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Addendum No. 3

Date: January 9, 2026

Project: Baseball & Softball Locker Room Buildings
Project Number: 24104.00

The following Addendum contains clarifications and revisions to the construction documents issued for bid 11/26/2025 for the above-mentioned project. This addendum forms a part of the Contract Documents and modifies all previously issued specifications and drawings. Bidders shall update their Bidding Documents with the information contained in this Addendum. Where new Drawings are enclosed with this Addendum, discard the old Drawing and insert the new. Where Supplemental drawings (Sketches) are enclosed with this Addendum, attach the Supplemental drawing to the documents as noted. Where only written modifications are given, copy the information onto the appropriate Documents and note the Addendum number. All items contained herein shall be included with the Bid. Acknowledge receipt of this addendum by inserting the number and date on the bid form.

Note: This addendum ☐ does ☒ does not modify the bid due date.

Specifications

3.A Specification Section: 08 71 00 Door Hardware
- a. For Hardware Set 019 add Door 110 and 210.

3.B Specification Section: 10 50 00 Solid Phenolic Lockers
- a. In Part 2, 2.2 A: Remove Line 2 "Panel Material shall meet fire resistance per ASTM E84 Class A".

3.C Specification Section: 20 07 00 Mechanical Insulation
- a. In Revise Paragraph 3.13(A)(1) to read as follows:
  "1. Supply air ducts, return air ducts, and outdoor air ducts."
- b. Delete Paragraph 3.13(B)(8) "Return Air Ducts"

3.D Specification Section: 22 11 19 Domestic Water Piping Specialties
- a. Added acceptable manufacturer for backflow preventer.

3.E Specification Section: 22 13 19 Sanitary and Storm Waste Piping Specialties
- a. Modified TD-1 description note.
- b. Added TD-2 entry and description.

3.F Specification Division: 27 Communications
- a. Scope Clarification – Contractor shall provide:

I. Provide pathways consisting of raceway and boxes for the following systems as indicated in the Contract Documents (Owner will self-perform, and/or contract directly for system infrastructure): Cooper Horizontal Cabling and Connectivity, Data Network Switching and Audio/Visual System Cabling and Equipment.
II. Provide plywood backboards in Communication Equipment Rooms: Softball IT Room 208 and Baseball IT Room 105 as indicated under Section 271100.
III. Provide communications racks and accessories in Softball IT Room 208 and Baseball IT Room 105 as indicated under Section 271116.

3.G Specification Division: 28 Electronic Safety and Security
a. Scope Clarification – Contractor shall provide:
I. Provide pathways consisting of raceway and boxes for the following systems as indicated in the Contract Documents (Owner will self-perform, and/or contract directly for system infrastructure): Access Control, Video Surveillance and Intrusion Detection.
II. Provide fire alarm system as indicated under Section 283111 and on the Drawings.

3.H Specification Section: 28 31 11 Fire Alarm System
a. Add Paragraph 1.2 A.11., to read:
"11. Notify the BSU Campus Police through Owner's Metasys building management system."
b. Add Paragraph 2.2 B.14., to read:
"14. Transmit system alarm to the BSU Campus Police through Owner's Metasys building management system."
c. Add Paragraph 2.2 E.7., to read:
"7. Transmit system status to the BSU Campus Police through Owner's Metasys building management system."
d. Add the following to the end of Paragraph 2.3 H.:
"Provide modules required to automatically transmit alarm, supervisory and trouble signals to the Building Management Metasys Control Panel, for reporting back to Campus Police."
e. Replace Paragraph 2.3 I. and subparagraphs, with the following.
"I. Network Communications: In addition to building network interface and digital alarm communicator modules (DAC), provide BACpac Ethernet Module in each FACP for communication with building Metasys control panel; Simplex #S4100-0051.

Drawings

General clarification:
Remove the "Preliminary - Not for Construction" stamp from the upper right-hand corner of the sheets.

3.I Sheet: G0.30 – Code Analysis
a. Fire extinguishers cabinet and bracket locations included.

3.J Sheet: C2.01S – Site Plan - Softball
a. Revised Note H to add references to pavement section and utility trench details.

3.K Sheet: C4.01S – Utility Plan – Softball
a. Changed 2" WL material from D.I. to HDPE
b. Changed TC of SAN-16 to 943.61
c. Added pipe label to pipe east out of SAN-16.

3.L Sheet: C4.02B – Utility Plan - Baseball
a. Changed 2" WL material from D.I. to HDPE

b. Several revisions to the sanitary and storm information on the east side of the bldg. The contractor should carefully review the information in this area.

3.M Sheet: C4.03 – Utility Plan – Fire Service Vault
a. Added sheet to show new fire service vault out near Bethel Avenue.

3.N Sheet: C6.01 – Construction Details
a. Updated the names of the pavement section details to be more specific as to the materials.

3.O Sheet: C6.03 – Construction Details
a. Added INAW fire service vault detail.

3.P Sheet: A2.10A - Alternate 1 - Baseball and Softball Connection
a. Added sheet to Include scope and details of Alternate 1.

3.Q Sheet: A4.01 - Section Details
a. Updated section details.

3.R Sheet: A6.01 - Door Schedule & Storefront Elevations
a. Updated hardware sets and detail.
b. Detail 6A/A6.01, modify location of GL-01A from 7'-0" FFE to 7'-4" FFE.
c. Detail 10/A6.01, modify location of GL-01A from 7'-0" FFE to 7'-4" FFE.

3.S Sheet: FP2.01B – First Floor Fire Protection Plan – Baseball Building
a. Replace double check backflow preventer with gate valve and check valve.

3.T Sheet: FP2.01S – First Floor Fire Protection Plan – Softball Building
a. Replace double check backflow preventer with gate valve and check valve.

3.U Sheet: P5.00 – Plumbing Schedules and Details
a. Added access door schedule.

3.V Sheet: P5.01 – Plumbing Detail
a. Created new drawing to represent trench drain TD-1 installation.

3.W Sheet: M7.00 – Mechanical Schedules
a. Electric Wall Heater Schedule – Change voltage and capacity of heaters.

3.X Sheet: ES2.01 – Electrical Plans - Site
a. Revise Plan Note #1 to reference Detail #5/E5.04..

3.Y Sheet: E2.01BB – Electrical Plans – Baseball Building
a. Electric Wall Heater (EWH-1-BB) voltage and circuit change. Plan note 21 added to indicate the size of the wire for the subsequent circuit.

3.Z Sheet: E2.01SB – Electrical Plans – Softball Building
a. Electric Wall Heaters (EWH-1-SB, EWH-2-SB, AND EWH-3-SB) voltage and circuit change. Plan note 21 added to indicate the size of the wire for the EWH-1-SB circuit.

3.AA Sheet: E5.04 – Electrical Details
a. Add Detail #5/E5.04 for the Utility Transformer Pad Detail.

3.BB Sheet: E7.01B – Electrical Schedules
- a. Change EWH-1-BB to a single pole 25A circuit #34 on Panel '1HN1-BB' and replaced circuit #36 with a spare breaker.

3.CC Sheet: E7.01S – Electrical Schedules
- a. Change EWH-1-SB to a single pole 25A circuit #20 in Panel '1HN1-SB'.
- b. Change EWH-2-SB to a single pole 20A circuit #30 in Panel '1HN1-SB'.
- c. Change EWH-3-SB to a single pole 20A circuit #29 in Panel '1HN1-SB'.
- d. Change breakers #22, #31, and #32 to 1P20A spares in Panel '1HN1-SB'

3.DDSheet: E8.01 – Light Fixture, Relay & Inverter Schedules
- a. Updated fixture IB-4 description
- b. Updated list of Acceptable Manufacturers

General Questions

3.EE Alternate 1 – Baseball & Softball Connection
Q: Provide information for Alternate 1 and Sheet A2.10A.
A: MSA – Basis of Design changed to Handi-Hut Custom Covered Walkway with enclosure. Refer to Sheet A2.10A added to the drawing set.

3.FF Hardware Sets Clarification
Q: Clarify the hardware sets for this project.
A: MSA – Hardware sets have been corrected in the Door Schedule on A6.01.

3.GG Access Control & Cameras
Q: Clarify whether the Owner is responsible for furnishing and installing access control and cameras.
A: MSA – Contractor is to install just the infrastructure (conduit, outlet boxes, etc.) for these items. BSU will install the systems, wiring, equipment, cameras etc.
LOFTUS - Access controls, Video Management Software and Intrusion Detection will be Owner furnished/Owner installed. Provide pathway rough-ins (raceways and boxes) as indicated in the Contract Documents.

3.HH Parapet Counterflashing
Q: Provide more information on the roof termination at parapet and counterflashing.
A: MSA – Blue line in parapet details represent roofing membrane. Include counterflashing and membrane termination as required by roofing manufacturer.

3.II ACM Metal Panel System
Q: Is ACM used in this project?
A: MSA -There is no ACM remaining in this project. All references to ACM should refer to Section 074213-Formed Metal Wall Panels.

3.JJ Foot Ledge Finish
Q: What is the desired finish for the foot ledge?
A: MSA - Provide shower foot ledge with a matte black finish to match other accessories.

3.KK Waste Chute Finish

Q: What is the desired finish for the waste chute?
A: MSA - Provide trash grommet standard finish.

3.LL Shower Seat
Q: What manufacturer and model number is the shower seat?
A: MSA - Provide Bobrick B-5191 Reversable.

3.MM Corner Guards
Q: The corner guards in the specs are vinyl snap on with aluminum retainers but the schedule in the drawings calls for aluminum corner guards adhered directly. Please clarify which corner guard is desired.
A: MSA - Provide Aluminum corner guards adhered directly per drawing notes.

3.NN Corner Guards
Q: Is there a desired manufacturer & model for the custom mirrors or would any frameless concealed mounted mirror be acceptable?
A: MSA - Frameless concealed mounted mirror is acceptable.

3.OO Keynote 2.66
Q: Sheet A2.00B keynote 2.66 references a detail 11/A10.01. This detail is missing.
A: MSA - Refer to interior elevation 4/A9.00 and detail 10/A10.01. All partitions should be noted as scheduled in the drawings, details are for reference.

Substitution Request

3.PP Question: [Builders Construction Products, December 19th, 2025]
Q: Duro-Tuff 60 Mil PVC membrane
A: MSA – This product is not included in BSU's architectural standards. Substitution request is not accepted.

3.QQ Question: [Builders Construction Products, December 19th, 2025]
Q: Duro-Last 60 Mil PVC adhered membrane
A: MSA – This product is not included in BSU's architectural standards. Substitution request is not accepted.

3.RR Question: [Elite Storage Products, January 1st, 2026]
Q: LockersMFG to be approved for Phenolic Locker series
A: MSA – Substitution request is not accepted.

3.SS Question: [Pridemark, January 16th, 2026]
Q: Glazed Curtain Walls
A: MSA – Manko is acceptable substitution request, as long as product submitted meets or exceeds specifications and basis of design product/system requirements.

Contractor Questions

3.TT Question: [Myers, December 19th, 2025]
Q: The finish legend calls for the epoxy flooring for a SW Deco-Flake system; however, the specifications call for a SW Hybri-Flex EC system. Could there be clarification on what system is desired?
A: MSA – Provide SW Deco-Flake System.

3.UU Question: [Myers, December 19th, 2025]
Q: Cleats can puncture flakes in an epoxy system. Would a quartz system be desired or considered, as quartz holds up better to cleats while also having stronger slip resistance?
A: MSA – Bid epoxy floors as noted.

3.VV Question: [Myers, December 19th, 2025]
Q: For the ground sealed concrete, will there be a specification for this, or is there any information for the desired sealer?
A: MSA – Refer to Cast-In Place Concrete Spec Section 033000.

3.WW Question: [Hagerman, December 22nd, 2025]
Q: The General Finish Notes (A8.00) state that "All walls to be painted PT-1, U.N.O.". There is no call out for the paint in the locker room shower stalls. Please confirm that the shower stalls are to be painted with the Acrylic Latex paint that is called out as PT-1.
A: MSA – Shower stalls are confirmed to be painted with PT-1.

3.XX Question: [RL Turner, January 2nd, 2026]
Q: Rooms 112a, 103d, 103c and 203b, show locations of showers with no called out for shower rods or curtains. Is this intentional that these items are to not be included in these shower areas?
A: MSA - Provide shower curtain & rod as called out in accessory schedule at all shower stall locations.

3.YY Question: [Mattcon General Contractors, January 2nd, 2026]
Q: What plastic laminate (PL-1 or PL-2) should be used for the cubbies shown in details 1 & 3?
A: MSA - Refer to Addendum #2 Sheet A10.00 Locker Details. Interior detail 1/A10.02 - these cubbies should be black phenolic.

3.ZZ Question: [Mattcon General Contractors, January 2nd, 2026]
Q: Do you have a desired manufacturer for the bench cubby cushion or any 2" thick foam cushion with HD Velcro?
A: MSA - Specific manufacture not required, coordinate with locker upholstery.

3.AAA Question: [Mattcon General Contractors, January 2nd, 2026]
Q: Please confirm that the section cutout in detail 3 on A9.01, 4/A10.02, is supposed to be 1/A10.02.
A: MSA - Detail 1/A10.02 is the correct reference detail.

3.BBB Question: [DECO, December 19th, 2025]
Q: 06 41 16 2.1 F.1 – Is Vertical Grade Surfacing (VGS) acceptable in place of Horizontal (HGS) for cabinet exteriors as per AWI recommendations and to help with laminate stocking availability?
A: MSA - Yes, this is acceptable.

3.CCC Question: [DECO, December 19th, 2025]
Q: 06 41 16 2.1 F.2 – Is 3mm and thin PVC an acceptable option for body edges and door/drawer fronts? Laminate edges on panels have durability issues (chipping, delaminating). AWI strongly encourages use of PVC edgebanding when machine applied with hot glue.
A: MSA - Yes, this is acceptable.

3.DDD Question: [DECO, December 19th, 2025]
Q: 06 41 16 2.1 G.3 – Can drawer bottoms match sides and backs as Thermally fused laminate instead of plywood?
A: MSA - Yes, this is acceptable.

3.EEE Question: [DECO, December 19th, 2025]

Q: 06 41 16 2.3 A – are 120 degree self-closing hinges acceptable?
A: MSA - Yes, this is acceptable.

3.FFF Question: [DECO, December 19th, 2025]
Q: 06 41 16 2.3 G.1.c – Please revise to be self closing only. Push to open motion slides are designed to work best on drawers WITHOUT pulls or handles and can be damaged if users open with the pulls as is likely in these public, heavy use spaces.
A: MSA - Yes, this is acceptable.

3.GGG Question: [Hagerman, December 16th, 2025]
Q: There is a slip sheet/protection mat referenced in spec sections 07 54 23 2.6 - C and again in 07 54 23 3.5 - B, but section 07 54 23 3.6 - A calls for the TPO membrane to be adhered. A slip sheet can only be placed between roofing membrane and insulation in a mechanically attached or ballasted type assembly. Should the request for slip sheet/protection mat be omitted?
A: MSA - Refer to Addendum 02.

3.HHH Question: [RL Turner, December 19th, 2025]
Q: Please confirm whether or not there is any AESS for the project. I see that there is a spec for it. I have went through the drawings and I do not see.
A: MSA – Refer to Addendum 02.

3.III Question: [RL Turner, December 19th, 2025]
Q: Noticed some discrepancies between the roofing spec and drawings. 1. Insulation: Spec calls for 2" base layer and top layer thickness to attain R-30. Drawing calls for two layers of 2.6" to attain R-30. Which is correct? 2. Is vapor retarder required? Spec states it is, but it's not shown in the drawing details.
A: MSA - The size of rigid insulation is only required to be sufficient to achieve an R-30 rating. Vapor retarded is required to be included.

3.JJJ Question: [Hagerman, December 22nd, 2025]
Q: Elevation drawings of the walkways (A3.00B & A3.00S) indicate doors and infill panels on the side of the walkway. These drawings also indicate that there is no roof on the walkway (3/A3.00S & 2/A3.00B). In talking with Upside Innovations, the Basis of Design, they have stated that the only canopies that they manufacture are post mounted roof structures. what are the specifications and who are the approved manufacturers for the canopies indicated by the information contained on the drawings?
A: MSA - Refer to Sheet A2.10A provided in Addendum #3.

3.KKK Question: [BCMI, December 30th, 2025]
Q: Sheet A2.00B wall between 103A & 103C has wall tag M8c indicating framing and drywall. Does this wall get framing, and drywall if so on which side as floor plan and enlarged plan conflict on which side?
A: MSA – There is no drywall and framing on this section of wall - disregard partition modifier "C" in the wall tag at this location only.

3.LLL Question: [BCMI, December 30th, 2025]
Q: Sheet A2.00S short wall in room 203 has a wall tag M8c indicating framing and drywall. Does this wall get framing, and drywall?
A: MSA - There is no drywall and framing on this section of wall - disregard partition modifier "C" in the wall tag at this location only.

3.MMM Question: [BCMI, December 30th, 2025]
Q: Sheet A2.00S wall between IT and Corridor has a wall tag F3 which is drywall on one side of framing. This means drywall will go on IT side or corridor side but not on the other. Is this wall tag correct?

A: MSA - Wall tag at this location is incorrect - This wall should be S3. Provide drywall at all framing on inside of IT Room 208.

3.NNN Question: [BCMI, December 30th, 2025]
Q: Detail 12/A4.01 shows blocking inside masonry. Is this an accurate detail? If it is why not fill block with grout instead? If blocking is required mason will need to be responsible.
A: MSA - Blocking sits above CMU between top of wall and roof deck. Refer to corrected detail in Addendum #3.

3.OOO Question: [Mattcon General Contractors, December 30th, 2025]
Q: Detail 6 shows a red line going up the CMU wall between the CMU & rigid insulation but then coming out into the air gap and terminating at the scupper conductor. What is this red line?
A: MSA – Refer to revised Detail 6/A4.01 in Addendum #3.

3.PPP Question: [Mattcon General Contractors, December 30th, 2025]
Q: Details 5 & 6 both reference detail 9 an the precast cap. Detail 6 though shows a small gap between the cap and the rigid insulation sandwich but detail 5 shows the cap flush on top of the rigid insulation sandwich. Detail 9 also shows the cap flush but I wanted to make sure the detail doesn't change at the scuppers.
A: MSA - The detail doesn't change at the scuppers. Blocking required as necessary.

3.QQQ Question: [Mattcon General Contractors, December 30th, 2025]
Q: How is the rigid insulation sandwich to be attached to the CMU wall? Are we to run fasteners through the top of the insulation sandwich into the top of the CMU wall or adhere the sandwich to the top of the CMU wall?
A: MSA - Attachment of insulation and sheathing means and methods per system requirements.

3.RRR Question: [Technical Roofing, December 30th, 2025]
Q: Where do I find the the millage and manufacture for the flat roofs really all the specs?
A: MSA - Refer to PVC Roofing Specification Section 075419 in Addendum #2.

3.SSS Question: [Hagerman, December 30th, 2025]
Q: Please provide specifications for the Davit system that is required on both locker rooms. On the baseball building, there appears to be one davit located in the middle of the metal deck span and one on a structural beam. On the softball building, the same locations occur, one on a bean and one in the middle of the deck span. Along with the specifications, please supply mounting details for each of the mounting locations.
A: MSA - Davit System Basis of Design: Pro-Bel Permanent Roof Anchor. Coordinate location and mounting requirements with building's structural system.

3.TTT Question: [Hagerman, December 30th, 2025]
Q: Detail 1/A3.50S calls out the top of parapet to be 114'8". All of the other details on this page have 116'2-5/16" printed over the top of parapet height. What is the height of the parapet on the softball building? if 114'8" is the correct height, to what does the 116' 2-5/16" elevation pertain?
A: MSA – Refer to Addendum #2

3.UUU Question: [Hagerman, December 30th, 2025]
Q: On drawing A2.00S along the west wall of Corridor 207 and between the Showers and the Locker Room, there are two dashed lines that seem to be indicating a bulkhead. On drawing A2.00B these double lines are at the entry to the Locker Room and again between the showers and the Locker Room. Are these in fact bulkheads? What is the height of the bulkhead?

A: MSA - No bulkhead at location mentioned in corridor 207 in Softball Building nor at locker room shower entry in Baseball Building. Masonry lintel is located at locker room entry in Baseball Building as noted on structural framing plan. Bottom of masonry lintel at this location is 8'-0" above finish floor.

3.VVV Question: [Hagerman, December 30th, 2025]
Q: Spec Section 014000 1.6 A.2 states "Payment for these services will be made from the testing and inspection allowances, as authorized by Change Order". There is no Allowance spec section that defines the amount of the allowance. Please clarify the method of paying for testing services and provide the amount that we are to carry in our bid as an Allowance.
A: MSA - Construction testing will be by Owner.

3.WWW Question: [RL Turner, December 31st, 2025]
Q: Sheet A6.00, Details 5,6,7 show metal angle on each side of the masonry walls that go to the deck. Are these angles continuous or in certain lengths on center? What size angles are required?
A: MSA – Refer to S4.0 Typical Non-loadbearing Typical Wall Details.

3.XXX Question: [RL Turner, December 31st, 2025]
Q: Architectural drawings seem to indicate under slab rigid insulation throughout the building. Can you clarify what is required for the foundation insulation?
A: MSA - Refer to revised typical foundation Detail 1/A4.01. Under slab insulation to extend 24" from slab edge.

3.YYY Question: [RL Turner, January 2nd, 2026]
Q: What thickness is the "exterior grade plywood substrate at parapet walls" supposed to be? (ref. 6/A4.01)
A: MSA - Refer to revised Detail 6/A4.01 in Addendum #3.

3.ZZZ Question: [Hagerman, January 5th, 2026]
Q: On the A4.00 drawing, wall sections 1 and 2 show that underslab rigid insulation is covering the entire entry slab. Is there rigid insulation under all slabs on grade, or is it only for the entry vestibule?
A: MSA - Refer to revised typical foundation Detail 1/A4.01. Under slab insulation to extend 24" from slab edge.

3.AAAA Question: [Congers, January 5th, 2026]
Q: Please provide an estimated cost of work for bonding.
A: MSA – As per Scope of Work published on BSU's website estimated cost of construction is $7,564,356.

3.BBBB Question: [Congers, January 5th, 2026]
Q: Please provide the Liquidated Damages information for bonding.
A: MSA - There are no liquidated damages on this project.

3.CCCC Question: [MCMI, January 6th, 2026]
Q: Shower Shelves AND Foot Ledges are both shown for the Softball Building but only Shower Shelves are shown in the Baseball Building. Please Confirm if the baseball building needs foot ledges.
A: MSA - Drawings show accurate needs.

3.DDDD Question: [MCMI, December 16th, 2025]
Q: Under Delegate Design on page S0.00, the GC is to use rammed aggregate piers or voluntary stone columns under the softball building footings. The 2nd line refers to the geotechnical report. Please provide in an upcoming addendum.
A: MSA - Refer to Addendum 02

3.EEEE Question: [Conger, December 17th, 2025]
Q: Please provide a sign schedule for Ball State Baseball and Softball Locker room Signage.
A: MSA - All room & ADA required signage is to be provided and installed by owner.

3.FFFF Question: [Conger, December 17th, 2025]
Q: Will we receive landscaping drawings or is the scope seeding only?
A: MSA - Refer to Addendum 02.

3.GGGG Question: [Conger, December 17th, 2025]
Q: This project requires the steel fabricator to be AISC certified. Can this be waived?
A: MSA - Refer to Addendum 02.

3.HHHH Question: [Conger, December 17th, 2025]
Q: Some of the drawings restroom signage is shown as required. Is there any other panel signage required? Will a spec section for panel signage be provided?
A: MSA - All room & ADA required signage is to be provided and installed by owner.

3.IIII Question: [Conger, December 17th, 2025]
Q: What is the basis of deign on the personalized magnetic plexi shelf box with student athlete's number, name and hometown? See detail 2/A10.00.
A: MSA - Refer to updated detail and locker specification section in Addendum 02

3.JJJJ Question: [Conger, December 17th, 2025]
Q: Can the cardinal bird logos at the bottom of the lockers have a painted finish in lieu pf powder coated finish? Typical powder coaters only allow for 1 color, and do not allow for designs such as this with the detailing.
A: MSA - Refer to Addendum 02.

3.KKKK Question: [Hagerman, December 18th, 2025]
Q: I have been going through the drawings for this and had a couple questions. On some details (A4.01 #5,6) there is glass mat sheathing called out on CMU but not shown, and others (#12) where something is shown but not called out. Do you know if the intent is to install the glass mat on the CMU and then the Air Barrier on the glass mat?
A: MSA - Details on Sheet A4.01 have been edited to correct notes. Refer to Add. 03 drawings.

3.LLLL Question: [Hagerman, December 18th, 2025]
Q: Also, I noticed that damproofing is called out on A6.01 #14 but no other foundation detail and there is no spec section. Or is that something that shouldn't be there?
A: MSA - Refer to revised typical foundation Detail 1/A4.01.

3.MMMM Question: [Hagerman, January 5th, 2026]
Q: Regarding drawings G0.10 and G0.20, as well as specification section 104400 for fire extinguisher cabinets and brackets, please confirm the following:
- *Are fire extinguishers required based on the building area?*
- *If they are required, please indicate the locations where they should be mounted.*
- *Please also clarify the size and number of the "Owner-furnished fire extinguishers for the mounting brackets.*

A: MSA - Refer to revised Life Safety plans on Sheet G0.30 Code Analysis. Provide brackets in mechanical rooms and cabinets at all other locations. Cabinets are to be flush mounted at CMU wall locations and semi-recessed at stud wall locations.

3.NNNN Question: [Pridemark Construction, December 16th, 2025]

Q: The sanitary line has conflicting information. The manholes are stating that the I" and 12" are to be PVC. The lines are saying that they are RCP. See attached.
A: ETICA - Pipe labels were incorrect. The intent is for all new sanitary piping to be PVC.

Question: [Electric Plus, December 19th, 2025]
Q: Were the AEP specs for the transformer pads included in the bid documents anywhere?
A: ETICA - Nothing specific to AEP specs was included in the Civil plans or specs.

3.OOOO Question: [Electric Plus, December 19th, 2025]
Q: Could you please provide a bit more guidance on how you'd like us to proceed with the trench patch along N Everrett Road?
A: ETICA - Note H on C2.01S has been revised to reference details on C6.01 and C6.02 to address trench patching.

3.PPPP Question: [Pridemark, December 16th, 2025]
Q: The water, 2" ductile iron pipe is not made. Also, may want to check the TC elevation of MH# SAN16. The clean out that is about 10' away is about 6' higher.
A: ETICA - All 2" water line shall be HDPE. Also...checked grade on MH#16. There was an error in the structure data. TC is now 943.61.

3.QQQQ Question: RL Turner, December 31st, 2025]
Q: On S0.00, Item 3 under Delegated Design it states, "Ground Modified Soils for Softball only." Is this trying to say that RAPs are only required at the Softball ball and not the baseball building?
A: JCA - The subsoil investigations indicated this condition only at the softball complex.

3.RRRR Question: [Hagerman, December 5th, 2025]
Q: In the Reinforcing details on sheet S0.00, it specifies that the wire mesh for the slab on grade is 6x6-W2.9xW2.9 (42#). However, sheets S1.1B and S1.1S indicate the use of 6x6-W4.0xW4.0 (48#). Which wire mesh should be used?
A: JCA - 6x6-W4.0XW4.0 (48#) should be used for slab on grade per plans.

3.SSSS Question: [Hagerman, December 30th, 2025]
Q: In the Baseball Locker Room, the exit doors for the players to the dugout is recessed. Detail 19/A6.01 shows a horizontal steel plate with no vertical stiffeners supporting the face brick. What is the thickness of the plate? Please verify that a vertical stiffener is not required to support the weight of the face brick.
A: JCA - Provide loose steel angle lintel for brick support over opening per "brick lintel schedule" on S4.00.

3.TTTT Question: [Mattcon General Contractors, January 6th, 2026]
Q: One of my steel fabricators is asking for direction/clarification on what category of AESS is to be applied to the steel on this project. Specifications provide details of each category but they don't say what steel gets what category nor do the drawings. Please clarify in an addendum at your earliest convenience.
A: JCA - AESS is not included in project scope.

3.UUUU Question: [Hagerman, December 31st, 2025]
Q: All plumbing drawings indicate that the shower trench drains are located at the back wall of the shower. Detail 4/A4.01 shows the trench drain to be 1-foot in front of the back wall. Which is correct?
A: MSA - Locate and install trench drain per detail 4/A4.01

3.VVVV Question: [Acumen Building Solutions, December 18th, 2025]

Q: I see in the specs the estimated system is a Simplex Fire System. Would this be the ideal/required system to be installed?

A: LOFTUS - Owner has requested that the fire alarm system be Simplex to maintain compatibility with the existing Campus wide monitoring system. Contractor may submit a Voluntary Alternate Bid for a different manufacturer for consideration by the Owner after Bid is awarded.

3.WWWW Question: [Mattcon General Contractors, December 18th, 2025]

Q: Received another RFI from a different sub regarding the plumbing fixture schedule on P5.00 and specifically the Floor Drains and Trench Drains. Please provide specified information for these two fixtures that are called out on both baseball and softball locker buildings but appear to be left out of the plumbing fixture schedule.

A: LOFTUS - Plumbing fixtures are all defined within the spec book, not on drawings. TD-1 has a new detail on sheet P5.01 that further defines its purpose. TD-2 has been added in the spec section 221319. These are represented in Addendum 3 documents.

3.XXXX Question: [Chapel-Romanoff Technologies, December 23rd, 2025]

Q: There are no Division 27 specifications for horizontal cabling or backbone cabling. Could those be provided so we know what manufacturers and cabling type is wanted?

A: LOFTUS - Cooper horizontal cabling and connectivity will be Owner furnished/Owner installed. Provide pathway rough-ins (raceways and boxes) as indicated in the Contract Documents.

3.YYYY Question: [Chapel-Romanoff Technologies, December 23rd, 2025]

Q: Drawing E5.01

Detail 1 – Which symbol on the systems drawings is this representing? There is no other mention on the electrical drawings of a Port Telecommunications Outlet. Also, can you confirm that this outlet gets (2) Cat6 cables?
Detail 3 – There is no symbol listed in the legend on E0.01 nor is there a symbol on the systems drawings for a telephone outlet. Should there be?
Detail 4 – States there should be (2) Cat6A cables but only (1) Cat6A jack. How many cables should be supplied to each camera location.
Detail 5 – States each Data & Voice outlet gets (2) data and (1) voice but shows 2 single gang faceplates. Should all (3) cables be in (1) single gang faceplate instead? What category cable is wanted – Cat6, Cat6A?
Detail 6 – Doesn't state how many cables or what category cable is wanted at each WAP location. How many cables and should they be Cat6 or Cat6A?

A: LOFTUS - Cooper horizontal cabling and connectivity will be Owner furnished/Owner installed. Provide pathway rough-ins (raceways and boxes) as indicated in the Contract Documents. Communication details are intended to indicate requirements for raceways and boxes and cabling and jacks shown are for general reference.

3.ZZZZ 23rd, 2025]

Q: Are copper press fittings for the domestic water piping within the building acceptable?

A: LOFTUS – Correct.

3.AAAAA Question: [Hagerman, December 30th, 2025]

Q: What are the requirements for plumbing chase access panels in masonry walls? Is there an Access Panel spec available?

A: LOFTUS - A schedule has been added to P5.00. Refer to Addendum 3.

3.BBBBB Question: [Hagerman, December 31st, 2025]

Q: Spec Section 221319 2.4 Trench Drains has a description and basis of design for TD-1. I have not been able to find the same information for TD-2. What is the description and basis of design for TD-1? In Addendum 2, contractor question 2.PP about card readers. Does "not used" mean someone else is providing and installing the card readers and door security panel?
A: LOFTUS - Plumbing fixtures are all defined within the spec book, not on drawings. TD-1 has a new detail on sheet P5.01 that further defines its purpose. TD-2 has been added in the spec section 221319. These are represented in Addendum 3 documents. Locate and install trench drain per detail 4/A4.01.

3.CCCCC Question: [Diling Group December 23rd, 2025]
Q: Is schedule 40 PVC and DWV fittings acceptable for pluming sanitary?
A: LOFTUS – Not acceptable. Provide Cast Iron per specification.

Summary of Attachments

Drawings
G0.30 – Code Analysis
C2.01S – Site Plan – Softball
C4.01S – Utility Plan – Softball
C4.02B – Utility Plan - Baseball
C4.03 – Utility Plan – Fire Service Vault
C6.01 – Construction Details
C6.03– Construction Details
A2.10A - Alternate 1 - Baseball and Softball Connection Sheet Added
A4.01 - Section Details
A6.01 – Door Schedule & Storefront Elevations
FP2.01B – First Floor Fire Protection Plan – Baseball Building
FP2.01S – First Floor Fire Protection Plan – Softball Building
P5.00 – Plumbing Schedules and Details
P5.01 – Plumbing Detail
M7.00 – Mechanical Schedules
ES2.01 – Electrical Plans - Site
E2.01BB – Electrical Plans – Baseball Building
E2.01SB – Electrical Plans – Softball Building
E5.04 – Electrical Details
E7.01B – Electrical Schedules
E7.01S – Electrical Schedules
E8.01 – Light Fixture, Relay & Inverter Schedules

Project Manual/Specification Sections
22 11 19 – Domestic Water Piping Specialties
22 13 19 – Sanitary and Storm Waste Piping Specialties

END OF ADDENDUM

SECTION 22 11 19

DOMESTIC WATER PIPING SPECIALTIES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes the following domestic water piping specialties:

1. Backflow Preventers.
2. Balancing Valves.
3. Strainers.
4. Drain Valves.
5. Trap Seal Primer Valves.
6. Water Hammer Arresters.
7. Thermostatic Mixing Valves.
8. Emergency Fixture Thermostatic Mixing Valves.
9. Wall Hydrants.
10. Hose Bibbs.
11. Thermal Expansion Absorbers.

B. Related Sections include the following:

1. Division 20 Section "Thermometers and Gages" for thermometers and pressure gages in domestic water piping.
2. Division 20 Section “General Duty Valves” for valves in domestic water piping.
3. Division 20 Section “Domestic Water Piping” for domestic water piping.

1.3 PERFORMANCE REQUIREMENTS

A. Minimum Working Pressure for Domestic Water Piping Specialties: 125 psig, unless otherwise indicated.

1.4 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Shop Drawings: Diagram power, signal, and control wiring.

C. Field quality-control test reports.

D. Operation and Maintenance Data: For domestic water piping specialties to include in emergency, operation, and maintenance manuals.

1.5 QUALITY ASSURANCE

A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

B. NSF Compliance:

1. Comply with NSF 14, "Plastics Piping Components and Related Materials," for plastic domestic water piping components.
2. Comply with NSF 61, "Drinking Water System Components - Health Effects; Sections 1 through 9."

PART 2 - PRODUCTS

2.1 BACKFLOW PREVENTERS

A. Reduced-Pressure-Principle Backflow Preventers:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
   a. FEBCO, a Watts Brand, Model LF825Y
   b. Watts Water Technologies, Inc, Series LF909
   c. Beeco
   d. Wilkins 975XL2TCU (2” and smaller).
   e. Wilkins Series 300 (2-1/2” and larger).
2. Lead Free.
3. Standard: ASSE 1013.
4. Operation: Continuous-pressure applications.
5. Pressure Loss**:** 12 psig maximum, through middle 1/3 of flow range.
6. Body: Bronze for NPS 2 and smaller. Epoxy coated ductile iron body for sizes larger than 2”
7. End Connections: Threaded for NPS 2 and smaller. Flanged for NPS 2-1/2” and larger.
8. Accessories:
   a. Valves: Bronze body ball type with threaded ends on inlet and outlet of NPS 2 and smaller. Epoxy coated iron body 2-1/2” and larger.
   b. Air-Gap Fitting: ASME A112.1.2, matching backflow-preventer connection.

2.2 BALANCING VALVES

A. Copper-Alloy Calibrated Balancing Valves:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
   a. Caleffi
   b. ITT Industries; Bell & Gossett Div.
   c. Armstrong.
2. Type: Ball or Y-pattern globe valve with two readout ports and memory setting indicator.
3. Body: Bronze.
4. Size: Same as connected piping, but not larger than NPS 2.
5. Accessories: Meter hoses, fittings, valves, differential pressure meter, and carrying case.
6. Manufacturer must have approval on valve for use in domestic water systems.

2.3 STRAINERS FOR DOMESTIC WATER PIPING

A. Y-Pattern Strainers:

1. "Y" type, stainless steel screen.
2. 2" and smaller: 250 psi working pressure, threaded ends. Epoxy coated cast iron body for steel piping, cast bronze body for copper lines. 1/16” screen for water service.
3. 2-1/2" and larger: 125 psi working pressure or 150 percent of operating pressure, whichever is greater. Epoxy coated cast iron, flanged. 1/16" (.062") perforations on sizes 2-1/2" through 4" and 1/8" (.125") perforations on sizes 5" and larger for water service.
4. Provide blowdown port and valve where indicated on Drawings. Valve shall be rated for 600 psi.

2.4 DRAIN VALVES

A. Ball-Valve-Type, Hose-End Drain Valves:

1. Standard: MSS SP-110 for standard-port, two-piece ball valves.
2. Pressure Rating: 400-psig minimum CWP.
3. Size: NPS 3/4.
4. Body: Copper alloy.
5. Ball: Chrome-plated brass.
6. Seats and Seals: Replaceable.
7. Handle: Vinyl-covered steel.
8. Inlet: Threaded or solder joint.
9. Outlet: Threaded, short nipple with garden-hose thread complying with ASME B1.20.7 and cap with brass chain.

2.5 WATER HAMMER ARRESTERS

A. Water Hammer Arresters:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
   a. Josam Company.
   b. Jay R. Smith Mfg. Co.; Division of Smith Industries, Inc.
   c. Watts Water Technologies, Inc.
   d. Zurn Industries, LLC, Specification Drainage Operation.
2. Standard: ASSE 1010 or PDI-WH 201.
3. Type: Metal bellows.
4. Housing: Stainless steel.
5. Working Pressure: 125 psi.
6. Size: ASSE 1010, Sizes AA and A through F or PDI-WH 201, Sizes A through F.

2.6 THERMOSTATIC MIXING VALVE

A. Primary, Thermostatic, Water Mixing Valves:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
   a. Lawler Manufacturing Company, Inc.
   b. Leonard
   c. Bradley.
2. Standard: ASSE 1017.

3. Pressure Rating: 125 psi.
4. Type: Exposed-mounting, thermostatically controlled water mixing valve.
5. Material: Bronze body with corrosion-resistant interior components.
6. Connections: Threaded union inlets and outlet.
7. Accessories: Manual temperature control, check stops on hot- and cold-water supplies, and adjustable, temperature-control handle.
8. Valve Pressure Rating: 125 psi minimum, unless otherwise indicated.
9. Valve Finish: Rough bronze.
10. Piping Finish: Copper.

2.7 WALL HYDRANTS

A. Nonfreeze Wall Hydrants:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
   a. Tyler Pipe; Wade Div.
   b. Watts Drainage Products Inc.
   c. Woodford Manufacturing Company.
   d. Zurn Plumbing Products Group; Specification Drainage Operation.
2. Standard: ASME A112.21.3M for concealed-outlet, self-draining wall hydrants.
3. Pressure Rating: 125 psi.
4. Operation: Loose key.
5. Casing and Operating Rod: Of length required to match wall thickness. Include wall clamp.
6. Inlet: NPS 3/4 or NPS 1.
7. Outlet: Concealed, with integral vacuum breaker and garden-hose thread complying with ASME B1.20.7.
8. Box: Deep, flush mounting with cover.
9. Box and Cover Finish: Polished nickel bronze.
10. Operating Keys(s): One with each wall hydrant.

2.8 HOSE BIBBS

A. Hose Bibbs:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
   a. Tyler Pipe; Wade Div.
   b. Watts Drainage Products Inc.
   c. Woodford Manufacturing Company.
   d. Prier

2. Standard: ASME A112.18.1 for sediment faucets.
3. Body Material: Bronze.
4. Seat: Bronze, replaceable.
5. Supply Connections: NPS 3/4 threaded or solder-joint inlet.
6. Outlet Connection: Garden-hose thread complying with ASME B1.20.7.
7. Pressure Rating: 125 psi.
8. Vacuum Breaker: Integral nonremovable, drainable, hose-connection vacuum breaker complying with ASSE 1011.
9. Finish for Equipment Rooms: Rough bronze, or chrome or nickel plated.
10. Finish for Finished Rooms: Chrome or nickel plated.
11. Operation: Wheel handle.

12. Include integral wall flange with each chrome- or nickel-plated hose bibb.

2.9 THERMAL EXPANSION TANKS

A. Thermal Expansion TANKS:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
   a. Taco.
   b. Bell & Gossett.
   c. Amtrol.
2. Standard: ASME Approved Welded Steel
3. Diaphragm/Bladder: Heavy Duty Butyl
4. Liner: Rigid Polypropylene
5. System Connection: Stainless Steel.
6. Working Pressure Rating: 125 psi.
7. Max. Operating Temperature: 200 Deg. F.
8. Operation: Suitable for use with potable water.
9. Include air charging valve.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Refer to Division 20 Section "Common Mechanical Work Results" for piping joining materials, joint construction, and basic installation requirements.

B. Install balancing valves, trap primer valves, and other components requiring service and maintenance in locations where they can easily be adjusted.

C. Wall Hydrants: Provide accessible shut-off valve in branch line ahead of each wall hydrant. Mount 2’-0” above adjacent grade.

D. Hose Bibbs: Provide hose bibs where shown on the Drawings and in each equipment room where there is a cold water line present. Mount 2’-0” above finished floor.

E. Install water hammer arresters in water piping according to PDI-WH 201. Install in accessible locations. Install isolation valve for each water hammer arrester. Provide access doors as required.

F. Install thermostatic mixing valves below top of water heater.

G. Provide thermometer and shut-off valve on outlet of thermostatic mixing valves.

H. Install horizontal backflow preventers 1’-0” minimum above finished floor, and 4’-0” maximum above finished floor.

I. Install backflow preventers in each water supply to mechanical equipment and systems and to other equipment and water systems that may be sources of contamination. Comply with authorities having jurisdiction.

1. Locate backflow preventers in same room as connected equipment or system.
2. Install air gap funnel drain under relief valve discharge and pipe full size to floor drain.
3. Do not install bypass piping around backflow preventers.

J. Install strainer ahead of each backflow preventer. Install a shutoff valve ahead of each strainer for a total of 3 shutoff valves per backflow preventer.

K. When installing floor mounted thermal expansion absorbers on 4” concrete pad. Precharge to suit water system pressure. Provide lock shield valve and pressure gauge in system connection line. Verify that water heater relief valve setting is 150 psi maximum.

3.2 CONNECTIONS

A. Piping installation requirements are specified in other Division 20 and 22 Sections. Drawings indicate general arrangement of piping and specialties.

B. Ground equipment according to Division 26 Section "Grounding and Bonding."

C. Connect wiring according to Division 26 Section "Conductors and Cables."

3.3 FIELD QUALITY CONTROL

A. Remove and replace malfunctioning domestic water piping specialties and retest as specified above.

B. Test backflow preventers to ensure proper operation. Inspection shall be performed by a registered inspector in accordance with the Indiana Department of Environmental Management. Submit reports to proper authorities and include a copy in the Operation and Maintenance manuals.

3.4 ADJUSTING

A. Adjust balancing valves to ensure quick delivery of hot water to fixtures. Set memory stops.

END OF SECTION 22 11 19

SECTION 22 13 19

SANITARY AND STORM WASTE PIPING SPECIALTIES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes the following sanitary drainage piping specialties:

1. Cleanouts.
2. Floor drains.
3. Floor sinks.
4. Trench drains.
5. Miscellaneous sanitary drainage piping specialties.
6. Flashing Materials.

1.3 SUBMITTALS

A. Product Data: For each type of product indicated. Include rated capacities, operating characteristics, and accessories.

B. Shop Drawings: Show fabrication and installation details.

C. Operation and Maintenance Data: For drainage piping specialties to include in emergency, operation, and maintenance manuals.

1.4 QUALITY ASSURANCE

A. Drainage piping specialties shall bear label, stamp, or other markings of specified testing agency.

B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

1.5 COORDINATION

A. Coordinate size and location of concrete bases. Cast anchor-bolt inserts into bases. Concrete, reinforcement, and formwork requirements are specified in Division 3.

B. Coordinate size and location of roof penetrations.

PART 2 - PRODUCTS

2.1 CLEANOUTS

A. Metal Floor Cleanouts:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
   a. Josam Company; Josam Div.
   b. Jay R. Smith Mfg. Co.
   c. Watts Drainage Products Inc.
   d. MIFAB.
   e. Zurn Plumbing Products Group; Specification Drainage Operation.
2. Standard: ASME A112.36.2M for cast-iron soil pipe with cast-iron ferrule cleanout.
3. Size: Same as connected branch.
4. Body or Ferrule: Cast iron.
5. Clamping Device: Required.
6. Outlet Connection: Threaded.
7. Closure: Threaded brass plug with straight threads.
8. Adjustable Housing Material: Cast iron.
9. Frame and Cover Material and Finish: Nickel-bronze, copper alloy.
10. Frame and Cover Shape: Round.
11. Top Loading Classification: Medium Duty.
12. Riser: ASTM A 74, Service class, cast-iron drainage pipe fitting and riser to cleanout.
13. Standard: ASME A112.3.1.
14. Size: Same as connected branch.

B. Cast-Iron Wall Cleanouts:

1. Standard: ASME A112.36.2M. Include wall access.
2. Size: Same as connected drainage piping.
3. Body: as required to match connected piping.
4. Closure: Countersunk or raised-head, brass plug.
5. Wall Access: Round, flat, stainless-steel cover plate with screw, flush with wall.

C. Exterior Grade Cleanouts:

1. ASME A112.36.2M, round, gray-iron housing with clamping device and round, secured, scoriated, gray-iron cover. Include gray-iron ferrule with inside calk or spigot connection and countersunk, tapered-thread, brass closure plug.
2. Top-Loading Classification: Heavy duty.
3. Sewer Pipe Fitting and Riser to Cleanout: ASTM A 74, Service class, cast-iron soil pipe and fittings.

2.2 FLOOR DRAINS

A. Cast-Iron Floor Drains:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
   a. Josam Company; Josam Div.
   b. Smith, Jay R. Mfg. Co.; Division of Smith Industries, Inc.
   c. MIFAB.
   d. Watts Drainage Products Inc.
   e. Zurn Plumbing Products Group; Specification Drainage Operation.

2. Standard: ASME A112.6.3.

B. FD-1: Cast iron body 6” deep flanged receptor, acid resistant coated interior, square nickel bronze top rim and secured grate, double drainage flange with seepage holes and aluminum dome bottom strainer. Jay R. Smith 3140Y.

C. FD-2: Cast iron body, flashing collar, adjustable strainer head, round adjustable nickel bronze strainer top, double drainage flange and integral cleanout. Size as shown on drawings. Jay R. Smith 2009Y.

2.3 FLOOR SINKS

A. Cast-Iron Floor Sinks:
1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
   a. Josam Company; Josam Div.
   b. Watts Drainage Products Inc.
   c. Zurn Plumbing Products Group; Specification Drainage Operation.
2. Standard: ASME A112.6.3.

B. FS-1: Polypropylene dome bottom strainer, no hub outlet. Loose set porcelain enamel coated cast iron grate. White acid resistant porcelain enamel coated interior. 12” x 6” deep flanged sanitary floor sink. Basis of Design is Watts FS-730.

2.4 TRENCH DRAINS

A. Trench Drains TD-1:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

   a. Striem
   b. Watts Drainage Products Inc.
   c. Zurn Plumbing Products Group; Specification Drainage Operation

2. Polyethylene drain trough with 1/4” nominal wall thickness. Removable, corrosion-resistant primary and secondary filter screen, each screen equipped with maximum ½”. Nested cover, internally sloped floor at 1/8” per foot, plain end molded in outlet. Inlet connections are field installed. Maximum operating, intermittent temperature of 165°F. Liquid capacity of 65 gallons. Certified to IAPMO/ANSI/CAN Z1167. Carry a UL listing. Carry a lifetime guarantee. Manufactured in the USA.

3. Basis of design is Striem Tuff Trough TT-10.

B. Trench Drains TD-2:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

   a. Kohler
   b. Sioux Chief
   c. Zurn Plumbing Products Group; Specification Drainage Operation

2. 2-1/2” linear drain grate with lattice pattern. Trimmable from 36” to 60”. Anodized aluminum construction. Thread-in, rubber-capped grate feet. Stainless steel and brass linear drain channel. Integral domed hair strainer. Adjustable center bottom outlet.

3. Basis of design – Kohler K-80646 drain channel and Kohler K-80654 drain grate.

2.5 MISCELLANEOUS SANITARY DRAINAGE PIPING SPECIALTIES

A. Air-Gap Fittings:

1. Standard: ASME A112.1.2, for fitting designed to ensure fixed, positive air gap between installed inlet and outlet piping.
2. Body: Bronze or cast iron.
3. Inlet: Opening in top of body.
4. Outlet: Larger than inlet.
5. Size: Same as connected waste piping and with inlet large enough for associated indirect waste piping.

2.6 FLASHING MATERIALS

A. Lead Sheet: ASTM B 749, Type L51121, copper bearing, with the following minimum weights and thicknesses, unless otherwise indicated:

1. General Use: 4.0-lb/sq. ft., 0.0625-inch thickness.
2. Vent Pipe Flashing: 3.0-lb/sq. ft., 0.0469-inch thickness.
3. Burning: 6-lb/sq. ft., 0.0938-inch thickness.

B. Fasteners: Metal compatible with material and substrate being fastened.

C. Metal Accessories: Sheet metal strips, clamps, anchoring devices, and similar accessory units required for installation; matching or compatible with material being installed.

D. Solder: ASTM B 32, lead-free alloy.

E. Bituminous Coating: SSPC-Paint 12, solvent-type, bituminous mastic.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Refer to Division 20 Section "Common Mechanical Work Results" for piping joining materials, joint construction, and basic installation requirements.

B. Install cleanouts in building drain piping according to the following, unless otherwise indicated:

1. Size same as drainage piping up to NPS 4. Use NPS 4 for piping up to NPS 6. Use NPS 6 for piping greater than NPS 6.
2. Locate at each change in direction of piping greater than 45 degrees.
3. Locate at minimum intervals of 100 feet.
4. Locate at base of each vertical sanitary and storm stack.

C. For floor cleanouts for piping below floors, install cleanout deck plates with top flush with finished floor.

D. For cleanouts located in concealed piping, install cleanout wall access covers, of types indicated, flush with finished wall.

Install floor drains at low points of surface areas to be drained. Set grates of drains flush with finished floor, unless otherwise indicated.

1. Position floor drains for easy access and maintenance.
2. Set floor drains below elevation of surrounding finished floor to allow floor drainage. Set with grates depressed according to the following drainage area radii:
   a. Radius, 30 Inches or Less: Equivalent to 1 percent slope, but not less than 1/4-inch total depression.
   b. Radius, 30 to 60 Inches: Equivalent to 1 percent slope.
   c. Radius, 60 Inches or Larger: Equivalent to 1 percent slope, but not greater than 1-inch total depression.
3. Install floor-drain flashing collar or flange so no leakage occurs between drain and adjoining flooring. Maintain integrity of waterproof membranes where penetrated.
4. Install individual traps for floor drains connected to sanitary building drain, unless otherwise indicated.

E. Install downspout nozzle wall flange set in sealant and anchor to wall. Downspout nozzles shall discharge 6” above adjacent grade.

F. Install roof flashing assemblies on sanitary stack vents and vent stacks that extend through roof.

G. Install flashing fittings on sanitary stack vents and vent stacks that extend through roof.

H. Install air-gap fittings on draining-type backflow preventers and on indirect-waste piping discharge into sanitary drainage system.

I. Install sleeve flashing device with each riser and stack passing through floors with waterproof membrane.

J. Install wood-blocking reinforcement for wall-mounting-type specialties.

K. Install traps on plumbing specialty drain outlets. Omit traps on indirect wastes unless trap is indicated.

L. Install escutcheons at wall, floor, and ceiling penetrations in exposed finished locations and within cabinets and millwork. Use deep-pattern escutcheons if required to conceal protruding pipe fittings.

M. Install roof drains at low points of roof areas according to roof membrane manufacturer's written installation instructions.

1. Install roof-drain flashing collar or flange so that there will be no leakage between drain and adjoining roofing. Maintain integrity of waterproof membranes where penetrated.
2. Position roof drains for easy access and maintenance.

3.2 CONNECTIONS

A. Piping installation requirements are specified in other Division 20 and 22 Sections. Drawings indicate general arrangement of piping, fittings, and specialties.

B. Install piping adjacent to equipment to allow service and maintenance.

3.3 FLASHING INSTALLATION

A. Fabricate flashing from single piece unless large pans, sumps, or other drainage shapes are required. Join flashing according to the following if required:

1. Lead Sheets: Solder joints of lead sheets 4.0-lb/sq. ft., 0.0625-inch thickness or thinner.

B. Install sheet flashing on pipes, sleeves, and specialties passing through or embedded in floors and roofs with waterproof membrane.

1. Pipe Flashing: Sleeve type, matching pipe size, with minimum length of 10 inches, and skirt or flange extending at least 8 inches around pipe.
2. Sleeve Flashing: Flat sheet, with skirt or flange extending at least 8 inches around sleeve.
3. Embedded Specialty Flashing: Flat sheet, with skirt or flange extending at least 8 inches around specialty.

C. Set flashing on floors and roofs in solid coating of bituminous cement.

D. Secure flashing into sleeve and specialty clamping ring or device.

E. Install flashing for piping passing through roofs with counterflashing or commercially made flashing fittings, according to Division 7 Section "Sheet Metal Flashing and Trim."

F. Extend flashing up vent pipe passing through roofs and turn down into pipe, or secure flashing into cast-iron sleeve having calking recess.

G. Fabricate and install flashing and pans, sumps, and other drainage shapes.

3.4 FIELD QUALITY CONTROL

A. Tests and Inspections:

1. Leak Test: After installation, charge system and test for leaks. Repair leaks and retest until no leaks exist.
2. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

3.5 PROTECTION

A. Protect drains during remainder of construction period to avoid clogging with dirt or debris and to prevent damage from traffic or construction work.

B. Place plugs in ends of uncompleted piping at end of each day or when work stops.

END OF SECTION 22 13 19