



January 12, 2022

## ADDENDUM #3

### BL002-23, Lanier Filter Plant New Chemical Building and Shoal Creek Filter Plant OSHG

This Addendum is being issued to provide the following revisions and/or clarifications to the bid documents and answers to the questions received.

#### Make the following changes to the Bid Form and Technical Specifications shown:

1. Bid Form
  - a. Remove Bid Item No. 2.8 (General County Contingency Allowance)
2. 09 90 00 (Painting and Coating)
  - a. Table A, coating system L-2 – change Surface entry to read as follows: “PVC and CPVC pipe where shown in Finish Schedule”
  - b. COATSPEC entry BB (Coating System L-2) – change Surface entry to read as follows: “PVC and CPVC pipe where shown in Finish Schedule”
  - c. Finish Schedule article A.3.h.2 – change Coating System Identification to read as follows: “Uncoated”; change Standard Color to read as follows: “—”
  - d. Finish Schedule article A.3.h.2.a – change Coating System Identification to read as follows: “Uncoated”; change Standard Color to read as follows: “—”
  - e. Finish Schedule article A.3.h.2.b – change Coating System Identification to read as follows: “Uncoated”; change Standard Color to read as follows: “—”
  - f. Finish Schedule article A.4.c.2 – change Coating System Identification to read as follows: “Uncoated, unless otherwise shown or specified”
  - g. COATSPEC ENTRY S (Coating System EA-5, article 6)
    - 1) Revise header for Chemical Receiving Stations to read as follows: “Chemical Receiving Areas”
    - 2) Revise slab subheading within Chemical Receiving Area heading to read as follows: “Slab including all areas within 10 feet from receiving station sumps”
    - 3) Revise sump subheading within Chemical Receiving Area heading to read as follows: “Chemical receiving station sump walls and floors”
    - 4) Add new subheading within Chemical Receiving Area heading to read as follows: “Chemical truck unloading drive trench drain walls and floor”, with system thickness of 40 mils to match chemical receiving station sumps.
  - h. COATSPEC ENTRY S (Coating System EA-5, article 7.d)
    - 1) Revise the first sentence to read as follows: “For all surfaces receiving this coating system, including surfaces associated with storage tank containment areas, chemical truck unloading area trench drains, chemical receiving station and containment area sumps, and associated unloading areas indicated to be coated, base coat shall be applied....”
3. 40 61 13 (Process Control System General Provisions)
  - a. Revise Part 1.01.A to read as follows: “....to be provided by the Gwinnett County (County) Approved Systems Integrator (SI), MR Systems. The Contractor shall....”
  - b. MR Systems’ direct contact: Sothorn Khel, [skhel@mrsystems.com](mailto:skhel@mrsystems.com), 678-325-2824
  - c. Contact McNaughton-McKay (Mc-Mc) for PLC panel building. Mc-Mc’s contact: Sydney Lehota, [lehotans@mc-mc.com](mailto:lehotans@mc-mc.com), 678-665-4347
4. 43 24 44 (Peristaltic Hose Pumps)
  - a. Add new article 1.08 Warranty and add sub-article A, stating the following: “Provide manufacturer’s standard warranty for no less than 2 years from date of Substantial Completion.”

5. 46 33 44 (Peristaltic Metering Pumps)
  - a. Add new article 1.05 Warranty and add sub-article A, stating the following: "Provide manufacturer's standard warranty for no less than 3 years from date of Substantial Completion."

**Make the following changes to the Drawings shown:**

1. A-60-202 – revise mounting height for mirror (mark TA-3) to be 40" AFF to bottom of reflective surface.
2. E-60-702 – add FACP to LP-61B. See attached reissued drawing.
3. A-60-301 – on each elevation view, modify callout that currently reads "DOOR PT-5" such that it reads as follows: "DOOR, COLOR TO BE SELECTED BY ARCHITECT OR OWNER FROM MANUFACTURER'S STANDARD AND PREMIUM COLORS TO CLOSELY MATCH PT-5"

**Questions and Responses:**

**Q1: Please provide the plan holders list as it was not included in Addendum #1 as stated in Question 16?**

A1: Please see the attached plan holders list. However, the plan holders list is updated and available from Brown and Caldwell representative in the invitation to bid.

**Q2: Note 3/A-40-151 states coat to match existing composite deck. Please clarify which new surfaces are required to be coated: concrete surface, exposed steel, or both?**

A2. Coat both exposed steel and composite deck.

**Q3: Repairs will be required for roof penetrations at the SCFP Chemical Building—see Keynotes 4/AD-60-152 and 1/MD-60-152. Can you provide the following information for the existing roof?**

- a. Roofing Manufacturer.
- b. Material specification, specifically: color, panel width and thickness, seam height.
- c. Metal roof decking information.
- d. Thickness of roofing insulation.

A3: Answers as follows (see also the attached shop drawings):

- a. 2IMETCO Series s316 with 30# asphalt saturated roofing felt (conforming to ASTM D226)
- b. Kynar 500 finish Light bronze "UC51227" (color not confirmed, Contractor shall field confirm), 16" wide, .040" thick aluminum smooth, 2 1/2" high standing seams
- c. Roof deck 16 ga. 1 1/2" deep galvanized
- d. Insulation thickness: 2 layers, 1 1/2" thick (3" total)

**Q4: Keynote 8/AD-60-151 states to remove the hoist beam in the SCFP Chemical Building. Please provide as-built information for the existing hoist system including beam size, elevation information and structural connection details, if available.**

A4: Please see attached shop drawings of the hoist beam system.

**Q5: Keynote 7/A-60-151 states to patch the beam opening at the top of the doors. Please provide manufacturer/model information and dimensions for these doors.**

A5: Specs of the large double door w/ notch-out are as follows:

- 2"x5 3/4" Fiberglass Frame
- 1 pair upper 4'-0"x7'-10" w/ 20"x6" monorail cutout, each
  - 1 pair lower 4'-0"x8'-0"
  - Doors by Corrim FRP

- w/ ASTs - Continuous hinge & lock

- Q6:** Spec section 09900 states to paint int/ext pvc piping. Is Gwinnett County requiring the PVC piping in the trenches, the chemical feed junction boxes and utility vaults at the Lanier Filter Plant to be painted per specification 09900?
- A6: No, PVC piping is not to be painted – see specification modifications above.
- Q7:** In regards to the new chemical building at the Lanier Filter Plant and Shoal creek plant. It is not mentioned in the finish schedule (drawing A-60-201) but do the trench walls, floors and sump walls and floors in the chemical building require the coating system EA-5? They are mentioned in 099000 page 45 7. D.
- A7: Sumps (floors and walls and areas surrounding these sumps) at exterior chemical fill station/unloading areas (also referred to as Chemical Receiving Station in the specification) shall receive coating system EA-5 as specified. Sumps located within secondary containment areas shall receive coating system EA-5 per Note 1 on A-60-201, noting this applies to all secondary containment areas (not just fluoride and ferric chloride) and their floors, walls, and tank/equipment pads. The portion referring to trenches is intended to refer to the trenches (trench drains) in the exterior chemical delivery truck unloading area drives on each side of the building. See specification modifications above.
- Q8:** Spec 099000 (EA-5) the scrim mentioned in the spec is only mentioned for the trenches and sumps. Can you clarify if the scrim is needed for all of the walls, pads and floors in the chemical building requiring the finish EA-5?
- A8: Scrim cloth shall be used for all EA-5 coating work per requirements in Section 2.01.A.2 Material Requirements for Coating Systems table. Also see specification modifications above.
- Q9:** Drawing A-60-301 mentions that the exterior cmu gets PT-3 (paint) & Doors get PT-5 (paint). The finish schedule in 099000 4. c. 2 says outdoors concrete, masonry and plaster to be uncoated. All of the doors and frames in the new chemical bldg are frp. Please clarify if the exterior cmu and frp doors and frames require field painting per the drawings.
- A9: The FRP doors should not be painted, but they are to be provided in a color selected by owner or architect from the manufacturer's colors to closely match PT-5. Refer to drawing modifications above. The exterior CMU of the building is to be painted per A-60-301 – the “unless otherwise specified” statement in Section 09 90 00 4.c.2 was intended to coordinate with this such that the drawing callout for painting would supersede the specification callout for Uncoated. This has been clarified in the specification – see specification modifications above.
- Q10:** Drawing A-60-151 note 12 - requires painting of the floors in room C111 with coating system EU-2. Are there existing coatings on the floor? If so do they need to be removed or just abraded? Or are there no existing coatings?
- A10: There are existing coatings. Prep surfaces for painting per manufacturer's recommendations. The as-built information available for coatings is limited, but what is available has been included for your information.
- Q11:** Drawing A-60-151 Note 14 - requires painting of the new pads and existing containment floors using coating system EA-5. Are there existing coatings on the containment floors? If so do they need to be removed or just abraded? Or are there no existing coatings?

A11: There are existing coatings. Prep surfaces for painting per manufacturer's recommendations. The as-built information available for coatings is limited, but what is available has been included for your information.

**Q12: Same drawing room # C111 note 12 - requires repainting of the walls and ceilings to match existing. What is the coating system and prep required for the walls and ceilings? What is the ceiling substrate (decking & joists or concrete)? Note 13 requires painting of an existing wall. What is the coating system and prep required for this wall as well?**

A12: Walls are CMU. Ceiling is metal deck supported by steel joists. All shall be painted. Refer to schedule in specifications for the coating systems for these materials. Prep surfaces for painting per manufacturer's recommendations. The as-built information available for coatings is limited, but what is available has been included for your information.

**Q13: Spec section 099000 finish schedule 3. H. 2b - mentions interior PVC/CPVC to be painted using E-7, but on some of the drawings with photo's that the CPVC and PVC is not painted and just labeled. Please confirm that all of the PVC and CPVC exposed in the new chemical building at the Lanier Filter Bldg requires painting per 099000 E-7 or does it only require labels.**

A13: Only labels are required for interior PVC/CPVC piping. See specification modifications above.

**Q14: Will Gwinnett County approve Diversified Casework as an equal to the named manufacturers in Section 12 34 50 for Lanier and Shoal Creek Filter Plant Chemical Project BL002-23. Please see below and attached.**

A14: Requests for approval of an "approved equal" product will only be evaluated following the Bid opening. Approval of any "or equal" products submitted for consideration will be at the Owner and Engineer's sole discretion.

**Q15: Please provide guidance on the chemical compatibility for the following chemicals to be pumped by units supplied under specification section 43 23 13.10 (Magnetic Drive End Suction, Centrifugal Pumps).**

A15: Refer to specific questions and answers below.

**Q16: 20% Polymer (P-6101-1 and P-6101-2): Some polymers are compatible with EPDM while others require Viton (FKM) elastomers. Please provide the chemical manufacturer's recommended materials for pumping equipment.**

A16: Please refer to SDS attached for basis of design product being used by the plant (Clarifloc™ C-308P). Coordinate with chemical manufacturer relative to provision of chemical manufacturer's recommended materials based on the chemicals involved.

**Q17: 36% Phosphate (P-6103-1 and P-6103-2): Noted as being utilized as a corrosion inhibitor; this typically means Orthophosphate which in the chemical compatibility tables do not list the chemical or recommended materials of construction for the transfer pumps. Please provide the chemical manufacturer's recommended materials for pumping equipment.**

A17: Please refer to SDS attached for basis of design product being used by the plant (CARUS™ 8500). Coordinate with chemical manufacturer relative to provision of chemical manufacturer's recommended materials based on the chemicals involved.

**Q18: 24% Calcium Thiosulfate (P-6109-1 and P-6109-2): Chemical compatibility tables that list it does not recommend either polypropylene or PVDF. Please provide the chemical manufacturer's recommended materials for pumping equipment.**

A18: Please refer to SDS attached for basis of design product (Captor®). Coordinate with chemical manufacturer relative to provision of chemical manufacturer's recommended materials based on the chemicals involved.

**Q19: Are there any grant forms that should be included?**

A19: No, the project is not funded through grant.

**Q20: Drawing Sheet I-61-654: Instrument PSL-5110-4 and PSH-5110-4 show that they get connected back to the liquid lime vendor control panel VCP-61540. The rest of the PSL's and PSH's on the sheet do not have controls wiring going back to any panel. Please confirm the other instruments do not need to communicate back to any panels.**

A20: No, all existing instruments are to be relocated and reconnected. Refer to General Note 6 on I-61-654 and Article 1.01.A of specification section 46 33 12, including but not limited to 1.01.A.1.d.

**Q21: Drawing Sheet C-05-401: Grid 2D note "Relocated Guy Pole and Wire". Please confirm the owner has coordinated this with the Utility provider who will be performing the work and the contractor has no responsibility.**

A21: Owner/Design team will coordinate the guy pole relocation with the utility company. Contractor will be responsible for bringing the area to grade and coordinating with utility company on timing of relocation.

**Q22: Spec. 28-31-00: There is a specification section for Fire Alarm, Is there a fire alarm system included for either site? Will there be a drawing set produced?**

A22: The new chemical building at Lanier Filter Plant has a fire alarm system. Refer to Drawing E-60-104 for Fire Alarm Control Panel (FACP) location in I.T./Data Room with power from LP-61B. Power supply for FACP from LP-61B has been added to E-60-702 (see drawing modifications above). In accordance with Section 28 31 00, the specification is performance based and the performance requirements are included therein, and the system is intended to be designed by a specialized subcontractor. Coordinate system design with other disciplines such as HVAC (e.g. ductwork smoke detectors) and fire protection per Contract Documents and as required. The existing Shoal Creek Filter Plant Chemical Building already has a fire alarm system. There is a new smoke detector being added in the new Electrical Room and, as shown on Drawing E-60-151, it shall be tied in with the existing FACP for alarming. Coordinate also as required with other disciplines such as HVAC (e.g. ductwork smoke detectors) and fire protection per Contract Documents.

- Q23:** Drawing Sheet D-60-104: General Note #7 – Ferric Chloride Room requires “all hardware” be Titanium in this room. We have contacted multiple suppliers and manufacturers of specialty alloy metals products for pricing and availability of Hastelloy C and Titanium hardware including nuts, bolts, washers, threaded rod, uni-strut, strut accessories like strut nuts, two piece clamps, channel fittings, trapeze accessories, etc. These suppliers can and do provide common hardware like threaded rod, nuts, bolts, washers in the required alloys however we were not able to find any suppliers for other hardware items in these alloys including strut, two piece clamps, and other misc. accessories required for most small bore piping and/or raceway support details. Will it be acceptable to use FRP hardware and misc. support components (equal to Aickinstrut of the most appropriate FRP materials) to the greatest extent possible above and below the grating level in the Ferric containment rooms? Please confirm there is no requirement for all hardware ABOVE the grating level in the SHC Generation and SHC Storage Areas to be Titanium, and that 316SSTL and/or FRP will be acceptable. Please note we would plan to use specialty alloy hardware with epoxy adhesive for all concrete anchorage points within the referenced containment rooms, and would provide specialty alloy “bolt kits” for all equipment and piping connections requiring hardware.
- A23:** The “hardware” referred to in the referenced note was meant to apply primarily to items such as bolts, nuts, washers, and similar typically metallic hardware. The design intent per specification sections 40 05 01 (2.02.A including Note 1) and 40 05 07 (2.02.B) is to provide FRP supports in the Ferric Chloride room with titanium nuts, bolts, washers, and fasteners. Per Note 1 of section 40 05 01 part 2.02.A, the titanium requirement in the SHC areas is only below the grating or where piping (and its supports) have the potential for exposure to bulk SHC above 4% concentration, such as piping upstream of the dilution panel. Per Part 2.02.A, 316 stainless steel and/or FRP are listed as being acceptable above the grating in the SHC areas subject to Note 1.
- Q24:** Drawing Sheet D-60-105: General Note #7 – Fluoride Room requires “all hardware” be Hastelloy C in this room. We have contacted multiple suppliers and manufacturers of specialty alloy metals products for pricing and availability of Hastelloy C and Titanium hardware including nuts, bolts, washers, threaded rod, uni-strut, strut accessories like strut nuts, two piece clamps, channel fittings, trapeze accessories, etc. These suppliers can and do provide common hardware like threaded rod, nuts, bolts, washers in the required alloys however we were not able to find any suppliers for other hardware items in these alloys including strut, two piece clamps, and other misc. accessories required for most small bore piping and/or raceway support details. Will it be acceptable to use FRP hardware and misc. support components (equal to Aickinstrut of the most appropriate FRP materials) to the greatest extent possible above and below the grating level in the Fluoride containment rooms? Please confirm there is no requirement for all hardware ABOVE the grating level in the SHC Generation and SHC Storage Areas to be Titanium, and that 316SSTL and/or FRP will be acceptable. Please note we would plan to use specialty alloy hardware with epoxy adhesive for all concrete anchorage points within the referenced containment rooms, and would provide specialty alloy “bolt kits” for all equipment and piping connections requiring hardware.
- A24:** The “hardware” referred to in the referenced note was meant to apply primarily to items such as bolts, nuts, washers, and similar typically metallic hardware. The design intent per specification sections 40 05 01 (2.02.A including Note 1) and 40 05 07 (2.02.B) is to provide FRP supports in the Fluoride room with Hastelloy C nuts, bolts, washers, and fasteners. Per Note 1 of section 40 05 01 part 2.02.A, the titanium requirement in the SHC areas is only below the grating or where piping (and its supports) have the potential for exposure to bulk SHC above 4% concentration, such as piping upstream of the dilution panel. Per Part 2.02.A, 316 stainless steel and/or FRP are listed as being acceptable above the grating in the SHC areas subject to Note 1.

**Q25: Drawings A-60-151 and D-60-151 show an access platform between Brine Tanks T-60511 and T-60512. Please provide framing plan, section views, materials of construction and details for this platform.**

A25: Please refer to Keynote 11 on Drawing S-60-152.

**Q26: Please provide framing details for the intermediate landing associated with Stair K shown on A-60-353.**

A26: Please refer to Keynote 11 on Drawing S-60-152.

All bidders shall acknowledge receipt of this addendum by inserting its number and date in the Bid Form. Failure to do so may subject bidder to disqualification. This addendum forms a part of the Contract Documents.