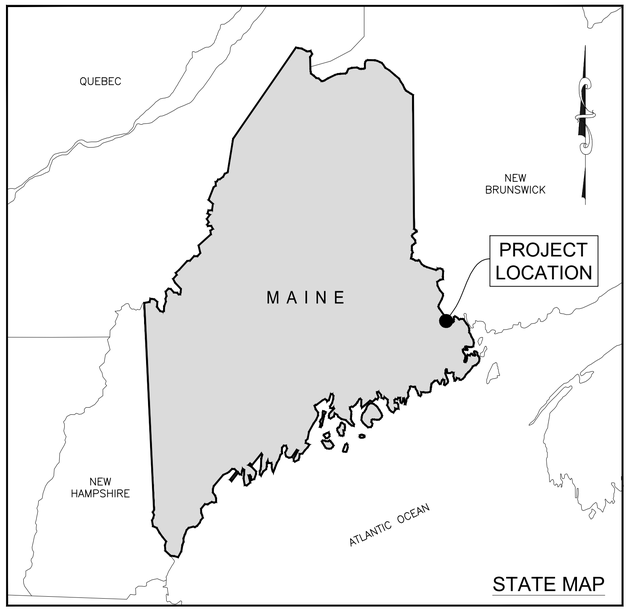
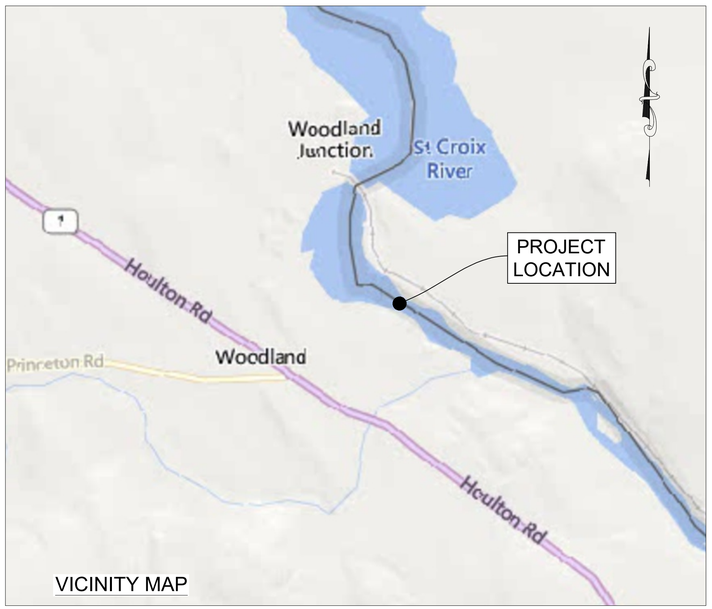
MAINE DEPARTMENT OF MARINE RESOURCES

WOODLAND
INTAKE DESIGN FOR DOWNSTREAM FISH PASSAGE



STATE MAP



VICINITY MAP

SITE MAP

ISSUED FOR BID, REV.1 09-02-25

PRELIMINARY NOT FOR CONSTRUCTION

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3"
2"
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0
22x34 = FULL SCALE

WOODLAND - INTAKE DESIGN FOR DOWNSTREAM FISH PASSAGE				
DRAWING LIST				
SERIES	SHEET NUMBER	DRAWING NAME	DATE	DRAWING STATUS
100 - GENERAL INFORMATION				
	100-00	DRAWING LIST	09/02/2025	ISSUED FOR BID, REV. 1
	100-01	GENERAL NOTES	09/02/2025	ISSUED FOR BID, REV. 1
	100-02	GENERAL NOTES	09/02/2025	ISSUED FOR BID, REV. 1
200 - EXISTING CONDITIONS				
	200-01	ORIGINAL (PRE 2022) CONDITIONS - PLAN AND SECTION	09/02/2025	ISSUED FOR BID, REV. 1
	200-02	EXISTING CONDITIONS - PLAN AND SECTION	09/02/2025	ISSUED FOR BID, REV. 1
	200-03	EXISTING CONDITIONS - SHEET WITH PHOTOS	09/02/2025	ISSUED FOR BID, REV. 1
	200-04	EXISTING CONDITIONS - DEMOLITION	09/02/2025	ISSUED FOR BID, REV. 1
300 - NEW CONDITIONS				
	300-01	NEW INTAKE - PLAN AND SECTION	09/02/2025	ISSUED FOR BID, REV. 1
	300-02	NEW INTAKE - FRAMING SECTION BENT 0	09/02/2025	ISSUED FOR BID, REV. 1
	300-03	NEW INTAKE - FRAMING SECTION BENT 1 - 6	09/02/2025	ISSUED FOR BID, REV. 1
	300-04	NEW INTAKE - FRAMING SECTION BENT 7 CLOSURE WALL	09/02/2025	ISSUED FOR BID, REV. 1
	300-05	NEW INTAKE - FRAMING SECTION BENT 7 CLOSURE WALL DETAILS	09/02/2025	ISSUED FOR BID, REV. 1
	300-06	NEW INTAKE - FRAMING SECTION BENT 8 - 11, 12, 13 - 14, AND 15 - 21	09/02/2025	ISSUED FOR BID, REV. 1
	300-07	NEW INTAKE - FRAMING SECTION BENT 22	09/02/2025	ISSUED FOR BID, REV. 1
	300-08	NEW INTAKE - FRAMING SECTION BENT 23	09/02/2025	ISSUED FOR BID, REV. 1
	300-09	NEW INTAKE - CONCRETE SILL	09/02/2025	ISSUED FOR BID, REV. 1
	300-10	NEW INTAKE - STOPLOGS	09/02/2025	ISSUED FOR BID, REV. 1
400 - TRASHRACK AND RAKER SUPPORT				
	400-01	TRASH RAKER SUPPORT - PLAN VIEW	09/02/2025	ISSUED FOR BID, REV. 1
	400-02	TRASH RAKER SUPPORT SECTION AT TYPICAL BENT, CLOSURE WALL AND GATE OPERATOR	09/02/2025	ISSUED FOR BID, REV. 1
	400-03	TRASH RAKER SUPPORT - SPLICE CONNECTION AND OTHER DETAILS	09/02/2025	ISSUED FOR BID, REV. 1
500 - BYPASS ENTRANCE				
	500-01	TRASH RACKS - OVERVIEW	09/02/2025	ISSUED FOR BID, REV. 1
	500-02	TRASH RACKS - SUPPORT FRAME TYP. 10.5 FT / 9 FT BAY	09/02/2025	ISSUED FOR BID, REV. 1
	500-03	TRASH RACKS - RACK PANELS TYP. 10.5 FT / 9 FT BAY	09/02/2025	ISSUED FOR BID, REV. 1
	500-04	TRASH RACKS - BYPASS ENTRANCE	09/02/2025	ISSUED FOR BID, REV. 1
	500-05	TRASH RACKS - SUPPORT FRAME AT BYPASS ENTRANCE #1 / #2	09/02/2025	ISSUED FOR BID, REV. 1
	500-06	TRASH RACKS - BYPASS ENTRANCE REMOVABLE SECTION	09/02/2025	ISSUED FOR BID, REV. 1
	500-07	TRASH RACKS - RACK PANELS AT BYPASS ENTRANCE #1 / #2	09/02/2025	ISSUED FOR BID, REV. 1
600 - CONCRETE				
	600-01	CONCRETE DECK TOPPING - PLAN	09/02/2025	ISSUED FOR BID, REV. 1
	600-02	CONCRETE DECK TOPPING - SECTIONS	09/02/2025	ISSUED FOR BID, REV. 1
	600-03	CONCRETE DECK TOPPING - SECTIONS	09/02/2025	ISSUED FOR BID, REV. 1
700 - ELECTRICAL				
	700-01	ELECTRICAL - SINGLE LINE DIAGRAM	09/02/2025	ISSUED FOR BID, REV. 1
	700-02	ELECTRICAL - PLAN	09/02/2025	ISSUED FOR BID, REV. 1
710 - CONTROLS				
	710-01	SCHEMATIC - EEL ENTRANCE BACK-FLUSH CONTROL	09/02/2025	ISSUED FOR BID, REV. 1
	710-02	CABINET LAYOUT - EEL ENTRANCE BACK-FLUSH CONTROL PANEL	09/02/2025	ISSUED FOR BID, REV. 1

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NOT FOR CONSTRUCTION

MAINE DEPARTMENT OF MARINE RESOURCES

WOODLAND
INTAKE DESIGN FOR DOWNSTREAM FISH PASSAGE

DRAWING LIST

No.	Revision	Date	Drawn	Checked
C	ISSUED FOR BID, REV. 1	09-02-25	JFB	AJC
B	ISSUED FOR BID	07-07-25	JFB	AJC
A	ISSUED FOR VERDANTAS REVIEW	06-13-25	JFB	AJC

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Designed	Drawn	Checked	Project No.	Date Revised	Drawing No.
AJC	JFB	DBN	010252	09-02-25	100-00

3"
2"
1"
0
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GENERAL NOTES

1. ALL ELEVATIONS ARE SHOWN IN BOTH NAVD88 AND MILL DATUM. MOST OF THE ELEVATIONS ARE BASED ON HISTORICAL DRAWINGS IN MILL DATUM AND HAVE BEEN CONVERTED TO NAVD88 TO MATCH THE VERDANTAS FISH PASSAGE DRAWINGS. AN APPROXIMATE CONVERSION OF 3.8 FT WAS USED (NAVD88 = MILL DATUM + 3.8 FEET), HOWEVER, NO BENCHMARK WAS FOUND TO CONFIRM THIS CONVERSION.
2. THESE ARE STANDARD NOTES APPLYING TO ALL WORK. SPECIFIC NOTES SHOWN ON OTHER DRAWINGS WILL TAKE PRECEDENCE.
3. CONTRACTOR SHALL SCHEDULE WORK IN COOPERATION WITH WOODLAND PULP.
4. DETERMINE LOCATIONS, EXISTING CONDITIONS AND DIMENSIONS BY VISITING THE SITE. VERIFY ALL DIMENSIONS IN THE FIELD BEFORE ORDERING OR FABRICATING MATERIAL AND BEGINNING CONSTRUCTION. ALL DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER IN WRITING.
5. INFORMATION SHOWN ON THESE DRAWINGS IS BASED ON LIMITED INFORMATION. VERIFY ALL DIMENSIONS AND NOTIFY THE OWNER AND ENGINEER OF DISCREPANCIES.
6. WHERE DIMENSIONS ARE NOT SHOWN, CONTACT THE ENGINEER.
7. CONTRACTOR SHALL DISCUSS LAYDOWN AND STAGING AREAS WITH WOODLAND PULP PRIOR TO START OF CONSTRUCTION AND BE RESPONSIBLE FOR THE DESIGN AND PLACEMENT OF THEIR EQUIPMENT OVER EXISTING INFRASTRUCTURE.
8. PROTECT ALL EXISTING SITE FEATURES FROM DAMAGE DURING CONSTRUCTION ACTIVITIES.
9. CONTRACTOR SHALL LEAVE SITE IN AS IS OR BETTER CONDITION UPON PROJECT COMPLETION. CONTRACTOR IS RESPONSIBLE FOR REPAIRS TO DAMAGED AREAS CAUSED BY CONSTRUCTION ACTIVITIES.
10. ALL MATERIALS STORED ON SITE SHALL BE IN A NEAR, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND ALLOCATED STORAGE AREAS.
11. CONTRACTOR SHALL CLEAN ANY SPILLS OR DEBRIS CAUSED BY CONSTRUCTION.
12. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR THOROUGHLY REVIEWS AND UNDERSTANDS ALL PLANS AND OTHER DOCUMENTS BY ALL PERMITTING AUTHORITIES. ANY SOLID WASTE FROM THE SITE SHALL BE DISPOSED OF BY CONTRACTOR IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.
13. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY REPSONSIBLE FOR THE MEANS, METHODS, TECHNIQUES AND PROCEDURES OF CONSTRUCTION INCLUDING BUT NOT LIMITED TO BRACING OF THE WORK AS REQUIRED TO PROTECT THE WORK UNTIL THE PROJECT IS COMPLETE.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK.
15. THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING AND PROTECTING WORK FROM RISING WATERS IN COORDINATION WITH WOODLAND PULP. DAMAGE TO PARTIALLY COMPLETED WORK, MATERIALS, OR EQUIPMENT SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
16. THE STRUCTURES HAVE BEEN DESIGNED TO BE SELF SUPPORTING IN THE FINAL CONDITIONS AS SHOWN IN THE CONTRACT DOCUMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE CONSTRUCTION PROCEDURES AND SEQUENCES TO ENSURE STABILITY AND SAFETY DURING ALL ASPECTS OF CONSTRUCTION. THIS INCLUDES BUT NOT LIMITED TO EXCAVATION, DEMOLITION, AND ERECTION AND MAY INVOLVE THE ADDITION OF SHEETING, SHORING, TEMPORARY BRACING, GUYS, TIE DOWNS, ETC. STABILIZING STRUCTURES DURING CONSTRUCTION, BUT NOT REQUIRED IN THE FINAL CONDITIONS AND SHALL BE PROVIDED AT NO ADDITIONAL COST TO MAINE DMR.

SUBMITTALS

1. SHOP DRAWINGS - THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR FABRICATION AND ERECTION OF ALL STRUCTURAL STEEL AND MISCELLANEOUS METAL FABRICATIONS INCLUDING CONCRETE REINFORCEMENT. SUBMIT ONE ELECTRONIC COPY OF SHOP DRAWINGS TO THE ENGINEER FOR REVIEW AND APPROVAL. SHOP DRAWINGS SHALL INCLUDE:
   A. PLANS, ELEVATIONS, SECTIONS, AND DETAILS OF ALL MEMBERS AND CONNECTIONS.
   B. INDICATION OF SIZES, SPACING, LOCATIONS OF STRUCTURAL MEMBERS, OPENINGS, ATTACHMENTS, AND FASTENERS.
   C. INDICATION OF WELDED CONNECTIONS WITH AWS A2.0 WELDING SYMBOLS. INDICATE NET WELD LENGTHS.
   D. DETAILS OF ANCHORAGE AND ACCESSORY ITEMS.
   E. TEMPLATES FOR ANCHOR AND BOLT INSTALLATION BY OTHERS.
   F. BAR SCHEDULES, SPACING, ARRANGEMENT, PLACEMENT, AND BENDING OF CONCRETE REINFORCEMENT.
2. PRODUCT DATA - THE CONTRACTOR SHALL SUBMIT DATA FOR PROPRIETARY MATERIALS AND ITEMS INCLUDING: MECHANICAL EQUIPMENT, ELECTRICAL EQUIPMENT, ELECTRICAL FIXTURES, INSTALLATION INSTRUCTIONS FOR PRODUCTS USED IN STRUCTURAL STEEL AND MISCELLANEOUS METAL FABRICATIONS, ANCHOR DETAILS, COATING PRODUCTS, GROUT, FORMING ACCESSORIES, ADMIXTURES, PATCHING COMPOUNDS, JOINT SYSTEMS, CURING COMPOUNDS, AND OTHERS IF REQUESTED BY THE ENGINEER. INCLUDE MANUFACTURER SPECIFICATIONS AND CERTIFICATIONS AS MAY BE REQUIRED TO SHOW COMPLIANCE WITH DESIGN DRAWINGS.
3. EQUIPMENT LOADS AND LIFT PLANS - PROVIDE DETAILED WORK PLANS AND LIFT PLANS IF EQUIPMENT OR MATERIAL WILL BE PLACED OR STORED ON THE INTAKE DECK. INCLUDE THE WEIGHT OF MATERIALS AND MEANS OF SUPPORT. FOR CRANE LOADING SHOW THE LOCATION OF OUTRIGGERS AND MAXIMUM REACTION AT EACH OUTRIGGER.
4. RECORD DRAWINGS: THE CONTRACTOR SHALL MAINTAIN A SET OF DESIGN DRAWINGS ON SITE THAT IS MARKED UP THROUGHOUT THE CONSTRUCTION PROCESS TO IDENTIFY ANY AREAS WHERE ACTUAL CONSTRUCTION DEVIATED FROM WHAT IS SHOWN ON THE DESIGN DRAWINGS. THIS "RED-LINED" DRAWING SET WILL SERVE AS THE RECORD OF CONSTRUCTION AND WILL BE PROVIDED TO ENGINEER AT THE COMPLETION OF THE PROJECT TO BE USED BY THE ENGINEER IN PREPARATION OF THE RECORD DRAWINGS.

STEEL NOTES

1. STRUCTURAL STEEL DESIGN STANDARD - AISC SPECIFICATION FOR DESIGN AND ERECTION OF STRUCTURAL STEEL, 16TH EDITION
   A. FABRICATOR SHALL DESIGN NEW STEEL TO NEW STEEL CONNECTIONS FOR BEAMS USING AISC STANDARD FRAMED BEAM CONNECTIONS IF NOT SHOWN ON THE DRAWINGS. CONTACT ENGINEER FOR LOADS ON CONNECTIONS NOT DETAILED.
   B. CONNECTIONS SHALL BE SHOP WELDED AND FIELD BOLTED UNLESS NOTED OTHERWISE (U.N.O.).
   C. BOLTED CONNECTIONS SHALL HAVE A MINIMUM OF 2 BOLTS, MINIMUM BOLT SIZE 3/4" DIA. U.N.O.
   D. ALL BOLTED CONNECTIONS SHALL USE STANDARD HOLE, U.N.O.
2. MATERIAL PROPERTIES:
   A. STEEL BARS, PLATES, ANGLES, CHANNELS AND OTHER SHAPES UNLESS NOTES OTHERWISE - ASTM A36.
   B. STRUCTURAL STEEL SHAPES, W-SHAPES - ASTM A992
   C. BOLTS, ASTM F3125, GRADE A325 GALV.
   D. PIPING - A53 GR. B .
   E. WELD - AWS D1.1 WITH E70 ELECTRODES. NOTIFY THE ENGINEER IF BASE METALS ARE NOT COMPATIBLE.
   F. GRATING:
   C I. BETWEEN RAKER RAILS: 19-W-4 GALV. SERRATED BAR GRATING WITH 2" X 3/16" BEARING BARS.
   II. OTHER: 19-W-4 GALV. SERRATED BAR GRATING WITH 1 1/2" X 3/16" BEARING BARS MINIMUM.
   G. GROUT - NON-SHRINK TYPE PRE-MIXED COMPOUND CONSISTING OF NON-METALLIC AGGREGATE, CEMENT, WATER REDUCING AND PLASTICIZING ADDITIVES, CAPABLE OF DEVELOPING A MINIMUM COMPRESSIVE STRENGTH OF 6,000 PSI AT 28 DAYS. FOR AREAS UNDERWATER USE SUBEC HYDRAULIC CEMENT OR APPROVED EQUAL.
3. COATINGS:
   A. STRUCTURAL STEEL COATING
      I. ALL STRUCTURAL STEEL SHALL BE SHIPPED UNCOATED.
      II. ALL STRUCTURAL STEEL ABOVE WATER SHALL BE FIELD COATED.
      III. FIELD COATING:
         a. SURFACE PREPARATION SSPC-SP 3 POWER TOOL CLEANING
         b. COATING: POLYSET WB HRZS SINGLE COAT SYSTEM, 6 - 8 MILS DFT
         c. COATINGS SHALL BE APPLIED PER MANUFACTURER INSTRUCTIONS.
   B. ALL TRASHRACK BAR PANELS ARE UNPAINTED.
   C. ALL BOLTS AND HARDWARE SHALL BE HOT DIPPED GALVANIZED PER ASTM A153.
4. CONCRETE ANCHORS:
   A. CONCRETE ANCHOR: ADHESIVE ANCHOR BOLTS - HILTI HAS-V-36 HDG (ASTM F1554 GR 36 ANCHORS), U.N.O. ANCHORS SHALL BE INSTALLED WITH HIT-RE 500 V3 INJECTABLE MORTAR, U.N.O. ANCHORS SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS TO DEPTHS SHOWN.
   B. IF EXISTING REINFORCEMENT IS ENCOUNTERED, STOP DRILLING TO PREVENT DAMAGE TO REBAR. CONTACT ENGINEER FOR GUIDANCE ON WHERE TO MOVE ANCHOR BOLT.
   C. SEE CONCRETE INSPECTION NOTES ON 100-02. THIS INSPECTION WORK SHALL BE PERFORMED PRIOR TO INSTALLING ANY CONCRETE ANCHORS.

HYDRAULIC INFORMATION

1. HEADWATER / NORMAL POND: EL. 144.6' (NAVD88)
   EL. 140.8' (MILL DATUM)
2. HIGH POND: EL. 145.4' (NAVD88)
   EL. 141.6' (MILL DATUM)
3. STATION HYDRAULIC CAPACITY: 3000 CFS

DESIGN CRITERIA FOR TRASHRACKS

1. SILL OF EXISTING INTAKE: EL. 122.55' (NAVD88)
   EL. 118.75' (MILL DATUM)
2. BOTTOM OF NEW RACKS: EL. 124.1' (NAVD88)
   EL. 120.3' (MILL DATUM)
3. TOP OF RACKS: EL. 146.3' (NAVD88)
   EL. 142.5' (MILL DATUM)
4. DESIGNED FOR FULL BLINDING AT HIGH POND: EL. 145.4' (NAVD88)
   EL. 141.6' (MILL DATUM).
5. ICE LOAD 2 KIPS PER FT. AT NORMAL POND.
6. BARS 3/8" x 3" MIN. (BAR DEPTH VARIES, SEE 500-03 AND 500-06) WITH 3/4" CLEAR SPACING WITH SPACERS AT 36" OC.
7. MATERIAL PROPERTIES: MIN. ASTM A36 STEEL, TRASHRACK PANELS ARE UNPAINTED.

DESIGN CRITERIA FOR INTAKE & DECK

1. DEAD LOADS:
   A. CONCRETE UNIT WEIGHT = 150 PCF
   B. STEEL UNIT WEIGHT = 490 PCF
   C. WATER UNIT WEIGHT = 62.4 PCF
   D. TRASH RAKER WEIGHT = 16 TONS (32,000 LB) +/-
2. LIVE LOADS
   A. TRASH RAKE VERTICAL LOADS (ASSUMED FROM KUENZ, MAY CHANGE BASED ON RAKER SELECTION)
      I. MAX CRANE RAIL LOAD (PER WHEEL) = 110 KN = 25 KIP
      II. MIN CRANE RAIL LOAD (PER WHEEL) = -50 KN = -11.5 KIP (TENSION)
   B. TRASH RAKE HORIZONTAL LOAD
      I. 10% OF VERTICAL LOADS ASSUMED IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS.
   C. CONCRETE DECK LIVE LOAD = 250 PSF
      I. SEE 300-01 AND 600-01 FOR CRITERIA REGARDING ALLOWABLE CRANE LOADING ON THE NEW SLAB AND PREVIOUSLY INSTALLED SLAB.
   D. STEEL DECK (BETWEEN RAKER RAILS) = 100 PSF
6. HYDROSTATIC
   A. INTAKE BENTS: MAX OPERATING POND LEVEL EL 141.6 FT WITH FULL BLINDING
4. SNOW LOAD = LIVE LOADING WILL CONTROL BY INSPECTION
5. SEISMIC LOAD (EQ) = TO BE DETERMINED IN CONSULTATION WITH RAKE VENDOR.
6. WIND LOAD = TO BE DETERMINED IN CONSULTATION WITH RAKE VENDOR.
7. ICE LOAD = 2 KLF APPLIED TO TRASHRACK BARS AND HORIZONTAL SUPPORTS AT WATER LEVEL
8. DESIGNED FOR TEMPERATURE VARIATION OF +/- 70 DEG F FROM INSTALLATION TEMPERATURE.

   T MAX = 110 DEG F
   T MIN = -30 DEG F
   ASSUMING STRUCTURE IS INSTALLED AT 40 DEG F

TRASH RAKER NOTES

C
1. THE DESIGN OF THE INTAKE FRAMING AND PROPOSED RAIL SUPPORTS HAS BEEN BASED ON CONCEPTUAL DESIGNS OF MUHR'S HYDRAULIC TRASH RACK CLEANING MACHINE - HYDRONIC M-2000 K. SOME FRAMING MAY NEED TO BE ADJUSTED DEPENDING ON THE FINAL GEOMETRY OF THE MACHINE.
2. AS PART OF CONFIRMATION OF EXISTING CONDITIONS, THE CONTRACTOR SHALL PERFORM A SURVEY OF THE INTAKE TO CONFIRM THE ALIGNMENT AND CLEARANCES OF A NEW RAKER MACHINE RELATIVE TO EXISTING EQUIPMENT.
3. CONTRACTOR TO COORDINATE WITH RAKE VENDOR FOR ALIGNMENT TOLERANCES.
4. CONTRACTOR TO PROVIDE AND INSTALL THE RAILS AND RAIL SUPPORT STRUCTURE, INCLUDING ALL BRACKETS, PRIOR TO DELIVERY OF RAKER MACHINE. REFER TO CMAA TABLE 1.4.2-1 FOR RAIL ALIGNMENT CRITERIA. RAIL SUPPORTS HAVE BEEN INCLUDED IN THESE DESIGN DRAWINGS BASED ON THE ASSUMED LOADS LISTED IN THE INTAKE DESIGN CRITERIA.
5. CONTRACTOR TO PREPARE THE REQUIRED ELECTRICAL POWER CONNECTION PRIOR TO DELIVERY OF THE RAKER MACHINE.
   A. POWER SUPPLY: 480V, 3 PHASE, 60 HZ, 10.8 KW MAXIMUM DEMAND
6. REQUIRED RAKE LIFTING CAPACITY: 4 KIPS
7. TRAVEL SPEED: 1-5 METERS/MINUTE
8. LOWERING SPEED OF RAKE: 0-10 METERS/MINUTE
9. LIFTING SPEED OF RAKE: 0-5 METERS/MINUTE
10. WIDTH OF GRAB RAKE: 2 METERS
11. ANGLE OF ROTATION: 270°
12. SERVICES INCLUDED WITH THE PURCHASE OF THE MACHINE TO INCLUDE DELIVERY TO WOODLAND FACILITY, INSTALLATION SUPERVISION, TESTING, COMMISSIONING, AND TRAINING OF OPERATION AND MAINTENANCE PERSONNEL.
   A. PROVIDED MACHINE INSTALLATION SUPERVISION TIME: 9 DAYS
   B. PROVIDED MACHINE COMMISSIONING TIME: 2 DAYS
   C. PROVIDED MACHINE O&M PERSONNEL TRAINING TIME: 1 DAY.
   D. ANY ADDITIONAL DAYS BEYOND WHAT IS MENTIONED ABOVE IS SUBJECT TO ADDITIONAL COSTS AT CONTRACTORS EXPENSE.
13. MUHR TO PROVIDE SPRING TENSIONED CABLE REEL SYSTEM FOR BOTH POWER AND COMMUNICATION CABLES BETWEEN THE STATIONARY CONTROL CABINET AND THE RAKER MACHINE. ALL CABLING BETWEEN THE STATIONARY CONTROL CABINET AND THE RAKER MACHINE TO BE PROVIDED BY MUHR. POWER TO THE STATIONARY CONTROL CABINET FROM THE FACILITY TO BE PROVIDED BY CONTRACTOR.
14. MUHR TO EVALUATE AND PROVIDE ALL OVERTURNING AND STRUCTURAL LOADS UNDER ALL CONDITIONS, INCLUDING MAXIMUM WIND, SNOW, AND SEISMIC LOADS, IN ACCORDANCE WITH ASCE 7 REQUIREMENTS. APPROPRIATE FACTORS OF SAFETY SHALL BE APPLIED TO PREVENT OVERTURNING.
15. MUHR TO PROVIDE OPERATION AND MAINTENANCE MANUALS FOR THE MACHINE. MANUAL TO INCLUDE A COMPREHENSIVE DESCRIPTION OF MACHINE FUNCTIONS, OPERATION PROCEDURES, SAFETY RESPONSIBILITIES, TROUBLE SHOOTING GUIDELINES, AND MAINTENANCE REQUIREMENTS. MAIN ASSEMBLY DRAWINGS, ELECTRICAL WIRING DIAGRAM, AND HYDRAULIC SCHEMATIC FOR THE MACHINE ARE TO BE INCLUDED, AS WELL AS TECHNICAL BROCHURES FROM SUB-SUPPLIERS FOR KEY COMPONENTS.
16. REFER TO MUHR'S BUDGET PROPOSAL FOR ADDITIONAL DETAILS, EXCLUSIONS, AND INFORMATION. C

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GENERAL NOTES

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C	ISSUED FOR BID, REV. 1	09-02-25	JFB	AJC
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Designed	Drawn	Checked	Project No.	Date Revised	Drawing No.
AJC	JFB	DBN	010252	09-02-25	100-01

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INSPECTION OF EXISTING STRUCTURES

1. THE CONDITION OF THE EXISTING CONCRETE NEAR THE WATERLINE IN THE HEADWALL (ABOVE THE HEADGATES) SHOULD BE INSPECTED AND REPAIRED PRIOR TO INSTALLING THE ANCHORAGE FOR THE TRASHRAKER.

2. WOODLAND PULP REPORTED SOME POSSIBLE DETERIORATION IN THE DIVIDER WALLS, DOWNSTREAM OF THE HEADWALL, BETWEEN UNIT NO. 4 AND NO. 5 AND UNIT NO. 5 AND NO. 6 THAT SHOULD BE INSPECTED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

DEMOLITION

1. SUBMIT A DETAILED DEMOLITION PLAN PRIOR TO STARTING WORK TO DISCUSS WITH WOODLAND PULP AND ENGINEER. DEMOLITION AND DEWATERING NEEDS TO BE SEQUENCED CAREFULLY TO ENSURE ADEQUATE SUPPORT IS AVAILABLE AND TO PREVENT DEBRIS OR OTHER MATERIAL FROM BYPASSING THE EXISTING / NEW TRASHRACKS.

2. DO NOT BEGIN DEMOLITION OR DECONSTRUCTION UNTIL AUTHORIZATION IS RECEIVED FROM WOODLAND PULP. WOODLAND PULP ASSUMES NO RESPONSIBILITY FOR ACTUAL CONDITION OF STRUCTURES TO BE DEMOLISHED.

3. REMOVE EXISTING STRUCTURES INDICATED TO BE REMOVED TO ELEVATIONS AND LIMITS SHOWN IN THE DRAWINGS.

4. CRACKS OR SPALLING THAT PROPAGATE DEEP INTO OR THROUGH STRUCTURES ARE ONE INDICATION OF POTENTIAL STRUCTURAL DISTRESS. REPORT SUCH OBSERVATIONS TO ENGINEER BEFORE PROCEEDING WITH REPAIRS.

5. CONSULT WITH WOODLAND PULP AND ENGINEER TO PLAN AREAS OF CONCRETE REMOVAL AND SURFACE PREP AND OBTAIN APPROVAL OF REPAIR METHODS AND EXTENTS BEFORE PROCEEDING.

6. DO NOT USE EXPLOSIVES OR CHEMICAL AGENTS FOR DEMOLITION OF STRUCTURES.

7. CONDUCT DEMOLITION OPERATIONS AND REMOVAL OF DEBRIS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, WALKS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES. DO NOT CLOSE OR OBSTRUCT ROADWAYS AND PATHS.

8. ENSURE SAFE PASSAGE OF PERSONS AROUND AREA OF DEMOLITION. CONDUCT OPERATIONS TO PREVENT INJURY TO ADJACENT BUILDINGS, STRUCTURES, OTHER FACILITIES, AND PERSONS.

9. PREVENT THE SPREAD OF DUST AND DEBRIS AND AVOID THE CREATION OF A NUISANCE OR HAZARD IN THE SURROUNDING AREA. DO NOT USE WATER IF IT RESULTS IN HAZARDOUS OR OBJECTIONABLE CONDITIONS SUCH AS, BUT NOT LIMITED TO, ICE, FLOODING, OR POLLUTION.

10. PREVENT MATERIALS FROM ENTERING THE WATERWAY.

SURFACE PREPARATION

1. PREPARE CONCRETE SURFACE AND DO SELECTIVE DEMOLITION.

2. REMOVE DETERIORATED SURFACE MATERIAL IN DESIGNATED AREAS DOWN TO SOUND CONCRETE. SOUND CONCRETE IS DEFINED AS WHEN THE SURFACE IS STRUCK WITH A GEOLOGIST'S HAMMER, THE AGGREGATE OF THE CONCRETE FRACTURES BEFORE THE CEMENT PASTE BOND IS BROKEN.

3. PERFORM LOCALIZED REMOVAL WITH POINTED TOOLS THAT LIMIT IMPACT DAMAGE SUCH AS A GEOLOGIST OR LIGHT DUTY CHIP HAMMER.

4. AREAS GREATER THAN 6" SQUARE, PRIMARY PREPARATION METHOD SHOULD BE ABRASIVE SHOT-BLASTING, WATER-BLASTING, OR HYDRO-DEMOLITION TO MINIMIZE CONCRETE BRUISING IN ACCORDANCE WITH ACI 364.7T-02 (TECH NOTE). PREVENT MATERIALS FROM ENTERING THE WATERWAY.

5. IF REINFORCEMENT STEEL IS ENCOUNTERED, HAMMER CHIP TO EXPOSE CORROSION UNTIL UN-CORRODED REBAR. CLEAN REBAR OF LOOSE AND BOND-INHIBITING MATERIAL WITH HIGH-PRESSURE WATER (3,000 PSI MIN) OR ABRASIVE BLAST.

6. PREPARE CONCRETE SURFACE IN ACCORDANCE WITH THE INTERNATIONAL CONCRETE REPAIR INSTITUTE (ICRI) TECHNICAL GUIDELINE NO. 310.2R-2013 BUT NO LESS THAN A MINIMUM OF 1/8" AMPLITUDE. CLEAN SURFACE TO REMOVE ALL DELETERIOUS MATERIAL, INCLUDING DIRT, GREASE, ETC. WASH WITH HIGH PRESSURE WASH (AT LEAST 3,000 PSI PRESSURE).

7. DEMO AREAS, INITIAL CONCRETE REMOVAL MAY USE 15-LB OR 30LB JACKHAMMER. USE 15-LB JACKHAMMER FOR DENTAL CONCRETE REMOVAL AROUND REBAR. FINISH REMOVAL IN ACCORDANCE WITH NOTE 3.

8. ANY DETERIORATED REINFORCING STEEL ENCOUNTERED THAT IS LESS THAN 50% OF ORIGINAL CROSS-SECTION, REPLACE WITH NEW REINFORCEMENT DOWELED INTO CONCRETE.

9. EXISTING AND NEW REINFORCING STEEL SHALL HAVE MINIMUM 1" CLEARANCE (U.N.O.) BETWEEN REBAR AND EXISTING CONCRETE SUBSTRATE, MIN. 1/4" GREATER THAN MAXIMUM AGGREGATE SIZE FOR REPAIR MIX BEING USED.

10. CONCRETE SURFACES SHALL BE SATURATED SURFACE DRY IN ACCORDANCE WITH ICRI, AT TIME OF CONCRETE PLACEMENT BUT NO STANDING WATER.

CONCRETE

1. ALL CONCRETE WORKS SHALL BE IN ACCORDANCE WITH THE LATEST ACI 318.

2. CONCRETE MIX

   A. 4500 PSI 28-DAY COMPRESSIVE STRENGTH.

   B. PORTLAND CEMENT: ASTM C150 TYPE I/II OR ASTM C595, TYPE IL. C

   C. W/C RATIO, 0.42 MAXIMUM BY WEIGHT.

   D. AIR ENTRAINMENT 5% TO 7%.

   E. SLUMP 3" TO 4" OR 6" TO 8" IF A HIGH-RANGE WATER REDUCER IS ADDED.

   F. THE CONTRACTOR SHALL SUBMIT THE MIX DESIGN TO THE ENGINEER FOR APPROVAL. THIS SUBMITTAL SHALL INCLUDE DOCUMENTATION OF EITHER TEST DATA OR A LETTER CERTIFYING THAT THE AGGREGATE HAS SATISFACTORY PERFORMANCE REGARDING ALKALI REACTIVITY.

3. MATERIALS USED IN PRODUCING THE CONCRETE SHALL BE FROM THE SAME SOURCE FOR THE DURATION OF THE PROJECT. CHANGE OF SOURCE FOR CEMENT ADMIXTURE OR FINE AND COARSE AGGREGATE CONSTITUTES A NEW MIX DESIGN AND WILL REQUIRE RESUBMITTAL OF ALL DATA AND LABORATORY TESTS. ANY COSTS ASSOCIATED WITH RESUBMITTALS SHALL BE BORNE BY CONTRACTOR AT NO CHARGE TO MAINE DMR.

4. THE TOLERANCES FOR FINISHED CAST-IN-PLACE CONCRETE SHALL CONFORM TO ACI-347.

5. COARSE AGGREGATE SHALL BE 3/4" PER ASTM C 33.

6. PROHIBITED ADMIXTURES: CALCIUM CHLORIDE THYOCYANATES OR ADMIXTURES CONTAINING MORE THAN 0.1 PERCENT CHLORIDE IONS ARE NOT PERMITTED.

7. CONTRACTOR TO PREPARE DESIGN MIXES FOR EACH TYPE AND STRENGTH OF CONCRETE BY EITHER LABORATORY TRIAL BATCH OR FIELD EXPERIENCE METHODS AS SPECIFIED IN ACI 301. IF TRIAL BATCH METHOD USED, USE AN INDEPENDENT TESTING FACILITY ACCEPTABLE TO THE ENGINEER FOR PREPARING AND REPORTING PROPOSED MIX DESIGNS.

8. FOR PLACING CONCRETE TO COMPLY WITH ACI 304 "RECOMMENDED PRACTICE FOR MEASURING, MIXING, TRANSPORTING, AND PLACING CONCRETE", AND AS HEREIN SPECIFIED.

9. COLD WEATHER PLACING: PROTECT CONCRETE WORK FROM PHYSICAL DAMAGE OR REDUCED STRENGTH WHICH COULD BE CAUSED BY FROST, FREEZING ACTIONS, OR LOW TEMPERATURES, IN COMPLIANCE WITH ACI 306 AND AS HEREIN SPECIFIED.

10. HOT WEATHER PLACING: WHEN HOT WEATHER CONDITIONS EXIST THAT WOULD SERIOUSLY IMPAIR QUALITY AND STRENGTH OF CONCRETE, PLACE CONCRETE IN COMPLIANCE WITH ACI 305 AND AS HEREIN SPECIFIED.

11. FORM SURFACES SHALL HAVE SMOOTH FINISH, FREE FROM HONEYCOMBING AND OTHER DEFECTS.

12. START INITIAL CURING AS SOON AS FREE WATER HAS DISAPPEARED FROM CONCRETE SURFACE AFTER PLACING AND FINISHING. KEEP CONTINUOUSLY MOIST FOR NOT LESS THAN 7 DAYS, OR USE A CURING COMPOUND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS, AND AS APPROVED BY THE ENGINEER.

13. REPAIR AND PATCH DEFECTIVE AREAS IN A MANNER ACCEPTABLE TO THE ENGINEER.

14. REMOVE AND REPLACE CONCRETE HAVING DEFECTIVE SURFACES IF DEFECTS CANNOT BE REPAIRED TO SATISFACTION OF ENGINEER. SURFACE DEFECTS, AS SUCH, INCLUDE COLOR AND TEXTURE IRREGULARITIES, CRACKS, SPALLS, AIR BUBBLES, HONEYCOMB, ROCK POCKETS; FINS AND OTHER PROJECTIONS ON SURFACE; AND STAINS AND OTHER DISCOLORATIONS THAT CANNOT BE REMOVED BY CLEANING.

15. EPOXY INJECT ALL VISIBLE SHRINKAGE CONCRETE CRACKS

16. COMPRESSION TEST SPECIMEN: ASTM C 31; ONE SET OF 5 STANDARD CYLINDERS FOR EACH COMPRESSIVE STRENGTH TEST, UNLESS OTHERWISE DIRECTED. MOLD AND STORE CYLINDERS FOR LABORATORY CURED TEST SPECIMENS EXCEPT WHEN FIELD-CURE TEST SPECIMENS ARE REQUIRED.

17. COMPRESSIVE STRENGTH TESTS: ASTM C 39; ONE SET FOR EVERY 50 CUBIC YARDS PLACED OR A MINIMUM OF ONE SET FOR EACH DAY; TWO SPECIMEN TESTED AT 7 DAYS, TWO SPECIMENS TESTED AT 28 DAYS, AND ONE SPECIMEN RETAINED IN RESERVE FOR LATER TESTING IF REQUIRED.

FORMWORK AND CONSTRUCTION JOINTS

1. CONSTRUCT FORMS TRUE TO LINE AND GRADE, ADEQUATELY BRACED TO MAINTAIN POSITION DURING PLACEMENT OF CONCRETE. WELDING OF FORM TIES TO STRUCTURAL DOWELS IS NOT PERMITTED, THOUGH ADDITIONAL DOWELS MAY BE INSTALLED FOR THAT PURPOSE.

2. PROVIDE 3/4" CHAMFER ON ALL EXPOSED EDGES UNLESS NOTED OTHERWISE.

3. REPAIR ALL AIR HOLES AND VOIDS LARGER THAN 1/4" AND FILL ALL TIE HOLES. REMOVE FINS AND PROJECTIONS.

4. CONTRACTOR SHALL PROPOSE CONSTRUCTION JOINT LOCATIONS IN FOOTING FOR REVIEW BASED ON PLACEMENT PLAN.

5. REINFORCEMENT SHALL BE CONTINUOUS THROUGH JOINT, UNLESS NOTED OTHERWISE AND BE FULLY DEVELOPED ON BOTH SIDES OF CONSTRUCTION JOINTS.

6. CLEAN ALL JOINTS OF GREEN CONCRETE WITHIN 30 HOURS TO REMOVE LAITANCE WITH MIN. 5,000 PSI WATER BLAST OR SANDBLASTING PRIOR TO NEXT CONCRETE PLACEMENT. MECHANICAL ROUGHENING IS AN ACCEPTABLE ALTERNATE FOR LAITANCE REMOVAL. ACID CLEANING/REMOVAL OF LAITANCE IS NOT ACCEPTABLE.

7. SATURATE JOINT IMMEDIATELY PRECEDING AND 12 HOURS PRIOR TO NEXT CONCRETE PLACEMENT. REMOVE ALL STANDING WATER.

8. MAXIMUM VERTICAL C.J. SPACING IS 35 FEET (U.N.O.).

REINFORCING

1. REINFORCING BARS: ASTM A 615, GRADE 60, DEFORMED. SUBMIT SHOP DRAWINGS AS OUTLINED ON 100-01.

2. PROVIDE DEFORMED REBAR DOWELS OF SIZE AND DIMENSION SHOWN. GROUTING OF DOWELS SHALL BE DONE EITHER WITH APPROVED CEMENTITIOUS OR PROPRIETARY EPOXY GROUT. CLEAN DRILL HOLES WITH AIR PRESSURE TO REMOVE DUST AND STANDING WATER. HOLES MAY BE DAMP. INSTALL PER MANUFACTURER'S INSTRUCTIONS.

3. HOOKS SHALL BE DIMENSIONED AND BENT PER ACI STANDARD HOOKS.

4. REBAR COVER SHALL BE 3" UNLESS NOTED OTHERWISE.

5. SPLICES AND DEVELOPMENT LENGTHS SHALL BE PER ACI STANDARDS PER THE FOLLOWING TABLE, UNLESS NOTED OTHERWISE:

CONCRETE REINFORCEMENT DEVELOPMENT SCHEDULE

BAR SIZE	BAR DIAMETER (in)	DEVELOPMENT LENGTH (in)	CLASS B* SPLICE (in)
4	0.500	19	25
5	0.625	24	31
6	0.750	28	37
7	0.875	42	54
8	1.000	47	62
9	1.128	54	70
10	1.270	60	78
11	1.410	67	87

ELECTRICAL NOTES

1. ALL ELECTRICAL INSTALLATIONS SHALL COMPLY WITH NFPA 70 (2023), THE NATIONAL ELECTRICAL CODE (NEC).

2. ALL EQUIPMENT AND MATERIAL SHALL BE NEW AND SHALL CONFORM TO APPLICABLE CODES AND STANDARDS FOR THAT CLASS OF EQUIPMENT OR MATERIAL.

3. WHERE BRANDS, MODELS, OR PART NUMBERS ARE SPECIFIED WITHOUT QUALIFICATION, THERE SHALL BE NO SUBSTITUTIONS EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER. ALTERNATE MATERIALS MAY BE SUBMITTED WITH THE PROPOSAL AND LISTED AS AN OPTION FOR CONSIDERATION BY THE ENGINEER.

4. EQUIPMENT AND MATERIALS SHALL BE UTILITY OR INDUSTRIAL TYPE. COMMERCIAL OR RESIDENTIAL GRADE EQUIPMENT IS NOT ALLOWED.

5. CONDUIT FOR GENERAL USE SHALL BE GALVANIZED STEEL RIGID METAL CONDUIT (RMC). COUPLINGS, CLAMPS, ELBOWS, AND OTHER FITTINGS SHALL BE OF GALVANIZED STEEL. CONDUIT PULLING BODIES SHALL BE CAST WITH SOLID GASKET AND COVERS. EMBEDDED OR BURIED CONDUIT SHALL BE SCHEDULE 40 RIGID POLYVINYL CHLORIDE (PVC). LIGHTING AND RECEPTACLE CIRCUITS MAY BE INSTALLED IN ELECTRICAL METALLIC TUBING USING COMPRESSION FITTINGS. SET SCREW FITTINGS ARE NOT ALLOWED. FOR CONNECTION TO MOTORS AND OTHER EQUIPMENT REQUIRING FLEXIBILITY, PROVIDE LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LFMC). MINIMUM CONDUIT SIZE ALLOWED IS ¾ INCH. WHERE CONDUIT SIZES ARE NOT SHOWN, PROVIDE CONDUITS AS REQUIRED BY THE NEC. EXPOSED CONDUIT AND RACEWAYS SHALL BE RUN PARALLEL AND PERPENDICULAR TO STRUCTURAL MEMBERS AND GROUPED TOGETHER WHERE POSSIBLE. ALL CONDUIT AND WALL-MOUNTED ENCLOSURES SHALL BE MOUNTED ON STRUT.

6. ALL CONDUCTORS SHALL BE STRANDED COPPER. SINGLE CONDUCTOR (BUILDING WIRE) INSULATION SHALL BE 600 VOLT, TYPE XHHW-2 OR THWN-2, 90 DEGREE C. MULTI-CONDUCTOR CABLE SHALL CONSIST OF COLOR CODED, FIRE RETARDANT XLP INSULATED, 600 VOLT STRANDED CONDUCTORS IN A FLAME RESISTANT, SUNLIGHT RESISTANT, PVC JACKET. WHERE CONDUCTOR SIZES ARE NOT SHOWN, PROVIDE CABLE AS REQUIRED BY THE NEC. ALL CONDUCTOR SPLICES/TERMINATIONS SHALL BE MADE BY TINNED COPPER COMPRESSION LUGS. NYLON SLEEVED COMPRESSION TYPE RING LUGS SHALL BE USED FOR SCREW TERMINALS EXCEPT CONDUCTORS MAY BE TERMINATED DIRECTLY IN SCREW-COMPRESSION TERMINALS. WIRE NUTS ARE NOT PERMITTED, BUT LEVER NUTS MAY BE USED FOR LIGHTING AND RECEPTACLE CIRCUITS.

7. ALL WIRES, CABLES, AND CONDUITS SHALL BE PERMANENTLY IDENTIFIED AT TERMINATION AND SPLICE POINTS, AND ALL CONDUITS SHALL BE IDENTIFIED AT ENCLOSURE AND PULL-BOX ENTRIES AS IDENTIFIED ON THE DRAWINGS AND CABLE & CONDUIT SCHEDULE. IDENTIFICATION TAGS SHALL BE TYPED AND PRINTED ON PERMANENT LABELS.

8. THE WORK SHALL INCLUDE TESTING OF EQUIPMENT AND WIRING AS RECOMMENDED BY THE MANUFACTURERS AS WELL AS ANY MINOR CONNECTION CHANGES OR ADJUSTMENTS NECESSARY FOR THE PROPER FUNCTIONING OF EQUIPMENT AND SYSTEMS. ALL INSULATED POWER CONDUCTORS SHALL BE INSULATION RESISTANCE TESTED AFTER PULLING IN, WITH THE APPROPRIATE VOLTAGE LEVEL. ALL 3-PHASE MOTORS SHALL BE TESTED FOR CORRECT ROTATION UNDER ENGINEER SUPERVISION. ALL SUCH TESTING SHALL BE DOCUMENTED AND TURNED OVER FOR THE RECORD.

NOT FOR CONSTRUCTION

MAINE DEPARTMENT OF MARINE RESOURCES

WOODLAND
INTAKE DESIGN FOR DOWNSTREAM FISH PASSAGE

GENERAL NOTES

No.	Revision	Date	Drawn	Checked
C	ISSUED FOR BID, REV.1	09-02-25	JFB	AJC
B	ISSUED FOR BID	07-07-25	JFB	AJC
A	ISSUED FOR VERDANTAS REVIEW	06-13-25	JFB	AJC

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AJC	JFB	DBN	010252	09-02-25	100-02

22x34 = FULL SCALE

212'-7" TRASHRACKS

19'-11" FISHWAY

UNITS 4, 5, & 6

UNITS 7 & 10

UNITS 8 & 9

SEE 300 SERIES FOR MORE INFORMATION ABOUT NEW COLUMN LINE

EXISTING CONCRETE WALL

FLOW

TRASHRACKS

EXISTING CONCRETE WALL

FLOW

WOOD PLANK DECK

GRATING

GATE 1 GATE 2 GATE 3 GATE 4 GATE 5 GATE 6 GATE 7 GATE 8 GATE 9 GATE 10 GATE 11 GATE 12 GATE 13 GATE 14

GATE 10 HAS STEEL STEMS

7'-0"±

14'-6"

6'-2" 4'-5" 4'-10" 6'-0" TYP. 4'-2" 6'-2" 6'-0" TYP. 4'-8" 4'-6"

x EL. 145.48'± (NAVD88)
EL. 141.68'± (MILL)

1'-6" FROM REFERENCE DRAWING

ASSUMED FACE OF WALL BELOW

SAFETY LINE SUPPORT

VENT 1 VENT 2 VENT 3 VENT 4 VENT 5 VENT 5

4'-0" 6'-0" 4'-5" 3'-7" 5'-0" 3'-0"

CONC. PATCH

BUILDING

DN

x EL. 146.7'± (NAVD88)
EL. 142.9'± (MILL)

OVERHEAD ELECTRICAL

SLOPE 8'-3"

8'-10" 4'-6" 22'-11" 21'-6"

FACE OF WALL BELOW

PERSONNEL GUARDRAIL ALONG CURB

DECK SLOPE

UNIT DIVIDER WALLS BELOW DECK

WALL MOUNTED VENTS

BUILDING

WALL SLOPE

CABLE TRAY

15'-8"

OUTLINE OF UNIT 7 AND 10 PENSTOCK

POWERHOUSE ROOF

OUTLINE OF UNIT 8 AND 9 PENSTOCK

161'-5" DOWNSTREAM WALL

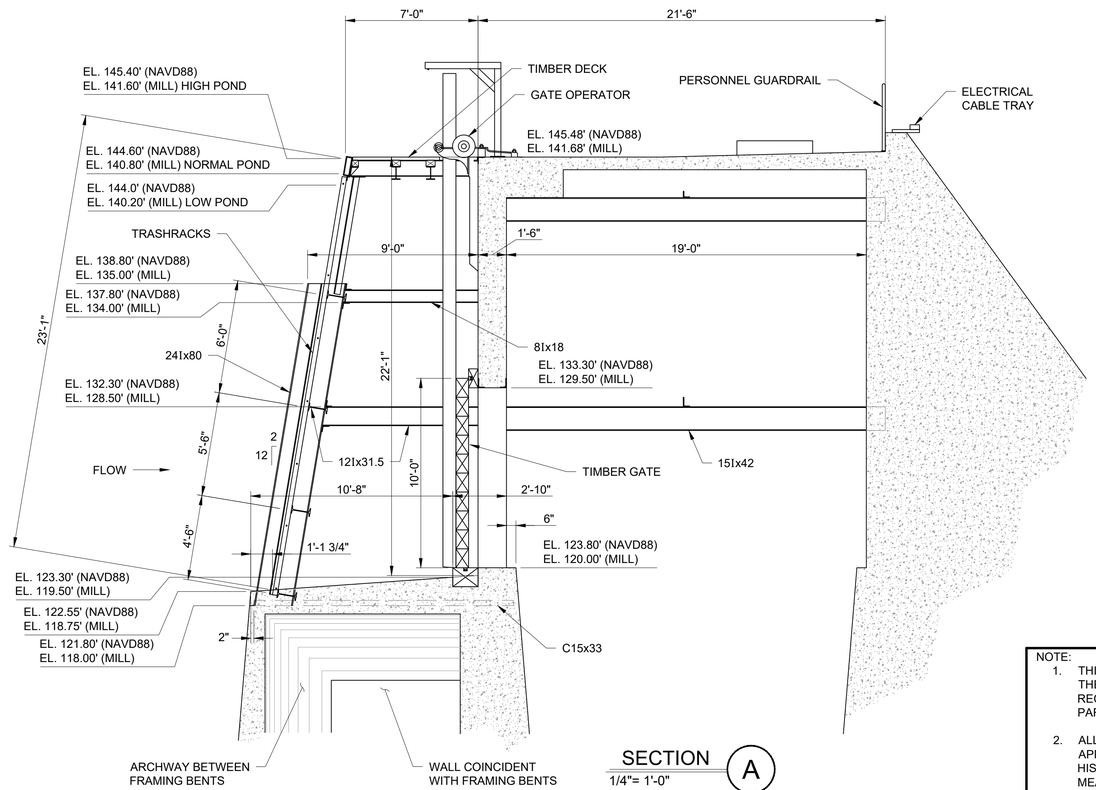
178'-3"

PLAN

1/8"= 1'-0"

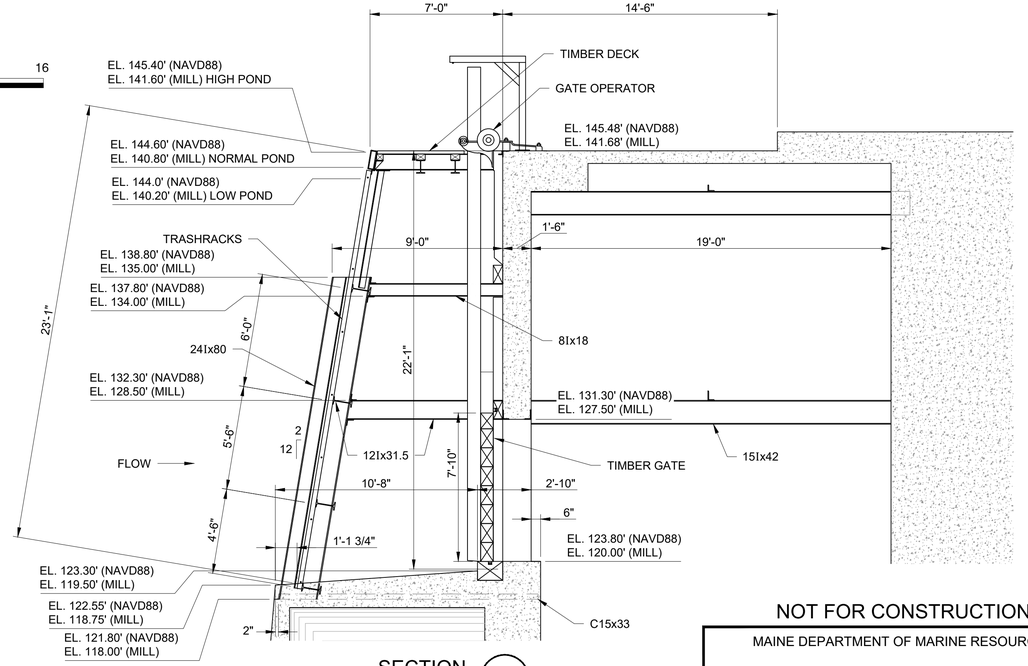
8 0 8 16

SCALE IN FEET



SECTION A

1/4"= 1'-0"



SECTION B

1/4" = 1'-0"

NOTE:

1. THIS DRAWING SHOWS THE CONDITIONS OF THE INTAKE PRIOR TO 2022, BEFORE THE RECENT INTAKE MODIFICATIONS WERE PARTIALLY COMPLETED.
2. ALL DIMENSIONS/ELEVATIONS SHOWN ARE APPROXIMATE, DERIVED FROM LIMITED HISTORICAL DRAWINGS AND LIMITED FIELD MEASUREMENTS. DIMENSIONS SHALL BE CONFIRMED PRIOR TO START OF WORK

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WOODLAND
INTAKE DESIGN FOR DOWNSTREAM FISH PASSAGE

ORIGINAL (PRE 2022) CONDITIONS
PLAN AND SECTION

No.	Revision	Date	Drawn	Checked
C	ISSUED FOR BID, REV. 1	09-02-25	JFB	AJC
B	ISSUED FOR BID	07-07-25	JFB	AJC
A	ISSUED FOR VERDANTAS REVIEW	06-13-25	JFB	AJC

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AJC	JFB	DBN	010252	09-02-25	200-01

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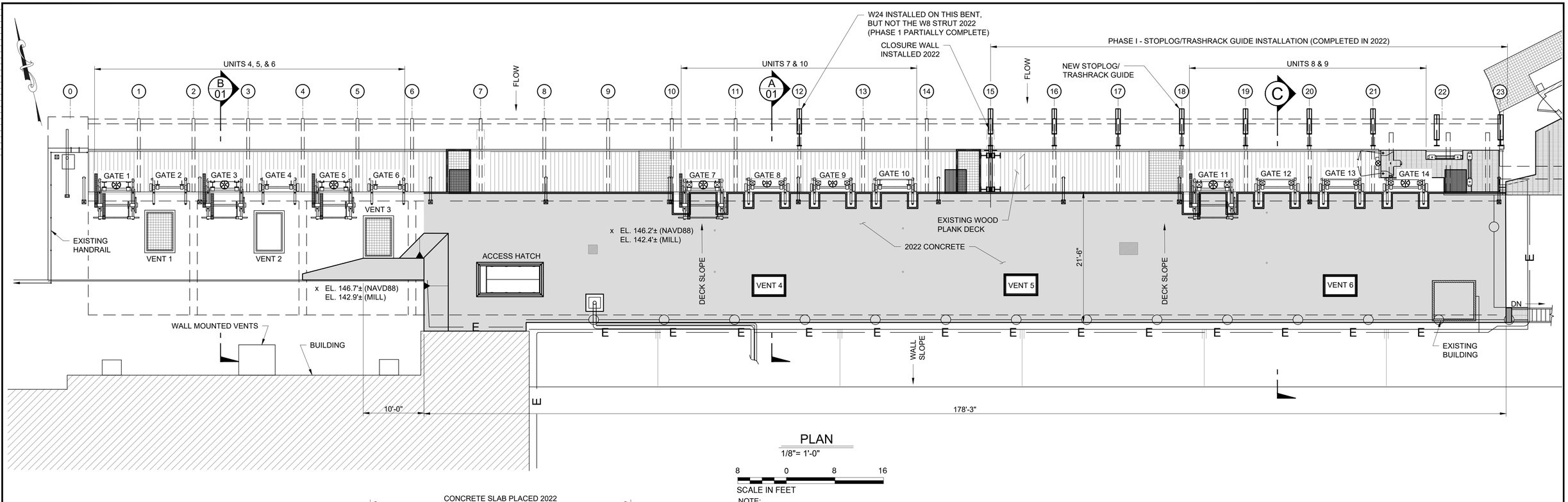
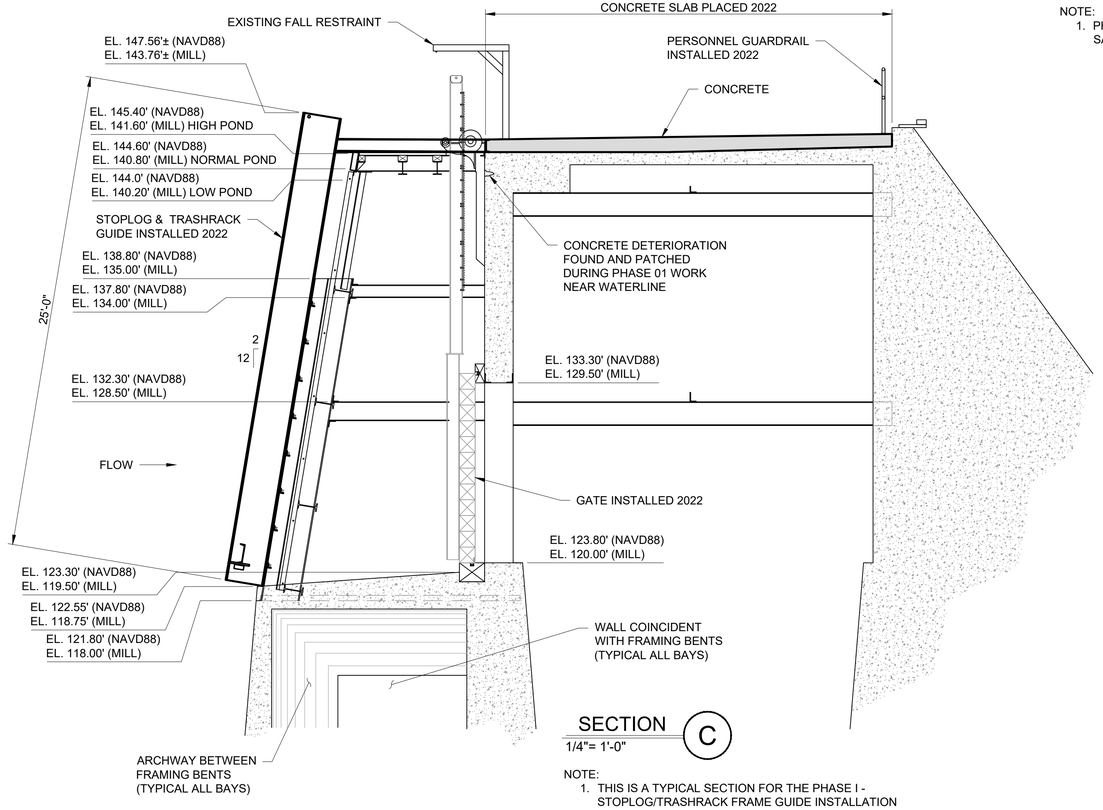


PLAN
1/8"= 1'-0"

SCALE IN FEET

NOTE:
1. PHASE 01 WORK PERFORMED BY DEMO SALVAGE OUT OF BAILEYVILLE, MAINE.



SECTION C
1/4"= 1'-0"

NOTE:
1. THIS IS A TYPICAL SECTION FOR THE PHASE I - STOPLOG/TRASHRACK FRAME GUIDE INSTALLATION

NOT FOR CONSTRUCTION

No.	Revision	Date	Drawn	Checked
C	ISSUED FOR BID, REV. 1	09-02-25	JFB	AJC
B	ISSUED FOR BID	07-07-25	JFB	AJC
A	ISSUED FOR VERDANTAS REVIEW	06-13-25	JFB	AJC

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EXISTING CONDITIONS
PLAN AND SECTION

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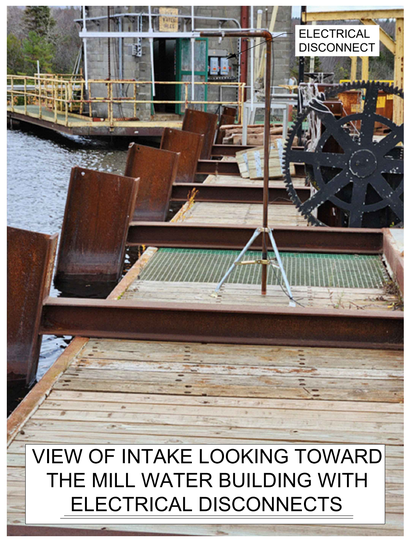
22x34 = FULL SCALE

VIEW LOOKING TOWARD THE EAST SIDE OF THE INTAKE

VIEW OF CONCRETE DECK ABOVE INTAKE FOR UNITS 4, 5, AND 6

VIEW AT THE EXISTING FISHWAY LOOKING TOWARD THE WEST SIDE OF THE INTAKE

MINOR VARIATION 1" - 5" IN W24s TOP ALIGNMENT INSTALLED DURING PHASE 1 LOOKING TOWARD THE WEST SIDE OF THE INTAKE



VIEW OF INTAKE LOOKING TOWARD THE MILL WATER BUILDING WITH ELECTRICAL DISCONNECTS

NOT FOR CONSTRUCTION

No.	Revision	Date	Drawn	Checked
C	ISSUED FOR BID, REV. 1	09-02-25	JFB	AJC
B	ISSUED FOR BID	07-07-25	JFB	AJC
A	ISSUED FOR VERDANTAS REVIEW	06-13-25	JFB	AJC

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WOODLAND
INTAKE DESIGN FOR DOWNSTREAM FISH PASSAGE

EXISTING CONDITIONS
SHEET WITH PHOTOS

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Designed	Drawn	Checked	Project No.	Date Revised	Drawing No.
AJC	JFB	DBN	010252	09-02-25	200-03

22x34 = FULL SCALE

3" 2" 1" 0

UNITS 4, 5, & 6 | UNITS 7 & 10 | UNITS 8 & 9

PHASE I - STOPLOG/TRASHRACK GUIDE INSTALLATION

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 F 20 21 E 22 23

GATE 1 GATE 2 GATE 3 GATE 4 GATE 5 GATE 6 GATE 7 GATE 8 GATE 9 GATE 10 GATE 11 GATE 12 GATE 13 GATE 14

SHIFT LIFELINE DOWNSTREAM 2'-0" +/- CONFIRM LOCATION WITH WOODLAND. SEE 400-02 FOR DETAILS

DEMO EXISTING TRASH RACK PANELS (NOT FRAMING) AFTER INSTALLATION OF NEW RACKS (TYP. ALL BAYS)

CLOSURE WALL INSTALLED 2022

CUT TOPS OF (4) W12S AT CLOSURE WALL DOWN TO ALLOW THE RAKER BEAM TO PASS OVER

TRIM TOP OF EXISTING W24

MINOR CONCRETE DEMOLITION FOR REPAIR. SEE 300-08 FOR MORE DETAILS.

FLOW

EXISTING HANDRAIL

VENT 1 VENT 2 VENT 3 VENT 4 VENT 5 VENT 6

DEMO AREA DOWN TO EL. 145.48'± (NAVD88) EL. 141.68' ± (MILL) (I.E. FLUSH TO EXISTING CONCRETE DECK)

x EL. 146.2'± (NAVD88) EL. 142.4'± (MILL)

DECK SLOPE

EXISTING WOOD PLANK DECK

2022 CONCRETE

21'-6"

DEMOLISH EXISTING FISHWAY

DEMOLISH W12 STOPLOG GUIDE AND TUBE STEEL STRUT AT BENT 22

DEMOLISH CURB FLUSH TO EXISTING DECK

INSPECT CONDITION OF DIVIDER WALLS BELOW DECK

x EL. 146.7'± (NAVD88) EL. 142.9'± (MILL)

ACCESS HATCH

WALL SLOPE

DN

EXISTING BUILDING

WALL MOUNTED VENTS

BUILDING

10'-0"

178'-3"

PLAN

1/8"= 1'-0"

8 0 8 16

SCALE IN FEET

DEMOLISH CURB FLUSH WITH EXISTING DECK

5"

FLOW

SECTION D

1/2"= 1'-0"

2' 0 2 4

EXISTING W12 AND TUBE STRUT TO BE REMOVED AND REPLACED WITH TYPICAL FRAME BENT

EXISTING GRATING DECK

EXISTING CONCRETE DECK

EL. 145.6'± (NAVD88)
EL. 141.80'± (MILL)
EXISTING GRATING DECK

PLATE BOLTED TO WALLS AND GRATING CLIP TO REMAIN

EXISTING GRIZZLY RACK

EXISTING FISHWAY GATE

FLOW

25'-0"

EL. 132.30' (NAVD88)
EL. 128.50' (MILL)

EXISTING W10x39 TO BE SALVAGED AND ATTACHED TO NEW W24 SEE 300-07 FOR MORE DETAIL

EL. 126.88' (NAVD88)
EL. 123.08' (MILL)

EXISTING W16x50 FRAME TO REMAIN

EXISTING W10x30 BEAMS TO REMAIN

EL. 122.55' (NAVD88)
EL. 118.75' (MILL)

SECTION E

1/4" = 1'-0"

4' 0 4 8

EXISTING FALL RESTRAINT

EXISTING TUBE STRUT TO BE REMOVED AND REPLACED WITH TYPICAL FRAME BENT

CONCRETE SLAB PLACED 2022

PERSONNEL GUARDRAIL INSTALLED 2022

CONCRETE

EL. 145.40' (NAVD88)
EL. 141.60' (MILL) HIGH POND

EL. 144.60' (NAVD88)
EL. 140.80' (MILL) NORMAL POND

EL. 144.0' (NAVD88)
EL. 140.20' (MILL) LOW POND

STOPLOG & TRASHRACK GUIDE INSTALLED 2022

ADDITIONAL STEEL MAY NEED TO BE REMOVED IF SEVERELY CORRODED (CONSULT WITH ENGINEER AND WOODLAND PULP PRIOR TO REMOVAL) (SEE BIDDER RFI LOG #111 FOR MORE DETAIL)

EL. 138.80' (NAVD88)
EL. 135.00' (MILL)

EL. 137.80' (NAVD88)
EL. 134.00' (MILL)

EXISTING TRASHRACKS TO BE REMOVED

EL. 132.30' (NAVD88)
EL. 128.50' (MILL)

EL. 133.30' (NAVD88)
EL. 129.50' (MILL)

25'-0"

2
12

FLOW

GATE INSTALLED 2022

EL. 123.80' (NAVD88)
EL. 120.00' (MILL)

EL. 123.30' (NAVD88)
EL. 119.50' (MILL)

EL. 122.55' (NAVD88)
EL. 118.75' (MILL)

SECTION F

1/4" = 1'-0"

4' 0 4 8

NOT FOR CONSTRUCTION

MAINE DEPARTMENT OF MARINE RESOURCES

WOODLAND
INTAKE DESIGN FOR DOWNSTREAM FISH PASSAGE

EXISTING CONDITIONS DEMOLITION

No.	Revision	Date	Drawn	Checked
C	ISSUED FOR BID, REV. 1	09-02-25	JFB	AJC
B	ISSUED FOR BID	07-07-25	JFB	AJC
A	ISSUED FOR VERDANTAS REVIEW	06-13-25	JFB	AJC

Designed	Drawn	Checked	Project No.	Date Revised	Drawing No.
AJC	JFB	DBN	010252	09-02-25	200-04

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22x34 = FULL SCALE

PHASE II - STOPLOG/TRASHRACK GUIDE INSTALLATION

PHASE I - STOPLOG/TRASHRACK GUIDE INSTALLATION STARTED 2022

1'-6"± FROM FACE OF PIER. THIS CAN BE FIELD ADJUSTED BASED ON EXACT LOCATION OF BENT 1. SEE 300-02 FOR MORE DETAIL

UNITS 4, 5, & 6

NEW CLOSURE WALL

DOWNSTREAM FISH BYPASS ENTRANCE (TYP. 2 LOCATIONS)

NEW STOPLOG/TRASHRACK GUIDE

NEW TRASHRACK RAILS, SEE 400 SERIES FOR MORE DETAIL

NOTE: THIS W24 WAS ALSO INSTALLED AS PART OF 2022 WORK.

UNITS 7 & 10

CLOSURE WALL INSTALLED 2022

2022 STOPLOG/ TRASHRACK GUIDE

FLOW

EEL BYPASS ENTRANCE (TYP. 3 LOCATIONS)

UNITS 8 & 9

0 1 2 B 3 4 5 6 7 8 9 10 11 12 A 13 14 15 16 17 18 19 20 21 22 23

GATE 1 GATE 2 GATE 3 GATE 4 GATE 5 GATE 6 GATE 7 GATE 8 GATE 9 GATE 10 GATE 11 GATE 12 GATE 13 GATE 14

2'-3"

3'-6 3/4"

EXISTING/NEW HANDRAIL

VENT 1 VENT 2 VENT 3

NEW TRASHRAKER, SEE NOTES ON SHEET 100-01 FOR MORE DETAIL

ACCESS HATCH

x EL. 146.2'± (NAVD88)
EL. 142.4'± (MILL)

DECK SLOPE

VENT 4

DESIGN SPAN

EXISTING WOOD PLANK DECK

2022 CONCRETE

21'-6"

DECK SLOPE

VENT 5

VENT 6

TRASH RAKER MACHINE STATIONARY CONTROL CABINET

DN

NEW CONCRETE

x EL. 146.7'± (NAVD88)
EL. 142.9'± (MILL)

WALL MOUNTED VENTS

BUILDING

WALL SLOPE

EXISTING BUILDING

ALLOWABLE LOADING FOR NEW CONCRETE SLAB:
1. UNIFORM LIVE LOAD = 250 PSF
2. NOT RATED FOR CRANE LOADING WITHOUT ENGINEERING REVIEW.

9'-10"

21'-1"

64'-3"

178'-3"

CENTERLINE OF FISH BYPASS (SEE 500 SERIES FOR MORE DETAIL)

CENTERLINE OF FISH BYPASS (SEE 500 SERIES FOR MORE DETAIL)

FISH BYPASS FLUME (BY VERDANTAS, SEE VERDANTAS DRAWINGS FOR MORE DETAIL)

ALLOWABLE LOADING FOR 2022 CONCRETE SLAB:
1. UNIFORM LIVE LOAD = 250 PSF
2. CRANE LOAD = 28.5 KIPS (14.25 TONS)
   A. UPSTREAM CRANE OUTRIGGERS TO BE WITHIN 5'-0" OF EDGE OF DECK.
   B. MAXIMUM CRANE PICK TO BE 9 KIPS WITHOUT ENGINEERING REVIEW.

PLAN
1/8"= 1'-0"

NEW TRASHRAKER RAIL SUPPORT BEAMS
EL. 147.56'± (NAVD88)
EL. 143.76'± (MILL)

FALL RESTRAINT TBD

6'-6 3/4"

CONCRETE SLAB PLACED 2022

PERSONNEL GUARDRAIL

NEW TRASHRAKER SUPPORT BEAM

SLOPED TO DRAIN

2022 CONCRETE WORK

EL. 145.40' (NAVD88)
EL. 141.60' (MILL) HIGH POND

EL. 144.60' (NAVD88)
EL. 140.80' (MILL) NORMAL POND

EL. 144.0' (NAVD88)
EL. 140.20' (MILL) LOW POND

REPAIR CONCRETE NEAR WATERLINE AS REQUIRED (SEE SHEET 300-03)

NEW/EXISTING W8 STRUT TO CONCRETE SLAB

25'-0"

NEW/EXISTING W24 STOPLOG & TRASHRACK GUIDE

2
12

EL. 133.30' (NAVD88)
EL. 129.50' (MILL)

NEW WEB TO WEB WT'S FOR PLANE ADJUSTMENT

FLOW

NEW/EXISTING GATE

CONCRETE FOOTING (SEE 300-09 FOR DETAILS)

EL. 123.80' (NAVD88)
EL. 120.00' (MILL)

EL. 123.30' (NAVD88)
EL. 119.50' (MILL)

EL. 122.55' (NAVD88)
EL. 118.75' (MILL)

EL. 121.80' (NAVD88)
EL. 118.00' (MILL)

SECTION A
1/4"= 1'-0"

NEW TRASHRAKER RAIL SUPPORT BEAMS

6'-6 3/4"

NEW TRASHRAKER SUPPORT BEAM

NEW CONCRETE

EL. 145.40' (NAVD88)
EL. 141.60' (MILL) HIGH POND

EL. 144.60' (NAVD88)
EL. 140.80' (MILL) NORMAL POND

EL. 144.0' (NAVD88)
EL. 140.20' (MILL) LOW POND

NEW W24 STOPLOG & TRASHRACK GUIDE

SEE 600 SERIES FOR MORE DETAIL

CONTRACTOR TO SURVEY AND FIELD CONFIRM EXISTING CONCRETE IS SLOPED TO DRAIN

REPAIR CONCRETE NEAR WATERLINE AS REQUIRED (SEE SHEET 300-03)

25'-0"

EL. 138.80' (NAVD88)
EL. 135.00' (MILL)

EL. 137.80' (NAVD88)
EL. 134.00' (MILL)

EL. 132.30' (NAVD88)
EL. 128.50' (MILL)

EL. 131.30' (NAVD88)
EL. 127.50' (MILL)

NEW WEB TO WEB WT'S FOR PLANE ADJUSTMENT

FLOW

EXISTING GATE

CONCRETE FOOTING (SEE 300-09 FOR DETAILS)

EL. 123.80' (NAVD88)
EL. 120.00' (MILL)

EL. 123.30' (NAVD88)
EL. 119.50' (MILL)

EL. 122.55' (NAVD88)
EL. 118.75' (MILL)

EL. 121.80' (NAVD88)
EL. 118.00' (MILL)

4' 0 4 8

SECTION B
1/4" = 1'-0"

NOT FOR CONSTRUCTION

MAINE DEPARTMENT OF MARINE RESOURCES

WOODLAND
INTAKE DESIGN FOR DOWNSTREAM FISH PASSAGE

NEW INTAKE
PLAN AND SECTION

No.	Revision	Date	Drawn	Checked
C	ISSUED FOR BID, REV. 1	09-02-25	JFB	AJC
B	ISSUED FOR BID	07-07-25	JFB	AJC
A	ISSUED FOR VERDANTAS REVIEW	06-13-25	JFB	AJC

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Designed	Drawn	Checked	Project No.	Date Revised	Drawing No.
AJC	JFB	DBN	010252	09-02-25	300-01

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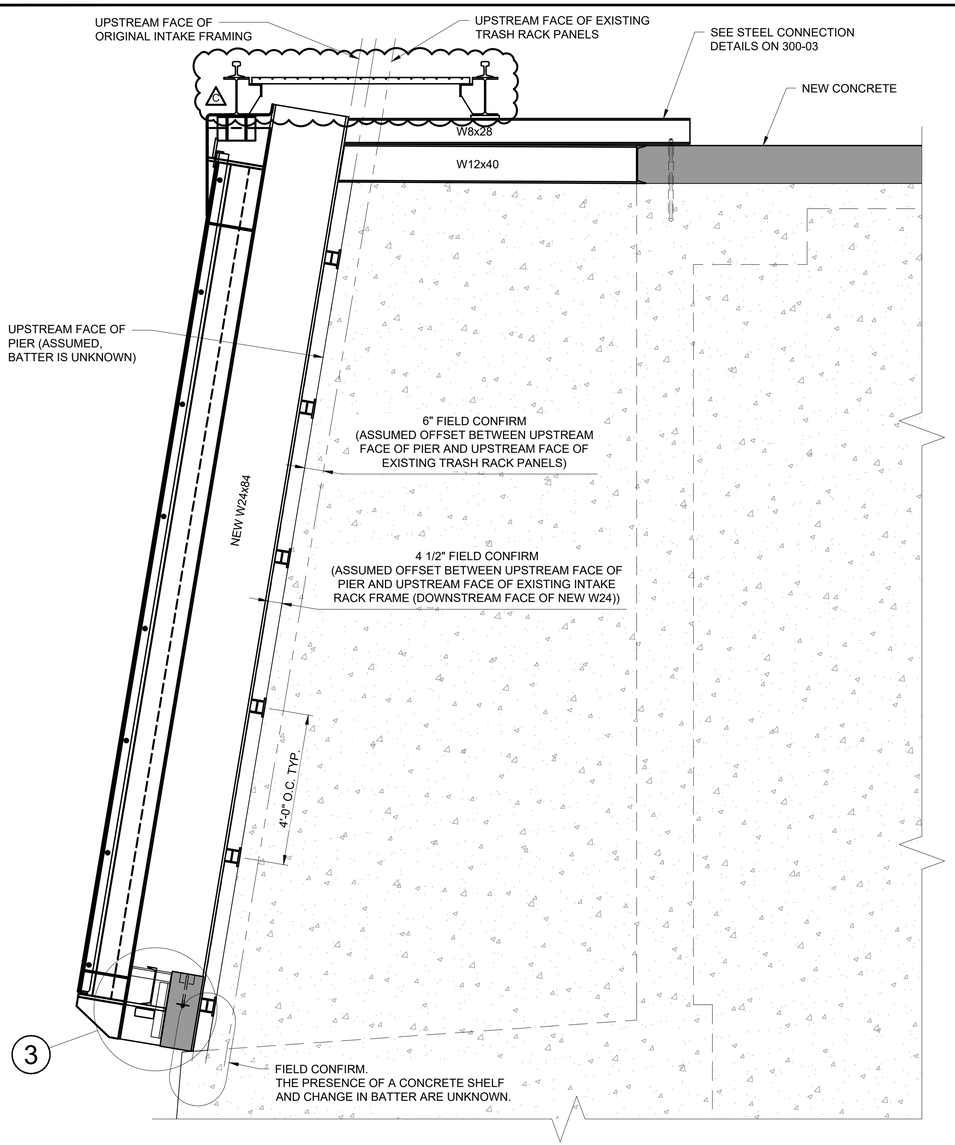
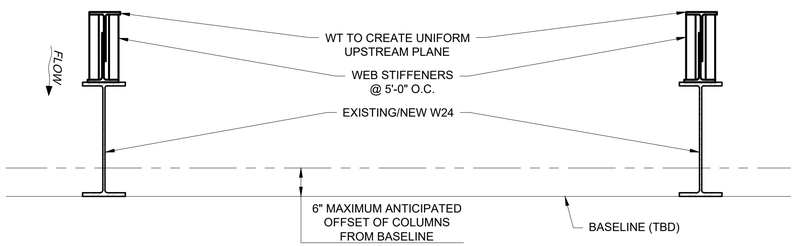
3" 2" 1" 0 22x34 = FULL SCALE



TYPICAL SECTION AT BENT 0

1/2" = 1'-0"

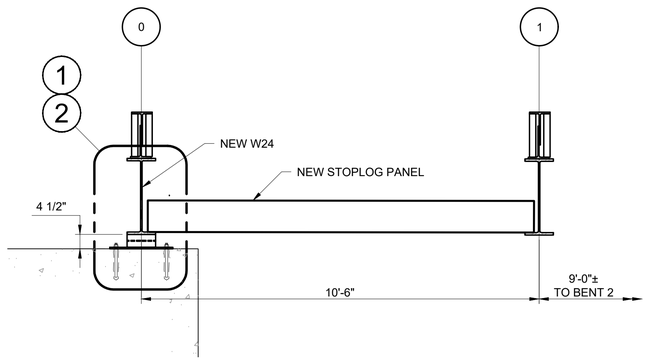
NOTE: SEE 300-01 FOR LOCATION IN PLAN VIEW.



TYPICAL PLAN VIEW FOR BENTS 0 THRU 22

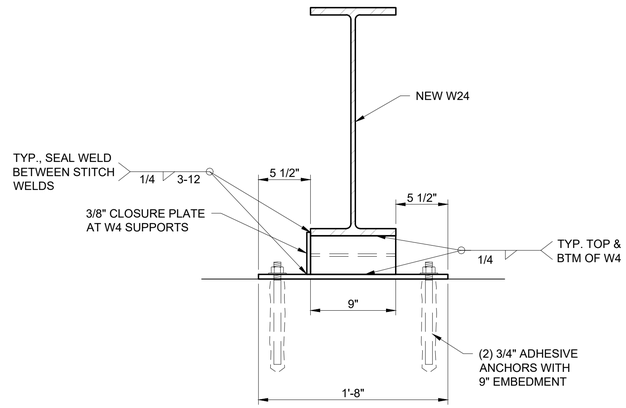
3/4"= 1'-0"

1' 0 1 2 3



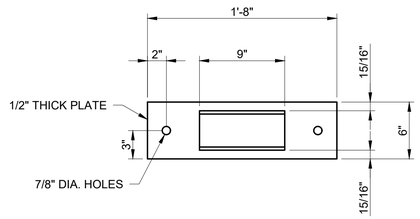
PLAN VIEW AT BENT 0

1/2" = 1'-0"



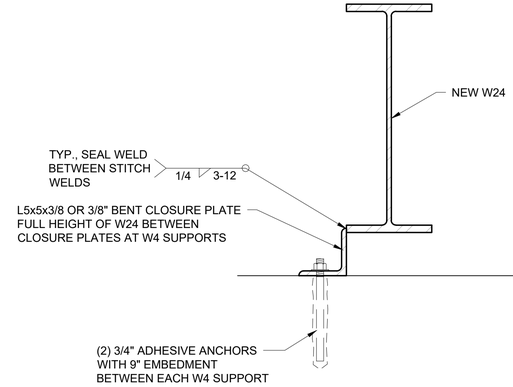
DETAIL 1

1 1/2" = 1'-0"



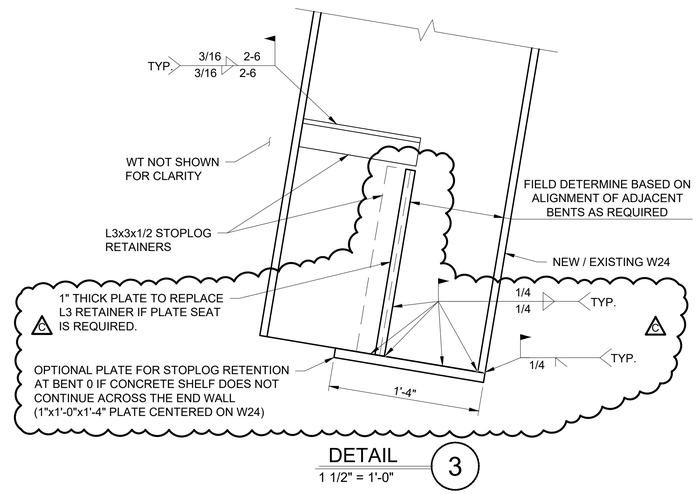
TYPICAL W4 SUPPORT ELEVATION

1/2" = 1'-0"



DETAIL 2

1 1/2" = 1'-0"



DETAIL 3

1 1/2" = 1'-0"

NOTE: THIS DETAIL IS TYPICAL FOR ALL W24s. FIELD CONFIRM RETAINERS IN PLACE WHERE W24s ARE ALREADY INSTALLED.

NOT FOR CONSTRUCTION

MAINE DEPARTMENT OF MARINE RESOURCES

WOODLAND
INTAKE DESIGN FOR DOWNSTREAM FISH PASSAGE

NEW INTAKE
FRAMING SECTION BENT 0

No.	Revision	Date	Drawn	Checked
C	ISSUED FOR BID, REV. 1	09-02-25	JFB	AJC
B	ISSUED FOR REVIEW	07-07-25	JFB	AJC
A	ISSUED FOR VERDANTAS REVIEW	06-13-25	JFB	AJC

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AJC	JFB	DBN	010252	09-02-25	300-02

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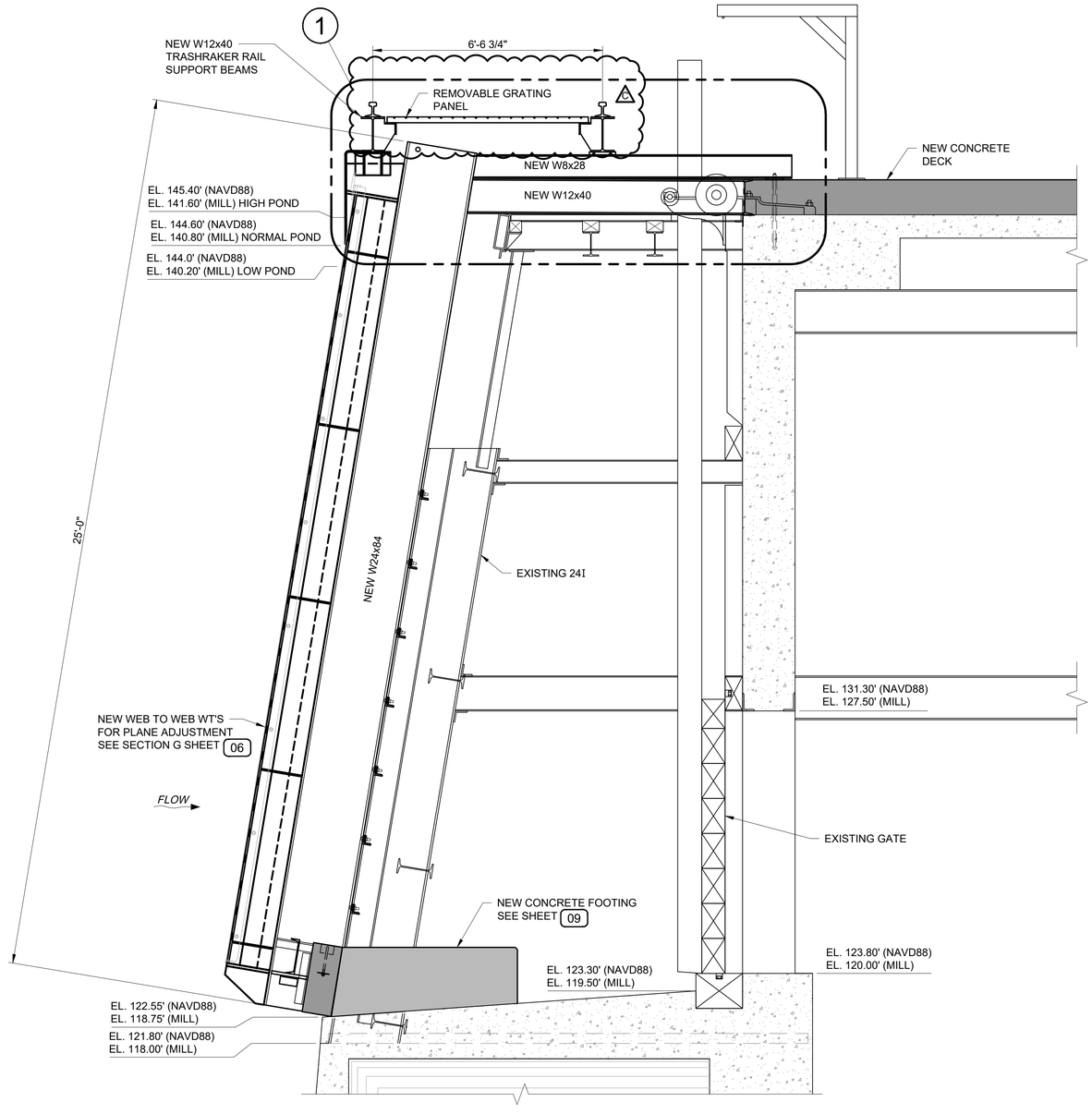
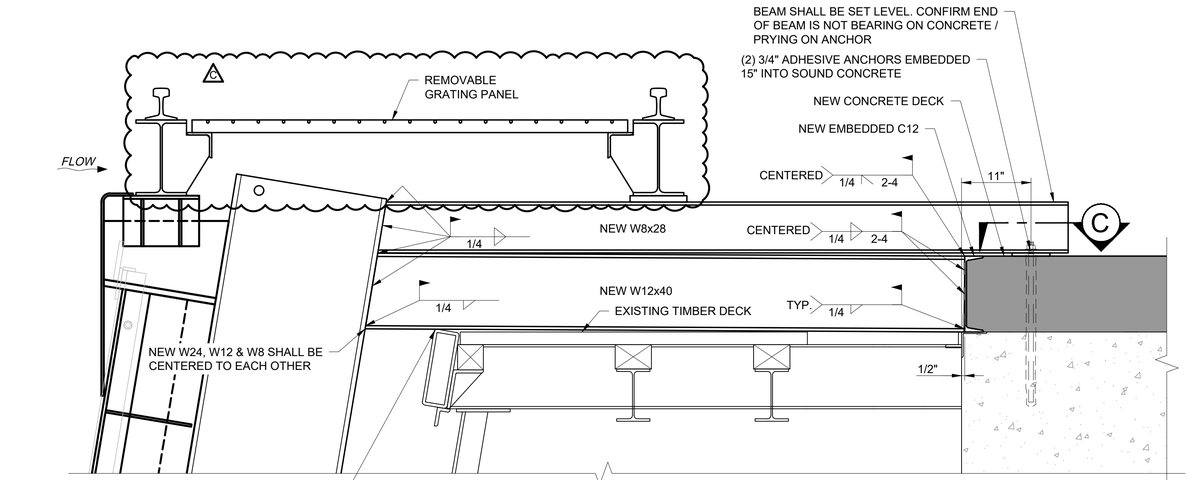
22x34 = FULL SCALE



TYPICAL FRAMING SECTION BENTS 1-6

1/2" = 1'-0"

2' 0 2 4



W12 (OR W8 AT 8" SLAB) MAY NOT BE LEVEL DUE TO EXISTING TUBE STEEL IT IS SET ON. THE BASE PLATE ON THE RIGHT SIDE OF THE TOP SUPPORT MAY NEED TO BE ADJUSTED DEPENDING ON THE SLOPE OF THE STRUT. SHIM BETWEEN THE TOP SUPPORT AND COMPRESSION STRUT WHERE THE RAKER RAIL LANDS.

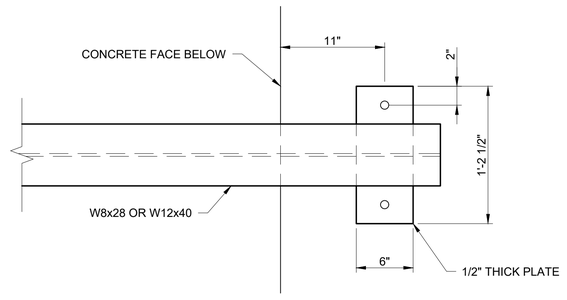
DETAIL 1

1" = 1'-0"

HEADWALL PATCH REPAIR DETAIL

NOT TO SCALE

NOTE:
1. AT TIME OF CONCRETE PLACEMENT, SURFACE TO BE SATURATED WITH WATER, BUT NO STANDING WATER.



SECTION C

1 1/2" = 1'-0"

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WOODLAND
INTAKE DESIGN FOR DOWNSTREAM FISH PASSAGE

NEW INTAKE
FRAMING SECTION BENT 1-6

No.	Revision	Date	Drawn	Checked
C	ISSUED FOR BID, REV. 1	09-02-25	JFB	AJC
B	ISSUED FOR BID	07-07-25	JFB	AJC
A	ISSUED FOR VERDANTAS REVIEW	06-13-25	JFB	AJC

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AJC	JFB	DBN	010252	09-02-25	300-03

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22x34 = FULL SCALE

* TRASH RAKER, SUPPORT BEAMS, AND GRATING ARE NOT SHOWN ON THIS SHEET FOR CLARITY

EXISTING TIMBER DECK TO BE PARTIALLY REMOVED

5'-7" C/C

EXISTING STEEL STRUT TO REMAIN

NEW W12x40

EL. 145.48' (NAVD88)
EL. 141.68' (MILL)

EL. 143.80' (NAVD88)
EL. 140.00' (MILL)

EL. 138.80' (NAVD88)
EL. 135.00' (MILL)

REMOVE PORTION OF EXISTING DECK BEAMS, SEE DETAIL 5/05

NEW 1/2" THK. CLOSURE PLATES

6'-0"± TALL x 24" WIDE, REMOVE PORTION OF EXISTING TRASHRACKS

NEW L4x4x1/2

1'-6" 1'-6" 1'-6" 1'-0"

NEW LANDING PLATE

(4) 1" DIA. ADHESIVE ANCHORS BOLTS, W/ 6" MIN. EMBEDMENT INTO SOUND CONCRETE (CENTERED ON C15)

NEW WTS AND RACKS NOT SHOWN FOR CLARITY

25'-0"

NEW W24x84, FOR DETAILS SEE SHEET 06

NEW W12x53

NEW W12x53

EXISTING TRASHRACKS

FLOW

EXISTING CONCRETE SPLITTER WALL

NEW W12x53

EXISTING CONCRETE APRON

1± 12

EL. 122.55' (NAVD88)
EL. 118.75' (MILL)

BOTTOM STOPLOG AND CLOSURE PLATE NOT SHOWN FOR CLARITY

EXISTING CONCRETE MISSING IN FRONT OF EXISTING 24I

BOTTOM OF VERTICAL W12 SHALL BE CUT TO MATCH EXISTING CONCRETE APRON SLOPE

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

EXISTING TIMBER DECK

5'-7" C/C

NEW GUSSET PLATES, INSTALL CENTERED ON EXISTING STRUCTURAL TUBE

NEW W24x84, FOR DETAILS SEE SHEET 06

NEW W8x28, FOR WELD DETAILS AT EACH END SEE SHEET 06

NEW W12x53

BENT CENTERLINE

NEW 2" HEAVY DUTY FIBERGLASS GRATING, 2" SQ MESH, GRITTED

FLOW

5'-7 1/2"

3'-6 5/8" GRATING

SPAN

7 1/2"

NEW DECK FRAME, SEE PLAN THIS SHEET

EXISTING STRUCTURAL TUBE

6'-9 5/8" GRATING

PLAN AT DECK
1/2"= 1'-0"

C8x18.75

4'-0"

C8x18.75

L4x4x1/2

L6x4x1/2, LLH

L4x4x1/2

C8x18.75

FLOW

7'-0 1/2"±

EMBEDDED C8

NEW DECK FRAME PLAN
1/2"= 1'-0"

EXISTING STRUCTURAL TUBE

EXISTING TRASHRACKS SHOWN BELOW EXISTING STRUCTURAL TUBE

NEW L4x4x1/2

NEW CLOSURE PLATE

TYP., SEAL WELD BETWEEN SKIP WELDS 1/4 4-12 1/4 4-12

NEW W24

NEW L4x4x1/2

TYP., SEAL WELD BETWEEN SKIP WELDS 1/4 4-12 1/4 4-12

REMOVE 24" WIDE OF EXISTING STEEL TRASHRACK & PORTION OF EXISTING SUPPORT ANGLE

NEW CLOSURE PLATE EXTENDS BELOW EXISTING STRUCTURAL TUBE

TRIM OUT PORTION OF EXISTING DECK SUPPORT STEEL FOR INSTALLATION OF NEW W24

NEW W12

1/4 2-12 1/4 2-12 TYP., SEAL WELD BETWEEN SKIP WELDS

2 1/2"

7 1/2"

2"

EXISTING STRUT TO REMAIN

NEW W24

BENT CENTERLINE

EXISTING TOP PLATE FOR DOUBLE ANGLES

FLOW

5'-1 1/2"

5'-2 1/2"

REMOVE PROTION OF EXISTING DECK SUPPORT BEAMS

NEW L4x4x1/2

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

PROVIDE GROUT HOLES THIS COLUMN

1'-0"

8"

1/2" PLATE

1/4 1/4 TYP.

6"

3"

FABRICATE LONG AND FIELD TRIM

SECTION E
1"= 1'-0"

5'-7"

2'-0"

NEW W12x53 (TYP.)

FLOW

1'-3"±

EXISTING CONCRETE SPLITTER WALL

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

WELD BETWEEN C15 AND W24 1/4

TYP., SEAL WELD BETWEEN SKIP WELDS 1/4 4-12

EXISTING DOUBLE ANGLES EXTENDING FROM TOP OF EXISTING 24I TO DECK TO REMAIN ABOVE NEW C15

NEW 1/2" CLOSURE PLATE

1/4 1/4 WELD W12 TO C15 (4 LOCATIONS)

NEW C15

2 1/2"

NEW L4x4x1/2, COPE TIGHT TO C15

TYP., SEAL WELD BETWEEN SKIP WELDS 1/4 4-12 1/4 4-12

NEW 8" x 8" x 1/2" GUSSET PLATE

1/4 1/4 4-12 4-12 TYP., SEAL WELD BETWEEN SKIP WELDS

REMOVE PORTION OF TRASHRACKS

EXISTING TRASHRACKS

FLOW

1/4 1/4 WELD W12 TO C15 (4 LOCATIONS)

BENT CENTERLINE

NEW C15x33.9

5'-7" C/C

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

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MAINE DEPARTMENT OF MARINE RESOURCES

WOODLAND
INTAKE DESIGN FOR DOWNSTREAM FISH PASSAGE

INTAKE RACK
FRAMING SECTION BENT 7 CLOSURE WALL

No.	Revision	Date	Drawn	Checked
C	ISSUED FOR BID, REV. 1	09-02-25	JFB	AJC
B	ISSUED FOR BID	07-07-25	JFB	AJC
A	ISSUED FOR VERDANTAS REVIEW	06-13-25	JFB	AJC

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AJC	JFB	DBN	010252	09-02-25	300-04

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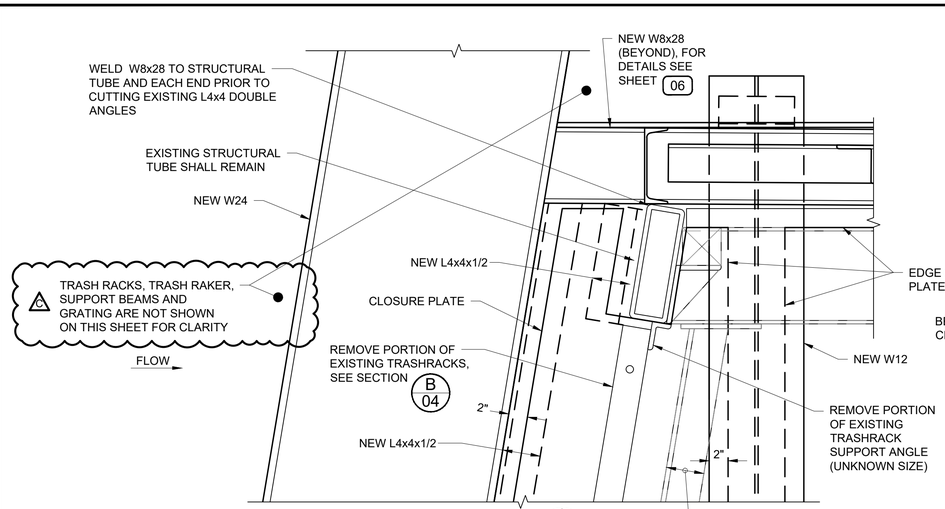
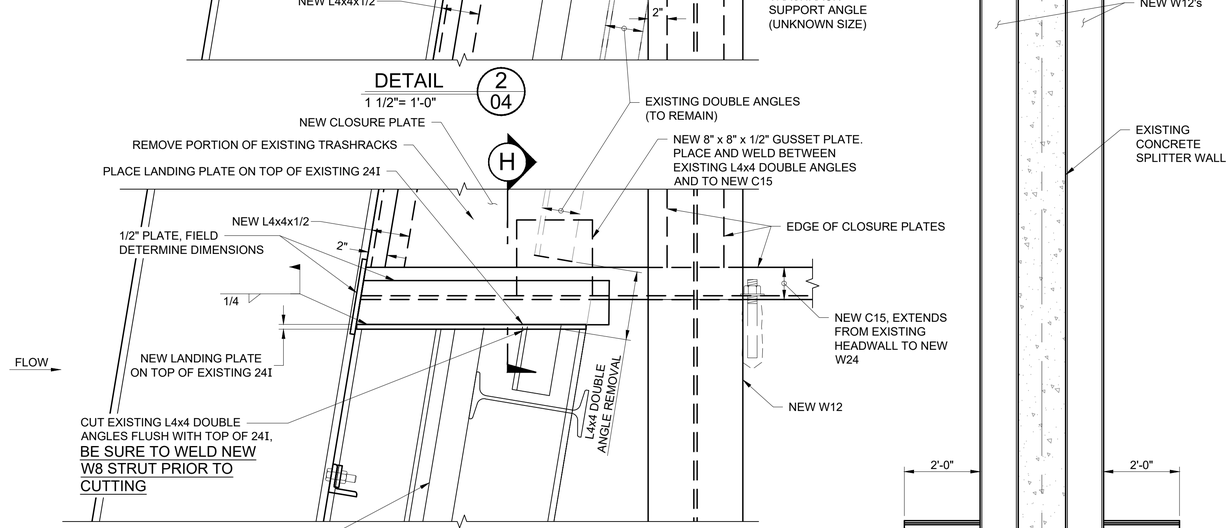
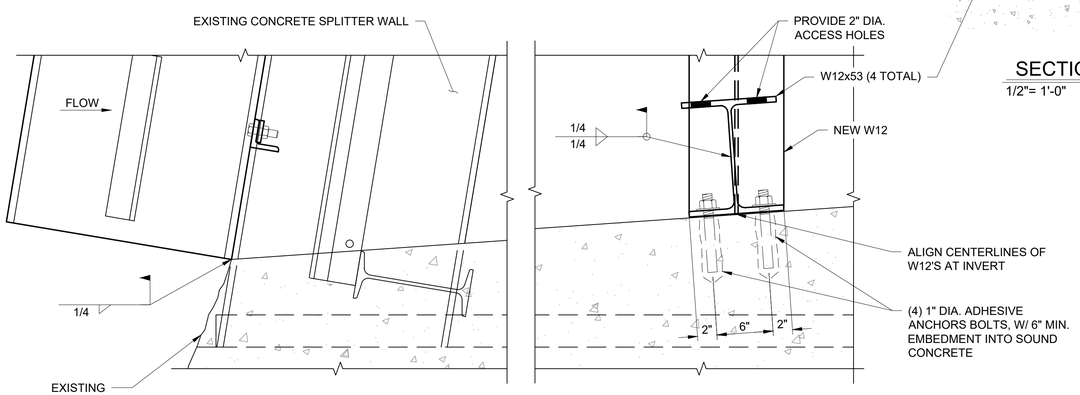


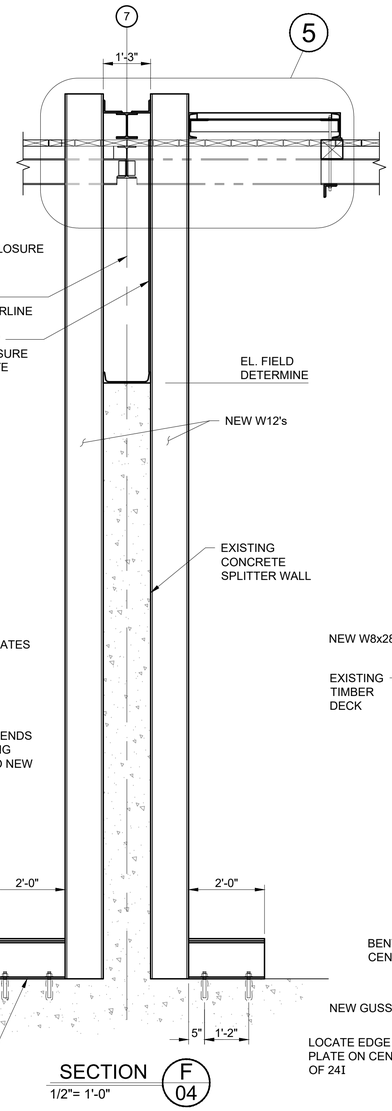
DETAIL 2 04
1 1/2"= 1'-0"



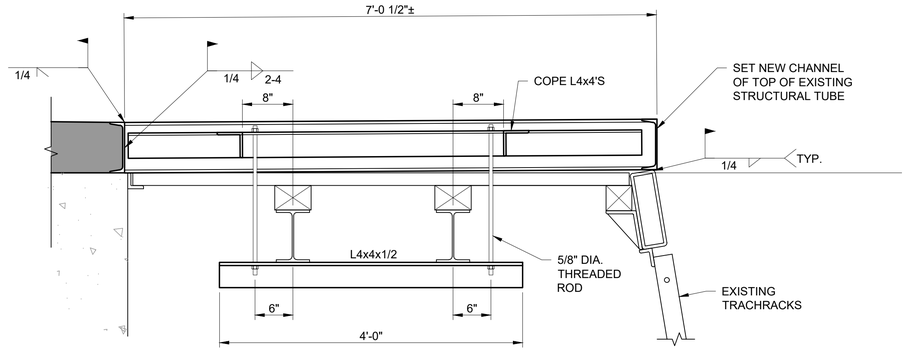
DETAIL 3 04
1 1/2"= 1'-0"



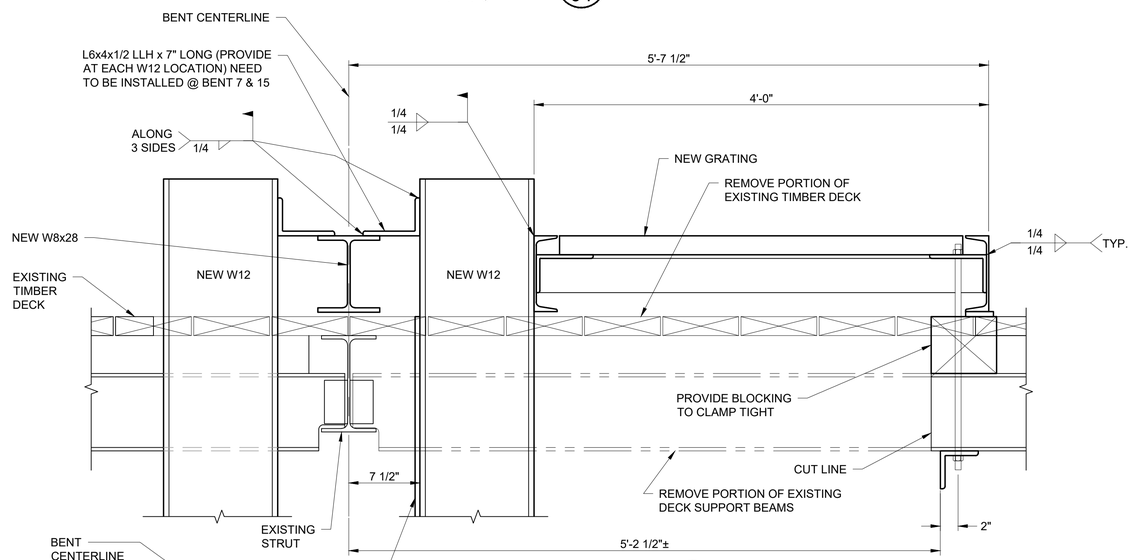
DETAIL 4 04
1 1/2"= 1'-0"



SECTION F 04
1/2"= 1'-0"

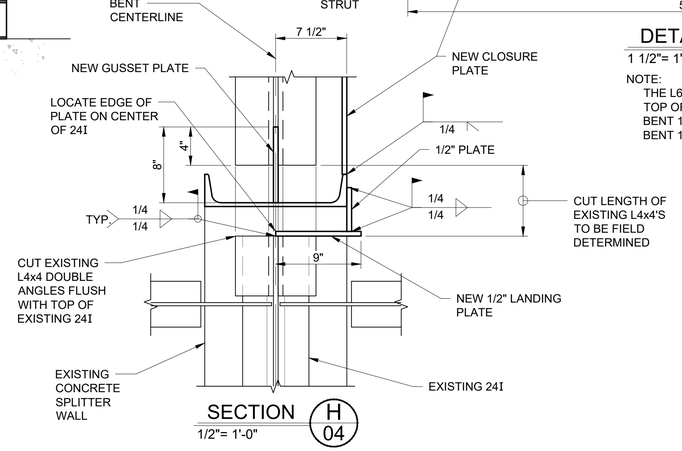


SECTION G 04
1"= 1'-0"



DETAIL 5
1 1/2"= 1'-0"

NOTE:
THE L6x4x1/2 ANGLES BETWEEN THE W8 AND TOP OF W12s HAVE NOT BEEN INSTALLED AT BENT 15. THESE NEED TO BE INSTALLED AT BENT 15 PRIOR TO DEWATERING.



SECTION H 04
1/2"= 1'-0"

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MAINE DEPARTMENT OF MARINE RESOURCES

WOODLAND
INTAKE DESIGN FOR DOWNSTREAM FISH PASSAGE

NEW INTAKE
BENT 7 CLOSURE WALL DETAILS

No.	Revision	Date	Drawn	Checked
C	ISSUED FOR BID, REV. 1	09-02-25	JFB	AJC
B	ISSUED FOR BID	07-07-25	JFB	AJC
A	ISSUED FOR VERDANTAS REVIEW	06-13-25	JFB	AJC

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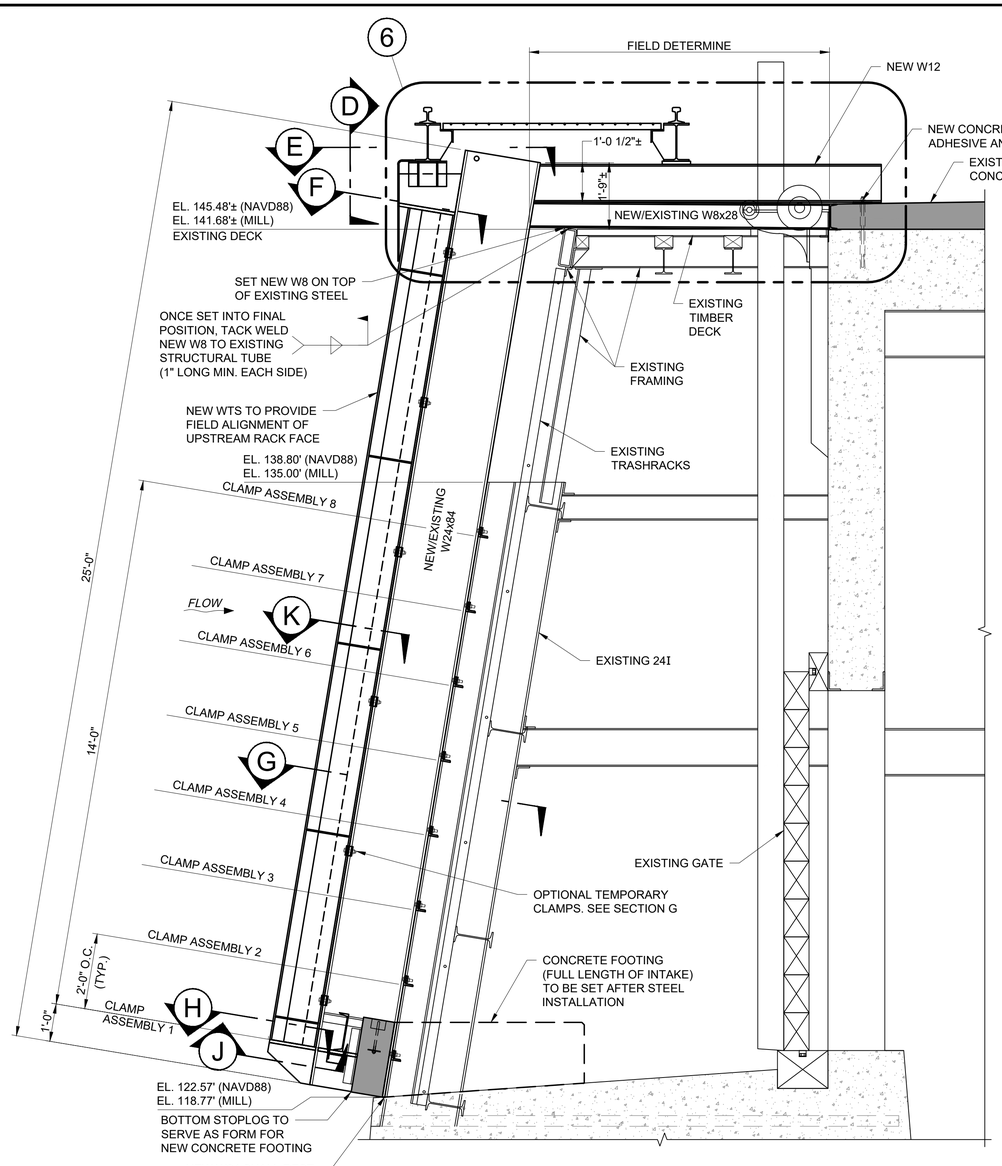
Designed	Drawn	Checked	Project No.	Date Revised	Drawing No.
AJC	JFB	DBN	010252	09-02-25	300-05

22x34 = FULL SCALE

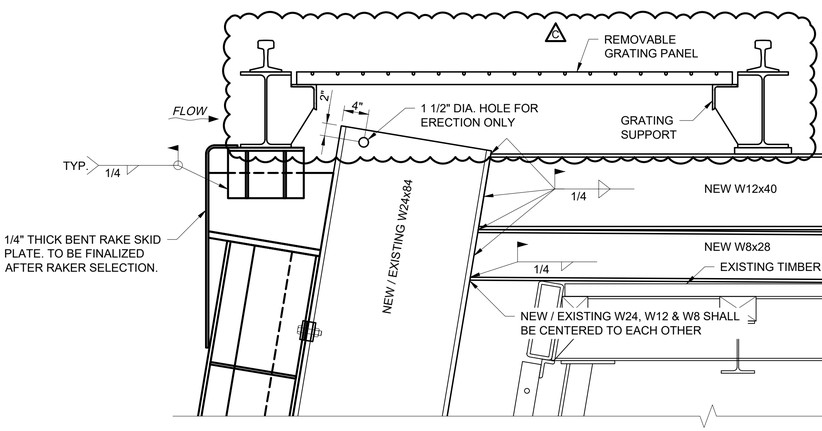
3" 2" 1" 0



TYPICAL SECTION FOR BENTS 8 THRU 21

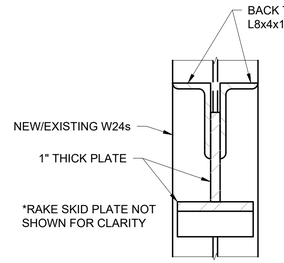
1/2"= 1'-0"

2' 0 2 4



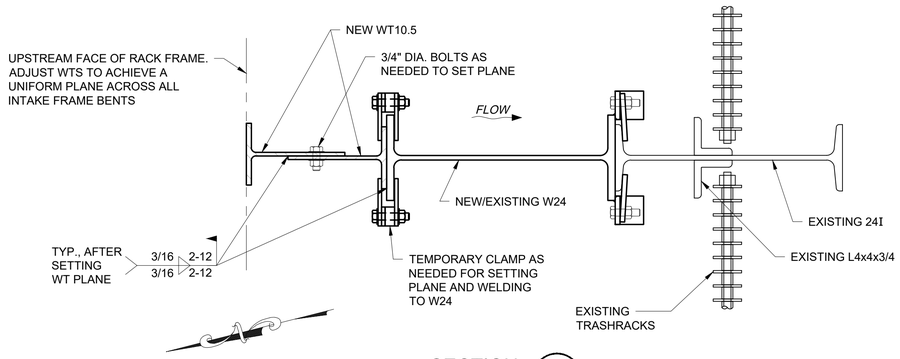
DETAIL 6

1" = 1'-0"



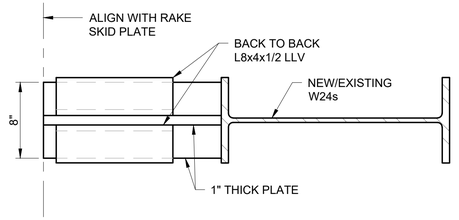
SECTION D

1 1/2" = 1'-0"



SECTION G

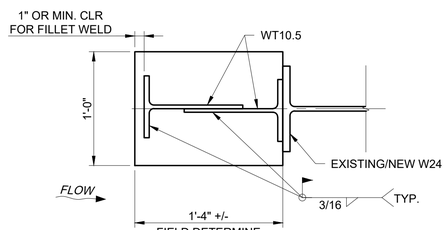
1 1/2"= 1'-0"



SECTION E

1 1/2" = 1'-0"

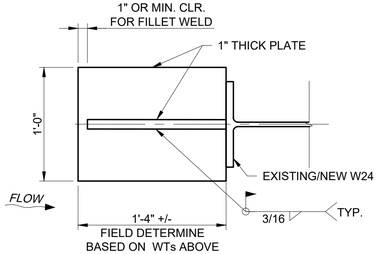
RAKE SKID PLATE NOT SHOWN FOR CLARITY



SECTION H

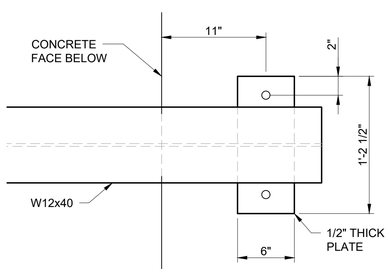
1 1/2" = 1'-0"

6" 0 6 12 18



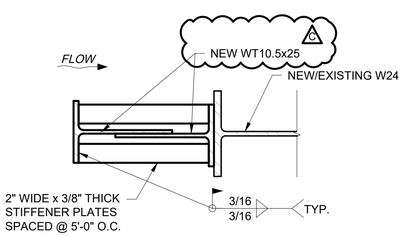
SECTION J

1 1/2" = 1'-0"



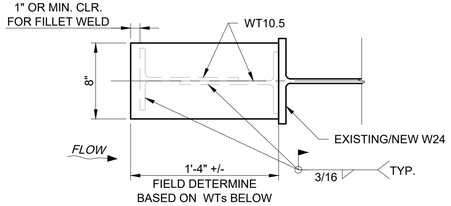
SECTION L

1 1/2" = 1'-0"



SECTION K

1 1/2" = 1'-0"



SECTION F

1 1/2" = 1'-0"

NOT FOR CONSTRUCTION

MAINE DEPARTMENT OF MARINE RESOURCES

WOODLAND
INTAKE DESIGN FOR DOWNSTREAM FISH PASSAGE

INTAKE RACK
FRAMING SECTION AT BENT 8-21

No.	Revision	Date	Drawn	Checked
C	ISSUED FOR BID, REV. 1	09-02-25	JFB	AJC
B	ISSUED FOR BID	07-07-25	JFB	AJC
A	ISSUED FOR VERDANTAS REVIEW	06-13-25	JFB	AJC

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Designed	Drawn	Checked	Project No.	Date Revised	Drawing No.
AJC	JFB	DBN	010252	09-02-25	300-06

PRINTED: Aug. 27, 2025 - 5:00 PM

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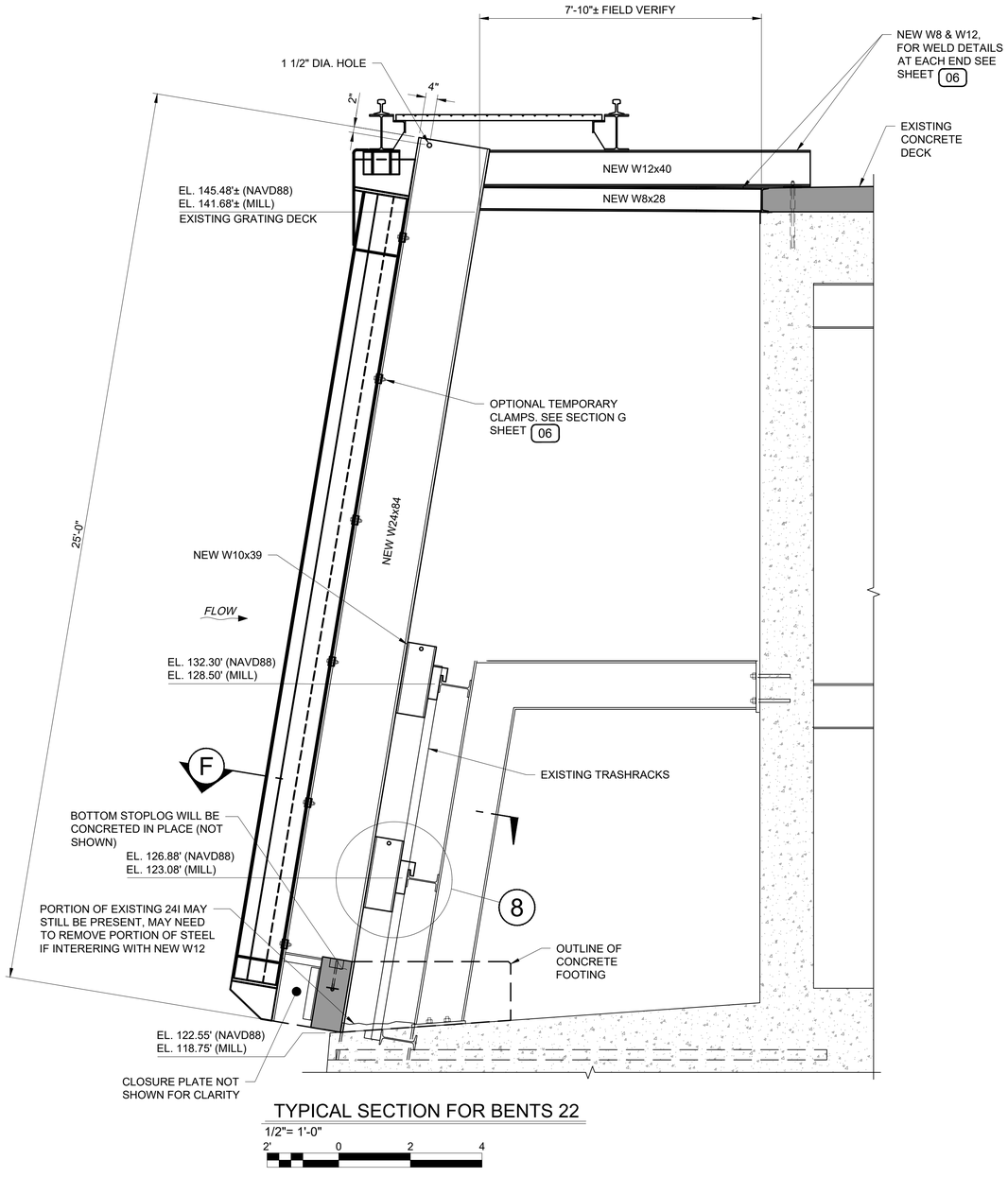
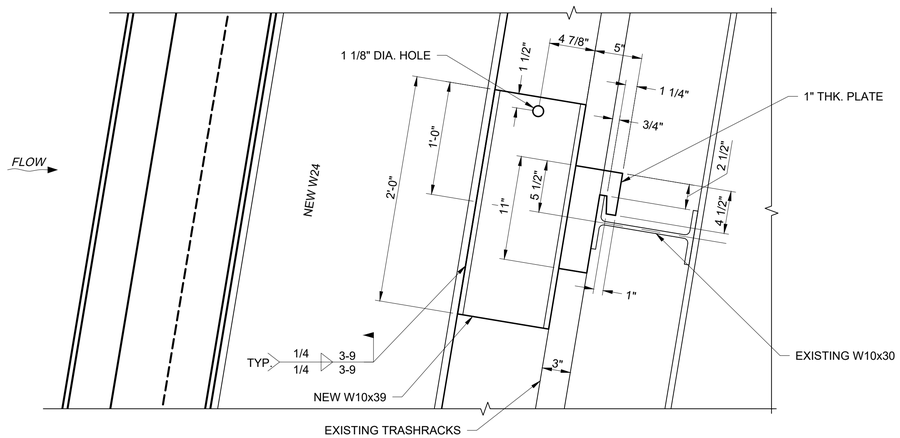


TYPICAL SECTION FOR BENTS 22

1/2"= 1'-0"

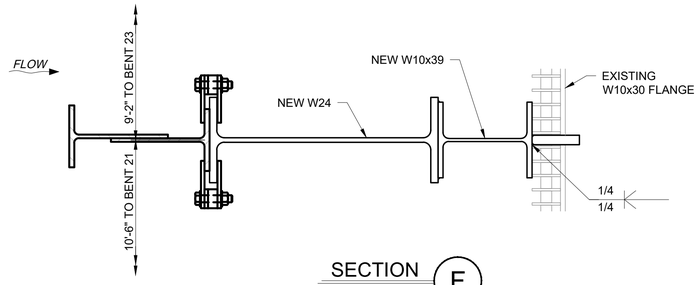
2' 0 2 4



CLIP BEAM DETAIL 8

1"= 1'-0"

NOTE:
THESE CLIPS WERE USED IN THE PHASE 01 WORK AND MAY BE ABLE TO BE SALVAGED FROM THE EXISTING FRAMING.



SECTION F

1"= 1'-0"

1' 0 1 2

NOT FOR CONSTRUCTION

No.	Revision	Date	Drawn	Checked
C	ISSUED FOR BID, REV. 1	09-02-25	JFB	AJC
B	ISSUED FOR BID	07-07-25	JFB	AJC
A	ISSUED FOR VERDANTAS REVIEW	06-13-25	JFB	AJC

MAINE DEPARTMENT OF MARINE RESOURCES

WOODLAND
INTAKE DESIGN FOR DOWNSTREAM FISH PASSAGE

INTAKE RACK
FRAMING SECTION BENT 22

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Designed	Drawn	Checked	Project No.	Date Revised	Drawing No.
AJC	JFB	DBN	010252	09-02-25	300-07

22x34 = FULL SCALE

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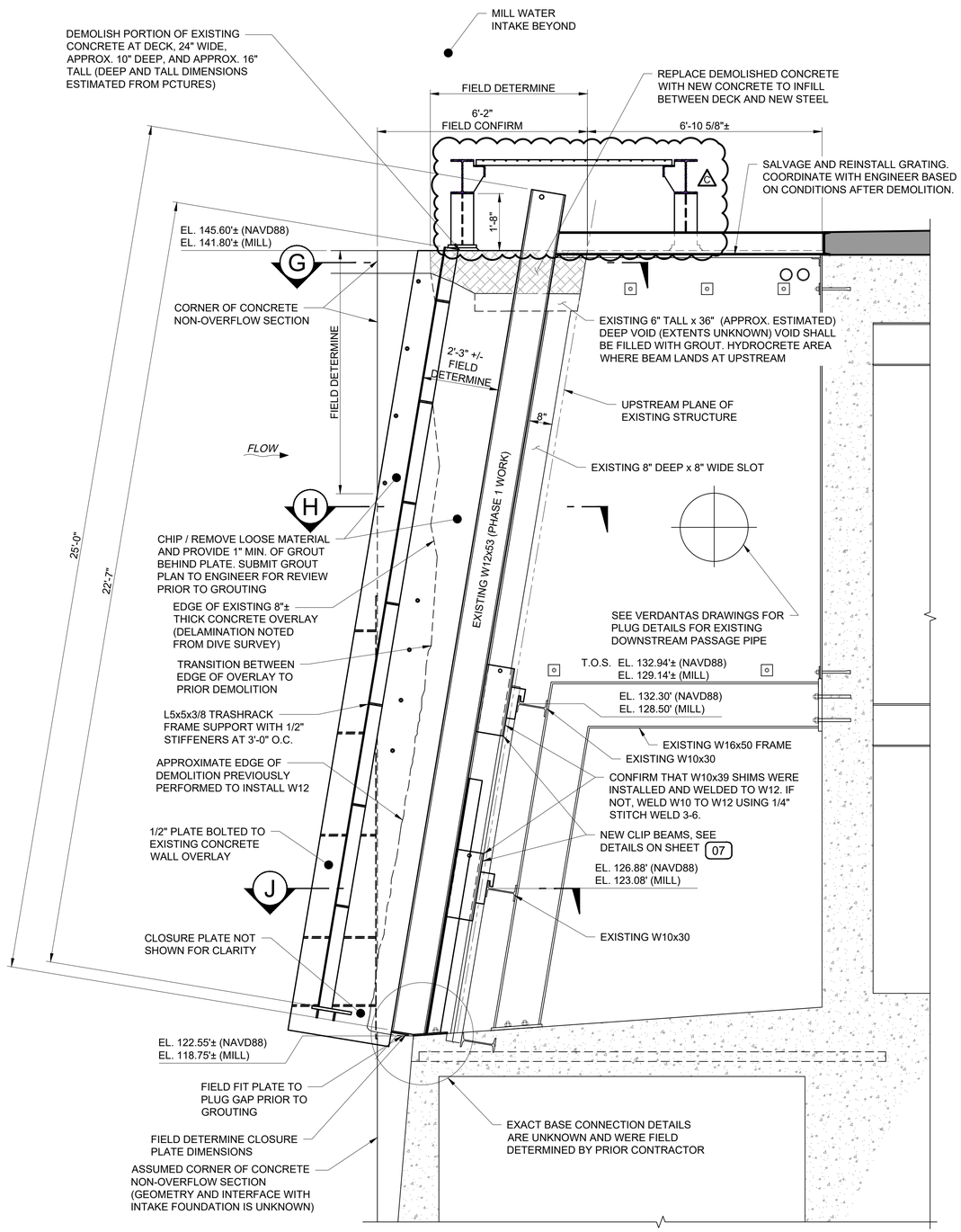
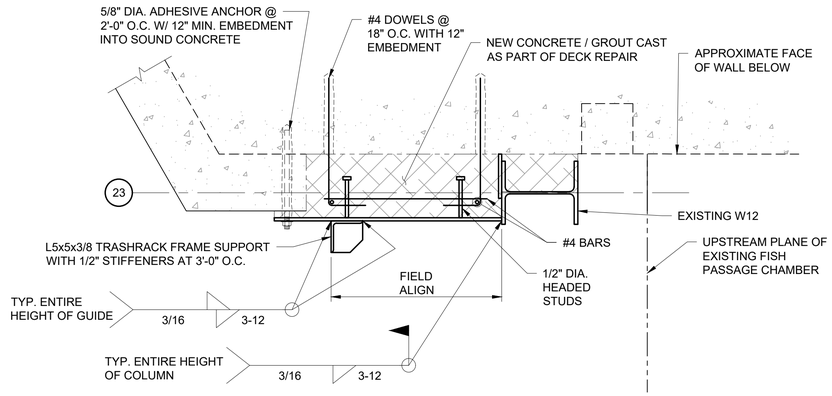


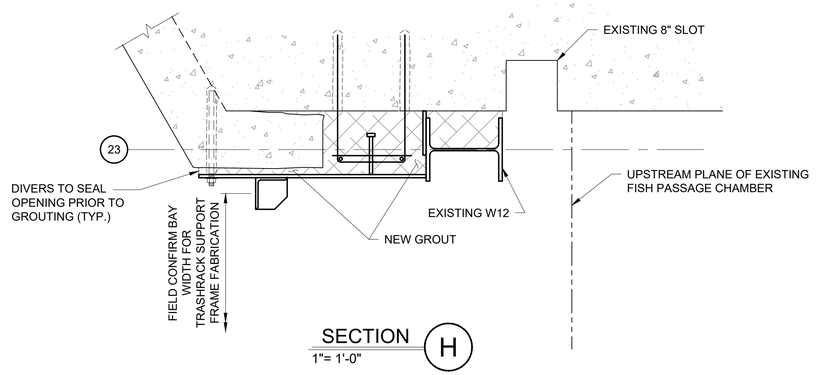
TYPICAL SECTION FOR BENT 23

1/2"= 1'-0"



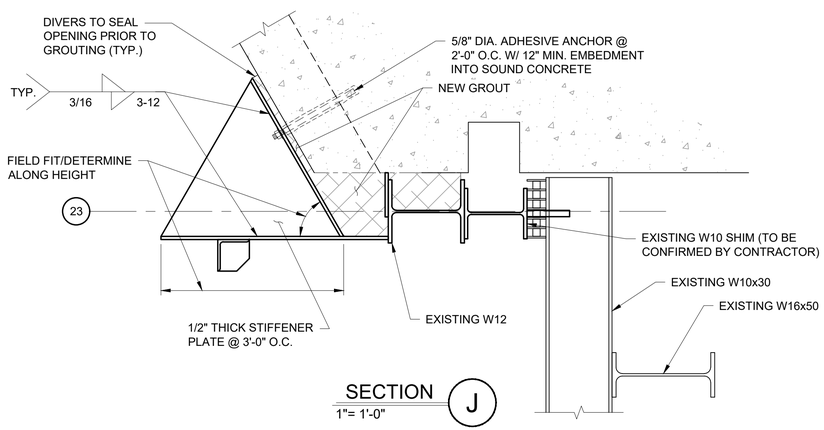
SECTION G

1"= 1'-0"



SECTION H

1"= 1'-0"



SECTION J

1"= 1'-0"

NOT FOR CONSTRUCTION

MAINE DEPARTMENT OF MARINE RESOURCES

WOODLAND
INTAKE DESIGN FOR DOWNSTREAM FISH PASSAGE

NEW INTAKE
FRAMING SECTION BENT 23

No.	Revision	Date	Drawn	Checked
C	ISSUED FOR BID, REV. 1	09-02-25	JFB	AJC
B	ISSUED FOR BID	07-07-25	JFB	AJC
A	ISSUED FOR VERDANTAS REVIEW	06-13-25	JFB	AJC

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Designed	Drawn	Checked	Project No.	Date Revised	Drawing No.
AJC	JFB	DBN	010252	09-02-25	300-08

22x34 = FULL SCALE

3" 2" 1" 0"

PRINTED: Sep. 2, 2025 - 9:45 AM

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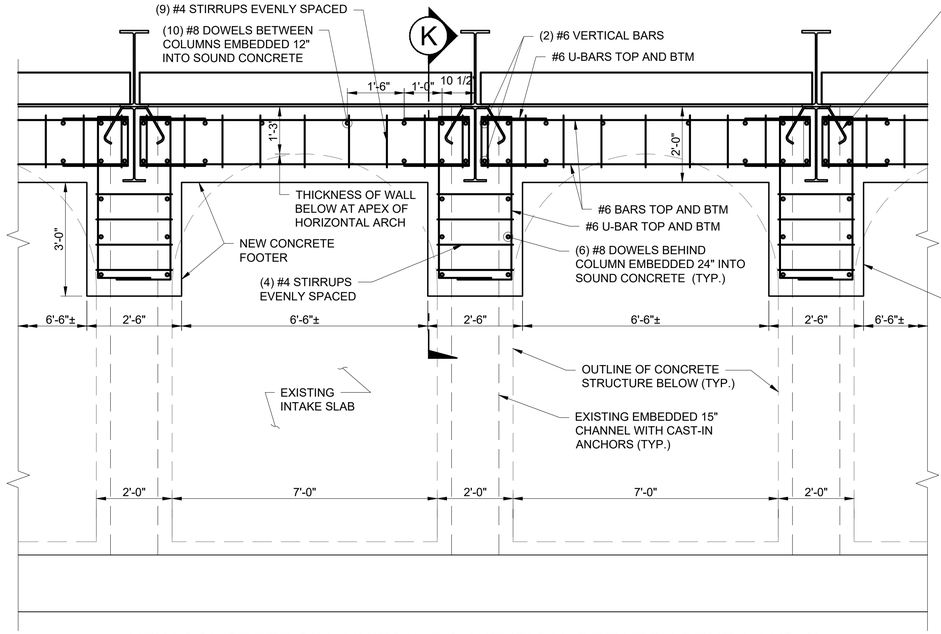
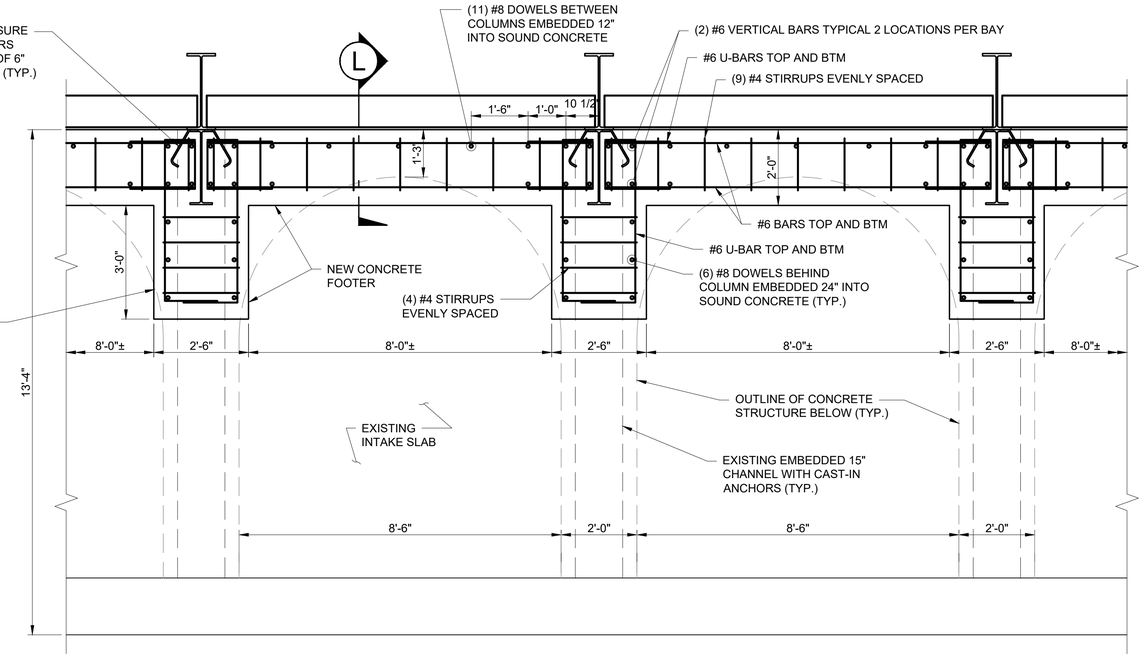


NEW CONCRETE SILL UNITS 4, 5 & 6 (TYPICAL BETWEEN BENT 0 AND 6)

1/2" = 1'-0"

2' 0 2 4

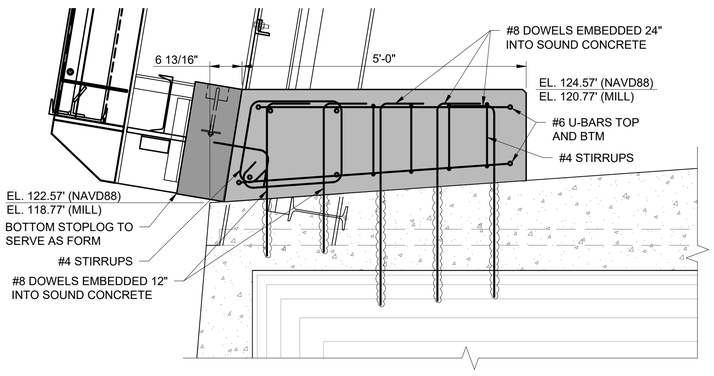
NOTE:
1. SPACING BETWEEN THE BUMPOUTS IN THE FOOTING IS BASED ON EXISTING COLUMN SPACING. NOTIFY ENGINEER IF COLUMN SPACING DIFFERS MORE THAN 1.5".



NEW CONCRETE SILL UNITS 7, 10 AND 8, 9 (TYPICAL BETWEEN BENT 6 AND 23)

1/2" = 1'-0"

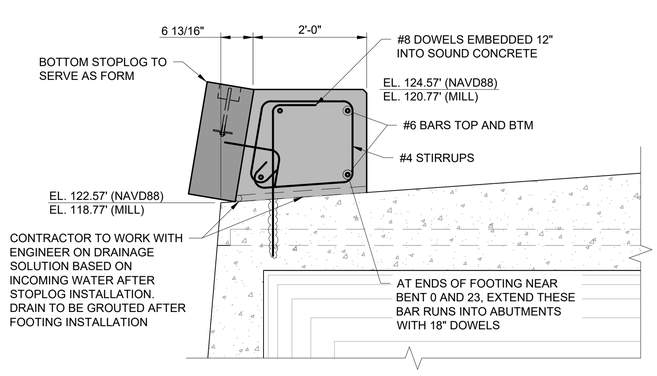
NOTE:
1. SPACING BETWEEN THE BUMPOUTS IN THE FOOTING IS BASED ON EXISTING COLUMN SPACING. NOTIFY ENGINEER IF COLUMN SPACING DIFFERS MORE THAN 1.5".



SECTION K

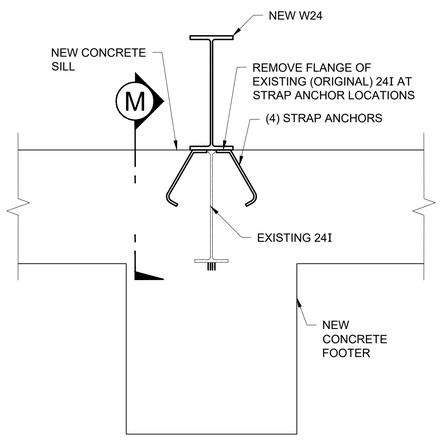
3/4" = 1'-0"

1' 0 1 2 3



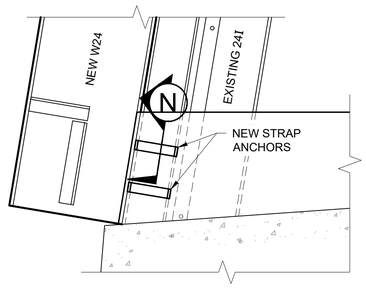
SECTION L

3/4" = 1'-0"



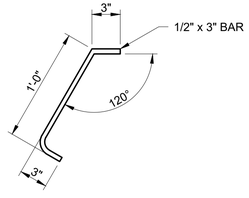
STRAP ANCHOR CONNECTION DETAIL

3/4" = 1'-0"



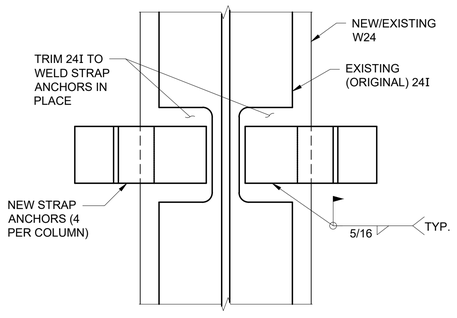
SECTION M

3/4" = 1'-0"



STRAP ANCHOR DETAIL

1 1/2" = 1'-0"



SECTION N

3" = 1'-0"

NOT FOR CONSTRUCTION

No.	Revision	Date	Drawn	Checked
C	ISSUED FOR BID, REV. 1	09-02-25	JFB	AJC
B	ISSUED FOR BID	07-07-25	JFB	AJC
A	ISSUED FOR VERDANTAS REVIEW	06-13-25	JFB	AJC

MAINE DEPARTMENT OF MARINE RESOURCES

WOODLAND
INTAKE DESIGN FOR DOWNSTREAM FISH PASSAGE

NEW INTAKE
CONCRETE SILL

Designed	Drawn	Checked	Project No.	Date Revised	Drawing No.
AJC	JFB	DBN	010252	09-02-25	300-09

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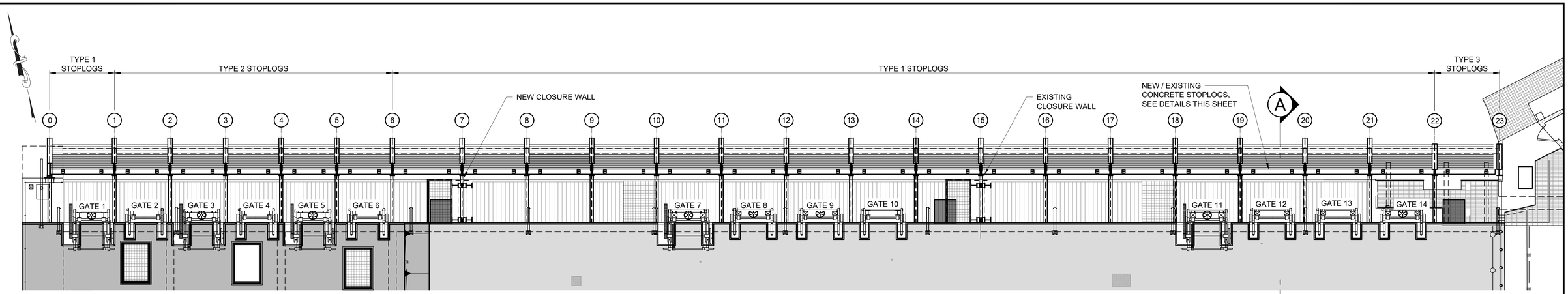
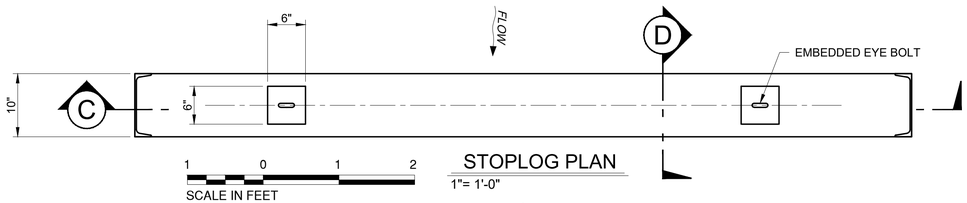


INTAKE STOPLOG PLAN VIEW

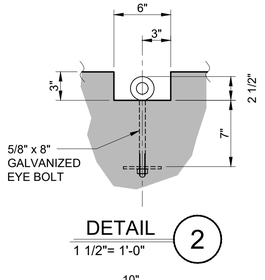
1/8" = 1'-0"

8' 0 8 16



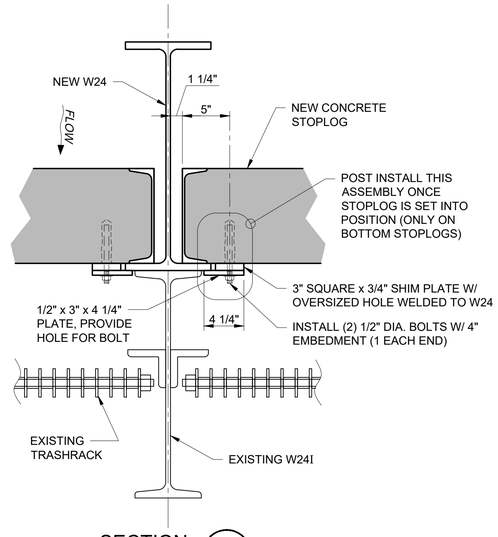
STOPLOG PLAN

1"= 1'-0"



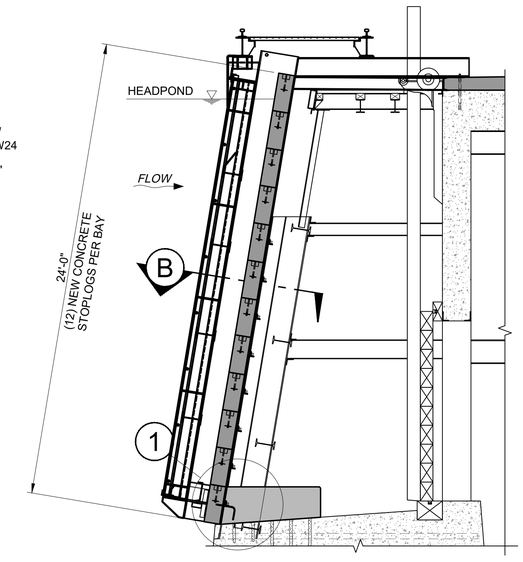
DETAIL 2

1 1/2"= 1'-0"



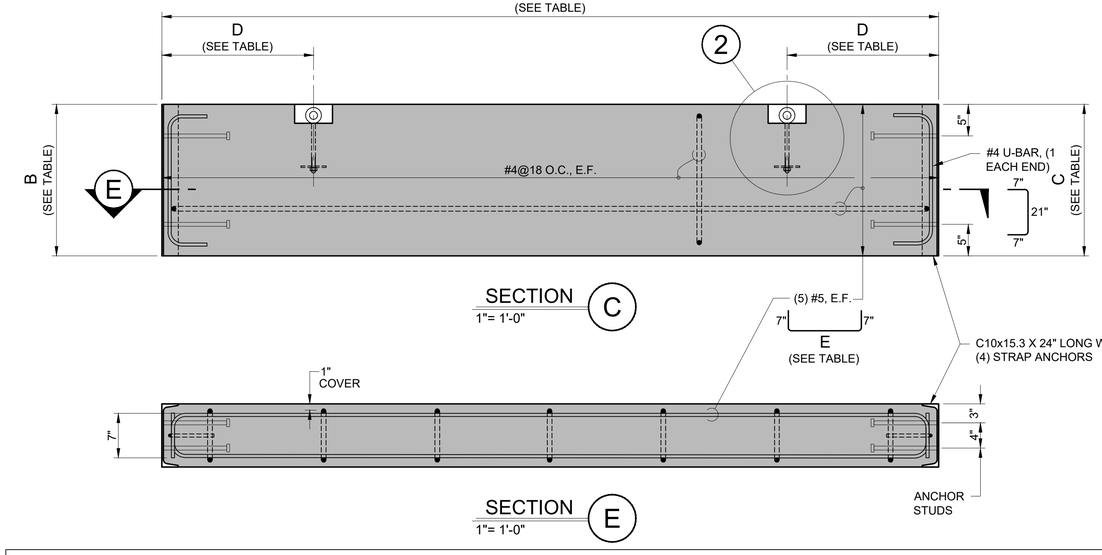
SECTION B

1 1/2"= 1'-0"



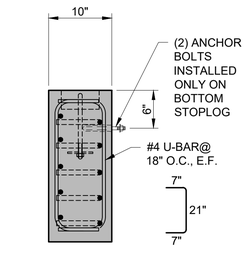
SECTION A

1/4"= 1'-0"



SECTION C

1"= 1'-0"

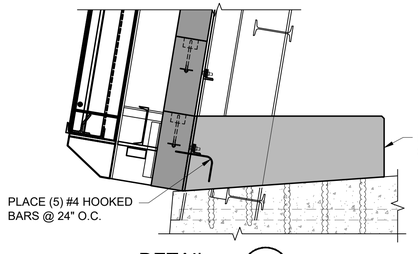


SECTION D

1"= 1'-0"

SECTION E

1"= 1'-0"



DETAIL 1

1/2"= 1'-0"

STOPLOG TABLE							
STOPLOG TYPE	QUANTITY	A	B	C	D	E	LOCATION/NOTES
TYPE 1	96 (ALREADY FABRICATED)	10'-3"	2'-0"	2'-0"	2'-0"	10'-0"	LOCATION BETWEEN BENT 0 AND 1, AND BETWEEN BENT 6 AND BENT 22. BOTTOM STOPLOGS TO HAVE ATTACHMENT CLIPS INSTALLED, CONTRACTOR TO CONFIRM WHETHER BOTTOM STOPLOG WAS ALREADY LEFT IN PLACE IN FRONT OF UNIT NO. 8 & 9).
TYPE 2	60	8'-9"	2'-0"	2'-0"	1'-0"	8'-6"	LOCATION TYPICAL BETWEEN BENT 1 AND BENT 6
TYPE 3	12 (ALREADY FABRICATED)	9'-4"	2'-0"	2'-0"	1'-0"	8'-10"	LOCATION TYPICAL BETWEEN BENT 22 AND BENT 23

NOTE:
1. DISTANCE BETWEEN COLUMN BENTS MAY VARY. CONTRACTOR TO FIELD VERIFY PRIOR TO FABRICATION OF STOPLOGS.
2. CAULKING OR GASKET MATERIAL MAY BE USED BETWEEN STOPLOGS TO INCREASE WATERTIGHTNESS.
3. (3) STOPLOGS REQUIRE INSTALLATION OF A SEGMENT OF EEL BYPASS PIPE. SEE 500-04 FOR DETAILS. MAINTAIN TOTAL NUMBER OF LONGITUDINAL BARS. SPACING CAN BE ADJUSTED AROUND THE PENETRATION.

NOT FOR CONSTRUCTION

No.	Revision	Date	Drawn	Checked
C	ISSUED FOR BID, REV. 1	09-02-25	JFB	AJC
B	ISSUED FOR BID	07-07-25	JFB	AJC
A	ISSUED FOR VERDANTAS REVIEW	06-13-25	JFB	AJC

Designed	Drawn	Checked	Project No.	Date Revised	Drawing No.
AJC	JFB	DBN	010252	09-02-25	300-10

MAINE DEPARTMENT OF MARINE RESOURCES

WOODLAND
INTAKE DESIGN FOR DOWNSTREAM FISH PASSAGE

NEW INTAKE STOPLOGS

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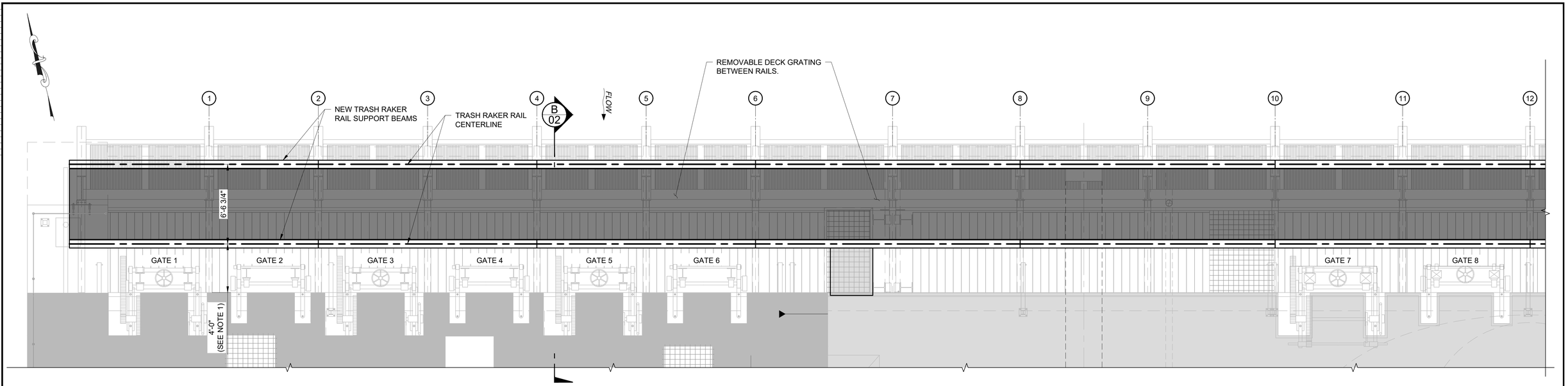
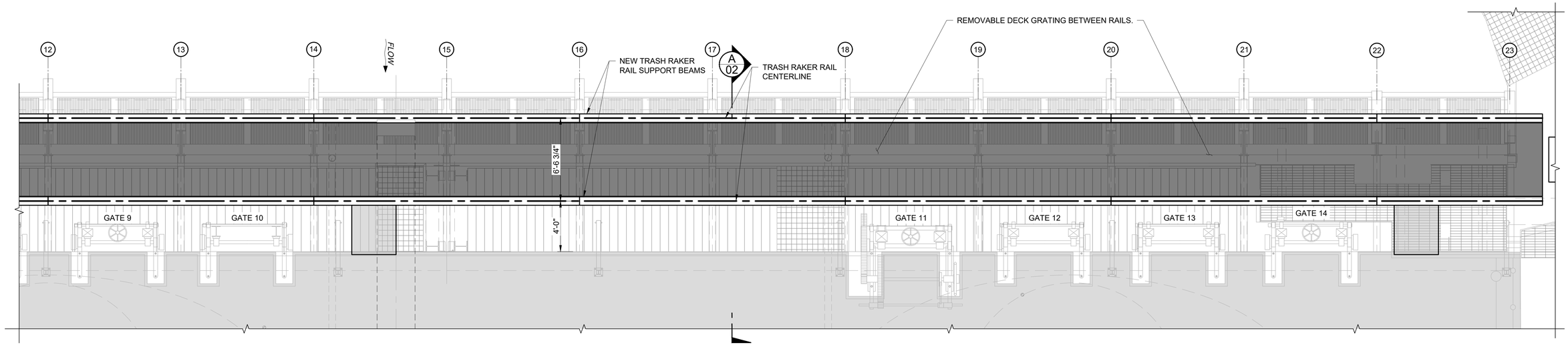


TRASH RAKER RAIL SUPPORT BEAMS - PLAN

1/4" = 1'-0"



TRASH RAKER RAIL SUPPORT BEAMS - PLAN

1/4" = 1'-0"

NOT FOR CONSTRUCTION

No.	Revision	Date	Drawn	Checked
C	ISSUED FOR BID, REV. 1	09-02-25	JFB	AJC
B	ISSUED FOR BID	07-07-25	JFB	AJC
A	ISSUED FOR VERDANTAS REVIEW	06-13-25	JFB	AJC

MAINE DEPARTMENT OF MARINE RESOURCES

WOODLAND
INTAKE DESIGN FOR DOWNSTREAM FISH PASSAGE

TRASH RAKER SUPPORT
PLAN VIEW

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Designed	Drawn	Checked
AJC	JFB	DBN

Project No.	Date Revised	Drawing No.
010252	09-02-25	400-01

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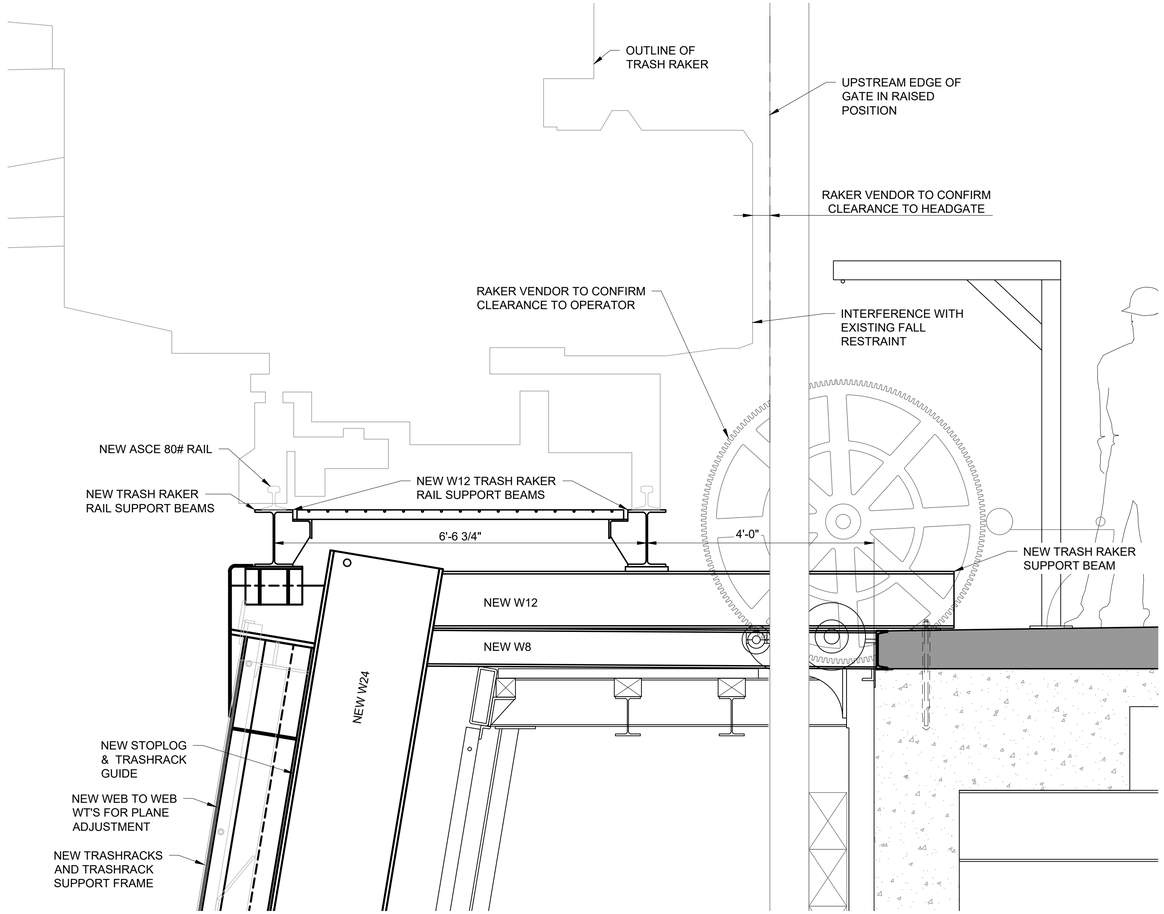
22x34 = FULL SCALE

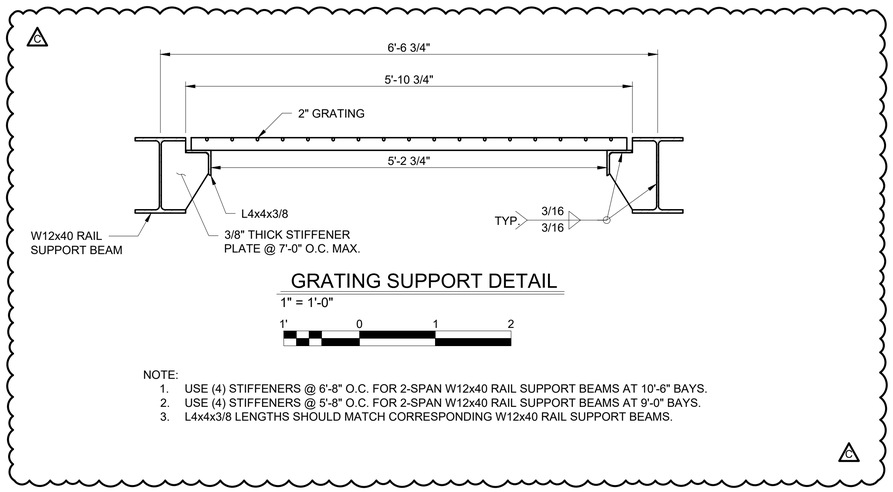
22x34 = FULL SCALE



TRASH RAKER SUPPORT - SECTION A

3/4" = 1'-0"

01



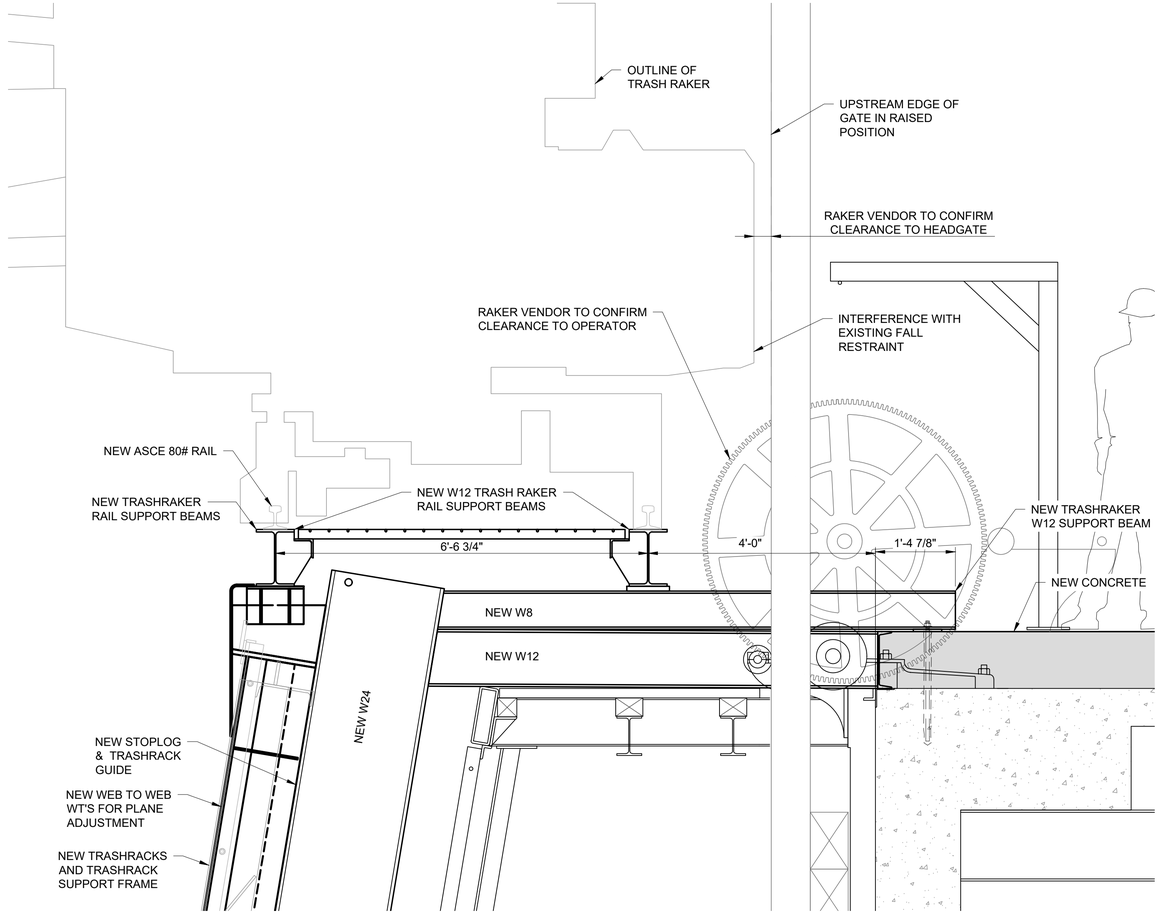
GRATING SUPPORT DETAIL

1" = 1'-0"

NOTE:

1. USE (4) STIFFENERS @ 6'-8" O.C. FOR 2-SPAN W12x40 RAIL SUPPORT BEAMS AT 10'-6" BAYS.
2. USE (4) STIFFENERS @ 5'-8" O.C. FOR 2-SPAN W12x40 RAIL SUPPORT BEAMS AT 9'-0" BAYS.
3. L4x4x3/8 LENGTHS SHOULD MATCH CORRESPONDING W12x40 RAIL SUPPORT BEAMS.

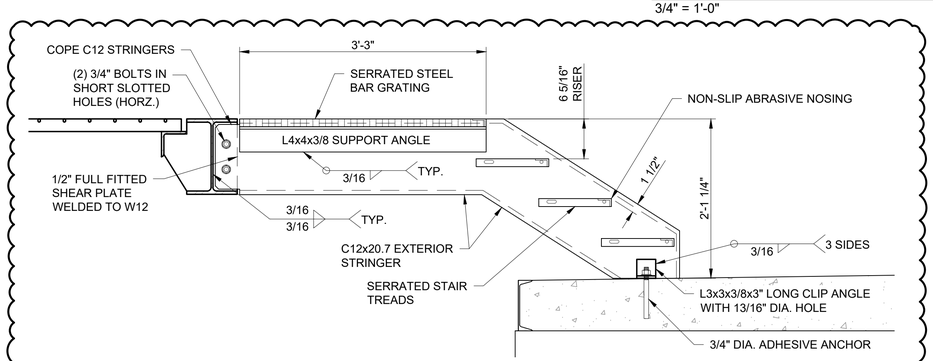
C



TRASH RAKER SUPPORT - SECTION B

3/4" = 1'-0"

01



TRASHRAKER ACCESS STAIR DETAIL

1" = 1'-0"

C

TYPICAL 3 LOCATIONS

NOT FOR CONSTRUCTION

No.	Revision	Date	Drawn	Checked
C	ISSUED FOR BID, REV.1	09-02-25	JFB	AJC
B	ISSUED FOR BID	07-07-25	JFB	AJC
A	ISSUED FOR VERDANTAS REVIEW	06-13-25	JFB	AJC

MAINE DEPARTMENT OF MARINE RESOURCES

WOODLAND
INTAKE DESIGN FOR DOWNSTREAM FISH PASSAGE

TRASH RAKER SUPPORT SECTION AT TYPICAL BENT, CLOSURE WALL AND GATE OPERATOR

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Designed	Drawn	Checked	Project No.	Date Revised	Drawing No.
AJC	JFB	DBN	010252	09-02-25	400-02

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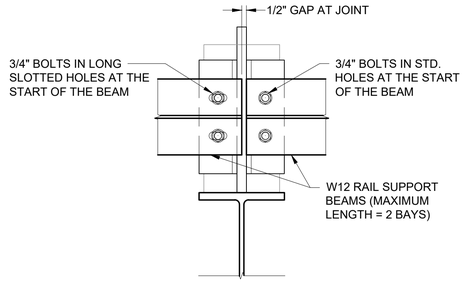
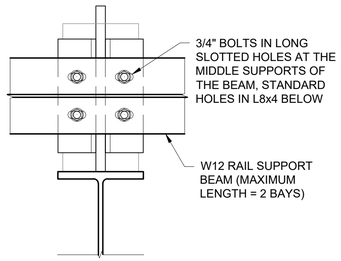


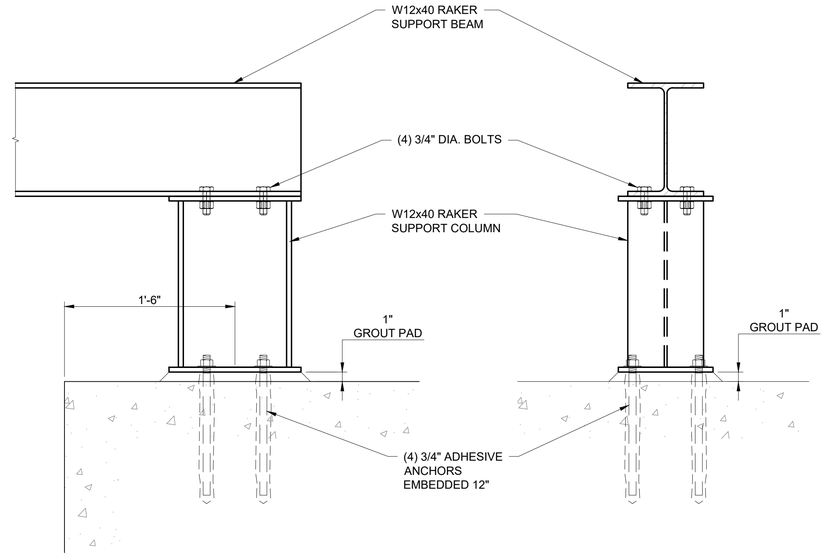
TYPICAL EXPANSION JOINT CONNECTION DETAIL AT UPSTREAM TRASH RAKER SUPPORT BEAM

1 1/2" = 1'-0"



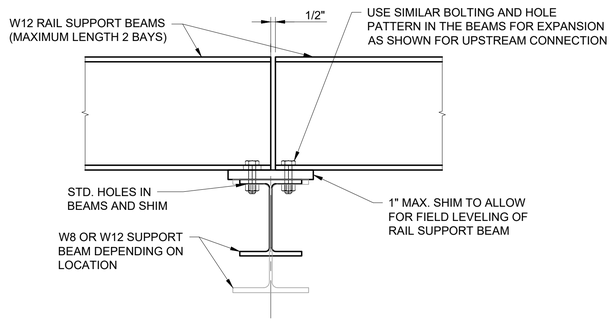
TYPICAL CONNECTION DETAIL AT UPSTREAM TRASH RAKER SUPPORT BEAM

1 1/2" = 1'-0"



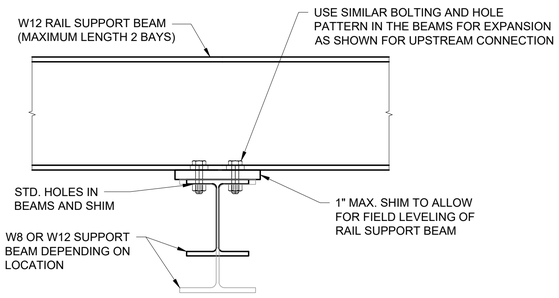
TYPICAL RAKER RAIL SUPPORT COLUMNS @ BENT 23

1 1/2" = 1'-0"



TYPICAL EXPANSION JOINT CONNECTION DETAIL AT DOWNSTREAM TRASH RAKER SUPPORT BEAM

1 1/2" = 1'-0"

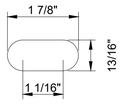


TYPICAL CONNECTION DETAIL AT DOWNSTREAM TRASH RAKER SUPPORT BEAM

1 1/2" = 1'-0"

6" 0 6 12 18

NOTES:
1. SUPPORT BEAMS ARE CONTINUOUS FOR UP TO APPROXIMATELY 21 FEET (2 BAYS).
2. MAXIMUM CHANGE IN LENGTH OVER 140DEGF IS 1/4 INCH.
3. CONTRACTOR TO ENSURE THAT BOLTS IN SLOTTED HOLES ARE SNUG-TIGHT AND **NOT OVER-TIGHTENED**.



TYPICAL LONG SLOTTED HOLE DETAIL

6" = 1'-0"

2" 0 2 4

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TRASH RAKER SUPPORT
SECTIONS AND DETAILS

No.	Revision	Date	Drawn	Checked
C	ISSUED FOR BID, REV. 1	09-02-25	JFB	AJC
B	ISSUED FOR BID	07-07-25	JFB	AJC
A	ISSUED FOR VERDANTAS REVIEW	06-13-25	JFB	AJC

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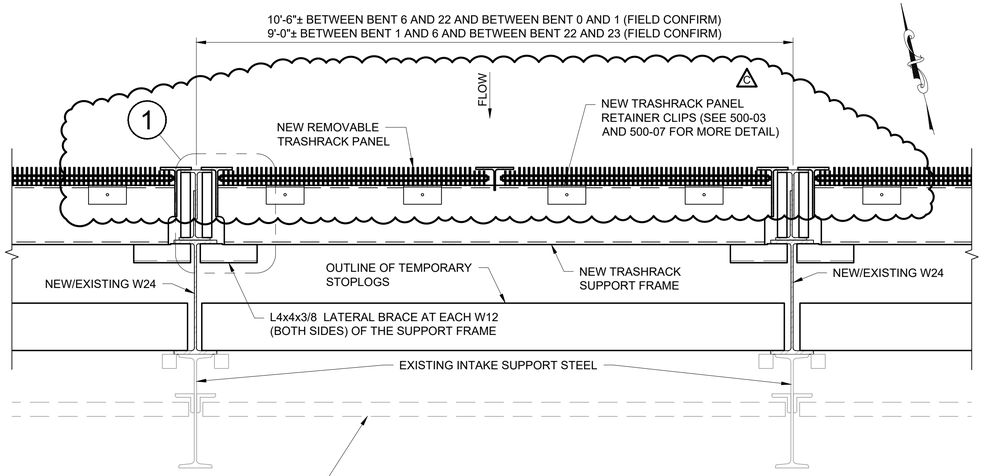
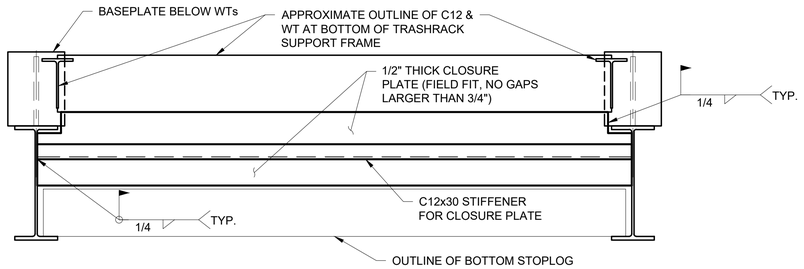
Designed	Drawn	Checked	Project No.	Date Revised	Drawing No.
AJC	AJC	DBN	010252	09-02-25	400-03



PLAN VIEW - TYPICAL BAY

3/4"= 1'-0"

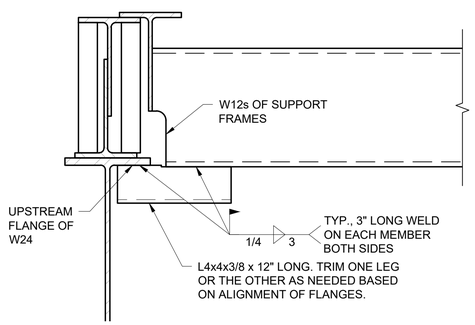
NOTE:
STOPLOGS MUST BE INSTALLED PRIOR TO FUTURE TRASH RACK PANEL REMOVAL (RAKER SUPPORT BEAM MUST ALSO BE REMOVED). PRIOR TO TRASH RACK PANEL RE-INSTALLATION, ENSURE THAT NO DEBRIS OR PULP WOOD IS TRAPPED BETWEEN THE TRASH RACK PANELS AND STOPLOGS THAT COULD GO THROUGH THE UNITS WHEN THE STOPLOGS ARE REMOVED.



PLAN VIEW - TYPICAL BAY BOTTOM CLOSURE PLATE

3/4"= 1'-0"

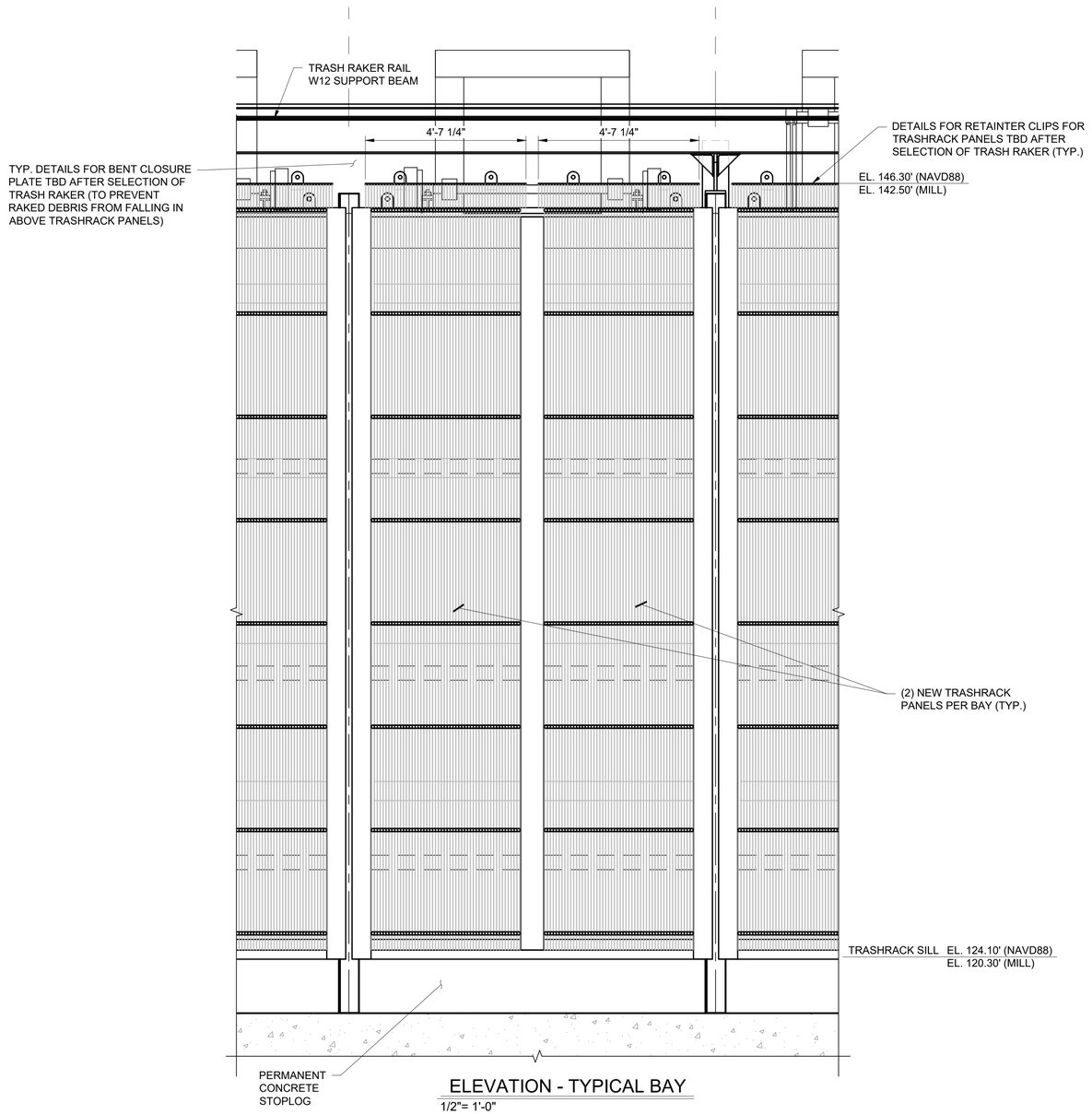
1' 0 1 2 3



DETAIL 1 (1)

1 1/2" = 1'-0"

6" 0 6 12 18



ELEVATION - TYPICAL BAY

1/2"= 1'-0"

2' 0 2 4

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TRASH RACKS
OVERVIEW

No.	Revision	Date	Drawn	Checked
C	ISSUED FOR BID, REV. 1	09-02-25	JFB	AJC
B	ISSUED FOR BID	07-07-25	JFB	AJC
A	ISSUED FOR VERDANTAS REVIEW	06-13-25	JFB	AJC

Designed	Drawn	Checked
AJC	JFB	DBN

Project No.	Date Revised	Drawing No.
010252	09-02-25	500-01

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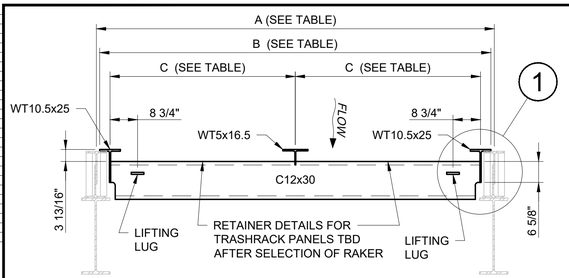
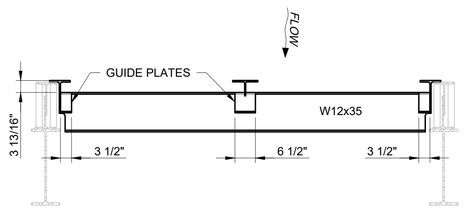
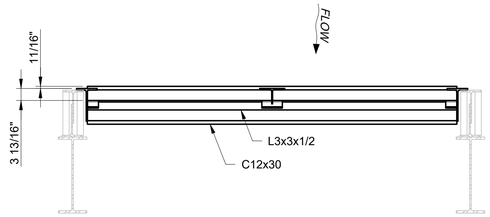


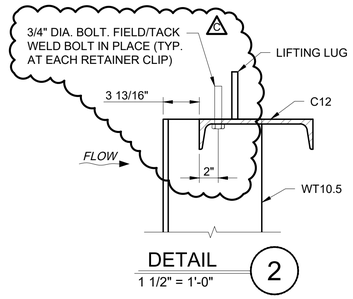
PLAN AT TOP
1/2" = 1'-0"



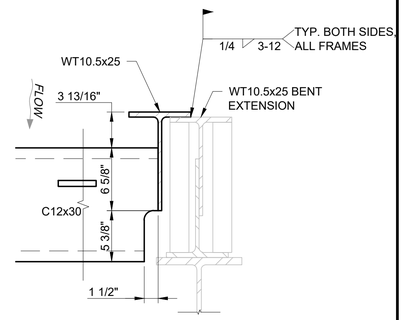
PLAN AT W12'S
1/2" = 1'-0"



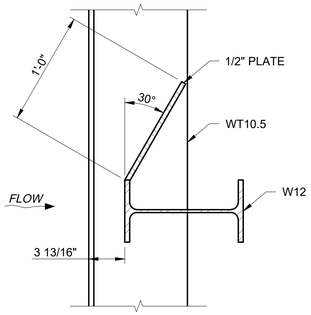
PLAN AT BOTTOM
1/2" = 1'-0"



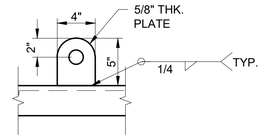
DETAIL 2
1 1/2" = 1'-0"



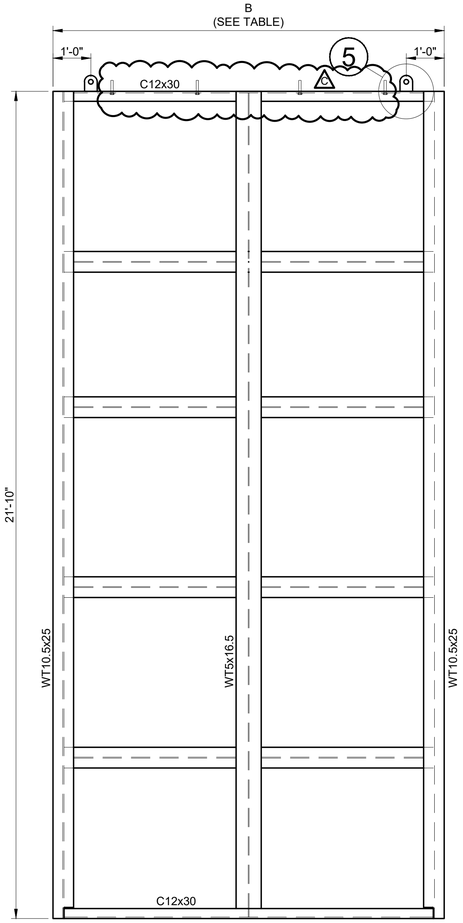
DETAIL 1
1 1/2" = 1'-0"



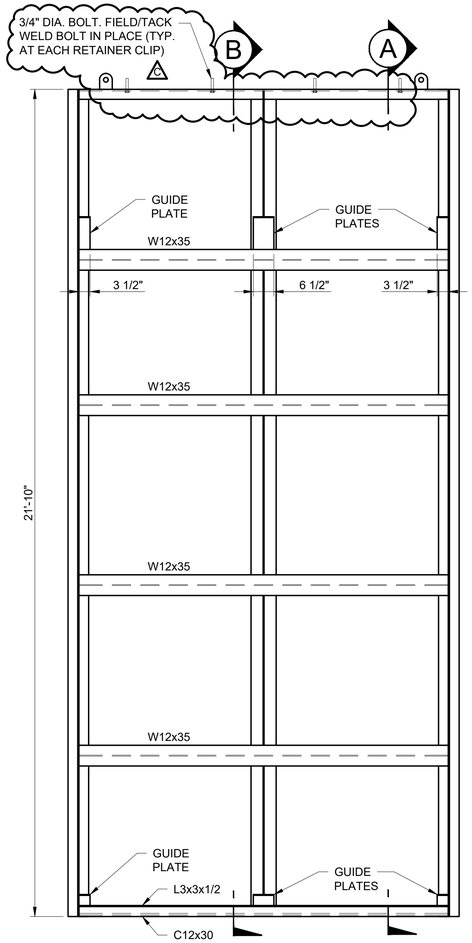
DETAIL 3
1 1/2" = 1'-0"



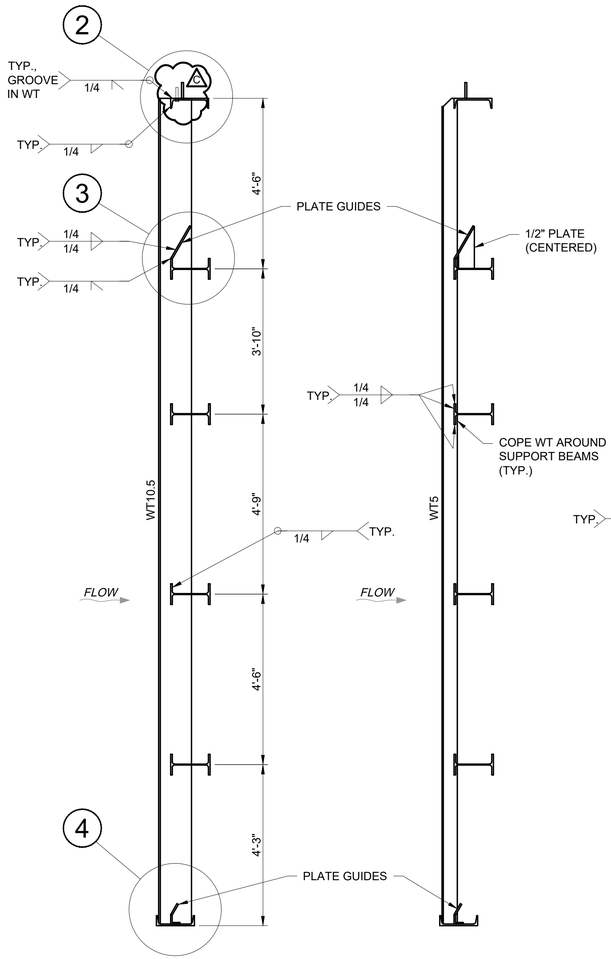
DETAIL 5
1 1/2" = 1'-0"



TRASH RACK SUPPORT FRAME
ELEVATION LOOKING DOWNSTREAM
1/2"=1'-0"

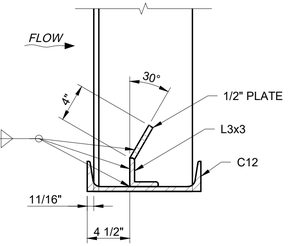


TRASH RACK SUPPORT FRAME
ELEVATION LOOKING UPSTREAM
1/2"=1'-0"



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

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



DETAIL 4
1 1/2" = 1'-0"

TRASH RACK SUPPORT FRAME TABLE					
FRAME TYPE	QUANTITY	A	B	C	LOCATION/NOTES
TYPE 1	15	10'-6"	10'-3 7/8"	4'-10 11/16"	TYPICAL FOR LOCATIONS WITH BENT SPACING 10'-6" (FIELD CONFIRM ALL BAYS PRIOR TO FABRICATION)
TYPE 2	6	9'-0"	8'-9 1/8"	4'-1 11/16"	TYPICAL FOR LOCATIONS WITH BENT SPACING 9'-0" (FIELD CONFIRM ALL BAYS PRIOR TO FABRICATION)

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TRASH RACKS
SUPPORT FRAME TYPICAL 10.5' & 9' BAYS

No.	Revision	Date	Drawn	Checked
C	ISSUED FOR BID, REV. 1	09-02-25	JFB	AJC
B	ISSUED FOR BID	07-07-25	JFB	AJC
A	ISSUED FOR VERDANTAS REVIEW	06-13-25	JFB	AJC

Designed	Drawn	Checked	Project No.	Date Revised	Drawing No.
AJC	JFB	DBN	010252	09-02-25	500-02

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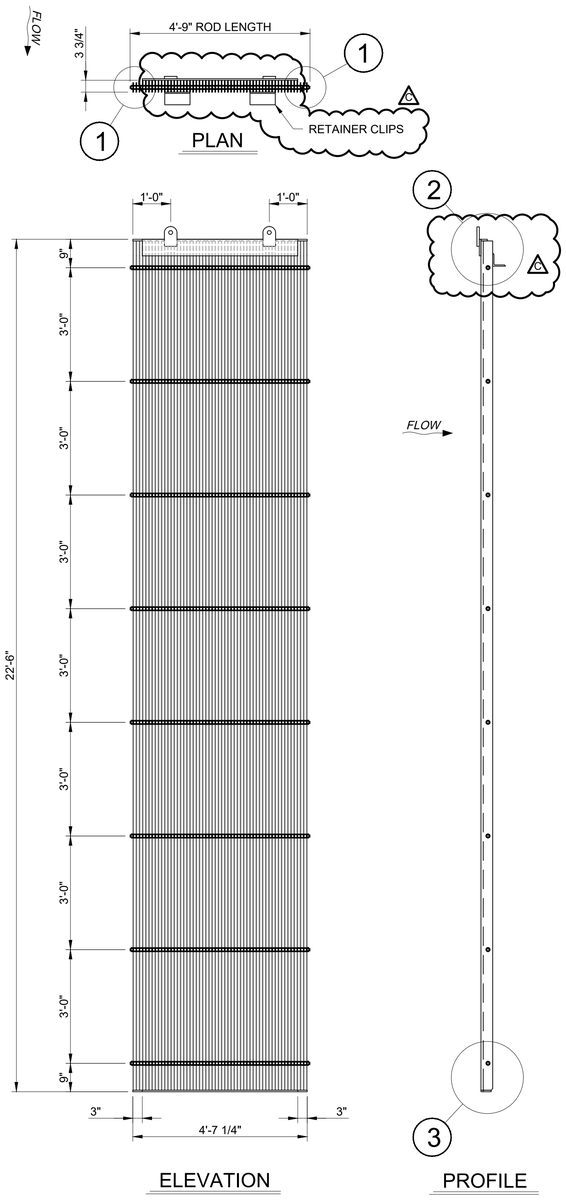
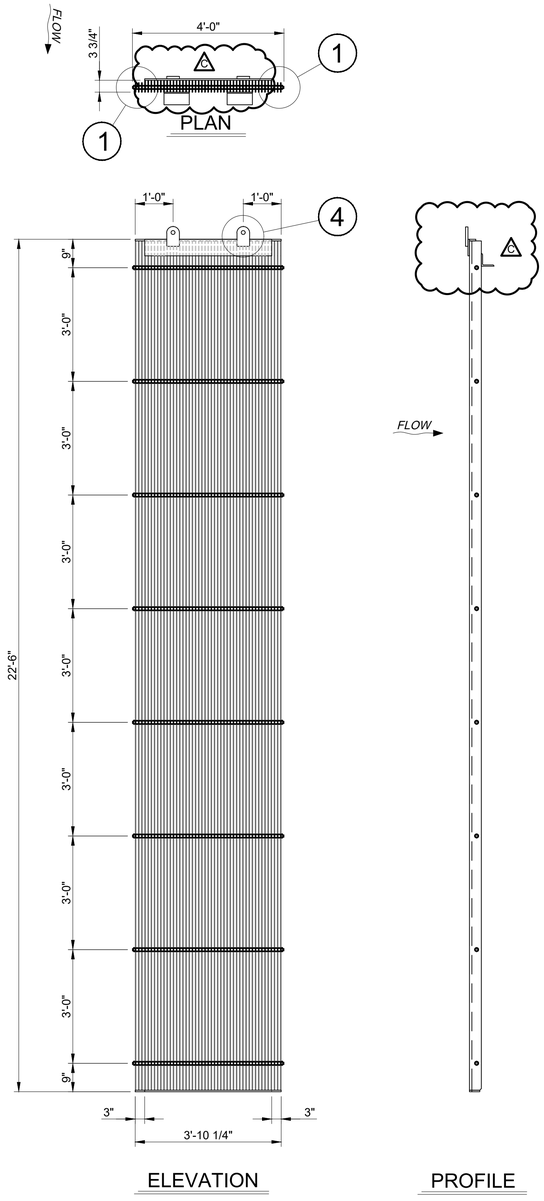


TRASH RACK PANELS 10.5' BAYS

1/2" = 1'-0"

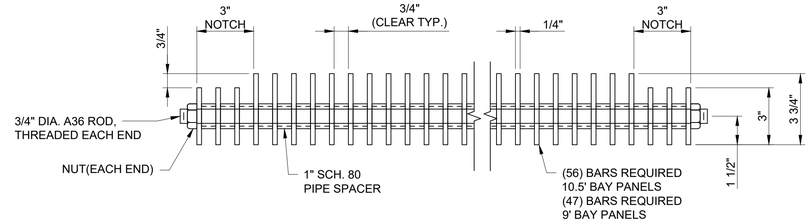
(APPROXIMATE WEIGHT = 4200 LBS)



TRASH RACK PANELS 9' BAYS

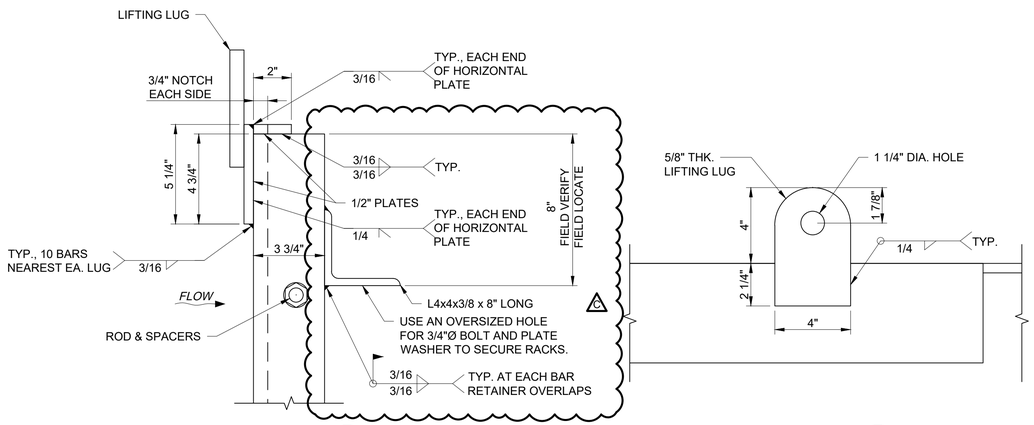
1/2" = 1'-0"

(APPROXIMATE WEIGHT = 3500 LBS)



DETAIL 1

3" = 1'-0"

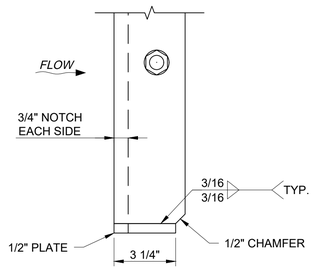


DETAIL 2

3" = 1'-0"

DETAIL 4

3" = 1'-0"



DETAIL 3

3" = 1'-0"

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INTAKE DESIGN FOR DOWNSTREAM FISH PASSAGE

TRASH RACKS
RACK PANELS TYPICAL 10.5' & 9' BAYS

No.	Revision	Date	Drawn	Checked
C	ISSUED FOR BID, REV.1	09-02-25	JFB	AJC
B	ISSUED FOR BID	07-07-25	JFB	AJC
A	ISSUED FOR VERDANTAS REVIEW	06-13-25	JFB	AJC

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Designed	Drawn	Checked	Project No.	Date Revised	Drawing No.
AJC	JFB	DBN	010252	09-02-25	500-03

22x34 = FULL SCALE

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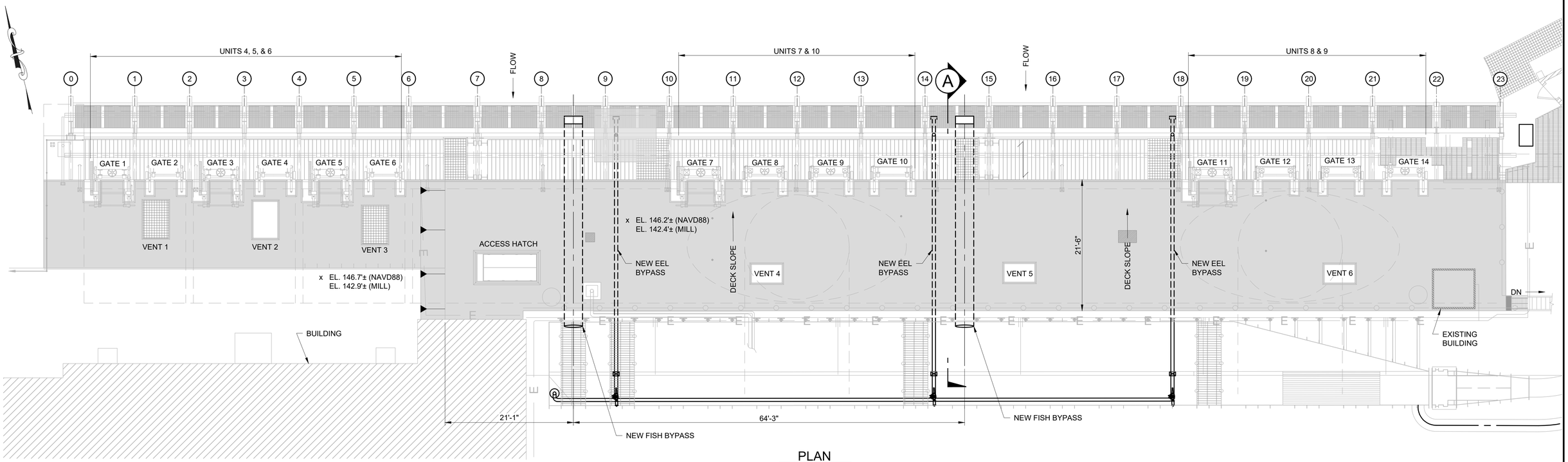
22x34 = FULL SCALE

3" 2" 1" 0

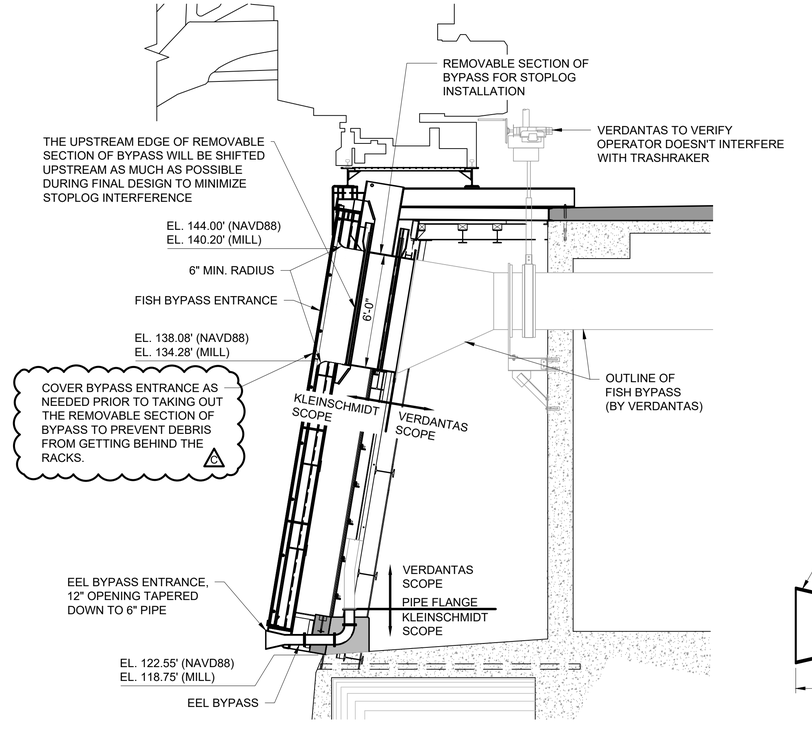


PLAN

1/8"= 1'-0"

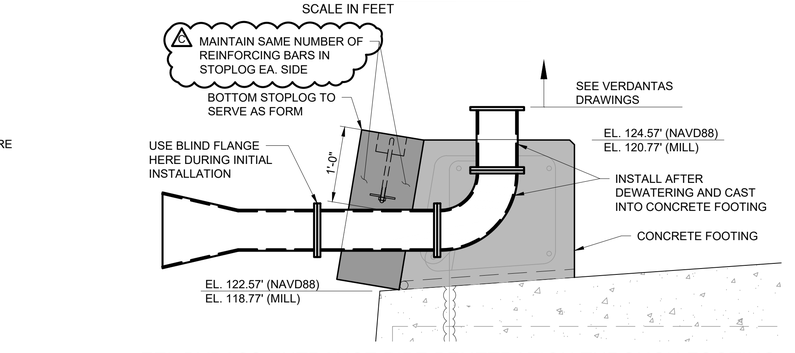
8 0 8 16

SCALE IN FEET



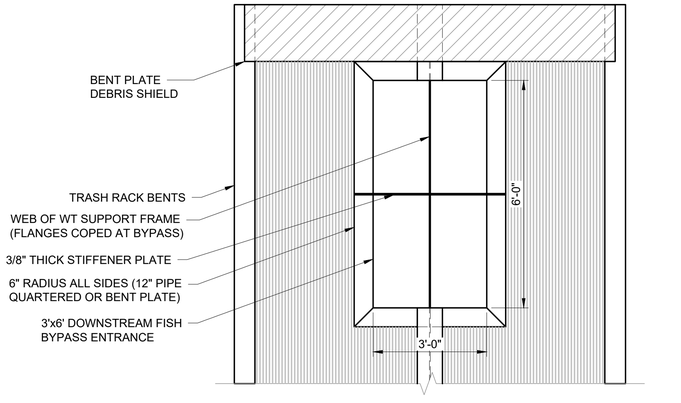
SECTION A

1/4" = 1'-0"



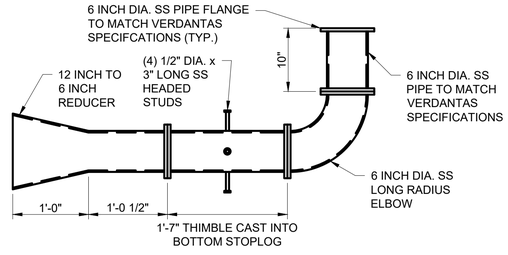
EEL BYPASS ENTRANCE PIPE PENETRATION THROUGH FOOTING

1" = 1'-0"



UPSTREAM ELEVATION OF BYPASS ENTRANCE

1/2" = 1'-0"



EEL BYPASS ENTRANCE PIPE

1" = 1'-0"

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WOODLAND
INTAKE DESIGN FOR DOWNSTREAM FISH PASSAGE

TRASH RACKS
BYPASS ENTRANCE

No.	Revision	Date	Drawn	Checked
C	ISSUED FOR BID, REV. 1	09-02-25	JFB	AJC
B	ISSUED FOR BID	07-07-25	JFB	AJC
A	ISSUED FOR VERDANTAS REVIEW	06-18-25	JFB	AJC

Designed	Drawn	Checked	Project No.	Date Revised	Drawing No.
AJC	JFB	DBN	010252	09-02-25	500-04

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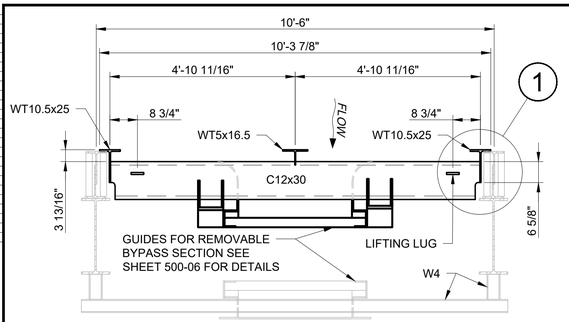
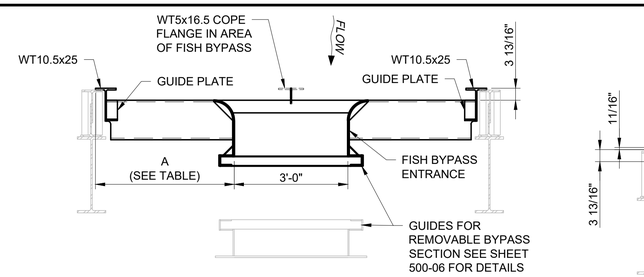
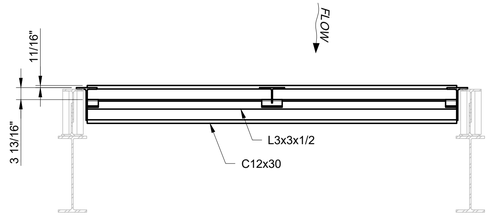


PLAN AT TOP
1/2" = 1'-0"

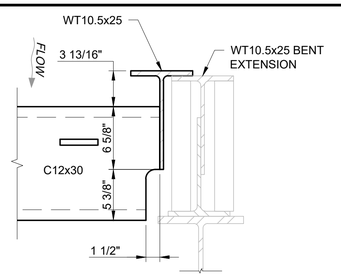


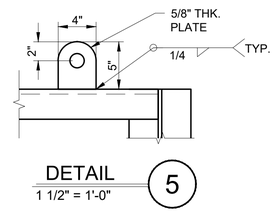
PLAN AT FISH BYPASS
1/2" = 1'-0"

SUPPORT FRAME AT FISH BYPASS ENTRANCE #1 SHOWN
SEE TABLE BELOW FOR FISH BYPASS ENTRANCE #2

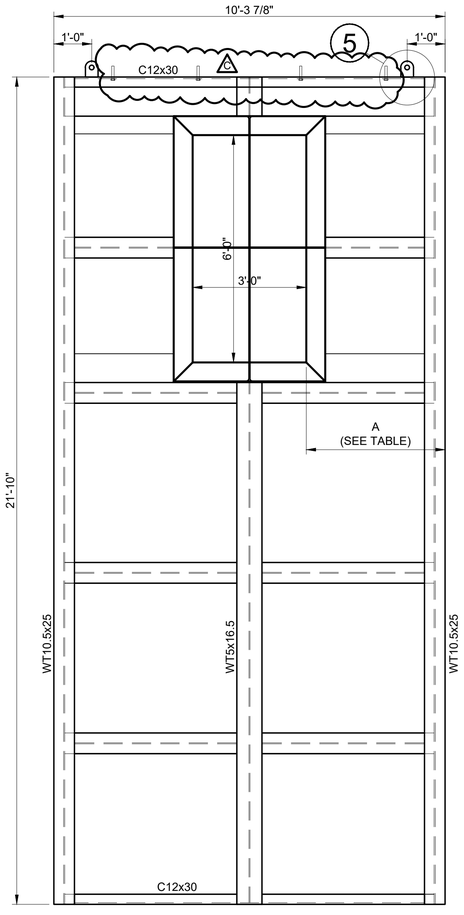


PLAN AT BOTTOM
1/2" = 1'-0"



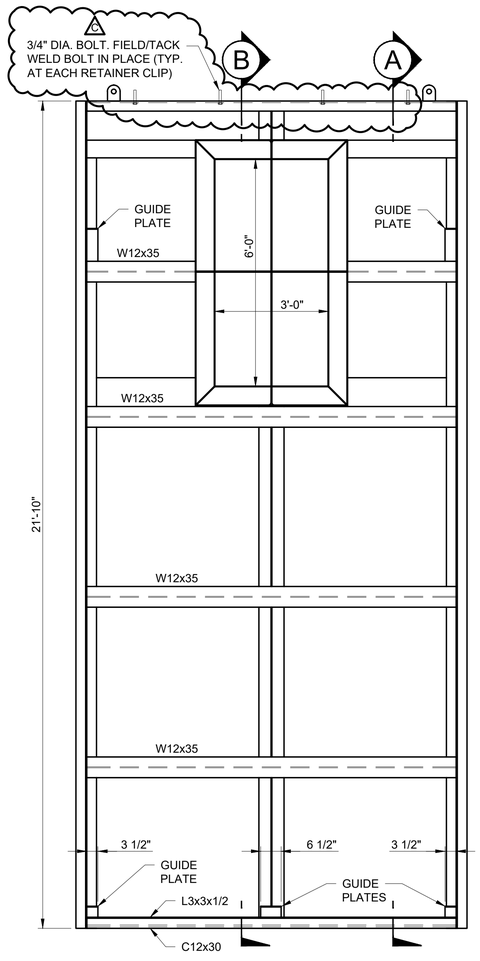


DETAIL 5
1 1/2" = 1'-0"



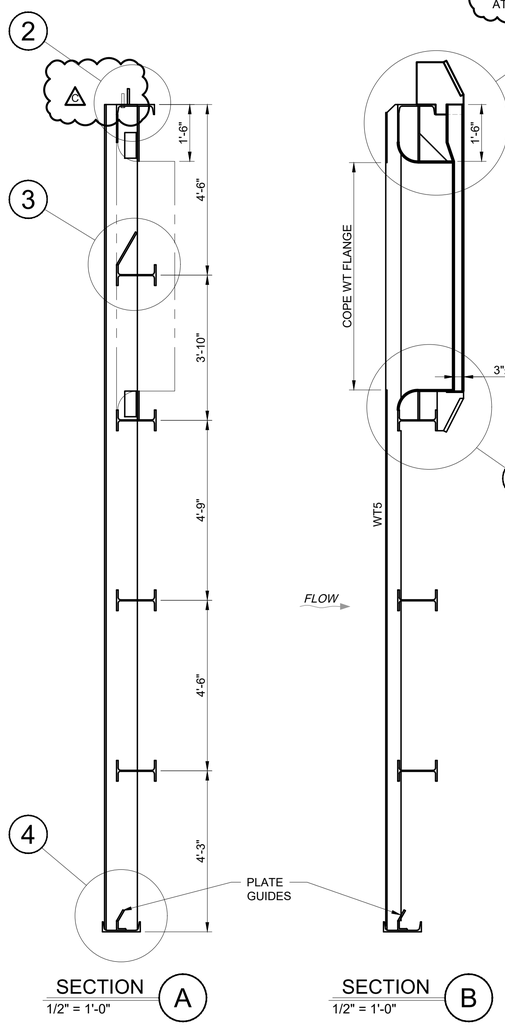
TRASH RACK SUPPORT FRAME ELEVATION LOOKING DOWNSTREAM
1/2"=1'-0"

SUPPORT FRAME AT FISH BYPASS ENTRANCE #1 SHOWN
SEE TABLE BELOW FOR FISH BYPASS ENTRANCE #2



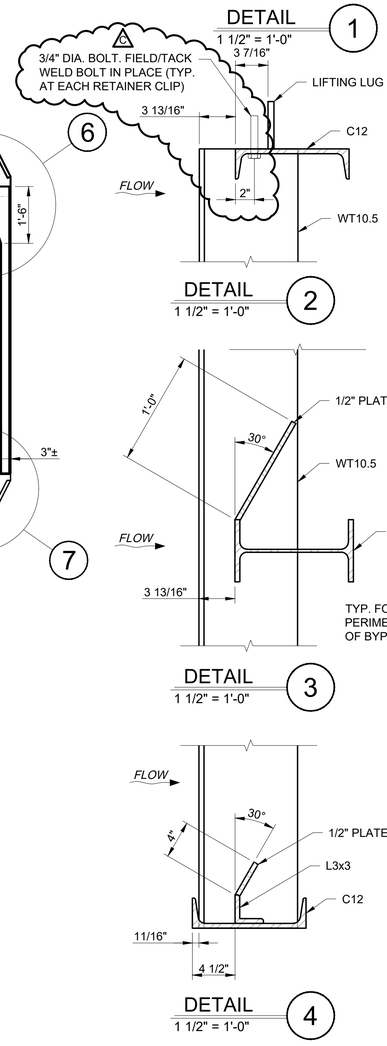
TRASH RACK SUPPORT FRAME ELEVATION LOOKING UPSTREAM
1/2"=1'-0"

SUPPORT FRAME AT FISH BYPASS ENTRANCE #1 SHOWN
SEE TABLE BELOW FOR FISH BYPASS ENTRANCE #2



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

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

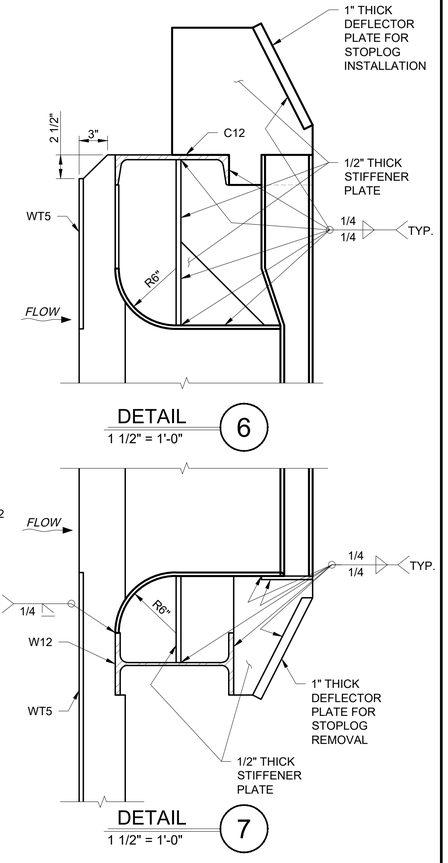


DETAIL 1
1 1/2" = 1'-0"

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

DETAIL 3
1 1/2" = 1'-0"

DETAIL 4
1 1/2" = 1'-0"



DETAIL 6
1 1/2" = 1'-0"

DETAIL 7
1 1/2" = 1'-0"

TRASH RACK SUPPORT FRAMES AT FISH BYPASS ENTRANCE TABLE			
FRAME TYPE	QUANTITY	A	LOCATION/NOTES
ENTRANCE #1	1	3'-7 15/16"	LOCATED BETWEEN BENTS #8 AND #9 (FIELD CONFIRM PRIOR TO FABRICATION)
ENTRANCE #2	1	2'-10 15/16"	LOCATED BETWEEN BENTS #14 AND #15 (FIELD CONFIRM PRIOR TO FABRICATION)

NOTE:
1. USE WELDS SHOWN ON 500-02 FOR SUPPORT FRAMES. ADDITIONAL WELDS SHOWN HERE ARE SPECIFIC TO THE BYPASS OPENINGS.
2. ALL WELDS ON INTERIOR OF FISH BYPASS TO BE GROUND SMOOTH.

NOT FOR CONSTRUCTION

No.	Revision	Date	Drawn	Checked
C	ISSUED FOR BID, REV. 1	09-02-25	JFB	AJC
B	ISSUED FOR BID	07-07-25	JFB	AJC
A	ISSUED FOR VERDANTAS REVIEW	06-18-25	JFB	AJC

MAINE DEPARTMENT OF MARINE RESOURCES

WOODLAND
INTAKE DESIGN FOR DOWNSTREAM FISH PASSAGE

TRASH RACKS
SUPPORT FRAME BYPASS ENTRANCE #1 & #2

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Designed	Drawn	Checked	Project No.	Date Revised	Drawing No.
AJC	JFB	DBN	010252	09-02-25	500-05

PRINTED: Aug. 28, 2025 - 12:03 PM
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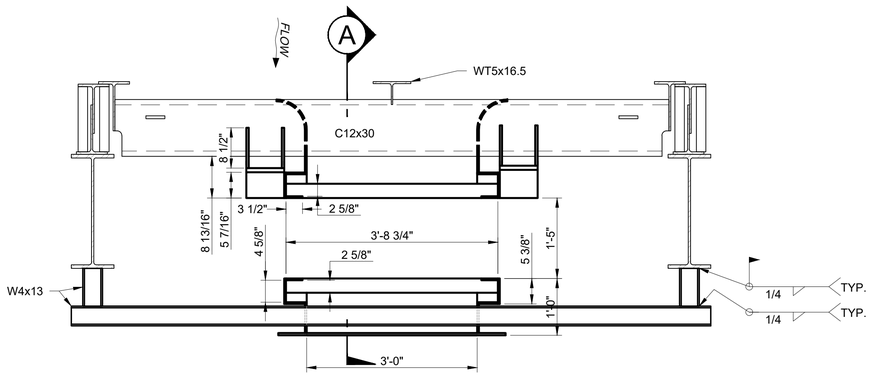
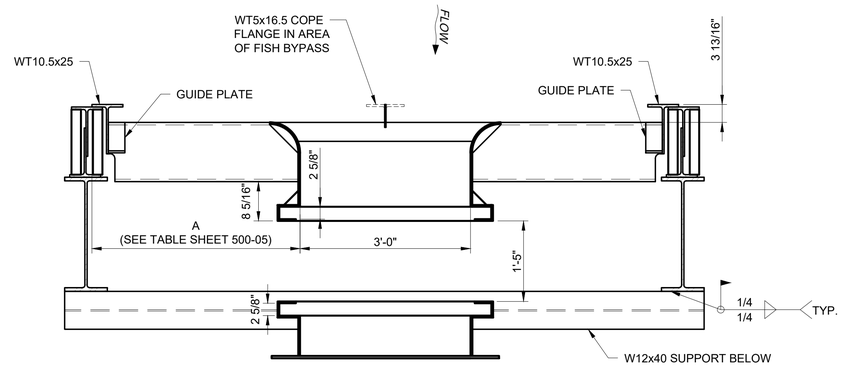


PLAN AT TOP OF FISH BYPASS

3/4" = 1'-0"

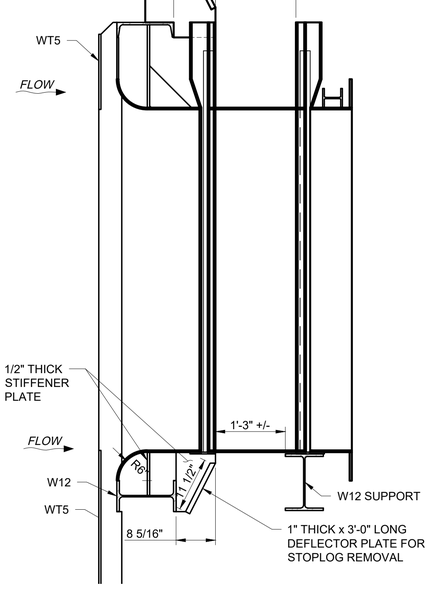
SUPPORT FRAME AT FISH BYPASS ENTRANCE #1 SHOWN
SEE TABLE SHEET 500-05 FOR FISH BYPASS ENTRANCE #2 LOCATION



PLAN AT CENTER OF FISH BYPASS

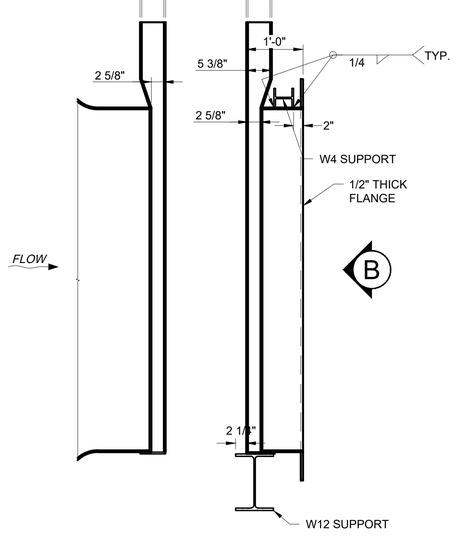
3/4" = 1'-0"

SUPPORT FRAME AT FISH BYPASS ENTRANCE #1 SHOWN
SEE TABLE SHEET 500-05 FOR FISH BYPASS ENTRANCE #2 LOCATION



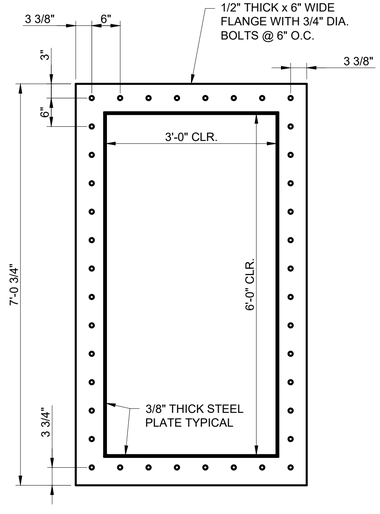
SECTION A

3/4" = 1'-0"



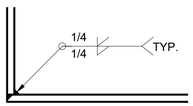
TYPICAL GUIDE DETAIL
REMOVABLE SECTION OF BYPASS

3/4"=1'-0"



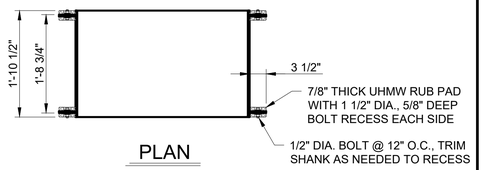
VIEW B

3/4" = 1'-0"

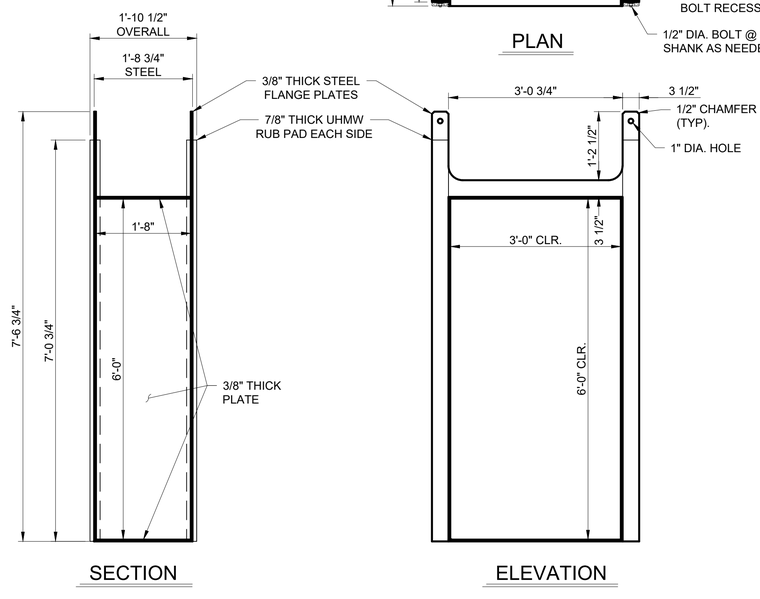


TYPICAL CORNER WELD DETAIL

3" = 1'-0"



PLAN



SECTION

ELEVATION

REMOVABLE SECTION OF FISH BYPASS FOR STOPLOG INSTALLATION DETAIL

3/4"=1'-0"

NOT FOR CONSTRUCTION

No.	Revision	Date	Drawn	Checked
C	ISSUED FOR BID, REV. 1	09-02-25	JFB	AJC
B	ISSUED FOR BID	07-07-25	JFB	AJC
A	ISSUED FOR VERDANTAS REVIEW	06-18-25	JFB	AJC

MAINE DEPARTMENT OF MARINE RESOURCES

WOODLAND
INTAKE DESIGN FOR DOWNSTREAM FISH PASSAGE

TRASH RACKS
BYPASS ENTRANCE REMOVABLE SECTION

Designed	Drawn	Checked	Project No.	Date Revised	Drawing No.
AJC	JFB	DBN	010252	09-02-25	500-06

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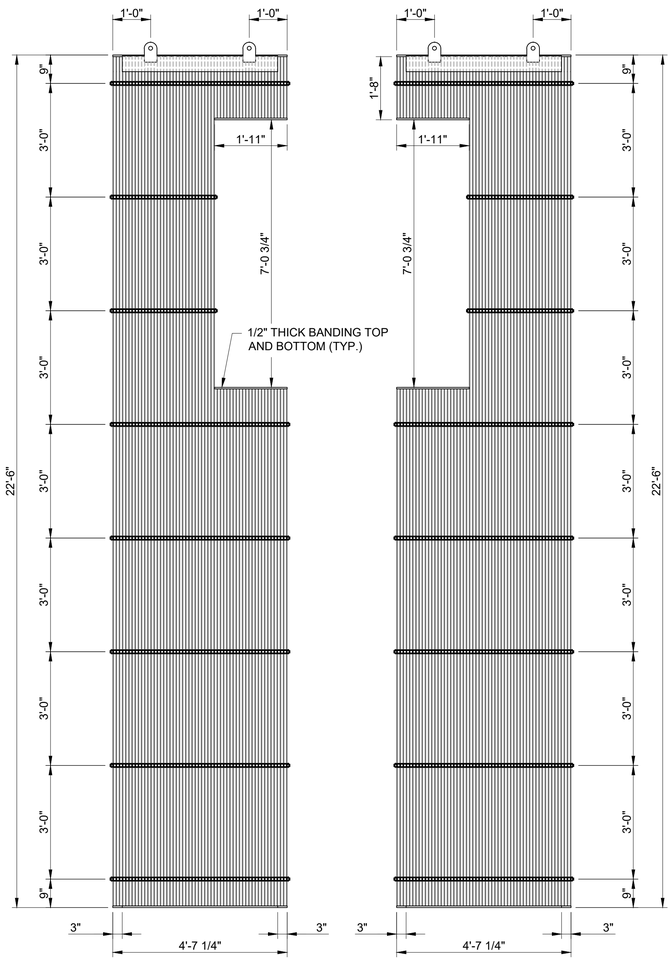
22x34 = FULL SCALE



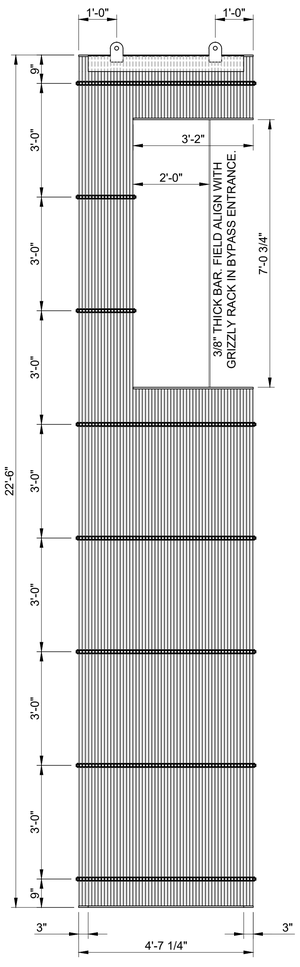
LEFT PANEL

RIGHT PANEL

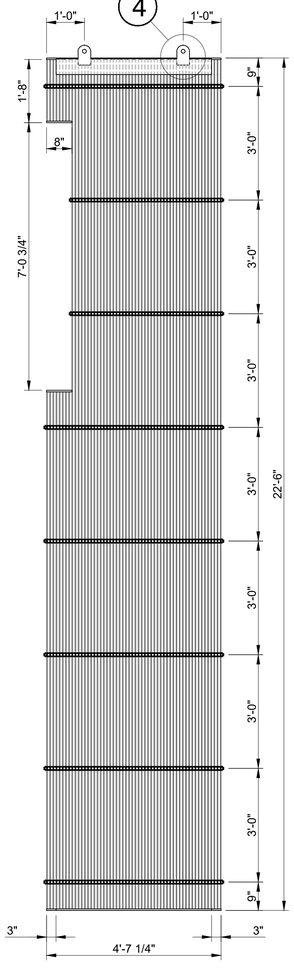
TRASH RACK PANELS FISH BYPASS ENTRANCE #1

1/2" = 1'-0"

(APPROXIMATE WEIGHT = 3700 LBS)



LEFT PANEL



RIGHT PANEL

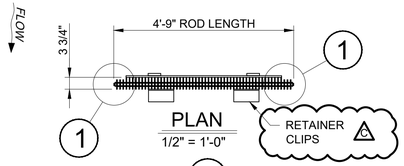
TRASH RACK PANELS FISH BYPASS ENTRANCE #2

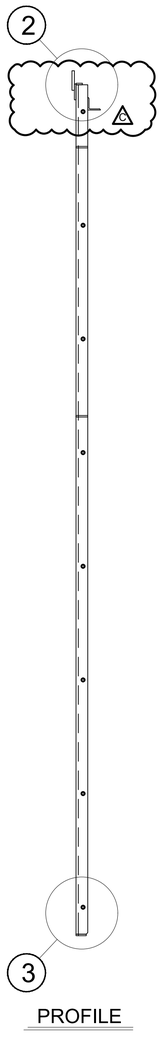
1/2" = 1'-0"

(APPROXIMATE WEIGHT LEFT PANEL = 3400 LBS)
RIGHT PANEL = 4100 LBS)

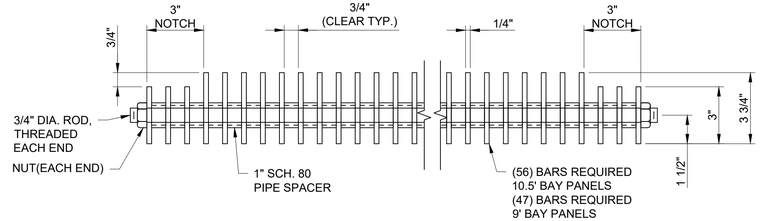
NOTE:

1. USE WELDS SHOWN ON 500-03 FOR TYPICAL PANELS.
2. ALL SHARP EDGES AT FISH PASSAGE OPENING SHALL BE GROUND SMOOTH.
3. CONTRACTOR MAY RELOCATE LUGS TO MINIMIZE THE ECCENTRICITY OF THE LIFT.

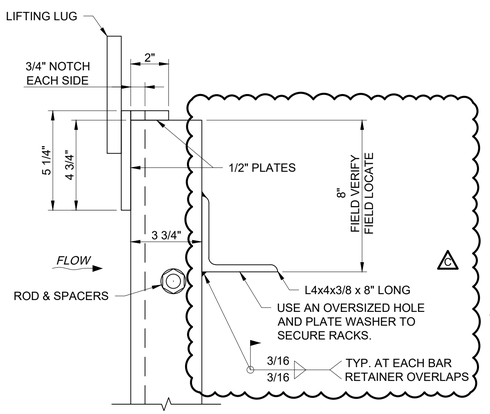




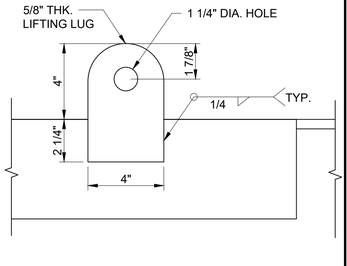
PROFILE



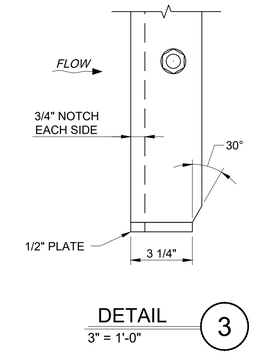
DETAIL 1
3" = 1'-0"



DETAIL 2
3" = 1'-0"



DETAIL 4
3" = 1'-0"



DETAIL 3
3" = 1'-0"

NOT FOR CONSTRUCTION

MAINE DEPARTMENT OF MARINE RESOURCES

WOODLAND
INTAKE DESIGN FOR DOWNSTREAM FISH PASSAGE

TRASH RACKS
RACK PANELS AT BYPASS ENTRANCE #1 & #2

No.	Revision	Date	Drawn	Checked
C	ISSUED FOR BID, REV. 1	09-02-25	JFB	AJC
B	ISSUED FOR BID	07-07-25	JFB	AJC
A	ISSUED FOR VERDANTAS REVIEW	06-13-25	JFB	AJC

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Designed	Drawn	Checked	Project No.	Date Revised	Drawing No.
AJC	JFB	DBN	010252	09-02-25	500-07

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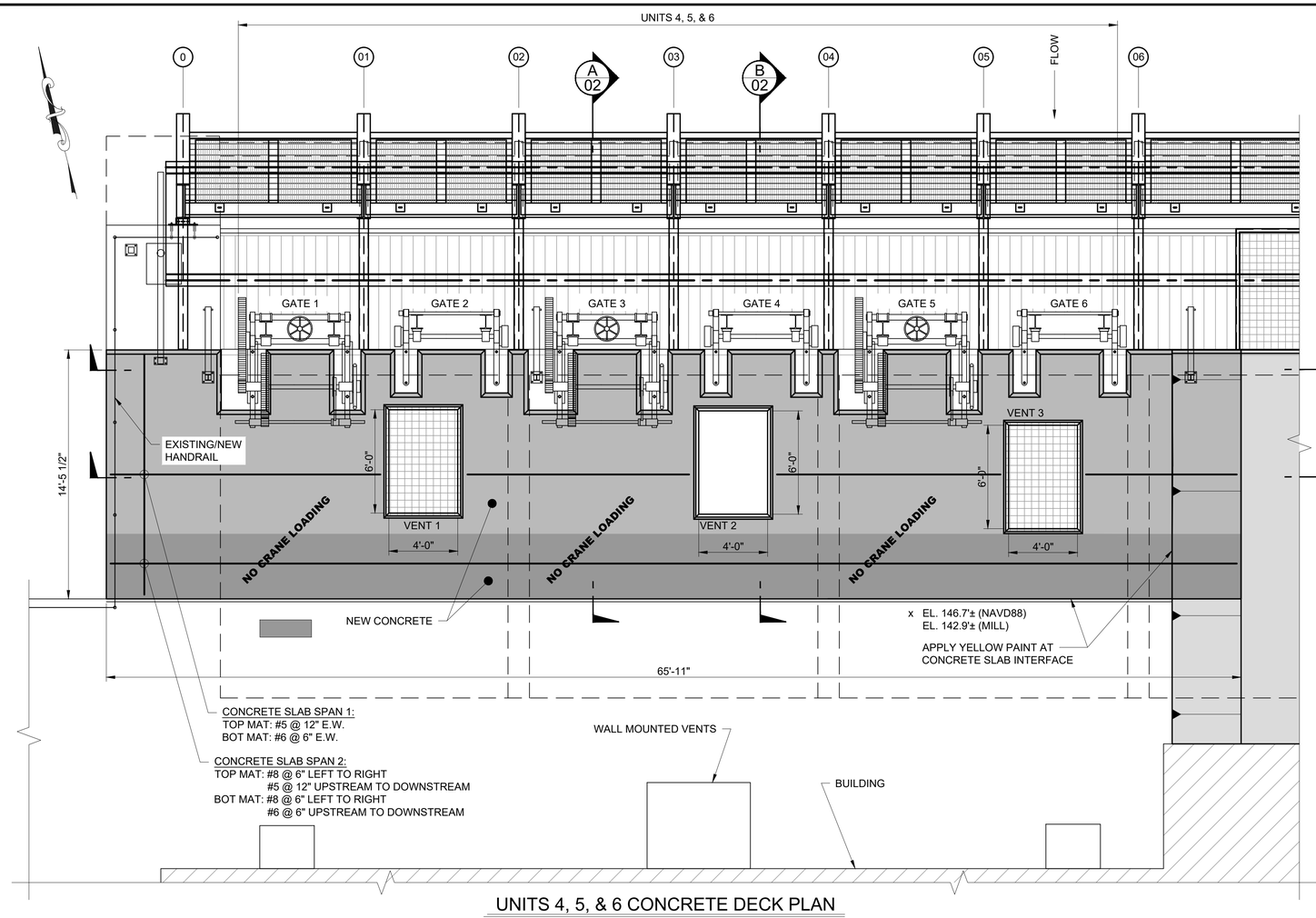
22x34 = FULL SCALE



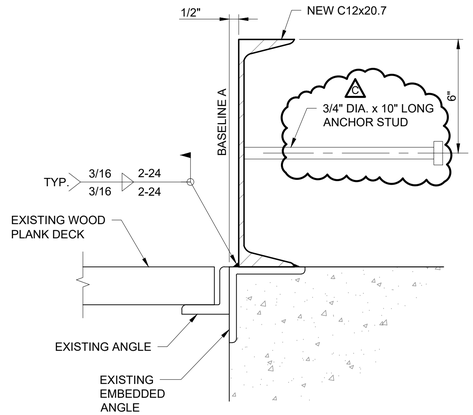
UNITS 4, 5, & 6 CONCRETE DECK PLAN

1/4" = 1'-0"

DECK LOADING NOTES:

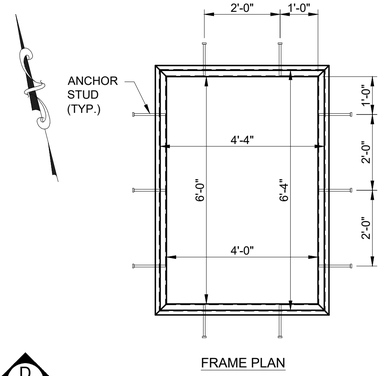
1. ALLOWABLE LOAD UNIFORM LIVE LOAD = 250 PSF
2. NOT RATED FOR CRANE LOADING WITHOUT ENGINEERING REVIEW.

- CONCRETE SPAN 1 REINFORCEMENT
- CONCRETE SPAN 2 REINFORCEMENT

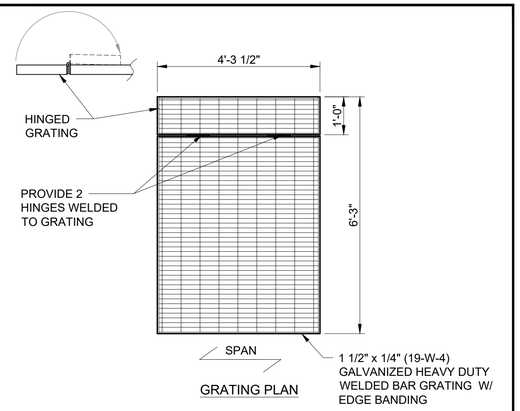


TYPICAL EMBEDDED EDGE CHANNEL

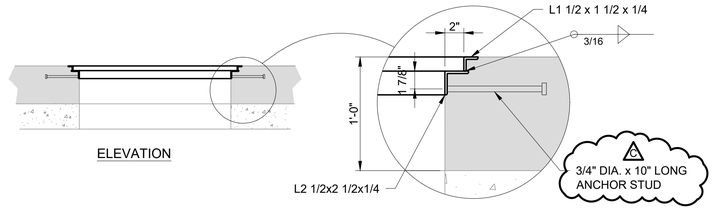
3" = 1'-0"



FRAME PLAN



GRATING PLAN



1.5" GRATING & EMBEDDED FRAME

1/2"= 1'-0"

(PROVIDE 3 FRAME AND GRATING ASSEMBLES TOTAL)

TYPICAL ADDITIONAL REINFORCEMENT DETAIL AT VENT OPENINGS IN DECK

1/2"= 1'-0"

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MAINE DEPARTMENT OF MARINE RESOURCES

WOODLAND
INTAKE DESIGN FOR DOWNSTREAM FISH PASSAGE

CONCRETE DECK TOPPING PLAN

No.	Revision	Date	Drawn	Checked
C	ISSUED FOR BID, REV. 1	09-02-25	JFB	AJC
B	ISSUED FOR BID	07-07-25	JFB	AJC
A	ISSUED FOR VERDANTAS REVIEW	06-13-25	JFB	AJC

Designed	Drawn	Checked
AJC	JFB	DBN

Project No.	Date Revised	Drawing No.
010252	09-02-25	600-01

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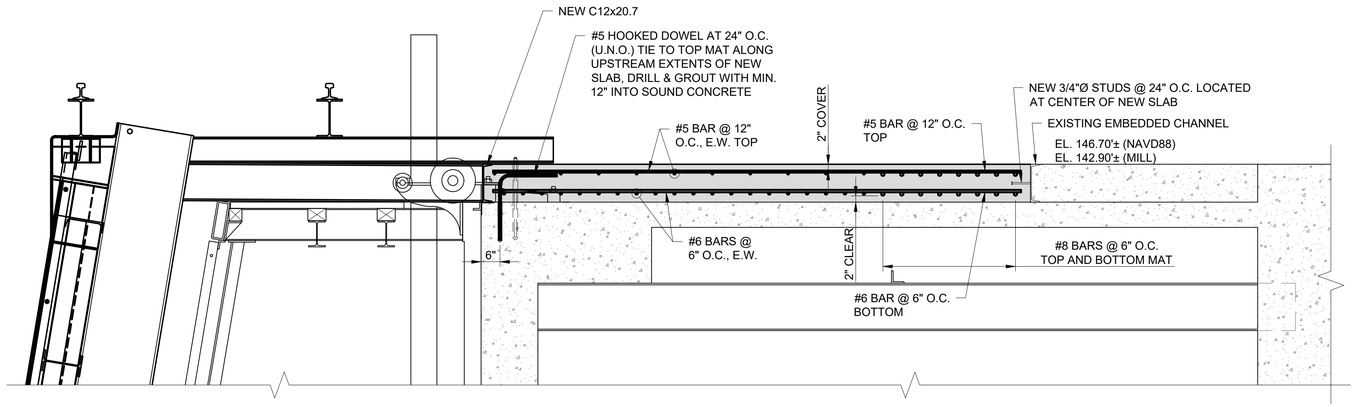
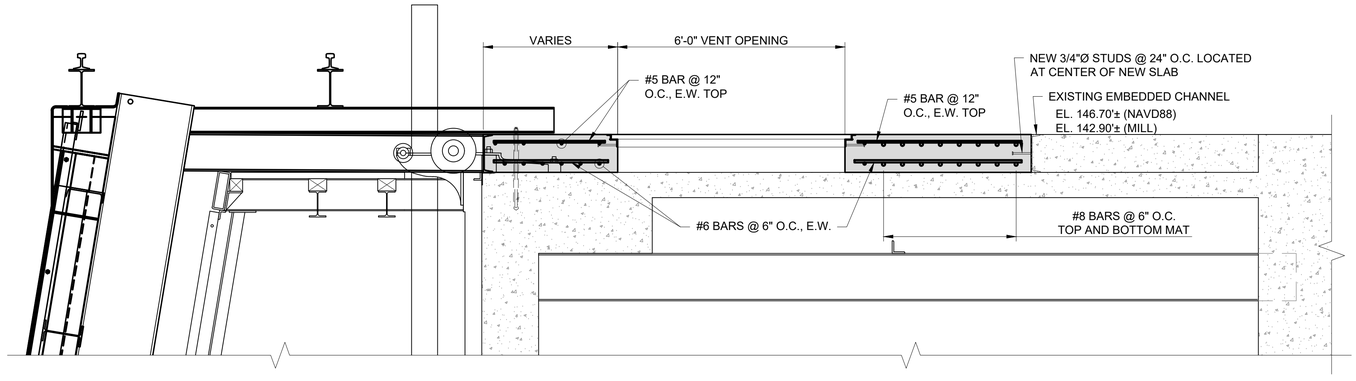


SECTION A/01
1/2" = 1'-0"



SECTION B/01
1/2" = 1'-0"

NOT FOR CONSTRUCTION

MAINE DEPARTMENT OF MARINE RESOURCES

WOODLAND
INTAKE DESIGN FOR DOWNSTREAM FISH PASSAGE

CONCRETE DECK TOPPING SECTIONS

No.	Revision	Date	Drawn	Checked
C	ISSUED FOR BID, REV. 1	09-02-25	JFB	AJC
B	ISSUED FOR BID	07-07-25	JFB	AJC
A	ISSUED FOR VERDANTAS REVIEW	06-13-25	JFB	AJC

Designed	Drawn	Checked	Project No.	Date Revised	Drawing No.
AJC	JFB	DBN	010252	09-02-25	600-02

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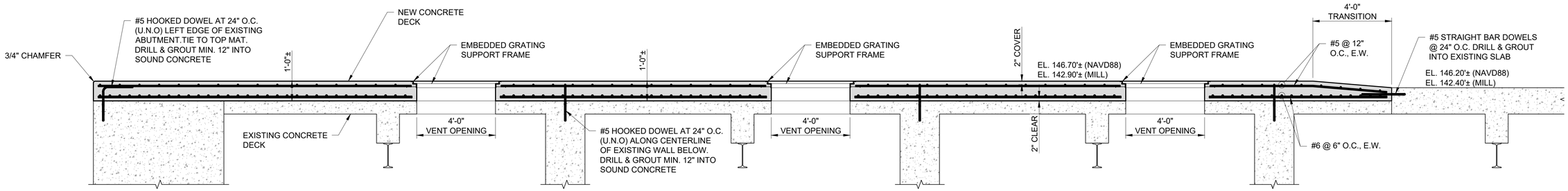
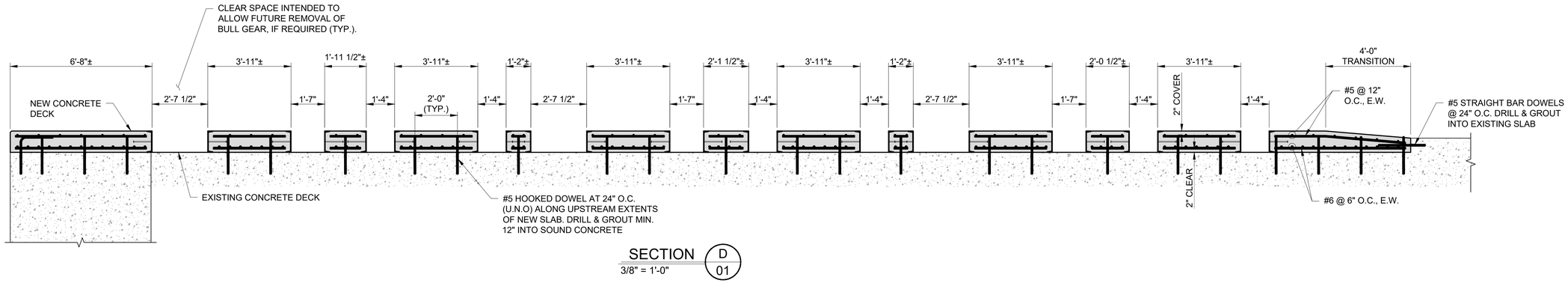


SECTION C
3/8" = 1'-0"



SECTION D
3/8" = 1'-0"

NOT FOR CONSTRUCTION

MAINE DEPARTMENT OF MARINE RESOURCES

WOODLAND
INTAKE DESIGN FOR DOWNSTREAM FISH PASSAGE

CONCRETE DECK TOPPING
SECTIONS

No.	Revision	Date	Drawn	Checked
C	ISSUED FOR BID, REV. 1	09-02-25	JFB	AJC
B	ISSUED FOR BID	07-07-25	JFB	AJC
A	ISSUED FOR VERDANTAS REVIEW	06-13-25	JFB	AJC

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Designed	Drawn	Checked	Project No.	Date Revised	Drawing No.
AJC	JFB	DBN	010252	09-02-25	600-03

480V, 3 PH, 3W
EXISTING FEEDER
FROM MCC 2-2 AR4 ER34

1-3/C #1/0 AWG
W/ #4 AWG GND

WIREWAY BUS, 480 V

FUSIBLE DISCONNECT
TRASH RACK RAKER
(F.K.A. RAW WATER
INTAKE HEATER #1)

60A
600V AC/DC

30A

FUSIBLE DISCONNECT
OUT OF SERVICE
(F.K.A. RAW WATER
INTAKE HEATER #2)

60A
600V AC/DC

__A

FUSIBLE DISCONNECT
EEL FLUSHING PUMP
& VALVES
(F.K.A. RAW WATER
INTAKE HEATER #3)

60A
600V AC/DC

30A

EXISTING

NEW SCOPE OF WORK

C005
3-1/C #10 AWG
W/ #10 AWG GND

JB

FLEXIBLE CABLE
SUPPLIED WITH
EQUIPMENT

SEE TRASH RACK RAKER VENDOR
DRAWINGS FOR DETAILS
(ESTIMATED MAXIMUM LOAD IS 20kW)

C004
3-1/C #10 AWG
W/ #10 AWG GND

EEL PASSAGE BACKFLUSHING
PUMP CONTROLLER

30A

20A

FVNR
SIZE 0

COMBINATION MOTOR
CONTROLLER WITH
ON/OFF/AUTO SELECTOR
SWITCH, GREEN "READY"
INDICATING LIGHT,
RED "RUN" LIGHT.

FLEXIBLE CABLE
SUPPLIED WITH
EQUIPMENT

EEL PASSAGE BACKFLUSHING
SUBMERSIBLE PUMP
5HP

C003
3-1/C #10 AWG
W/ #10 AWG GND

30A, 3P, 600V

EEL PASSAGE BACKFLUSHING
CONTROL POWER
DISCONNECT SWITCH

15A

C002
2-1/C #12 AWG
W/ #12 AWG GND

EEL PASSAGE BACKFLUSHING
CONTROL POWER XFMR.
480 / 120 V
5 KVA, 1 PH.
NEMA 3R, ENCAPSULATED

C001
2-1/C #8 AWG
W/ #10 AWG GND

EEL PASSAGE
BACKFLUSHING SYSTEM
CONTROL PANEL
(DWG. 710-01)

NOT FOR CONSTRUCTION

MAINE DEPARTMENT OF MARINE RESOURCES

WOODLAND
INTAKE DESIGN FOR DOWNSTREAM FISH PASSAGE

ELECTRICAL
SINGLE LINE DIAGRAM

No.	Revision	Date	Drawn	Checked
C	ISSUED FOR BID, REV. 1	09-02-25	JFB	AJC
B	ISSUED FOR BID	07-07-25	JFB	AJC
A	ISSUED FOR VERDANTAS REVIEW	06-13-25	JFB	LJD

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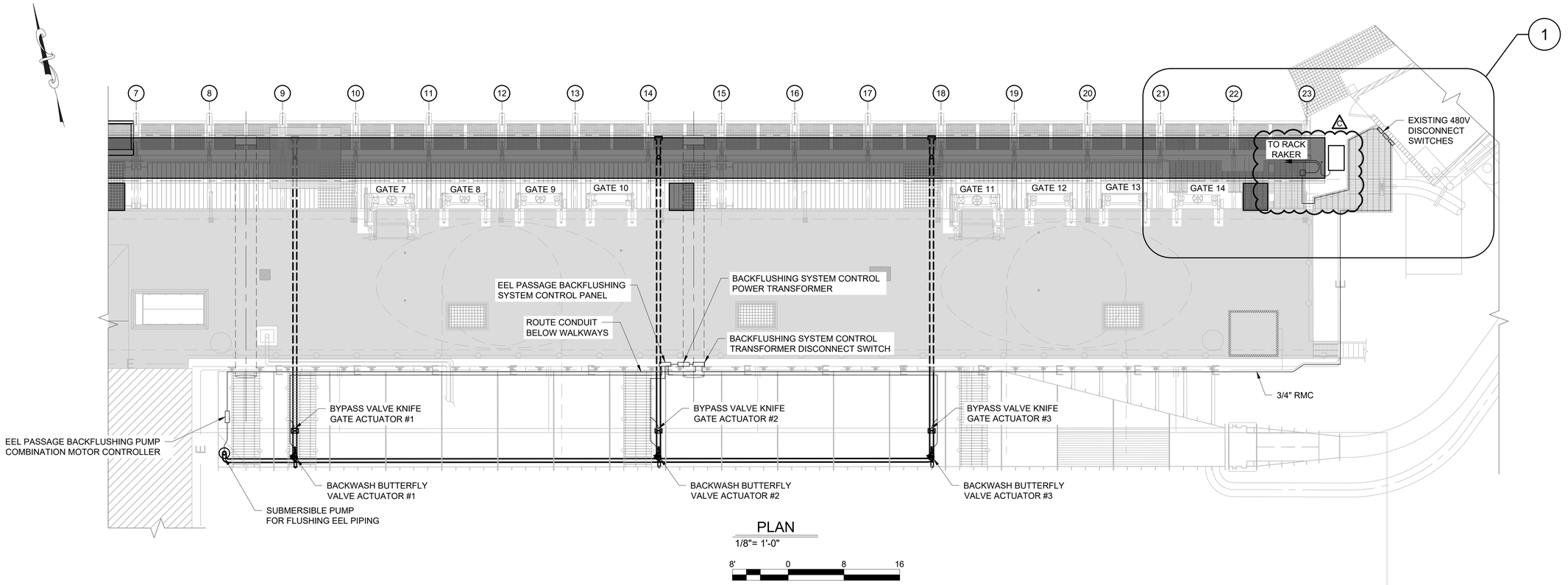
Designed	Drawn	Checked	Project No.	Date Revised	Drawing No.
LJD	JFB	MRB	010252	09-02-25	700-01

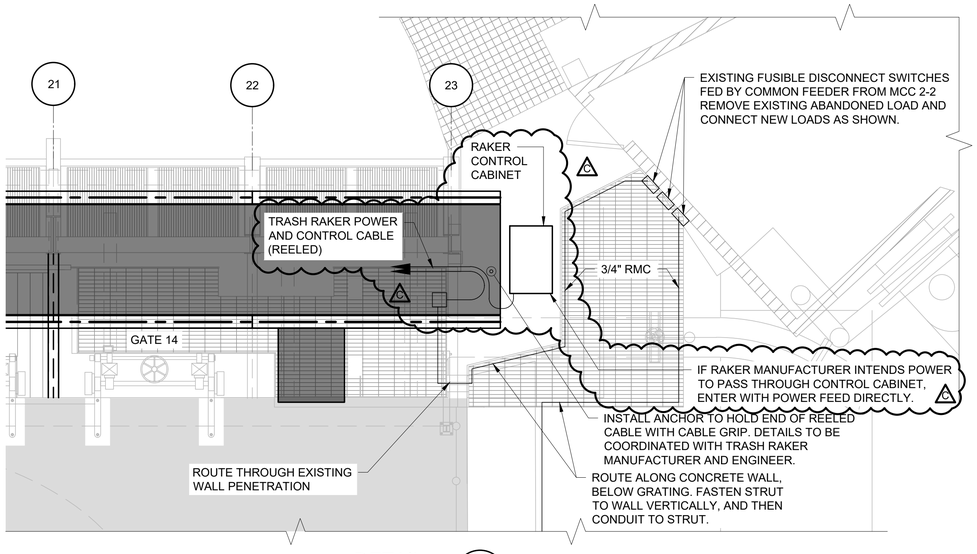
22x34 = FULL SCALE



PLAN

1/8"= 1'-0"

8' 0 8 16



DETAIL 1

1/4" = 1'-0"

4' 0 4 8

NOT FOR CONSTRUCTION

No.	Revision	Date	Drawn	Checked
C	ISSUED FOR BID, REV. 1	09-02-25	JFB	AJC
B	ISSUED FOR BID	07-07-25	JFB	AJC
A	ISSUED FOR VERDANTAS REVIEW	06-13-25	JFB	LJD

MAINE DEPARTMENT OF MARINE RESOURCES

WOODLAND
INTAKE DESIGN FOR DOWNSTREAM FISH PASSAGE

ELECTRICAL
PLAN

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Designed	Drawn	Checked	Project No.	Date Revised	Drawing No.
LJD	JFB	MRB	010252	09-02-25	700-02

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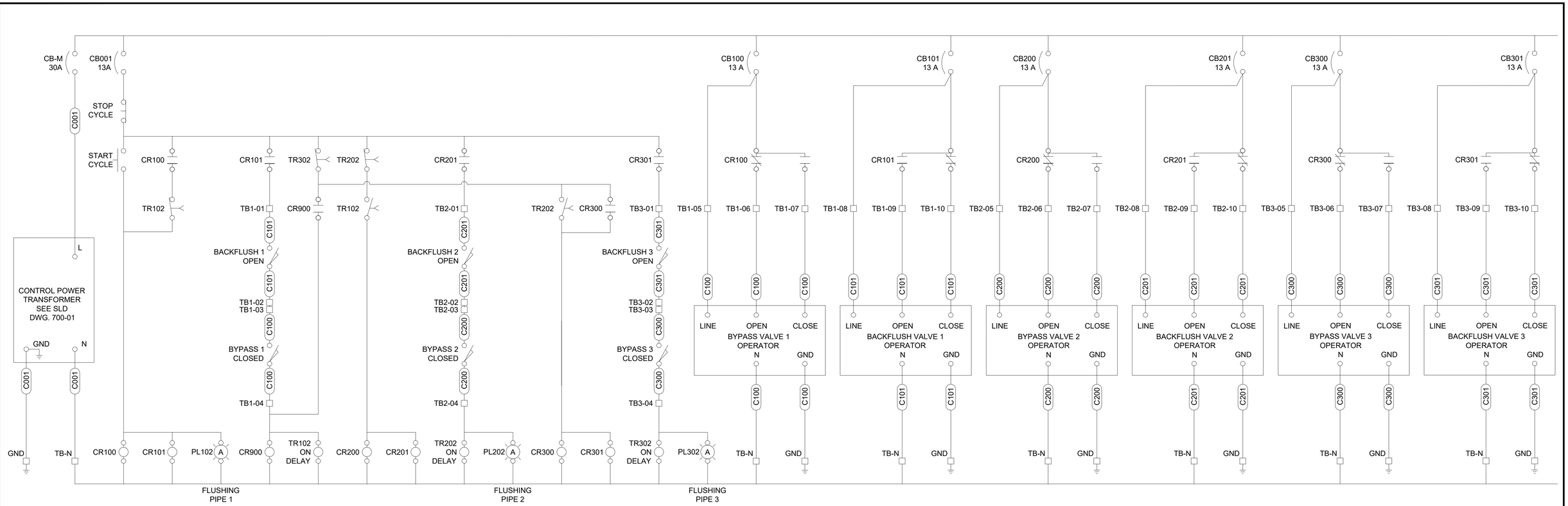

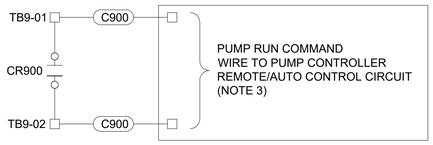

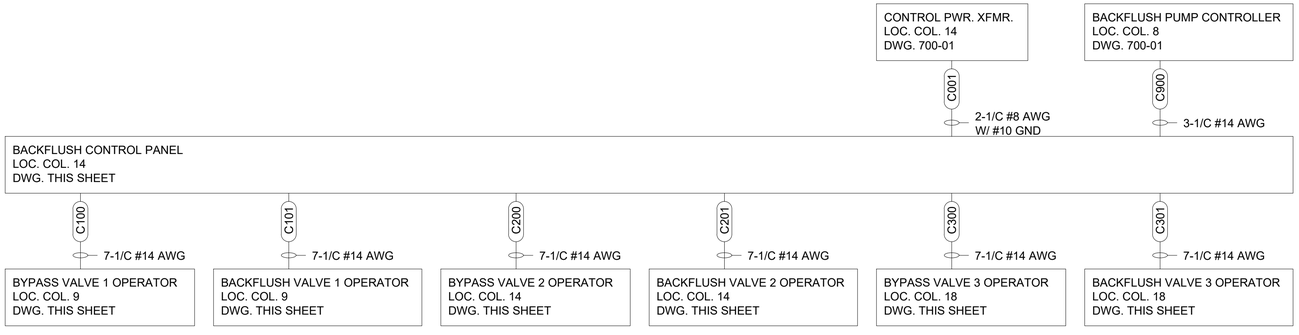

CR100
BYPASS VALVE 1 CONTROL RELAY

	FUNCTION	REFERENCE
	CLOSE VALVE	THIS SHEET
	OPEN VALVE	THIS SHEET
	SEAL IN	THIS SHEET

CR200
BYPASS VALVE 2 CONTROL RELAY

	FUNCTION	REFERENCE
	CLOSE VALVE	THIS SHEET
	OPEN VALVE	THIS SHEET

CR300
BYPASS VALVE 3 CONTROL RELAY

	FUNCTION	REFERENCE
	CLOSE VALVE	THIS SHEET
	OPEN VALVE	THIS SHEET
	SEAL IN	THIS SHEET

CR101
BACKFLUSH VALVE 1 CONTROL RELAY

	FUNCTION	REFERENCE
	OPEN VALVE	THIS SHEET
	CLOSE VALVE	THIS SHEET
	START PUMP & TIMER TR102	THIS SHEET

CR201
BACKFLUSH VALVE 2 CONTROL RELAY

	FUNCTION	REFERENCE
	OPEN VALVE	THIS SHEET
	CLOSE VALVE	THIS SHEET
	START TIMER TR202	THIS SHEET

CR301
BACKFLUSH VALVE 3 CONTROL RELAY

	FUNCTION	REFERENCE
	OPEN VALVE	THIS SHEET
	CLOSE VALVE	THIS SHEET
	START TIMER TR302	THIS SHEET

TR102
BACKFLUSH 1 TIMER RELAY
MACROMATIC ON-DELAY MODEL TE5022U-15

	FUNCTION	REFERENCE
	START PIPE 2 FLUSH	THIS SHEET
	END PIPE 1 FLUSH	THIS SHEET

TR202
BACKFLUSH 2 TIMER RELAY
MACROMATIC ON-DELAY TE5022U-15

	FUNCTION	REFERENCE
	START PIPE 3 FLUSH	THIS SHEET
	END PIPE 2 FLUSH	THIS SHEET

TR302
BACKFLUSH 3 TIMER RELAY
MACROMATIC ON-DELAY TE5022U-15

	FUNCTION	REFERENCE
	END PIPE 3 FLUSH STOP PUMP	THIS SHEET

CR900
FLUSHING PUMP CONTROL RELAY

	FUNCTION	REFERENCE
	RUN PUMP	THIS SHEET
		THIS SHEET
	SEAL IN	THIS SHEET

NOTES
1. VALVE OPERATORS SHALL BE 120 V, SINGLE-PHASE, MOTOR-OPERATED TYPE WITH BYPASS LIMIT SWITCHES INDICATING FULLY CLOSED AND FULLY OPENED POSITIONS. EACH SHALL INCLUDE PROVISION FOR LOCAL MANUAL OPERATION BY HAND-WHEEL, AND SHALL INCLUDE LOCAL POSITION INDICATION. INTERNAL MOTOR THERMAL PROTECTION AND OVER-TORQUE PROTECTION SHALL BE INCLUDED.
2. MINIMAL TERMINAL BLOCKS ARE SHOWN IN THIS SCHEMATIC. MORE TERMINAL BLOCKS MAY BE USED AS NEEDED TO FACILITATE PANEL WIRING.
3. PUMP CONTROL: THIS DESIGN PROVIDES A SINGLE RUN SIGNAL VIA A DRY RELAY CONTACT.
4. TIME-DELAY RELAY: MACROMATIC MODEL TE5022U-15
   - 4.1. CONTROL VOLTAGE: 24 – 240V AC, 12 – 240V DC
   - 4.2. DELAY: ANALOG ADJUSTABLE. t = 0.3 - 30 MIN. DELAY
   - 4.3. FUNCTION: UPON APPLICATION OF INPUT VOLTAGE, THE TIME DELAY (t) BEGINS. AT THE END OF THE TIME DELAY (t), THE OUTPUT IS ENERGIZED. INPUT VOLTAGE MUST BE REMOVED TO RESET THE TIME DELAY RELAY & DE-ENERGIZE THE OUTPUT.
   - 4.4. CONTACTS: 10 A DPDT
   - 4.5. MOUNTING: 35MM DIN RAIL

DESCRIPTION OF SYSTEM AUTOMATIC OPERATION
1. PRESS CYCLE START BUTTON.
2. CLOSE PIPE 1 BYPASS VALVE AND OPEN PIPE 1 BACKFLUSH VALVE
3. START BACKFLUSH PUMP.
4. WAIT SOME TIME (1 - 10 MINUTES).
5. CLOSE PIPE 2 BYPASS VALVE AND OPEN PIPE 2 BACKFLUSH VALVE AND CLOSE PIPE 1 BACKFLUSH VALVE AND OPEN PIPE 1 BYPASS VALVE.
6. WAIT SOME TIME.
7. CLOSE PIPE 3 BYPASS VALVE AND OPEN PIPE 3 BACKFLUSH VALVE AND CLOSE PIPE 2 BACKFLUSH VALVE AND OPEN PIPE 2 BYPASS VALVE.
8. WAIT SOME TIME.
9. TURN OFF PUMP AND CLOSE PIPE 3 BACKFLUSH VALVE AND OPEN PIPE 3 BYPASS VALVE.

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MAINE DEPARTMENT OF MARINE RESOURCES

WOODLAND
INTAKE DESIGN FOR DOWNSTREAM FISH PASSAGE

SCHEMATIC
EEL ENTRANCE BACK-FLUSH CONTROL

No.	Revision	Date	Drawn	Checked
C	ISSUED FOR BID, REV. 1	09-02-25	JFB	AJC
B	ISSUED FOR BID	07-07-25	JFB	AJC
A	ISSUED FOR VERDANTAS REVIEW	06-13-25	JFB	LJD

Designed	Drawn	Checked	Project No.	Date Revised	Drawing No.
LJD	JFB	MRB	010252	09-02-25	710-01

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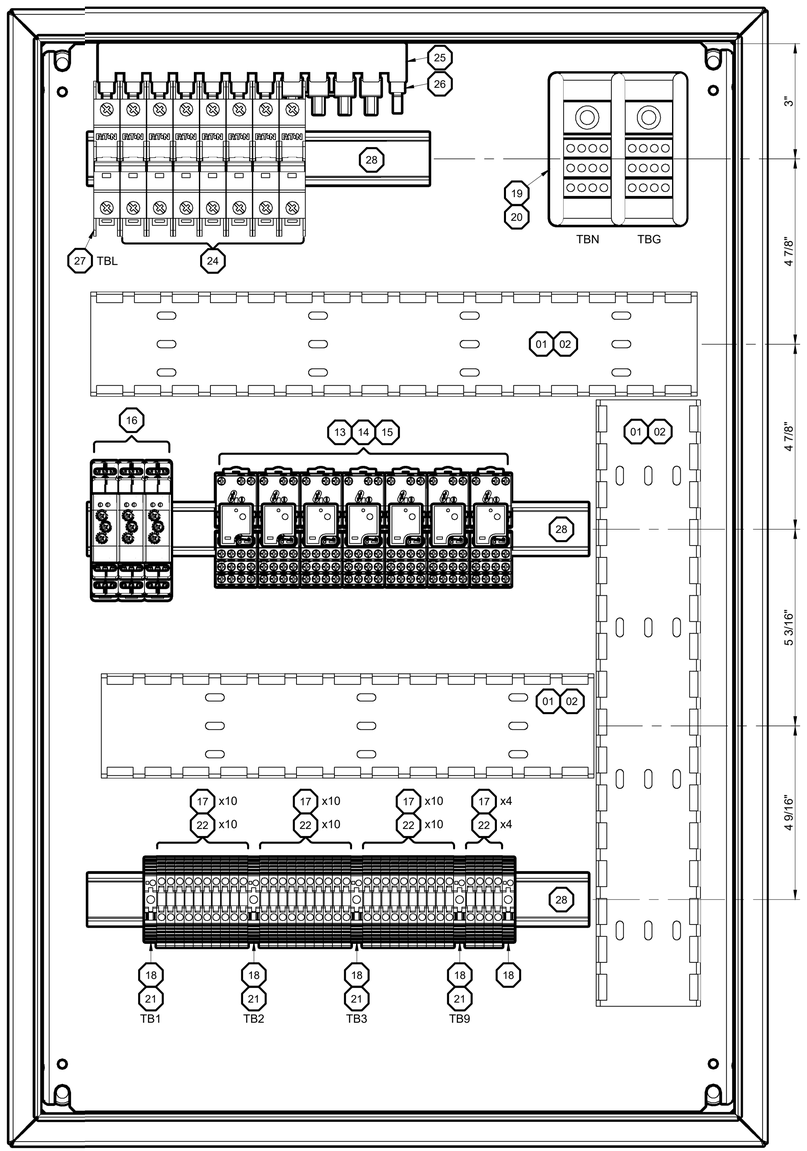
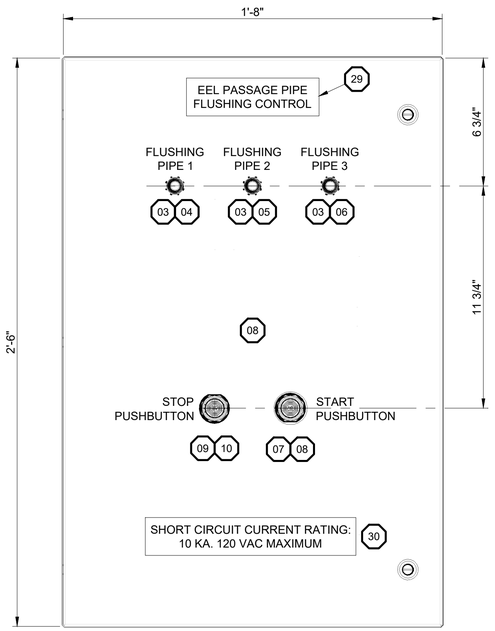
22x34 = FULL SCALE

22x34 = FULL SCALE



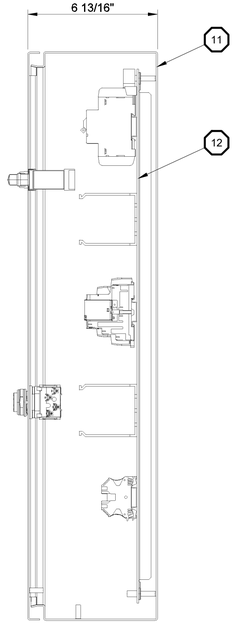
ELECTRICAL ENCLOSURE - FRONT

6" = 1'-0"



ELECTRICAL ENCLOSURE - DOOR

3" = 1'-0"



ELECTRICAL ENCLOSURE - SECTION

3" = 1'-0"

FISH LIFT CONTROL PANEL BILL OF MATERIALS

ITEM #	QTY	ITEM DESCRIPTION	MANUFACTURER	PART NUMBER
1	1	PANDUCT TYPE G WIDE SLOT WIRING DUCT, DUCT NOMINAL SIZE (WXH) 2.5"X3", 6 FOOT SECTIONS	PANDUIT	G2.5X3LG6
2	1	PANDUCT WIDE SLOT WIRING DUCT COVER FOR 2.5" DUCT, 6 FOOT SECTIONS	PANDUIT	C2.5LG6
3	3	TYPE 4/13 METAL (800T) PILOT LIGHT, UNIVERSAL LED, 12–130V AC/DC, AMBER	ALLEN BRADLEY	800T–QH2A
4	1	800T CUSTOM LEGEND NAMEPLATE, CUSTOM TEXT LINE 1: FLUSHING; LINE 2: PIPE 1	ALLEN BRADLEY	800T–X559E
5	1	800T CUSTOM LEGEND NAMEPLATE, CUSTOM TEXT LINE 1: FLUSHING; LINE 2: PIPE 2	ALLEN BRADLEY	800T–X559E
6	1	800T CUSTOM LEGEND NAMEPLATE, CUSTOM TEXT LINE 1: FLUSHING; LINE 2: PIPE 3	ALLEN BRADLEY	800T–X559E
7	1	TYPE 4/13 METAL (800T) PUSH BUTTON, MOMENTARY, FLUSH HEAD, GREEN, 1 N.O. – 1 N.C. CONTACTS.	ALLEN BRADLEY	800T–A1A
8	1	800T STANDARD LEGEND NAMEPLATE, "START"	ALLEN BRADLEY	800T–X547
9	1	TYPE 4/13 METAL (800T) PUSH BUTTON, MOMENTARY, EXTENDED HEAD, RED, 1 N.O. – 1 N.C. CONTACTS.	ALLEN BRADLEY	800T–B6A
10	1	800T STANDARD LEGEND NAMEPLATE, "STOP" (RED)	ALLEN BRADLEY	800T–X550
11	1	ELECTRICAL ENCLOSURE. MILD STEEL, NEMA 3/4/12, HINGED DOOR W/ SLOTTED QUARTER–TURN LATCH, COLLAR STUDS FOR INNER PANEL MOUNTING. ANSI 61 GRAY. 30"x20"x6"	HAMMOND	EN4SD30206GY
12	1	ELECTRICAL ENCLOSURE INNER PANEL	HAMMOND	EP3020
13	7	GENERAL PURPOSE RELAY, 8 BLADE, DPDT, 120 VAC COIL, 12 AMP CONTACTS	MACROMATIC	GB120A2
14	7	GENERAL PURPOSE RELAY SOCKET, 8 BLADE	MACROMATIC	18F–2Z–C5
15	7	GENERAL PURPOSE RELAY RETAINER, PLASTIC	MACROMATIC	GB–PR
16	3	RELAY, SINGLE–FUNCTION, SINGLE–RANGE, FUNCTION: ON DELAY, RANGE: 0.3 – 30 MINUTES. DPDT CONTACTS RATED 10 AMPS. 35MM DIN RAIL MOUNTING	MACROMATIC	TE5022U–15
17	34	TERMINAL BLOCK, SCREW CONNECTION, 4 mm², 35 A, 800 V. 2 CONNECTIONS, 1 LEVEL.	WEIDMÜLLER	WDU 4
18	5	TERMINAL BLOCK END BRACKET FOR WDU–4	WEIDMÜLLER	WEW 35/2
19	1	POWER DISTRIBUTION BLOCK, 2–POLE, ONE LINE–SIDE TERMINAL, 12 LOAD SIDE TERMINALS, 310 A, 100 KA SCCR. UL RECOGNIZED	EATON/BUSSMANN	16370–2
20	1	COVER FOR POWER DISTRIBUTION TERMINAL BLOCK ITEM 32	EATON/BUSSMANN	CPDB–2
21	4	TERMINAL BLOCK END BRACKET GROUP MARKER 33.3 x 8 mm	WEIDMÜLLER	WAD 8 MC NE WS
22	1	TERMINAL BLOCK MARKER FOR WDU–4, 5 MM X 6 MM, (6 MM PITCH) PRE–PRINTED 1 – 50, 10 SETS.	WEIDMÜLLER	468660001 DEK 6 FW 1–50
23		(NOT USED)		
24	7	BRANCH CIRCUIT BREAKER, SINGLE POLE, UL 489, DIN RAIL MOUNT. 13 AMP, 10 KAIC. CURVE C	EATON	FAZ–C13/1–NA–L
25	1	BUS BAR – ONE–POLE, 12 TERMINLS	EATON	Z–SV/UL–16/1P–1TE/12
26	2	BUS BAR SHROUD, THREE–POLE	EATON	ZV–BS–UL
27	1	BRANCH CIRCUIT BREAKER, SINGLE POLE, UL 489, DIN RAIL MOUNT. 30 AMP, 10 KAIC. CURVE C	EATON	FAZ–C30/1–NA–L
28	2	DIN RAIL, 35 MM X 7.5 MM X 1 M, ZINC COATED STEEL	MCMASTER–CARR	8961K15
29	1	NAMEPLATE, ENGRAVED LAMINATED PLASTIC, WHITE TEXT ON BLACK FIELD, "EEL PASSAGE PIPE FLUSHING CONTROL". TEXT HEIGHT: 1/2". OVERALL DIMENSIONS AS REQUIRED TO FIT TEXT. FASTEN WITH STAINLESS MACHINE SCREWS	BY DESCRIPTION	BY DESCRIPTION
30	1	NAMEPLATE, ENGRAVED LAMINATED PLASTIC, WHITE TEXT ON BLACK FIELD, "SHORT CIRCUIT CURRENT RATING: 10 KA, 120 VAC MAXIMUM". TEXT HEIGHT: 3/16". OVERALL DIMENSIONS AS REQUIRED TO FIT TEXT. FASTEN WITH STAINLESS MACHINE SCREWS	BY DESCRIPTION	BY DESCRIPTION

(##) BILL OF MATERIAL ITEM NUMBER ##

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MAINE DEPARTMENT OF MARINE RESOURCES

WOODLAND
INTAKE DESIGN FOR DOWNSTREAM FISH PASSAGE

CABINET LAYOUT
EEL ENTRANCE BACKFLUSH CONTROL PANEL

No.	Revision	Date	Drawn	Checked
C	ISSUED FOR BID, REV. 1	09-02-25	JFB	AJC
B	ISSUED FOR BID	07-07-25	JFB	AJC
A	ISSUED FOR VERDANTAS REVIEW	06-13-25	JFB	LJD

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Designed	Drawn	Checked	Project No.	Date Revised	Drawing No.
LJD	JFB	MRB	010252	09-02-25	710-02

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