



**MAINE DEPARTMENT OF
INLAND FISHERIES AND WILDLIFE**

ADDENDUM NO. 2

23-OCT-24

TO THE SPECIFICATIONS, PROPOSAL, CONTRACT AND BOND

FOR THE CONSTRUCTION OF

**EFFLUENT CHARACTERISTIC DESIGN AT
EMBDEN REARING STATION**

SOMERSET COUNTY

BGS PROJECT NO.: 3289



SUBJECT:	ADDENDUM NO. 2
PROJECT:	Effluent Characteristic Design at Embden Rearing Station
TO:	Richard Parker - DIFW
FROM:	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.

PART 1 - QUESTIONS AND ANSWERS

- 1. QUESTION:** The tank cover suppliers are saying there is not enough detail on the drawings to properly quote the covers. 46 13 01 - ALUMINUM COVERS - DOME TYPE 46 13 15 - ALUMINUM COVERS - FORMED PANEL TYPE.

ANSWER: See updated (from Addendum 01) 15S-102.

SOURCE: Joe LaRose jlrose@gannestonconstruction.com Tue 10/8/2024 04:34
- 2. QUESTION:** Which division is responsible for supplying and installing the control panels?

ANSWER: The Contractor is responsible for providing all elements in the contract documents.

SOURCE: : Joe LaRose jlrose@gannestonconstruction.com Tue 10/8/2024 13:54
- 3. QUESTION:** The site drawings & floor plans for the Alternate 1 Chemical Dosing Building appear to show an exterior building pad and 2 bollards. Is this correct?

ANSWER: Correct – The exterior pad measures 6’-0” x 3’-0” and shall have an 8” thick slab reinforced w/ #4@12” on center, each way, 2” clear from the top of the slab. The slab shall be constructed flat and have a perimeter wall and backfill similar to detail 5/10S-502. There are two pipe bollards, one at each corner of the slab.

SOURCE: Joe LaRose jlrose@gannestonconstruction.com Wed 10/9/2024 09:34
- 4. QUESTION:**

Base Bid Questions-

 - a. Are the clarifier and backwash control panels supposed to be furnished with the equipment?
 - b. Drawing 10E-502: Is the alarm panel existing and are we adding wiring or is this a complete new system?
 - c. Drawing 11E-101: No electrical shown to the clarifier or sludge storage tank. Is there any wiring associated with these? For example, is there a clarifier drive motor? Are there level instruments in the sludge tank?
 - d. Drawing 10E-651: Panel E2 shows circuits for heat trace. Where is the heat trace located?

Bid Alt Question-



- e. Drawings 11D-101, 11E-101, 12D-101, 12E-101: These drawings show a well associated with the chemical building. I do not see any provisions for a well pump. Is there a well pump and well pump controller?

ANSWER:

- a. Yes, both control panels are to be furnished with the equipment.
- b. This is to be a completely new system.
- c. The drawing has been modified with additional information.
- d. Refer to the revised drawing 11E-101.
- e. See Section 33 11 15 – Water Wells, inclusive of addenda.

SOURCE: Michael Vining mikegcmaine@gmail.com Thu 10/10/2024 08:29

5. **QUESTION:** There is no reinforcing shown for the sludge mixing pump building on 15S-301, please submit an RFI or provide some direction.

ANSWER: Foundation walls are reinforced with #5@12" OC, EW, each face. Footings are reinforced with (4) #5 longitudinal and #5@12" oc transverse.

SOURCE: Jason Stutheit jason@cemmaine.com Thu 10/10/2024 10:41

6. **QUESTION:** There is a spec section for wood roof trusses. The only wood framed roof base bid) is the Sludge Pump Building which appears to be framed conventionally with 2X material.

ANSWER: Correct. The Sludge Pump Building Roof is conventional wood framing. The wood roof trusses applies to the Chemical Dosing Building.

SOURCE: Joe LaRose jlarose@gannestonconstruction.com Thu 10/10/2024 12:48

7. **QUESTION:** The Metal Roofing specification includes gutters and downspouts. I don't see any shown on the drawings.

ANSWER: Gutters and downspouts are not required for this project.

SOURCE: Joe LaRose jlarose@gannestonconstruction.com Thu 10/10/2024 12:51

8. **QUESTION:**

- a. Is a VFD intended to be supplied with the control panel for section 43 22 56?
- b. Does the VFD need to invert single phase to 3 phase?
- c. Is the VFD intended to be located inside the control panel? If not does the VFD need a NEMA 12 shroud due to location?

ANSWER:

- a. A VFD is not intended.
- b. The pump is single-phase, conversion is not required.
- c. All controls shall be contained within the control panel.

SOURCE: Ian Lane ilane@hayespump.com Thu 10/10/2024 15:45

9. **QUESTION:**

- a. Who is responsible for providing and installing the controls and instrumentation? If the Owner / Engineer has a provider already, who is responsible for providing and installing the conduit and cable infrastructure for the controls and instrumentation?



- b. Regarding Specification Section 06-8200 Mats & Fiberglass Reinforced Plastic Fabrications, we see an FRP spec was provided, however, nothing on the drawings was found indicating FRP material. Can you please confirm where we can find this scope?
- c. For Specification Section 46-7133 Rotary Drum Filter, we cannot find the corresponding schedule to size the units in either the written specs or on the drawings. We see the existing drum filter building on the drawings, however, there are no drawings of the drum filters themselves. Please confirm this scope.
- d. For Section 05-5243 Welded Aluminum Railings, the manufacturer Peak-to-Peak Railings does not offer a welded railing on curved areas. Would the option of a mechanical railing for the curved area be an acceptable substitute to the welded railing?

ANSWER:

- a. Controls and instrumentation is to be provided by the contractor and equipment suppliers in accordance with the drawings and specifications.
- b. Per Addendum #1 this section has been removed.
- c. Section 46 71 33 ROTARY DRUM FILTER will be removed.
- d. Mechanical railing will be acceptable.

SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49

- 10. QUESTION:** We are requesting a 3 to 4 week Bid Date Extension to allow time for Subs and Suppliers to submit.

ANSWER: Per Addendum #1 a bid extension will not be awarded.

SOURCE: Jeff Todd Jeff@apex-constructioninc.com Mon 10/14/2024 13:27

- 11. QUESTION:**

- a. Is a new drum filter required for this project? If so, can you provide additional details such as dimensions, flow rate, etc? There is a specification section that appears to indicate a new drum filter but the drawings are vague.
- b. Can you verify if the new Well is part of the bid alternate pay item?
- c. Can you clarify where the 'Crushed stone Surfacing' spec section 32 15 40 applies?
- d. Is Sod required?
- e. The geotech report is indicating foundations be placed on a minimum of 6" crushed stone base. The drawings do not reflect this. Can you please clarify what will be required for basis of our bid?
- f. The detail on drawing 11C-101 detail in the upper top left corner has a note indicating the potential of having to remove/replace 8" of additional material beneath asphalt paved areas. So all bidders on the same page should we include this in our bid or not?

ANSWER:

- a. Rotary Drum Filters are not being added to this project. There are existing rotary drum filters. Flow rates are detailed in Addendum #01.
- b. The Well and all components are part of the Alternate Bid.
- c. Refer to Sheet 11C-101 Detail 1, the crushed stone surfacing spec is for the roadway section
- d. Sod is not required but can be used in lieu of seeding.



- e. All foundations shall bear on a minimum of 6" compacted crushed stone.
- f. Answer: Contractor can assume for bid.

SOURCE: Michael Vining mikegcmaine@gmail.com Mon 10/14/2024 14:12

12. QUESTION:

- a. The plans have a hand hole detail (attached), but I cannot find a handhole location on the plans.
- b. Can you please give locations and quantities?
- c. The light fixture schedule does not have a W2 light fixture, but the sludge building electrical plan has a W2 fixture.
- d. Please specify the W2 fixture.
- e. Please provide a picture, with brand and type, of the DP1 panel, so that we can verify that there is space in the panel for 3 new circuit breakers, and so we can specify the breaker brand and type.
- f. Please provide details on the alarm panels (attached).
- g. Please provide details on the heat traces (attached).

ANSWER:

- a. Handholes are not specifically identified on the plans. Handholes shall be provided in accordance with 26 05 43 and as required by the NEC.
- b. See answer to A.
- c. This fixture should be W1.
- d. See answer to C.
- e. Picture is not available. Please follow the plan documents.
- f. No additional details are available. The alarm panels are to be provided as a coordinated system to meet the performance conveyed by the drawings.
- g. The heat traces shall be provided by the contractor to meet the requirements of the drawings. Provide a heat trace package with a self-contained electronic temperature controller, heat trace cables, 100 ohm resistance temperature detector, and 30mA ground-fault protection. System shall include alarm contacts.

SOURCE: tom hedstromelectric.com tom@hedstromelectric.com Tue 10/15/2024 05:49

13. QUESTION:

- a. Re: Sludge mixing pump bldg. – dwg 15s-301 section #3: Are the vertical & horizontal reinforcing bars just one layer or at each face. The Alt. 1 Dosing Bldg. shows rebar at each face.
- b. Re: Sludge Storage Tank - dwg 15d-4022 - No structural details for foundation reinforcing for base pad and walls.

ANSWER:

- a. Foundation walls are reinforced with #5@12" OC, EW, each face. Footings are reinforced with (4) #5 longitudinal and #5@12" oc transverse.
- b. Structural Details are not called out on process sheets.

SOURCE: Joe LaRose jarose@gannestonconstruction.com Tue 10/15/2024 08:04



14. QUESTION:

- a. The Dosing Bldg. (Alt. 1) shows a clear height of 16'-3". It also shows roof trusses where the bottom chord is below that elevation. The building sections don't appear to show the framing as roof trusses but the structural plan indicates trusses.
- b. Sludge Pump Building drawing 15S-302 has details for roof trusses but framing appears to be conventional framed.

ANSWER:

- a. The Chemical Dosing Building (Series 12) roof framing is metal plate connected wood trusses spaced @ 2'-0" OC.
- b. See Addendum 1, Answer 1 for Sludge Pump Building roof framing.

SOURCE: Joe LaRose ilarose@gannestonconstruction.com Tue 10/15/2024 08:30

- 15. QUESTION:** There is a specification section 07 13 26 SELF-ADHERING SHEET METAL WATERPROOFING but nothing indicated on the drawings nor any conditions that would require it.

ANSWER: Per Addendum #1 this is to be placed between CMU bricks and building siding.

SOURCE: Joe LaRose ilarose@gannestonconstruction.com Tue 10/15/2024 08:37

- 16. QUESTION:** The maximum branch breaker size is 100 amp for this GE panel. Should panel DP-1 be upgraded to accept the additional load as part of the base bid?

ANSWER: Contractor to Upgrade panel to accommodate design.

SOURCE: Michael Vining mikegcmaine@gmail.com Tue 10/15/2024 09:37

- 17. QUESTION:** There is a specification section 08 51 13 ALUMINUM WINDOWS but none are indicated on the drawings.

ANSWER: Per Addendum #01 there are no windows on this project. This specification section will be deleted.

SOURCE: Joe LaRose ilarose@gannestonconstruction.com Tue 10/15/2024 14:20

- 18. QUESTION:** There is a specification section 08 90 00 LOUVERS AND VENTS but none are indicated on the drawings.

ANSWER: See Sheet 12M-101 and Sheet 15M-101.

SOURCE: Joe LaRose ilarose@gannestonconstruction.com Tue 10/15/2024 14:26

19. QUESTION:

- a. There is a specification section 09 77 61 FIBERGLASS REINFORCED PLASTIC (FRP) PANELS but none is indicated on the drawings.
- b. There is no specification for the fiber-cement siding and trim. Does this come pre-finished or is it field painted?

ANSWER:

- a. Spec section 09 77 61 is not required and will be deleted.
- b. The fiber-cement siding and trim should be pre-finished. Field touchups around field cuts should be performed in accordance with the manufacturer recommendations.



- SOURCE:** Joe LaRose jarose@gannestonconstruction.com Wed 10/16/2024 02:48
- 20. QUESTION:** Drawing 13D-401 shows the PWW C.L. elevation at 391.17 but it shows the bottom of the concrete structure at elevation 391.75 which is higher than the pipe.
ANSWER: 391.17 should be changed to 392.60.
SOURCE: Joe LaRose jarose@gannestonconstruction.com Wed 10/16/2024 05:27
- 21. QUESTION:** Drawing 15S-101 is labeled as 'Sludge Storage Tank Structural Plans'.
ANSWER: This sheet title has been revised to "SLUDGE MIXING PUMP BUILDING STRUCTURAL PLANS"
SOURCE: Michael Vining mikegcmaine@gmail.com Wed 10/16/2024 06:18
- 22. QUESTION:** Is this project subject to Buy America Build America (BABA)?
ANSWER: No
SOURCE: Eva Schaible eschaible@phelanconstruction.com Fri 10/11/2024 15:55
- 23. QUESTION:** 10S-503 : GENERAL STRUCTURAL DETAILS 3: Please confirm where the # 6 Alum Stair and # 2 Stair pad details are located on the plans
ANSWER: Per Addendum #01 minimum of one step stair is required near clarifier bridge.
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49
- 24. QUESTION:** 10D-602 : PROCESS SCHEDULES: Please confirm the note # 2-3-4. Where are they located to refer to in the schedules?
ANSWER: See PART 3
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49
- 25. QUESTION:** 10E-651 : ELECTRICAL SCHEDULES: Luminaire Schedule: The lighting is not shown for what building it is located in. Are all the lights to be furnished and installed on all the buildings shown on this schedule?
ANSWER: Refer to building electrical plans for luminaire locations and designations.
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49
- 26. QUESTION:** 10E-651 : ELECTRICAL SCHEDULES: Luminaire Schedule: Please confirm where W2 exterior light is on the schedule. This light is shown 15E-101 Sludge Mixing Pump building
ANSWER: The light on the mixing pump building should refer to W1 instead of W2.
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49
- 27. QUESTION:** 10E-651 : ELECTRICAL SCHEDULES: Panel Schedule E2: What does SLF stand for? E2: 7 & 9 shows this is for the WEF-1 and WEF-2 on sheet 15E-101 the panel schedule as SLF
ANSWER: SLF is the correct tag. 15E-101 has been updated to reflect this. SLF stands for Sludge Pump Fan, See Added HVAC Schedule Sheet.
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49
- 28. QUESTION:** 10E-651 : ELECTRICAL SCHEDULES: Panel Schedule E2 CKT# 5 is for SH-2. Please confirm what this is tagged to. There is SH-1 shown for the Gas Fired Unit heater
ANSWER: SH-2 is to be changed to SH-1.
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49



29. **QUESTION:** 10E-651 : ELECTRICAL SCHEDULES: CHP-1 Clarifier hopper pump. Is this Circuit # 2 & 4? It is not shown on power plan. Does this include the CVP Clarifier Control Panel CVP-1?
ANSWER: Yes, the Clarifier Control Panel is shown on 15E-101 and provides power to both CVP-1 and CHP-1.
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49
30. **QUESTION:** 10E-651 : ELECTRICAL SCHEDULES: Panel E2 - Lighting Circuit # 8 Lighting. This is not labeled on the power plan on sheet 15E-101
ANSWER: Sheet 15E-101 includes the designation 8 near each luminaire, indicating the circuiting source in accordance with the electrical legend.
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49
31. **QUESTION:** 10E-651 : ELECTRICAL SCHEDULES: Panel E2 - Receptacles Circuit # 6. This is not labeled on the power plan on sheet 15E-101
ANSWER: Sheet 15E-101 includes the designation 6 near each receptacle, indicating the circuiting source in accordance with the electrical legend.
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49
32. **QUESTION:** 10E-651 : ELECTRICAL SCHEDULES: Panel E2 - Outdoor Lights Circuit # 10. This is not labeled on the power plan on sheet 15E-101
ANSWER: Sheet 15E-101 includes the designation 10 near the outdoor luminaire, indicating the circuiting source in accordance with the electrical legend.
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49
33. **QUESTION:** 11D-101 : EMBDEN STATE FISH HATCHERY OVERALL PROCESS PIPING PLAN: Clarifier: This has a note to see sheet "14D-401." Please confirm this sheet should be 14S-101 & 14S-102. There are no 14D sheets provided
ANSWER: See Addendum 01 - 21.
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49
34. **QUESTION:** 11D-101 : EMBDEN STATE FISH HATCHERY OVERALL PROCESS PIPING PLAN: New Manhole # 15 is not shown on the Manhole schedule on sheet 10D-602. The note shows MHxx, the manhole is #15
ANSWER: MH 11 should be labeled as MH 15.
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49
35. **QUESTION:** 11E-101 : OVERALL ELECTRICAL PLAN: Confirm the scope / extent of work of the power and comm for Alternate # 1. Is the connection to the Chemical Dosing Building as full Alternate # 1 from Drum Filter Building?
ANSWER: Only conduit installation up to the limits as shown on plan are part of base bid.
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49
36. **QUESTION:** 11E-101 : OVERALL ELECTRICAL PLAN: Chemical Dosing Building Add Alt # 1: Please confirm the propane tank specification and pad location in all drawings.



ANSWER: Pads are shown on plan sheets.

SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49

- 37. QUESTION:** 12S-101 : CHEMICAL DOSING BUILDING STRUCTURAL PLANS: Chemical Dosing Building Add Alt #1, Section #1 & #2- 12S-301: Have 2" thick concrete with ww reinforcing and 4" thick concrete slab. 12S-101-Foundation plan has 1" thick. Please confirm this detail

ANSWER: This detail is correct. 2" topping slab over rigid insulation over 4" slab on grade.

SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49

- 38. QUESTION:** 12S-101 : CHEMICAL DOSING BUILDING STRUCTURAL PLANS: At the exterior door, is there a slab detail? Is there a dimension to locate this door opening? Does this slab step down?

ANSWER: There is no door stoop at this location.

SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49

- 39. QUESTION:** 12S-101 : CHEMICAL DOSING BUILDING STRUCTURAL PLANS: Are there column grids on the structural sheet to coordinate with the structural details and column grid on the architectural sheets?

ANSWER: Column grids will be shown on the structural sheet for reference.

SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49

- 40. QUESTION:** 12S-303 : ROOF FRAMING SECTIONS AND DETAILS: 4/12S-303: Is there a dimension to locate the CMU wall on the foundation wall? The Foundation plan on the Structural sheets do not have column grids

ANSWER: The out to out concrete foundation wall dimensions shown on sheet 12S-101 shall be 16'-8" x 16'-8" in lieu of 16'-3" x 16'-3". The INTERIOR face of cmu wall will align with the interior face of the concrete foundation wall.

SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49

- 41. QUESTION:** 12A-101 : CHEMICAL DOSING BUILDING PLANS: Interior elevation tags: Please confirm the elevation tags

ANSWER: Interior elevations are shown on sheet 12A-201 as per the tag.

SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49

- 42. QUESTION:** 12A-101 : CHEMICAL DOSING BUILDING PLANS: First Floor Plan: Chemical Dosing Plan Add Alt # 1: Please confirm the location of the wall type tag to a legend and detail 1A

ANSWER: Refer to wall sections on sheet 12A-321. There is only 1 wall type for this building.

SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49

- 43. QUESTION:** 12A-101 : CHEMICAL DOSING BUILDING PLANS: Referring to Sheet 12A-101, in the floor plan, there is a detail for a storage cupboard for PPE and equipment. Who is responsible for furnish + install? If GC is responsible, please clarify scope and provide specs.

ANSWER: Contractor is responsible, see Addendum 01 – 5.

SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49

- 44. QUESTION:** 12A-301 : CHEMICAL DOSING BUILDING BUILDING SECTIONS: Gravity Fed Safety Shower: Please confirm this is noted and does not show any context



ANSWER: The gravity fed shower is not shown in sections, to allow clarity to the wall and structure.

SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49

45. **QUESTION:** 12A-321 : CHEMICAL DOSING BUILDING WALL SECTIONS AND DETAILS: Fascia: Please confirm the size and specifications

ANSWER: The fascia shall be sized to match the height of the wood truss.

SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49

46. **QUESTION:** 12A-321 : CHEMICAL DOSING BUILDING WALL SECTIONS AND DETAILS: Is there a soffit vent to be installed in the Fiber Cement Soffit?

ANSWER: No.

SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49

47. **QUESTION:** 12A-601 : CHEMICAL DOSING BUILDING DOOR SCHEDULE AND DETAILS: What is the exterior trim at the doors and exterior louvers and other equipment on the exterior walls?

ANSWER: Fiber cement trim to match the siding.

SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49

48. **QUESTION:** 12D-401 : CHEMICAL DOSING BUILDING ENLARGED PROCESS PIPING PLAN & SECTION: Section Detail 2/ 12D-401: Please confirm where the detail 21D-101 is located. There are no plumbing plans for this add alt

ANSWER: 21D-101 should be 11D-101.

SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49

49. **QUESTION:** 12D-401 : CHEMICAL DOSING BUILDING ENLARGED PROCESS PIPING PLAN & SECTION: Please confirm the basis of design for the gravity safety shower & eye wash.

ANSWER: S19390 Series Gravity Fed Safety Showers.

SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49

50. **QUESTION:** 12D-401 : CHEMICAL DOSING BUILDING ENLARGED PROCESS PIPING PLAN & SECTION: Please confirm who furnishes and installed the 55 Gal Drum

ANSWER: Owner is responsible for supplying 55 gallon drums.

SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49

51. **QUESTION:** 12D-401 : CHEMICAL DOSING BUILDING ENLARGED PROCESS PIPING PLAN & SECTION: Please confirm who furnishes and installs the potable water lines and connections

ANSWER: Contractor is responsible for potable water lines and connections.

SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49

52. **QUESTION:** 12M-101 : CHEMICAL DOSING BUILDING MECHANICAL PLAN: Chemical Dosing Building Add Alt #1: 12 Sheet Series Please confirm where the equipment schedule is located for : L-1 L-2 L-3 D-1 D2 D-3 WEF-1 MAU-1 UH-1 Floor Drain Water Heater

ANSWER: See HVAC Schedule Sheet.

SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49



- 53. QUESTION:** 12M-101 : CHEMICAL DOSING BUILDING MECHANICAL PLAN: Is there a vent off the duct vent in the area of 225 CFM to be installed?
ANSWER: Contractor to install duct vent.
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49
- 54. QUESTION:** 12M-101 : CHEMICAL DOSING BUILDING MECHANICAL PLAN: MAU-1: Please confirm this detail and specifications on a schedule
ANSWER: See PART 3: added sheet 10M-601.
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49
- 55. QUESTION:** 12E-101 : CHEMICAL DOSING BUILDING ELECTRICAL PLAN: Please confirm the water heater specifications and information noted on this plan. Is there a water heater to be furnished and installed?
ANSWER: Water Heater is included is Division 22 20 00 added for Addendum #01.
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49
- 56. QUESTION:** 12E-101 : CHEMICAL DOSING BUILDING ELECTRICAL PLAN: 1/12E-101: Please confirm what the circle represents in the center of the plan
ANSWER: Circle is an artifact to be removed.
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49
- 57. QUESTION:** 12E-101 : CHEMICAL DOSING BUILDING ELECTRICAL PLAN: Where is the water heater Panel E1 # 7-9?
ANSWER: Water heater panel is shown on plan as fed from circuit E1: 3,5 per the panel schedule.
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49
- 58. QUESTION:** 12E-101 : CHEMICAL DOSING BUILDING ELECTRICAL PLAN: D-1: Please confirm the electrical panel circuit and specification
ANSWER: Provide power to dampers from mechanical equipment as listed on new sheet 10M-601. Interlock damper with equipment operation.
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49
- 59. QUESTION:** 15S-101 : SLUDGE STORAGE TANK STRUCTURAL PLANS: 15S-101 : This sheet it titled: Sludge Storage Tank Structural Plans. The plans on this sheet are for Sludge Pump Building Structural Plans.
ANSWER: The title of the sheet should be SLUDGE MIXING PUMP BUILDING.
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49
- 60. QUESTION:** 15S-101 : SLUDGE STORAGE TANK STRUCTURAL PLANS: General Note # 1: Please confirm sheet 00S-100 for general structural notes. There are sheets 10S-001
ANSWER: Structural General notes are on sheet 10S-001.
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49
- 61. QUESTION:** 15S-101 : SLUDGE STORAGE TANK STRUCTURAL PLANS: General Note # 2: Please confirm sheet 00S-500 for typical details. There are sheets : 10S-001-501-502-503-504



ANSWER: Typical structural details sheets are 10S-501 thru 10S-504.

SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49

- 62. QUESTION:** 15S-101 : SLUDGE STORAGE TANK STRUCTURAL PLANS: Sludge Building Foundation Plan: At column #2/A - Please confirm rectangle represents propane tank pad (Sheet 15M-101). Sheet 1/5D-401 does not show this information. Please confirm the scope of work, details and specifications on all the Civil and corresponding sheets

ANSWER: The exterior pad measures 6'-0" x 3'-0" and shall have an 8" thick slab reinforced w/ #4@12" on center, each way, 2" clear from the top of the slab. The slab shall be constructed flat and have a perimeter wall and backfill similar to detail 5/10S-502. There are two pipe bollards, one at each corner of the slab.

SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49

- 63. QUESTION:** 15S-101 : SLUDGE STORAGE TANK STRUCTURAL PLANS: What is the roof framing to be installed?

ANSWER: Roof rafters shall be 2x12 @ 16" O.C.

SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49

- 64. QUESTION:** 15S-301 : SLUDGE MIXING PUMP BUILDING SECTIONS: Is the 8" cmu wall centered on the footing? The wall looks offset from the column line "A"

ANSWER: Yes. The CMU wall shall be centered on the foundation wall.

SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49

- 65. QUESTION:** 15S-301 : SLUDGE MIXING PUMP BUILDING SECTIONS: Is there rigid insulation to be installed in the footing wall?

ANSWER: No

SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49

- 66. QUESTION:** 15S-302 : SLUDGE MIXING PUMP BUILDING ROOF FRAMING SECTIONS AND DETAILS: Detail 4/15S -302: Please confirm the additional notes and dimension for this detail, there are no notes shown. Is the 8" cmu wall offset on the column line at the footing?

ANSWER: Notes have been added to the detail. The CMU wall shall be centered on the foundation wall.

SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49

- 67. QUESTION:** 15S-302 : SLUDGE MIXING PUMP BUILDING ROOF FRAMING SECTIONS AND DETAILS: Detail 2/15S -302: Please confirm where this detail is referenced from. Top of CMU 247.00 vs the TO Wall 406'-2" or 406" 15S-301

ANSWER: Elevation note revised to reference sections.

SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49

- 68. QUESTION:** 15S-302 : SLUDGE MIXING PUMP BUILDING ROOF FRAMING SECTIONS AND DETAILS: For the 7 1/4" insulated concrete slab floor, please confirm this detail for insulation and concrete. This detail shows the insulation embedded in the concrete. What is the depth



of the concrete slab? Is there a vapor barrier in the concrete? Will there be rigid insulation on the building footing wall?

ANSWER: The floor shall consist of a 4" reinforced concrete slab, vapor retarder over the concrete, 2" rigid insulation, then 2" concrete topping slab with welded wire mesh reinforcing. Align the top of the topping slab with the top of the foundation walls.

SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49

- 69. QUESTION:** 15A-101 : SLUDGE MIXING PUMP BUILDING PLANS: Interior Elevation Tag: 1/15A-601: Please confirm the elevations tags. There is not a sheet 15A-601. There are interior elevation ons sheet 15A-201. Please confirm the interior elevation tags

ANSWER: The sheet reference has been revised to 15A-201.

SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49

- 70. QUESTION:** 15A-101 : SLUDGE MIXING PUMP BUILDING PLANS: Wall Tag 1A: Please confirm the wall type schedule

ANSWER: There is only 1 wall type. This has been added to the wall section titles on sheet 15A-321.

SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49

- 71. QUESTION:** 15A-101 : SLUDGE MIXING PUMP BUILDING PLANS: Door Type Tag: Is there a door schedule? Please confirm the sheet location. Division 08 08 11 00 has exterior door as 48" wide. Please confirm the hardware set for this exterior door. 7'-0" H x 3'-0" Wide Steel Door: Note on this sheet states all doors to be FRP? Please confirm this detail if the door is to be hollow metal frame on the exterior or FRP.

ANSWER: Door schedule has been added to sheet 15A-101. The door has been revised to be 48" wide. Hardware set is HW-2. Spec section 08 70 00 has been revised to reflect the correct hardware set.

SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49

- 72. QUESTION:** 15A-101 : SLUDGE MIXING PUMP BUILDING PLANS: At Exterior Door #2: Is there a walk off slab? Please confirm this slab detail at the threshold.

ANSWER: There is no walk-off slab at this door. The door shall be located over the concrete foundation wall. There will be step down to the paved area around the building.

SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49

- 73. QUESTION:** 15A-101 : SLUDGE MIXING PUMP BUILDING PLANS: Is there a finish schedule for the Sludge Mixing Pump Building?

ANSWER: There are no special finishes for the pump building. Finishes for the exposed materials shall be per the specifications for each material.

SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49

- 74. QUESTION:** 15A-201 : SLUDGE MIXING PUMP BUILDING ELEVATIONS: Interior Elevations: The outside context (boundary) lines are missing for the elevations

ANSWER: The limits of the CMU hatch is the limit of the interior elevation.

SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49



- 75. QUESTION:** 15A-301 : SLUDGE MIXING PUMP BUILDING BUILDING SECTIONS: Please confirm the overhang dimension for the roof on both sides
ANSWER: The front (high) and back (low) overhangs shall be a minimum of 8". The side overhangs shall be a minimum of 1-½". All overhangs shall be from the face of the exterior wall finish.
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49
- 76. QUESTION:** 15A-321 : SLUDGE MIXING PUMP BUILDING WALL SECTIONS AND DETAILS: What is the roof framing to be installed for rafters and framing
ANSWER: Roof rafters shall be 2x12 @ 16" O.C.
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49
- 77. QUESTION:** 15A-321 : SLUDGE MIXING PUMP BUILDING WALL SECTIONS AND DETAILS: Is there insulation above the CMU wall? What is the blocking at the wall?
ANSWER: The rigid insulation shall continue to the batt insulation at the roof rafters, so that there is no gap between the two systems. The blocking at the top of the wall shall be a double 2x8 pressure treated top plate, similar to what is shown in detail 2/15S-302.
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49
- 78. QUESTION:** 15D-401 : SLUDGE STORAGE TANK AND SLUDGE MIXING PUMP BUILDING ENLARGED SLUDGE PUMP BLDG PROCESS PIPING PLAN & SECTION: The Clarifier Vacuum Pump CVP-1: Is this to be on a housekeeping pad? it is shown offset away on the plan. The Dimensions are shown on 15A-101. What is the depth and location?
ANSWER: See Part 3 of this addendum.
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49
- 79. QUESTION:** 15D-402 : SLUDGE STORAGE TANK AND SLUDGE MIXING PUMP BUILDING ENLARGED SLUDGE STORAGE PROCESS PIPING PLAN & SECTION: Sludge Storage Tank Processing Section: Please confirm the sheet to refer to for the Dome structural drawings
ANSWER: Hatch can be found in 15S-102 Section A in Addendum 01.
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49
- 80. QUESTION:** 15E-101 : SLUDGE MIXING PUMP BUILDING POWER PLAN: Please confirm the mechanical schedule for WEF-1 & WEF-2
ANSWER: See added sheet 10M-601. These fans are now labelled SLF-1 and SLF-2.
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49
- 81. QUESTION:** 15E-101 : SLUDGE MIXING PUMP BUILDING POWER PLAN: Ground Field: See Detail 4/E-501. Please confirm this detail location. Where is the sheet E-501?
ANSWER: The reference should refer to 10E-501.
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49
- 82. QUESTION:** 15E-101 : SLUDGE MIXING PUMP BUILDING POWER PLAN: Please confirm the SH-1 on the schedule. The panel schedule has SH-2 for CKT # 5.
ANSWER: The schedule should indicate SH-1.
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49



- 83. QUESTION:** 15E-101 : SLUDGE MIXING PUMP BUILDING POWER PLAN: Please confirm the D-2 & D-3 on the schedules.
ANSWER: See added sheet 10M-601.
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49
- 84. QUESTION:** 15E-101 : SLUDGE MIXING PUMP BUILDING POWER PLAN: Exterior lighting fixture "W2." Please confirm this light fixture is not located on sheet 10E-651
ANSWER: This fixture should reference W1 instead of W2.
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49
- 85. QUESTION:** 05-5000 Metal Fabrications: We are unable to locate the associated scope of work on the drawings for this spec section. Please clarify its relevance.
ANSWER: 05-5000 is for rails, bollards, and stairs.
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49
- 86. QUESTION:** 06-8200 Mats & Fiberglass Reinforced Plastic Fabrications: We are unable to locate the associated scope of work on the drawings for this spec section. Please clarify its relevance.
ANSWER: This section was removed in Addendum 01.
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49
- 87. QUESTION:** 07-1326 Self-Adhering Sheet Membrane Waterproofing: We are unable to locate the associated scope of work on the drawings for this spec section. Please clarify its relevance.
ANSWER: See Question 4.b. of Addendum 01
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49
- 88. QUESTION:** 08-4300 Storefronts: We are unable to locate the associated scope of work on the drawings for this spec section. Please clarify its relevance.
ANSWER: Section 08-4300 was not found in specifications. It is not relevant to scope of work.
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49
- 89. QUESTION:** 09-7761 Fiberglass Reinforced Plastic (FRP) Panels: We are unable to locate the associated scope of work on the drawings for this spec section. Please clarify its relevance.
ANSWER: See Question 4.d. of Addendum 01
SOURCE: Eva Schaible eschaible@phelanconstruction.com Thu 10/17/2024 11:49
- 90. QUESTION:** the MAU-1 does not appear to be specified. If it is the same as the "mini makeup air handler", they need size, power/ fuel identification.
ANSWER: See added sheet 10M-601.
SOURCE: Heath Todd heath@apex-constructioninc.com Mon 10/21/24 11:17
- 91. QUESTION:** Is the piping going between clarifier and pump building SCH 80 PVC or DI? The figure on 15D-501 insinuates DI with the plug valve and flange callout, but the piping schedule states the pumped lines 3" and smaller are SCH 80 PVC, which seems to match the reference to "sweep els". Note 3" DI is more expensive than 4" due to it seldom being used. Should all this 3" sludge piping be PVC with PVC ball valves per 40 05 63 and PVC check valves per 40 05 66?



ANSWER: DI is not necessarily insinuated at plug valves since iron plug valves can be provided between PVC flanges. Follow Pipe Legend and Pipe Material Schedule unless specifically indicated otherwise.

SOURCE: Heath Todd heath@apex-constructioninc.com Mon 10/21/24 10:16

92. **QUESTION:** Is the 6" sludge piping from pump building to sludge tank PVC or DI? Piping is drawn as PVC, but table on 10D-602 calls out DI.

ANSWER: Provide DI pipe.

SOURCE: Heath Todd heath@apex-constructioninc.com Mon 10/21/24 10:16

93. **QUESTION:** Groundwater pressure relief valves appear on detail sheet 10S-502, noting "where shown", but I don't see any at the clarifier or sludge tank. I can't find a spec on vertical type of valves, but I see horizontal flappers specified in 40 05 52.2.4.B.

ANSWER: See PART 3.

SOURCE: Heath Todd heath@apex-constructioninc.com Mon 10/21/24 05:45

PART 2 - PROJECT MANUAL UPDATES

94. **DIVISION 00**

a. **SECTION 00 11 13 NOTICE TO CONTRACTORS**

- i. **UPDATE:** PARAGRAPH 1 – "to be received no later than 2:00:00 p.m. on Monday, October 28, 2024". See attached.

95. **DIVISION 08**

a. **SECTION 08 51 13 ALUMINUM WINDOWS PER ADDENDUM 01**

i. **REMOVE SECTION**

b. **SECTION 08 70 00 – FINISH HARDWARE**

- i. **UPDATE:** Revised Hardware Set 2 for use for the Sludge Pump Building Door

96. **DIVISION 09**

a. **SECTION 09 77 61 - FIBERGLASS REINFORCED PLASTIC (FRP) PANELS**

i. **REMOVE SECTION**

97. **DIVISION 22**

a. **SECTION 22 20 00 - PLUMBING FIXTURES AND EQUIPMENT**

- i. **UPDATE:** Spec (see attached)

98. **DIVISION 23**

a. **SECTION 23 30 00 - HVAC AIR DISTRIBUTION**

- i. **REMOVE:** Part 2.1.A.12
ii. **REMOVE:** Part 2.4 Combination Louvers
iii. **ADD:** 2.11 EXTERIOR CENTRIFUGAL WALL MOUNTED FAN
1. Fantech RVF-4 or equal.



2. Permanently lubricated, sealed ball bearings.
3. Circular Duct Connection.
4. Galvanized Steel Housing with baked, powder coat finish.
5. Statically and dynamically balanced impeller.
6. Motor:
 - a. IP44 Enclosure.
 - b. Built-in thermal overload with auto reset.
 - c. Continuous duty.
7. Max air flow Temperature: 140 Fahrenheit.
8. Accessories:
 - a. Backdraft damper with aluminum blades, stainless steel spring and rubber gasket.

99. DIVISION 33

a. SECTION 33 11 15 – WATER WELLS,

- i. **UPDATE:** Part 1.1, Add “B. Provide NEMA 4X or 3R pump control panel compatible with the pump motor and inclusive of any overload protection that the pump motor manufacturer recommends, minimum 14 gallon hydropneumatic tank, 100 psi 2-inch diameter stainless steel cased pressure gage, adjustable pressure switch initially set for on at 30 psi and off at 50 psi.

100. DIVISION 43

a. SECTION 43 22 56 – LIQUID PROCESS EQUIPMENT – SLUDGE TANK MIXING

- i. **CHANGE:** 2.3.A.1.a, “20” To “30”
- ii. **CHANGE:** 2.3.A.1.b, “8” To “10”
- iii. **CHANGE:** 2.3.A.1.c, “6 3/4” To “12”
- iv. **CHANGE:** 2.3.A.1.d, “18,000” To “55,000”

b. SECTION 43 25 13 – SUBMERSIBLE NON-CLOG PUMPS,

- i. **UPDATE:** Part 2.5, C. Provide N.O. auxiliary contact for feeder pump interlock. Contact shall close when pump is running.
- ii. **UPDATE:** Part 2.9, revised power requirements to indicate 240V, 1-phase.

101. DIVISION 46

a. SECTION 46 43 22 – CIRCULAR CLARIFIER EQUIPMENT

- i. **UPDATE:** Part 2.5. Control panel shall include motor starting equipment for each of the pumps.

b. SECTION 46 71 33 - ROTARY DRUM FILTER

- i. **REMOVE SECTION**

PART 3 - DRAWING UPDATES

102. SHEET 10M-601-

a. ADD: SHEET



103. SHEET 11E-101

- a. **UPDATE SHEET**
- b. **ADD: Well pump circuits.**

104. SHEET 10D-602-

- a. **Pipe Legend: Change "Note 4" To "Note 3."**
- b. **Notes: Change "Note 2" and "Note 4" To "General."**
- c. **Notes: Change "5-feet" To "10-feet."**

105. SHEET 10D-602-

- a. **CHANGE:**

MH 11		4'	390.52 388.24	21" SDR 35 24" SDR 25 (existing)	IN OUT	W S
-------	--	----	------------------	-------------------------------------	-----------	--------

TO:

MH 15		4'	390.82 388.92	21" SDR 35 21" SDR 35	IN OUT	NW S
-------	--	----	------------------	--------------------------	-----------	---------

106. SHEET 10E-651-

- a. **CHANGE: SH-2 TO SH-1**
- b. **ADD: Well pump circuit to Panel E1.**

107. SHEET 12D-401

- a. **ADD: "Note: In the corner of the building opposite the portable ramp shown, provide hydropneumatic tank, pressure switch and pressure gage, each with isolation valves, teed into the well pump piping."**

108. SHEET 12S-101

- a. **UPDATE: Sheet with Section Callouts**

109. SHEET 12M-101

- a. **ADD: "Note: Provide ½ inch SCH40 black steel pipe and fittings from propane tank pad to Gas fired unit heater UH-1. Include dirt leg, gas cock, sealed wall penetration, isolation valve above tank pad, and ground joint union at heater. Paint piping per 09 96 00."**

110. SHEET 12E-101

- a. **ADD: Well Pump Controller.**

111. SHEET 13D-401-

- a. **CHANGE: 391.17 TO: 392.60**

112. SHEET 14S-102



- a. **ADD:** Section 3: General note “Add 3, equally spaced, 6 inch horizontal pressure relief valves into outer most wall of chamber 1 foot above grade (UNO).”
- 113. SHEET 15A-101-**
- a. **ADD, Plan 1, Notes:** “6. Concrete housekeeping pads are represented by three 24 x 36-inch rectangles. The Contractor shall coordinate the location of the pads with the pumps on scalable/measurable sheet 15D-401. “
 - b. **UPDATE:** Sheet.
- 114. SHEET 15A-201**
- a. **UPDATE:** Sheet
- 115. SHEET 15A-301**
- a. **UPDATE:** Sheet
- 116. SHEET 15A-321**
- a. **UPDATE:** Sheet
- 117. SHEET 15S-101**
- a. **UPDATE:** Sheet
- 118. SHEET 15S-102**
- a. **Add: Section A: General note** “Add 3, equally spaced, 6 inch horizontal pressure relief valves into outer most wall of chamber 1 foot above grade (UNO).”
- 119. SHEET 15S-302**
- a. **UPDATE:** Sheet - Elevation note revised to reference sections.
- 120. SHEET 15M-101-**
- a. **ADD:** “Note: Provide ½ inch SCH40 black steel pipe and fittings from propane tank pad to Gas fired unit heater SH-1. Include dirt leg, gas cock, sealed wall penetration, isolation valve above tank pad and ground joint union at heater. Paint piping per 09 96 00.”
 - b. **CHANGE:** Tag “WEF-1” To “SLF-1”
 - c. **CHANGE:** Tag “WEF-2” To “SLF-2”
 - d. **CHANGE:** Tag “D-2” To “D-4”
 - e. **CHANGE:** Tag “D-3” To “D-5”
 - f. **CHANGE:** Tag “L-2” To “L-4”
 - g. **CHANGE:** Tag “L-3” To “L-5”
- 121. SHEET 15D-102-**
- a. **REMOVE: Section 2 and Section 3.**
 - b. **REMOVE: From Section B:** “Thicken tank base slab pipe elbow location, see detail.”



122. SHEET 15D-402

- a. **ADD-Section 2, Boxed Note**, "Provide a total of not less than two hatches in the dome. One shall be 30x30 located between the two 3-inch SLU pipes. The second shall be 30x30 (not 24x24) and located over the overflow standpipe."

123. SHEET 15E-101-

- a. **CHANGE:** Tag "WEF-1" To "SLF-1"
- b. **CHANGE:** Tag "WEF-2" To "SLF-2"
- c. **CHANGE:** Tag "D-2" To "D-4"
- d. **CHANGE:** Tag "D-3" To "D-5"
- e. **CHANGE:** Tag "L-2" To "L-4"
- f. **CHANGE:** Tag "L-3" To "L-5"

END OF ADDENDUM 2

00 11 13
Notice to Contractors

EFFLUENT CHARACTERISTIC DESIGN AT EMBDEN REARING STATION

BGS project No.: 3289

This project will replace the existing open air concrete clarifier and sludge storage tanks with new covered sludge storage and clarifier tanks. This project will also replace existing piping and install a new clarifier solids pump building. A Bid Alternate 1 has been included in this bid set with the potential to install a chemical dosing and pump building.

The contract shall designate the Substantial Completion Date on or before **31 December 2025**, and the Contract Final Completion Date on or before **30 June 2026**.

1. Submit bids on a completed Contractor Bid Form (section 00 41 13), provided in the Bid Documents, include bid security when required, and scan each item as an attachment to an email addressed to: BGS.Architect@Maine.gov, so as to be received no later than **2:00:00 p.m. on Monday, October 28, 2024**. The email subject line shall be marked "**Bid for EFFLUENT CHARACTERISTIC DESIGN AT EMBDEN REARING STATION**".

Bid submissions will be opened and read aloud at the time and date noted above at the Bureau of General Services office, accessible as a video conference call. Those who wish to participate in the call must submit a request for access to BGS.Architect@Maine.gov.

Any bid received after the noted time will not be considered a valid bid and will remain unopened. Any bid submitted by any other means will not be considered a valid bid. In certain circumstances, the Bureau of General Services may require the Bidder to surrender a valid paper copy of the bid form or the bid security document. The Owner reserves the right to accept or reject any or all bids as may best serve the interest of the Owner.

2. Questions and comments on the *bid opening process* shall be addressed to: Division of Planning, Design & Construction, Bureau of General Services, 77 State House Station, Augusta, Maine 04333-0077, BGS.Architect@Maine.gov.
3. Questions and comments regarding the *project* design specifications or drawings shall be directed in writing to the Consultant during the bid period prior to the question and comment deadline of 5:00 p.m. on **Thursday, October 17, 2024**.

HDR
Andrew Gurski
andrew.gurski@hdrinc.com

00 11 13
Notice to Contractors

4. ☒ Bid security is required on this project.

The Bidder shall include a satisfactory Bid Bond (section 00 43 13) or a certified or cashier's check for 5% of the bid amount with the completed bid form submitted to the Owner. The Bid Bond form is available on the BGS website.

or

- ☐ Bid security is not required on this project.

5. ☒ Performance and Payment Bonds are required on this project.

If noted above as required, or if any combination of Base Bid and Alternate Bids amounts selected in the award of the contract exceeds \$125,000.00, the selected Contractor shall furnish a 100% contract Performance Bond (section 00 61 13.13) and a 100% contract Payment Bond (section 00 61 13.16) in the contract amount to cover the execution of the Work. Bond forms are available on the BGS website.

or

- ☐ Performance and Payment Bonds are not required on this project.

6. Filed Sub-bids *are not required* on this project.

7. ☐ Pre-qualified General Contractors are utilized on this project.

insert the company name, city and state for each

or

- ☒ Pre-qualified General Contractors are not utilized on this project.

8. ☒ An on-site pre-bid conference (☐ *mandatory* or ☒ *optional*) will be conducted for this project.

The pre-bid conference is intended for General Contractors. Subcontractors and suppliers are welcome to attend. Contractors who arrive late or leave early for a mandatory meeting may be prohibited from participating in this meeting and bidding.

Tuesday, 08 October 2024 @ 11:30 am

On site at the Embden Fish Rearing Station

located at 809 Cross Town Rd, Embden, ME 04958

9. Bid Documents - full sets only - will be available on or about **23 September 2024** and may be obtained *type at no cost* from:

<https://www.maine.gov/dafs/bgs/business-opportunities#invitationforbid>

00 11 13
Notice to Contractors

10. Bid Documents may be examined at:

AGC Maine

188 Whitten Road, Augusta, ME 04330

207-622-4741

Construction Summary

734 Chestnut Street, Manchester, NH 03104

603-627-8856

This page intentionally left blank.

SECTION 22 20 00
PLUMBING FIXTURES AND EQUIPMENT

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Plumbing fixtures, trim, and equipment.
- B. Related Specification Sections include but are not necessarily limited to:
 - 1. Section 01 61 03 - Equipment - Basic Requirements.
 - 2. Section 40 05 00 - Pipe and Pipe Fittings - Basic Requirements.

1.2 QUALITY ASSURANCE

- A. Referenced Standards:
 - 1. Americans with Disabilities Act (ADA):
 - a. Accessibility Guidelines for Buildings and Facilities (ADAAG).
 - 2. American National Standards Institute (ANSI):
 - a. Z358.1, Emergency Eyewash and Shower Equipment.
 - 3. American Society of Heating, Refrigerating and Air Conditioning Engineers/Illuminating Engineering Society of North America (ASHRAE/IESNA):
 - a. 90.1 IP, Energy Standard for Buildings Except Low-Rise Residential Buildings.
 - 4. American Society of Mechanical Engineers (ASME):
 - a. A112.19.3, Stainless Steel Plumbing Fixtures (Designed for Residential Use).
 - 5. American Society of Sanitation Engineers (ASSE):
 - a. 1011, Performance Requirements for Hose Connection Vacuum Breaker.
 - 6. Canadian Standards Association (CSA).
 - 7. NSF International (NSF).
 - 8. Underwriters Laboratories, Inc. (UL).

1.3 SUBMITTALS

- A. Shop Drawings:
 - 1. See Specification Section 01 61 03 and Specification Section 40 05 00.
 - 2. Color selection charts for Owner color selection.
 - 3. Fabrication and/or layout drawings:
 - a. Layout plan(s) showing dimensions, elevations, etc.
 - b. Details showing connections, installation, rough-in locations, etc.
 - 4. Product technical data including:
 - a. Acknowledgement that products submitted meet requirements of standards referenced.
 - b. Manufacturer's installation instructions.
 - c. Chemical-resistance data.
- B. Contract Closeout Information:
 - 1. Operation and Maintenance Data:
 - a. See Specification Section 01 78 23 for requirements for the mechanics, administration, and the content of Operation and Maintenance Manual submittals.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Subject to compliance with the Contract Documents, the following manufacturers are acceptable:
 - 1. Spill Containment Platform & Ramp:

- a. New Pig
- b. Eagle- Justrite Safety Group
- c. Or Equal
- 2. Emergency shower and eyewash:
 - a. Bradly Corp.
 - b. Or Equal.

2.2 MANUFACTURED UNITS

- A. Emergency Fixtures:
 - 1. Gravity Fed Emergency Shower and Eye/Face Wash:
 - a. ANSI Z358.1
 - b. Steel Frame:
 - 1) Include forklift slots.
 - c. Tepid Water Storage Tank:
 - 1) Minimum Storage Size:
 - a) Storage tank shall be 550 Gallons or large enough to supply Deluge Shower Head and Eye/Face Wash simultaneously for 15 minutes, whichever is larger.
 - 2) Minimum R rating: R-8
 - 3) Water level Meter
 - 4) Enclosure heater
 - a) 240 volt single phase.
 - b) Heating load: 1.7 kW
 - c) Maximum water temperature: 100 degrees Fahrenheit
 - d) Minimum water temperature: 60 degrees Fahrenheit
 - e) Supply Voltage: 208V 60 Hz Single Phase
 - f) Protects to negative 40 degrees Fahrenheit
 - g) Digital temperature control
 - h) Temperature indicator
 - d. Deluge Shower Head:
 - 1) Minimum Flow Rate: 22 GPM
 - 2) Stay open ball valve
 - 3) Pull-chain
 - e. Eye/Face Wash:
 - 1) Minimum Flow Rate: 5 GPM
 - 2) Stay-open full port ball valve.
 - 3) Push handle
 - f. Pressure Booster Pump:
 - 1) Horsepower: 2 hp
 - 2) Automatic on/off flow switch and pressure reducing outlet, with controls
 - g. Alarm transmitter
 - 1) Sound alarm when Deluge Shower or Eye/Face Wash is activated
 - a) Alarm shall activate light and Muteable Horn.
 - h. Include water purification tablets to prevent bacterial growth in storage tank.
 - 2. Spill Containment Platform & Ramp
 - a. Minimum Sump Capacity: 75 Gallons
 - b. Minimum Drum Capacity: 8 standard 55 gallon drums
 - c. Meets Title 40 CFR 112.7, 122.26, and 264.175
 - d. With out Drain
 - e. Material: Polyethylene

2.3 FABRICATION

- A. Trench Sections:
 - 1. Pre-cast fiberglass modular channel sections.
 - 2. Nominal Dimensions: 8 inches interior width, 1.0% slope built into the bottom, 6 feet length.

3. Vertical side walls and a radiused bottom.
4. 2 inches bolted lap joint.
5. End caps: Same material as channel, design that allows the caps to interlock with channel sections and either close off the end of the channel or provide for drain pipe connection.
6. Bottom outlet:
 - a. Where shown on Drawings.
 - b. Same material as channel.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Cross Connection: Do not install any plumbing components that will provide a cross connection between potable and non-potable or drainage systems.
- B. Fixtures:
 1. Install fixtures at locations indicated on Drawings and in compliance with local Codes.
 2. Connect plumbing supply, drain and vent line sizes as shown on Drawings.
 3. Set proper grounds to form secure base for each fixture and rigid setting.
 4. Install fixtures except water closets with water supply above rim and with Code approved backflow preventers.
 5. Seal fixture joints abutting walls and floors with silicone sealant.
 6. Connect exposed traps and supply pipes for fixtures and equipment to rough piping systems at wall, unless otherwise specified.
 7. Install emergency fixtures in accordance with ANSI Z358.1.
- C. Drains:
 1. Install drains at locations indicated on Drawings and in compliance with local Codes.
 2. In quarry tile floors:
 - a. 24 x 24 inches 6 pound lead sheet clamped to drain.
 - b. Set 1-1/2 inches above structural slab for mortar set and 1/2 inches for thin set.
 3. In uncovered concrete slabs:
 - a. Install at the low points of surface areas to be drained or as indicated.
 - b. Set tops of drains flush with the finished floor.
 - c. Install drain flashing collar or a flange so that no leakage occurs between the drain and the adjoining surfaces.
 - d. Maintain the integrity of waterproof membranes, where penetrated.
 4. Trench drains:
 - a. Install in accordance with manufacturer's instructions and approved Shop Drawings.
 - b. Install trench sections with the top edges level and straight at elevations indicated.
 - 1) Support channel sections in place while concrete is placed under and around sections as indicated.

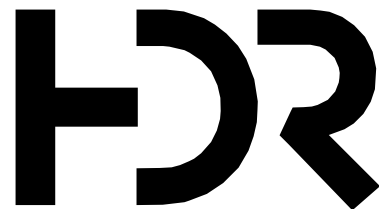
3.2 FIELD QUALITY CONTROL

- A. Test piping and fixtures for leaks per Specification Section 40 05 00.

END OF SECTION

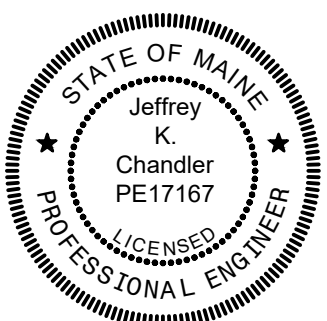
This page intentionally left blank.

Autodesk Docs\\10377389_Maine_Effluent_Trmnd_DESIGN_2022\\10377389-10-G.rvt
10/23/2024 9:19:09 AM



C	10/23/2024	ADDENDUM #2
ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	A. GURSKI
CIVIL	J. GAGNON
STRUCTURAL	B. BRADLEY
ARCHITECTURAL	M. BASKIN
PROCESS	J. CHANDLER
MECHANICAL	J. CHANDLER
ELECTRICAL	A. KANER
PROJECT NUMBER	10377389



Effluent Characteristic
Design at Embden Rearing
Station

MECHANICAL SCHEDULES



FILENAME | 10377389-10-G.rvt
SCALE

C

SHEET
10M-601

HEAT RECOVERY VENTILATOR SCHEDULE										
TAG	MINIMUM SENSIBLE EFFICIENCY AT 32 F OUTSIDE AIR	ROOM OR SPACE SERVED	FAN DATA		MOTOR DATA		CONTROL	WEIGHT (LB)	MAKE & MODEL	NOTES
			FLOW (CFM)	SP (IN OF H2O)	MAX POWER (WATT)	V/PH				
HRV-1	75% AT 64 CFM	SLUDGE MIXING PUMP BUILDING	31	0.4	60	120/1	REMOTE WALL	44	FANTECH VHR 70R ES	1

- NOTES:**
1. AIR CONNECTIONS 4" ROUND OR 5" OVAL WITH PLASTIC ALUMINUM OR STAINLESS TRANSITIONS TO 4" ROUND PVC DUCT

PROPANE UNIT HEATER SCHEDULE		
TAG	UH-1	SH-1
LOCATION	CHEMICAL BLDG.	SLUDGE BLDG.
BTUH INPUT MINIMUM	30,000	30,000
AFUE (MINIMUM)	82	82
VOLTS	120	120
PHASE	1	1
FULL LOAD AMPS	3.7	3.7
MOCP (AMPS)	15	15
TEMPERATURE RISE (F)	45	45
BLOWER HP	1/6	1/6
MOUNTING HEIGHT (FT)	9	9
THROW 50 FPM DISTANCE	32	32
WEIGHT (LB)	300	300
ACCESSORIES	1, 2, 3 AND 4	1, 2, 3 AND 4
MAKE & MODEL	REZNOR UBX-30	REZNOR UBX-30

- ACCESSORIES:**
1. BUILT-IN DISCONNECT
2. 24 VOLT TRANSFORMER
3. HORIZ. AIR/VENT KIT, INCL. CONCENTRIC ADAPTER
4. FIELD CONVERT TO SEPERATED COMBUSTION

EXHAUST FAN SCHEDULE															
MARK	BUILDING	FAN TYPE	DRIVE TYPE	AIRFLOW (CFM)	STATIC PRES ("W.C)	MOTOR			PH	ENCL	MIN DAMPER DIMENSIONS	WEIGHT (LB)	ACCESSORIES	MANUF.	MODEL
						HP	RPM	VOLTS							
WEF-1	CHEMICAL FEED	WALL	DIRECT	500	0.4	1/10	1725	120	1	ODP	10"x10"	17	1,2,3	GREENHECK COOK	CBF EQUAL
SLF-1	SLUDGE PUMP	WALL	DIRECT	450	0.2	1/10	1725	120	1	ODP	10"x10"	33	1,2,3	GREENHECK	CUE-080
SLF-2	SLUDGE PUMP	CEILING	DIRECT	25	0.25	1/25	3000	120	1	ODP	4" ROUND		1,2,4	FANTECH	RVF-4

- ACCESSORIES:**
1. PROVIDE LOCAL DISCONNECT FOR EACH FAN
2. LOCATE EACH FAN 7 TO 8 FEET CLEAR ABOVE FINISHED FLOOR
3. INSULATED GRAVITY BACKDRAFT DAMPER NOT NECESARILY BY FAN MANUFACTURER
4. BACKDRAFT DAMPER

DAMPER SCHEDULE												
MARK:	BUILDING	ASSOCIATED EQUIPMENT	Minimum AIRFLOW (CFM)	WIDTH (IN)	HEIGHT (IN)	LEAKAGE (CFM/SF@1"W.C.)	ACTUATOR		DAMPER MATERIALS	ACCESSORIES	MANUF.	MODEL
							MAX OPERATING TIME (S)	FAIL POSITION				
D-4	SLUDGE PUMP	SLF-1	450	8	24	3	60	CLOSED	ALUM.	1,2,3,4	RUSKIN	TED50
D-5	SLUDGE PUMP	SLF-2	25	16	24	3	60	CLOSED	ALUM.	1,2,3,4	RUSKIN	TED50
D-1	CHEMICAL FEED	L-1, WEF-1	500	24	12	3	60	CLOSED	ALUM.	1,2,3,4	RUSKIN	TED50
D-2	CHEMICAL FEED	L-2	25	12	12	3	60	CLOSED	ALUM.	1,2,3,4	RUSKIN	TED50
D-3	CHEMICAL FEED	L-3, MAU-1	225	12	12	3	60	CLOSED	ALUM.	1,2,3,4	RUSKIN	TED50

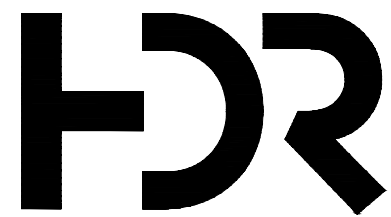
- ACCESSORIES:**
1. THERMALLY BROKEN FRAMES AND BLADES
2. ACTUATOR OPERATING AND/OR HOLDING POWER REQUIREMTNS SHALL NOT EXCEED 25 WATTS PER ACTUATOR
3. INSULATED AND BROKEN AIRFOIL BLADES, 304 SS AXLE AND LINKAGE, SYTHETIC AXLE BEARINGS, SILICONE BLADE, AND JAMB SEALS
4. REMOVABLE FRAMED ALUMINUM OR SS INSECT SCREEN

LOUVER SCHEDULE										
MARK:	BUILDING	ASSOCIATED EQUIPMENT	AIRFLOW (CFM)	WIDTH (IN)	HEIGHT (IN)	LEAKAGE (CFM/SF@1"W.C.)	LOUVERS MATERIALS	ACCESSORIES	MANUF.	MODEL
L-4	SLUDGE PUMP	D-4	450	16	24	3	ALUMINUM	1,2	RUSKIN	GFL800D
L-5	SLUDGE PUMP	D-5	25	8	24	3	ALUMINUM	1,2	RUSKIN	GFL800D
L-1	CHEMICAL FEED	D-1, WEF-1	500	24	12	3	ALUMINUM	1,2	RUSKIN	GFL800D
L-2	CHEMICAL FEED	D-2	25	12	12	3	ALUMINUM	1,2	RUSKIN	GFL800D
L-3	CHEMICAL FEED	D-3, MAU-1	225	12	12	3	ALUMINUM	1,2	RUSKIN	GFL800D

- ACCESSORIES:**
1. INTERNALLY MOUNTED ALUMINUM BIRD SCREEN
2. KYNAR/HYLAR PREMIUM PAINT FINISH, OWNER WILL SELECT FROM MANUFACTURER'S STANDARD COLORS. SUBMIT COLOR CHART

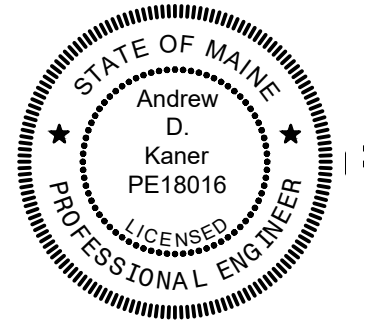
MAKE UP AIR UNIT	
Tags	MAU-1
ROOM OR SPACE SERVED	CHEMICAL FEED
DUCT SIZE	12" DIA
FLOW (CFM)	330
TEMPERATURE DIFFERENTIAL	62
SP (IN OF H2O)	0.2
MAX POWER (WATT)	6,000
V/PH	240
CONTROL	AUTOMATIC IAQ CONTROL
WEIGHT (LB)	70
MAKE & MODEL	THERMOLEC FER
NOTES	

C:\USERS\TFAVIS\Documents\H01377389 - MAINE EFFLUENT_TITMINT DESIGN_2022\PROJECT FILES\H01377389-1E-101.DWG
10/22/2024 9:45:04 PM



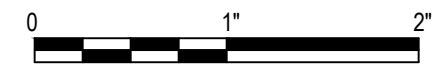
ISSUE	DATE	DESCRIPTION
C	10/23/2024	ADDENDUM #2
B	10/15/2024	ADDENDUM #1
A	09/11/2024	ISSUED FOR BID

PROJECT MANAGER	A. GURSKI
CIVIL	J. GAGNON
STRUCTURAL	B. BRADLEY
ARCHITECTURAL	M. BASKIN
PROCESS	J. CHANDLER
MECHANICAL	J. CHANDLER
ELECTRICAL	A. KANER
PROJECT NUMBER	10377389

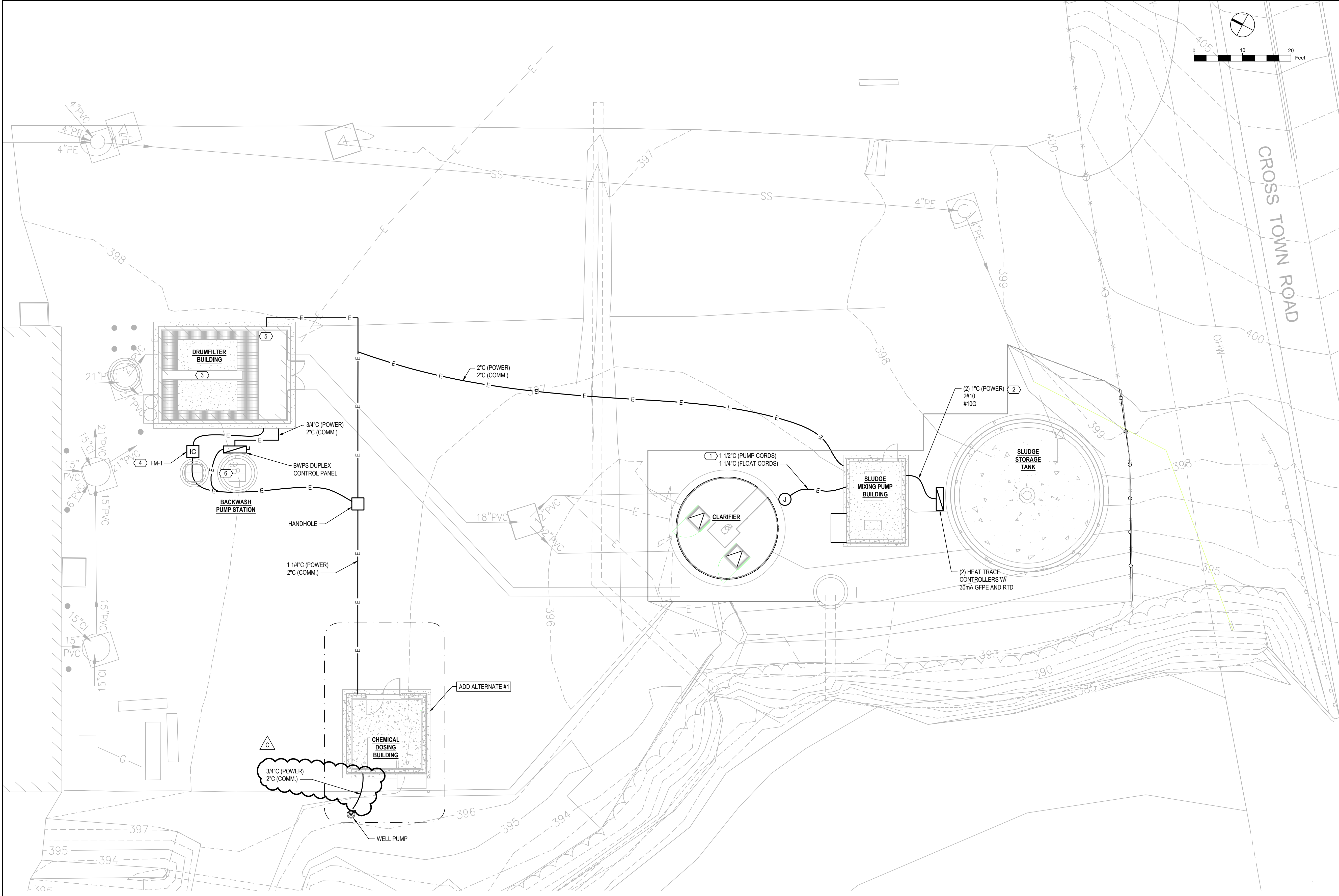
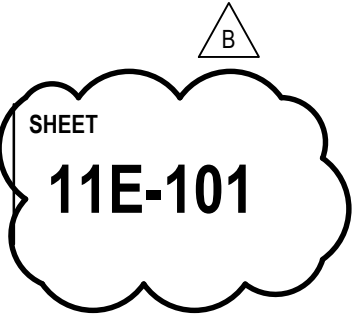


Effluent Characteristic Design at Embden Rearing Station

OVERALL ELECTRICAL PLAN



FILENAME | 10377389-1E-101.DWG
SCALE | AS NOTED



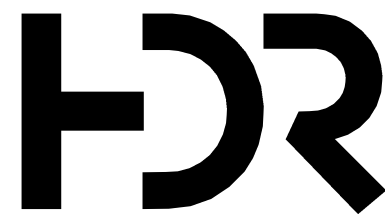
GENERAL NOTES

- REFER TO 10E601 FOR CONDUIT AND WIRE DETAILS.
- UNDERGROUND CONDUITS SHALL BE ROUTED IN PVC CONDUIT BURIED IN EARTH. REFER TO 10E601 FOR TRENCH SECTION DETAILS.
- COORDINATE CONDUIT ROUTINGS WITH SITE UTILITIES (I.E. PIPING) AND PHYSICAL SITE TO AVOID CONFLICT.
- SPARE CONDUITS SHALL BE EQUIPPED WITH PULL CORD AND CAPPED AT EACH END. LABEL EACH END OF CONDUIT WITH SOURCE.
- PROVIDE SEPARATE HANDHOLES FOR POWER AND COMM. ONE SHOWN FOR CLARITY..

KEYNOTES

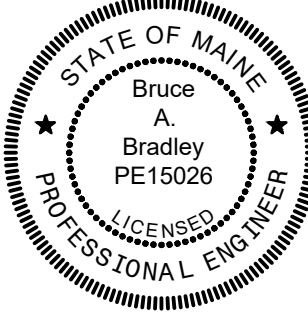
- CONDUIT AND WIRE IS SHOWN FOR BIDDING PURPOSES ONLY. CONFIRM REQUIREMENTS WITH MANUFACTURER SHOP DRAWINGS.
- PROVE (2) 30A CIRCUITS FOR TWO HEAT TRACES ON SLUDGE TANK STAND-PIPES. PROVIDE 2#14 LOW TEMP. ALARM CONTACT FROM EACH HEAT TRACE PANEL TO ALARM JUNCTION BOX. REFER TO DETAIL 2 / 15D-402 AND SPECIFICATION 40 41 13 FOR DETAILS. COORDINATE WITH MFG. REQUIREMENTS FOR EXACT LOADING AND NUMBER OF CONNECTIONS.
- DRUMFILTER BUILDING IS EXISTING. FIELD-VERIFY CONDITIONS TO DETERMINE MOST EFFECTIVE CONDUIT ROUTING AND EQUIPMENT LOCATIONS.
- PROVIDE 1" C FOR 120V POWER FROM EXISTING DRUMFILTER BUILDING PANEL. PROVIDE 1" C TO HANDHOLE FOR METER SIGNAL WIRE FROM SENSOR TO REMOTE-DISPLAY IN CHEMICAL TREATMENT BUILDING.
- INSTALL NEW SECURITY PANEL IN DRUMFILTER BUILDING. FIELD-VERIFY LOCATION, AND COORDINATE REQUIREMENTS WITH OWNER AND SECURITY COMPANY PRIOR TO INSTALLATION. REFER TO 10E-502 FOR ADDITIONAL DETAILS.
- PROVIDE 4#14 FROM BWPS CONTROL PANEL TO CHEMICAL BUILDING FOR FEED PUMP INTERLOCK..

Autodesk Docs\\10377389_Maine_Effluent_Trmnd_DESIGN_2022\\10377389-12-SA.rvt
10/22/2024 9:41:33 PM



C	10/23/2024	ADDENDUM #2
A	08/26/2024	ISSUED FOR BIDS
ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	A. GURSKI
CIVIL	J. GAGNON
STRUCTURAL	B. BRADLEY
ARCHITECTURAL	M. BASKIN
PROCESS	J. CHANDLER
MECHANICAL	J. CHANDLER
ELECTRICAL	A. KANER
PROJECT NUMBER	10377389



Effluent Characteristic
Designs at Embden
Rearing Station

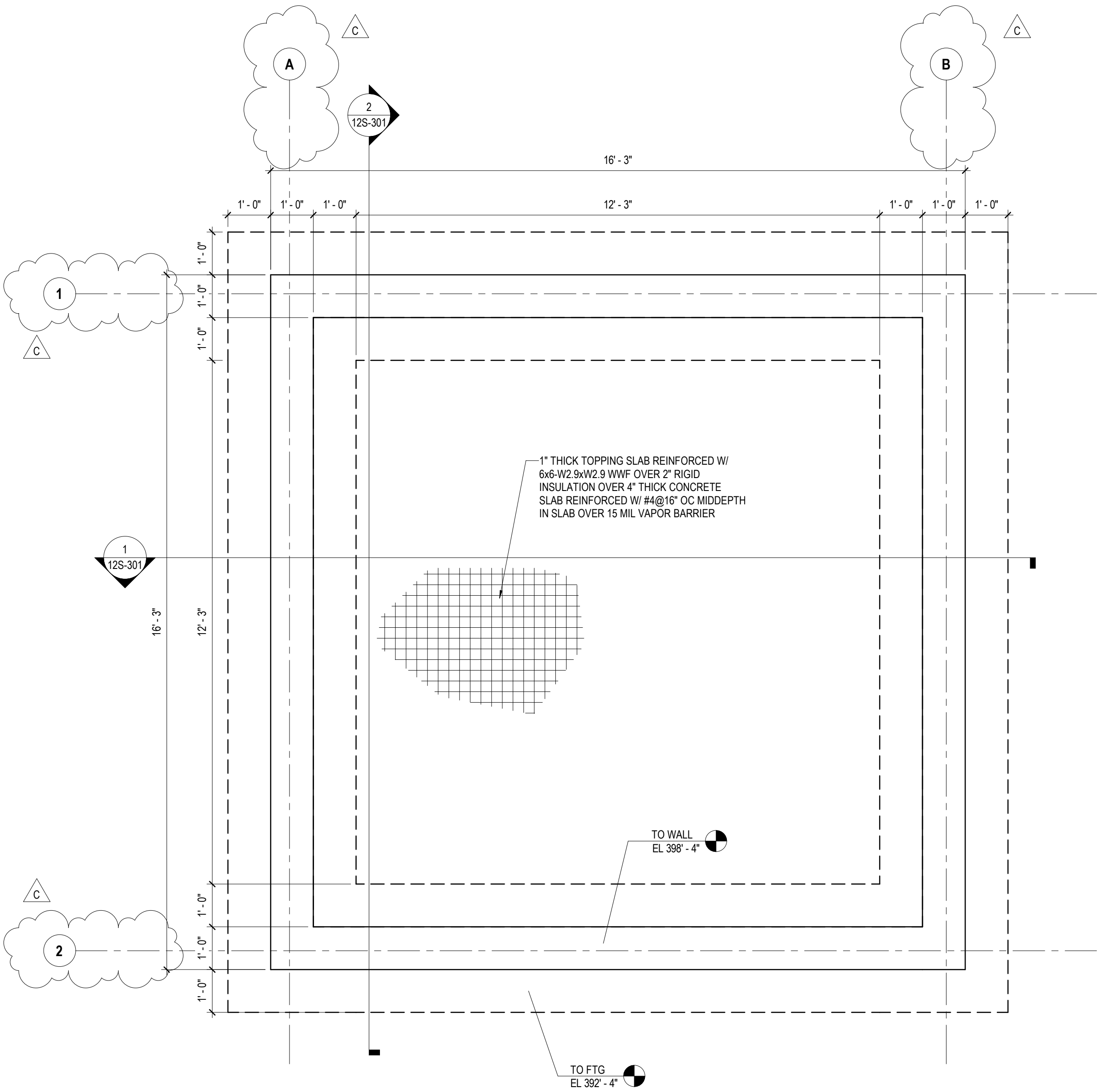
CHEMICAL DOSING BUILDING
STRUCTURAL PLANS



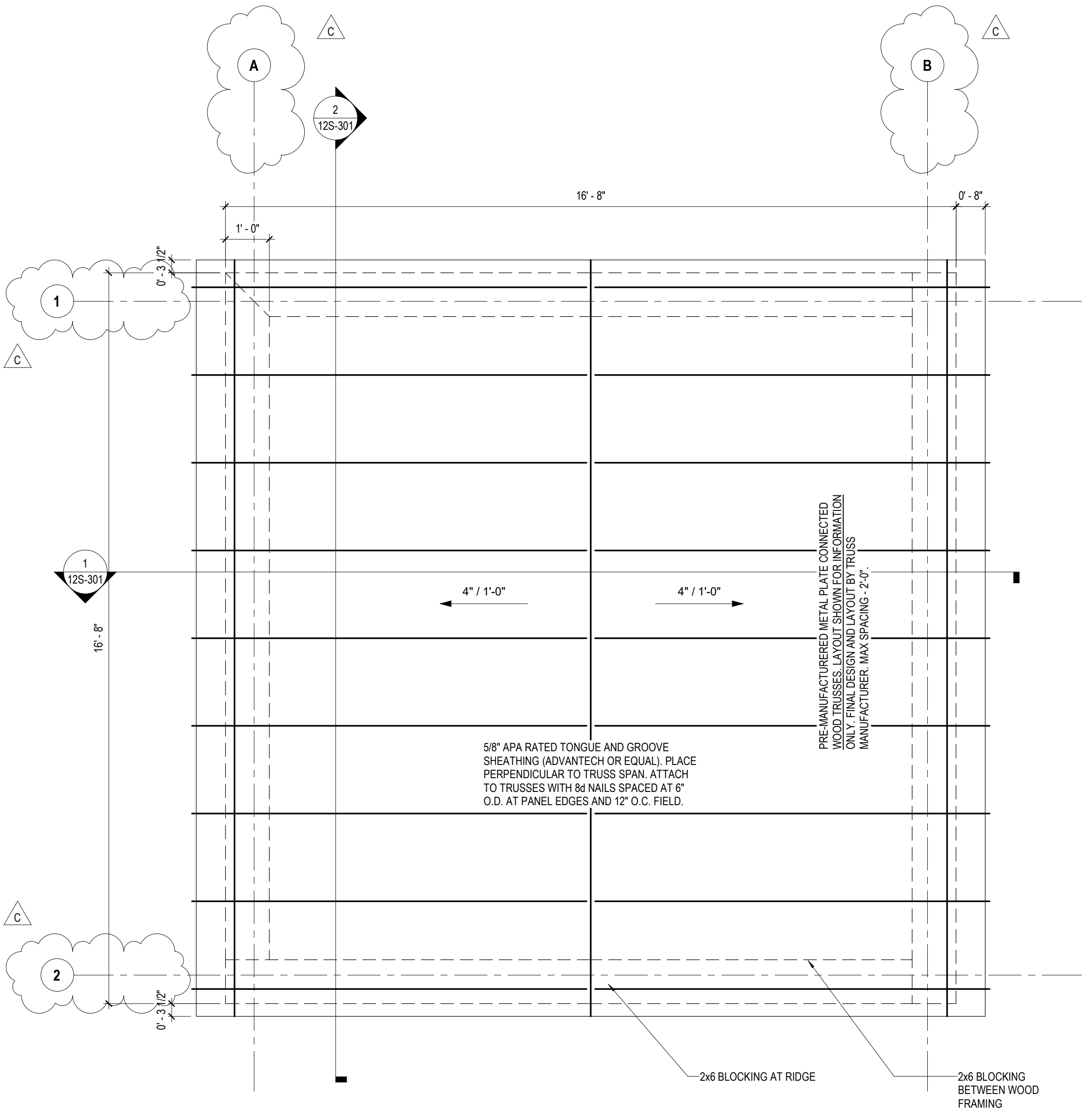
FILENAME 10377389-52-SA.rvt
SCALE 1/2" = 1'-0"

SHEET
12S-101

ADD ALTERNATE #1



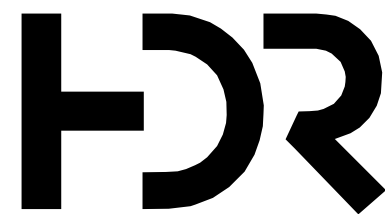
1 FOUNDATION PLAN
1/2" = 1'-0"



2 ROOF FRAMING PLAN
1/2" = 1'-0"

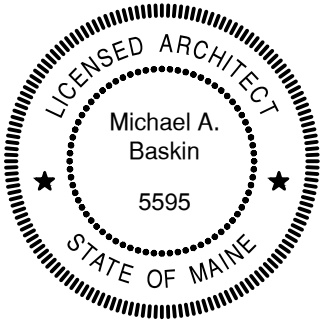
- GENERAL NOTES:
- SEE SHEET 00S-100 FOR GENERAL STRUCTURAL NOTES.
 - SEE 00S-500 SERIES SHEETS FOR TYPICAL STRUCTURAL DETAILS.
 - REFER TO ARCHITECTURAL, PROCESS, MECHANICAL, PLUMBING, ELECTRICAL, AND DRAWINGS OF OTHER TRADES FOR LOCATIONS OF OPENINGS, DEPRESSIONS, FLOOR SLOPES AND DRAINS.
 - PRE-ENGINEERED TRUSSES SHALL BE DESIGNED BY TRUSS SUPPLIER.
 - COORDINATE ROOF OPENING SIZES WITH ARCHITECTURAL DRAWINGS.
 - TEMPORARY AND PERMANENT BRACING NOT SHOWN. SIZES AND LOCATIONS OF BRACING TO BE DESIGNED BY CONTRACTOR'S ENGINEER AND SUBMITTED WITH TRUSS SHOP DRAWINGS FOR REVIEW PRIOR TO CONSTRUCTION.

Autodesk Docs\\10377389_Maine_Effluent_Trmnd_DESIGN_2022\\10377389-15-SA.rvt
10/22/2024 4:44:26 PM



C	10/23/2024	ADDENDUM #2
A	09/11/2024	ISSUED FOR BIDS
ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	A. GURSKI
CIVIL	J. GAGNON
STRUCTURAL	B. BRADLEY
ARCHITECTURAL	M. BASKIN
PROCESS	J. CHANDLER
MECHANICAL	J. CHANDLER
ELECTRICAL	A. KANER
PROJECT NUMBER	10377389



Effluent Characteristic Designs at Embden Rearing Station

SLUDGE MIXING PUMP BUILDING PLANS



FILENAME	10377389-15-SA.rvt
SCALE	As indicated

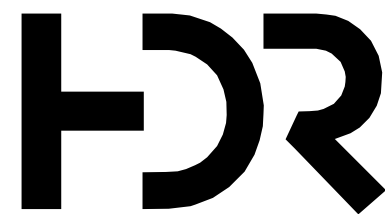
SHEET
15A-101

NOTES:

- ALL DOOR FRAMES SHALL BE HOLLOW METAL PER SPECIFICATIONS SECTION 08 11 00.
- SEE STRUCTURAL DRAWINGS FOR STEEL REINFORCING TO BE INSTALLED IN LOAD BEARING MASONRY WALLS.
- ALL MASONRY WALLS SHALL HAVE HORIZONTAL JOINT REINFORCING AT 1'-4" OC.
- GROUT CMU SOLID AT LOCATIONS WHERE ITEMS ARE TO BE MOUNTED TO THE WALLS.
- COORDINATE WITH ALL OTHER DRAWINGS AND TRADES FOR LOCATIONS OF ITEMS BUILT INTO OR ANCHORED TO THE MASONRY WALLS.
- CONCRETE HOUSEKEEPING PADS ARE REPRESENTED BY THREE 24 X 36-INCH RECTANGLES. THE CONTRACTOR SHALL COORDINATE THE LOCATION OF THE PADS WITH THE PUMPS ON SCALABLE/MEASURABLE SHEET 15D-401.
- COORDINATE MASONRY OPENINGS WITH THE MECHANICAL EQUIPMENT TO BE INSTALLED AND WITH THE MASONRY LAYOUT.

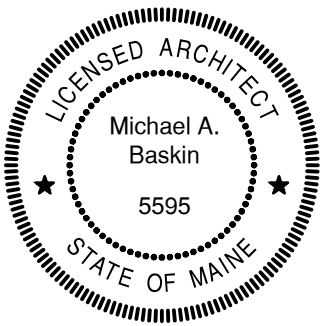
	DIMENSIONS				PANEL		FRAME			HARDWARE		
DOOR NO.	OPENING WIDTH			H	T	Material	Finish	Material	Finish	FIRE RATING	GROUP	NOTES
	W1	W2	Total Width									
2	-	-	4' - 0"	7' - 0"	1 3/4"	METAL	PAINTED	METAL	PAINTED	N/A	2	

Autodesk Docs\\10377389_Maine_Effluent_Trmnd_DESIGN_2022\\10377389-15-SA.rvt
10/22/2024 4:44:42 PM



C	10/23/2024	ADDENDUM #2
A	09/11/2024	ISSUED FOR BIDS
ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	A. GURSKI
CIVIL	J. GAGNON
STRUCTURAL	B. BRADLEY
ARCHITECTURAL	M. BASKIN
PROCESS	J. CHANDLER
MECHANICAL	J. CHANDLER
ELECTRICAL	A. KANER
PROJECT NUMBER	10377389



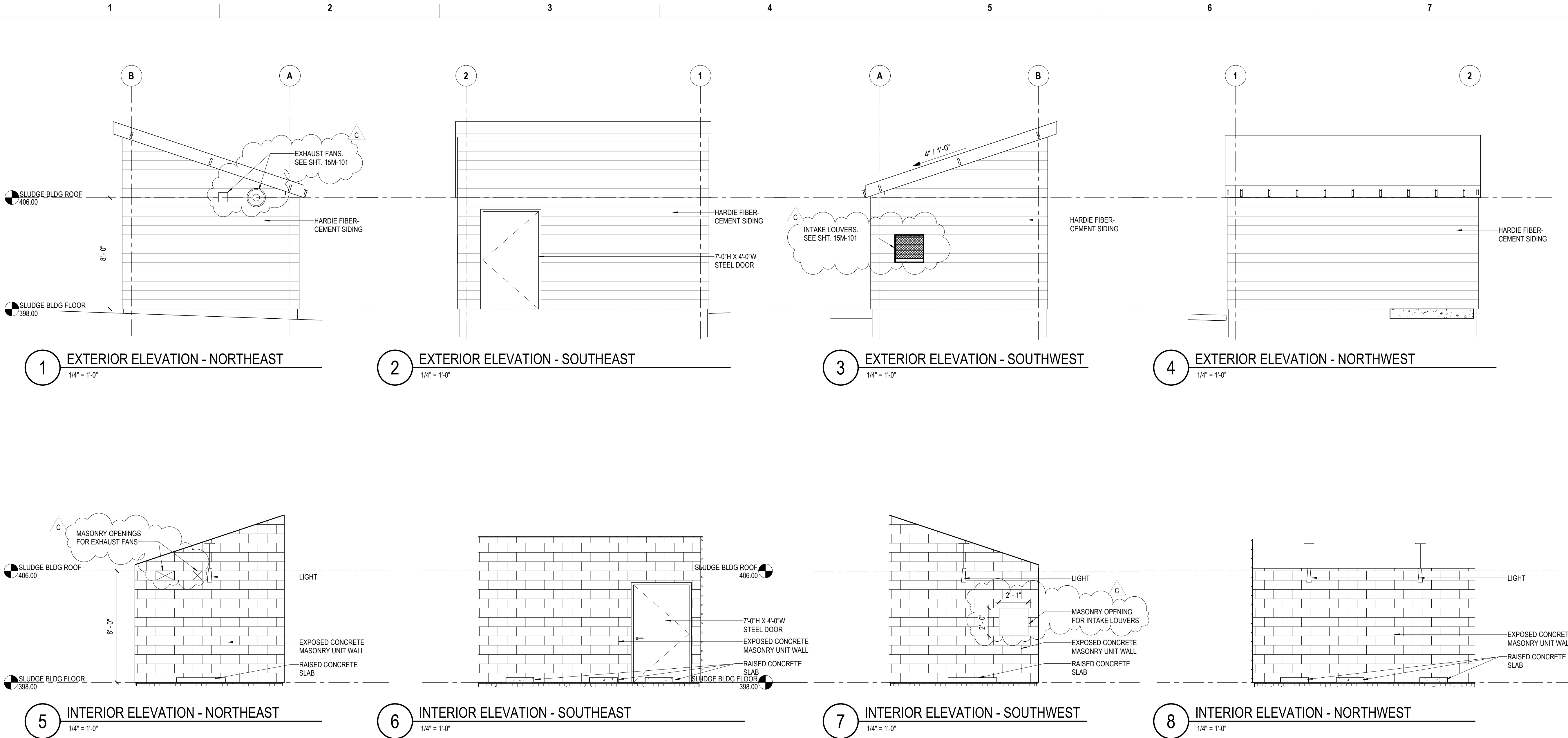
Effluent Characteristic
Designs at Embden
Rearing Station

SLUDGE MIXING PUMP BUILDING
ELEVATIONS



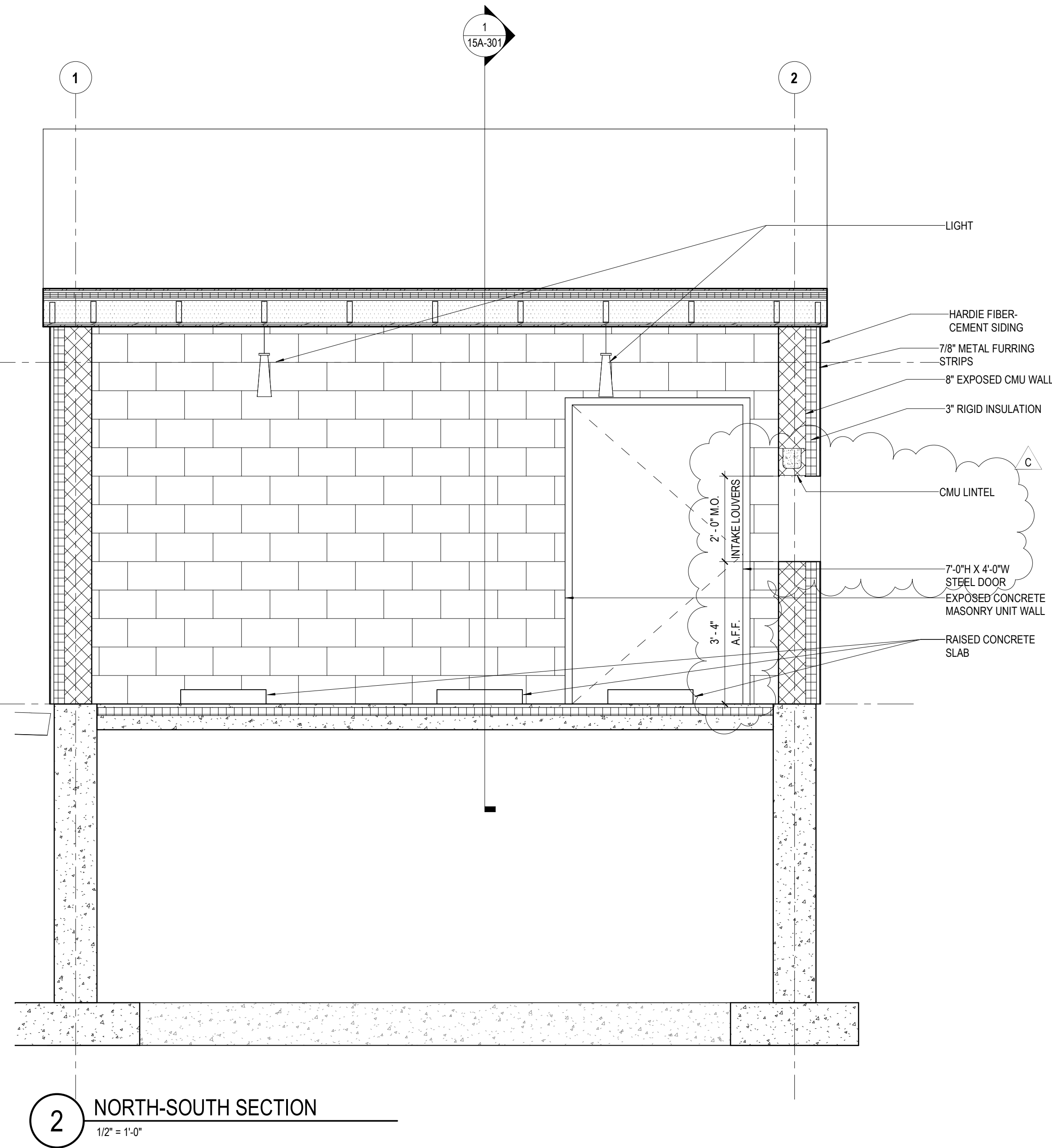
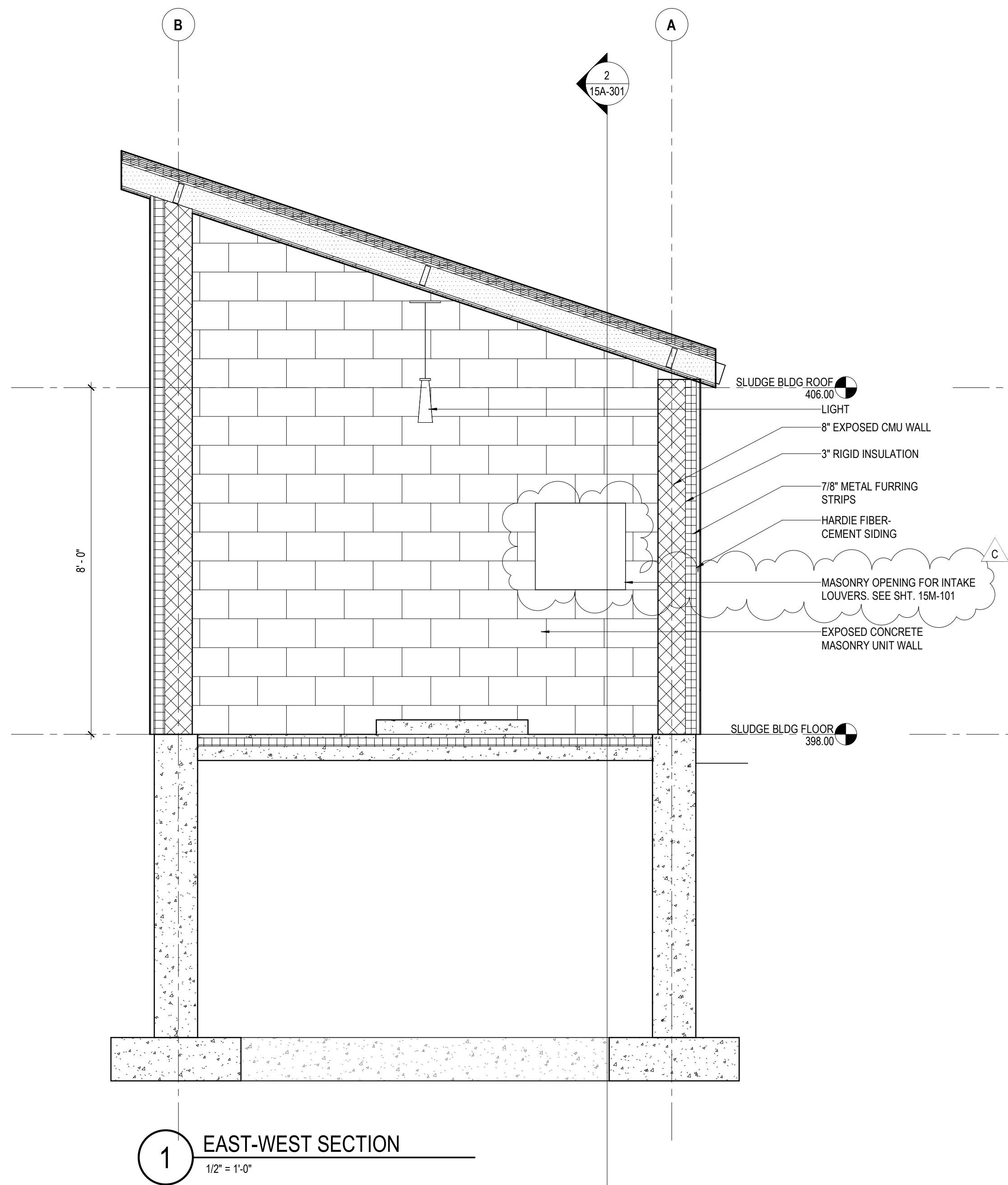
FILENAME | 10377389-15-SA.rvt
SCALE | 1/4" = 1'-0"

SHEET
15A-201

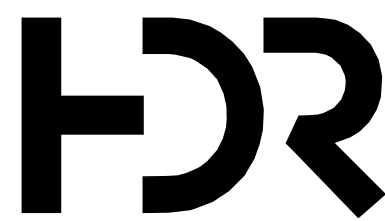


MASONRY OPENING NOTES:

- COORDINATE MASONRY OPENINGS FOR MECHANICAL EQUIPMENT WITH THE MECHANICAL EQUIPMENT TO BE INSTALLED AT EACH OPENING. REFER TO MECHANICAL DRAWING SHEET 15M-101.
- REFER TO SHEET 15S-302 FOR LINTEL SCHEDULE.
 - PROVIDE MASONRY LINTELS FOR MASONRY OPENINGS AS INDICATED ON THE LINTEL SCHEDULE.



Autodesk Docs/10377389_Maine_Effluent_Trmnd_DESIGN_2022/10377389-15-SA.rvt
10/22/2024 4:44:57 PM



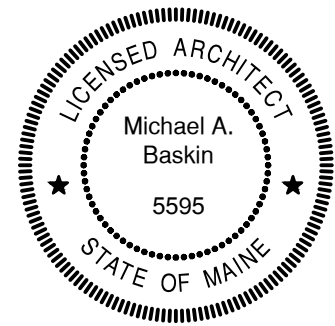
C	10/23/2024	ADDENDUM #2
A	09/11/2024	ISSUED FOR BIDS

ISSUE DATE DESCRIPTION

PROJECT MANAGER A. GURSKI

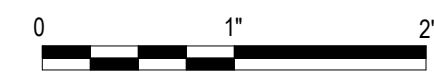
CIVIL	J. GAGNON
STRUCTURAL	B. BRADLEY
ARCHITECTURAL	M. BASKIN
PROCESS	J. CHANDLER
MECHANICAL	J. CHANDLER
ELECTRICAL	A. KANER

PROJECT NUMBER 10377389



Effluent Characteristic Designs at Embden Rearing Station

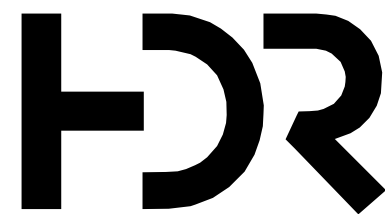
SLUDGE MIXING PUMP BUILDING BUILDING SECTIONS



FILENAME 10377389-15-SA.rvt
SCALE 1/2" = 1'-0"

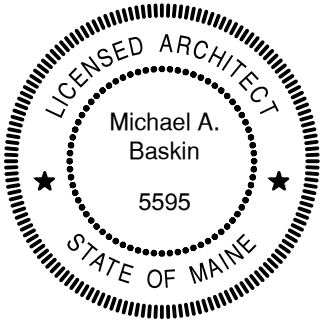
SHEET
15A-301

Autodesk Docs/10377389_Maine_Effluent_Trmnd_DESIGN_2022/10377389-15-SA.rvt
10/22/2024 4:45:17 PM



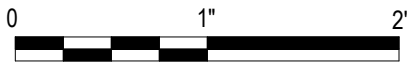
C	10/23/2024	ADDENDUM #2
A	09/11/2024	ISSUED FOR BIDS
ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	A. GURSKI
CIVIL	J. GAGNON
STRUCTURAL	B. BRADLEY
ARCHITECTURAL	M. BASKIN
PROCESS	J. CHANDLER
MECHANICAL	J. CHANDLER
ELECTRICAL	A. KANER
PROJECT NUMBER	10377389



Effluent Characteristic
Designs at Embden
Rearing Station

SLUDGE MIXING PUMP BUILDING
WALL SECTIONS AND DETAILS



FILENAME	10377389-15-SA.rvt
SCALE	As indicated

SHEET
15A-321

1

EAST-WEST WALL SECTION (TYPE 1A)

1" = 1'-0"

2

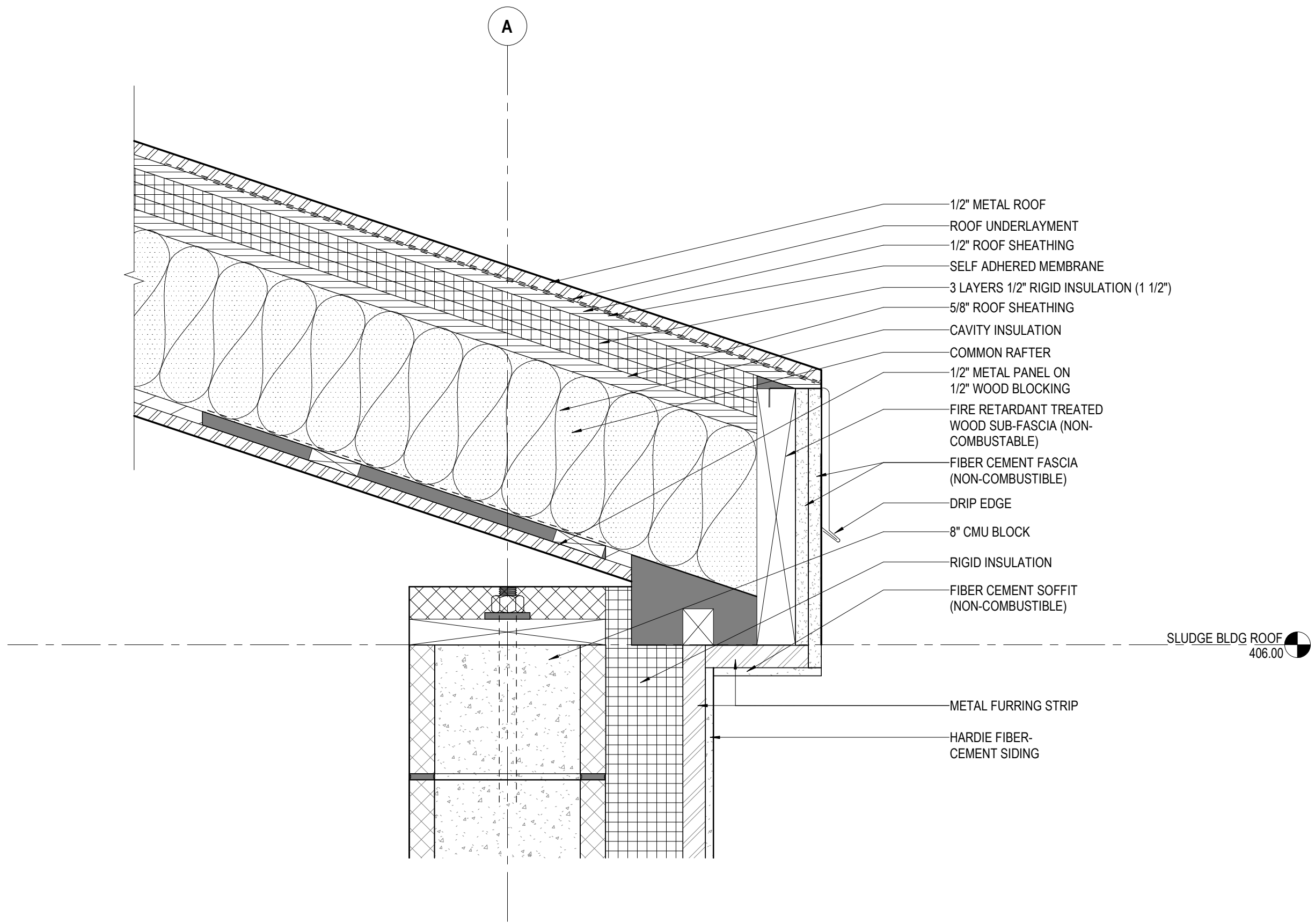
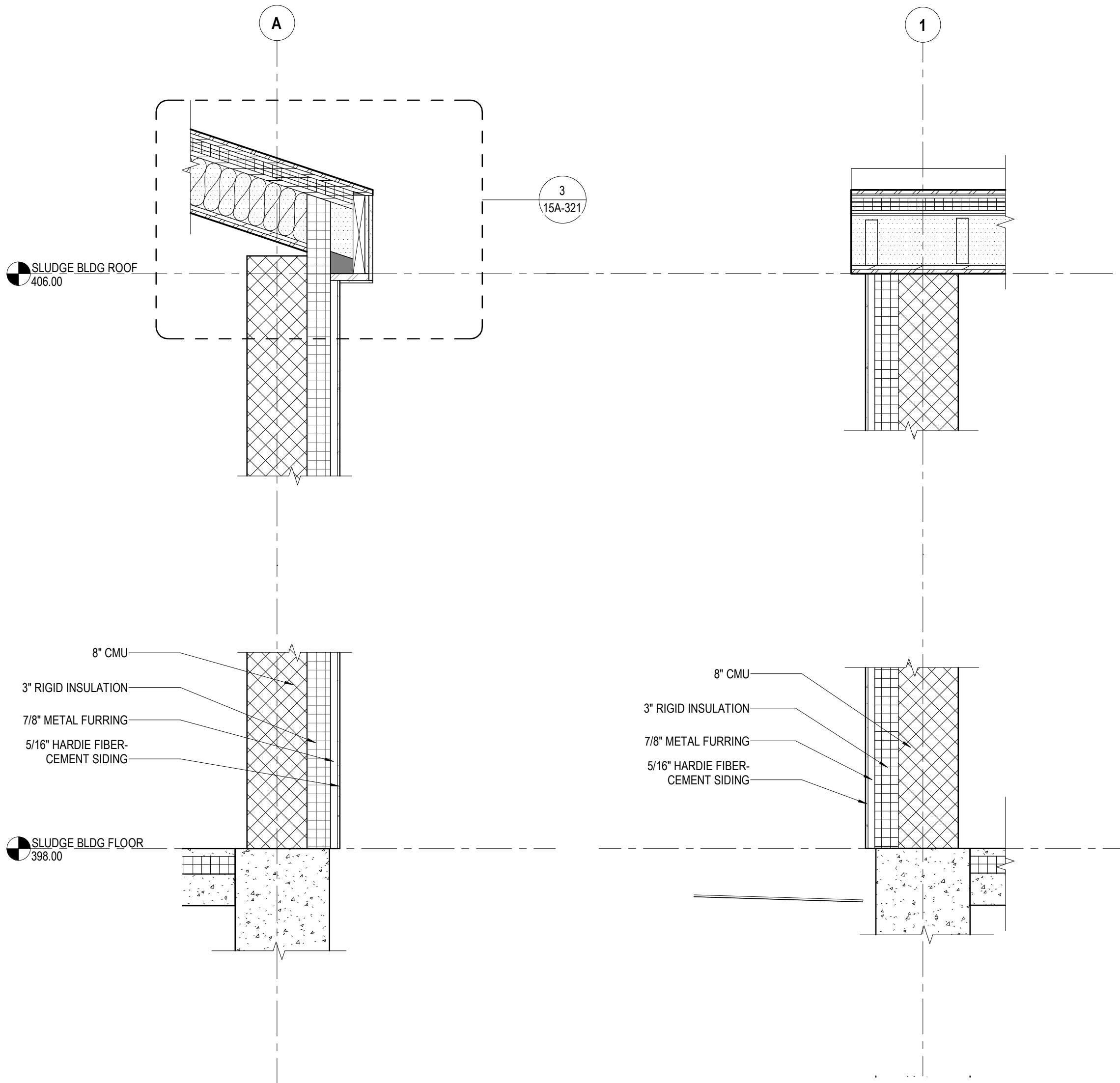
NORTH-SOUTH WALL SECTION (TYPE 1A)

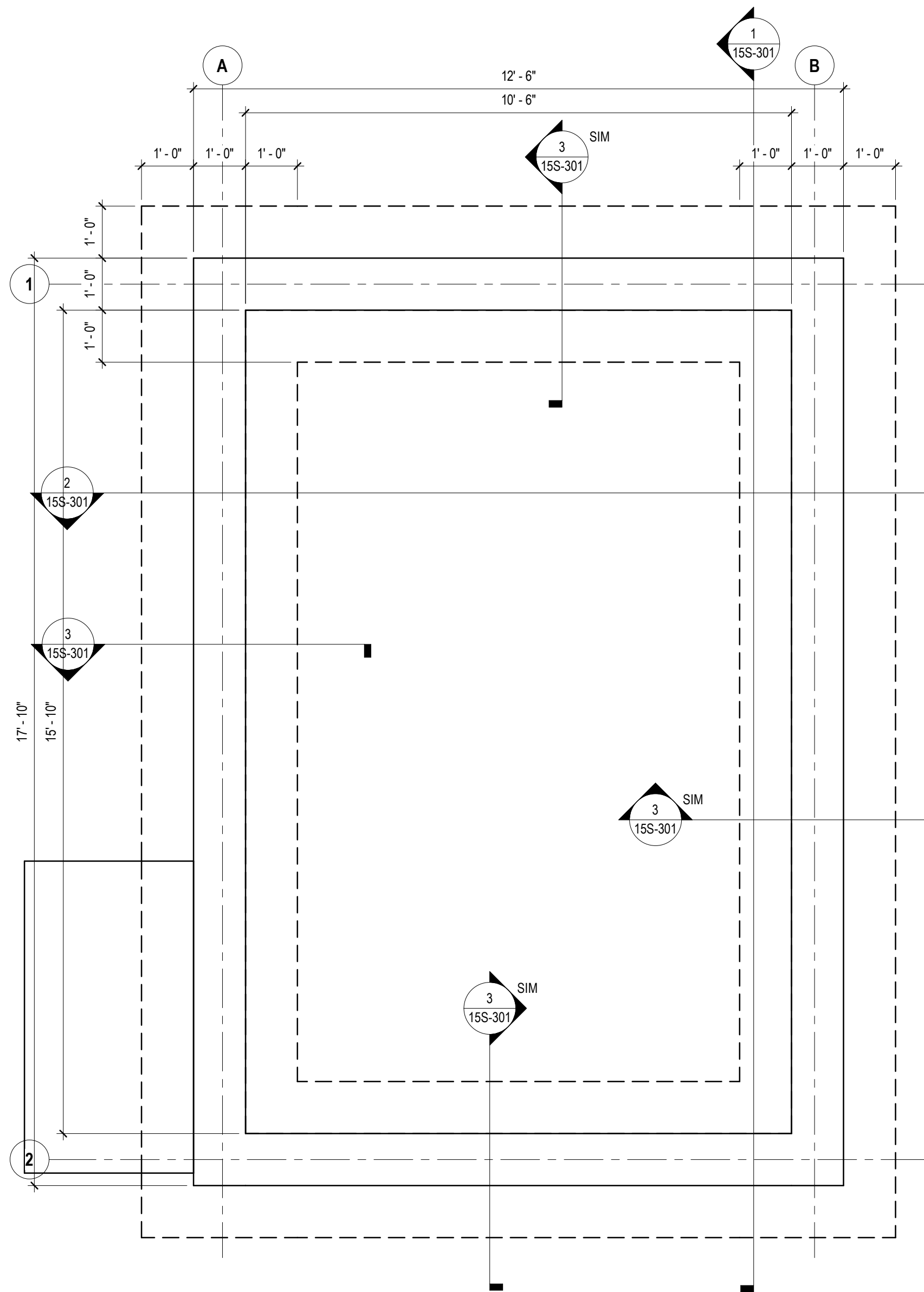
1" = 1'-0"

3

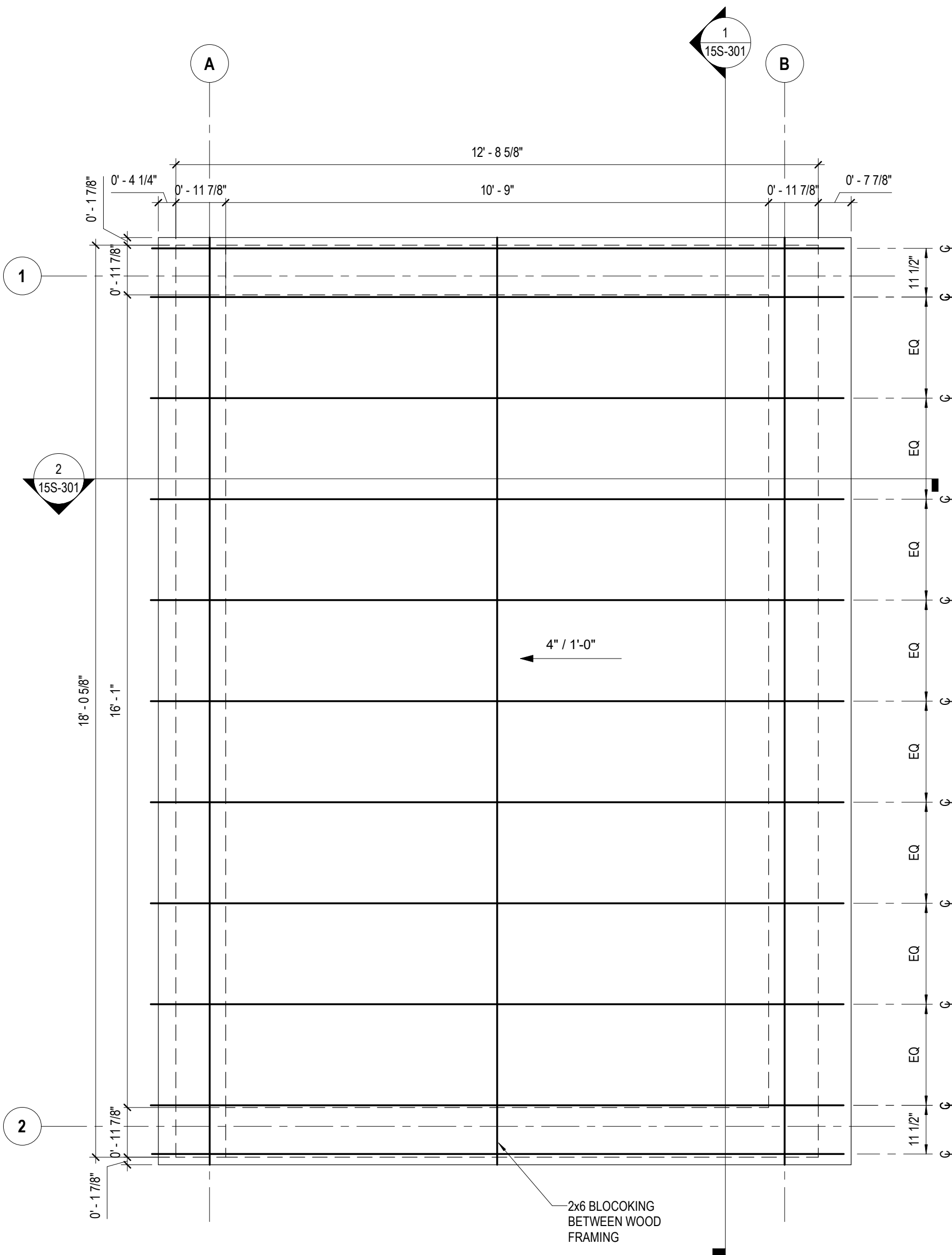
ROOF DETAIL

3" = 1'-0"





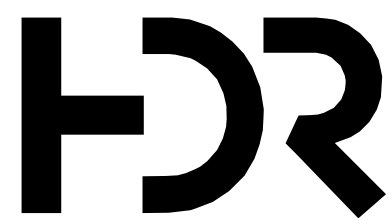
1 SLUDGE BLDG FLOOR
1/2" = 1'-0"



2 SLUDGE BLDG ROOF
1/2" = 1'-0"

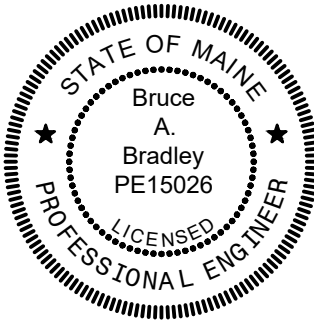
GENERAL NOTES:

- SEE SHEET 10S-100 FOR GENERAL STRUCTURAL NOTES.
- SEE 10S-500 SERIES SHEETS FOR TYPICAL STRUCTURAL DETAILS.
- REFER TO ARCHITECTURAL, PROCESS, MECHANICAL, PLUMBING, ELECTRICAL, AND DRAWINGS OF OTHER TRADES FOR LOCATIONS OF OPENINGS, DEPRESSIONS, FLOOR SLOPES AND DRAINS.



C	10/23/2024	ADDENDUM #2
A	09/11/2024	ISSUED FOR BIDS
ISSUE	DATE	DESCRIPTION

PROJECT MANAGER		A. GURSKI
CIVIL	J. GAGNON	
STRUCTURAL	B. BRADLEY	
ARCHITECTURAL	M. BASKIN	
PROCESS	J. CHANDLER	
MECHANICAL	J. CHANDLER	
ELECTRICAL	A. KANER	
PROJECT NUMBER		10377389



Effluent Characteristic
Designs at Embden
Rearing Station

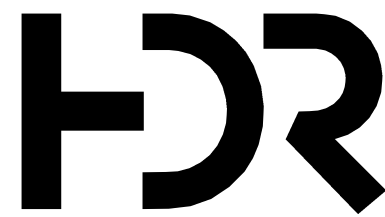
SLUDGE MIXING PUMP BUILDING
STRUCTURAL PLANS



FILENAME 10377389-15-SA.rvt
SCALE 1/2" = 1'-0"

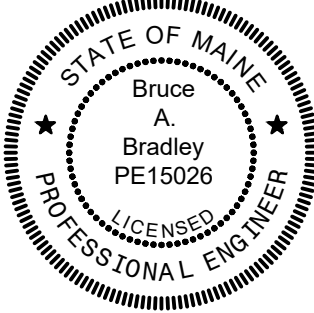
SHEET
15S-101

Autodesk Docs\\10377389_Maine_Effluent_Trmnd_DESIGN_2022\\10377389-15-SA.rvt
10/23/2024 9:08:24 AM



C	10/23/2024	ADDENDUM #2
A	09/11/2024	ISSUED FOR BIDS
ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	A. GURSKI
CIVIL	J. GAGNON
STRUCTURAL	B. BRADLEY
ARCHITECTURAL	M. BASKIN
PROCESS	J. CHANDLER
MECHANICAL	J. CHANDLER
ELECTRICAL	A. KANER
PROJECT NUMBER	10377389



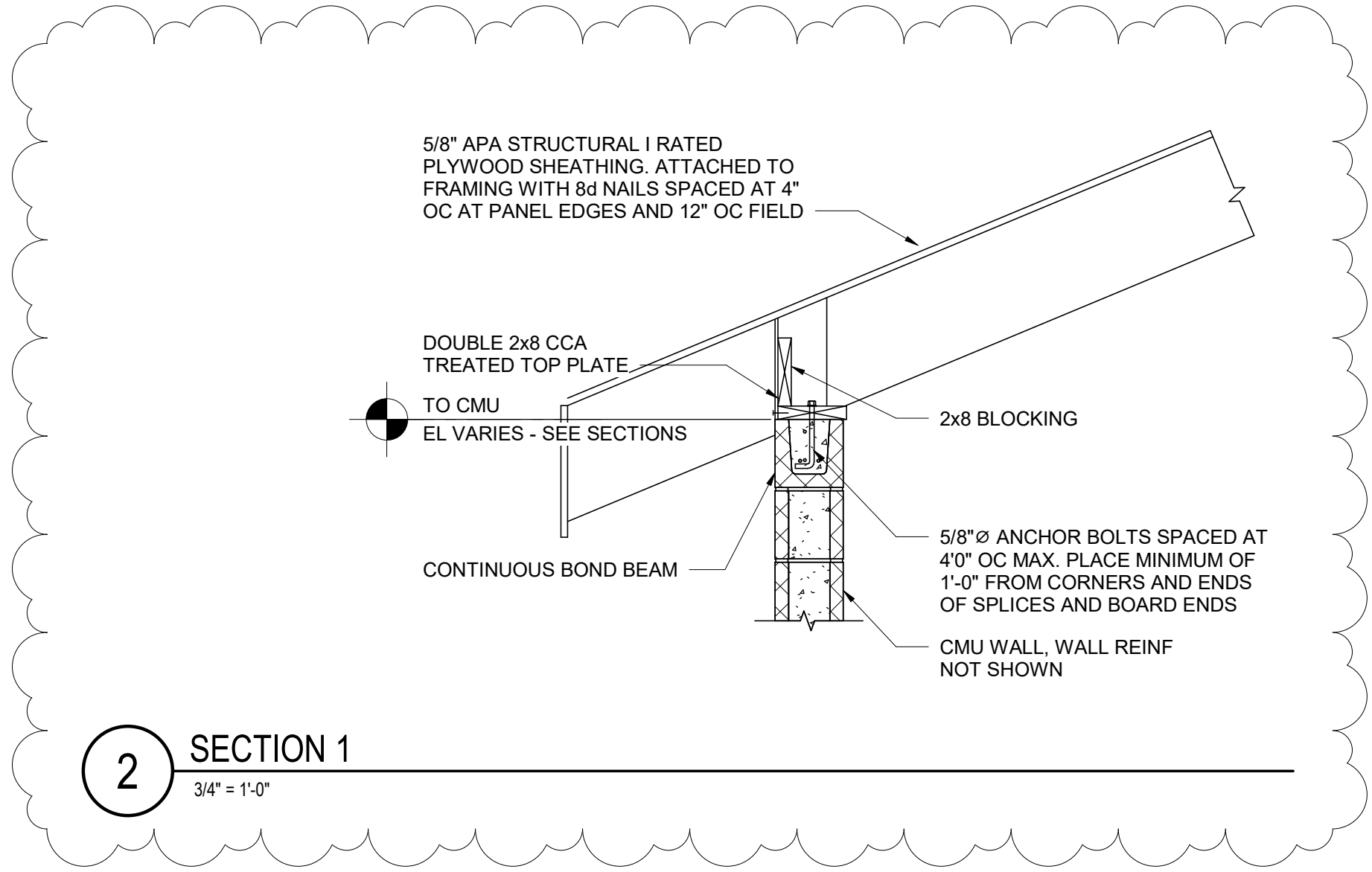
Effluent Characteristic
Designs at Embden
Rearing Station

SLUDGE MIXING PUMP BUILDING
ROOF FRAMING SECTIONS AND DETAILS



FILENAME	10377389-15-SA.rvt
SCALE	As indicated

SHEET
15S-302



3	2	3
2	1	2
3	2	3
3	2	3
2	1	2
3	2	3

ZONE WIND PRESSURE

1	-33.1 PSF
2	16.0 PSF
2	-39.8 PSF
2	16.0 PSF
3	-62.8 PSF
3	16.0 PSF

TOP CHORD DEAD LOAD = 10 PSF (EXCLUDING TRUSS SELF-WEIGHT)

BOTTOM CHORD DEAD LOAD = 10 PSF

1 DETAIL 1
12" = 1'-0"

