



**MAINE DEPARTMENT OF  
INLAND FISHERIES AND WILDLIFE**

**ADDENDUM NO. 3  
24-AUG-23**

TO THE SPECIFICATIONS, PROPOSAL, CONTRACT AND BOND  
FOR THE CONSTRUCTION OF

**IMPROVEMENTS AT GRAND LAKE STREAM STATE FISH HATCHERY  
GRAND LAKE STREAM, MAINE**

**WASHINGTON COUNTY**

BGS PROJECT NO.: 3289-14

BID DATE: 07 SEPTEMBER 2023



<b>SUBJECT:</b>	<b>ADDENDUM NO. 3</b>
<b>PROJECT:</b>	Improvements at Grand Lake Stream State Fish Hatchery
<b>DATE:</b>	Wednesday, August 23, 2023
<b>TO:</b>	Richard Parker - DIFW
<b>FROM:</b>	Andrew Gurski – HDR

This Addendum is issued to known individuals, firms or corporations holding Bidding Documents and Contract Documents for above listed project.

This Addendum is hereby made a portion of Bidding Documents and Contract Documents. Bidders are required to acknowledge receipt of Addendum in appropriate space on Bid Form.

**QUESTIONS AND ANSWERS**

- QUESTION:** Typical notes has a detail on pressure relief valves, says as shown on the plans. I can not find any shown on the plans. I assume they are meant to go in the round tanks? You have a spec on a pressure relief valve, but not certain about what Harvest Kettles means.

**2.8 PRESSURE RELIEF VALVES AT POND HARVEST KETTLES:** Flanged iron flap check valve such as Waterman PRB-14 or equal by Penn Troy or Neenah.

**ANSWER:** Plans 02D-102 and 03D-102 have Section cuts referring to next sheets where Section 3 shows valves. We do not have any pond harvest kettles in this job. References will be removed in the specs.

**SOURCE:** Mark McPheters [mark@tbuckconstruction.net](mailto:mark@tbuckconstruction.net) Wednesday, August 16, 2023 4:54 PM

- QUESTION:** Attachment B to section 01 45 33 pages 141 through 146 are blank in the bidding documents.

**ANSWER:** Attachment B shall be removed in its entirety.

**SOURCE:** Mark McPheters [mark@tbuckconstruction.net](mailto:mark@tbuckconstruction.net) Thu 8/17/2023 8:07 AM

- QUESTION:** Sheet 03s-101 has a section through what I believe is a storage room labeled E/03S-301. Page 03s-301 does not exist, not in the plans or legend.

**ANSWER:** The reference to 03S-301 is incorrect and should be 3/00S-103.

**SOURCE:** Mark McPheters [mark@tbuckconstruction.net](mailto:mark@tbuckconstruction.net) Thu 8/17/2023 10:02 AM

- QUESTION:** There are several specification sections for masonry. I am struggling to find where it is located, possibly the storage room in the Lower Pavilion?

**ANSWER:** The Division 4 specifications are not required and will be removed.

**SOURCE:** Mark McPheters [mark@tbuckconstruction.net](mailto:mark@tbuckconstruction.net) Thu 8/17/2023 10:02 AM

- QUESTION:** I see a specification for water testing of the aquaculture tanks to be water tested. I do not see a specification for the poured in place concrete tanks to be water tested. Will poured in place tanks need to be water tested?



**ANSWER:** Yes. Specification 01 45 25 – Testing Concrete Structures for Watertightness has been added.

**SOURCE:** Mark McPheters [mark@tbuckconstruction.net](mailto:mark@tbuckconstruction.net) Thu 8/17/2023 10:28 AM

**6. QUESTION:** Where is section 07 27 26 fluid applied vapor barrier to be used? Typically, it is used in the cavity of a block wall. I have searched the plans and cannot find where it is to be applied.

**ANSWER:** This is not required and this spec section will be deleted.

**SOURCE:** Mark McPheters [mark@tbuckconstruction.net](mailto:mark@tbuckconstruction.net) Thu 8/17/2023 3:27 PM

**7. QUESTION:** I am confused by section 13 34 00 post framed building system. Is that section for the Storage building? Details on the plans seem to indicate at conventionally framed building with wood trusses and concrete foundation.

**ANSWER:** This specification section is not required and will be deleted.

**SOURCE:** Mark McPheters [mark@tbuckconstruction.net](mailto:mark@tbuckconstruction.net) Thu 8/17/2023 4:24 PM

**8. QUESTION:** Page 06C-101 points the oxygen slab and says future. There is a specification for the oxygen system so I assume we are constructing the slab and oxygen system and building over the system would be future? Please confirm.

**ANSWER:** The callout for 'FUTURE STRUCTURE' will be modified to state 'NEW OXYGEN PAD.'

**SOURCE:** Mark McPheters [mark@tbuckconstruction.net](mailto:mark@tbuckconstruction.net) Thu 8/17/2023 4:24 PM

**9. QUESTION:** Comment from my overhead door installer: "Spec has full view aluminum doors And plans have 2" solid panel doors". Please clarify.

**ANSWER:** Overhead garage doors shall be per the specifications.

**SOURCE:** Mark McPheters [mark@tbuckconstruction.net](mailto:mark@tbuckconstruction.net) Thu 8/17/2023 15:34

**10. QUESTION:** I assume these dates are a typo.

**ARTICLE 2 COMMENCEMENT AND COMPLETION DATES**

**2.1** The Work of this Contract shall commence no sooner than the date this document is executed by the approval authority, or a subsequent date designated in the contract documents.

**2.2** The Substantial Completion Date shall be 15 December 2023.

**2.3** The Work of this Contract shall be completed on or before the Contract Final Completion Date of 31 December 2023.

**2.4** The Contract Expiration Date shall be 29 February 2024. (This date is the Owner's deadline for internal management of contract accounts. The Contract Expiration Date does not directly relate to any contract obligation of the Contractor.)

**ANSWER:** From DIFW - This is a sample of what the contract format will be (water mark saying sample). Dates in this sample are not applicable to any project. At this stage you can find these dates in the Notice to Contractor section 00 11 13

**SOURCE:** Richard Wentworth [richard@tbuckconstruction.net](mailto:richard@tbuckconstruction.net) Wednesday, August 9, 2023 11:14 AM

**11. QUESTION:** Can you tell me who did the installation and services the existing Oxygen System at the hatchery? Also who fills the tanks.



**ANSWER:** From DIFW - Air Gas is the supplier of these tanks as well as our smaller high pressure oxygen tanks which are provided/leased/refilled by them via state contract. I believe more relevant would our bulk oxygen supplier by way of state contract which is Maine Oxy who serves all our facilities (excluding Grand Lake and New Gloucester which have yet to receive Department owned bulk tanks & LHO systems). Maine Oxy has also serviced our bulk delivery tanks/systems as needed. Dale Gamage 207-740-6643

**SOURCE:** Mark McPheters [mark@tbuckconstruction.net](mailto:mark@tbuckconstruction.net) Friday, August 18, 2023 10:00 AM

**12. QUESTION:** I believe soil borings were done on this project. Can we get a copy of the soils report?

**ANSWER:** The Geotechnical Report has been added to the Appendix of the construction manual.

**SOURCE:** Mark McPheters [mark@tbuckconstruction.net](mailto:mark@tbuckconstruction.net) Fri 8/18/2023 12:33

**13. QUESTION:** Sheet 04D-402 references sheet 00D-602 for the back wash pump BWSP-1&2 information. I do not find the backwash pump information on the sheet. Also don't see the pump conditions in the specification.

**ANSWER:** The pumps on Sheet 04D-402 should be tagged CP0401 and CP0402. The pump conditions can be found in the submersible pump schedule on sheet 00D-602.

**SOURCE:** Mark McPheters [mark@tbuckconstruction.net](mailto:mark@tbuckconstruction.net) Fri 8/18/2023 12:33

**14. QUESTION:** Please provide the required Collateral Load for the PEMBs. Collateral Loads will be supporting MEPs which typically run from 3-5 PSF.

**ANSWER:** Use 5 PSF for the collateral loads for the PEMBs.

**SOURCE:** Mark McPheters [mark@tbuckconstruction.net](mailto:mark@tbuckconstruction.net) Monday, August 21, 2023 06:43

**15. QUESTION:** The basic wind speed of 108mph? Note that IBC 2015 requires Ultimate Wind Speed which we believe to be 115mph. Please confirm.

**ANSWER:** Correct. Please use 115mph for the ultimate wind speed.

**SOURCE:** Mark McPheters [mark@tbuckconstruction.net](mailto:mark@tbuckconstruction.net) Monday, August 21, 2023 06:43

**16. QUESTION:** Are wall or ceiling liner panels required in either the pavilions or the effluent treatment building? If so, please specify ceiling and wall locations for each building.

**ANSWER:** Liner panels are not required for walls. If the roof insulation will be batt insulation instead of rigid insulation, a liner panel shall be required with a vapor retarder, similar to the Thermaliner Insulation System by Butler.

**SOURCE:** Mark McPheters [mark@tbuckconstruction.net](mailto:mark@tbuckconstruction.net) Monday, August 21, 2023 06:43

**17. QUESTION:** Please clarify rigid insulation requirements for the building roofs. The VSR roof system is not designed for rigid insulation and would have to be custom designed.

**ANSWER:** If rigid insulation is not standard with the roof panels, batt insulation with a liner panel and vapor retarder may be used, similar to the Thermaliner Insulation System by Butler.

**SOURCE:** Mark McPheters [mark@tbuckconstruction.net](mailto:mark@tbuckconstruction.net) Monday, August 21, 2023 06:43

**18. QUESTION:** Please provide plan holders list.

**ANSWER:** Pre-Bid Sign in Sheet is attached to this addendum.

## SPECIFICATION UPDATES



**19. SECTION 01 45 25 – TESTING CONCRETE STRUCTURES FOR WATERTIGHTNESS**

**ADDED:** Added specification 01 45 25 to project manual. See attached.

**20. SECTION 01 75 00 – FACILITY STARTUP**

**UPDATE:** Part 3.2, B., 4.: Replace a through i with “Piping, valves, gates, manholes, meters, 20-ft round tanks, existing raceways, low head oxygenators, weirs, drumfilters, pumps, clarifier and sludge storage tanks.”

**21. SECTION 40 05 52 – MISCELLANEOUS VALVES**

**UPDATE:** Part 2.8: Delete “at pond harvest kettles.”

**22. SECTION 40 60 05 - SLUICE & SLIDE GATES AND METAL STOPLOGS**

**UPDATE:** Part 2.1, A.: Delete “Structural Sheets and” and Delete 2nd sentence of paragraph.

**23. SECTION 40 60 05 – SLUICE & SLIDE GATES AND METAL STOPLOGS:**

**UPDATE:** Delete Parts 2.2 through 2.6 regarding mud valves in this Section since Section 40 05 52 better addresses mud valves.

**DRAWING UPDATES**

**24. SHEET 00D-502, DETAIL 2:**

**UPDATE:** Change “Not applicable under structure” To “The bedding up to the spring-line of Type B pipe shall be Compacted Granular Bedding. Under structures all fill above the Compacted Granular Bedding shall be Structural Fill.”

**25. SHEET 04D-401, GENERAL NOTES:**

**UPDATE:** Add “3. Each mud valve shall have a 30-inch stem extension supported to the nearest concrete sump wall. Provide 3-inch diameter hole in decking/grating above and slit in floor mat above for passage of operating wrench socket.”

**26. SHEET 04D-402**

**UPDATE:** Plan 1: Change “BSWP-1” and “BSWP-2” To “CP0401” and “CP-0402.”

**27. SHEET 00S-103**

**ADD:** Attached detail 3/00S-103 “THICKENED SLAB DETAIL”. See updated plan sheet in this addendum.

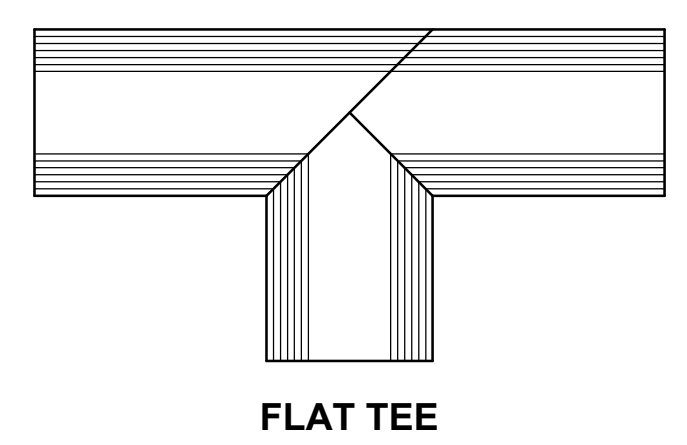
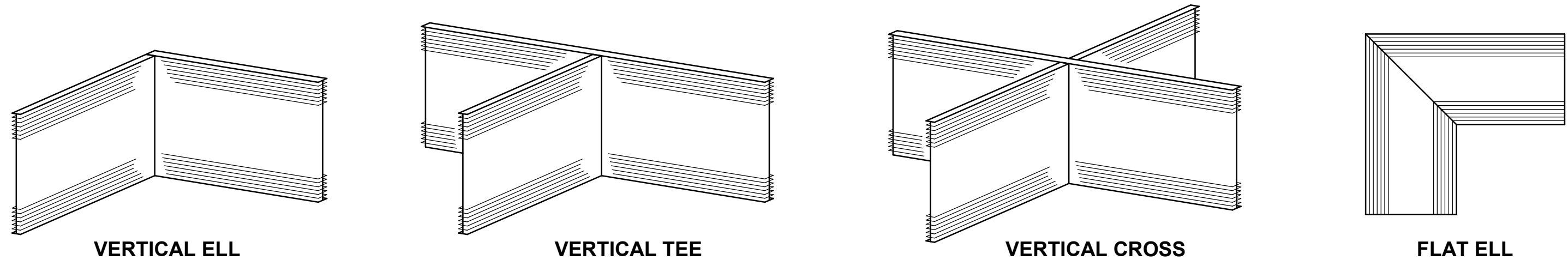


STATE OF MAINE  
 DEPARTMENT OF  
 INLAND FISHERIES & WILDLIFE  
 353 WATER STREET  
 41 STATE HOUSE STATION  
 AUGUSTA ME 04333-0041



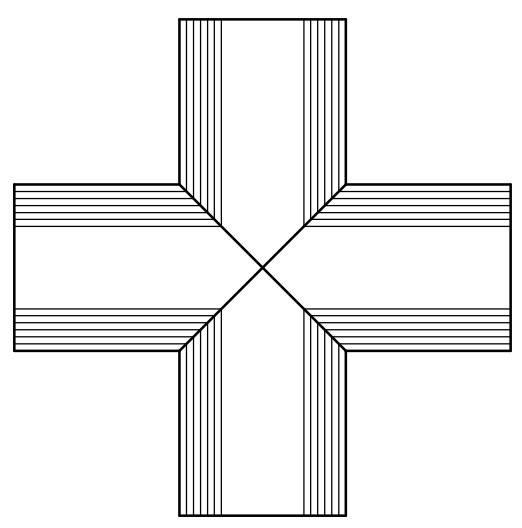
Grand Lake Stream BREM 3289-14 Pre-Bid Meeting August 1, 2023

COMPANY NAME	CONTRACTOR NAME	PHONE NUMBER	EMAIL ADDRESS
T-BUCK CONSTRUCTION, INC	RICHARD WENMOUTH	207-595-0702	richard@tuckconstruction.net
Wilcox Electric	BRIAN Wilcox	207-827-6432	brian@wilcoxelectricinc.com
JORDER ELECTRIC	STEPHEN SMITH	207 454 8619	bsmc@jwi.net

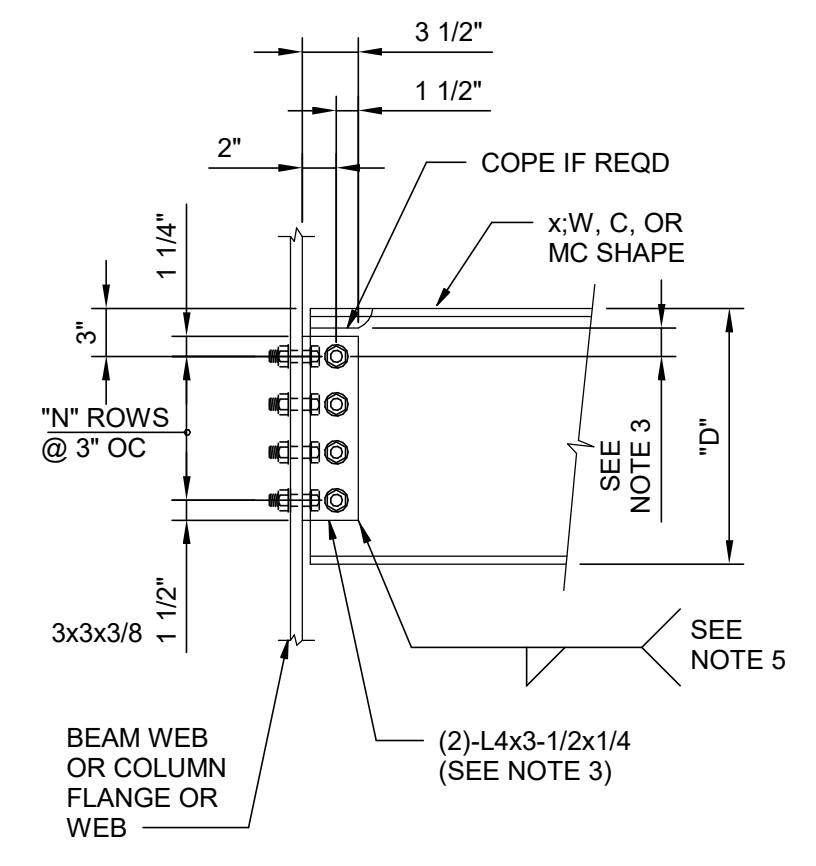


- NOTES:**
- BULB TYPE WATERSTOPS SHALL BE HANDLED SIMILAR TO AS SHOWN WITH BULB JOINTS MITERED FOR FULL CONTINUITY OF HOLLOW BULB.
  - ONLY STRAIGHT BUTT JOINT WELDS ARE ALLOWED IN THE FIELD.

**1 SHOP FABRICATED WATERSTOP**  
NOT TO SCALE



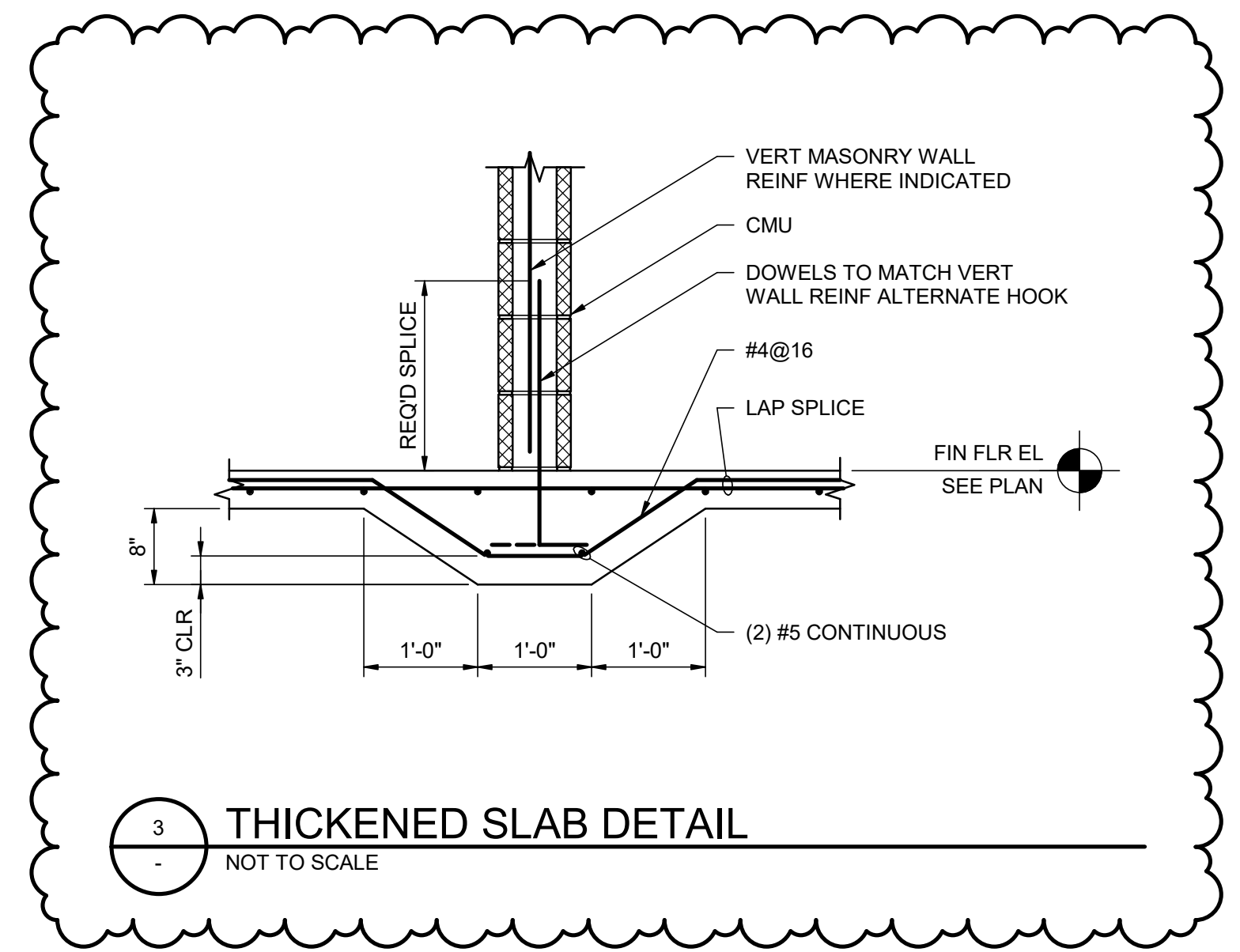
**FLAT CROSS**



- NOTES:**
- ALL BOLTS SHALL BE 3/4"Ø A325-N FOR STEEL CONSTRUCTION. ALL BOLTS SHALL BE 3/4"Ø SST FOR ALL OTHER CONSTRUCTION.
  - PROVIDE MINIMUM NUMBER OF BOLT ROWS "N" SHOWN AS THE TYPICAL CONN. INCREASE NUMBER OF ROWS AND / OR BOLT DIA. IF INDICATED ON PLANS.
  - MIN. DISTANCE FROM  $\epsilon$  OF TOP BOLT TO A COPE SHALL BE 1-1/2". WHERE DEEP COPES ARE REQD., INCREASE DISTANCE FROM TOP OF BEAM TO  $\epsilon$  OF TOP BOLT.
  - USE STANDARD OR SHORT HORIZONTAL SLOTTED HOLES AS REQUIRED.
  - WELD DOUBLE ANGLES TO BEAM WEB IN LIEU OF BOLTING AT CONTRACTORS OPTION.

**2 TYPICAL BEAM CONNECTION**  
NOT TO SCALE

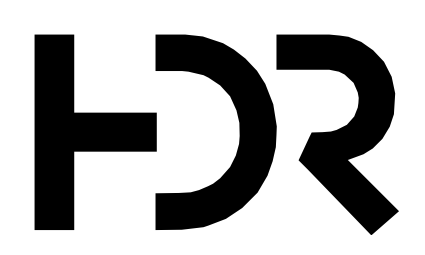
STANDARD BOLTED CONNECTION SCHEDULE		
NOMINAL BEAM SIZE "D"	NUMBER OF BOLT ROWS "N"	WELD SIZE
W8	2	3/16
W10	2	3/16
W12	3	3/16
W14	3	3/16
W16	3	1/4
W18	4	1/4
W21	4	1/4
W24	4	1/4
W27	5	1/4
W30	5	5/16
W33	6	5/16
W36	6	5/16



**3 THICKENED SLAB DETAIL**  
NOT TO SCALE

A3

Autodesk Docs/10357686\_Main/DIF\_GrandLake Stream Exp\_2022/10357686-00-G.rvt 8/23/2023 4:09:04 PM

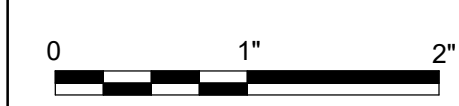


ISSUE	DATE	DESCRIPTION
A3	08/23/2023	ADDENDUM 3
	07/14/2023	ISSUED FOR BID

PROJECT MANAGER		ANDREW GURSKI
CIVIL	J. GAGNON	
STRUCTURAL	B. BRADLEY	
ARCHITECTURAL	M. BASKIN	
PROCESS	J. CHANDLER	
MECHANICAL	J. CHANDLER	
ELECTRICAL	A. KANER	
PROJECT NUMBER	10357686	

**IMPROVEMENTS AT GRAND LAKE STREAM STATE FISH HATCHERY**

**GENERAL STRUCTURAL DETAILS 3**



FILENAME | 10357686-00-G.rvt  
SCALE | As indicated

SHEET  
**00S-103**

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**APPENDIX – BOUND HEREIN**

- A – GEOTECHNICAL REPORT, GRAND LAKE STREAM FISH HATCHERY IMPROVEMENTS, 05MAY2023

**SECTION 01 45 25**  
**TESTING CONCRETE STRUCTURES FOR WATERTIGHTNESS**

**PART 1 - GENERAL**

**1.1 SUMMARY**

- A. Section Includes:
  - 1. Requirements for furnishing all labor, materials, tools, equipment, and services, for all testing of concrete structures for watertightness, in accord with provisions of the Contract Documents.
  - 2. Completely coordinate with work of all other trades.
  - 3. Although such work is not specifically indicated, furnish and install all supplementary or miscellaneous items, appurtenances and devices incidental to or necessary for a sound, secure and complete leak test.
- B. Related Sections include but are not necessarily limited to, DIV 03:
- C. Payment:
  - 1. Contractor to pay all costs required for testing, test water, retesting, patching, repair and work required to provide access for repair as required to meet watertightness requirements specified or indicated.

**1.2 QUALITY ASSURANCE**

- A. Reference Standards:
  - 1. American Concrete Institute (ACI):
    - a. 350.1, Specification for Tightness Testing of Environmental Engineering Concrete Containment Structures and Commentary.
  - 2. NSF International (NSF).
  - 3. Underwriters Laboratories, Inc. (UL).
  - 4. United States Department of Agriculture (USDA).
  - 5. Water Quality Association (WQA).

**1.3 SUBMITTALS**

- A. Shop Drawings:
  - 1. Watertightness testing plan:
    - a. Plan shall include:
      - 1) Schedule for testing.
      - 2) Description of testing apparatus for measuring water level in structure and evaporation pan.
        - a) Include Drawings (plans, sections, and details), sketch, or photos as appropriate to fully describe apparatus.
      - 3) Location plan showing measurement location and evaporation pan location.
      - 4) Procedures for isolation of tank or compartments to assure a constant volume during testing.
      - 5) Narrative describing testing procedure.
      - 6) Calculations showing:
        - a) Total structure volume at water elevation for commencement of test period.
        - b) Maximum water leakage allowed.
        - c) Test period: See ACI 350.1.
      - 7) Plan shall be in accordance with ACI 350.1, Chapters 1 and 2.
    - 2. If structure has running water leaks or otherwise fails watertightness test, submit repair and patching plan. Include with plan:
      - a. Location and areas of leaks.
      - b. Repair material and procedures proposed for repair.

- c. Photographs of all visible leaks and damp areas.
  - 1) Include distant photos and close-ups to document conditions.
- B. Informational Submittals:
  - 1. Results of watertightness testing indicating the following:
    - a. Level of water in structure and in evaporation pan and water temperature at commencement of test period.
    - b. Level of water in structure and in evaporation pan and water temperature at end of test period.
    - c. Net leakage in percent of total volume during test period (gross leakage minus that due to evaporation).
    - d. Results of retesting required due to leakage exceeding specified percentages allowed.

## **PART 2 - PRODUCTS**

### **2.1 MANUFACTURERS**

- A. Subject to compliance with the Contract Documents, the following manufacturers are acceptable:
  - 1. Non-shrink grout: See DIV 03.
  - 2. Epoxy grout: See DIV 03
  - 3. Instant setting waterstop:
    - a. Sikaset Plug by Sika Corporation.
    - b. Sikafix HH LV by Sika Corporation.
    - c. MasterSeal 590 by BASF.
  - 4. Injectable polyurethane sealant:
    - a. De Neef by GCP Applied Technologies, Inc.
    - b. SikaFix HH+ by Sika Corporation.
    - c. Mountain Grout by Green Mountain International.
  - 5. Epoxy adhesive:
    - a. Sikadur-35 Hi-Mod LV by Sika Corporation.
- B. Reference Division 03 specifications for patching and repair materials.

### **2.2 MATERIALS**

- A. Water for Testing:
  - 1. See ACI 350.1.
  - 2. Wastewater plant: Raw or treated effluent water.
  - 3. Water treatment: Potable water.
  - 4. Coordinate delivery of water for testing with Owner.
- A. Reference DIV 03 for patching and repair materials.
- B. Any patching or repair materials that may come into contact with potable water in tanks shall be approved for drinking water per NSF, UL, USDA, or WQA.

## **PART 3 - EXECUTION**

### **3.1 PREPARATION BEFORE TESTING**

- A. General:
  - 1. Verify the specified 28-day concrete strength has been achieved prior to testing.
  - 2. Testing to be performed prior to placement of exterior backfill soil.
    - a. Contractor is responsible for phasing construction to minimize the impact of and to leak testing.
  - 3. Contractor to furnish all necessary materials (such as gaskets and flange cover plates).
  - 4. Testing to be performed prior to application of any specified coatings or insulation or backfilling, unless otherwise noted.

5. Test the following tanks prior to backfilling:
  - a. Clarifier, sludge storage tank, pump station wet well and sumps for drumfilters.
- A. Source of water:
  1. Coordinate use and delivery of test water test with Owner.
  2. The source of water will be hatchery effluent water].
  3. Contractor shall provide the means of transporting the water to the structure being tested.
- B. Cleaning:
  1. Thoroughly clean interior of structure to be tested of all debris and dirt and hose down surfaces of all walls and slabs.
  2. Cleaning may be required after satisfactory test completion.
- C. Patching and Finishing:
  1. Prepare concrete surfaces in accordance with ACI 350.1 and DIV 03.
    - a. Fill all holes, voids, and honeycombed areas per DIV 03. Cracks suspected to cause leakage to be filled and sealed.
    - b. Review tank for areas of potential leakage before filling.

### **3.2 WATERTIGHTNESS TESTING**

Commence testing with water 12" from structure rim unless specified otherwise in the Drawings or other Sections.

- A. Perform a watertightness test as required by Engineer on any additional structure when in the opinion of the Engineer the structure contains sufficient concrete defects that could impair the watertightness of the structure.
  1. Testing to conform to requirements of this Section with allowable leakage and other criteria as established by Engineer.
- B. Test for leakage in accordance with ACI 350.1, latest edition, Chapters 1 and 2, and this Section.
  1. Isolate sections of structures that can be isolated during operation.
    - a. Test each section separately.
  2. Allow Owner's Representative to witness testing for watertightness and review accompanying results.
- C. Place evaporation pan in an easily accessible location.
- D. Record level of water in structure and evaporation pan and water temperature at commencement of the test period.
- E. During testing period, inspect structure for areas indicating leakage.
  1. Any areas evidencing running water to be repaired and patched.
  2. Patching or repair of leaks as defined above shall be completed independent of the watertightness test.
    - a. Passing watertightness test does not relieve Contractor from repairing running water leaks.
- F. Record level of water surface in the structure and evaporation pan and temperature every 24 HRS until end of test period.
  1. Test periods defined per ACI 350.1.
- G. If leakage is greater than that allowed, repair and patch areas suspected of causing the leakage.
  1. Re-test structure using the same procedure until leakage is equal to or less than that allowed.
  2. Provide repair plan to Engineer for approval prior to repair of tank.
  3. Cracks suspected to cause leakage to be filled and sealed to prevent leakage.
    - a. Patching to be performed after defective concrete area is cleaned of all loose material to surface of sound concrete.
  4. Prior to patching activities, Contractor to submit patching materials and procedures for review and approval by Engineer.
- H. Dispose of water used for testing.

1. Dispose of water used for testing to an area which will not damage new or existing construction and will not interfere with construction operations or plant operations.
2. Provide hoses, temporary connections, temporary fittings and other conduits as necessary to dispose of test water without damage to structure or terrain.
3. Point of disposal to be approved by Owner.

**END OF SECTION**