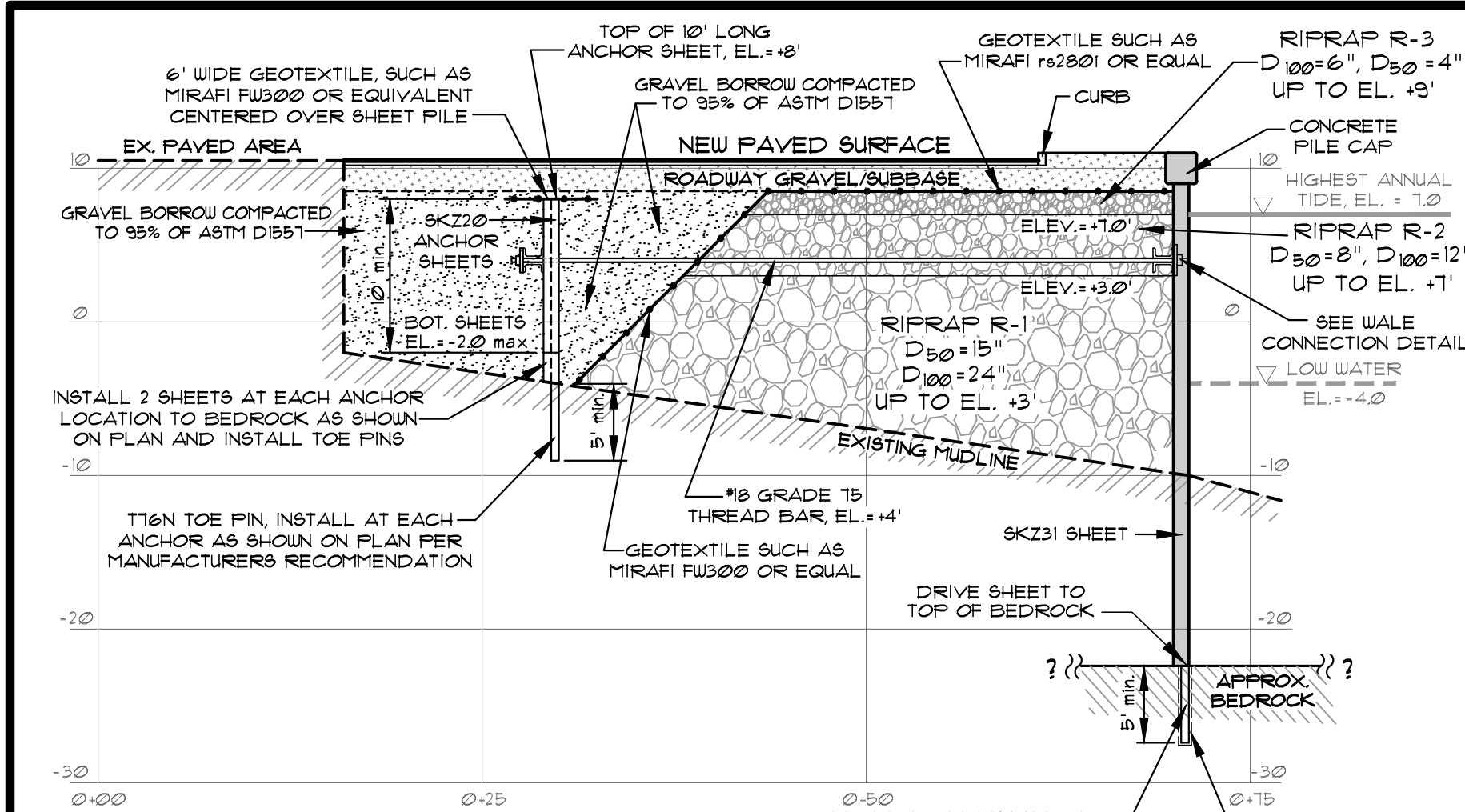


SHEETING PROFILE
SCALE: 1" = 10'

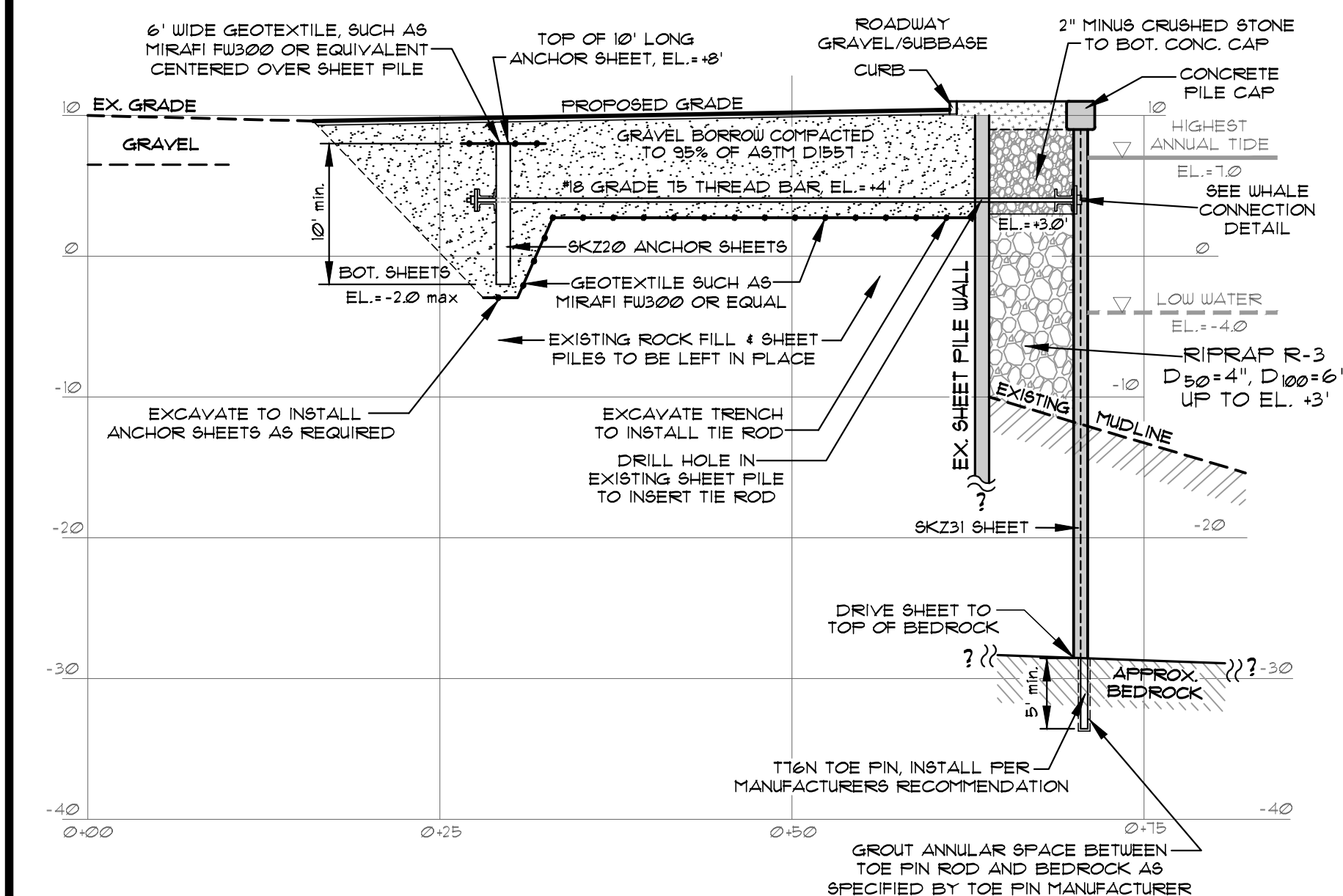
NOTE:
PROFILE IS BASED ON INTERPOLATION OF
SUBSURFACE CONDITIONS BETWEEN
WIDELY SPACED BORING LOCATIONS.
SUBSURFACE CONDITIONS, ESPECIALLY
THE BEDROCK SURFACE, MAY VARY FROM
ELEVATIONS SHOWN BETWEEN BORINGS.

PROJECT:		SHEET TITLE:		NO.		REVISION		DATE	
HARBOR & WHARF IMPROVEMENTS		SHEETING PLAN							
PROJECT:		SCALE: AS NOTED		DRAWN BY: KRF		CHECKED BY: JWP			
COLD STORAGE ROAD - PORT CLYDE - ST. GEORGE, ME		DATE: MARCH 3, 2020							
CLIENT:		TOWN OF ST. GEORGE							
3 SCHOOL STREET - ST. GEORGE, ME 04860									
173 PLEASANT STREET ROCKLAND, ME 04841 Tel.: (207) 318-1161		SUMMIT ENGINEERING SERVICES							
145 LEBRON ST. - SUITE 601 LEWISTON, ME 04240 Tel.: (207) 516-3313		STATE OF MAINE WILLIAM M. PETERLEIN 15181 LICENSED PROFESSIONAL ENGINEER							
PROJECT # - 173511		SHEET		2					

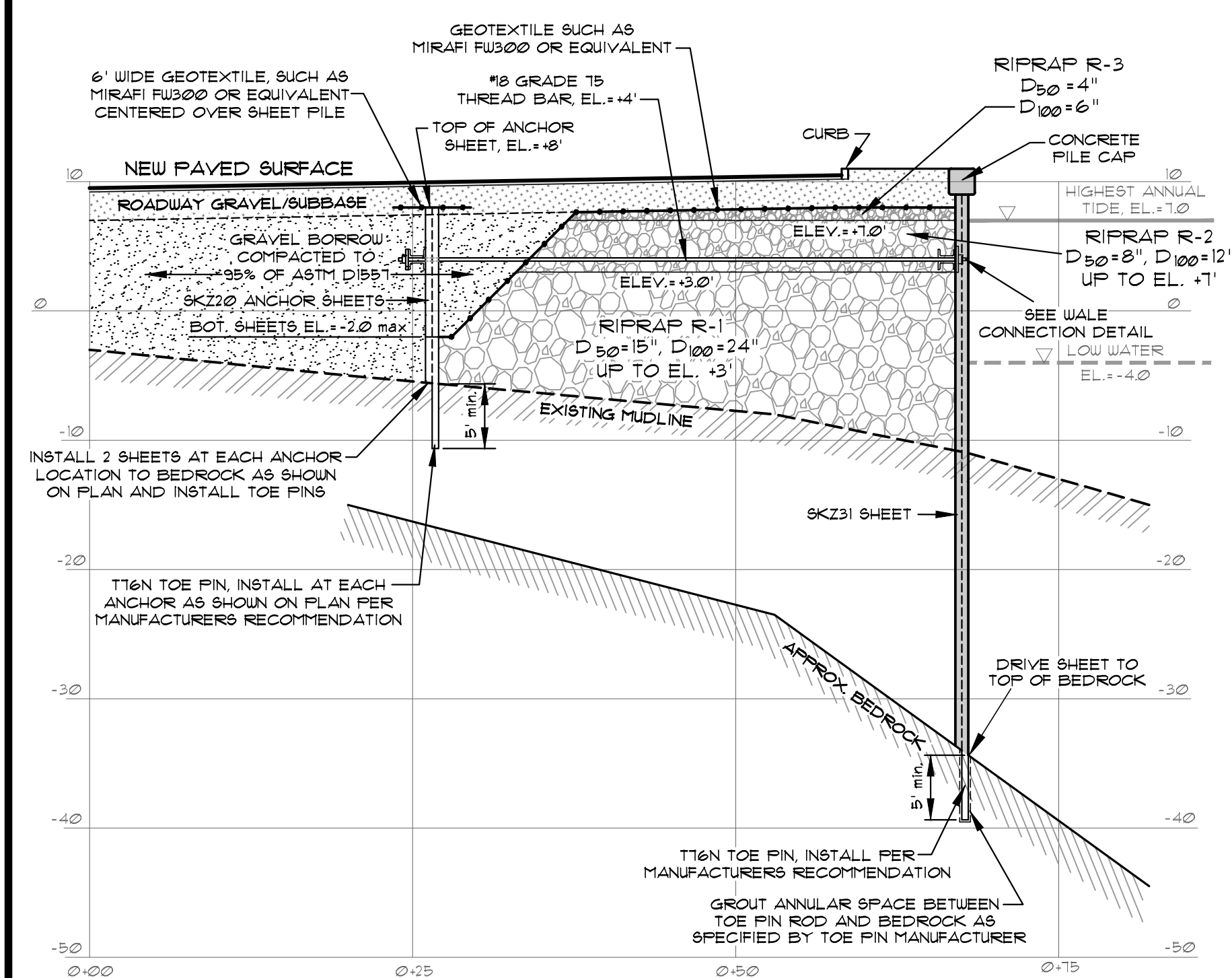
BID SET
"FOR CONSTRUCTION" DRAWINGS
WILL BE PROVIDED AFTER BIDDING



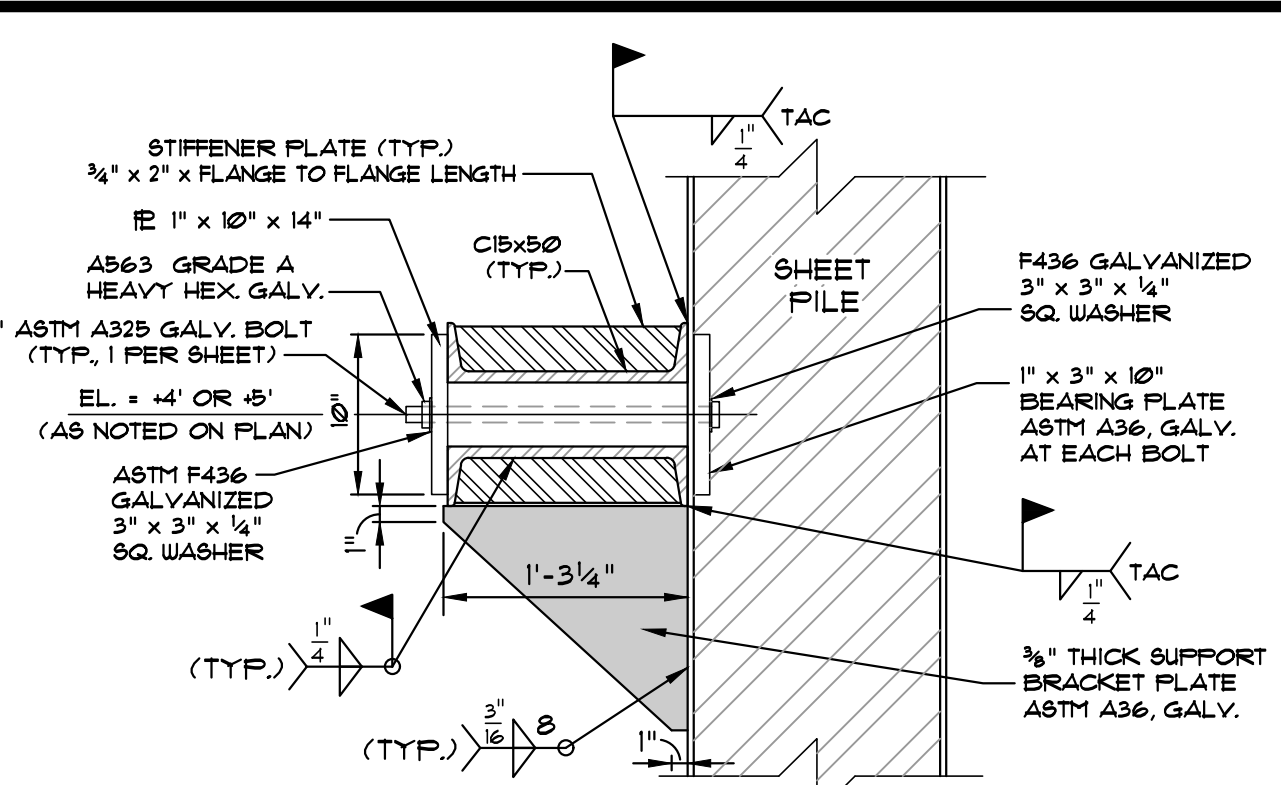
CROSS SECTION A-A
SCALE: 1" = 10'



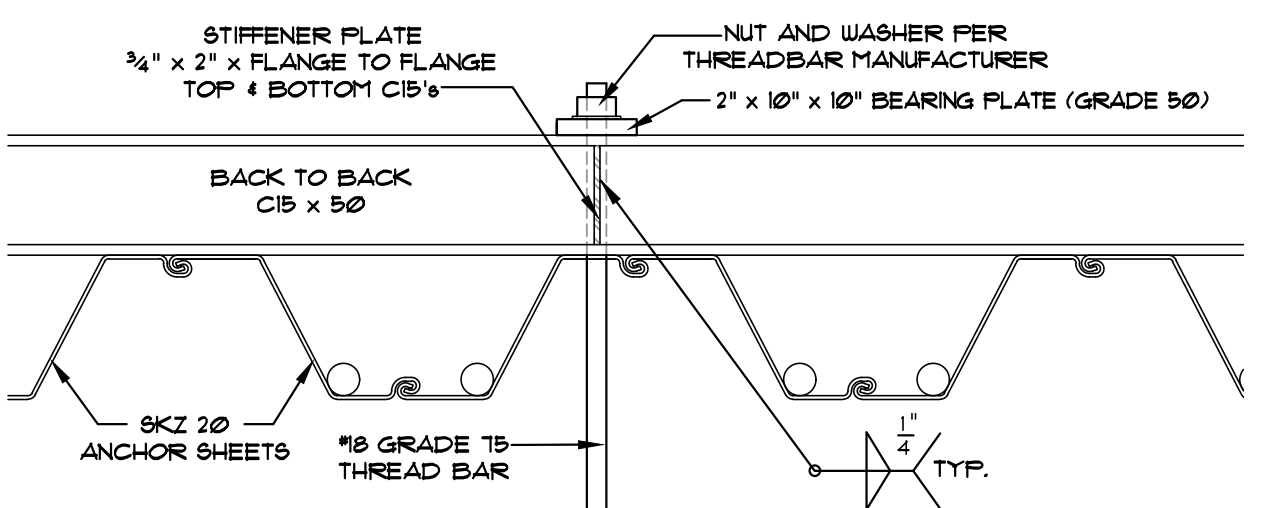
CROSS SECTION B-B AT ANCHOR TRENCH
SCALE: 1" = 10'



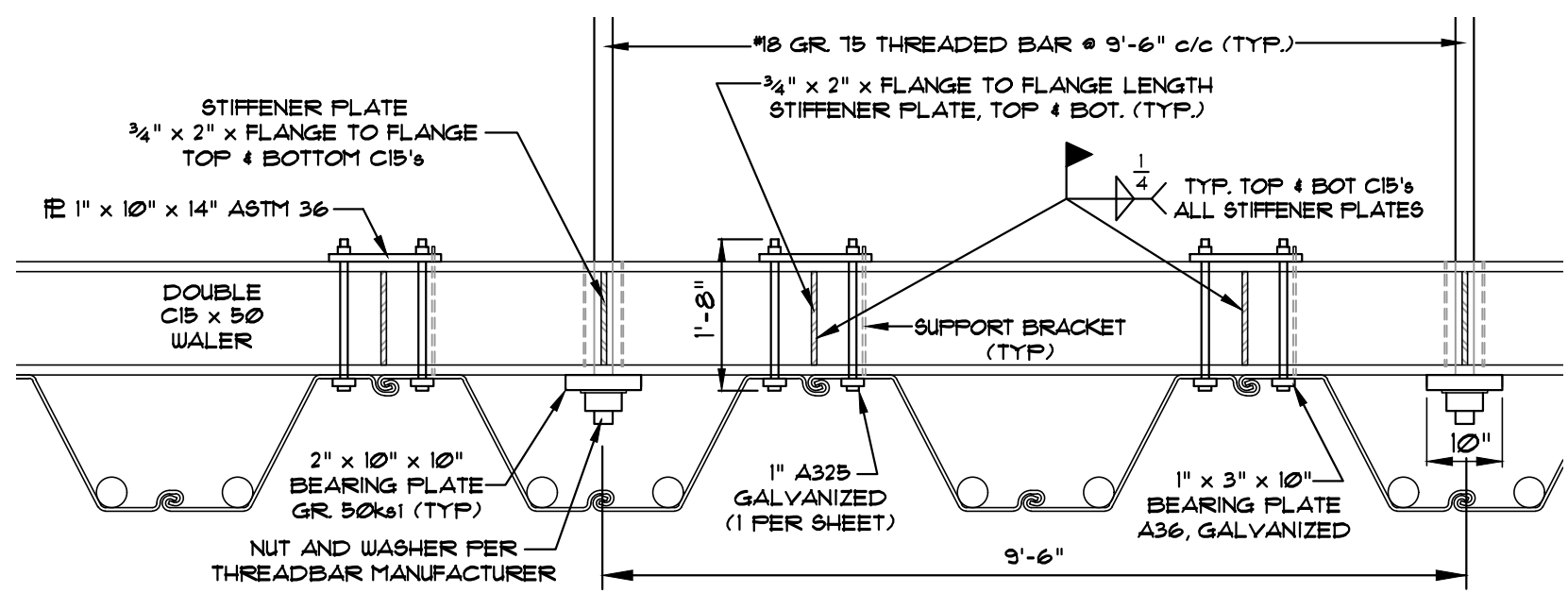
CROSS SECTION C-C
SCALE: 1" = 10'



WALE CONNECTION DETAIL - SECTION
1" = 1'-0"



ANCHOR SHEETS CONNECTION DETAIL
1/2" = 1'-0"



WALE CONNECTION DETAIL - PLAN
1/2" = 1'-0"

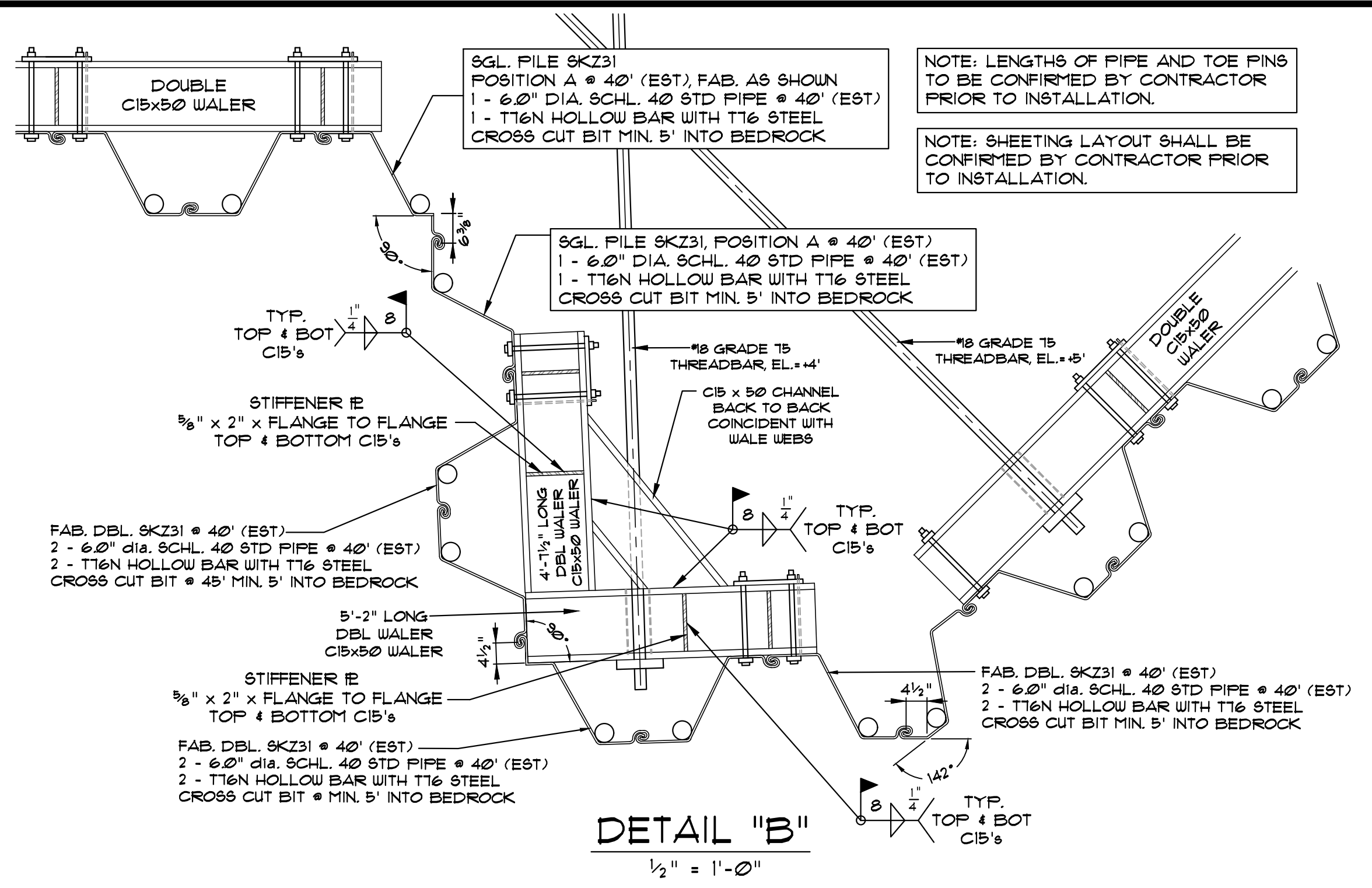
GENERAL NOTES

- 1) SHEET PILE LAYOUT BASED ON A PLAN ENTITLED "GRADING AND STORMWATER MANAGEMENT PLAN, 10 COLD STORAGE ROAD", DATED JULY 30, 2019, PREPARED BY G.F. JOHNSTON & ASSOCIATES.
- 2) IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE ALL PLANS, APPROVALS, AND DETAILS. THE CONTRACTOR SHALL VERIFY THE SITE CONDITIONS IN THE FIELD AND CONTACT THE ENGINEER IF ANY DISCREPANCIES REGARDING THE CONSTRUCTION DOCUMENTS AND/OR FIELD CONDITIONS SO THAT APPROPRIATE REVISIONS CAN BE MADE PRIOR TO BIDDING.
- 3) THE WORK SHALL CONFORM TO ALL APPLICABLE OSHA STANDARDS. ANY REFERENCE TO A SPECIFICATION OR DESIGNATION OF ASTM OR OTHER STANDARDS AND CODES REFERS TO THE MOST RECENT SPECIFICATION OR DESIGNATION.
- 4) ALL MAIN SHEETS SHALL BE DRIVEN TO REFUSAL. THE APPROXIMATE BEDROCK LOCATION IS SHOWN ON THE PROFILE SHOWN ON THESE PLANS. THE BEDROCK LOCATION IS INTERPOLATED FROM WIDELY SPACED BORINGS. THE ACTUAL LENGTH OF THE SHEETING MAY VARY FROM THE PROFILE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE REQUIRED LENGTH OF THE MAIN SHEETS. SPLICES OF SHEETS SHALL NOT BE ALLOWED.
- 5) THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE MAIN SHEETS AND ANCHOR SHEETS WITH OTHER ELEMENTS OF THE CONSTRUCTION TO AVOID UNNECESSARY INTERFERENCES AND CONFLICTS.
- 6) THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR REVIEW AND APPROVAL FOR THE MATERIALS, FABRICATION, AND INSTALLATION OF ALL SHEETING AND ANCHORING SYSTEMS AND THE ASSOCIATED FRAMING, CONNECTIONS, PIPE AND THE PIN DETAILS, AND ALL ANCILLARY ELEMENTS CONNECTED TO AND INTEGRAL WITH THE SHEETING.
- 7) THE CONTRACTOR SHALL PROVIDE AS-BUILT RECORDS OF ALL CONSTRUCTION TO THE OWNER DURING CONSTRUCTION AS INDICATED IN THE PLANS AND SPECIFICATIONS AND AT THE COMPLETION OF CONSTRUCTION.
- 8) ALTERNATIVE PRODUCTS AND METHODS OTHER THAN THOSE SPECIFIED MAY BE USED IF APPROVED IN WRITING BY THE OWNER, ENGINEER, AND APPROPRIATE GOVERNMENTAL AGENCY PRIOR TO INSTALLATION.
- 9) THESE PLANS WERE DEVELOPED IN CONJUNCTION WITH THE TOWN OF ST. GEORGE IN A SELECT BID PROCESS. THE ENGINEER RESERVES THE RIGHT TO ADJUST THE PLANS AND SPECIFICATIONS TO COMPLY WITH ANY STATE OR FEDERAL REGULATIONS WHICH WERE NOT APPLICABLE IN THE SELECT BID PROCESS.

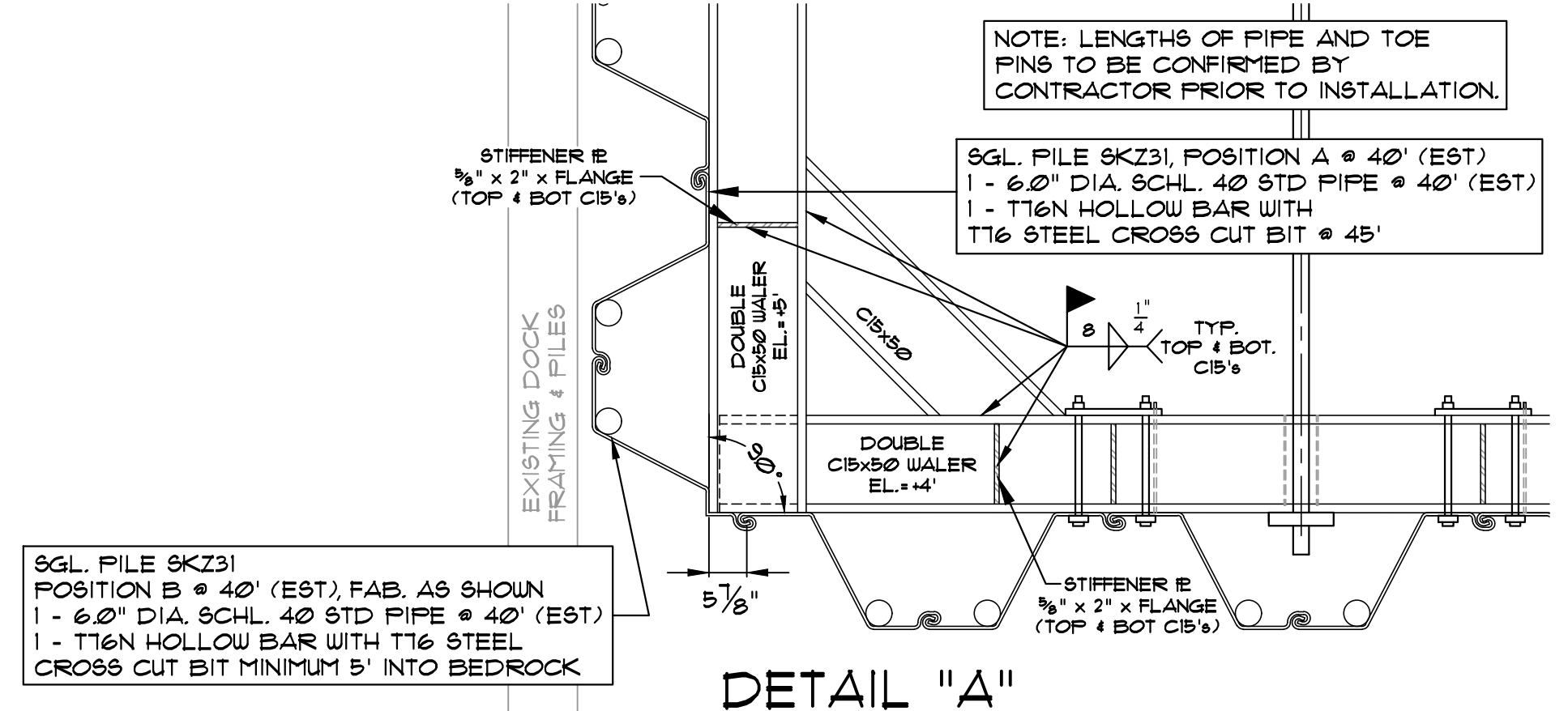
MATERIALS

- 1) MAIN SHEETS SHALL BE NEW AND UNDamAGED AND SHALL CONFORM TO ASTM A630, GRADE 50.
- 2) ANCHOR SHEETS SHALL BE NEW AND UNDamAGED AND SHALL CONFORM TO ASTM A328, GRADE 50.
- 3) STEEL FOR WALES SHALL CONFORM TO ASTM A572 (MINIMUM YIELD STRENGTH = 50 KSI).
- 4) STEEL PLATES, STIFFENERS, AND SUPPORT BRACKETS SHALL CONFORM TO ASTM A36 (MINIMUM YIELD STRENGTH = 30 KSI). THESE ELEMENTS SHALL BE GALVANIZED WHERE NOTED ON THE PLANS.
- 5) BOLTS FOR WALE TO SHEET CONNECTION SHALL BE GALVANIZED AND MEET THE REQUIREMENTS OF ASTM A325.
- 6) WASHERS SHALL BE GALVANIZED AND MEET THE REQUIREMENTS OF ASTM F436.
- 7) NUTS SHALL BE GALVANIZED AND MEET THE REQUIREMENTS OF ASTM A563, GRADE A, HEAVY HEX.
- 8) STEEL PIPES FOR TOE PINS SHALL CONSIST OF 6" DIAMETER SCHEDULE 40 STANDARD PIPE MEETING THE REQUIREMENTS OF ASTM A53 OR AS RECOMMENDED BY THE SUPPLIER OF THE TOE ANCHOR SYSTEM.
- 9) SHEETS SHALL BE ANCHORED TO BEDROCK WITH TOE PINS EMBEDDED A MINIMUM OF 5 FEET INTO SOLID BEDROCK AND SURROUNDED BY A MINIMUM OF 2 INCHES OF NON-SHRINK SALT WATER RESISTANT GROUT (MIN 28 DAY COMPRESSIVE STRENGTH = 5 KSI). TOE PINS SHALL BE DESIGNED TO SUPPORT A MINIMUM HORIZONTAL WORKING LOAD OF 20 TONS PER PIN.
- 10) THREAD BARS FOR ANCHORS SHALL MEET THE REQUIREMENTS OF ASTM A615 AND HAVE A MINIMUM YIELD STRENGTH OF 75 KSI. THREAD BARS SHALL HAVE CAPACITY TO SUPPORT A MINIMUM WORKING LOAD OF 10 TONS PER ANCHOR. A MINIMUM CORROSION LIFE OF 75 YEARS SHALL BE CONSIDERED IN THE THREAD BAR SIZING.
- 11) PLATES, WASHERS, AND NUTS FOR THREAD BAR ANCHORS SHALL BE AS SPECIFIED/SUPPLIED BY THE THREAD BAR MANUFACTURER AND SHALL MEET THE PERTINENT REQUIREMENTS OF ASTM A41, A336, A108, A516, AND F436. FABRICATION DRAWINGS/DETAILS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO SHIPPING.
- 12) ALL WELDS SHALL CONFORM TO AWS D11 PROCEDURES, E70XX ELECTRODES.
- 13) RIP RAP FOR ROCK FILL SHALL CONSIST OF HARD DURABLE ROCK THAT WILL NOT DISINTEGRATE BY EXPOSURE TO SALT WATER. ROCKS SHALL BE ANGULAR AND ROUGH. ROCK FILL SHALL NOT CONTAIN ROUNDED, SUBROUNDED, OR LONG THIN STONES. THE MAXIMUM ALLOWABLE LENGTH TO THICKNESS RATIO SHALL BE 3:1. ROCK FILL SHALL MEET THE FOLLOWING SIZE REQUIREMENTS.

SIZE DESIGNATION	R-1	R-2	R-3
D50	24	12	6
D100	1000	150	15
D50	15	8	4
D10	8	50	2



DETAIL "B"
1/2" = 1'-0"



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

14) 2" MINUS STONE SHALL CONSIST OF CRUSHED ANGULAR PARTICLES MEETING THE FOLLOWING GRADATION REQUIREMENTS (MDOT 103.31)

SIEVE SIZE	PERCENT FINER
2 1/2"	100
2"	95 - 100
1 1/2"	0 - 30
3/4"	0 - 5

15) GRAVEL BORROW SHALL MEET THE REQUIREMENTS OF MDOT 103.30. THE PERCENT OF PARTICLES PASSING THE 3" SIEVE SHALL MEET THE FOLLOWING GRADATION REQUIREMENTS. THE MAXIMUM PARTICLE SIZE SHALL BE LIMITED TO 6 INCHES.

SIEVE SIZE	PERCENT FINER
3"	100
1 1/2"	0 - 10
No. 200	0 - 10

16) GEOTEXTILE SHALL CONSIST OF MIRAFI F3000 OR APPROVED EQUIVALENT HAVING A MINIMUM CBR PUNCTURE STRENGTH OF 1250 POUNDS.

CONSTRUCTION

- 1) DEMOLITION OF EXISTING SITE FEATURES AND ELEMENTS SHALL BE IN ACCORDANCE WITH THE CIVIL PLANS AND WHERE NOTED ON THESE PLANS AS REQUIRED TO AVOID CONFLICTS WHEN CONSTRUCTING THE SHEETING AND SHORING SYSTEMS.
- 2) INSTALLATION SEQUENCING AND TECHNIQUES ARE CONSIDERED MEANS AND METHODS AND ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL SUBMIT A SEQUENCING AND INSTALLATION PLAN FOR THE MAIN SHEETS, ANCHOR SHEETS, TIE RODS, AND BACKFILLING TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO BEGINNING CONSTRUCTION.
- 3) ALL MAIN SHEETS AND ANCHOR SHEETS WHERE NOTED SHALL BE DRIVEN TO BEDROCK. THE CONTRACTOR SHALL RECORD THE LENGTH OF EACH SHEET AND CONFIRM BEDROCK HAS BEEN REACHED. AN AS BUILT RECORD OF THE TIP ELEVATION OF EACH SHEET SHALL BE PROVIDED TO THE ENGINEER. IN THE EVENT BEDROCK CANNOT BE REACHED, THE CONTRACTORS SHALL NOTIFY THE ENGINEER AS SOON AS POSSIBLE.
- 4) STEEL PIPE SLEEVES AND TOE PINS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS WHERE APPLICABLE. WHERE EXPLICIT INSTALLATION TECHNIQUES ARE NOT PROVIDED BY THE MANUFACTURER OR WHERE THE CONTRACTOR DESIRES TO DEVIATE FROM THE MANUFACTURERS RECOMMENDATIONS, THE CONTRACTOR SHALL SUBMIT A MEANS AND METHODS PLAN TO THE ENGINEER FOR REVIEW PRIOR TO INSTALLATION.
- 5) TOE PINS SHALL BE INSTALLED A MINIMUM OF 5 FEET INTO BEDROCK. THE ANNUAL SPACE BETWEEN THE TOE PIN AND BEDROCK AND THE TOE PIN AND STEEL PIPE SLEEVE SHALL BE GROUTED. THE CONTRACTOR SHALL CONFIRM THAT THE ENTIRE PIN IS SURROUNDED BY GROUT AND SUBMIT SUPPORTING DOCUMENTATION TO THE ENGINEER.
- 6) THE PLACEMENT OF FILL ON THE NATIVE MUD, SILT, AND SAND SOIL WILL RESULT IN SETTLEMENT. DOWN DRAG FORCES ON THE THREAD BAR TIE RODS WILL CREATE UNACCEPTABLE BENDING FORCES IN THE TIE RODS AND MAY LEAD TO FAILURE OF THE RODS. THE CONTRACTOR SHALL SUBMIT A PLAN FOR MINIMIZING THE EFFECTS OF SETTLEMENT ON THE TIE RODS. CONSIDERATION SHOULD BE GIVEN TO, AMONG OTHER THINGS, TIMING OF FILL PLACEMENT, MONITORING OF VERTICAL MOVEMENTS, AND/OR USING ARTICULATING JOINTS FOR THE TIE BACKS. OTHER TECHNIQUES MAY BE APPROPRIATE.
- 7) INSTALLATION OF THE ANCHOR SHEETS WILL REQUIRE OPEN EXCAVATION AND PLACEMENT AND COMPACTION OF IMPORTED GRAVEL BORROW AT THE LOCATIONS SHOWN ON THE PLAN AND AT ALL LOCATIONS ABOVE THE TIE RODS. THE CONTRACTOR SHALL CONFIRM THAT THE FULL LENGTH OF ANCHOR SHEETS (10 FEET) IS ATTAINED. THE CONTRACTOR SHALL PROVIDE PHOTOGRAPHS, MEASUREMENTS, ANCHOR SHEET TIP ELEVATIONS AND OTHER APPROPRIATE DOCUMENTATION TO THE ENGINEER FOR THE RECORD.
- 8) PROVIDE TEMPORARY ERECTION BRACINGS AS REQUIRED TO HOLD STRUCTURAL ELEMENTS IN PLACE UNTIL THEY ARE FULLY STABILIZED.
- 9) FIELD CUTTING AND OTHER MODIFICATIONS OF SHEETS AND STRUCTURAL STEEL SHALL NOT BE MADE WITHOUT PRIOR APPROVAL OF THE ENGINEER.
- 10) CARE SHALL BE TAKEN WHEN PLACING ROCK FILL TO AVOID DAMAGE TO THE SHEETS, TIE RODS AND OTHER ELEMENTS OF THE CONSTRUCTION. IT IS ACCEPTABLE TO END DUMP THE R-1, R-2, AND R-3 ROCK FILL MATERIALS - NO COMPACTION IS NECESSARY. THE FINISHED SURFACE OF THE R-3 ROCK FILL AND 2" MINUS GRAVEL SHALL BE COMPACTED WITH A VIBRATORY COMPACTOR HAVING A MINIMUM OPERATING WEIGHT OF 10 TONS.
- 11) GRAVEL BORROW SHALL BE PLACED IN A MAXIMUM OF 12 INCH LIFTS AND BE COMPACTED TO A MINIMUM OF 95% OF ASTM D1557. THE CONTRACTOR SHALL SUBMIT SAMPLES TO A QUALIFIED TESTING LABORATORY FOR COMPLETION OF GRAIN SIZE ANALYSES AND MOISTURE DENSITY TESTS.
- 12) FIELD DENSITY TESTS SHALL BE PERFORMED BY A QUALIFIED CONSTRUCTION MATERIALS TESTING FIRM ON THE GRAVEL BORROW AS IT IS PLACED AND COMPACTED. THE RESULTS OF TESTS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL ON A TIMELY AND REGULAR BASIS.

BID SET

"FOR CONSTRUCTION" DRAWINGS
WILL BE PROVIDED AFTER BIDDING

CROSS SECTIONS
DETAILS AND NOTES

HARBOR & WHARF
IMPROVEMENTS

PROJECT:
173 FLEASANT STREET
ROCKLAND, ME 04841
Tel.: (207) 318-1161

145 LISBON ST. SUITE 601
LEWISTON, ME 04240
Tel.: (207) 516-3313

SUMMIT
ENGINEERING SERVICES

WILLIAM M. PETERLEIN
LICENSED PROFESSIONAL ENGINEER
STATE OF MAINE

PROJECT # 173511

CROSS SECTIONS
DETAILS AND NOTES

HARBOR & WHARF
IMPROVEMENTS

CLIENT: TOWN OF ST. GEORGE
COLD STORAGE ROAD - PORT CLYDE - ST. GEORGE, ME
3 SCHOOL STREET - ST. GEORGE, ME 04860

SCALE: AS NOTED
DATE: MARCH 9, 2020

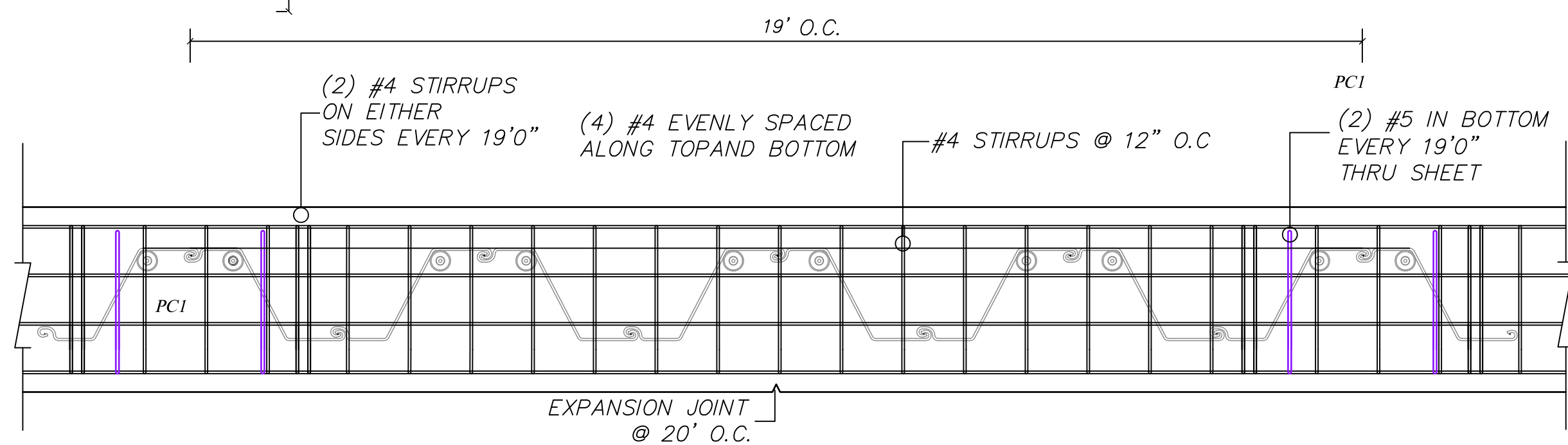
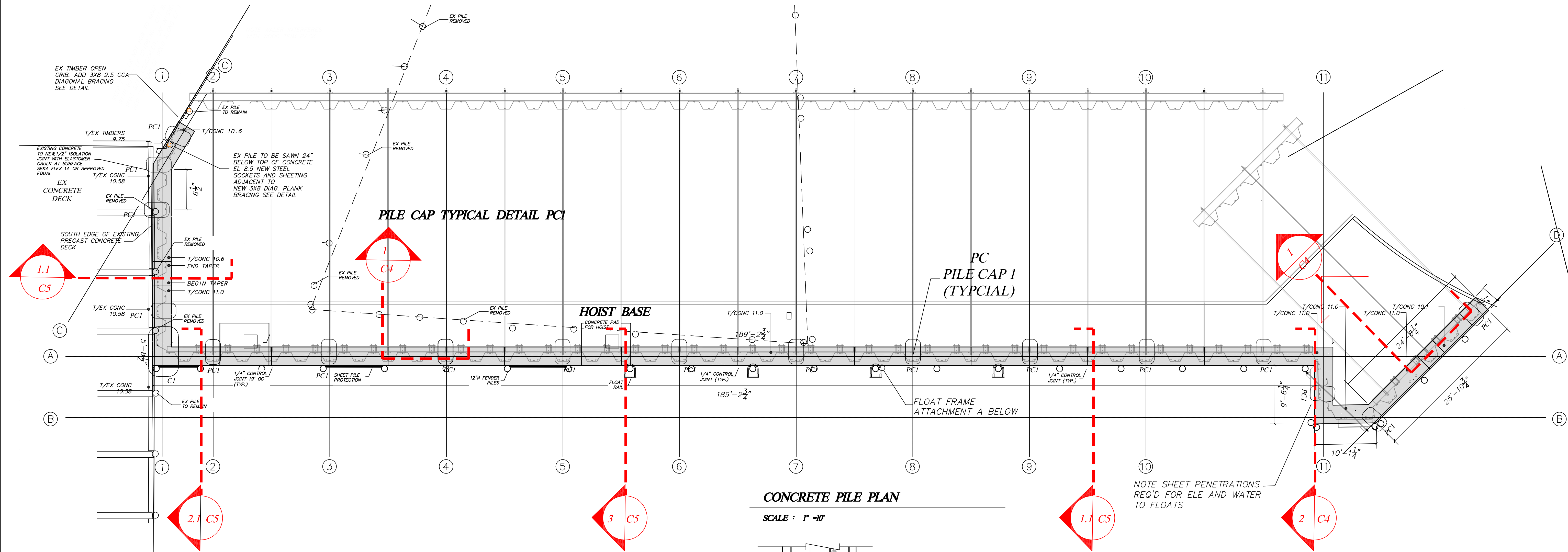
DRAWN BY: KRF
CHECKED BY: JWP

SHEET
3

REVISION

NO.

DATE



- PILE CAP CONCRETE MATERIAL SPECIFICATIONS: HIGH SULFATE RESISTANCE MARINE GRADE CONCRETE
- CONCRETE
 - ULTIMATE COMPRESSIVE STRENGTH AT 28 DAYS PC = 5000 PSI, ACI 318 EXPOSURE CATEGORY S1
 - SUMP/ DESIGNATED COARSE AGGREGATE 4\" +/- 1-3/4\"
 - AIR ENTRAINMENT 5-6% IN ACCORDANCE WITH ACI 318 PROPORTIONED TO AGGREGATE SIZE
 - PLACE CONCRETE IN ACCORDANCE WITH ACI 301
 - ALL CONCRETE WORK TO CONFORM TO ACI 318
 - CALCIUM CHLORIDE BASED ACCELERATE WILL NOT BE ALLOWED.
 - CONCRETE MIX DESIGN SUBMITTAL REQUIRED FROM CONTRACTOR.
 - MAX W/C RATIO 0.40
 - AGGREGATES FRESHWATER WASHED PRIOR TO INTRODUCTION TO MIX.
 - MIX DESIGN SUBMITTAL REQUIRED FOR REVIEW AND APPROVAL BY ENGINEER
 - CURING OF CONCRETE IN ACCORDANCE WITH ACI 318, CURING PROGRAM BASED ON TEMPERATURE OF POOR SUBMITTED FOR REVIEW AND APPROVAL BY ENGINEER. FORMS SHALL REMAIN IN PLACE FOR A MINIMUM OF 48 HOURS AFTER PLACEMENT. CURING TO BE IN ACCORDANCE WITH ACI 308 "GUIDE TO CURING CONCRETE."
 - FORM RELEASE AGENT SHALL BE APPLIED PRIOR TO FORMS. AGENT IS TO AVOID REBAR DURING AGENT APPLICATIONS. REBAR WILL BE FRESHWATER WASHED PRIOR TO POUR.
 - DEPOSIT CONCRETE IN FORMS IN HORIZONTAL LAYERS NOT DEEPER THAN 18\" VIBRATING THE CONCRETE.
 - INSPECTIONS BY ENGINEER PRIOR TO EACH POUR WILL OCCUR. 48 HOURS NOTICE OF POUR SHALL BE MADE. CONCRETE WILL BE SAMPLED AND TESTED, 2 CYLINDERS SHALL BE TAKEN FOR 7, 28 AND 56 DAY BREAKS.
 - REINFORCEMENTS
 - ALL REINFORCEMENTS TO TO BE GRADE 60 EPOXY COATED AND CONFORM TO ASTM A615
 - COMPLETE REINFORCING WORK IN ACCORDANCE WITH ACI 318

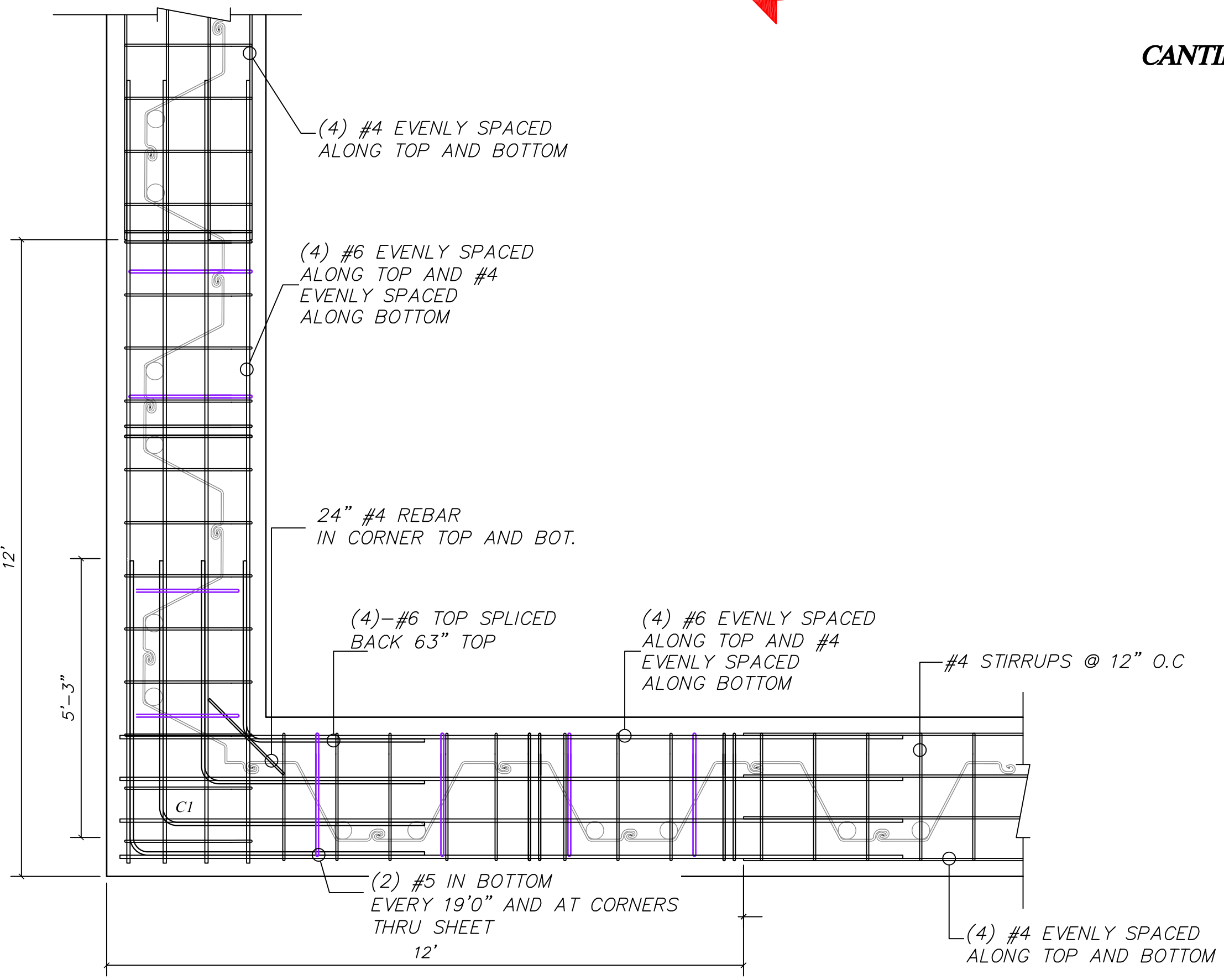
CONCRETE DEVIATION STANDARDS AND TOLERANCES

ITEM	DEVIATION ALLOWED
VERTICAL DEVIATION FOR REINFORCEMENT EMBED	± 1/4"
BEAM THICKNESS DEVIATION	± 3/8"
BEAM SURFACE ELEV DEVIATION	+/- 1/4"
TOP SURFACE OF BEAM WALL VERTICAL DEVIATION	+ 1/2" - 1/2"
FORMED BEAM FACE ALIGNMENT HORIZONTAL DEVIATION	+ 1/4" - 1/4"

DIMENSIONAL VARIANCES PER ACI 117 SECTION 3 APPLY AND AS OTHERWISE NOTED ABOVE.

CONCRETE PILE PLAN

SCALE : 1" = 10'



CANTILEVER CORNER DETAIL

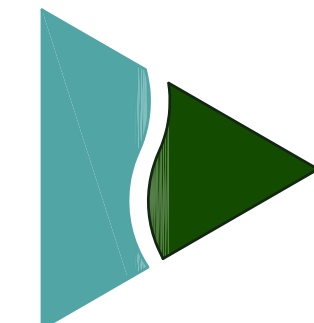
SCALE : 1/2" = 1'

CANTILEVER CORNER DETAIL

CONCRETE PILE CAP

RECORD OWNER
TOWN OF ST. GEORGE,
KNOX COUNTY, MAINE

C.F. Johnston & Associates
Consulting Civil Engineers
P.O. Box 197
Southwest Harbor, Maine 04679
207-244-1200



DATE:
MARCH 13TH, 2020

SCALE:
AS MARKED

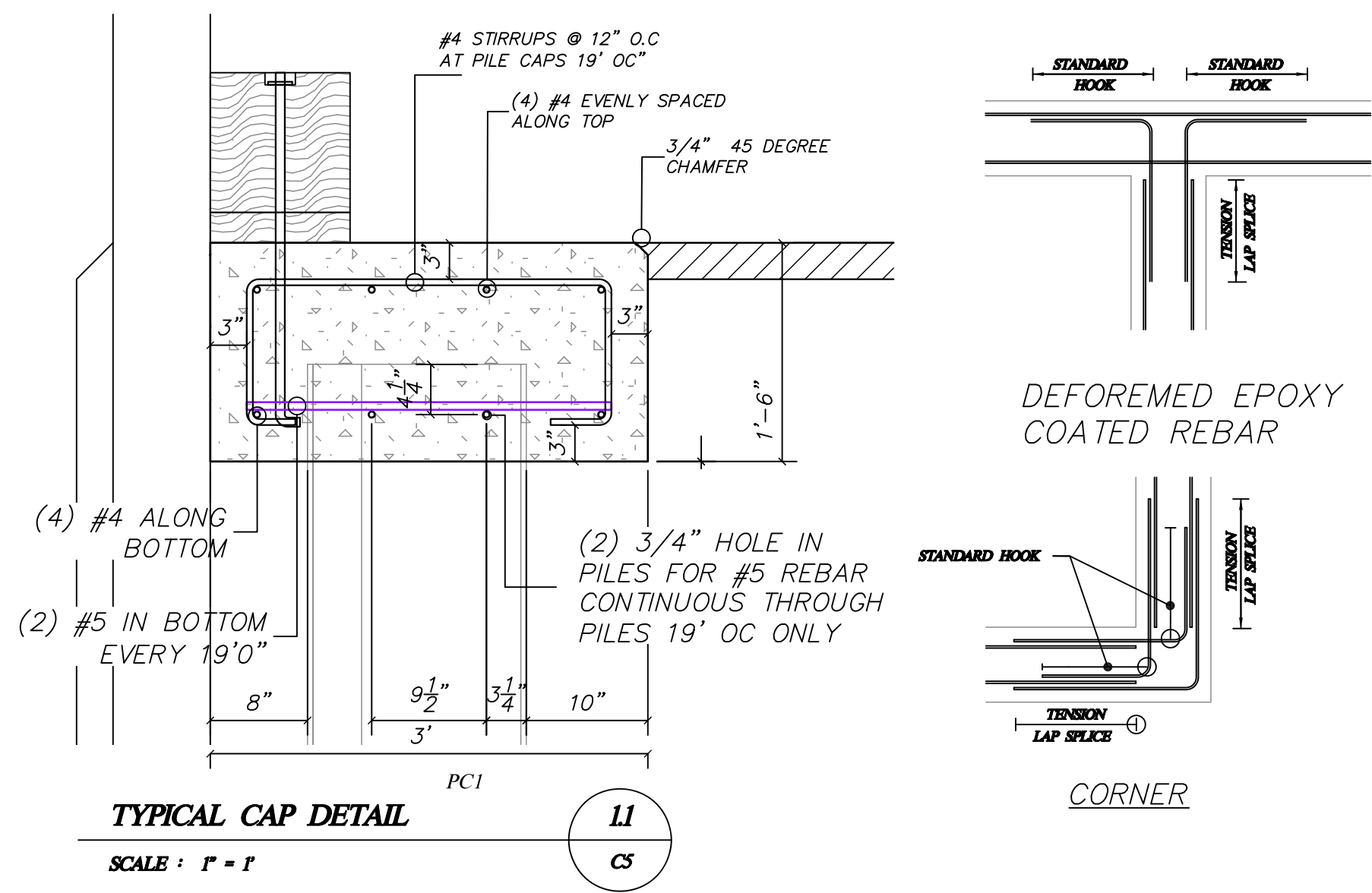
PROJECT ID #
C-0354

DRAWN BY:
FMV

CHECKED BY:
GFJ

SHEET NO:

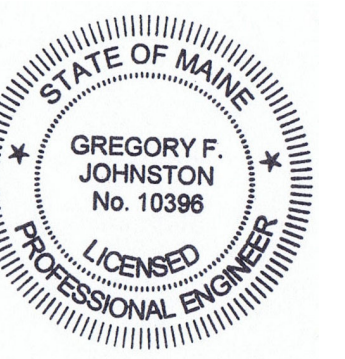
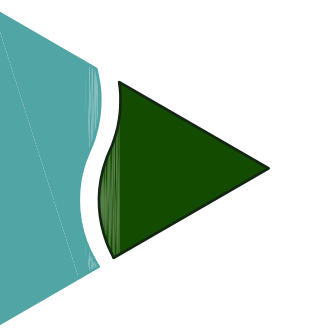
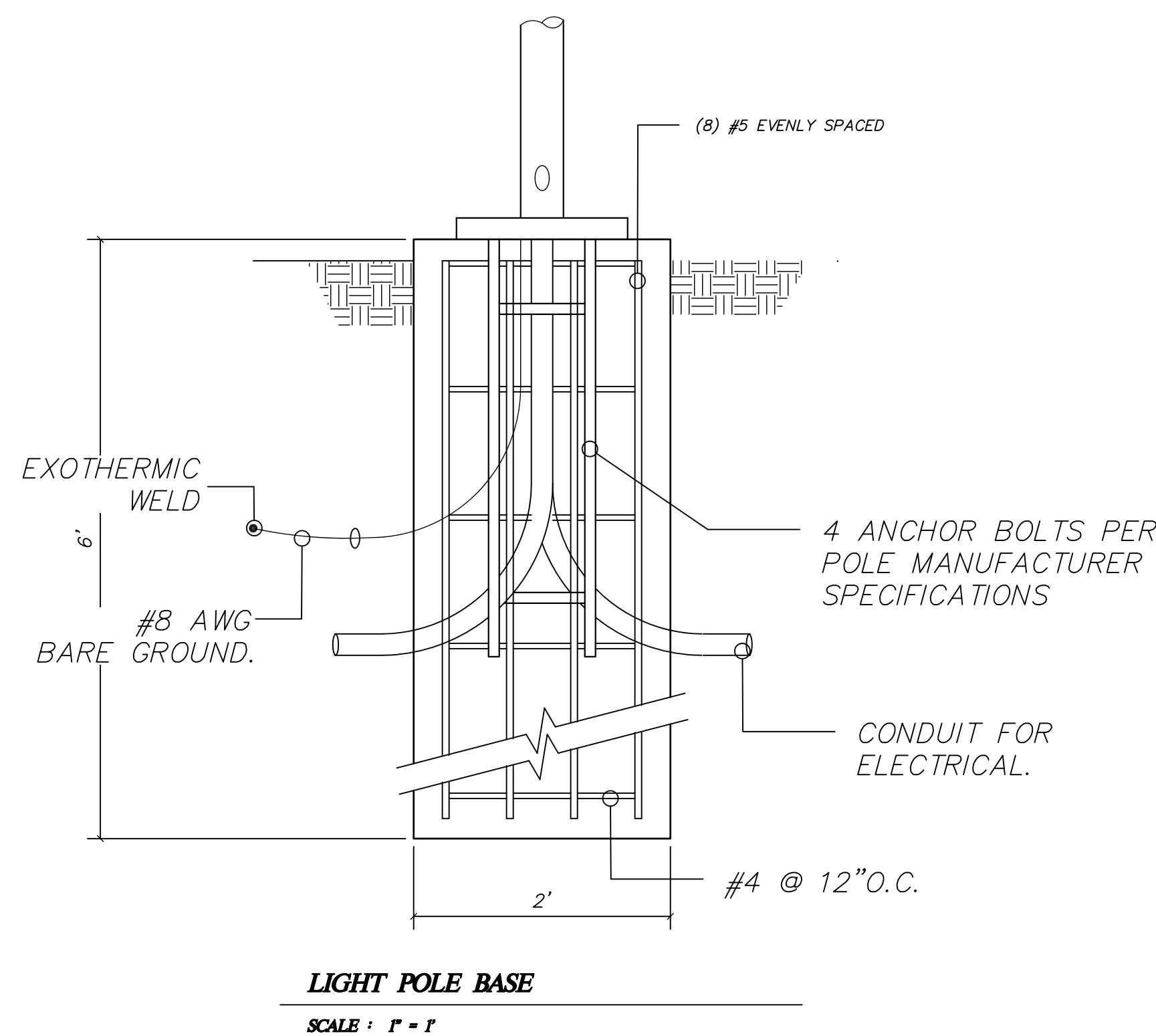
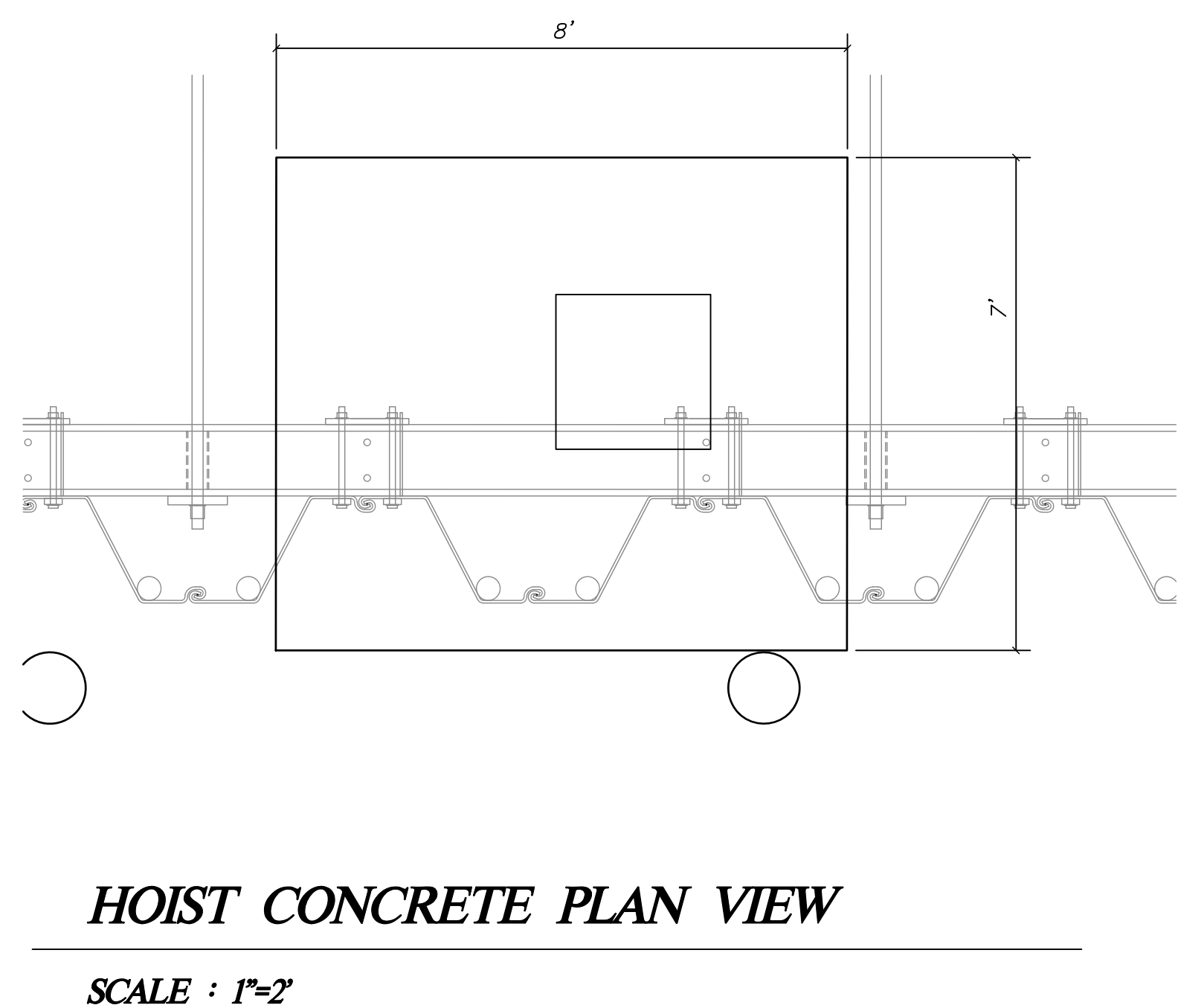
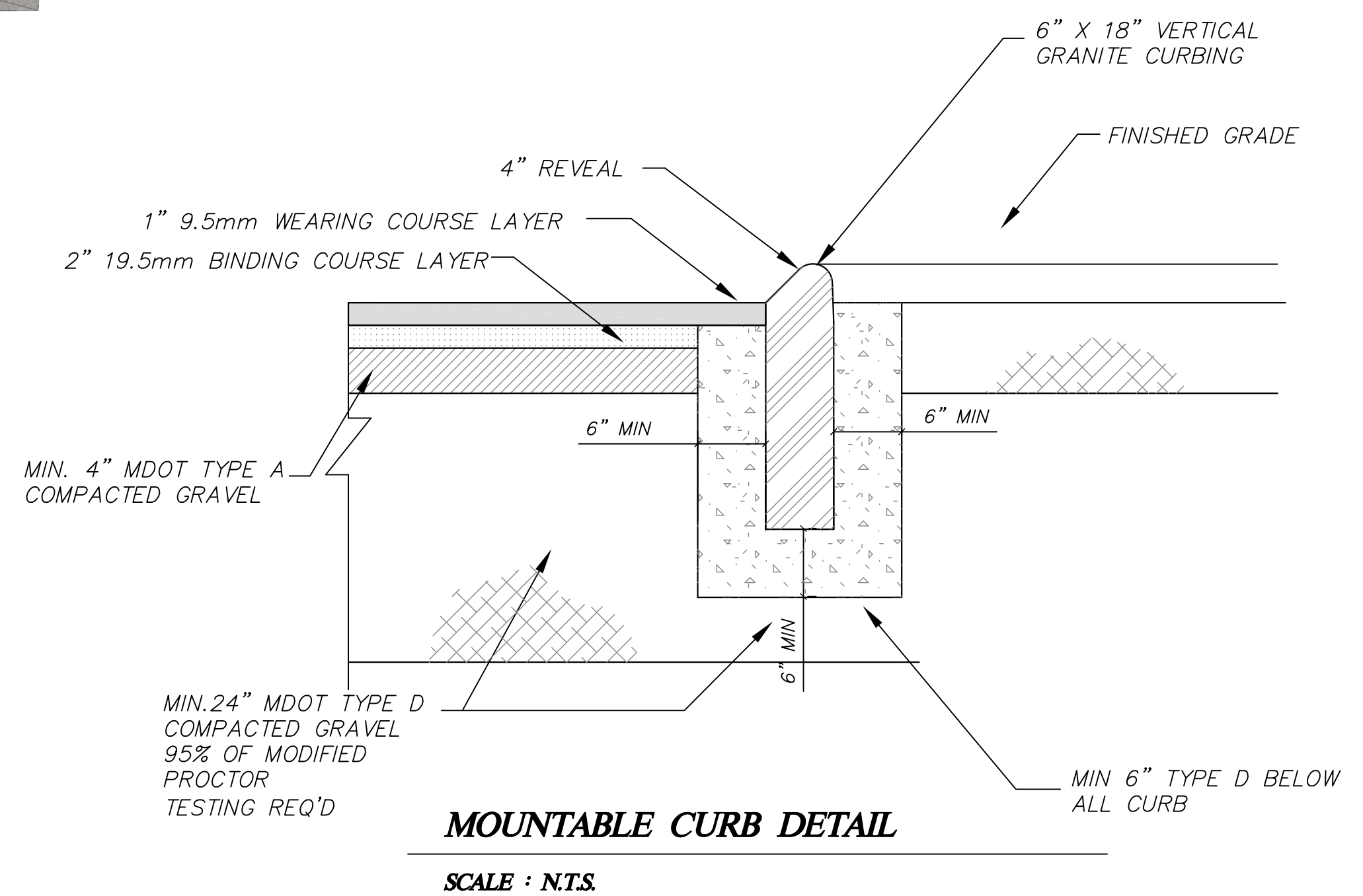
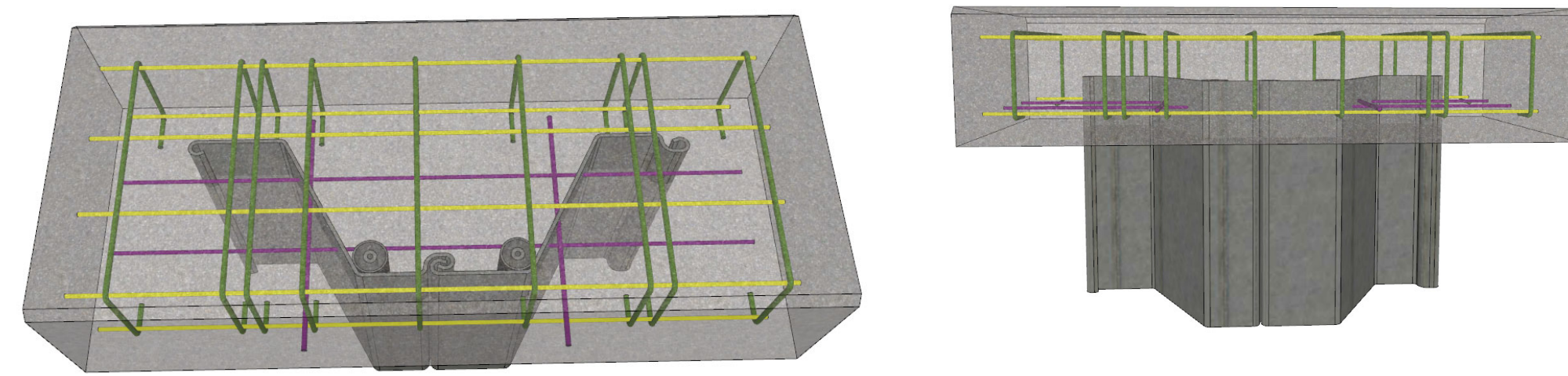
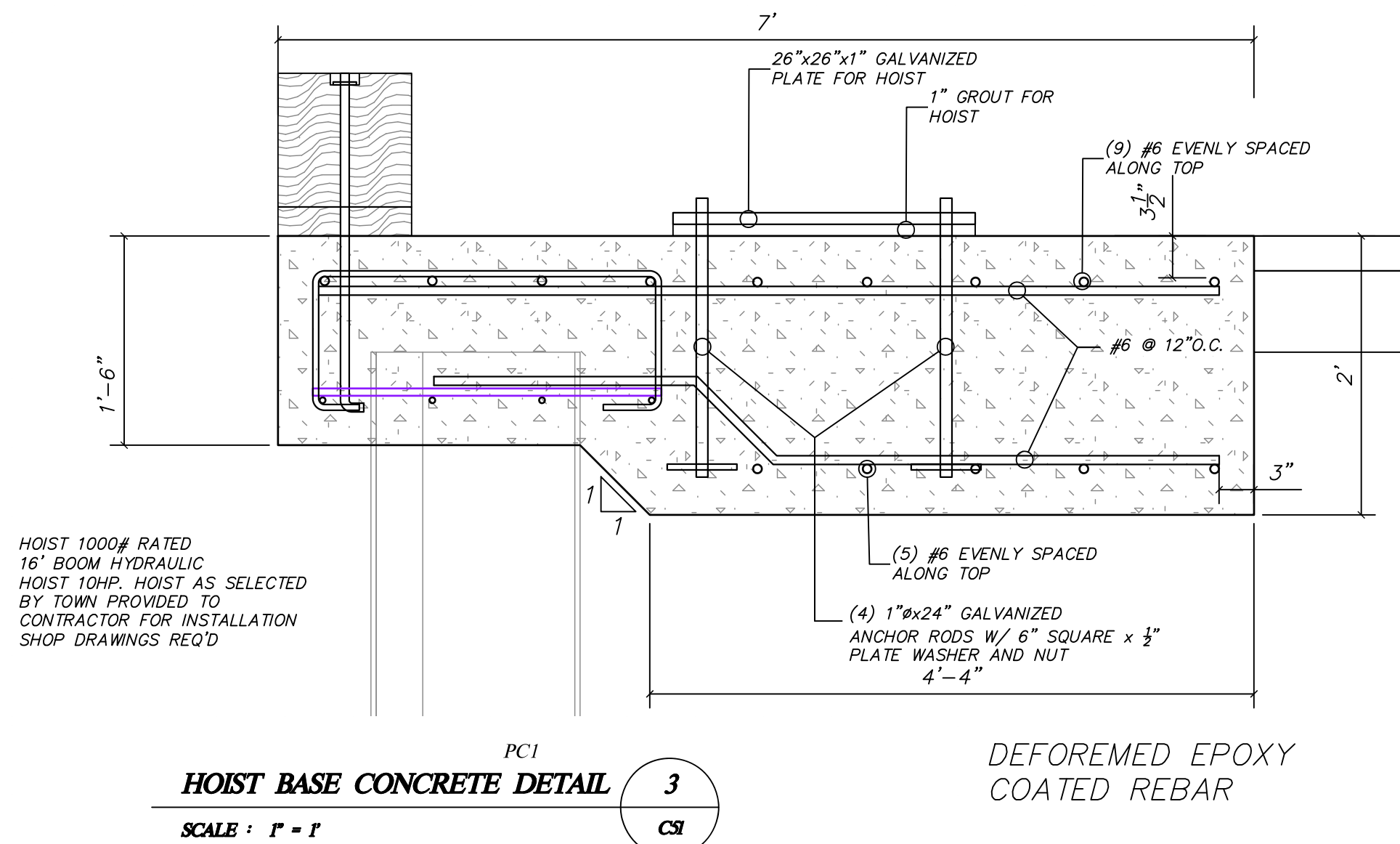
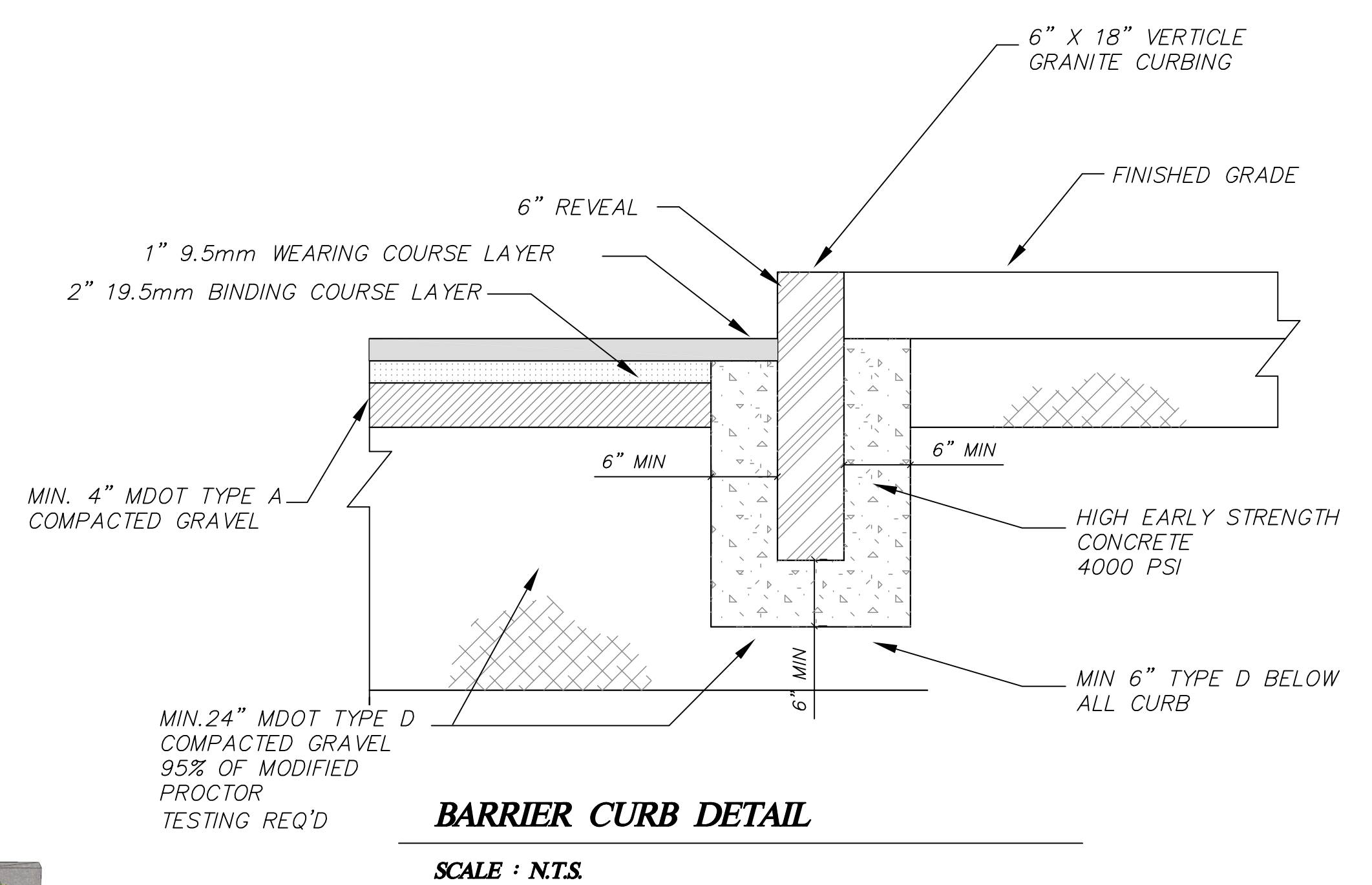
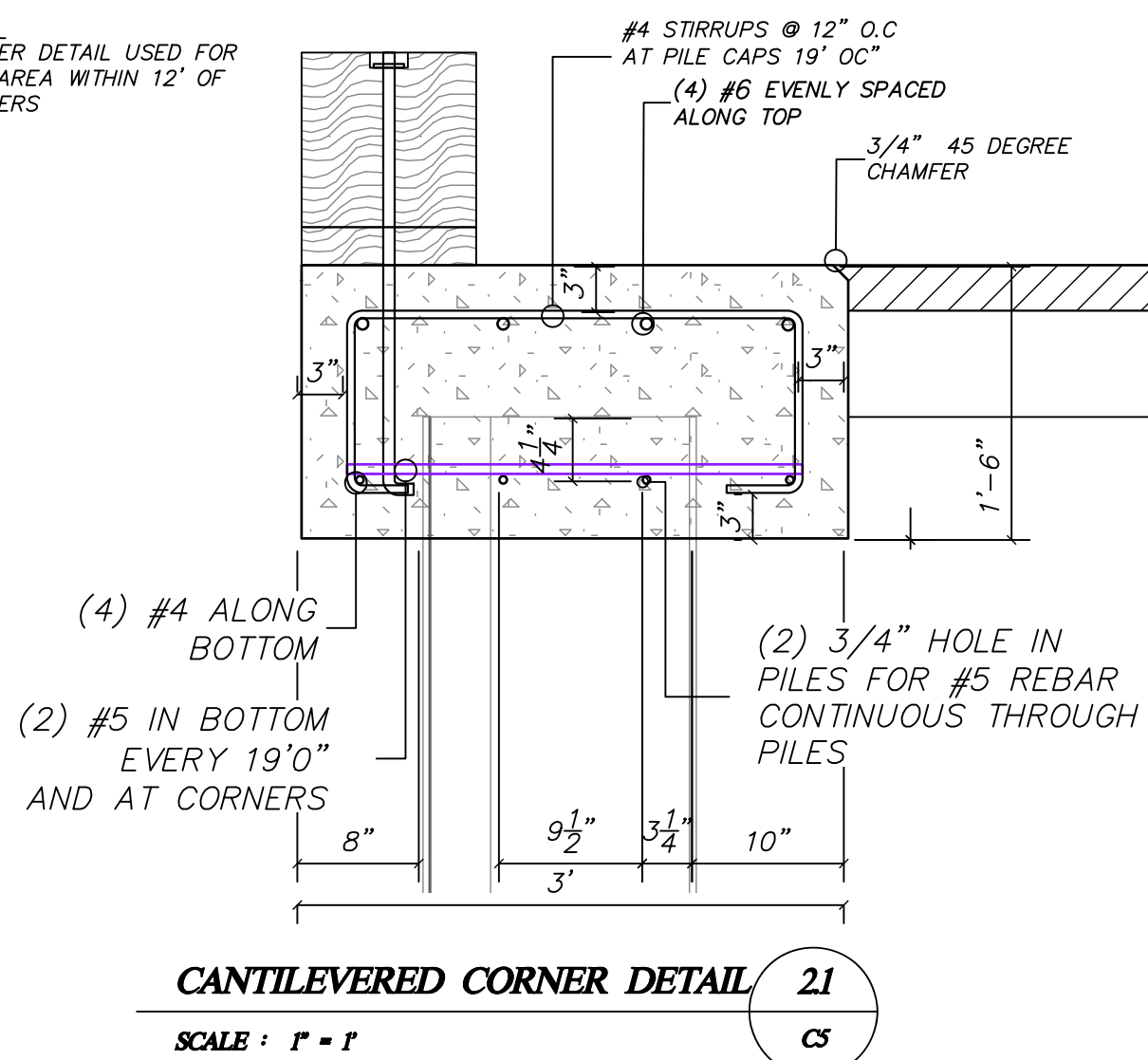
C4



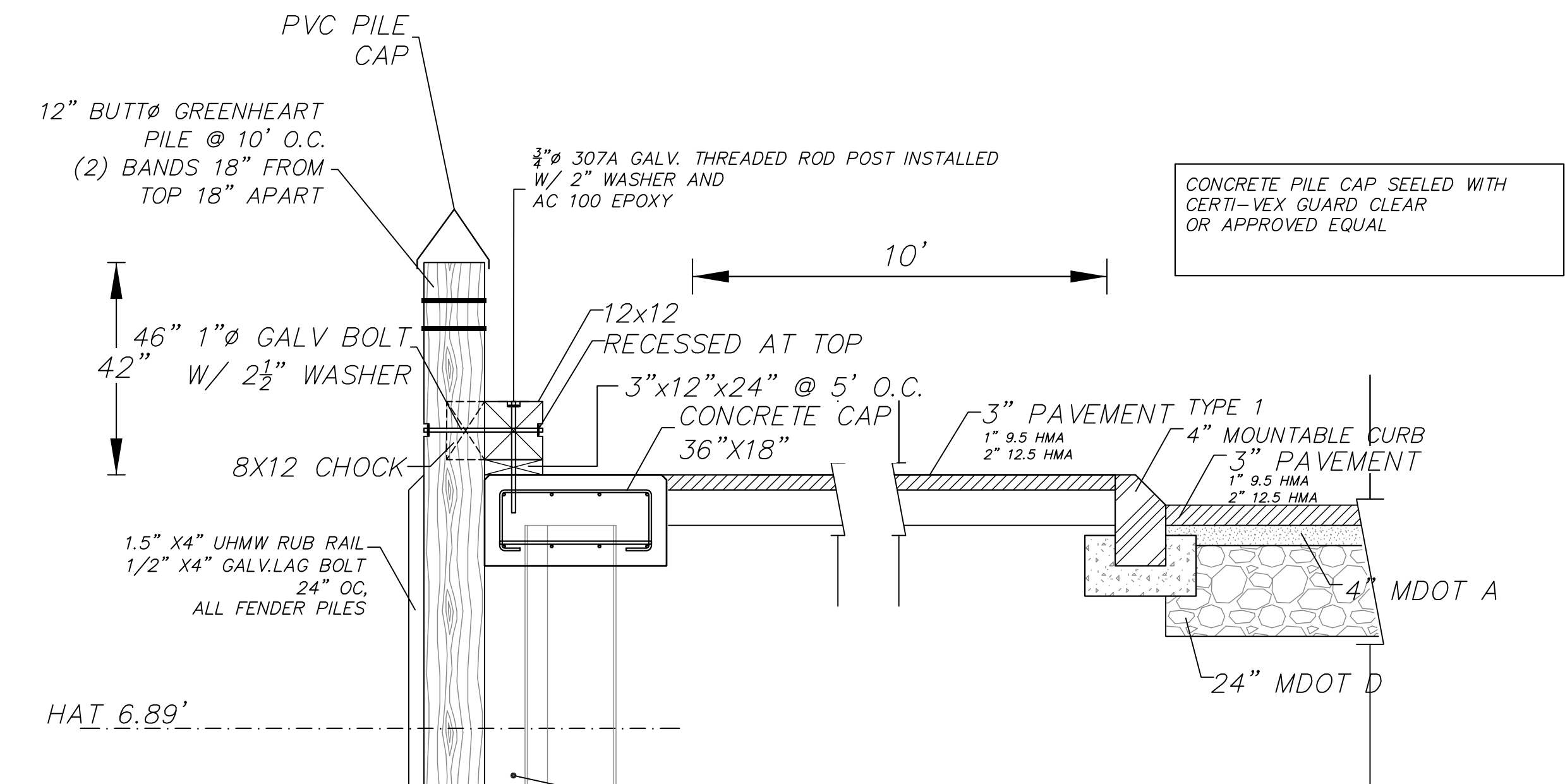
NOTE: CORNER DETAIL USED FOR CAP AREA WITHIN 12' OF CORNERS

DEFORMED EPOXY COATED REBAR

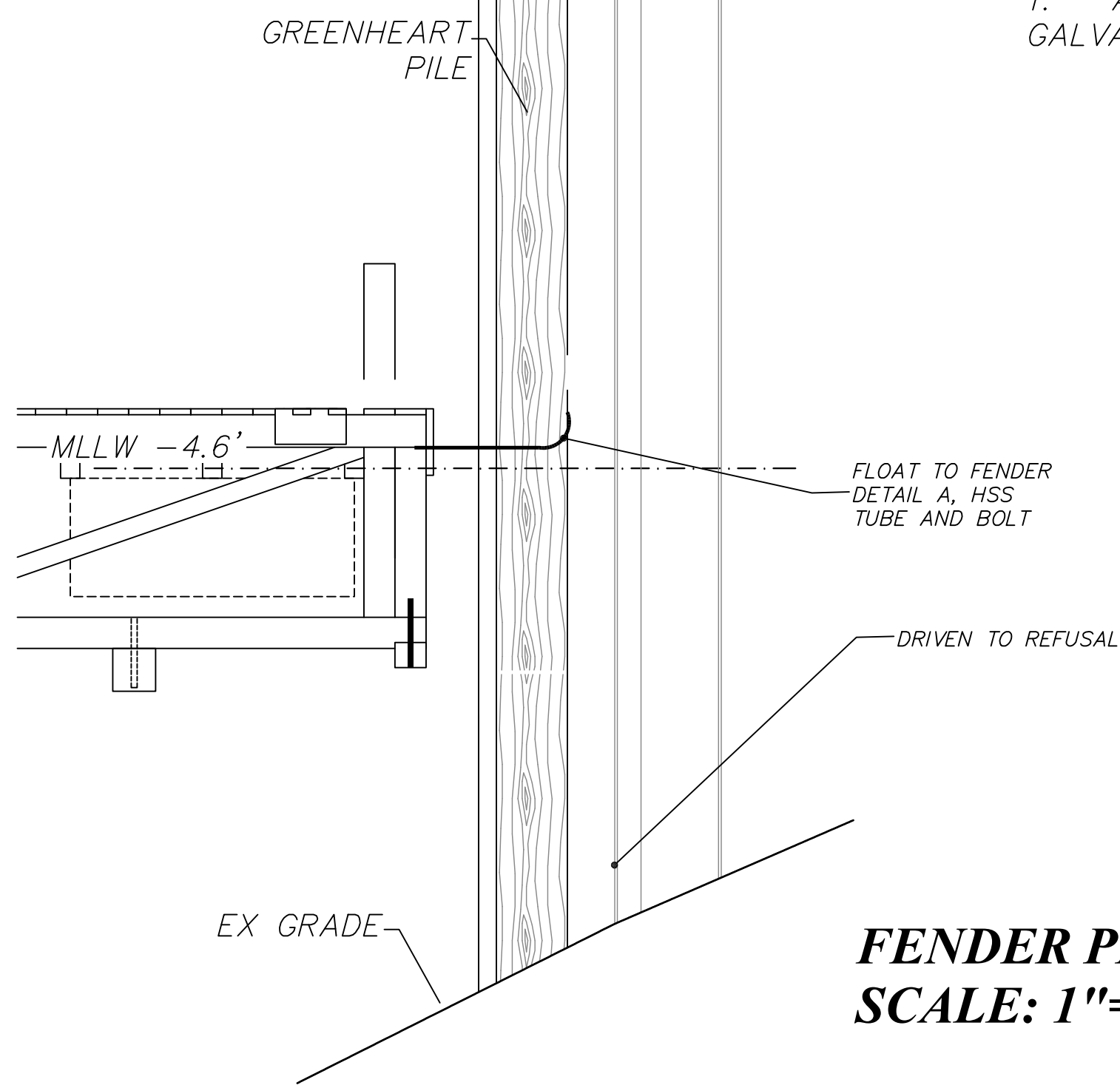
TYPICAL HORIZONTAL REINFORCEMENT AT CORNERS



NOTE DEPTHS TO REFUSAL VARY, CENTER OF DOCK TO TOP OF PILE APPROACHES 60 LINEAR FEET. PILE LENGTHS FOR DRIVING ARE ESTIMATED FROM SHEET 2 OF THE SHEETING PLANS

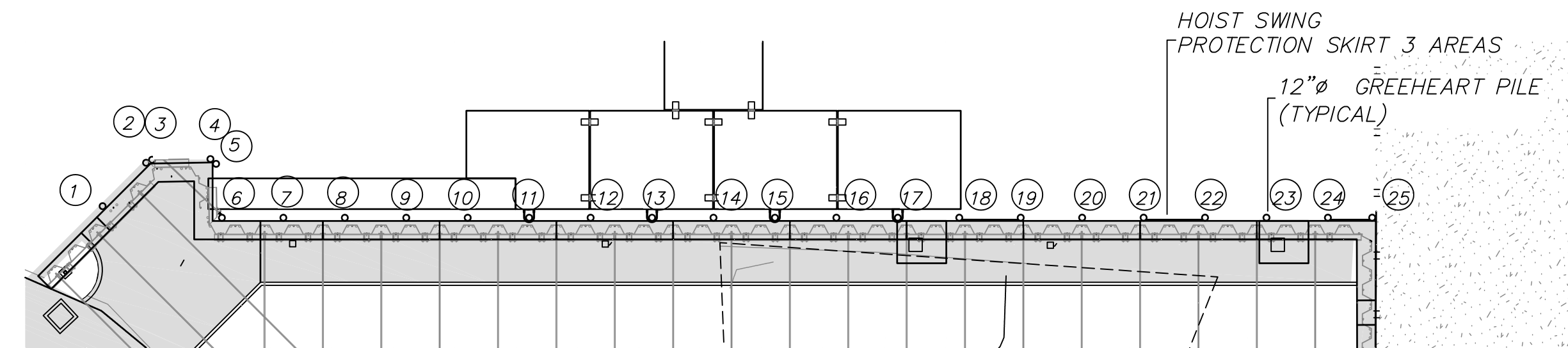


NOTES:
1. ALL BOLTS/ HARDWARE
GALVANIZED 307A

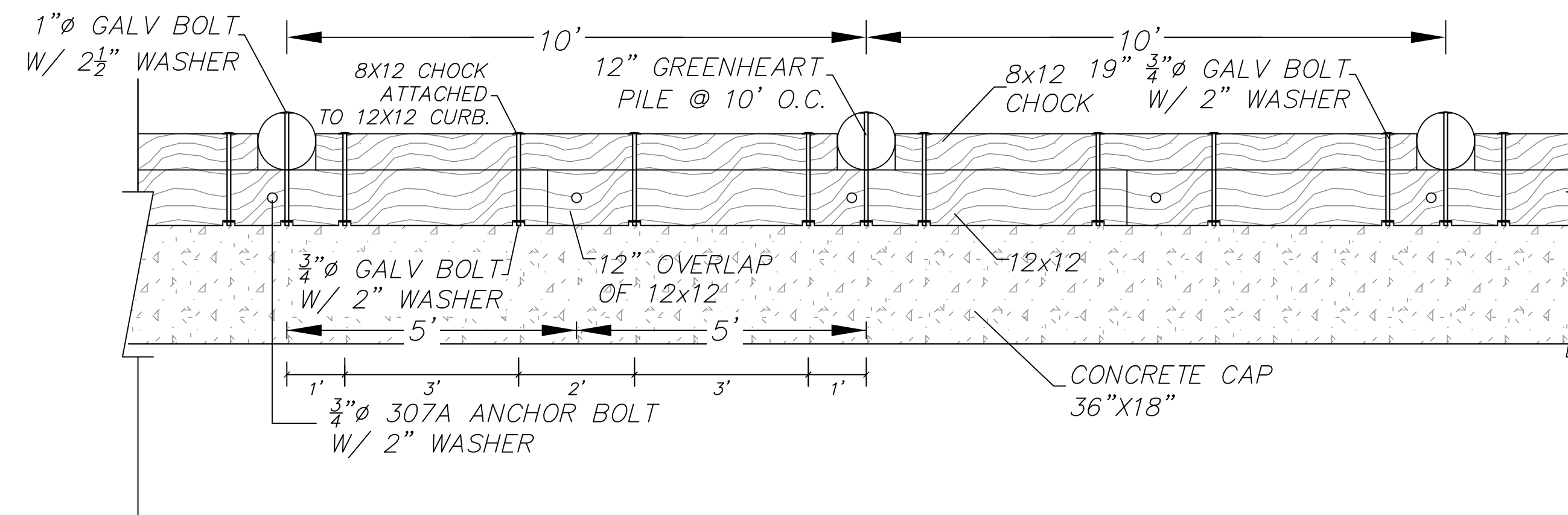


FENDER PILE SYSTEM
SCALE: 1"=2'

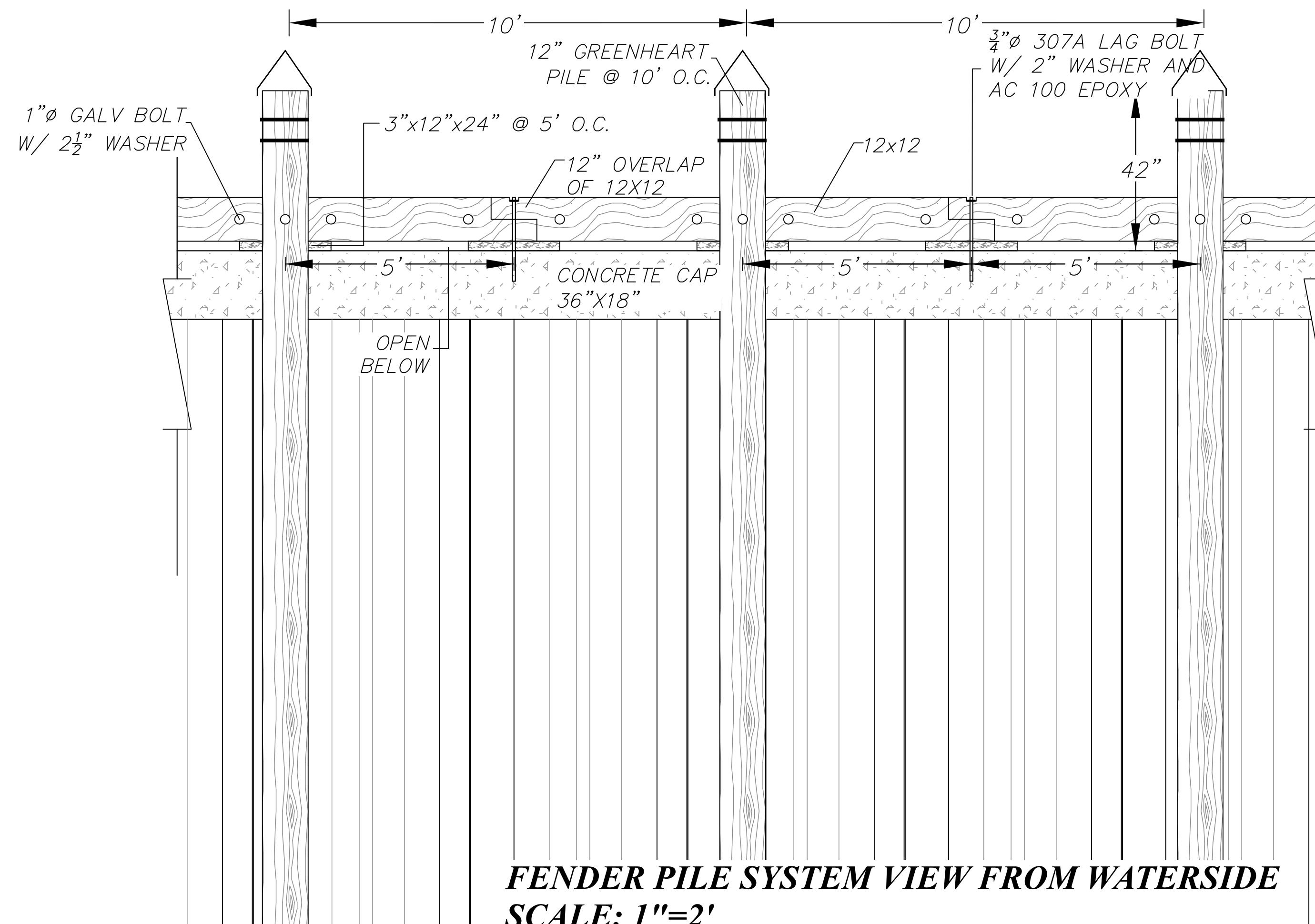
MDOT SPECIFICATIONS SECTION 500 SHALL GOVERN ALL WOOD PILE DRIVING WHERE AS:
HAMMERS PILES SHALL BE DRIVEN WITH APPROVED POWER-ACTUATED IMPACT HAMMERS POWERED WITH STEAM/AIR,
DIESEL FUEL, OR HYDRAULICS (HEREINAFTER REFERRED TO AS POWER HAMMERS). GRAVITY DROP HAMMERS
(HEREINAFTER REFERRED TO AS DROP HAMMERS), EXCEPT AS NOTED ON THE PLANS, SHALL ONLY BE USED TO DRIVE
TIMBER PILES. WHEN DROP HAMMERS ARE USED TO DRIVE TIMBER PILES, THE RAM SHALL BE BETWEEN 2,000 AND
3,500 POUNDS AND THE HEIGHT OF DROP SHALL NOT EXCEED 13 FEET. IN NO CASE SHALL THE RAM WEIGHT BE LESS
THAN THE COMBINED WEIGHT OF THE DRIVE HEAD AND PILE. ALL DROP HAMMERS SHALL BE EQUIPPED WITH HAMMER
GUIDES TO INSURE CONCENTRIC IMPACT ON THE DRIVE HEAD



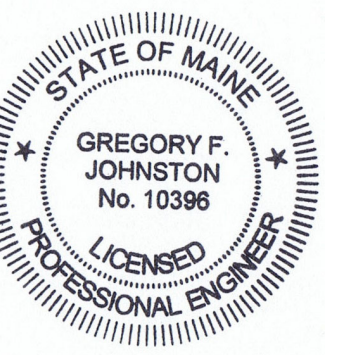
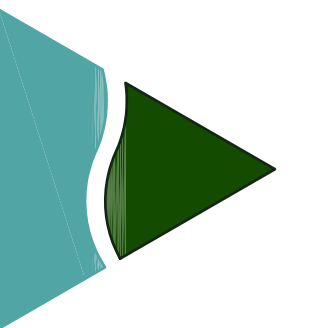
FENDER PILE PLAN
SCALE: 1"=20'



FENDER PILE PLAN VIEW
SCALE: 1"=2'



FENDER PILE SYSTEM VIEW FROM WATERSIDE
SCALE: 1"=2'



DATE:
MARCH 13TH, 2020

SCALE:
AS MARKED

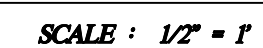
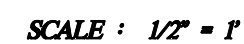
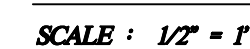
PROJECT ID #
C-0354

DRAWN BY:
FMV

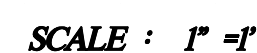
CHECKED BY:
GFI

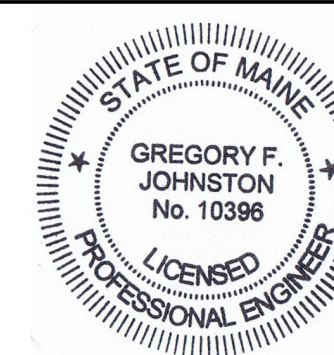
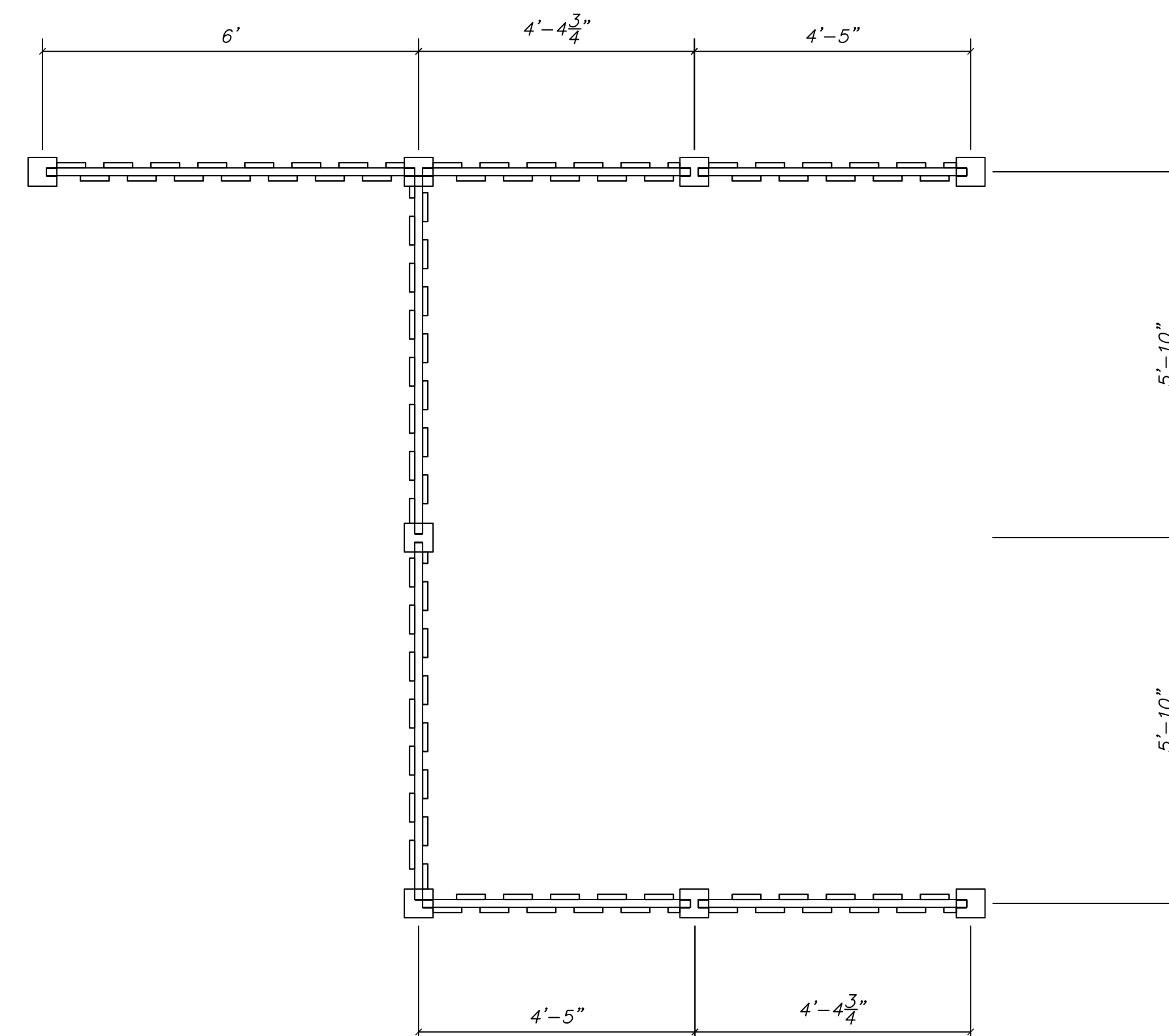
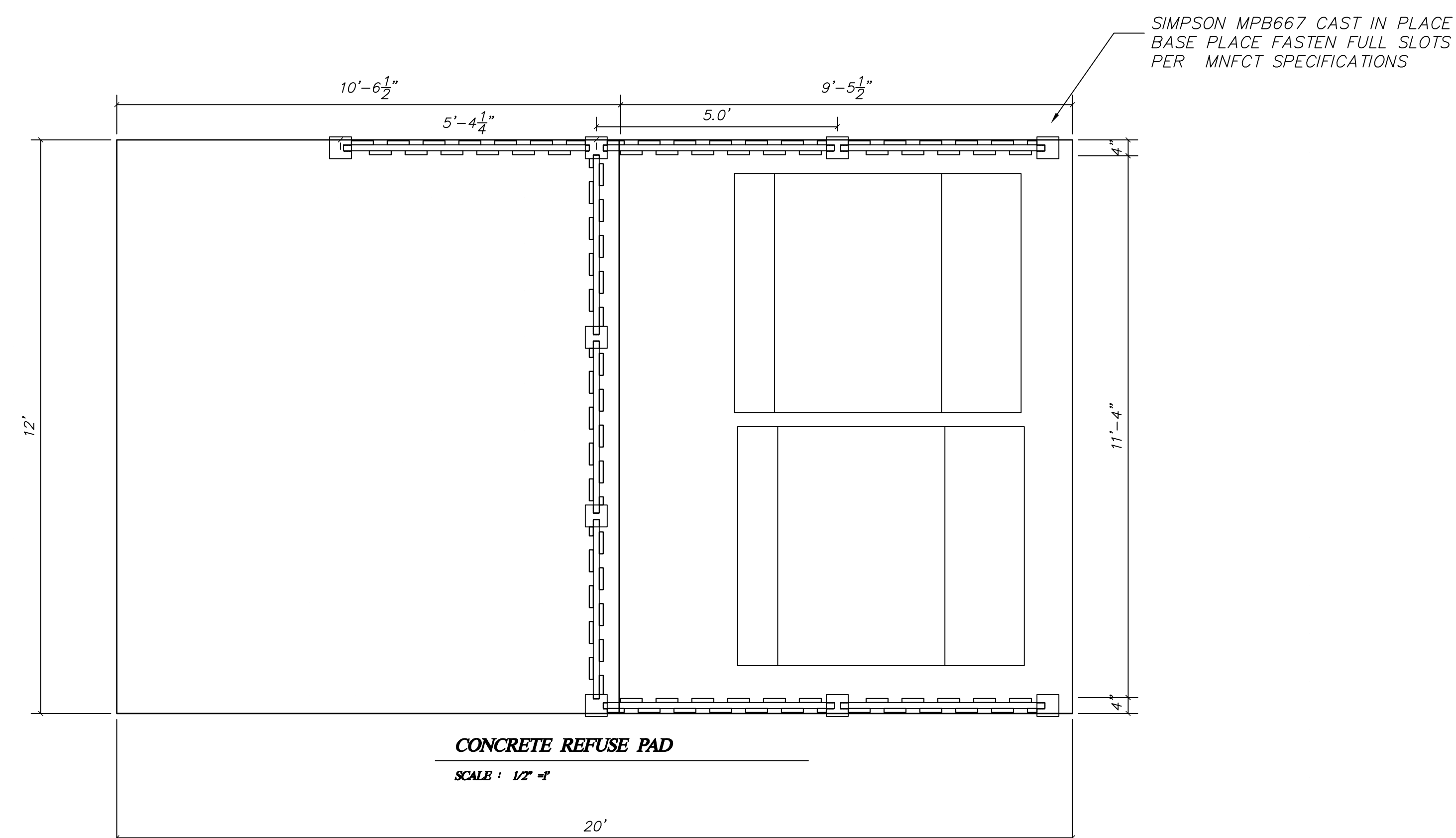
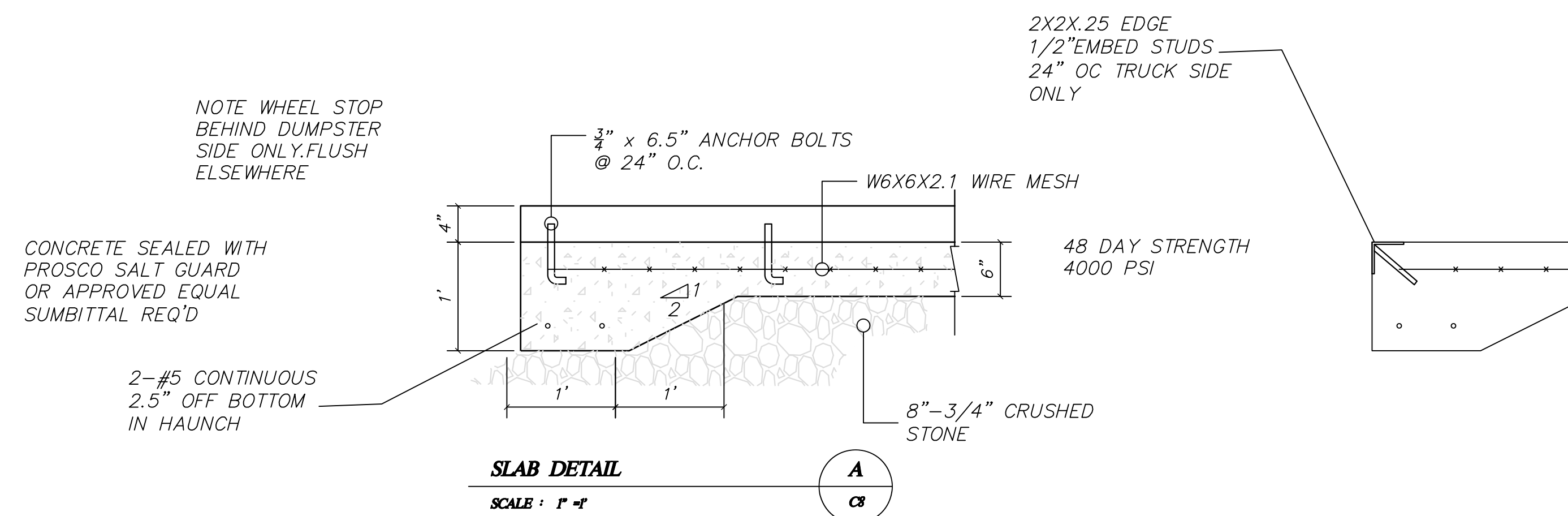
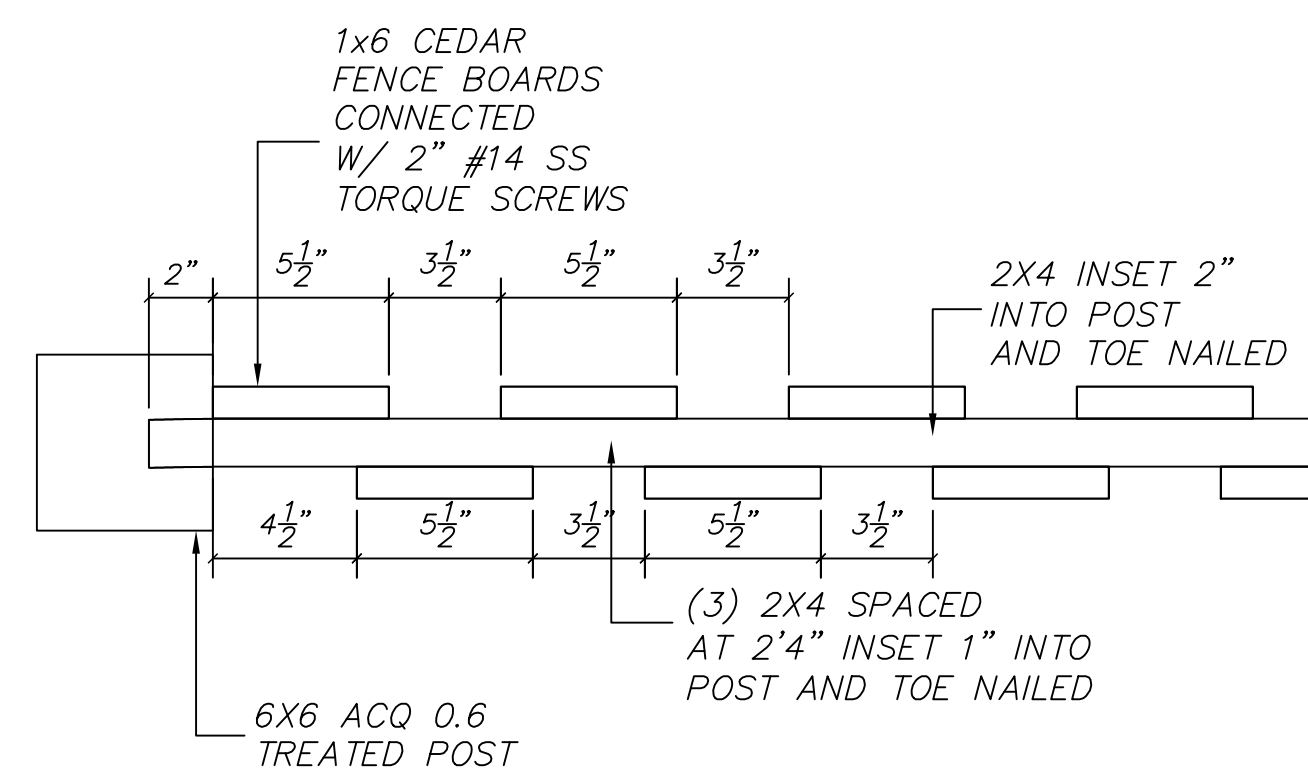
SHEET NO:

C6



SCALE : 1" = 1'





*G.F. Johnston & Associates
Consulting Civil Engineers
P.O. Box 197
Southwest Harbor, Maine 04679
207-244-1200*

DATE:
12/17/2019

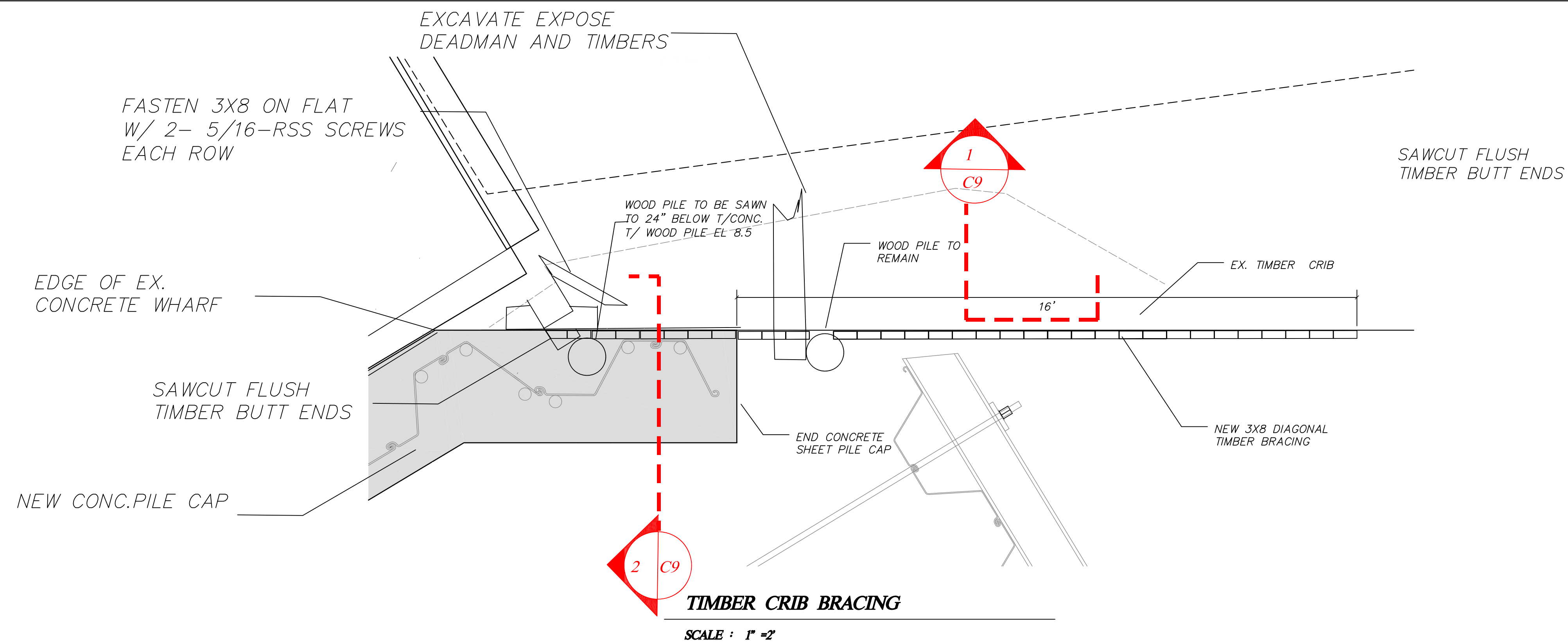
SCALE:
AS MARKED

PROJECT.ID #	
C-0354	

DRAWN BY:
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CHECKED BY:
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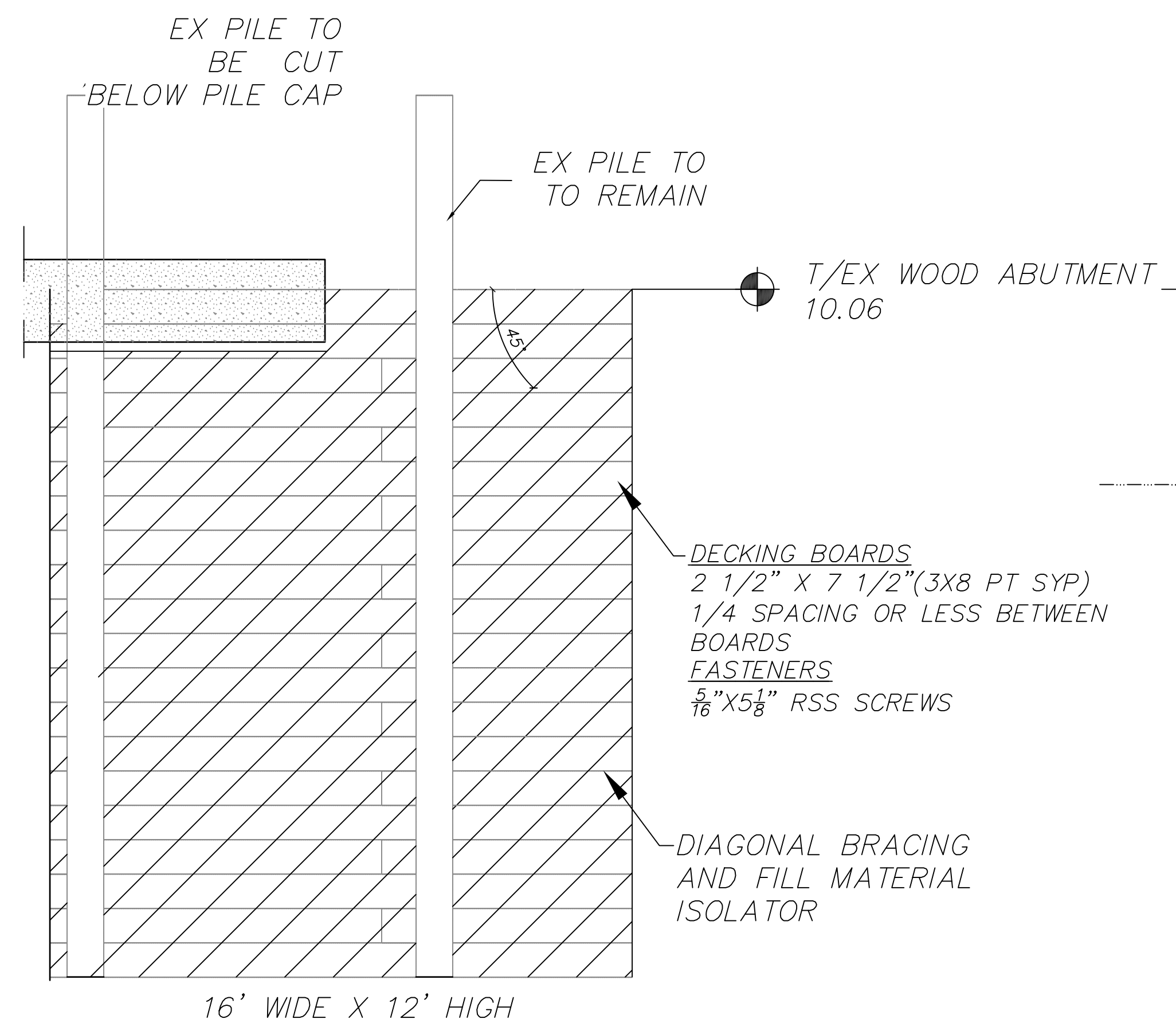
SHEET NO



WOOD PILE TO REMAIN

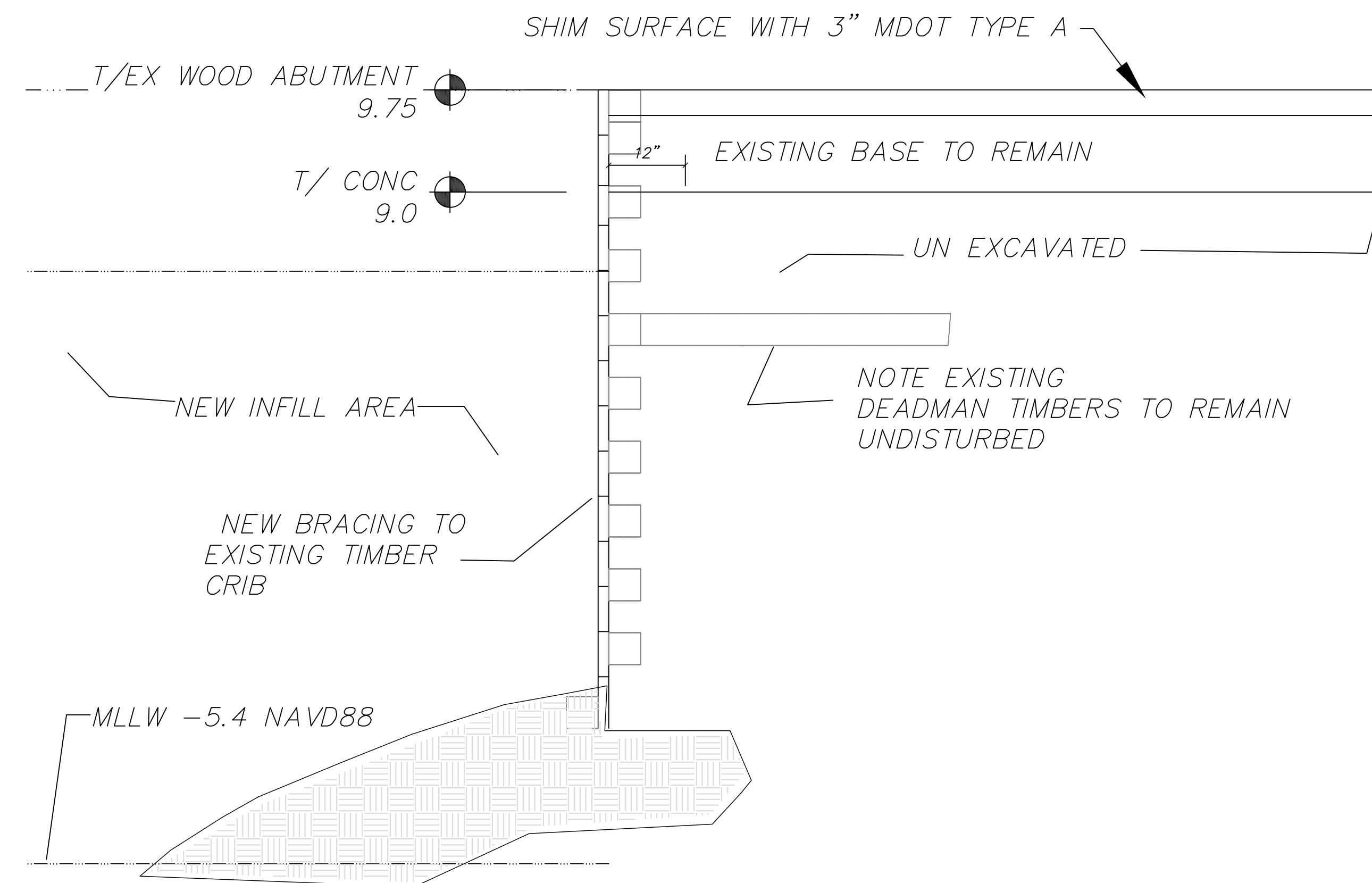
NEW 3X8 DIAGONAL TIMBER BRACING

DETAIL LOCUS

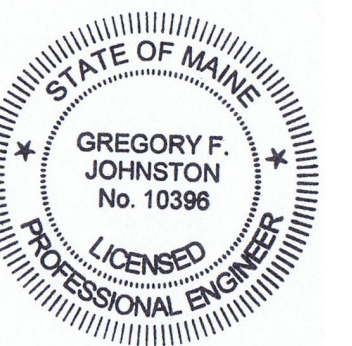
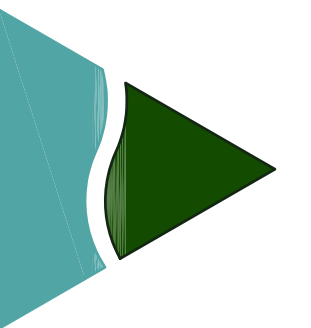


NORTH INFILL TIMBER CRIB STABILIZATION

SCALE : 1" = 10'



SCALE : 1" = 10'



DATE:
MARCH 13TH, 2020

SCALE:
AS MARKED

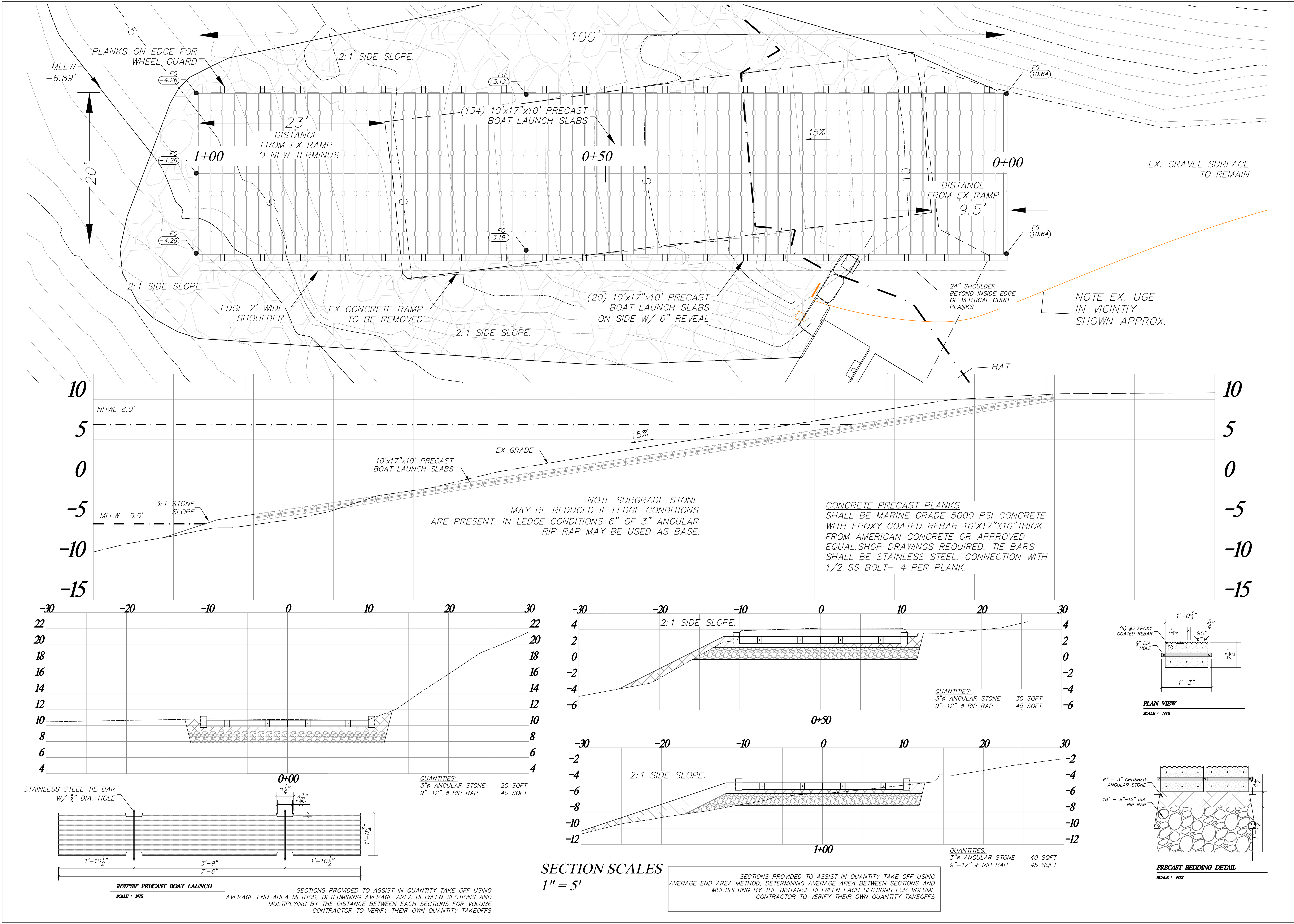
PROJECT ID #
C-0354

DRAWN BY:
FMV

CHECKED BY:
GFJ

SHEET NO:

C9



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Consulting Civil Engineers
P.O. Box 197
Southwest Harbor, Maine 04679
207-244-1200

STATE OF MAINE
GREGORY F. JOHNSTON
No. 10398
LICENSED PROFESSIONAL ENGINEER

DATE:
MARCH 13TH, 2020

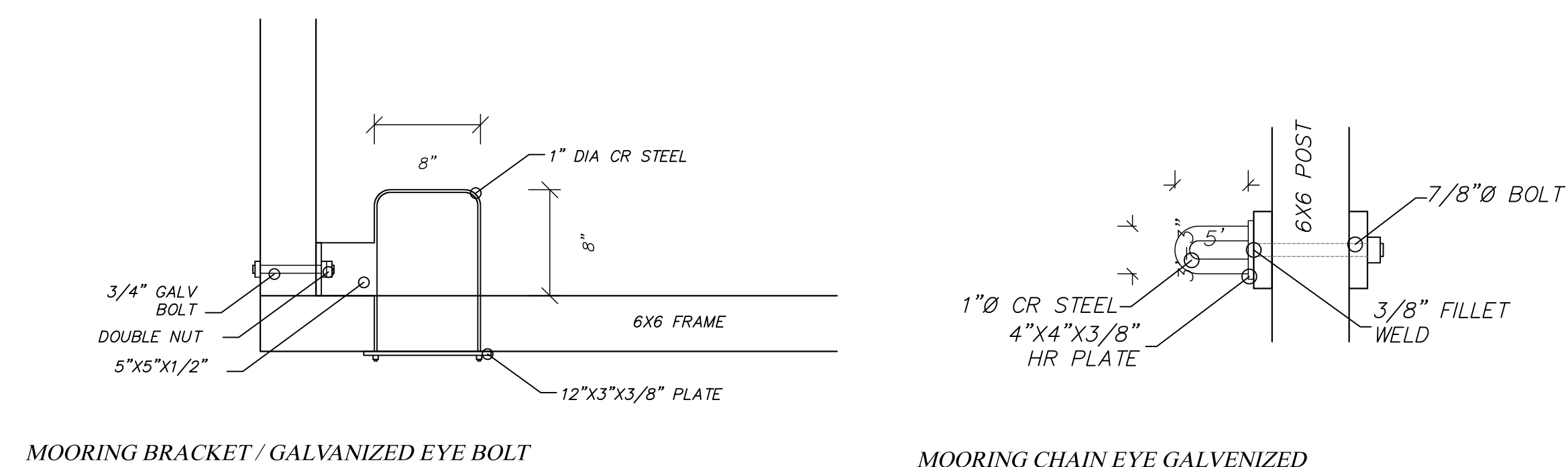
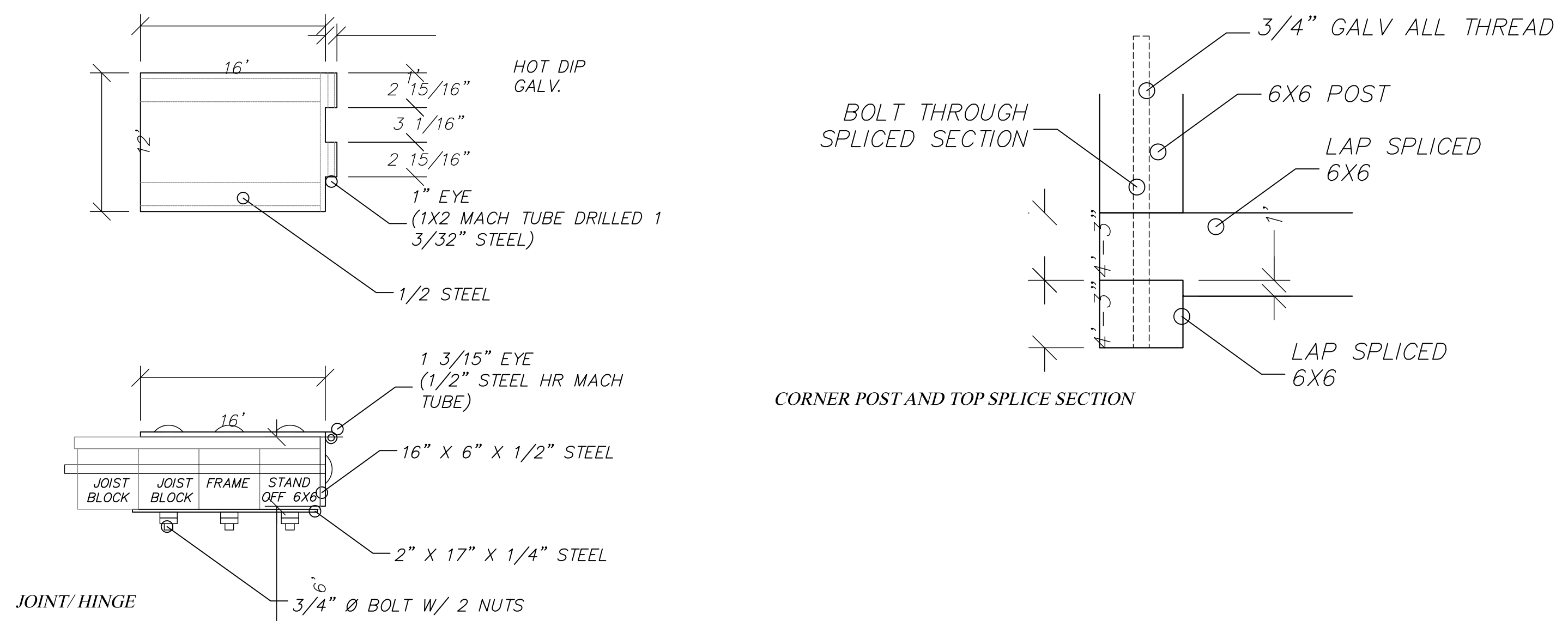
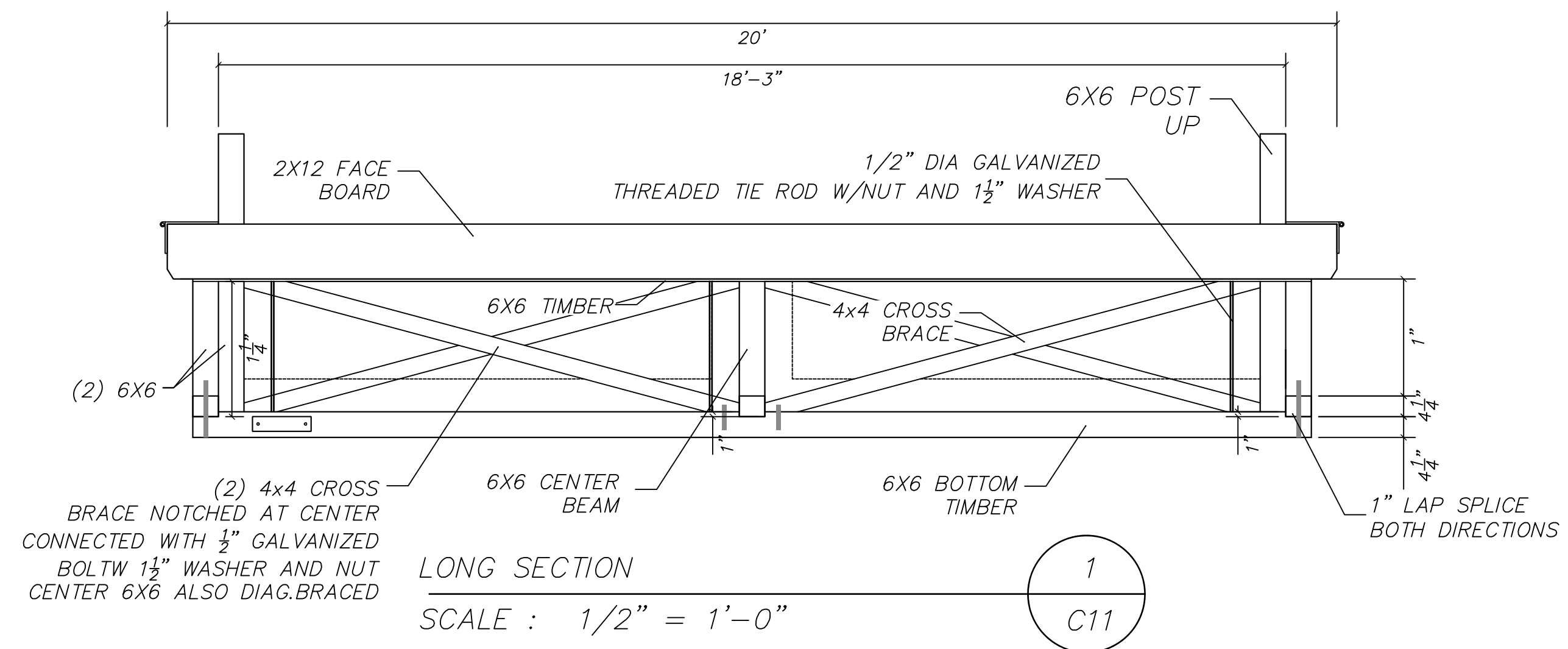
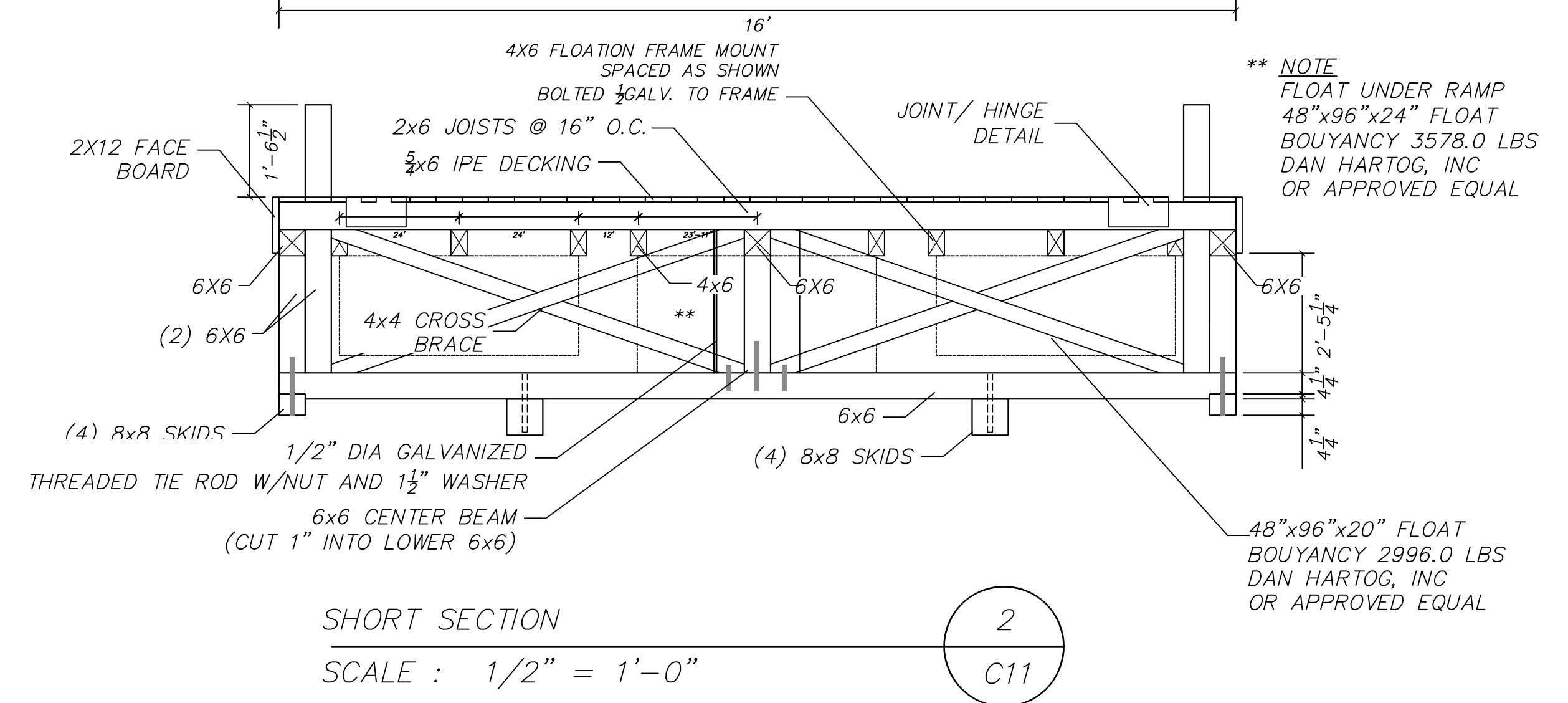
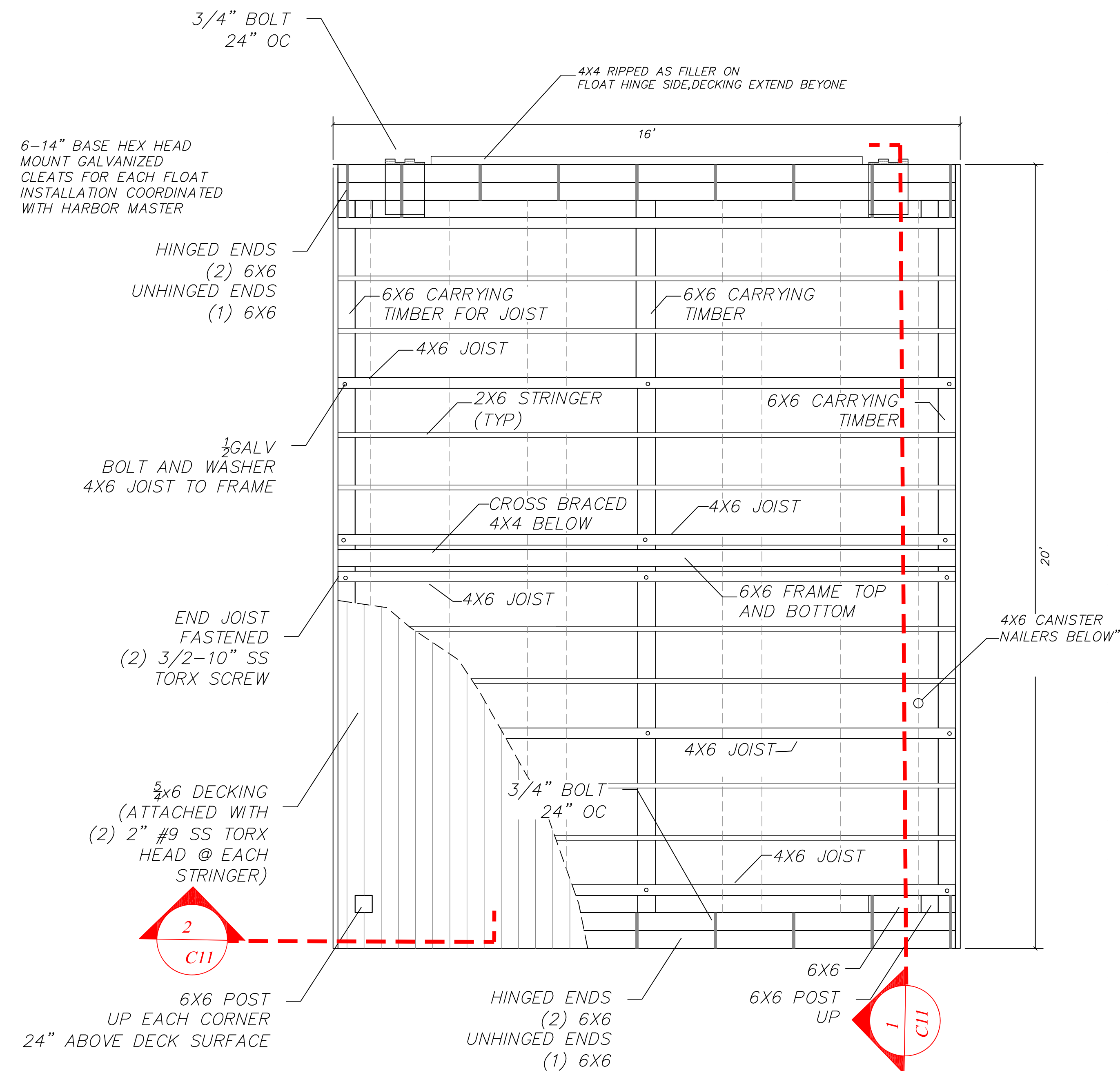
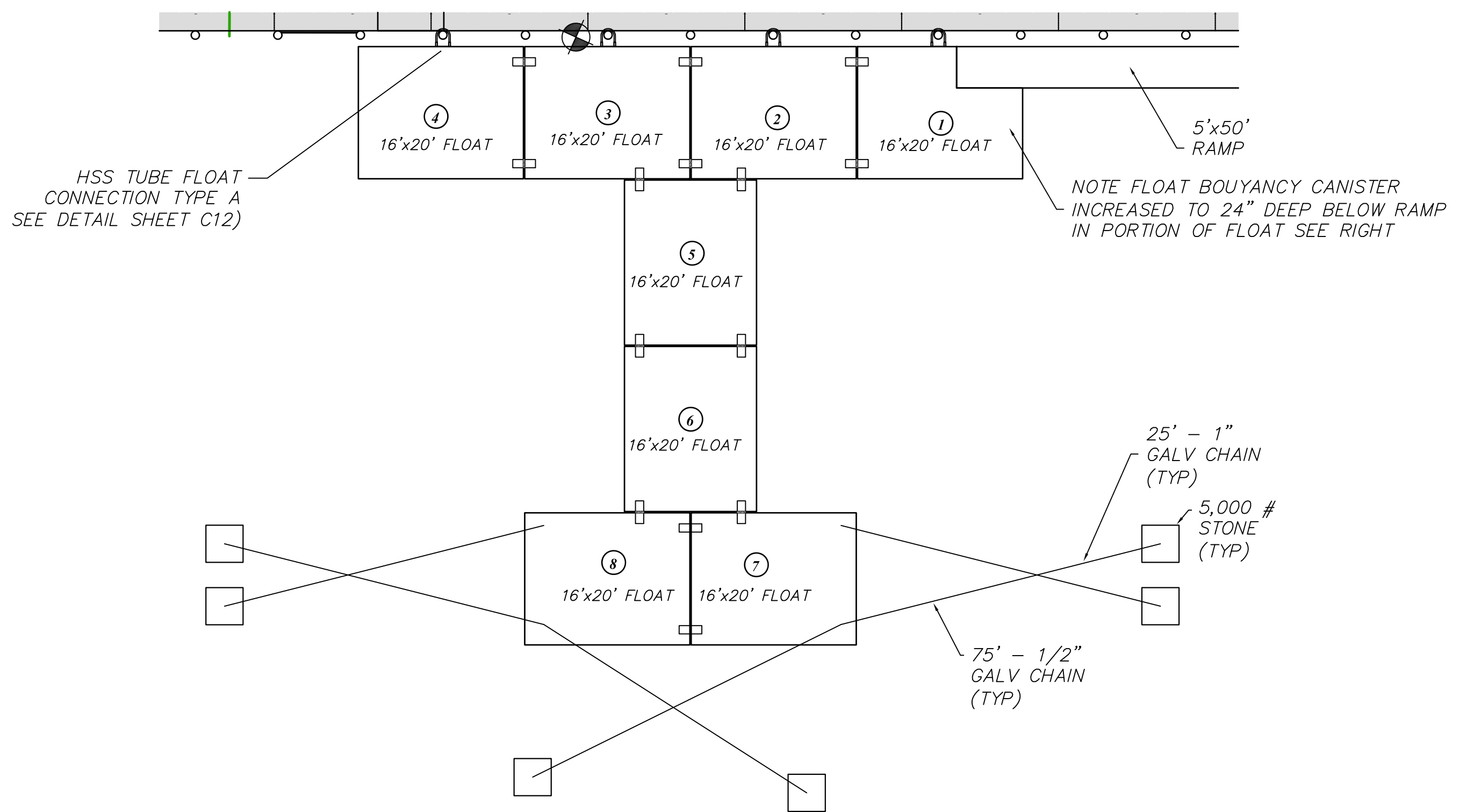
SCALE:
1" = 20'

PROJECT ID #
C-0354

DRAWN BY:
FMV

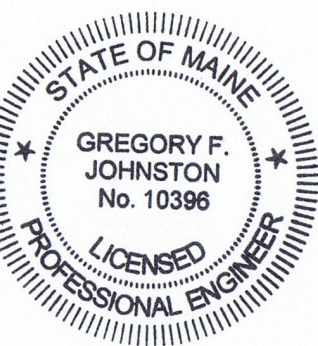
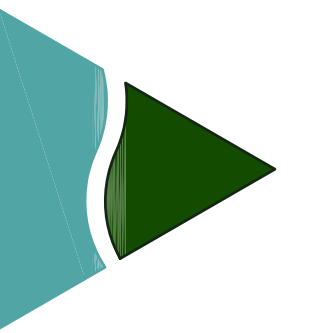
CHECKED BY:
GFJ

SHEET NO:
C10



FLOAT PLAN
10 COLD
STORAGE
ROAD
 RECORD OWNER
 TOWN OF ST. GEORGE,
 KNOX COUNTY, MAINE

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Consulting Civil Engineers
 P.O. Box 197
 Southwest Harbor, Maine 04679
 207-244-1200



DATE:
MARCH 13TH, 2020

SCALE:
AS MARKED

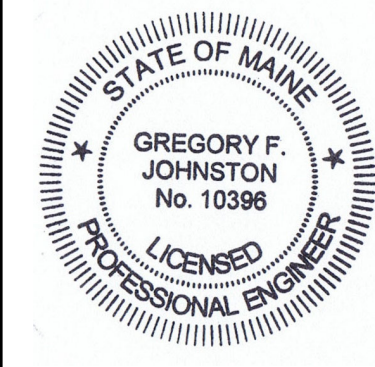
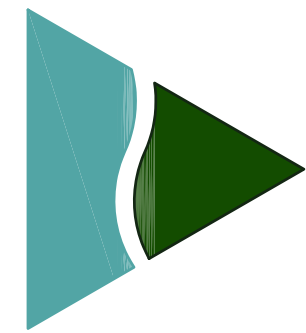
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C-0354

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CHECKED BY:
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SHEET NO:

C11



DATE:
MARCH 13TH, 2020

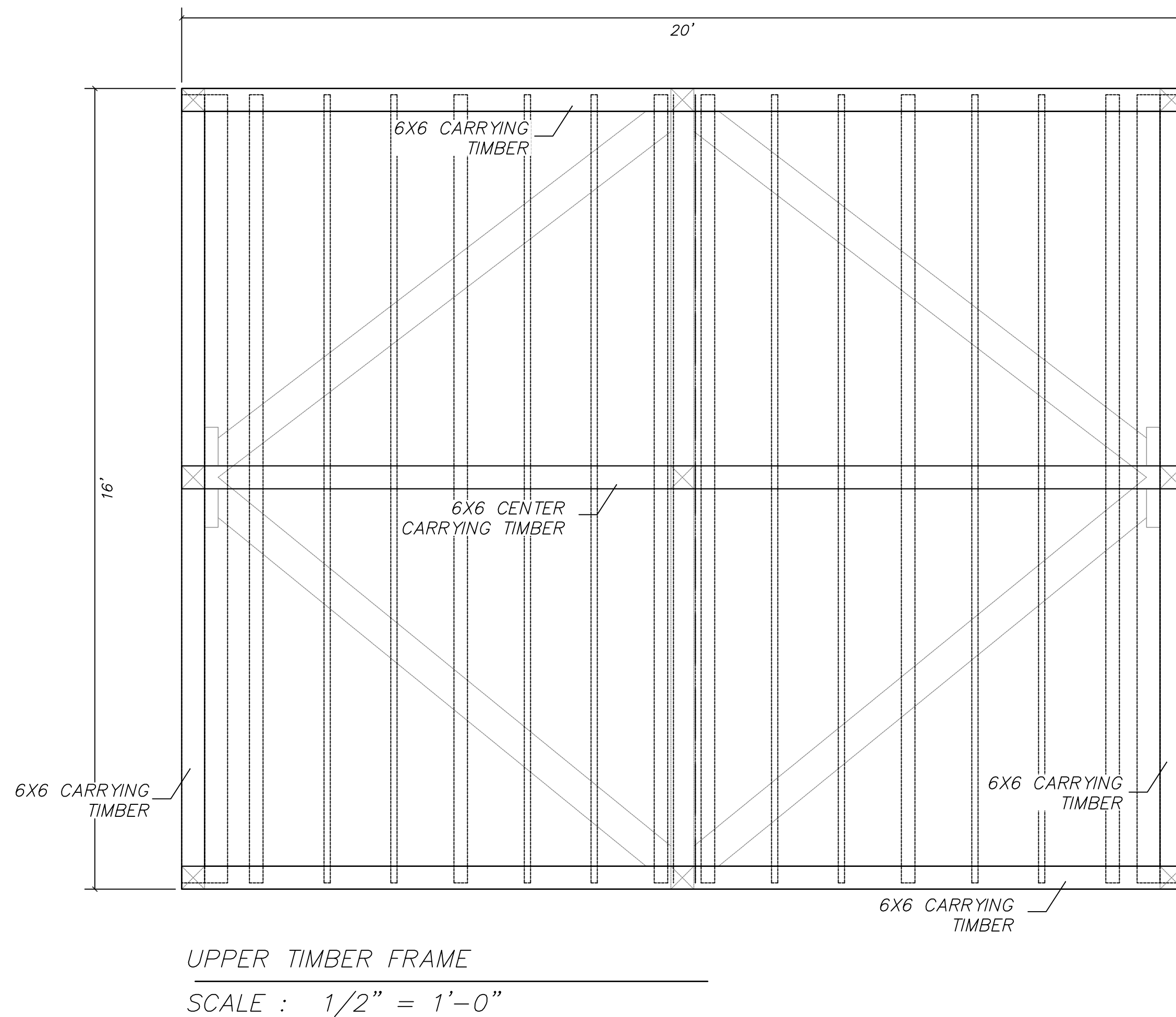
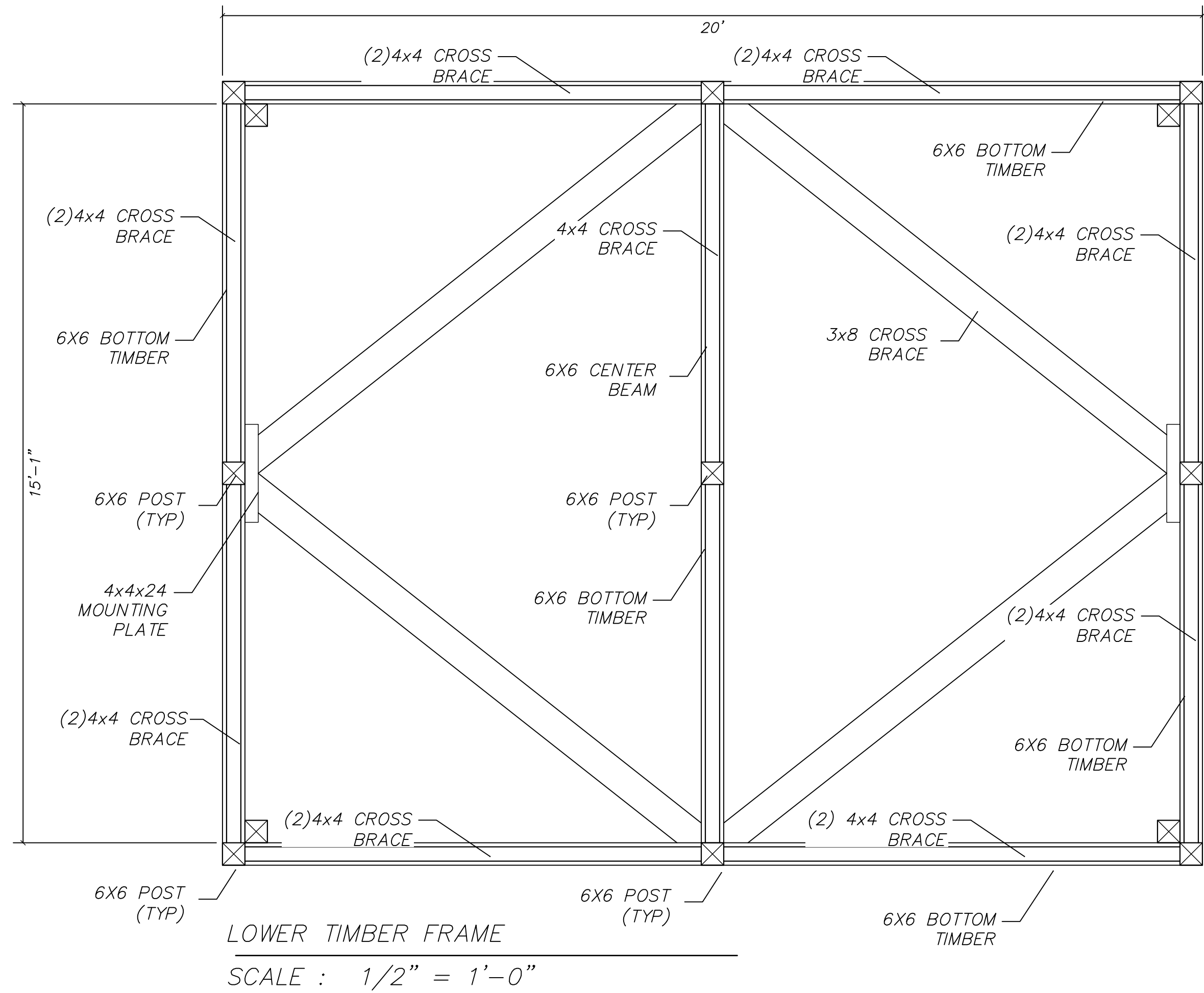
SCALE:
AS MARKED

PROJECT ID #
C-0354

DRAWN BY:
FMV

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GFJ

SHEET NO:



MATERIAL AND FASTENING NOTES:

- 8"x8"x24' SOUTHERN YELLOW PINE TREATED 2.5 CCA ROUGH SAWN SKIDS SPACED 8' FROM OUTSIDE DIMENSION.
- 6"x6" SOUTHERN YELLOW PINE TREATED 2.5 CCA FRAME MEMBERS
- ALL FRAME FASTENERS TO BE 3/4" HOT DIP GALVANIZED. JOIST AND BRACING AS NOTED.
- THE 6"x6" POST TO BE CENTER DRILLED WITH FOR GALVANIZED 3/4" ALL-THREAD TOP TO BOTTOM IN CENTER OF POST. CORNERS HAVE SINGLE EXTERNAL THREADED ROD
- 6"x6" SOUTHERN YELLOW PINE TREATED 2.5 CCA . BITT POSTS TO BE BOLTED IN THE FOUR CORNERS OF THE FRAME AND EXTEND 18" ABOVE THE DECK.
- THE 2"XL2" FACE BOARDS TO BE NATIVE FIR.

DECKING FASTENING REQUIRED AT EACH JOIST 2"x #9 SS DECKING SCREWS

FACEBOARDS REQUIRES 1/8" X #10 , COUNTERSUNK 1/2" AND BUNGED WITH SIMILAR MATERIAL

- FOUR 4"x6" JOIST TO BE BOLTED TO THE FRAME WITH 1/2" X 10" GALVANIZED CARRIAGE BOLTS. THE SIX FLOAT BINS TO BE BOLTED TO THE SUPPORT FRAMING ONLY.

• ALL FLOATS HAVE A HINGE END, CENTER FLOATS HAVE TWO. THE HINGE SIDESIDE FACE MOUNTED AN ADDITIONAL 6"x6" INNER FLOAT AND HAS STEP GUARD BETWEEN HINGE TO CLOSE GAP BETWEEN FLOATS.

• AT THE SEAWARD END OF EACH FLOAT, ON EACH SIDE, THERE WILL BE A 5/8" GRAB HOOK, 2 LINKS OF 5/8" CHAIN AND 5/8" SHACKLE TO A 1" EYEBOLT (TO BE GALVANIZED) AND FASTEN THROUGH THE BIT AND THE 6"x6" UPPER FRAME MEMBER(S) FOR MOORING ATTACHMENTS AND 1" GALVANIZED CHAIN GUIDES, THROUGH THE BOTTOM SILL UNDER THE CHAIN ATTACHMENTS WITH ACCESS PANELS ABOVE.

• 3X3X.25 GANGWAY TRACK WILL BE LOCATED ON THE INBOARD FLOAT, INNER END WHERE THE GANGWAY ROLLER IS CAPTIVE ON ANGLE IRON TRACK WITH SACRIFICIAL OAK PLANKING ON DECK TO SUPPORT THE ROLLER.

• FLOAT NOTES:

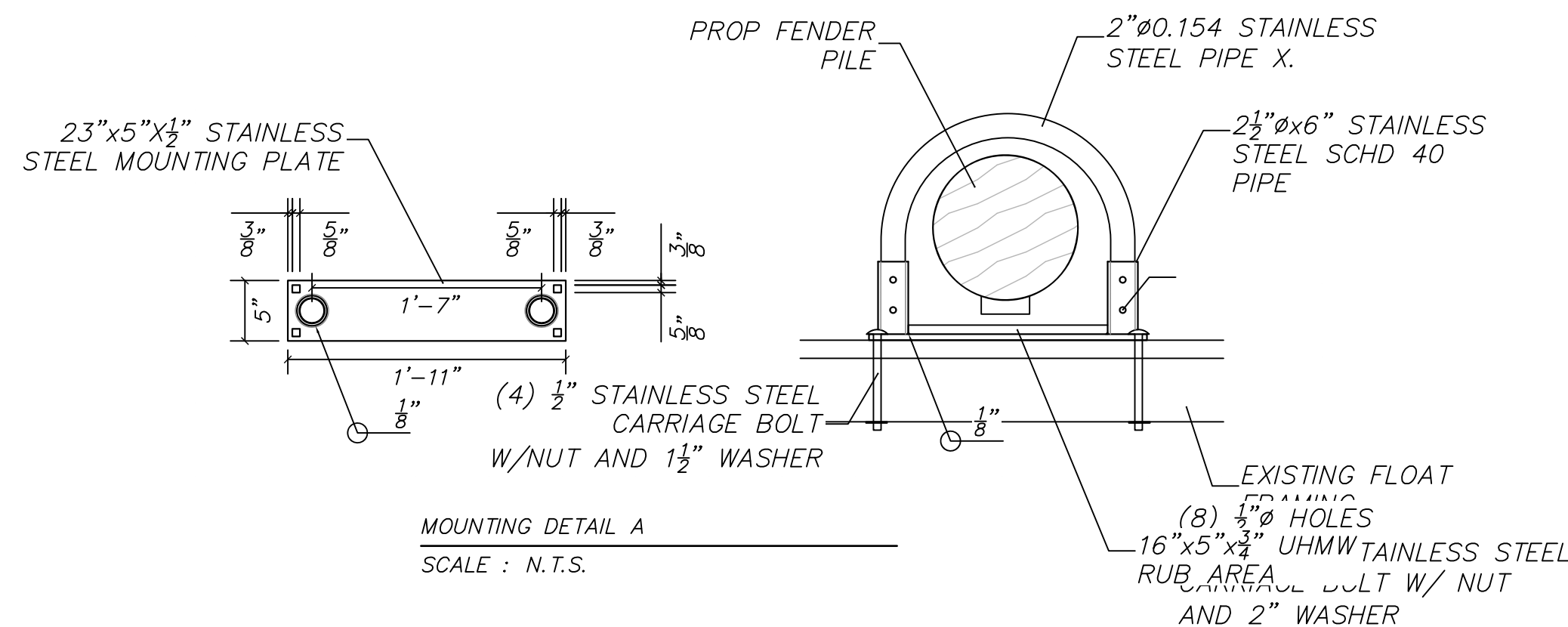
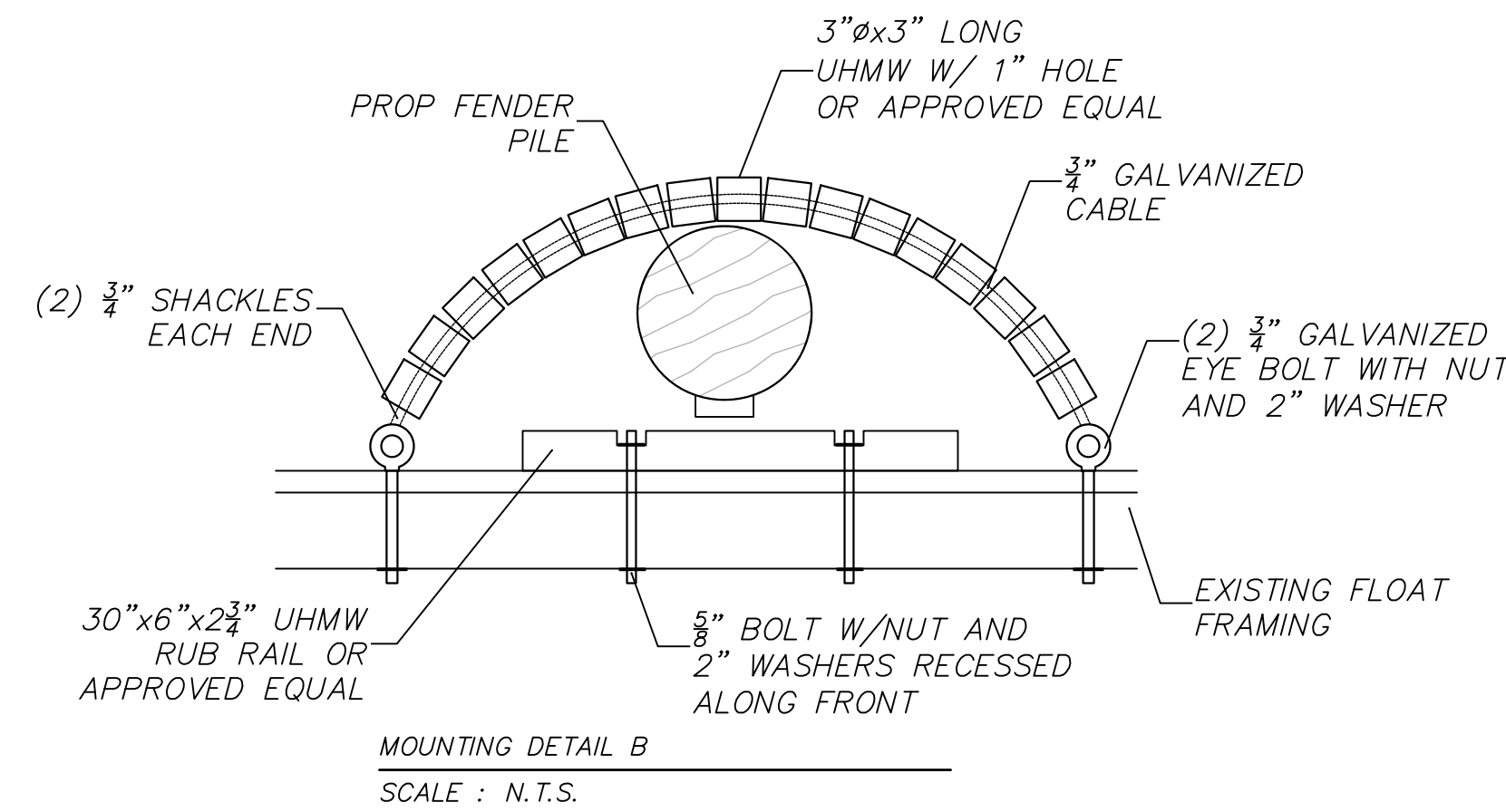
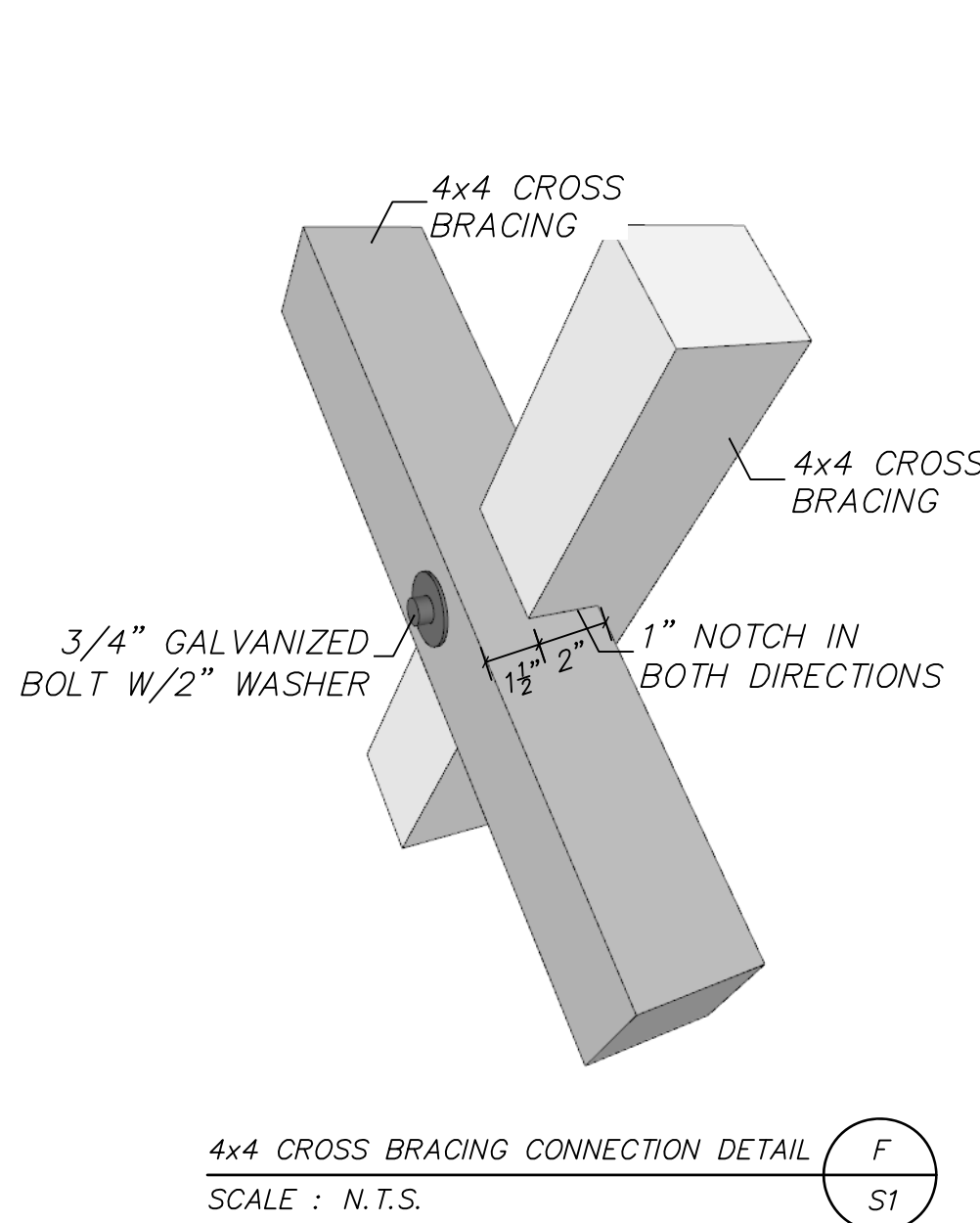
EACH FLOAT RECEIVES 6 EPS FOAM FILLED ENCAPSULATED FLOAT CHAMBERS. EACH CHAMBER MEASURES 4'X8'X20" DEEP WITH A SINGLE 2X8X24" UNDER RAMP.

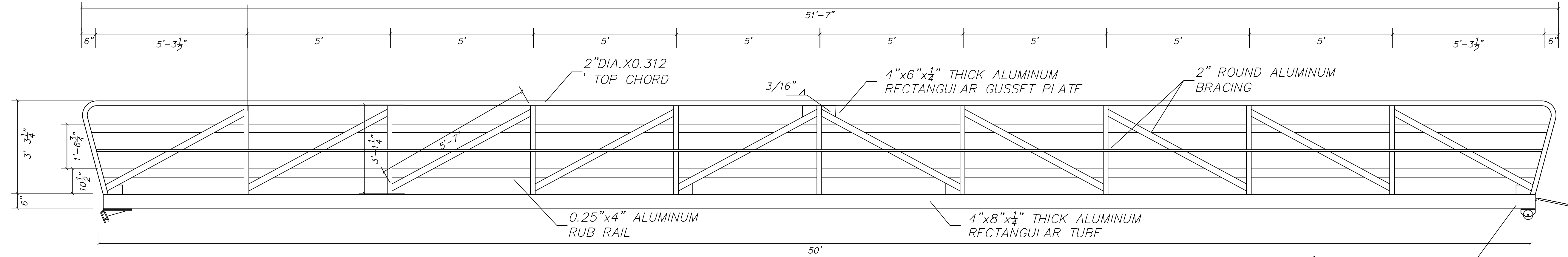
- THE INBOARD END HAS A, 2"x12" FACE BOARD CUT BETWEEN THE SIDE FACE BOARDS

MIDDLE
THE MIDDLE FLOATS CONTAIN TWO HINGE ENDS.

OUTER FLOATS

- THE OUTER END HAS A 2"x12" FACE BOARD THAT OVER LAPS THE ENDS OF THE SIDE FACE BOARDS.
- OUTBOARD FRAME LENGTH WITHOUT THE EXTRA 6"x6" ON THE INNER END AND THE 2"x12" FACE BOARD IS, 23'-5".

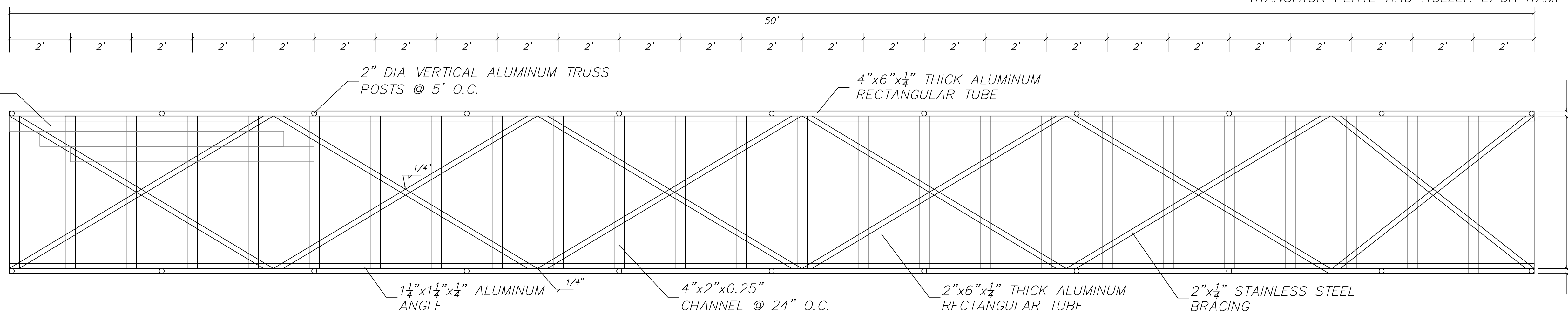




RAMP PROFILE VIEW

SCALE : 1/2" = 1'-0"

1"x6" PTSYP
W/ STAGGERED BUT ENDS
FASTENED W/ 2" #14 SS 316
SELF TAPPING SCREWS



RAMP FRAMING

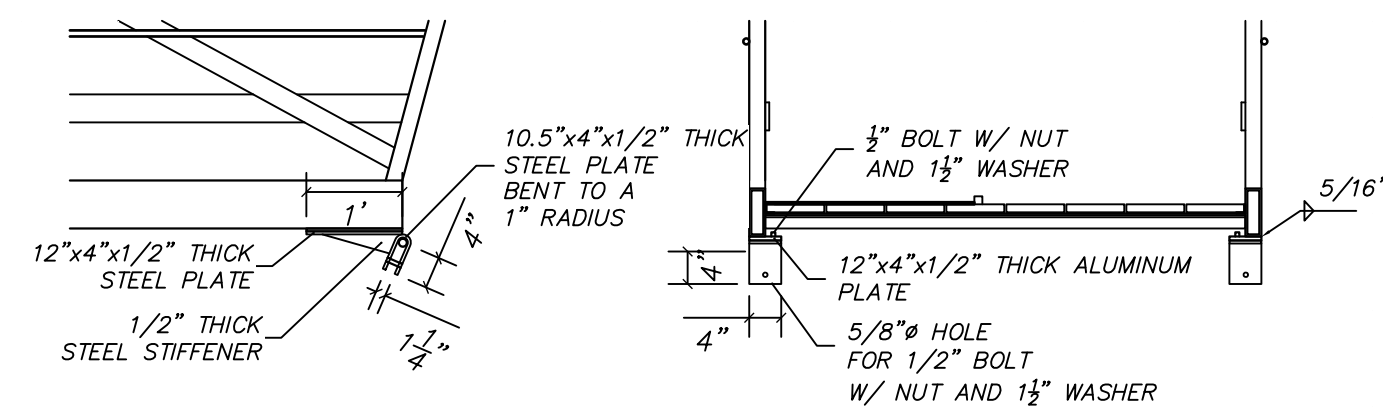
SCALE : 1/2" = 1'-0"

CLEAR WIDTH INTERIOR IS 60"
HEIGHT TO TOP OF RAIL ON TOP CHORD IS 42"

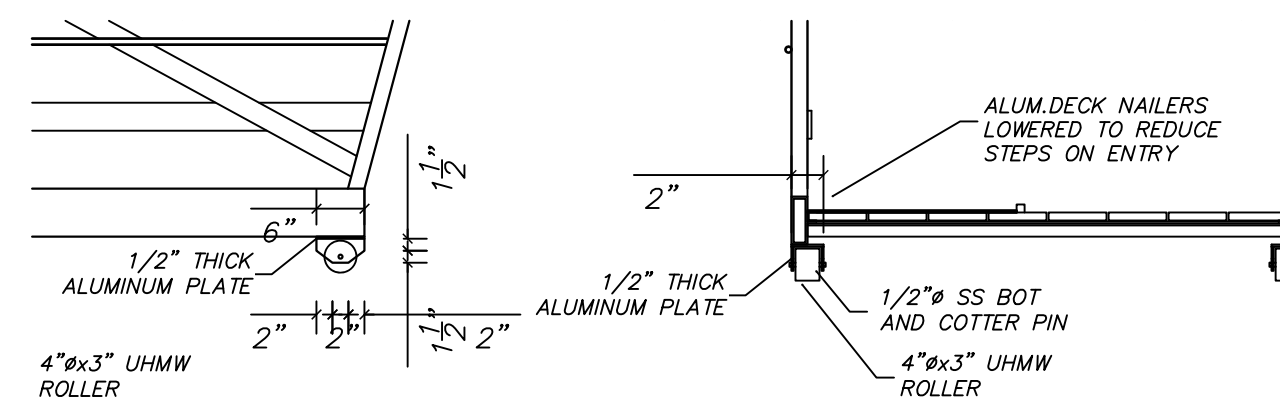
NOTES:
SHOP DRAWINGS REQUIRED
ALUMINUM T6061

100 PLF LOAD DESIGN LIVE
L/360 ALLOWABLE LL DEFLECTION
L/240 ALLOWABLE TL DEFLECTION.

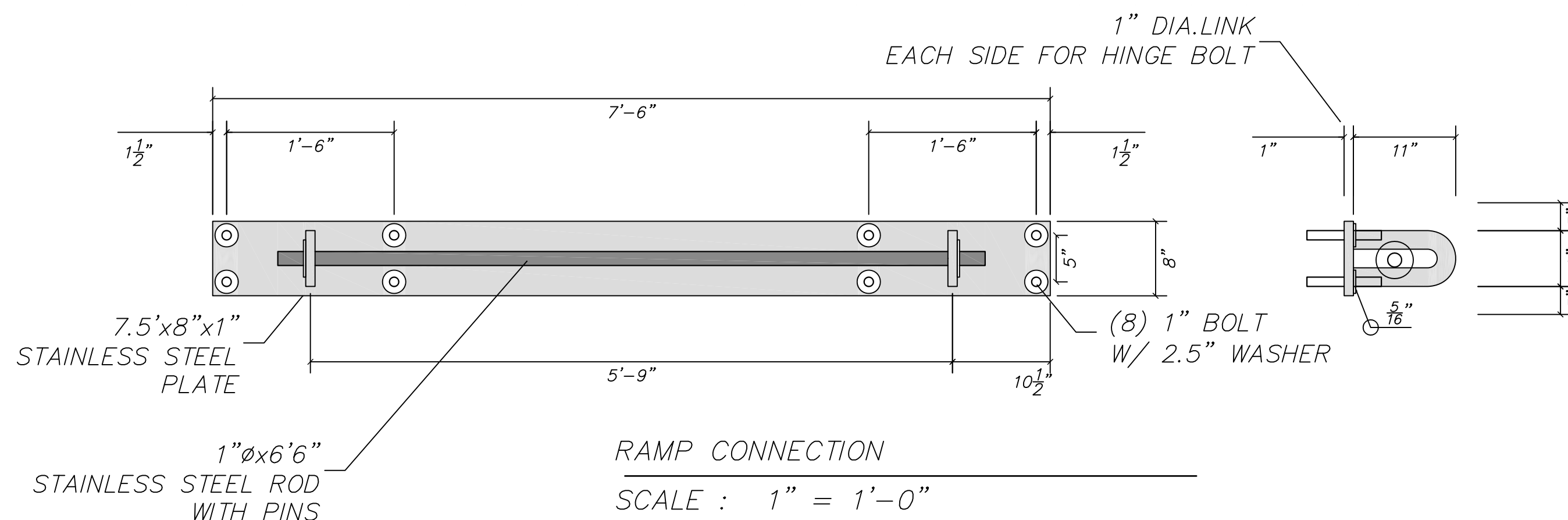
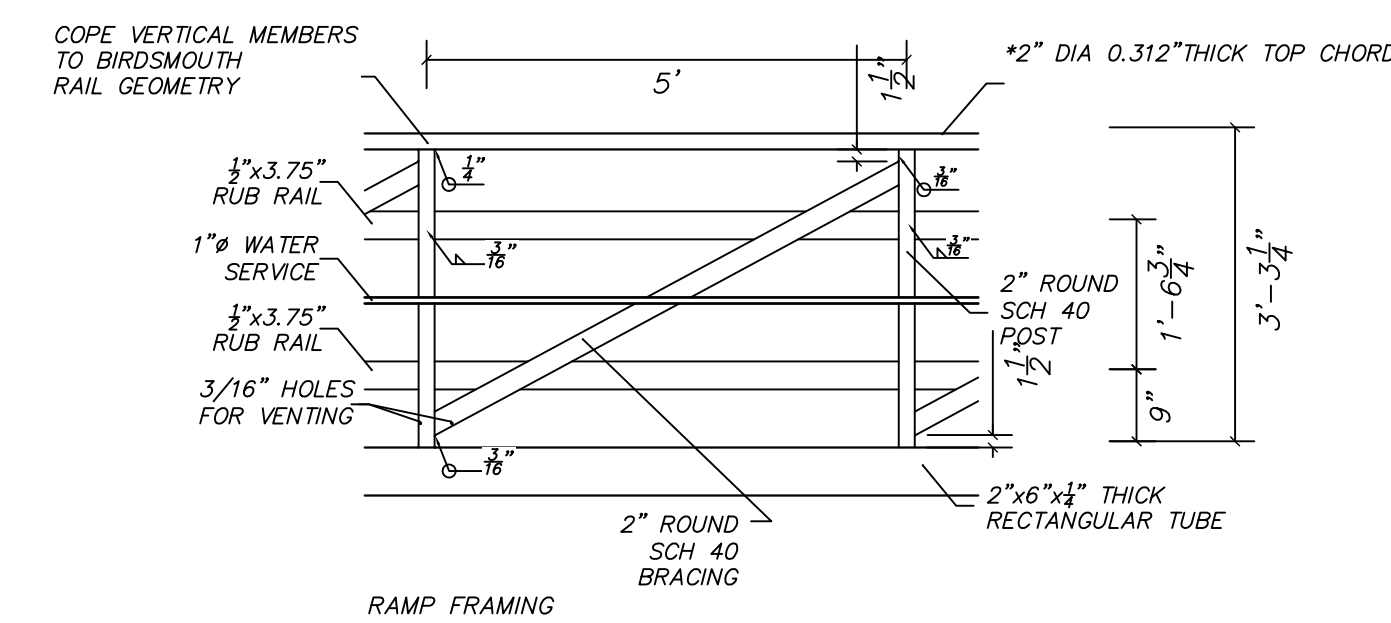
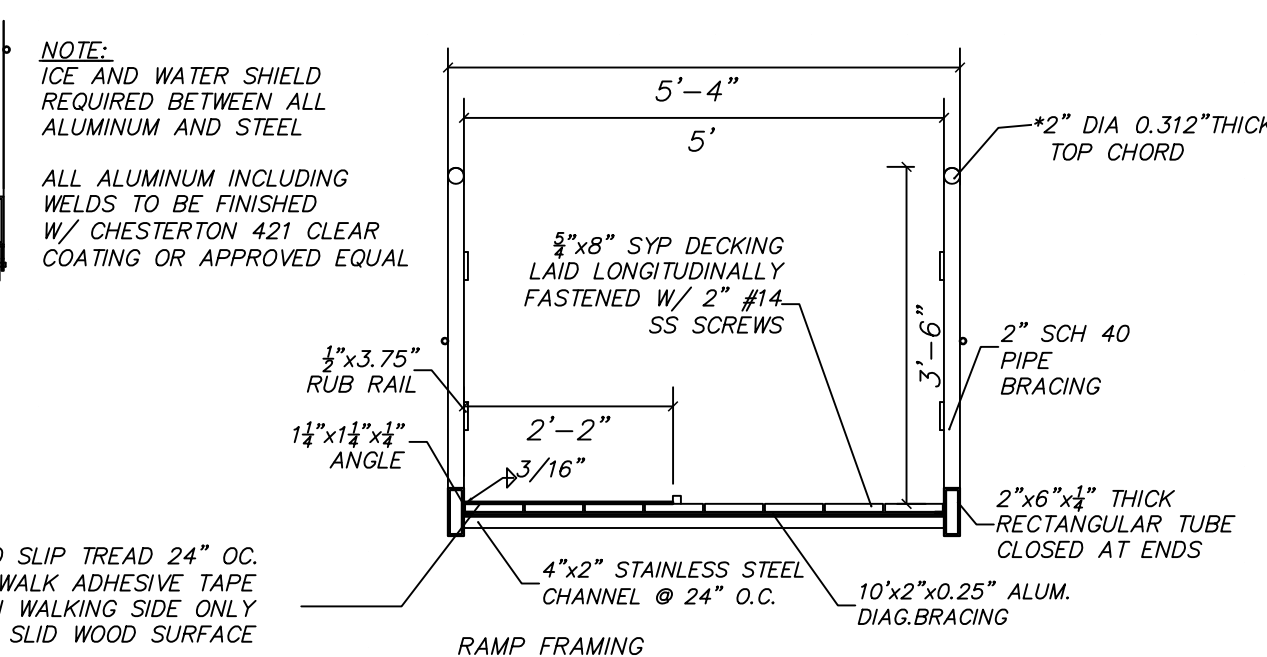
ALL FILLET WELDS 1/8" UNLESS OTHERWISE NOTED



RAMP TO SHORE BRACKET
SCALE : 1/2" = 1'-0"

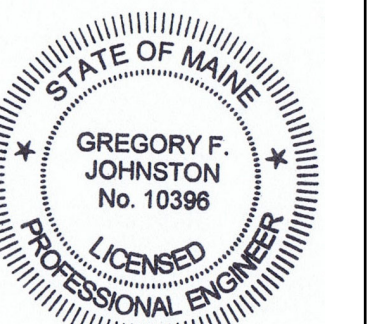
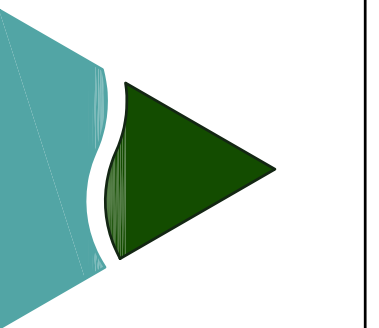


RAMP ROLLER
SCALE : 1/2" = 1'-0"



RAMP CONNECTION

SCALE : 1" = 1'-0"



DATE:
JANUARY 8, 2019

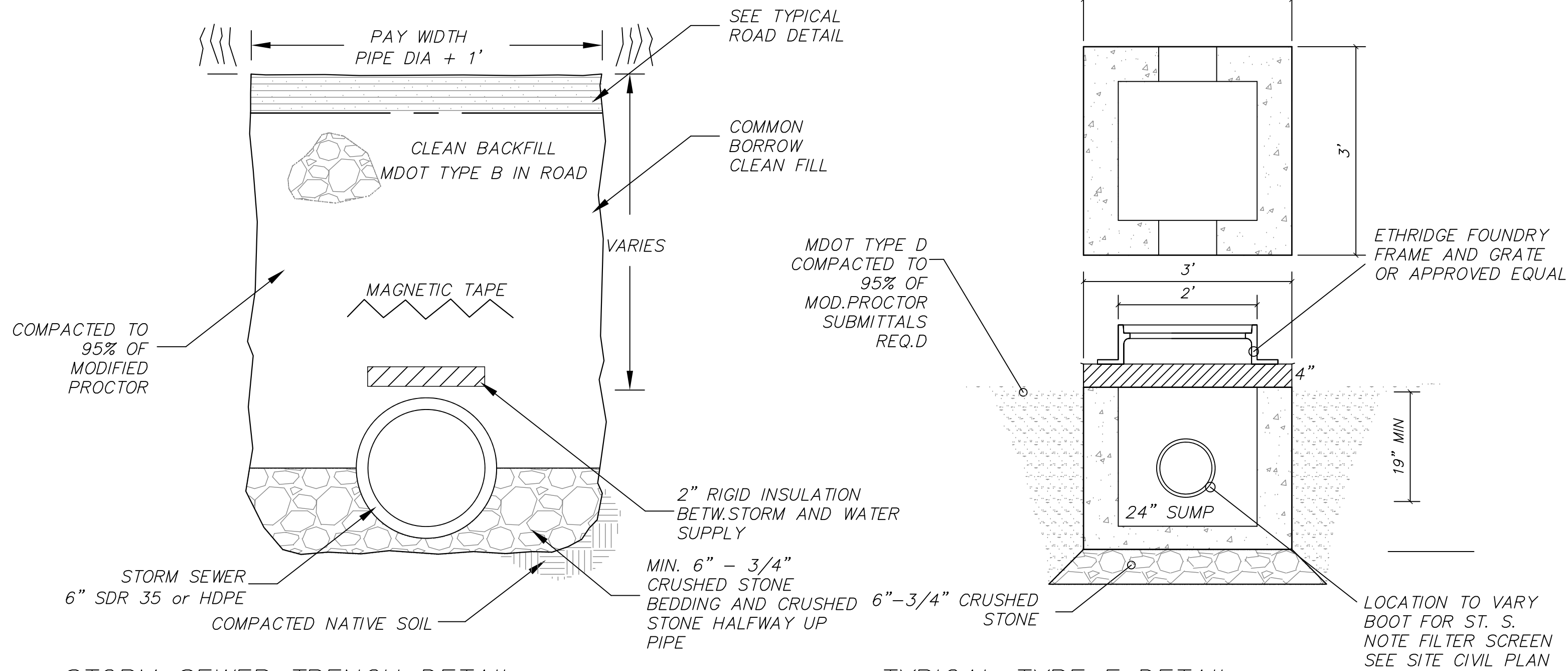
SCALE:
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PROJECT ID #
C-0354

DRAWN BY:
FMV

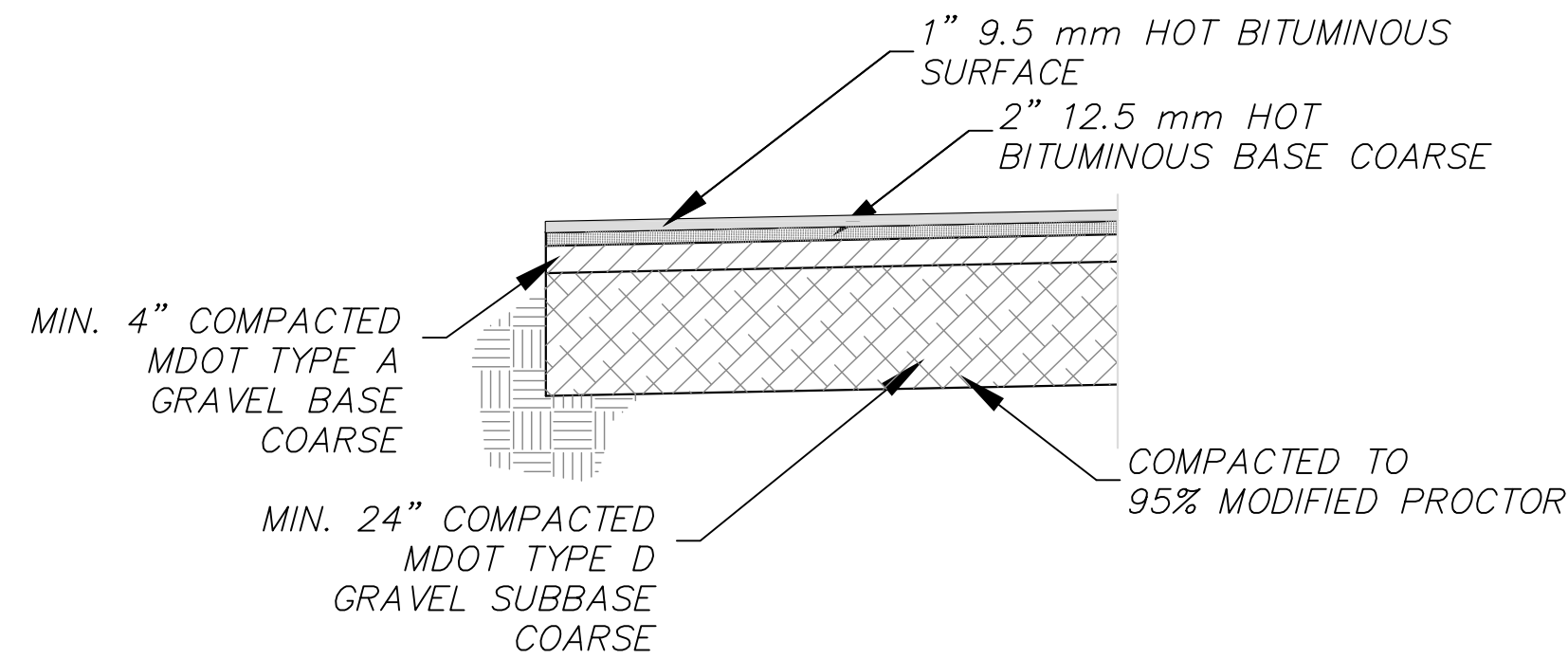
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SHEET NO:



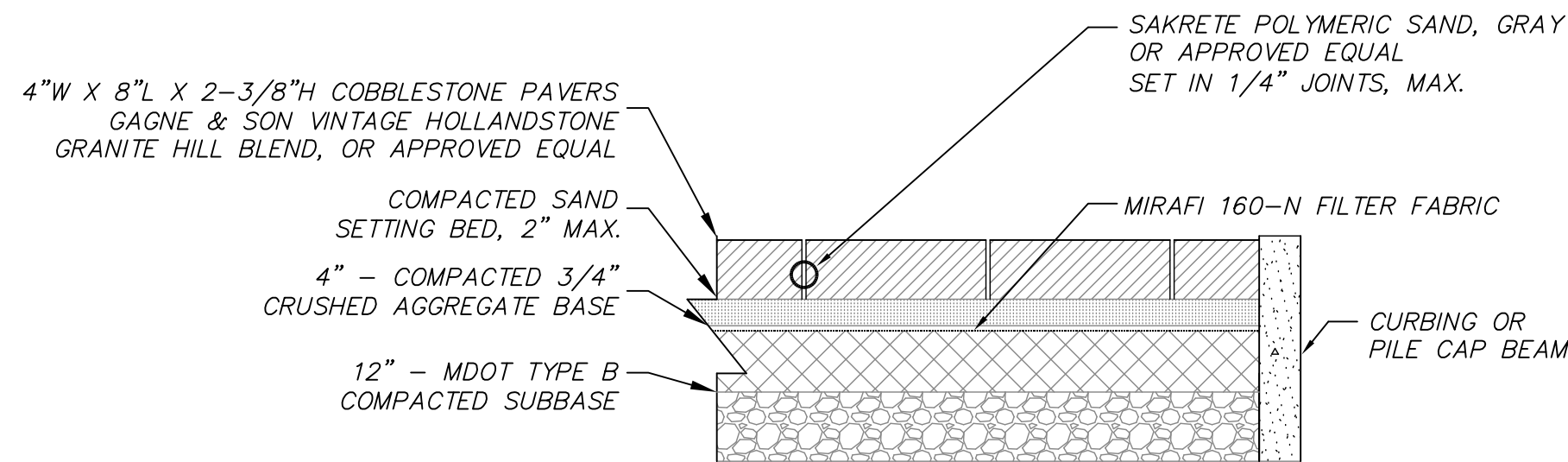
STORM SEWER TRENCH DETAIL

SCALE : N.T.S.



PAVING DETAIL

SCALE : N.T.S.

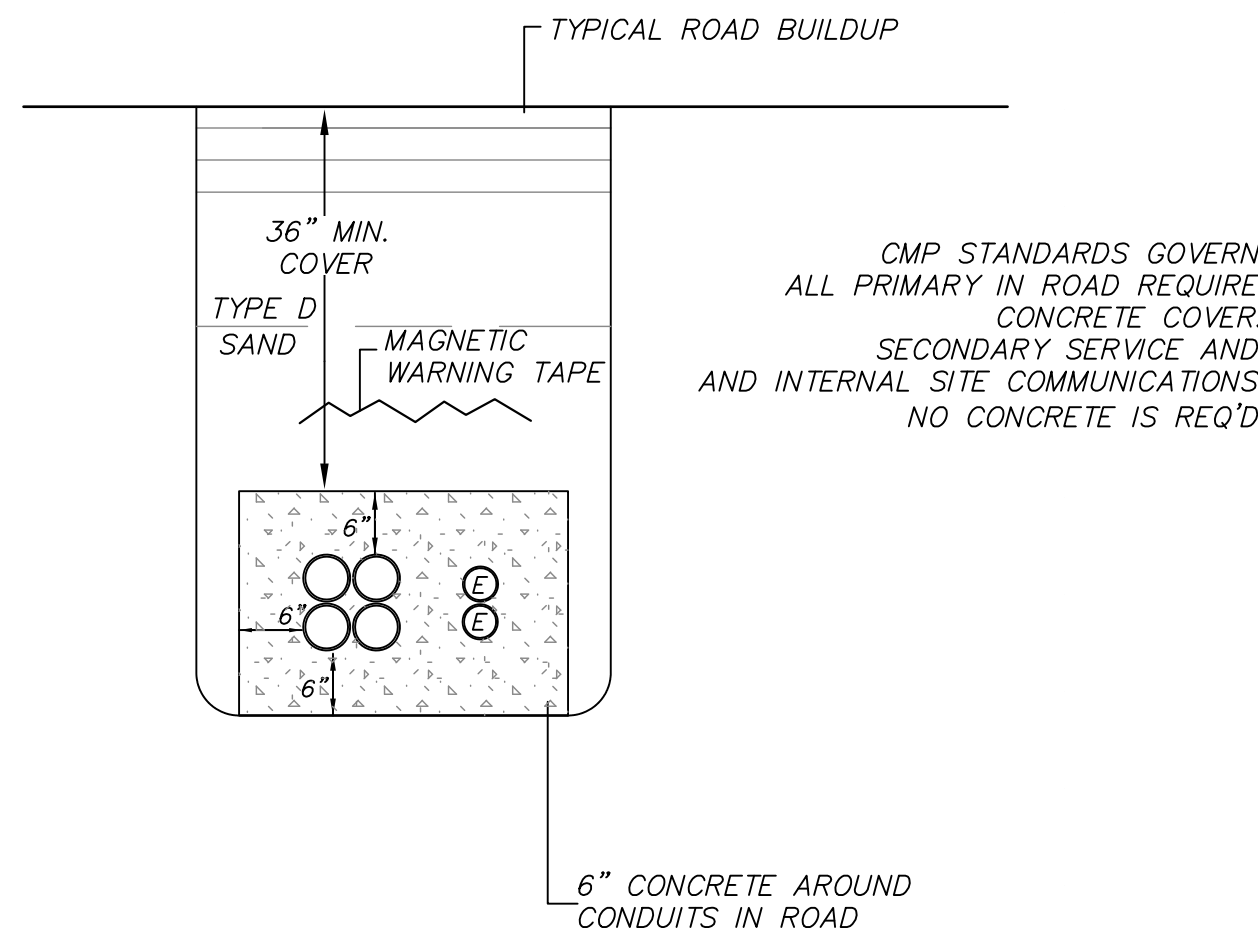


STONE PAVER DETAIL

SCALE : N.T.S.

TYPICAL TYPE F DETAIL

SCALE : N.T.S.

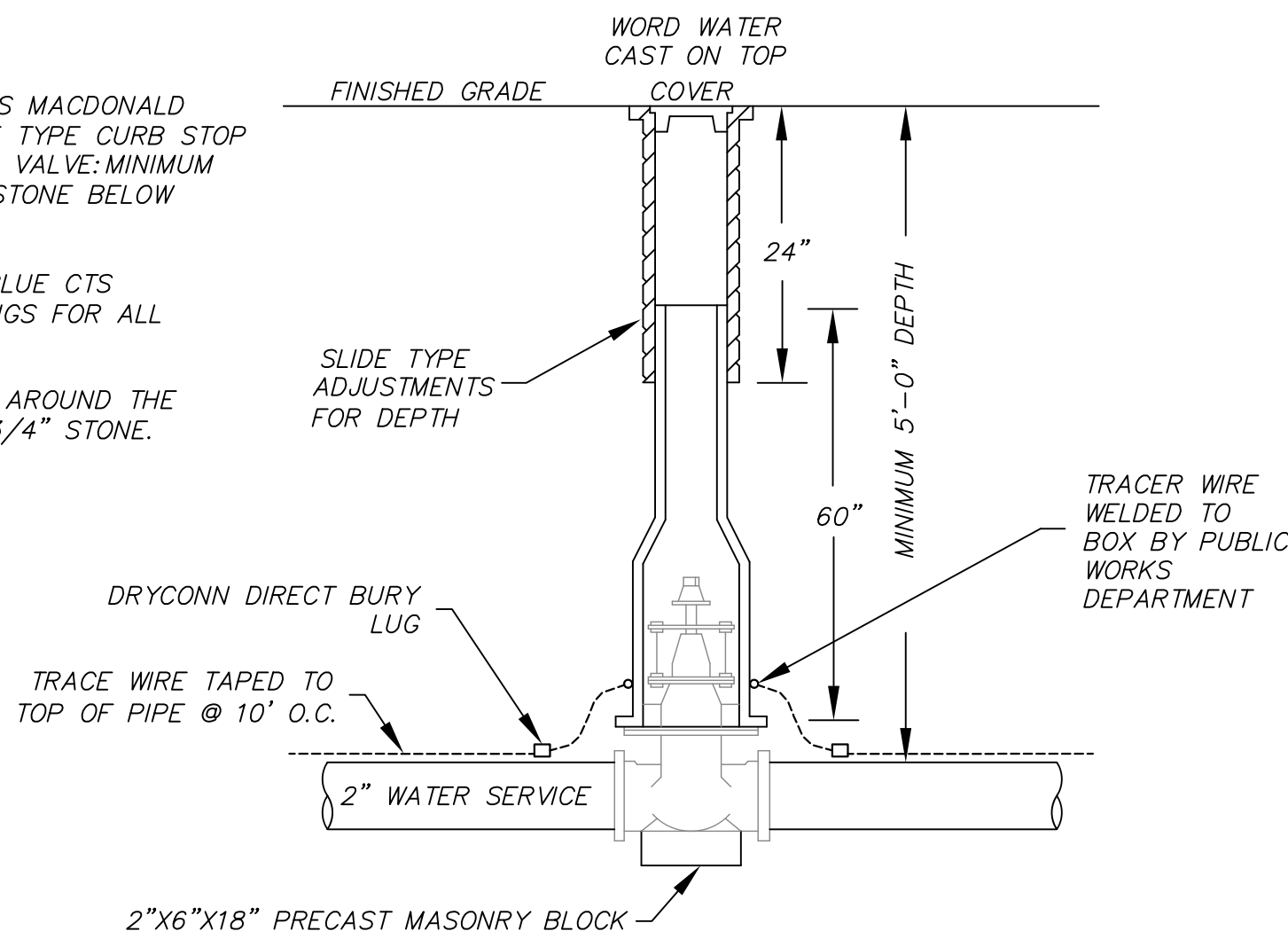


ELECTRICAL TRENCH

SCALE : N.T.S.

NOTES:

- 1" SERVICES TO AYS MACDONALD
STOP DRAIN BALL VALVE TYPE CURB STOP
WITH INTEGRATED CHECK VALVE: MINIMUM
24" OF 3/4" CRUSHED STONE BELOW
VALVE.
- 1" SERVICE LINES BLUE CTS
PIPE, COMPRESSION FITTINGS FOR ALL
CONNECTIONS.
- BACK FILL THE AREA AROUND THE
VALVE BOX WITH 6" - 3/4" STONE.

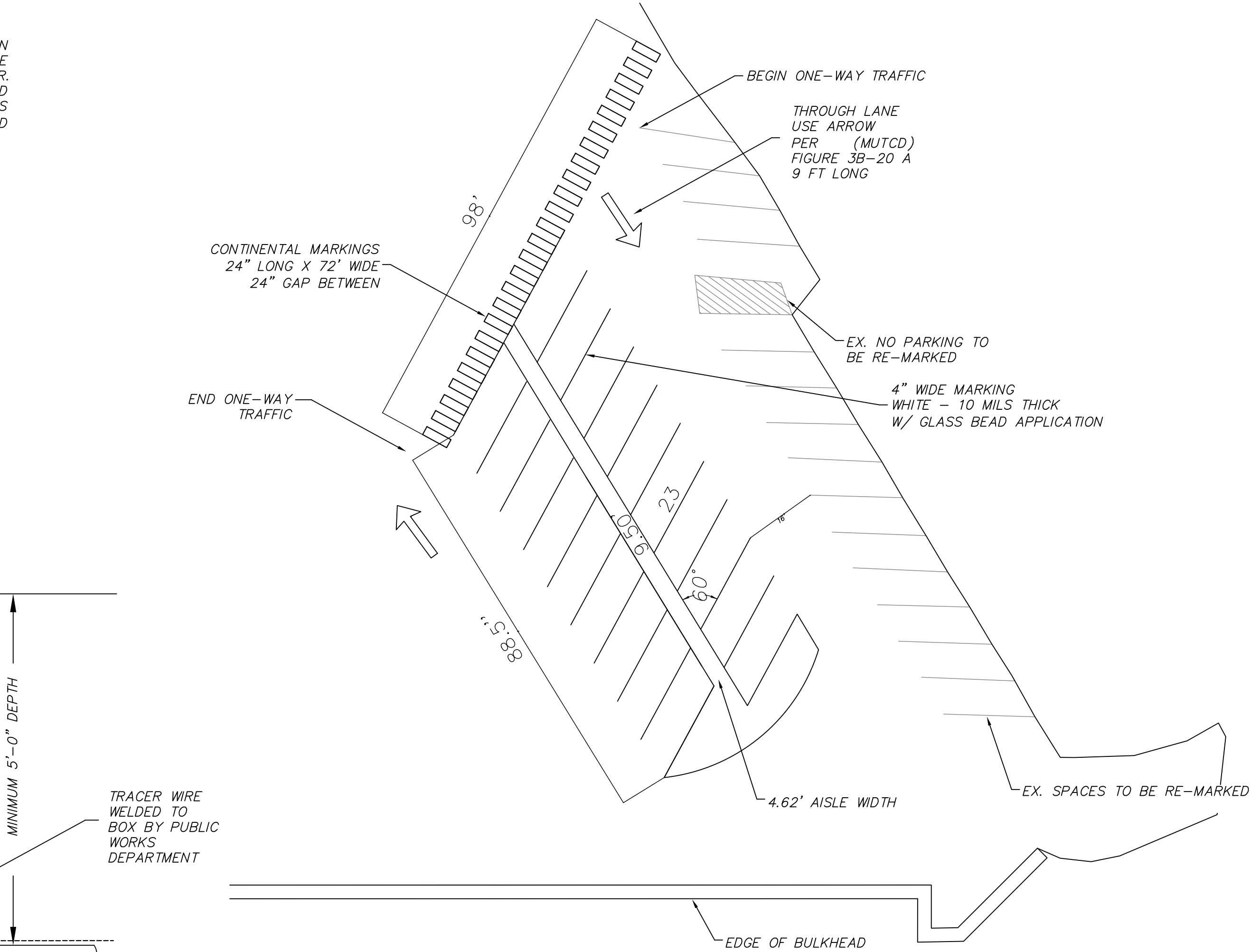


CURB STOP DETAIL

SCALE : N.T.S.

TYPICAL WATERMAIN AND TRENCH DETAIL

SCALE : N.T.S.



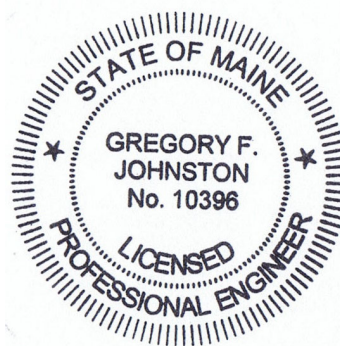
STRIPING DETAIL DETAIL

SCALE : 1" = 20'

PAVEMENT MARKING NOTES:

1. ALL PAVEMENT LINES AND MARKINGS SHALL BE APPLIED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
2. LONGITUDINAL LINES PLACED ON TANGENT ROADWAY SEGMENTS SHALL BE STRAIGHT AND TRUE. LONGITUDINAL LINES PLACED ON CURVES SHALL BE CONTINUOUS SMOOTHLY CURVED LINES CONSISTENT WITH THE ROADWAY ALIGNMENT. ALL PAVEMENT MARKINGS PLACED SHALL MEET THE TOLERANCE LIMITS SHOWN ON THE PLANS.
3. BROKEN LINES SHALL CONSIST OF ALTERNATE 3 M [10 FT] PAINTED LINE SEGMENTS AND 9M [30 FT] GAPS.
4. APPLICATION PRIOR TO APPLYING PAINT FOR FINAL PAVEMENT LINES, THE CONTRACTOR SHALL PERFORM A TEST FOR PAINT THICKNESS BY FURNISHING AND PLACING A PIECE OF SMOOTH, CLEAN METAL WITH AN AREA OF AT LEAST 0.1 M2 [144 IN2] IN THE PATH OF THE STRIPING TRUCK. THE STRIPING TRUCK SHALL BE PASSED OVER THE PIECE OF METAL, PAINTING THE SURFACE AS IT PASSES, WITHOUT APPLYING BEADS. THE RESULT OF THIS TEST WILL BE USED TO DETERMINE THE PRESSURE SETTING AND SPEED OF THE TRUCK WHEN APPLYING PAINT TO OBTAIN THE SPECIFIED THICKNESS. ADDITIONAL PAINT THICKNESS TESTING MAY BE REQUIRED ON THE FINAL PAINT MARKINGS. THE WET THICKNESS OF PAINT WITHOUT BEADS ON FINAL PAVEMENT LINES SHALL BE A MINIMUM OF 0.400 MM [16 MILS].
5. WHERE THE PAINT IS APPLIED BY HAND PAINTING OR SPRAYING, APPLICATION SHALL BE IN TWO UNIFORM COVERING COATS, EACH AT LEAST 0.25 MM [10 MILS] THICK. BEFORE THE SECOND COAT OF PAINT HAS DRIED, THE GLASS BEADS SHALL BE APPLIED BY A PRESSURE SYSTEM THAT WILL FORCE THE GLASS BEADS ONTO THE UNDRYED PAINT AS UNIFORMLY AS POSSIBLE.
6. GLASS BEADS SHALL BE APPLIED TO THE FINAL PAVEMENT LINES, MARKING AND CURB AT THE RATE OF 0.54 KG/L [4.5 LB/GAL] OF PAINT AND IN SUFFICIENT QUANTITY TO ASSURE COMPLETE AND UNIFORM COVERAGE OF HAND PAINTED SURFACES.
7. THE FINAL PAVEMENT LINES AND MARKINGS SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS BY THE INLAY METHOD OF APPLICATION.
8. ESTABLISHMENT PERIOD MARKING MATERIAL FURNISHED AND INSTALLED UNDER THIS CONTRACT FOR FINAL PAVEMENT MARKINGS SHALL STILL BE SUBJECT TO A SIX-MONTH PERIOD OF ESTABLISHMENT.
9. REMOVING LINES AND MARKINGS WHEN IT IS NECESSARY TO REMOVE PAVEMENT LINES AND MARKINGS. IT SHALL BE DONE BY GRINDING, HIGH TEMPERATURE FLAME, SAND BLASTING, SOLVENT OR OTHER ACCEPTABLE MEANS. THE METHOD CHOSEN MUST BE CAPABLE OF COMPLETELY ERADICATING THE EXISTING LINE OR MARKING WITHOUT DAMAGE TO THE PAVEMENT. BURNING AND GRINDING TO REMOVE TEMPORARY MARKINGS FROM FINAL PAVEMENT OR FROM EXISTING PAVEMENT NOT TO BE RESURFACED WILL NOT BE PERMITTED.
10. ALL CROSSWALKS SHALL MEET THE LATEST MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) SECTION 3B.18 CROSSWALK MARKING STANDARDS.

G.F. Johnston & Associates
Consulting Civil Engineers
P.O. Box 197
Southwest Harbor, Maine 04679
207-244-1200



SITE WORK DETAILS

DATE:
MARCH 13TH, 2020

SCALE:
AS MARKED

PROJECT ID #
C-0354

DRAWN BY:
FMV

CHECKED BY:
GFI

SHEET NO:

C14



CONCRETE DECKING AT EX. INFILL



EX. TIMBER CRIBBING



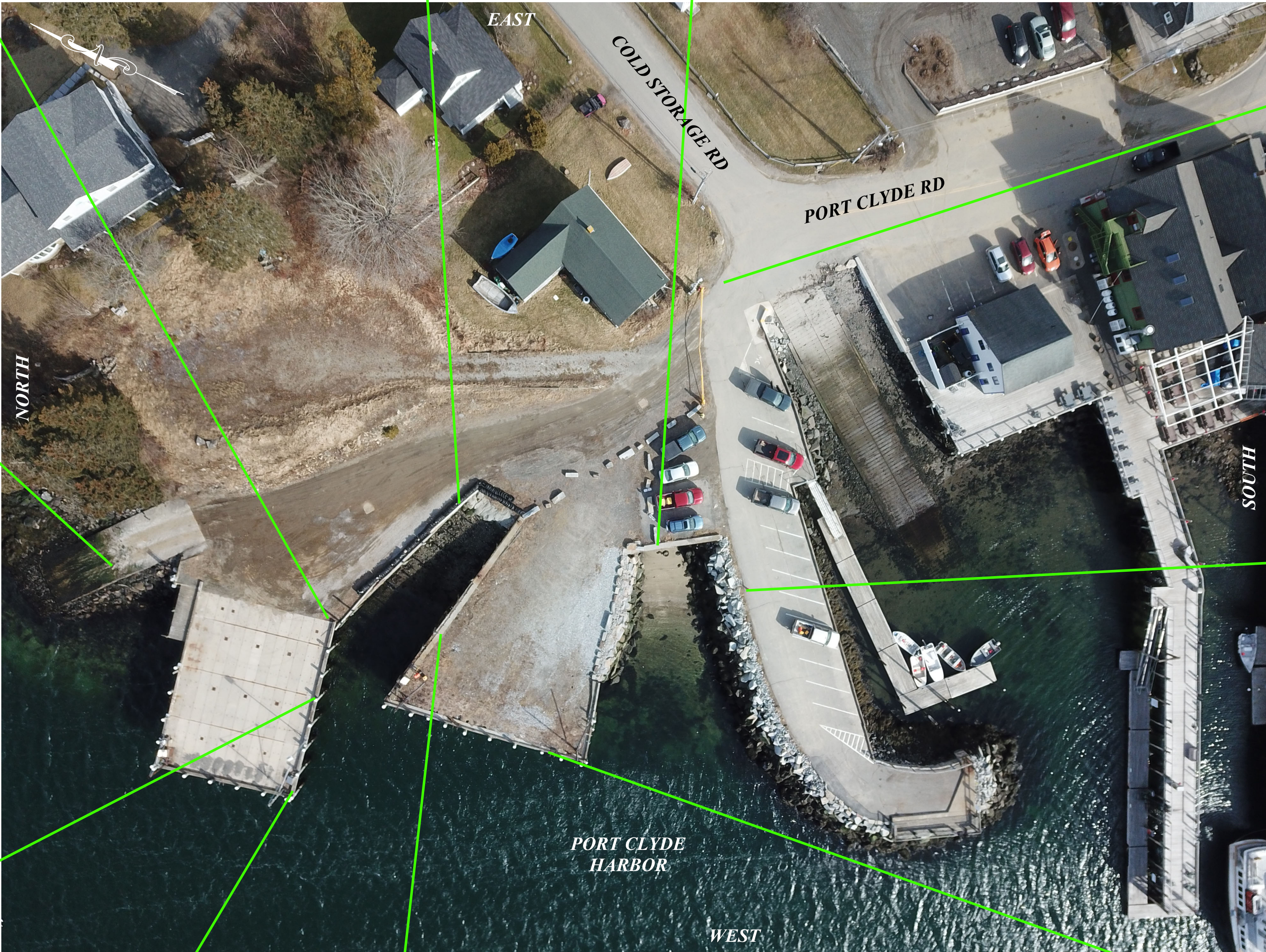
EX. TIMBER CRIBBING & CONCRETE CAP



EX. OVERHEAD UTILITIES



EX. RAMP



EX. RIP RAP EMBANKMENT



EX. FENDER PILES



EX. SHEET PILING & FENDER PILES



EX. CONCRETE DECKING

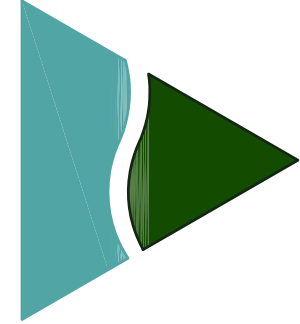


EX. CONDITIONS WITHIN INFILL AREA "A"

EXISTING CONDITION
PHOTO EXHIBIT

RECORD OWNER
TOWN OF ST. GEORGE,
KNOX COUNTY, MAINE

G.F. Johnston & Associates
Consulting Civil Engineers
P.O. Box 197
Southwest Harbor, Maine 04679
207-244-1200



DATE:
MARCH 13TH, 2020

SCALE:
N.T.S.

PROJECT ID #
C-0354

DRAWN BY:
JB

CHECKED BY:
GFJ

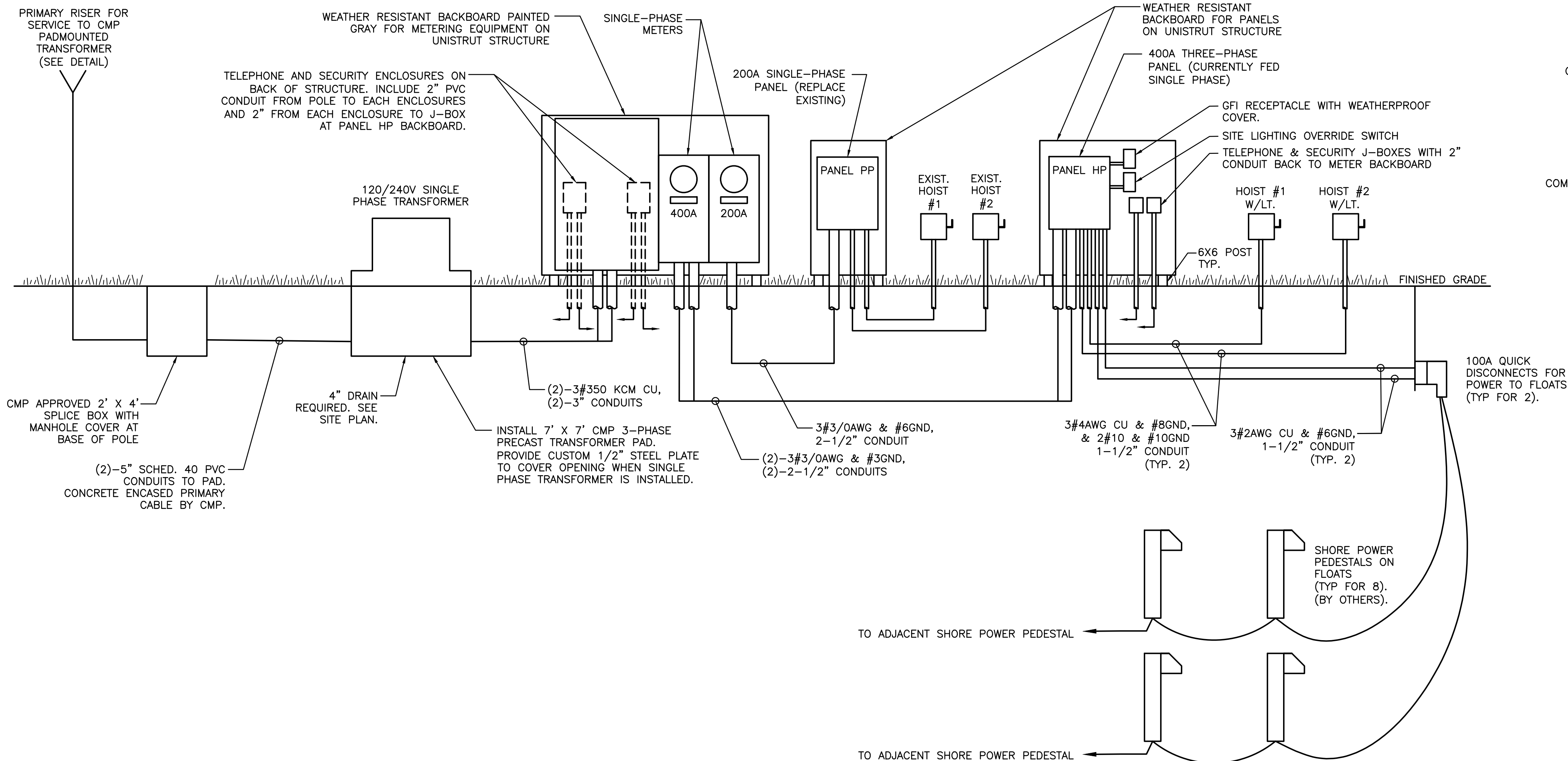
SHEET NO:

C15

DIRECTORY	KVA LOAD			CKT #	BKR AMPS	PHASE	BKR AMPS	CKT #	KVA LOAD			DIRECTORY	
	A	B	C						A	B	C		
FLOAT SHORE POWER: CKT #1	9.6			1	100	A	100	2	9.6			FLOAT SHORE POWER: CKT #2	
		9.6		3		B		4		9.6			
SPARE (NOT ENERGIZED)			*	5	20	C	20	6			*	SPARE (NOT ENERGIZED)	
HOIST #1	5.8			7	90 (1)	A	90 (1)	8	5.8			HOIST #2	
		5.8		9		B		10		5.8			
SPARE (NOT ENERGIZED)			*	11	20	C	20	12			*	SPARE (NOT ENERGIZED)	
PIER LIGHTING	0.3			13	20	A	20	14	0.1			HOIST LIGHT #1	
GFI RECEPTACLE		0.2		15	20	B	20	16		0.1		HOIST LIGHT #2	
SPARE (NOT ENERGIZED)			*	17	20	C	20	18			*	SPARE (NOT ENERGIZED)	
SPARE	*			19	20	A	20	20	*			SPARE	
SPARE		*		21	20	B	20	22		*		SPARE	
SPARE (NOT ENERGIZED)			*	23	20	C	20	24			*	SPARE (NOT ENERGIZED)	
SPACE	*			25	20	A	20	26	*			SPACE	
SPACE		*		27	20	B	20	28		*		SPACE	
SPACE			*	29	20	C	20	30			*	SPACE	
SPACE	*			31	20	A	20	32	*			SPACE	
SPACE		*		33	20	B	20	34		*		SPACE	
SPACE			*	35	20	C	20	36			*	SPACE	
SPACE	*			37	20	A	20	38	*			SPACE	
SPACE		*		39	20	B	20	40		*		SPACE	
SPACE			*	41	20	C	20	42			*	SPACE	
SUBTOTAL	15.7	15.6	###						15.5	15.5	###	SUBTOTAL	
VOLTAGE: 208Y/120V PHASE: 3				POLES: 4			TOTAL KVA A-PHASE			31.2		PANEL	HP
MAIN LUGS: 400A				BUS AMPS: 400A			TOTAL KVA B-PHASE			31.2			
MOUNTING: SURFACE IN NEMA 4X ENCLOSURE						TOTAL KVA C-PHASE			###		LOCATION	ON POLE AT HARBOR	
SHORT CIRCUIT RATING: *KAIC						TOTAL KVA			62.4				
NOTES: INTENT IS TO PROVIDE 3-PHASE PANEL FOR FUTURE USE AND INSTALL SINGLE PHASE POWER TO IT AT THIS TIME. (1) BREAKER SHOWN FOR SIZING/PRICING PURPOSES ONLY. COORDINATE WITH EQUIPMENT PROVIDED.													

3 ELECTRICAL PANEL SCHEDULES

SCALE: NOT TO SCALE



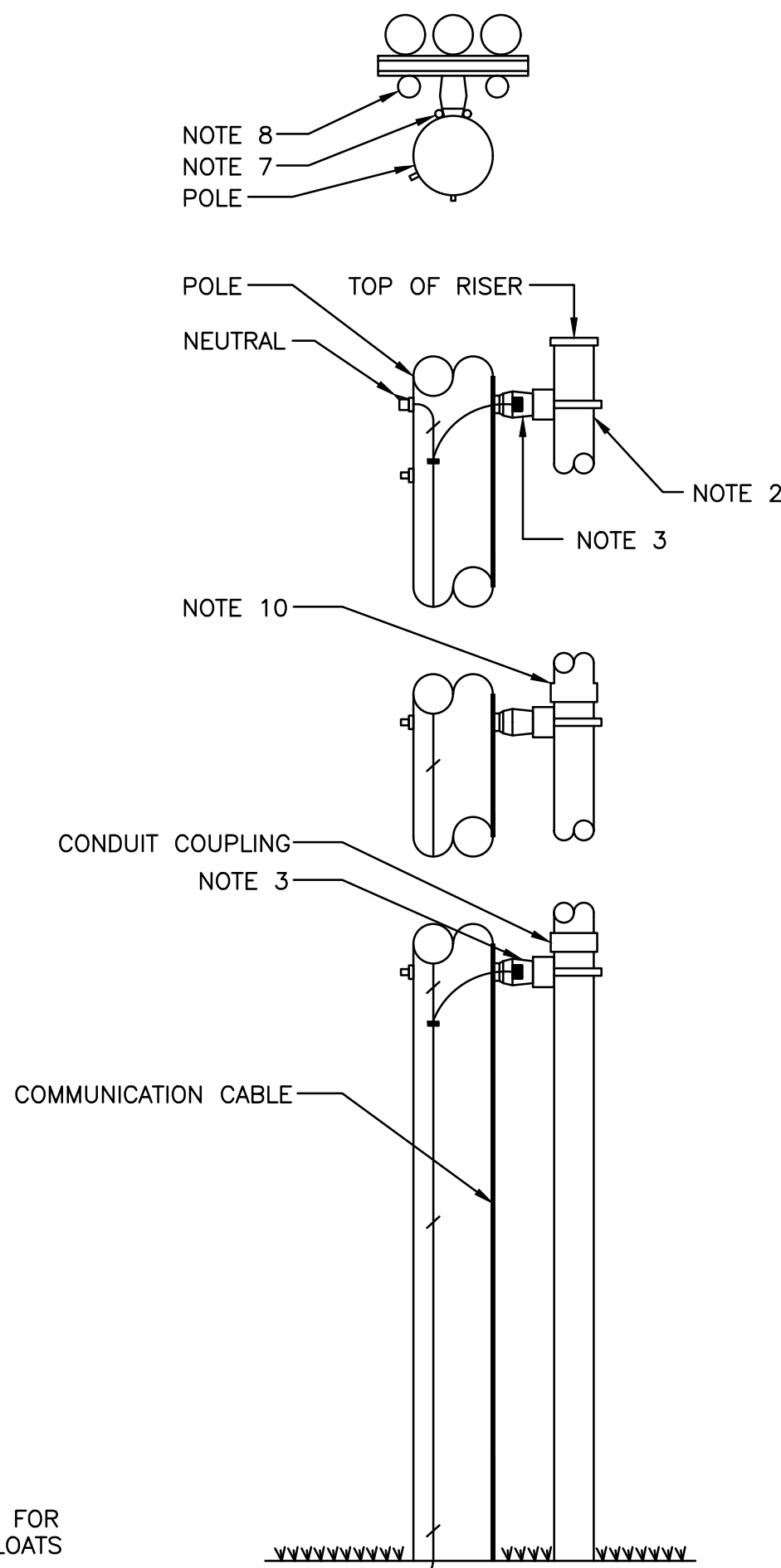
1 RISER DIAGRAM

SCALE: NOT TO SCALE

DIRECTORY	KVA LOAD		CKT #	BKF AMPS	PHASE	BKF AMPS	CKT #	KVA LOAD		DIRECTORY
	A	B						A	B	
UNREADABLE	*		1	20	A	20	2	*		*UNREADABLE*
UNREADABLE		*	3	20	B	60	4		*	BAIT MACHINE
	*		5		A		6	*		
UNREADABLE		*	7	20	B	30	8		*	*UNREADABLE*
	*		9		A		10	*		
UNREADABLE		*	11	20	B	30	12		*	OUTLET ON RIGHT SIDE
UNREADABLE	*		13	20	A	30	14	*		*UNREADABLE*
		*	15		B		16		*	
UNREADABLE	*		17	20	A		18	*		SPACE
		*	19		B		20	*		SPACE
SPACE	*		21		A		22	*		SPACE
SPACE		*	23		B		24		*	SPACE
SPACE	*		25		A		26	*		SPACE
SPACE		*	27		B		28		*	SPACE
SPACE	*		29		A		30	*		SPACE
SUBTOTAL	###	###						###	###	SUBTOTAL
VOLTAGE: 120Y/240V PHASE: 1 POLES: 3				TOTAL KVA A-PHASE ###				PANEL		PP
MAIN LUGS ONLY BUS AMPS: 200A				TOTAL KVA B-PHASE ###						
MOUNTING: SURFACE IN NEMA 4X ENCLOSURE								LOCATION		EXISTING PANEL LOCATION
SHORT CIRCUIT RATING: 10KAIC				TOTAL KVA ###						
NOTES: VERIFY BREAKER SIZES IN THE FIELD.										

NOTES:

- ALL WORK SHALL BE IN COMPLIANCE WITH NFPA-70 NATIONAL ELECTRICAL CODE.
- INTENT IS TO CONSTRUCT SINGLE-PHASE ELECTRICAL UNDERGROUND SYSTEM THAT CAN BE CONVERTED TO THREE-PHASE IN THE FUTURE. COORDINATE ALL EQUIPMENT, INCLUDING BUT NOT LIMITED TO RISER EQUIPMENT, SPLICE BOX, TRANSFORMER PAD AND POLE WORK WITH CENTRAL MAINE POWER (CMP), CONTACT: DAN BEGIN (207) 629-4517.
- RISER CONDUITS SHALL BE GALVANIZED RIGID STEEL WITH STEEL SWEEPS.
- UNDERGROUND CONDUITS SHALL BE PVC SCHEDULE 40, INSTALLED TO A MINIMUM OF 30" BELOW GRADE. THE PRIMARY CONDUITS SHALL BE CONCRETE ENCASED. ALL OTHER CONDUITS CONCRETE ENCASED ONLY WHERE INSTALLED UNDER ROADWAYS, OR SUBJECT TO VEHICULAR TRAFFIC.
- THE INTENT IS TO PROVIDE A 7'X7' PRECAST PAD TO CMP STANDARDS FOR FUTURE THREE-PHASE BUILD-OUT. AT THIS TIME FURNISH A CUSTOM STEEL PLATE TO COVER THE UNUSED PORTIONS OF THE OPENINGS IN THE PAD THERE SHALL BE NO OPENINGS OBSERVABLE WHEN SINGLE-PHASE TRANSFORMER IS MOUNTED ON THE PAD.
- PROVIDE METERING GEAR ON UNISTRUT BACK PANEL LOCATED ADJACENT TO TRANSFORMER. THE INTENT IS THAT THE METERING EQUIPMENT AND WIRING WILL BE REPLACED ON THIS STRUCTURE IN THESE CONDUITS IN THE FUTURE AT SUCH TIME THREE-PHASE POWER IS BROUGHT TO THE SITE. METERING GEAR SHALL BE SQUARE D, EZ-METER PAK, OR EQUAL.
- PROVIDE GROUNDING ELECTRODE SYSTEM AT THE METERING GEAR, AS PER NEC TO INCLUDE A MINIMUM OF (2)-8' X 3/4" COPPER GROUND RODS, INSTALLED A MINIMUM OF 10' APART, #2/0 AWG BARE COPPER GROUNDING ELECTRODE CONDUCTOR.
- ALL WIRING SHALL BE COPPER, 600V, STRANDED, XHHW INSULATION. MINIMUM WIRE SIZE SHALL BE #12 AWG.
- PROVIDE NEW PANELBOARDS IN NEMA 4X STAINLESSS STEEL ENCLOSURES. PANELBOARDS SHALL BE AS MANUFACTURED BY SQUARE D MODEL NQ OR EQUAL.
- LIGHTING FIXTURES SHALL BE AS SPECIFIED ON THE LIGHTING SCHEDULE. FURNISH LIGHTING CONTROLS AS SPECIFIED.
- ALL DISCONNECT SWITCHES SHALL BE NEMA 4X RATED, STAINLESS STEEL CONSTRUCTION.

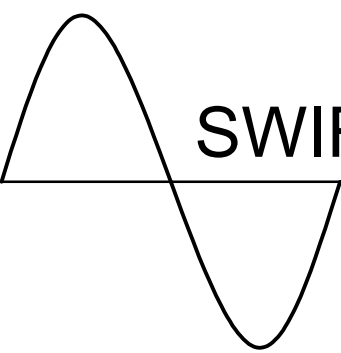


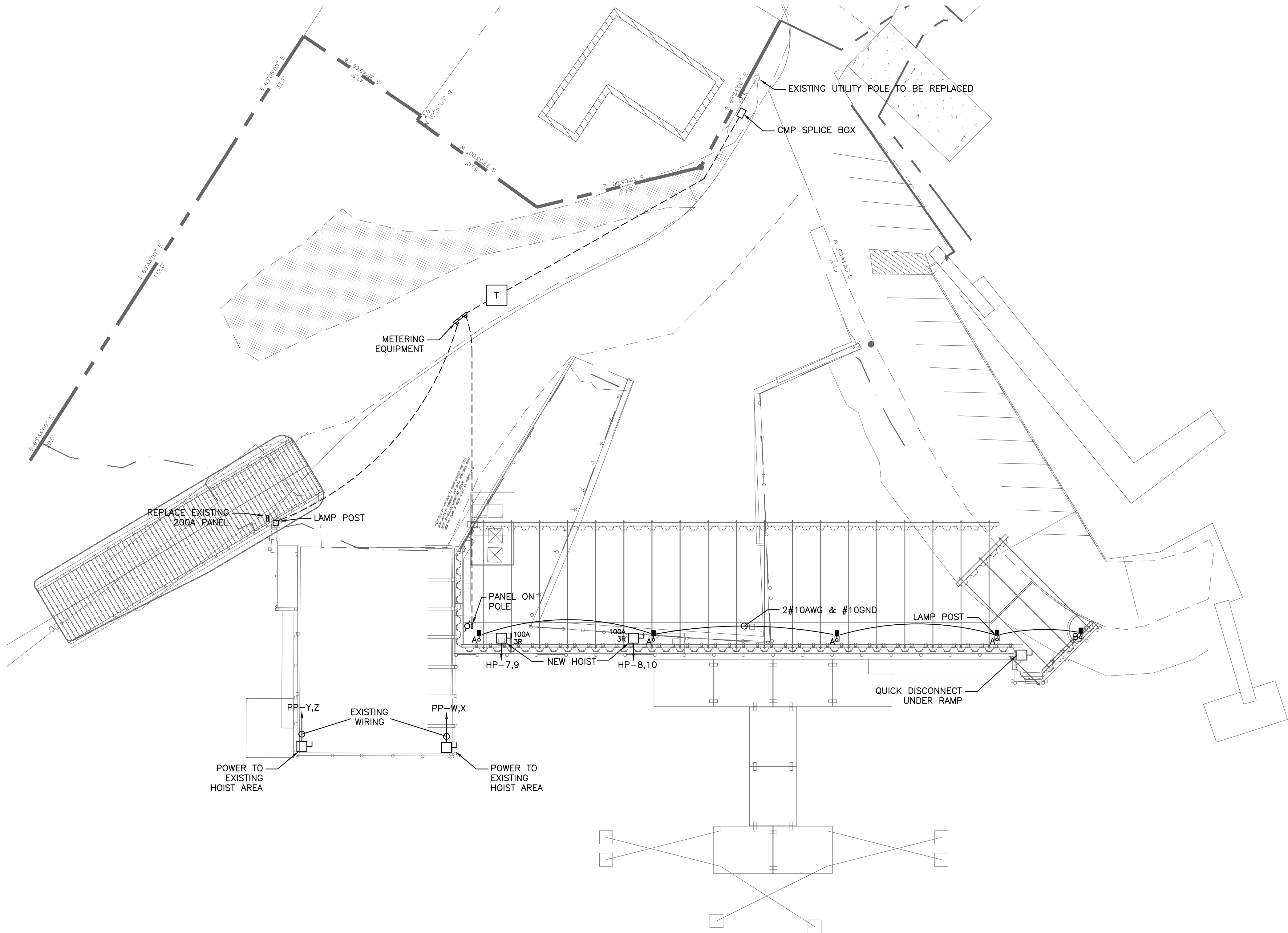
NOTES:

- STAND OFF BRACKETS ARE REQUIRED WHEN MORE THAN ONE CONDUIT PER-UTILITY IS TO BE INSTALLED ON A POLE
- CONDUIT SECTIONS USED WITH STAND OFF BRACKETS SHALL BE RIGID STEEL OR SCHEDULE 80 PVC CONDUIT ONLY. EXCEPT THAT, SCHEDULE 40 PVC SUN LIGHT RESISTANT CONDUIT MAY BE USED FOR THE TOP SECTION OF THE RISER. IF TOP SECTION IS NO LONGER THAN 24' IT MUST BE SUPPORTED WITH A MINIMUM OF ONE STAND OFF BRACKET. IF TOP SECTION IS LONGER THAN 72' IT MUST BE SUPPORTED BY TWO STAND OFF BRACKETS.
- WHERE PVC IS USED FOR RISER, EACH STAND OFF BRACKET SUPPORTING THE PVC SHALL BE GROUNDED. WHERE STEEL IS USED FOR THE RISER ONE STAND OFF BRACKET SUPPORTING THE STEEL IS REQUIRED TO BE GROUNDED.
- IF RISER IS ALL STEEL CONDUIT, INSTALL INSULATED GROUNDING BUSHING AT TOP OF RISER.
- LOWEST BRACKET SHALL BE A MINIMUM OF 8 FEET ABOVE FINISHED GRADE.
- ONE BRACKET SHALL BE USED TO SUPPORT EACH 10 FOOT SECTION OF CONDUIT WITH THE BRACKET PLACED JUST BELOW THE RISER CONDUIT COUPLING.
- COMMUNICATION CABLE MAY BE ATTACHED DIRECTORY TO POLE ADJACENT TO BRACKETS.
- ALTERNATE LOCATION FOR COMMUNICATION CABLE IF RUN IN METAL CONDUIT OR SCHEDULE 80.
- ON SINGLE PHASE PRIMARY, SECONDARY AND SERVICE URD RISERS RIGID STEEL, STEEL IMC OR SCHEDULE 80 PVC MAY BE USED. WHERE SCHEDULE 80 PVC IS USED THE CONDUIT DIAMETER SHALL BE NO GREATER THAN 3 INCHES. ON RISER USING STAND OFF BRACKETS THE TOP SECTION LESS THAN 10' IN LENGTH MAY BE SCHEDULE 40 PVC. WHEREVER SWEEPS ARE USED STEEL IS REQUIRED.
- WHEN USING PVC, POSITION BELL END SECURELY OVER RIGID CONDUIT.

2 DETAIL — CONDUIT STANDOFF BRACKET RISER

SCALE: NOT TO SCALE

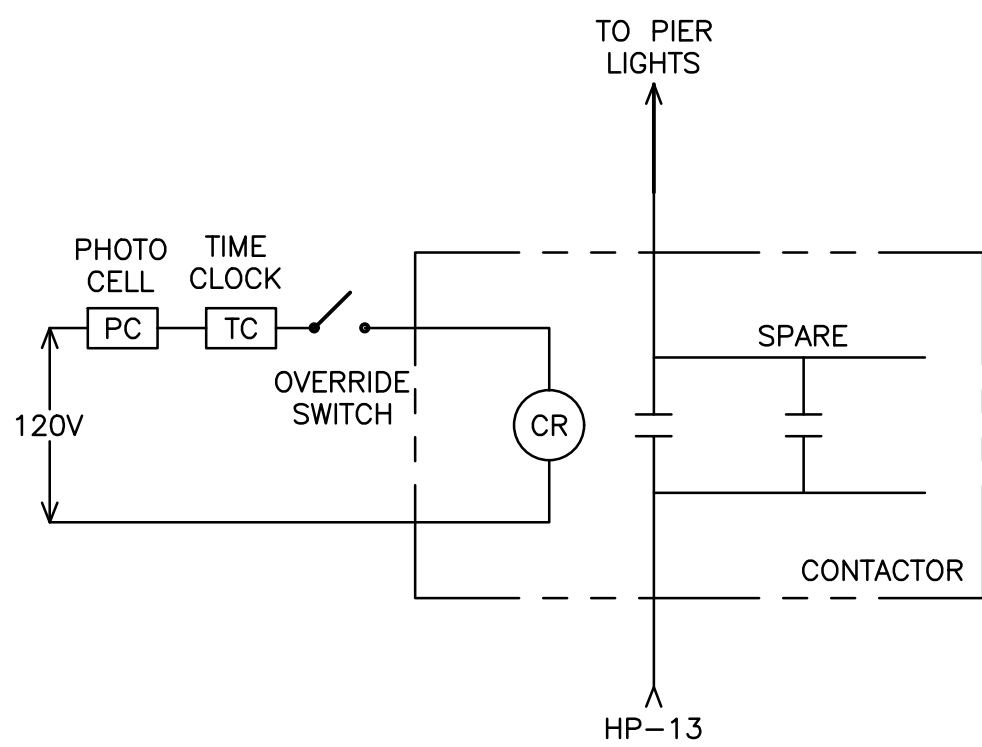
REV	BY	DATE	STATUS
ST. GEORGE PIER 10 COLD STORAGE ROAD, ST. GEORGE, MAINE			
ELECTRICAL NOTES, RISER, PANEL SCHEDULES & DETAIL			
		 SWIFTCURRENT Engineering Services 10 Forest Falls Dr. Unit 4b Yarmouth, ME 04096 Tel: (207) 847-9280	
		DESIGN BY: TDM	
		DRAWN BY: JMD	
		DATE: 3/13/2020	
		JOB: 20006	
		SCALE: AS NOTED	
		E1	



1 ELECTRICAL SITE PLAN
SCALE: 1"=20'

LIGHTING SCHEDULE					
TYPE	DESCRIPTION	MANFACTORER	LAMPS	MOUNTING	NOTES
A	FULL CUTOFF LED LIGHT CORROSION RESISTANT, BLACK FINISH, TYPE 2 DISTRIBUTION. 120V	BEACON LIGHTING	55W LED 4000K 6257 LUMENS	16' ROUND STRAIGHT ALUM. POLE	MODEL #: VPS-24L-55-4K7-2-UNV-A-BL POLE #: RSA-B-S-16-40-B-CAP-1-B3-BLT
B	LED FLAGPOLE LIGHT, BLACK FINISH, KNUCKLE FOR AIMING. MOUNT ON 1/2" THREADED PIPE. 120V	BK LIGHTING	13W LED 4000K 900 LUMENS	GROUND MOUNT ON CONDUIT STUB	MODEL #: DE-LED-TR-X100-SP-BLP-9-11-B-120.

2 LIGHTING SCHEDULE
SCALE: NOT TO SCALE



3 EXTERIOR LIGHTING CONTROLS DIAGRAM
SCALE: NOT TO SCALE

NOTES:

- SEE E1 FOR PANEL SCHEDULES, ELECTRICAL RISER DIAGRAM & GENERAL NOTES.
- SEE RISER PLAN FOR WIRING AND CONDUITS.

REV	BY	DATE	STATUS
ST. GEORGE PIER 10 COLD STORAGE ROAD, ST. GEORGE, MAINE			
ELECTRICAL SITE PLAN, LIGHTING SCHEDULE & CONTROL DIAGRAM			
		DESIGN BY: TDM	
		DRAWN BY: JMD	
		DATE: 3/13/2020	
		JOB: 20006	
		SCALE: AS NOTED	
		E2	
		Engineering Services 10 Forest Falls Dr. Unit 4b Yarmouth, ME 04096 Tel: (207) 847-9280	