ADDENDUM NUMBER 3

ISSUED Sept 14, 2010

to the CONTRACT DOCUMENTS for:

WASHINGTON COUNTY SERVICE AUTHORITY
MIDDLE FORK WTP UPGRADE TO 12 MGD

Prepared by: Olver - A CHA Company
1116 South Main Street
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Olver Project No.: 12367.13

The following revisions, additions, and clarifications are hereby made part of the Contract Documents and Technical Specifications for the above-referenced project and shall be taken into account in the preparation of all bids and the execution of all Work. Bidders shall acknowledge receipt of the addendum in the appropriate space on the Bid Form.

GENERAL REVISIONS AND CLARIFICATIONS:

Ad1-1 **The Bid Opening Date has been revised to ~~Thursday~~ Tuesday, September 21, 2010. All other items regarding the bid opening remain unchanged.**

Ad1-2 The magnetic flow meters FE-201, FE-202, and FE-203 and associated transmitters are owner supplied equipment.

Ad1-3 Section 9905 was inadvertently left out of the attachments to Addendum No. 2. Use the version attached to this Addendum.

Ad1-4 Section 11227 was not attached to Addendum No 2. Please remove this reference from Addendum No. 2. This section was for reference only, and will not be distributed. Please contact Siemens for a full scope of supply.

REVISIONS/CLARIFICATIONS TO TECHNICAL SPECIFICATIONS:

Ad1-5 Section 6610, Paragraph 2.3.E, **ADD** sentence 14 as follows: "14. Baffles shall be as manufactured by Strongwell, or equal."

Ad1-6 Section 11930 - **REMOVE** Paragraph 2.4.D

Ad1-7 Section 11930, Paragraph 2.5.B.2.d - **CHANGE** the specification section referenced from 11261 to 11921: Chemical Feed: Chlorine. The chlorine gas detectors are to be supplied as part of the scope of 11921.

Ad1-8 Section 11999, Paragraph 2.3.B.1 - **CHANGE** the number of mixing elements from 5 to 10.

Ad1-9 Section 11999, Paragraph 2.4.A - **CHANGE** the text that reads "Install injection ports as follows:" to "Install injection ports as follows in 24-inch static mixer:"

Ad1-10 Section 11999, Paragraph 2.4.D - **ADD** new paragraph below this paragraph to read "

E. Install injection ports on 2" Static mixer with mixing elements between each of the ports, with the ports as follows:

1. ¾-inch PACL
2. ¾-inch Caustic
3. ¾-inch Sodium Permanganate
4. ¾-inch Spare
5. ¾-inch Spare

REVISIONS/CLARIFICATIONS TO DRAWINGS:

Ad1-1 Sheet S102, Detail S102.1 - **ADD** a leader to the roof with the text "Roof similar to the Chlorine and Chemical Feed Building roof. See Arch drawings."

Ad1-2 Sheet S101, Detail S101.2 - **ADD** a note with a dimension line extending the full length of the building directly underneath the 42'-3 ¼" dimension to read "Metal trusses, 2' on center"

Ad1-3 Sheet 505, **REPLACE** S505.6 issued in Addendum No. 1 with ***Attached***

Ad1-4 Sheet M108, Detail M108.1 - **ADD** note 3 as follows: "3. Run ¾" CA from new compressor location to existing lines located on exterior of sedimentation basin walls. Lines to be run underground between the booster pump station and the sedimentation basin, but may be run above ground along the sedimentation basin wall to the existing CA connection.

Ad1-5 Sheet M203 - CLARIFICATION: There are two rows of new PVC channel wall.

Ad1-6 Sheet M205 - Detail M205.1 **REMOVE** the text in the note next to the 1'2" cutout which reads "SQUARE CUT IS ACCEPTABLE." A square cut may not be used in any of these locations,

Ad1-7 Sheet M213 - **ADD** a leader that calls out all piping connected to both blowers as 10" LPA.

Ad1-8 Sheet E004 - **CHANGE** feeder to panel H3 to two 3" conduits with three 300 kcmil & 1#1/0 in each conduit.

Ad1-9 Sheet E011 - **ADD** #6 neutral to wire and conduit tag #18.

Ad1-10 Sheet E005 - **CHANGE** wire and conduit tag to EF-2 from #13 to #9.

Ad1-11 Sheet E207 - **ADD** telephone outlets in Rooms 110 and 120. In room 120 provide a telephone outlet on wall and a telephone outlet in a floor box below the computer desks. Telephone outlets shall be flush device boxes with ¾" concealed EMT run to a 4' X 6' X 3/4" plywood

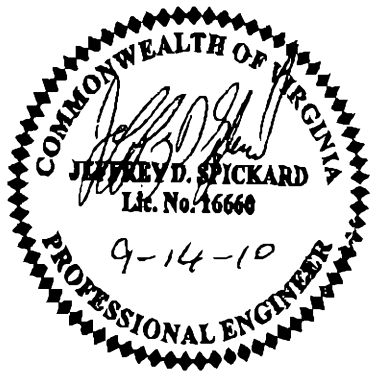
telephone backboard located in the electrical room. Provide suitable device box cover plates and pull cord in each telephone conduit.

Ad1-12 Sheet E208 - **ADD** telephone outlets in Rooms 101 through 104, 109, 113, and 114. In room 101, provide telephone outlet 6" above the reception area countertop. Telephone outlets shall be flush device boxes with ¾" concealed EMT run to a 4' X 6' X 3/4" plywood telephone backboard located in the electrical room. Provide suitable device box cover plates and pull cord in each telephone conduit. Section 06200 in the Table of Contents from "Finish Carpentry" to "Architectural Woodwork". The laboratory casework is specified in this section.

Ad1-13 Sheet E209 - **ADD** note one to the bottom of the page to read: "1. The VFD for Blower No 1 will be relocated from the existing location. The VFD for Blower No 2 will be owner provided, and installed by the contractor"

END OF ADDENDUM

Douglas B. Hudgins, P.E.
Project Manager



SECTION 09905

PAINTING AND PROTECTIVE COATINGS

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SECTION 09905

PAINTING AND PROTECTIVE COATINGS

PART 1 – GENERAL

1.1 SUMMARY

A. Section Includes:
1. Painting and protective coatings.
2. Minimum surface preparation requirements.
3. This specification only applies to painting within non-conditioned spaces. Painting in the conditioned spaces (cooled) in the plant building is covered by Section 09900.

B. Related Sections include but are not necessarily limited to:
1. Division 0 - Bidding Requirements, Contract Forms, and Conditions of the Contract.
2. Division 1 - General Requirements.
3. Section 03002 - *Concrete*.

1.2 QUALITY ASSURANCE

A. Referenced Standards:
1. American National Standards Institute (ANSI):
   a. A224.1, Test Procedures and Acceptance Criteria for Prime Painted Steel Surfaces for Steel Doors and Frames.
   b. Z53.1, Safety Color Code for Marking Physical Hazards.
2. American Society for Testing and Materials (ASTM):
   a. A780, Standard Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings.
   b. D4258, Standard Practice for Surface Cleaning Concrete for Coating.
   c. D4259, Standard Practice for Abrading Concrete.
   d. D4261, Standard Practice for Surface Cleaning Concrete Unit Masonry for Coating.
   e. D4262, Standard Test Method for pH of Chemically Cleaned or Etched Concrete Surfaces.
   f. D4263, Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method.
   g. E84, Standard Test Method for Surface Burning Characteristics of Building Materials.
3. National Bureau of Standards (NBS):
   a. Certified Coating Thickness Calibration Standards.
4. Steel Structures Painting Council (SSPC):
   a. PA-2, Measurement of Dry Paint Thickness with Magnetic Gages.
   b. SP-1, Solvent Cleaning.
   c. SP-2, Hand Tool Cleaning.
   d. SP-3, Power Tool Cleaning.
   e. SP-6, Commercial Blast Cleaning.
   f. SP-10, Near-White Blast Cleaning.
   g. SP-13, Surface Preparation of Concrete.

B. Qualifications:
1. Applicator shall have minimum of 5 years experience in application of similar products on similar project. Provide references for minimum of three different projects completed in last 5 years. Include name and address of project, size of project in value (painting) and contact person.

C. Miscellaneous:
1. Furnish paint through one manufacturer when possible.

D. Deviation from specified mil thickness or product type is not allowed without written authorization of Engineer.

1.3 DEFINITIONS

A. Installer or Applicator: Installer or applicator is the person actually installing or applying the product in the field at the Project site.
   1. Installer or applicator are synonymous.

B. Approved Factory Finish: Finish on a product in compliance with the finish specified in the section where the product is specified.

C. Exposed Exterior Surface: Surface which is exposed to the weather but not necessarily exposed to view as well as surface exposed to view.

D. Finished Area, Room or Space: One that has finish called for on Room Finish Schedule or is indicated, on Drawings, to be painted.

E. Paint includes fillers, primers, sealers, emulsions, oils, alkyds, latex, enamels, thinners, stains, epoxies, vinyls, chlorinated rubbers, urethanes, shellacs, varnishes, and any other applied coating specified within this Section.

F. Surface Hidden from View: Surfaces such as those within pipe chases, and between top side of ceilings (including drop-in tile ceilings) and underside of floor or roof structure above.

G. VOC: Volatile Organic Compounds.

1.4 SUBMITTALS

A. Manufacturer's statement regarding Applicator instruction on product use.

B. Applicator experience qualifications.

C. Shop Drawings:
   1. See Section 01340 – *Shop Drawings, Product Data & Samples; Operation & Maintenance Manuals; and Miscellaneous Submittals.*
   2. Product technical data including:
      a. Acknowledgment that products submitted meet requirements of standards referenced.
      b. Manufacturer's application instructions.
      c. Manufacturer's surface preparation instructions.
      d. If products being used are manufactured by Company other than listed in Article 2.2, provide complete individual data sheet comparison of proposed products with specified products including application procedure, coverage rates and verification that product is designed for intended use.
      e. Manufacturer's factory-applied finish information. Refer to paragraph 3.2-B.

D. Samples:
   1. Manufacturer's full line of standard colors for Engineer's color selection.

E. Miscellaneous Submittals:
   1. Painter's daily record when requested by Engineer.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver in original containers, labeled as follows:
   1. Name or type number of material.
   2. Manufacturer's name and item stock number.
   3. Contents, by volume, of major constituents.
   4. Warning labels.
   5. VOC content.

PART 2 – PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

A. Subject to compliance with the Contract Documents, the following manufacturers are acceptable:
   1. Tnemec.
   2. Ameron International.
   3. Valspar Corp.
   4. Carboline.
   5. Porter Paints.
   6. Sherwin Williams.
   7. Or approved equal.

B. Submit requests for substitution in accordance with Section 01640 – *Product Substitutions.*

2.2 MATERIALS

A. For unspecified materials such as thinner, provide manufacturer's recommended products.

B. Paint Systems - General:
   1. P=prime coat. F1, F2 . . . Fn = first finish coat, second finish coat . . . . nth finish coat, color as selected by Engineer.
   2. If two finish coats of same material are required contractor may, at his option and by written approval from paint manufacturer, apply one coat equal to mil thickness of two coats specified.

C. Products specified are manufactured by Tnemec unless otherwise specifically noted to be by other manufacturer.

D. Coating Systems:
   1. System #1 - Polyamidoamine Epoxy Primer with Epoxy-Polyamide or Aliphatic Acrylic Polyurethane Top Coats.
      P1=N69 Hi-Build Epoxoline II (Polyamidoamine Epoxy) VOC=2.29
      1 coat, 4 mils
      F1= Series 66 Hi-Build Epoxoline (Epoxy-Polyamide) VOC=3.04
      1 coat, 3 mils
      *F2 = Series 66 Hi-Build Epoxoline (Epoxy-Polyamide)
      1 coat, 3 mils
      *F2E Series 1075 Endura-Shield II (Aliphatic Acrylic Polyurethane) VOC=1.84
      1 coat, 2.5 mils
      *Replace F2 with F2E for exterior environment.
   2. System #2 - NOT USED.
   3. System #3 - Epoxy-Polyamide Primer with Epoxy-Polyamide or Aliphatic Acrylic Polyurethane Top Coats.
      P1=Series 66 Hi-Build Epoxoline (Epoxy-Polyamide) VOC=3.42
      1 coat, 2 mils
      *F1=Series 66 Hi-Build Epoxoline (Epoxy-Polyamide)
      1 coat, 2 mils
      *F1E Series 1075 Endura-Shield II (Aliphatic Acrylic Polyurethane) VOC=1.84
      1 coat, 2.5 mils
      *Replace F1 with F1E for exterior environment
   4. System #4 - Zinc-rich Urethane Primer with Epoxy-Polyamide or Aliphatic Acrylic Polyurethane Top Coats.
      P1=90-97 Tneme-Zinc (Zinc-Rich Urethane) VOC=3.10
      1 coat, 2.5 mils
      *F1=Series 66 Hi-Build Epoxoline (Epoxy-Polyamide) VOC=3.42
      1 coat, 3 mils
      *F1E Series 1075 Endura-Shield II (Aliphatic Acrylic Polyurethane) VOC=1.84
      1 coat, 2.5 mils
      *Replace F1 with F1E for exterior environment

5. System #5 - Moisture-Cured Urethane Primer with Epoxy-Polyamide or Aliphatic Acrylic Polyurethane Top Coats.
   P1=530 Omnithane (Moisture-Cured Urethane) VOC=3.42
   1 coat, 2.5 mils
   *F1=Series 66 Hi-Build Epoxoline (Epoxy-Polyamide) VOC=3.42
   1 coat, 4 mils
   *F1E Series 1075 Endura-Shield II (Aliphatic Acrylic Polyurethane) VOC=1.84
   1 coat, 2.5 mils
6. System #6 - NOT USED.
7. System #7 - Epoxy-Polyamide Primer with Epoxy-Polyamide or Aliphatic Acrylic Polyurethanel Top Coats.
   P1=Series 65 Poxiprime II (Epoxy-Polyamidaomine) VOC=3.46
   1 coat, 4 mils
   *F1=Series 66 Hi-Build Epoxoline (Epoxy-Polyamide) VOC=3.42
   1 coat, 5 mils
   *F1E Series 1075 Endura-Shield II (Aliphatic Acrylic Polyurethane) VOC=1.84
   1 coat, 2.5 mils
8. System #8 - NOT USED.
9. System #9 - NOT USED.
10. System #10 - NOT USED.
11. System #11 - Zinc-Rich Urethane Primer.
    P1=90-97 Tneme-zinc (Zinc-Rich Urethane) VOC=3.10
    1 coat, 3.5 mils
12. System #12 - Emulsified Acrylic Primer and Top Coat.
    P1=Series 6 Tneme-Cryl (Emulsified Acrylic) VOC=1.89
    1 coat, 2.5 mils
    F1=Series 6 Tneme-Cryl (Emulsified Acrylic)
    1 coat, 2.5 mils
13. System #13 - Modified Waterborne Acrylate Primer and Top Coat.
    P1=Series 156 Enviro-Crete (Modified Waterborne Acrylate) VOC=0.98
    1 coat, 6 mils
    F1=Series 156 Enviro-Crete (Modified Waterborne Acrylate)
    1 coat, 6 mils
14. System #14 - Vinyl-Acrylic Latex Sealer with Waterborne Acrylic Epoxy Top Coats.
    P1=Series 51-792 PVA Sealer (Vinyl-Acrylic Latex) VOC=0.00
    1 coat, 1.5 mils
    F1=Series 113 H.B. Tneme-Tufcoat (Waterborne Acrylic Epoxy) VOC=2.08
    1 coat, 5 mils
    F2=Series 113 H.B. Tneme-Tufcoat (Waterborne Acrylic Epoxy)
    1 coat, 5 mils
15. System #15 - Epoxy-Polyamide Primer with Epoxy-Polyamide Top Coat.
    P1=Series 66 Hi-Build Epoxoline (Epoxy-Polyamide) VOC=3.42
    1 coat, 4 mils
    F1=Series 66 Hi-Build Epoxoline (Epoxy-Polyamide)
    1 coat, 4 mils
16. System #16 - NOT USED.
17. System #17 - NOT USED.
18. System #18 - NOT USED.
19. System #19 - Epoxy-Polyamide Coating.
    P1=Series 66 Hi-Build Epoxoline(Epoxy-Polyamide) VOC=3.42
    1 coat, 5 mils
20. System #20 - NOT USED.
21. System #21 - NOT USED.
22. System #22 - NOT USED.
23. System #23 - Epoxy-Polyamide Primer with Epoxy-Polyamide Top Coat.
    P1=Series 20-1255 Pota-Pox (Epoxy-Polyamide PW System) VOC=3.42
    1 coat, 4 mils
    F1=Series 20-2000 Pota-Pox (Epoxy-Polyamide PW System) VOC=3.42
    1 coat, 4 mils.
24. System #24 - NOT USED.

25. System #25 - NOT USED.
26. System #26 - NOT USED.
27. System #27 - Vinyl-Acrylic Latex Block Filler with Waterborne Acrylic Epoxy Top Coats.
    P1=54-660 Latex Masonry Filler (Vinyl-Acrylic Latex) VOC=1.34
    1 coat, 75 to 100 GAL/SF/coat
    F1=Series 113 H.B. Tneme-Tufcoat (Waterborne Acrylic Epoxy) VOC=2.46
    1 coat, 2.5 mils
    F2=Series 113 H.B. Tneme-Tufcoat (Waterborne Acrylic Epoxy)
    1 coat, 2.5 mils.
28. System #28 - NOT USED.
29. System #29 - NOT USED.
30. System #30 - NOT USED.
31. System #31 - Waterborne Epoxy-Amine Adduct Primer and Top Coat.
    P1 = Stratashield Series 287 Enviro-Pox VOC=0.05
    1 coat, 4 mils
    F1 = Stratashield Series 287 Enviro-Pox
    1 coat, 3 mils.
32. System #32 - NOT USED
33. System # 33 - See Specification Section 09850.
34. System #34 - Specification Section 09850.

PART 3 – EXECUTION

3.1 ITEMS TO BE PAINTED

A. Exposed Exterior Surfaces including:
   1. Plain, insulated, or wrapped piping, valves, fittings, hydrants, and appurtenances; except when covered by lagging.
   2. Conduit and appurtenances.
   3. Ferrous metals - See Specification Section 09900.
   4. Exposed wood - See Specification Section 09900.
   5. Galvanized metal surfaces - See Specification Section 09900.

B. Interior Finished Process, Equipment, and Piping Areas: (For conditioned office, laboratory, lavatory, etc. spaces See Specification Section 09900).
   1. All new and existing concrete walls.
   2. All new and existing concrete masonry walls.
   3. All new and existing concrete ceilings.
   4. Permanently exposed to view concrete floors.
   5. Plain, insulated, or wrapped piping; valves; fittings; and appurtenances.
   6. Conduit and appurtenances.
   7. Ferrous metals.
   8. Galvanized metal surfaces.

C. New and Existing Equipment:
   1. Paint new and existing equipment, except:
      a. Where noted in Article 3.2.
      b. Where specified elsewhere in the Contract Documents.

3.2 ITEMS NOT TO BE PAINTED

A. General: Do not paint items listed in Article 3.2 unless specifically noted in the Contract Documents to be painted. Any items to be painted that are in contact with process water shall be coated with NSF-61 coating.

B. Items with Approved Factory Finish:
   1. Do not field paint items with Approved Factory Finishes, as defined; including the following:
      a. Prefinished sheet metal.
      b. Prefinished metal roof and wall panels.

c. Finished electrical equipment.

C. Surfaces Hidden from View including:
1. Piping.
2. Conduit.
3. Insulation.
4. Manufacturer's standard coatings, if any, may remain.

D. Other Items:
1. Stainless steel surfaces except:
a. Piping.
b. Banding as required to identify piping.
2. Aluminum surfaces except:
a. Where specifically shown in the Contract Documents.
b. Where imbedded in concrete.
c. Where in contact with dissimilar metals.
3. Interior of pipe, ductwork, and conduits.
4. Moving parts of mechanical and electrical units where painting would interfere with the operation of the unit.
5. Code labels and equipment identification and rating plates.
6. Exterior concrete or precast concrete surfaces.

3.3 PAINTING SCHEDULE

	Painting System Number
A. Newly Cast or Existing Uncoated Concrete:	
1. Interior cast-in-place and interior precast surfaces (other than prefinished panels) in areas indicated on the Drawings and identified in the Finish Schedule to be painted, including equipment bases, pads, walls (that are not below grade or part of a liquid containing structure), beams, columns, pedestals, pilasters, etc.	15
2. Interior cast-in-place and interior precast walls (other than prefinished panels) below grade.	13
3. New and Existing Permanently Exposed to View concrete floors	31
B. Existing Coated Concrete: Use System #13 or #15 as applicable and apply finish "F" coats only	
C. Concrete Masonry Units:	
1. Interior (New construction or previously uncoated cmu).	27
2. Interior (previously painted): Use System #27 finish "F" coats only.	
D. Structural Steel:	7
E. Ferrous Metals: May include steel handrails and guardrails, steel stairs, exterior of steel tankage, tank or equipment bridges, pumps, and similar items.	1
F. Galvanized Metals:	
1. Field cut edge where top coat is required.	
a. This paint coating to be applied after galvanizing has been repaired in accordance with ASTM A780.	4

	Painting System Number
2. Assembled galvanized steel items.	3
3. Field touch-up of galvanized surfaces not requiring a finish top coat.	
a. This paint coating to be applied after galvanizing has been repaired in accordance with ASTM A780.	11
G. Doors, door frames, and window frames:	
1. Steel doors and frames primed in the factory in conformance with ANSI A224.1.	5
H. Plastic Surfaces:	
1. PVC, FRP, and CPVC surfaces.	3
2. PVC, FRP, and CPVC in contact with process water (in areas indicated on the Drawings).	23
I. Electrical Conduit:	
1. Galvanized.	3
2. PVC coated.	3
J. Pipe, Valves, and Fittings: (Not in contact with potable water)	
1. Steel and cast-iron.	1
2. Stainless.	1
3. Brass and bronze.	3
4. PVC, FRP, and CPVC.	3
K. Pipe and Duct Insulation.	12
L. Gypsum Board (In unconditioned process areas)	14
M. Aluminum buried in concrete and between dissimilar metals which are not below liquid level.	19
N. All ferrous metal piping and surfaces submerged in process water or subject to splash, spillage, vapor, condensation or other chronic process water exposure.	23
O. Interior walls of Filters and interior walls and floors of Adsorption Clarifiers.	23
P. Floor of Fluoride Room and bottom 8 inches of walls & protrusions above finished floor elevation.	See 09805
Q. Floor and walls of secondary containment and bulk storage containment.	See 09805

3.4 PREPARATION

A. General:
1. Prepare surfaces to be painted in accordance with coating manufacturer's instructions and this Section.
2. Remove all dust, grease, oil, compounds, dirt and other foreign matter which would prevent bonding of coating to surface.

B. Protection:
1. Protect surrounding surfaces not to be coated.
2. Remove and protect hardware, accessories, plates, fixtures, finished work, and similar items; or provide ample in-place protection.
3. Protect process water from spray.

C. Prepare and Paint Before Assembly: Where component is subject to corrosive environment, prepare and paint, before assembly, all surfaces which may be subject to corrosive environment which are inaccessible after assembly.

D. Ferrous Metal:
   1. Complete fabrication, welding or burning before beginning surface preparation.
      a. Chip or grind off flux, spatter, slag or other laminations left from welding.
      b. Remove mill scale.
      c. Grind smooth rough welds and other sharp projections.
   2. Surfaces subject to corrosive environment:
      a. Near-white blast clean in accordance with SSPC SP-10.
   3. Interior and exterior surfaces not subject to corrosive environment (including structural steel surfaces):
      a. Commercial blast clean in accordance with SSPC SP-6.

E. Hollow Metal:
   1. Solvent clean in accordance with SSPC SP-1.

F. Concrete:
   1. Cure for minimum of 28 days.
   2. Verify that concrete surfaces have been cleaned and that voids have been patched in accordance with Section 03002.
      a. Concrete surfaces shall be cleaned in accordance with ASTM D4258.
   3. Test pH of surface to be painted in accordance with ASTM D4262.
      a. If surface pH is not within coating manufacturer's required acceptable range, flush surface with clean water as required to bring pH within acceptable limits.
      b. Retest pH until acceptable results are obtained.
   4. Verify that moisture content of surface to be painted is within coating manufacturer's recommended acceptable limits.
      a. Test moisture content of surface to be coated in accordance with ASTM D4263.
      b. After remedial measures have been taken to lower or raise moisture content, retest surface until acceptable range is obtained.
   5. Mechanically abrade concrete surfaces in accordance with ASTM D4259 as recommended by coating manufacturer.

3.5 APPLICATION

A. General:
   1. Thin, mix and apply coatings by brush, roller, or spray in accordance with manufacturer's installation instructions.
   2. Temperature and weather conditions:
      a. Do not paint surfaces when surface temperature is below 50°F unless approved in writing by Engineer and paint manufacturer's authorized representative.
      b. Avoid painting surfaces exposed to hot sun.
      c. Do not paint on damp surfaces.
   3. Immediately after surface has been accepted by NACE certified coatings inspector, apply structural steel, miscellaneous steel, and steel joist prime coat in the factory.
      a. Finish coats shall be applied in the field.
   4. Provide complete coverage to mil thickness specified.
      a. Thickness specified is dry mil thickness.
      b. All paint systems are "to cover." In situations of discrepancy between manufacturer's square footage coverage rates and mil thickness, mil thickness requirements govern.
      c. When color or undercoats show through, apply additional coats until paint film is of uniform finish and color.
   5. If so directed by Engineer, do not apply consecutive coats until Engineer has had an opportunity to observe and approve previous coats.
   6. Apply materials under adequate illumination.
   7. Evenly spread to provide full, smooth coverage.
   8. Work each application of material into corners, crevices, joints, and other difficult to work areas.

9. Avoid degradation and contamination of blasted surfaces and avoid intercoat contamination.
    a. Clean contaminated surfaces before applying next coat.
10. Smooth out runs or sags immediately, or remove and recoat entire surface.
11. Allow preceding coats to dry before recoating.
    a. Recoat within time limits specified by coating manufacturer.
12. Allow coated surfaces to cure prior to allowing traffic or other work to proceed.
13. Coat all aluminum in contact with dissimilar materials.
14. Back roll concrete surfaces with a roller if paint coatings are spray applied.

B. Prime Coat Application:
1. Prime all surfaces indicated to be painted. Apply prime coat in accordance with coating manufacturer's written instructions and as written in this Section.
2. Ensure field-applied coatings are compatible with factory-applied coatings. Ensure new coatings applied over existing coatings are compatible.
    a. Employ services of coating manufacturer's qualified technical representative.
        1) Certify thru material data sheets.
        2) Perform test patch.
    b. If field-applied coating is found to be not compatible, require the coating manufacturer's technical representative to recommend, in writing, product to be used as barrier coat, thickness to be applied, surface preparation and method of application.
    c. At Contractor's option, coatings may be removed, surface reprepared, and new coating applied using appropriate paint system listed in paragraph 2.2 E.
        1) All damage to surface as result of coating removal shall be repaired to original condition or better by Contractor at no additional cost to Owner.
3. Prime ferrous metals embedded in concrete to minimum of 1 IN below exposed surfaces.
4. Apply zinc-rich primers while under continuous agitation.
5. Ensure abrasive blasting operation does not result in embedment of abrasive particles in paint film.
6. Brush or spray bolts, welds, edges and difficult access areas with primer prior to primer application over entire surface.
7. Fill all pores of concrete block completely using block filler specified.
8. Touch up damaged primer coats prior to finish coats.
9. Restore primed surface equal to surface before damage.

C. Finish Coat Application:
1. Apply finish coats in accordance with coating manufacturer's written instructions and in accordance with this Section.
2. Touch up damaged finish coats using same application method and same material specified for finish coat.
3. Prepare damaged area in accordance with Article 3.4.

3.6 COLOR CODING

A. Color and band piping in accordance with Article 3.9 of this Section.
1. Band piping using maximum of three different colors at 20 FT maximum centers.
2. Place bands:
    a. Along continuous lines.
    b. At changes in direction.
    c. At changes of elevation.
    d. On both sides of an obstruction (i.e., wall, ceiling that painted item passes through.
3. Band width for individual colors (pipe diameter measured to outside of insulation):
    a. Piping up to 8 IN DIA: 2 IN minimum.
    b. Piping greater than 8 IN up to 24 IN DIA: 4 IN minimum.

3.7 FIELD QUALITY CONTROL

A. Maintain daily record showing:
1. Start date and time of work in each area.
2. Date and time of application for each following coat.

B. Manufacturer's field representative shall be on site to observe application of coating specified in System No. 31, and to inspect substrate for this system prior to coating application.

C. Where a wall or ceiling is disturbed and patched, repaint entire wall or ceiling.

D. Measure wet paint with wet film thickness gages.

E. Measure paint dry film thickness in accordance with SSPC PA-2 using Mikrotest gage calibrated against National Bureau of standards "Certified Coating Thickness Calibration standards."

1. Engineer may measure paint thickness at any time during project to assure conformance with Specifications.

F. Measure surface temperature of items to be painted with surface temperature gage specifically designed for such.

G. Measure substrate humidity with humidity gage specifically designed for such.

H. Provide wet paint signs.

3.8 CLEANING

A. Clean paint spattered surfaces. Use care not to damage finished surfaces.

B. Upon completion of painting, replace hardware, accessories, plates, fixtures, and similar items.

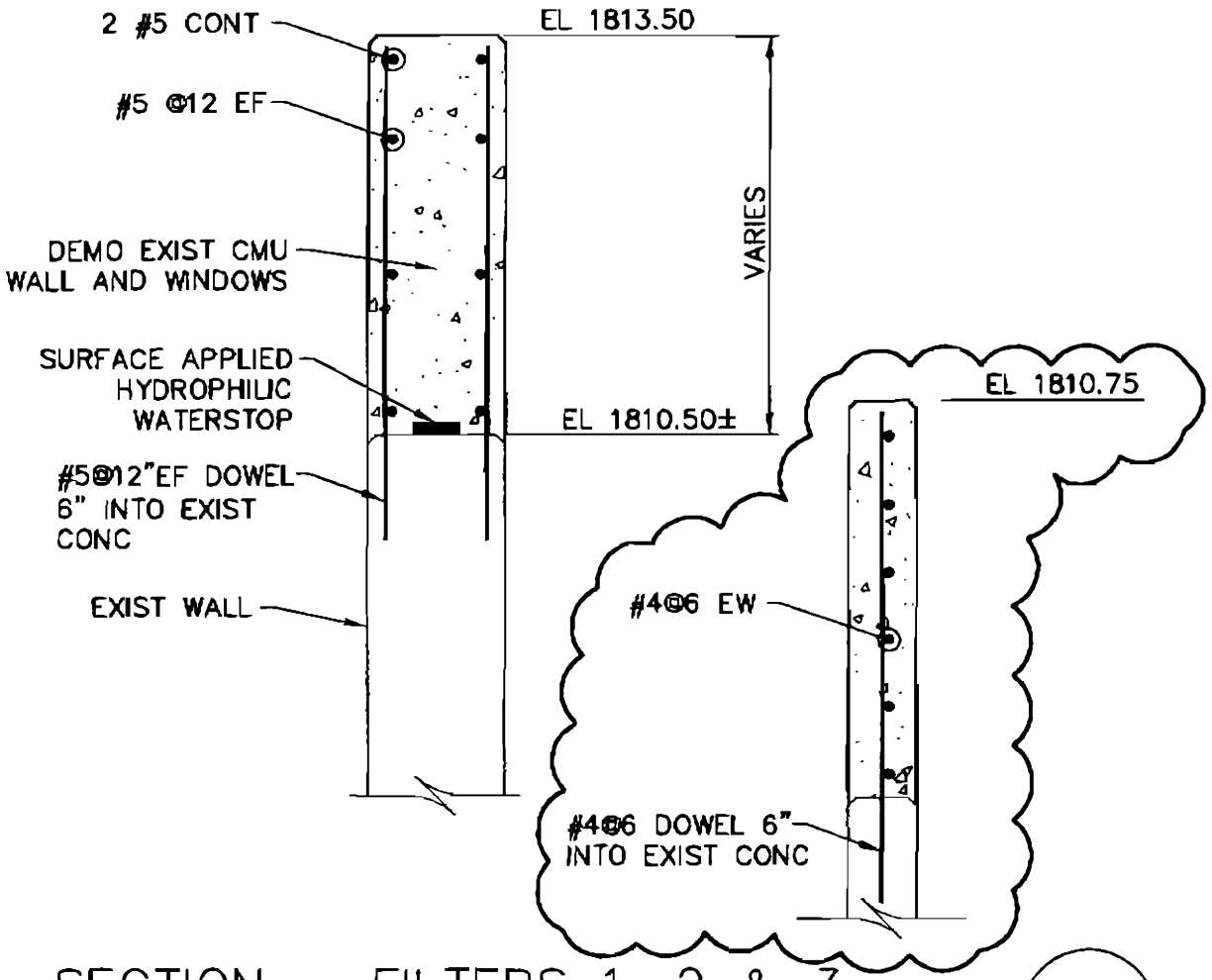
C. Remove surplus materials, scaffolding, and debris. Leave areas broom clean.

3.9 COLOR SCHEDULE

A. Piping and Pipe Banding Color Schedule (Submit color schedule to Engineer):

Legend	Color
Backwash	Blue (match existing)
Backwash Drain	Brown (match existing)
Compressed Air	Dark Green
Powered Activated Carbon	Black
Chlorine Solution	Yellow
Drain	Light Gray
Potable Water	Blue (match existing)
Filter Effluent	Blue (match existing)
Filter to Waste	Brown (match existing)
Fluoride Solution	Light Blue w/ Red Banding
Finished Water	Blue (match existing)
Low Pressure Air	Light Gray
Polymer	White
Rain Leader	Light Gray
Sample	Do not paint
Sedimentation Effluent	Aqua (match existing)
Sump Discharge	Gray
Storm Drain	Gray
Seal Water	Blue
Temporary Piping	Do not paint
Taylor's Valley Water	Match existing

END OF SECTION



SECTION – FILTERS 1, 2 & 3

S505.6 / S207

SCALE: 3/4" = 1'-0"

WASHINGTON COUNTY SERVICE AUTHORITY
MIDDLE FORK WTP UPGRADE TO 12 MGD
ADDENDUM NO. 3
SECTION S505.6

SCALE: 3/4" = 1'-0"
JOB NO.: 12367.13

SEPT 14, 2010

OLVER INCORPORATED