

Addendum 5

City of Canton, Ohio
Purchasing Department
218 Cleveland Ave. SW, 4th floor
Canton, Ohio 44702

Sugarcreek Water Treatment Plant and Wellfield Improvements

Item/Project

Water Department

Responsible Department

Thursday June 9, 2022 at 2:00 PM local time

Bids Due On or Before

Bid Proposal Submitted By:

Company Name

Street Address

City

State

Zip

Contact Person

Phone No.

Email Address

Addendum No. 5
June 1, 2022

SCOPE OF BIDS

1. **Page BF-4-5, Bid Item 3: Water Treatment Plant Process...that Excludes Item 1, Item 2, and Items 4 thru 41.**
 - In Item a. viii) (16) REPLACE “*Cleaning of the designated lagoons...Bid Item No. 27.*” with “Cleaning of existing process piping within buildings and all yard piping that is being re-used shall be cleaned and inspected. Work related to this item shall include, but not be limited to, labor, tools, and equipment necessary to remove sediment, loadout (via roll-off boxes, tanker trucks, or dump trucks), and unload residual solids from cleaning operations into the designated lagoon selected by the Owner shall be included in Bid Item No. 3.”
 - After a. x), ADD the following: “xi) Final dewatering, removal, hauling, and disposal of residual solids from the cleaning of pipelines, tanks & channels at the Water Treatment Plant and Wellfields remaining in the designated lagoon or any additional drained and dewatered solids remaining in the other two lagoons still in use by the City shall be paid for under Bid Item No. 26 – Allowance 7.”
2. **Page BF-11, Bid Item 26: Allowance 7 – Lagoon Residual Solids Removal, Hauling, and Disposal to an Approved Landfill.** In Item a) REPLACE the following: “*Only the final cleaning of the designated lagoon used during construction shall be included in Bid Item No. 3.*” with “Only the dewatering, removal, hauling, and disposal of residual solids from the designated lagoon selected by the Owner and used by The Contractor or any additional drained and dewatered solids remaining in the other two lagoons still in use by the City during the project shall be paid for under this allowance.”
3. **Page BF-13, Bid Item 33: Allowance 14 – Additional SCADA Programming.** In Item a) ADD the following: “This item shall include factory training at an offsite location as requested by the Owner/Engineer.”

MANUFACTURER OF MATERIAL AND EQUIPMENT TO BE FURNISHED

4. **Page MF-5, Section 43 21 00. Pumps, General.** DELETE in its entirety. Contractor is not required to complete motor selection.

MODIFIED GENERAL CONDITIONS (EJCDC)

5. **Page 26 of 62, 7.03 Service, Material, and Equipment.** In paragraph B, for the last sentence. REPLACE “*Contractor warrants that all materials and equipment... The foregoing applies whether the materials or equipment are specified in the Contract Documents.*” with “Contractor warrants that all materials and equipment not specifically called out for in the Contract Documents, however, chosen by the Contractor to be incorporated in to the Work, are suitable and fit for the intended use of such materials and equipment and are free from defects in material, workmanship, or design.”

APPENDIX D SPECIFICATIONS

6. **Page 7, Table of Contents,** In Division 40 – Process Interconnections, DELETE row for Gas Detection System Section 40 91 04 Page 1555. This Section is being deleted in this Addendum.
7. **Page 30-60, Section 01 14 00 – Work Restrictions.**
 - Part 3.5 B. 3. Well #8 – (Typical for Wells #8, #9, and #10), at the beginning of paragraph a., ADD “Contractor shall cut existing 12” main and install new 12” shut off valve, and then complete work on Well No. 8 (typical for Wells # 9 and #10). Contractor shall coordinate with the Owner/ Engineer to schedule this work during an 8-hour outage.”
 - Part 3.5 D. 1. West Aerator Building. In paragraph a, 12. ADD the following: “New isolation valves for Connection A, shown on Sheet WC-24 shall be completed so that all flow is diverted to the East Aerator Building while work is performed to install Valves #302, #304, and #305 (2). Plant flows of 7 MGD shall be maintained while the West Aerator is offline. A 24-hour outage shall be used to isolate the two clearwells to replace Valves #305 (2), and a second 24-hour outage shall be used to replace Valves #302 and #304.”
 - Part 3.5 D. 1. West Aerator Building. In paragraph a, 19. In the sentence that starts with Schedule extended outages to make critical interconnections and replace piping and valves, REPLACE “*while maintaining...if needed.*” with “as described in paragraph a. 12. After Valves #302 and #304 are replaced, Contractor shall maintain flows of 10 MGD to the plant with any one of the three aerators online and pre-chlorinating the aerator bypass flow as needed. There is an existing pre-chlorination line to the aerator bypass that will be operated by the Owner as required during construction.”
 - Part 3.5 D. 3. Filter Piping Gallery – Piping and Valve Replacements. In paragraph, 3.b. ADD the following: “To install Valves #407 and #409, the Contractor shall close Valve # 408 in the influent flume and maintain Filters No. 5 and 6 in operation.”
 - Part 3.5 D. 3. Filter Piping Gallery – Piping and Valve Replacements. In paragraph, 3.f. ADD the following: “A plant outage of up to 8 hours shall be scheduled to facilitate the replacement of Valve #408 in the influent flume.”
 - Part 3.5 D. 3. Filter Piping Gallery – Piping and Valve Replacements. In paragraph, 3.i. ADD the following: “To install stop logs in filter influent flume, the Contractor shall close Valve # 408 in the influent flume and maintain Filters No. 5 and 6 in operation. The Contractor shall install new bypass piping connection to the influent flume.”
 - Part 3.5 D. 3. Filter Piping Gallery – Piping and Valve Replacements. In paragraph, 3.1.1. ADD the following: “The Contractor shall isolate Filter Nos. 1 and 2 with the stop logs and replace the filter influent and effluent valves Valves # 411/414 and 421/424. The Contractor shall maintain four filters in operation, Filter Nos. 3-6. Typical for Filters Nos. 3 and 4 and Nos. 5 and 6, the Contractor shall maintain four filters in operation. Once the influent and effluent valves have been replaced, the remaining valves in the succeeding items can be performed and filter cells shall be rebuilt.”
 - Part 3.5 D. 7. Backwash Pump and Piping. In paragraph, 7.c. ADD the following after ...in the pipe gallery.: “When backwash pump header is connected to the existing 20” washwater header, the Contractor shall perform piping demolition and install Valve #405 to isolate the Make Up Reservoir supply line.”

- Part 3.5 D. 9. Clearwell Cleaning, Inspection, Baffles, Gates, and Valves. In paragraph, 9.a. ADD the following after ...the Finished Water supply.: “Modifications to Clearwells 1-3 are described in items b. through j. below. 1.) In order to perform the work, the Contractor shall close the existing 42” valve in the filter addition at Filter No. 6 to complete the work in Clearwells 1A, 1B, 3A, 3B, and Contact Tank No.1. Filter Nos. 2, 4, and 6 will remain in service. 2.) In order to perform the work, the Contractor shall close the existing 42” valve in the filter addition at Filter No. 5 to complete the work in Clearwell 2A, 2B, 3A, and Contact Tank No.2. Filter Nos. 1, 3, and 5 will remain in service. 3.) Once the Clearwells 1-3 and the new Chlorine Contact Tanks work is complete, a 24-hour plant outage shall be scheduled to core drill new opening and install Valve #481 in new Fluoridation Chamber from Chlorine Contact Tank No.1.”
- Part 3.5 D. 12. Fluoride Room Improvements. After paragraph 12. i., ADD “j. The three chemical feed pumps and piping to the Fluoridation tank shall be performed while existing Fluoride system is operable. The Contractor shall schedule an outage with the Owner/Engineer to make final connections from day tank to the new chemical feed pumps. The existing system shall remain in service until the new system is operational.”
- Part 3.5 D. 13. Chlorine Building Improvements. After paragraph 13. g., ADD “h. The Contractor shall supply new piping and valves from the chlorine cylinder to the chlorinators while the 75 psi system remains in operation. The Contractor shall run new chlorine solution lines from the application point back to the chlorine distributors. The Contractor shall schedule an outage with the Owner/Engineer to remove the 150 psi system, install the new distributor, and make final piping connections to put the new 150 psi system in service. The outage is limited to 24 hours. The Contractor shall remove and replace the second chlorinator and piping to install the new 75 psi distributor panel and make final piping connections. i. There are no restrictions on The Contractor in order to perform the mechanical, structural, and architectural improvements to the Chlorine Building.”
- Part 3.5 D. 17. Surge Relief at WTP to Makeup Reservoir. At the end of paragraph, 17.b. ADD the following: “The Contractor shall install surge relief system to fill Make Up Reservoir for the Owner to utilize the reservoir for filter backwash operations. The Contractor shall install the new filter backwash pump and make the connection to the 20” washwater header and install Valve #405.”
- Part 3.5 D. 27. Site Work at Main Water Treatment Plant. In paragraph 27. r., REPLACE “*Exaction and remove ...line.*” with “Approved Tank Remediation Firm / UST Removal Contractor shall excavate and remove existing 2,00-gallon buried steel tank and buried fuel line. Scope for the Contractor and UST Removal Contractor is defined in Section 33 36 13.”
- Part 3.5 D. 27. Site Work at Main Water Treatment Plant. After paragraph 27. y, ADD “z. Remove and replace existing motor operated 3-way Plug Valve in manhole east of Fluoride Building serving Fluoride fill station drain. As shown on P-35 and E-61.”

8. **Page 476-478, Section 08 33 23 – Doors, Aluminum Overhead Coiling.**
- Part 2.1A 1. Face Slat. ADD “For doors less than 12’ wide with insulation, the face slat and back slat shall be aluminum 18-gauge minimum. For door openings 12’ and wider, 18-gauge galvanized steel with epoxy coating will be accepted provided that it meets OBC for wind loads.”
 - Part 2.2 A. Operator. In the second and third sentence, REPLACE “*on plans*” with “table below”. At the end of Paragraph A, INSERT the following table for the motor operators.

Mark	Location	Operator NEMA Rating
102A	Pump Room 102 A	4X
103D	Electric Room 103	4X
121C	Chlorine Storage 121	4X
121D	Chlorine Storage 121	4X
G100C	Garage G100	4X
G100D	Garage G100	4X

9. **Page 745, Section 22 14 29 – Sump Pumps.** Part 2.1 D. Controls. ADD

“3. Controls:

- a. NEMA 4X Control Panel with watertight enclosure for Simplex Operation
- b. Provide pumps off, start pump, and high alarm floats (LSH-xxx By Contractor).
- c. Float switch assembly with stainless steel rod and level switches. Floats to be field-adjustable.
- d. Mount switch assembly support in a location that is accessible to personnel and as approved by the Owner and Engineer.
- e. Pump hand-off-auto switch
- f. Pump “run” indicator light. Horn silence and alarm test switches.
- g. Audible, light alarms and dry contacts”

10. **Page 1204-1207, Section 28 16 00 – Closed Circuit Television Systems.**

- Part 2.5 Space Intrusion Detection Devices. ADD “Not used, provide capability to support the following in the future.”
- Part 2.6, A.2 a. IP Cameras. Under 16 – 5 MP outdoor bullet type PTZ cameras, for Feature 7 and Feature 9 ADD “Not Used”.

11. **Page 1385-1386, Section 33 56 13 – Diesel Fuel Aboveground Storage Tank Systems.**

- Part 2.6, after 2.6 Pumping Equipment Valves and Fittings – Fuel Dispensing Applications” ADD “(Not Used)”.
- Part 2.7, after 2.7 Pump Controls, ADD “(Not Used)”.

12. **Page 1396, Section 40 05 13.13– Process Piping, Carbon & Galvanized.** Part 2.1 D. Finishes. REPLACE “*coal tar in accordance with AWWA C203*” with “liquid epoxy coating that is NSF61 approved.”

13. **Page 1555-1561, Section 40 91 04 – Gas Detection System.** DELETE in its entirety. Gas detection is covered in Section 46 31 11.

14. **Page 1458, Section 40 05 23 – Process Valves.** Part 4.5, B. Ball Valve Schedule. ADD the following:

Location	Pipe/Use	Type	Size (Inches)	Ends	Pressure Rating (psi)	Quantity	Operator	Accessories
YARD (501)	FLUORIDE DRAIN	CPVC	4	SKT	50	1	ON	ES

15. **Page 1471, Section 40 05 23 – Process Valves.** Part 4.5, H. Plug Valves Schedule. ADD the following:

Location	Pipe/Use	Type	Size (Inches)	Ends	Quantity	Operator	Controls	Accessories	Installation
YARD (500)	3-WAY DRAIN	RP	8	MJ	1	PAE	DG	EB	V

NSF 61 Compliant?	Operation	Service
Y	OC	WW

16. **Page 1723, Section 43 24 13 – Pumps, Backwash Vertical Pump.** Part 3.4 A. Equipment Schedule, Under Maximum Motor Horsepower (HP), REPLACE “125” with “100”.

17. **Page 1744, Section 46 31 11 – Chlorine Gas Feed Equipment.** Part 2.5 A. Chlorine Detector. Under paragraph 1. ADD the following table:

Tag No.	Analyzer Location	Mounting	Enclosure Type
AIT-1036	Chlorine Cylinder Room	Wall	NEMA 4X
AIT-1037	Chlorinator / Distribution Room	Wall	NEMA 4X

APPENDIX D: DRAWINGS

18. **Sheet WC-13, New Raw Water Main Connection B Civil Site Plan.** ADD the following general note: “The cross over for Connections A and B shall be scheduled with the Owner/Engineer at two different times. The outages will be limited to 24 hours each.”
19. **Sheet WC-24, Ex. Raw Water Main Connection A Civil Site Plan.** ADD the following general note: “The cross over for Connections A and B shall be scheduled with the Owner/Engineer at two different times. The outages will be limited to 24 hours each.”

20. **Sheet P-15, Main & Filter Bldg Process Filter Pipe Gallery Intermediate Plan.**
 - On 18” wash water header adjacent to Coded Note 2, ADD arrow and symbol for Coded Note 21 at symbol for 6” flanged pipe connection.
 - ADD Coded Note 21, “21. Remove 6” Make-Up Reservoir Fill Line as shown on D-29 and install new 6” Blind Flange.”
21. **Sheet P-18, Main & Filter Bldg Process Filter Pipe Gallery Sections.** To Coded Note 2, ADD “Install 3” Blind Flange to 3”x3” tee at the center line of each Filter Cell (Typ. 12). This water line is being repurposed as the Plant Water System in Filter Pipe Gallery. See Plumbing Drawings for plant water hosebibbs.”
22. **Sheet P-19, Main & Filter Bldg Process Filter Pipe Gallery Sections.**
 - In Section 11, Coded Note 29. ADD “The 2” drain line shall be tapped off the 6” FTW and run to the gutter in the tunnel. See Sheet P-13, Coded Note 24 for basement plan.”
23. **Sheet P-20, Filter Building Process Filter Pipe Gallery Section.**
 - In Section 13/P-13, Valve 404 is shown incorrectly, DELETE symbol and number for Valve 404. The valve is shown correctly on Sheet P-19.
24. **Sheet P-26, Main Building Process High Service Pump Rm Plan.**
 - For High Service Pump No. 1 and No. 2, downstream of the proposed butterfly valve, ADD arrow and symbol for Diamond Note 6.
 - ADD Diamond Note 6, “6. New flange coupling adaptor for proposed butterfly valve.”
 - For High Service Pump No. 3, No. 4 and No. 5, downstream of the proposed butterfly valve, ADD arrow and symbol for Diamond Note 7.
 - ADD Diamond Note 7, “7. Install new butterfly valve at existing flange.”
25. **Sheet P-27 – Main Building Process High Service Pump Rm Sections.** Section 18/P-26. For High Service Pump No. 1, DELETE the following notes: “*Remove and clean existing pump, install new bearings.*” and “*Remove, clean, recondition, and reinstall existing 5KV Synchronous motor.*”
26. **Sheet P-31, Main Building Process in Mechanical Rm Plan-Section-Schematic.**
 - Section B, REPLACE with the attached P-31. Revisions were made to show 3” vent line in Section B that is shown in the schematic.
 - Blower Schematic, Note G for ASB-475 ADD “Valve shall be flanged per Valve Schedule.”
27. **Sheet P-35, Fluoride Building Process Plan-Sections.** REPLACE with the attached P-35. Revisions were made to show new stair as FRP instead of Aluminum, added details for replacing existing 3-way plug valve (500), and added information for new Fluoride Containment Drain Valve (501).
28. **Sheet A-16, Architectural Door Schedule and Details.**
In Door Types Detail G,
 - For 12’ wide, ADD “102A”
 - For 10’ wide, DELETE “102A” and ADD “103D”
 - For 9’ high, DELETE “102A” and ADD “103D”
 - For 10’ high, ADD “102A”

29. **Sheet A-17, Architectural Room Finish Schedule.**
 - For Room 125 – Fluoride Operator Room, under Remarks ADD “Floor shall have chemical resistant coating.” Coating system is specified in Section 09 96 35.
30. **Sheet PL-3, Filter Building First Floor Plan Sanitary Demolition.** Coded Note 4, REPLACE “*Existing site sanitary line....Contractor.*” with “The existing sanitary sewer location shall be field verified and cleaned from the Mechanical Room to the Septic Tank. A new 4” sanitary line shall be extended as shown on PL-7.
31. **Sheet PL-7, Filter Building First Floor Plan Sanitary.**
 - Coded Note 3, REPLACE “*Note Not Used*” with “In yard, excavate and connect to existing 4” sanitary wye below grade outside of Rear Lobby Room 123. Saw cut existing floor, core drill 6” opening in footer, and install new 4” sanitary line below grade. Contractor shall make required connection to 4” sanitary from new 1st Floor Restroom. Replace concrete floor as required.”
 - Coded Note 9, REPLACE “*4” sanitary line down...below*” with “4” sanitary line to extend into Lobby Room 123 and connect to new 4” sanitary sewer.”
32. **Sheet PL-8, Filter Building First Floor Plant Plumbing.** DELETE Coded Note 25.
33. **Sheet E-57 – Filter Gallery Electrical Renovation Power Plan EL 975.**
 - At south wall in Filter Piping Gallery, DELETE AIT 421 on East Aerator Filter Influent Piping and AIT 428 on West Aerator Filter Influent Piping. (Note: These were not included in the schedule updated in Addendum 3).
 - General Notes: ADD the following: “3. Provide NEMA 4X junction box for each float switch as shown on typical detail.”
34. **Sheet E-39 – Proposed New 5KV One-Line Diagram** For the generator feeder between the generator and that 5KV switchgear, disregard what was revised in Addendum 2, Item 48. In the Feeder/Conduit Schedule Note 2, REPLACE “New (1) 5”...spare” with “New (1) 5” conduits with 4 #350 KCIMIL, 1 #1/0 Ground. (1) 5” spare conduit. All feeder conduits between the new switchgear, new 480V MCCs, new 5KV MCCs, generator, electrical panels shall be installed in conduit and run overhead within the electrical room and as high as possible.”

GENERAL CLARIFICATIONS

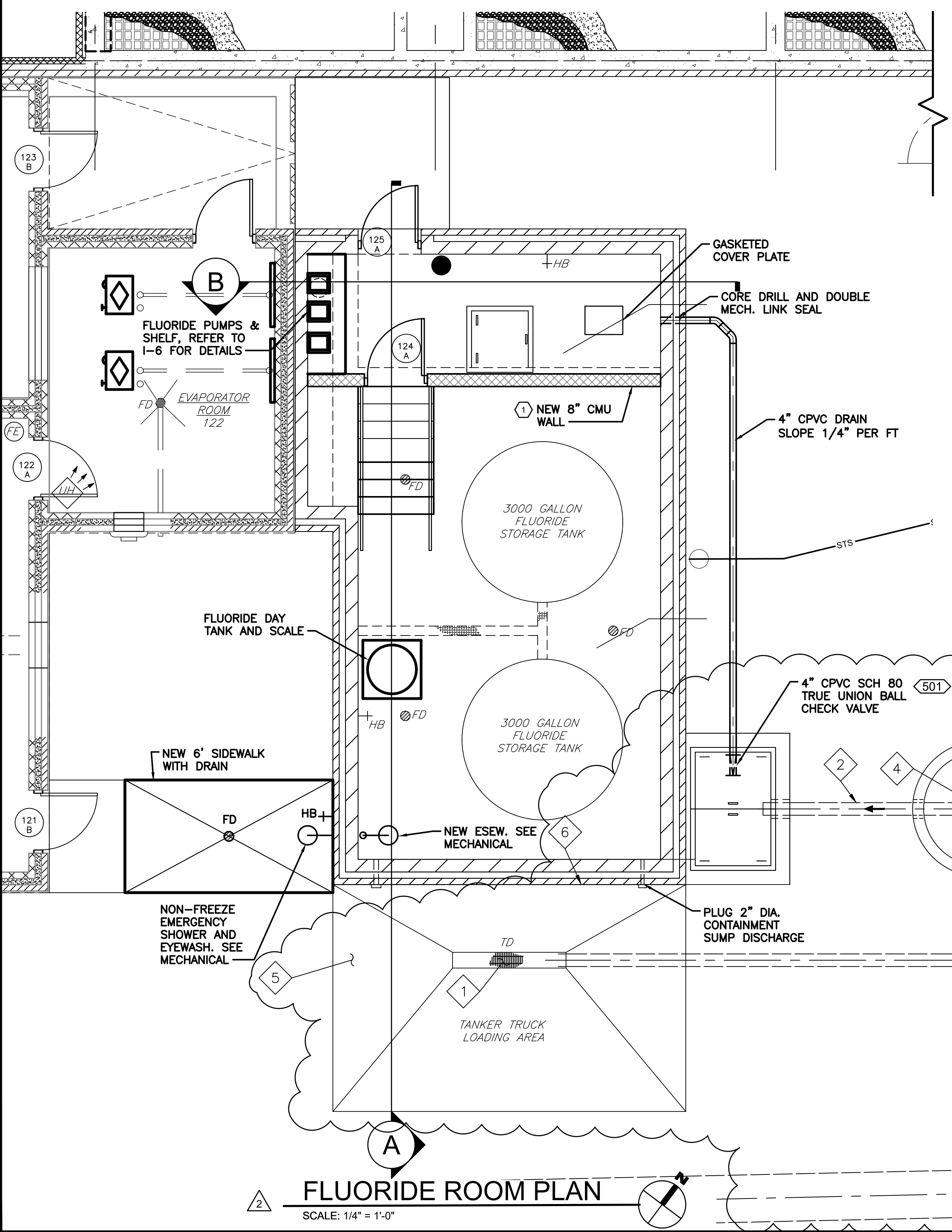
35. **Bid Item 37 and Bid Item 38, Alternate 2 and 3.** Sheet I-55 and I-56 depict ATI Filter Smart Controller Systems Backwash Analyzers being wired back to the designated PLCs. Coded notes include new conduit and wire sizes.
36. **Section 40 91 00 - Analytical Instruments.** Part 2.1 D. Sample Pump - Suction Lift. All analyzer probes are specified as reagentless. A Sample Pump is not required unless required by Manufacturer.
37. **Sheet WC-16 and WC-17.** Doghouse Manholes are shown correctly and indicate the location of the proposed cleaning access. All cross-connections between existing PCCP and the New Raw Water Line are provided with valve boxes at locations shown on the plans.

38. **Sheet WC-21 – Ex. Raw Water Main Plan and Profile Sta 60+00 to 65+73.** The limits of the 12” blow off pipe that is to be cleaned and inspected begins at Well #10 then extends North to the existing Concrete Headwall, Sta. 62+29.
39. **Sheet P-9, Main Building Process Clearwell Plan.** The 12” flap valves (482) between clearwells and new chlorine contact chambers are shown correctly. (Detail 11 on SD-33 Typical Pressure Relieve Valve does not apply)
40. **Sheet E-57 – Filter Gallery Electrical Renovation Power Plan El. 975.** The Plumbing Drawings call for the replacement of the two sump pumps in the gallery and reconnecting to existing discharge pipe. Drawing E-57 shows a new Simplex Pump panel to be installed with each of these replaced pumps. The Simplex Pump control panel layout and wiring diagrams shall be provided by the manufacturer during the submittal process. Section 22 14 29 was revised in this Addendum to include control panel. Pumps are controlled by float switches provided by the manufacturer (LSL-520A), but high level alarm float switches (LSH-520A and LSH-520B) shall be provided independent from the sump pump and wired to the PLC.

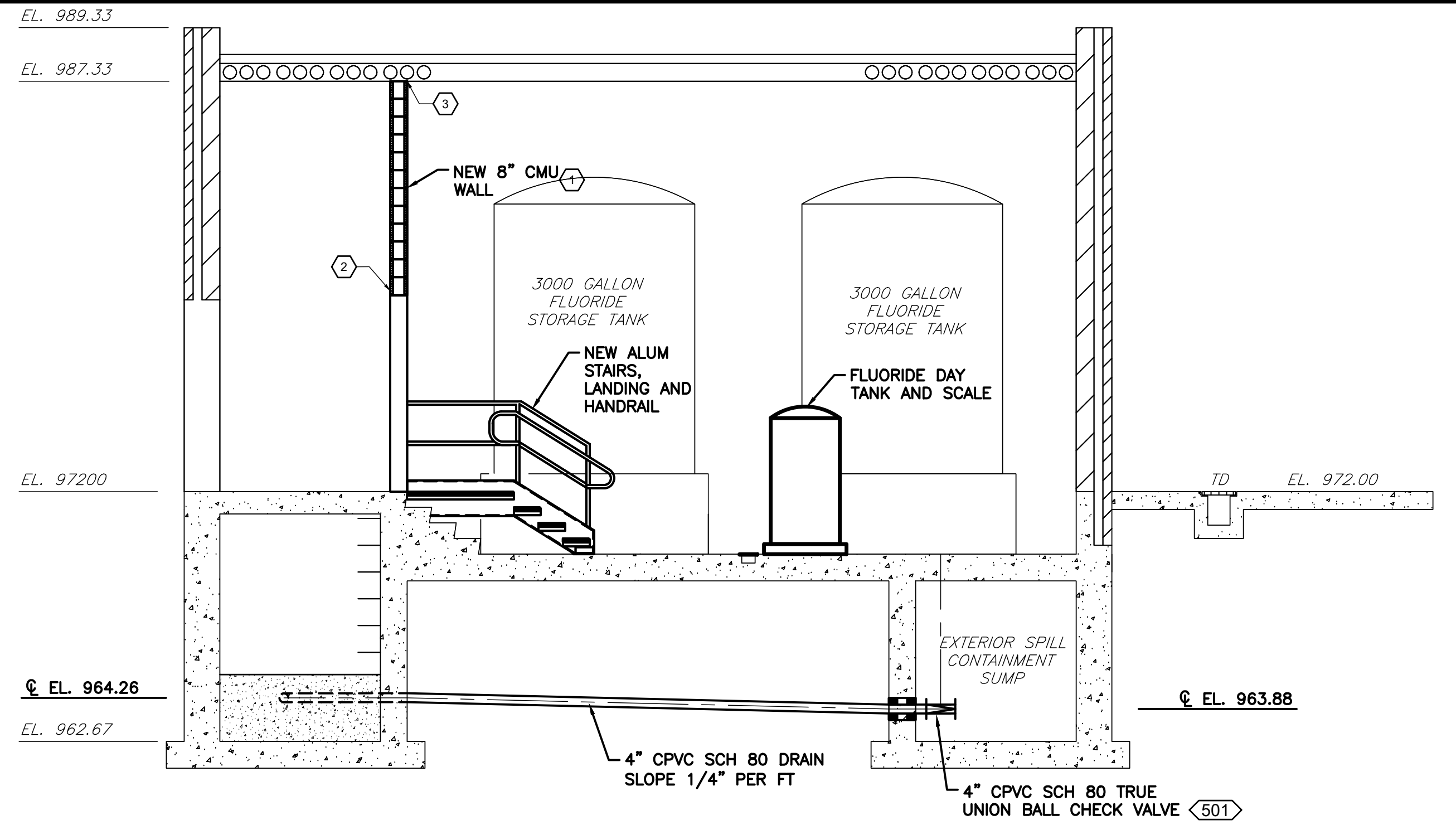
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P:\PR58982\Cadd\Sheets\F-35 FLUORIDE BUILDING PROCESS PLAN-SECTIONS.dwg 5/31/2022 2:20:51 PM Randy Podmore

- 6 REPLACE EXISTING 1/2" JOINT FILLER AND SEALANT OVER FILLER.
- 5 EXISTING 8" THICK ODOT ITEM 452, CLASS D CONCRETE PAVEMENT. ENCASED TRENCH DRAIN IN 8" CONCRETE.
- 4 REPLACE EXISTING 3-WAY M.O. PLUG VALVE WITH NEW.
- 3 EXISTING 72" DIAMETER PRE-CAST CONCRETE TYPE "B" MANHOLE.
- 2 EXISTING 8" SCH.40 PVC @ 1.0%.
- 1 EXISTING SINGLE CHANNEL DRAIN WITH CAST IRON GRATE, AND WITH AN 8" VERTICAL OUTLET.



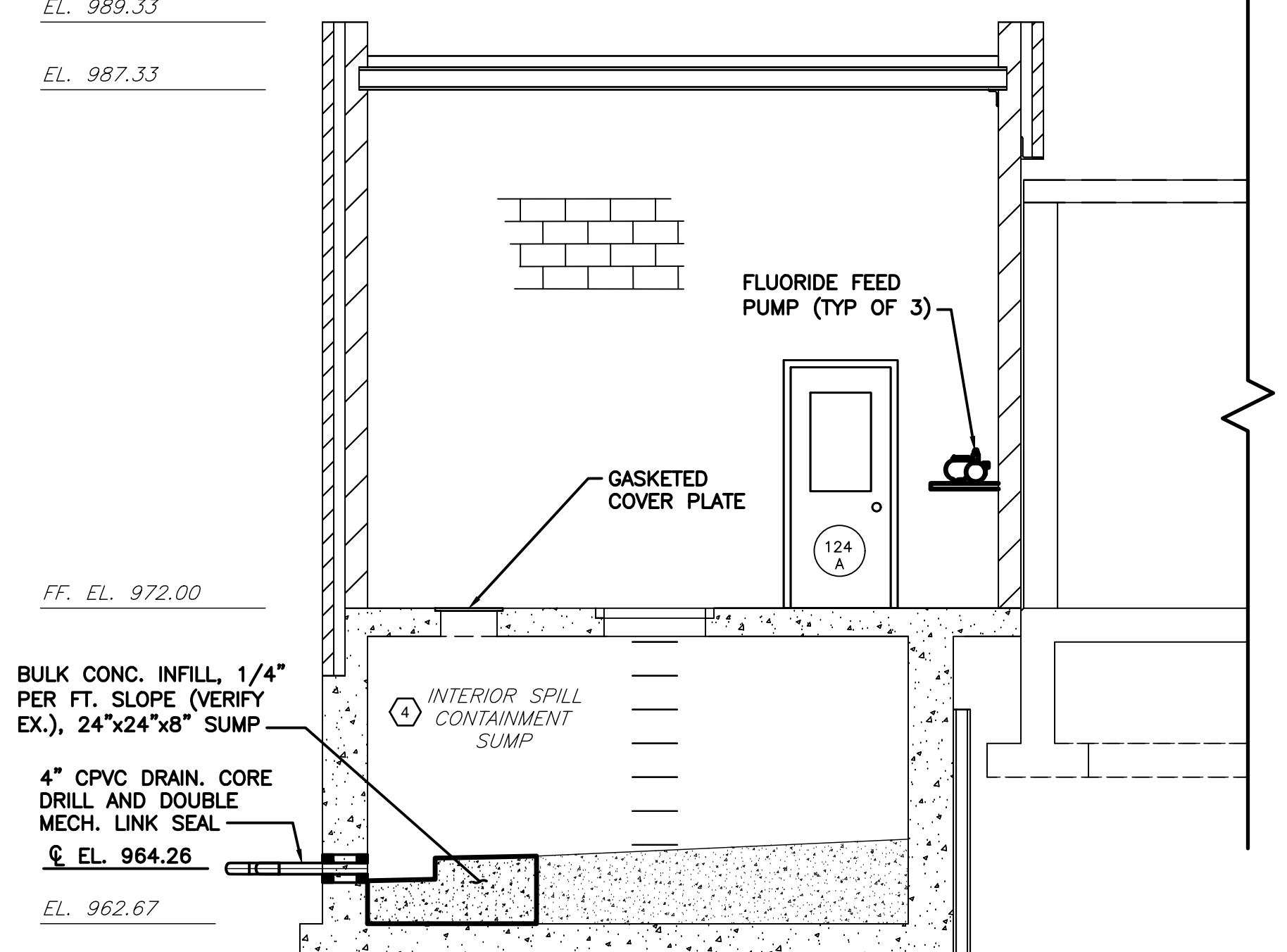
FLUORIDE ROOM PLAN
SCALE: 1/4" = 1'-0"



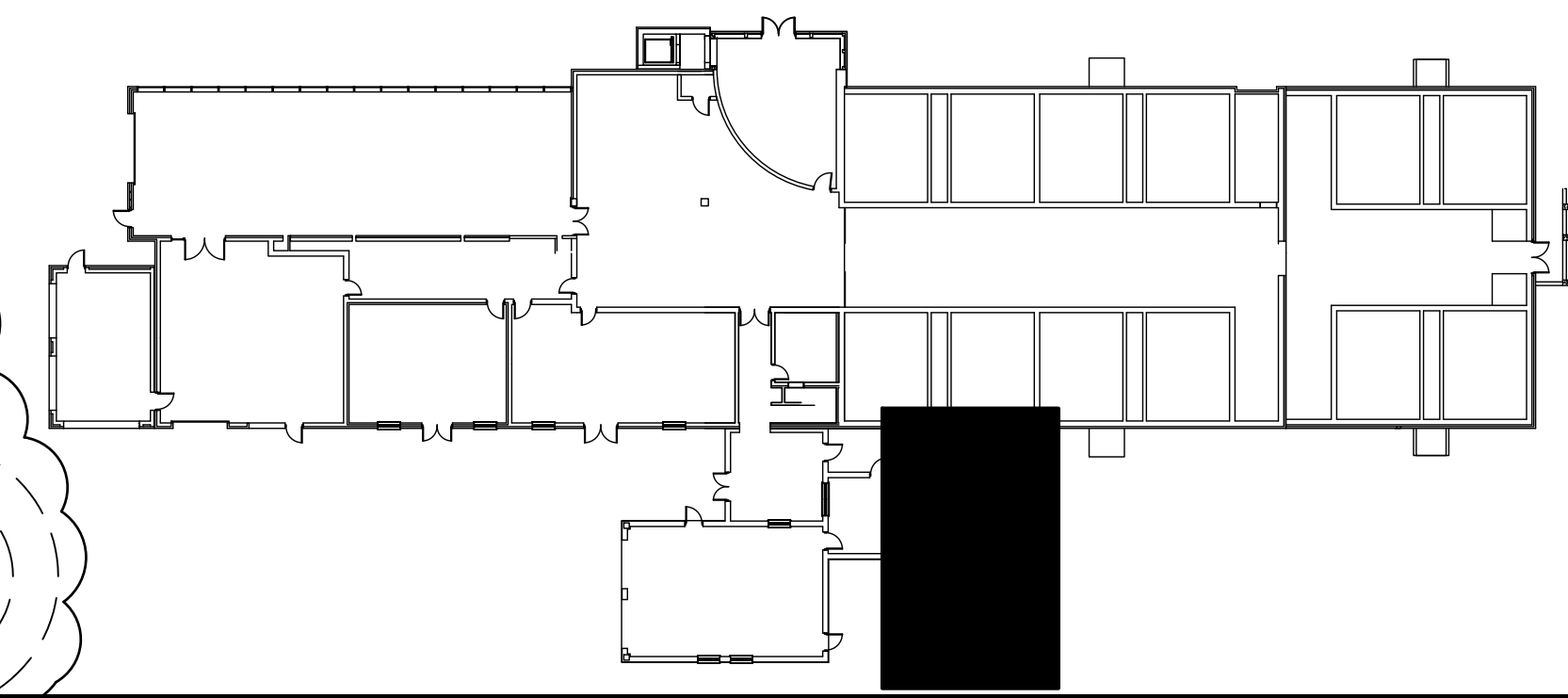
A SECTION
SCALE: 1/4" = 1'-0"

CODED NOTES:

1. REINFORCE VERTICALLY WITH #5 @ 48" O.C. PROVIDE MATCHING #5 x 3'-2" ADHESIVE DWL'S AT BASE OF WALL, 8" EMBEDMENT. SEE SHEET SD-5 FOR ADDITIONAL MASONRY REQUIREMENTS.
2. PROVIDE LINTEL L1 OVER DOOR OPENING. SEE LINTEL SCHEDULE, SHEET SD-6.
3. LATERALLY BRACE TOP OF WALL PER DETAIL 8, SHEET SD-7. LOCATE EXPANSION ANCHORS SO PRESTRESSING STRAND IN EXISTING HOLLOW CORE PLANK IS NOT SEVERED.
4. THE VOLUME OF THE INTERIOR SPILL CONTAINMENT SUMP IS SIZED TO HOLD 4,500 GALLONS.



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



BURGESS & NIPLÉ
100 WEST ERIE STREET
PAINESVILLE, OHIO 44077

CITY OF CANTON, OHIO
WATER DEPARTMENT
SUGAR CREEK
WATER TREATMENT PLANT &
WELLFIELD IMPROVEMENTS

NO.	DESCRIPTION	DATE	REVISIONS
2	ADDENDUM NO.5	06/2022	
1	BID SET	04/2022	

JOB NO: PR58982
DATE: APR 2022
DESIGNED BY: KAS
DRAWN BY: KAS
CHECKED BY: MMK
APPROVED BY: CMS
SCALE: NONE

FLUORIDE BUILDING
PROCESS
PLAN-SECTIONS

P-35
SHEET: OF