### ADDENDUM NO. 2, APRIL 23, 2009

RE:	Ocean Avenue Elementary School Portland, Maine A/E Comm. No. 3316.10	City of Portland RFP No. 7109 BGS project No. 723
FROM:	WBRC Architects Engineers 141 Preble Street Portland, Maine 04101 Tel: (207) 828-4511	City of Portland, Purchasing Department 389 Congress Street Portland, Maine 04101 Tel: (207) 874-8654

### TO: Prospective Bidders

This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents dated April 02, 2009, as noted below. Acknowledge receipt of the Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of the following:

- Clarifications
- Document Changes
- Specification Changes
- Drawing Changes
- Section 099061
- Section 108000
- ADD2-CU101-1
- ADD2-AE101-C-1
- ADD2-AE208-1
- ADD2-OF101-1
- ADD2-ES101-1
- ADD2-ES501-1 & ADD2-ES501-2
- ADD2-EP101-B-1
- ADD2-EP101-C-1
- ADD2-EP102-B-1
- ADD2-EY101-B-1
- ADD2-EY101-C-1
- ADD2-EY102-B-1

## **CLARIFICATIONS**:

- 1. Provide plywood sheet blocking, similar to that shown on M1/AE212 for K #138 (floor to ceiling 3/4-inch plywood sheet blocking between studs) at the following areas:
  - 5'-0" wide area in the following rooms: Art #119, Soc Work #127, Soc Work #129, Clinic
    - #131, Computer Lab #147, Speech #150B, Speech #162, Resource #213, Classroom #222.
  - Entire south wall Vol/Scrn #117.
  - 11'-0" wide area in the following rooms OT/PT #160
- 2. *Can Divisions 26, 27 & 28 be combined?* These three Divisions are to be combined into a single Electrical filed sub-bid, per Section 2-A.

- 3. On sheet EP102-A, Note #4 references the VFD and disconnects for said equipment will be furnished and installed by Division 23. However on page 230900-17 VFD section, there is no mention of the disconnect. The referenced disconnect is noted in Section 230900, Paragraph 2.13.B.
- 4. *For communications stubs, can we use electrical non-metallic tubing (ENT)?* Conduit stubs within gypsum board partitions are not required per Specification Section 271500, Communications Horizontal Cabling. If stubs are installed for ease of installation, they shall meet the requirements of Section 260533, Raceway and Boxes for Electrical Systems, which does not allow ENT.

# **DOCUMENT CHANGES:**

5. Section 3A, General Conditions, Article 11, ADD the following: "WBRC Architects/Engineers has made the initial submission for the City of Portland 'General Building Permit Application' and the City has waived the fee for this application."

## SPECIFICATION CHANGES:

- 6. Section 012100, Allowances, Par. 3.2, ADD Subpar. B as follows: "B. All allowances will be carried by the General Contractor as indicated on form 2-B-1."
- 7. Section 012300 Alternates:
  - Par. 3.1.D, DELETE in its entirety and REPLACE with the following:
    - "D. Alternate #4: Anti Graffiti Coatings.
      - 1. Base Bid: Do not provide Anti Graffiti Coatings.
      - 2. Alternate: Provide Anti Graffiti Coatings to a height of 10 feet above finished grade at the perimeter of the building."
  - Par. 3.1.F, DELETE in its entirety.
- 8. Section 024116, Structure Demolition, Par. 1.2.B.5, DELETE in its entirety.
- 9. Section 042000, Unit Masonry, Par. 2.13.A, ADD the following: "Provide square edge sheets in size applicable at CMU back-up walls"
- 10. Section 081100, Steel Doors and Frames:
  - Par. 1.02, ADD Subpar. C as follows:
    - "C. Products furnished, but not installed, under this Section include the following:
      - 1. Hollow metal door frames, installed under Division 04 Section "Masonry Units."
      - 2. Hollow metal door frames, installed under Division 09 Section "Gypsum Board"."
    - Par. 3.03.C, ADD the following sentence. "Installation of Steel Doors to be completed by Steel Door vendor."
- 11. Section 082110, Wood Doors, Par. 3.02.B, ADD the following "Installation of Wood Doors to be completed by Wood Door vendor."
- 12. Section 085200, Wood Windows:
  - Par. 2.1.A.1, ADD Subpars. c, d, and e as follows:
    - "c. Pella Windows and Doors
    - d: Bonneville Windows and Doors
    - e: Jeld-Wen Premium Siteline EX series"

- Par. 2.4.A, DELETE in its entirety and REPLACE with the following: "A. Glass: Clear, insulating-glass units, with low-E2 coating. Basis-of-Design glazing is LoE2-270- #2/Clear by Cardinal IG or LoE2-272- #2/Clear by Cardinal IG.
  - 1. Visible Light Transmission: 70% to 72%.
  - 2. Overall Window U: 0.32 or 0.31.
  - 3. Overall Window SHGC: 0.29 to 0.30."
- Par. 2.10.A, DELETE in its entirety and REPLACE with the following: "A. Provide manufacturers standard clear finish on exposed interior wood surfaces or provide unfinished interior wood surfaces with Low VOC clear coat field finish (Field Finish products furnished and installed under Section 099123)"
- 13. Section 087100, Finish Hardware:
  - Par. 2.07.B, DELETE in its entirety.
  - Par. 2.10.G.1, DELETE Manufacturers "Schlage" and "Best"
  - Par. 2.10.G.2, DELETE Manufacturers "Schlage" and "Best"
  - Par. 2.10.I, Deadlocks, DELETE Manufacturer "Schlage"
  - Par. 3.03.1, ADD the following sentence "Installation of Finish Hardware to be completed by Finish Hardware vendor."
  - Par. 3.08 Hardware Sets:
    - o Item #1, DELETE 'Offset Pulls', ADD 'Pulls'
    - Item #3, DELETE 'Offset Pull', ADD 'Pull', DELETE Door 101D
    - o Item #21, REVISE Door 104A to 104AA
    - Item #24, REVISE Door 138A to 138B
    - Item #28, ADD Door 117A
    - Item #32, DELETE 'Electric Hinge' and 'Power Supply'. REVISE Function 'W' to function 'X'.
    - o Item #35, DELETE Door 124A1
    - o Item #36, DELETE Door 128AA and 224CA
    - o Item #40, DELETE Door 117A
- 14. Section 088000, Glazing:
  - Par. 2.6.A.1, 2.6.A.2, and 2.6.A.3, DELETE in their entirety.
  - Par. 2.6.B, ADD "or 1 1/8 inch."
  - Par. 2.6.E, DELETE in its entirety and REPLACE with the following:
    - "E. Color Schedule
      - 1. Decorative Glazing 1:
        - a) Inboard Lite: 3/16 inch thick clear tempered glass.
        - b) Interior: Dehydrated 5/8 inch thick airspace with clear Panelite tubular honeycomb core (1/4 inch cell size).
        - c) Outboard Lite: 3/16 inch thick, clear tempered glass with Low-E coating.
      - 2. Decorative Glazing 2:
        - a) Inboard Lite: 3/16 inch thick clear tempered glass.
        - b) Interior: Dehydrated 5/8 inch thick airspace with orange Panelite IGU/TO4 tubular honeycomb core (1/4 inch cell size).
        - c) Outboard Lite: 3/16 inch thick, clear tempered glass with Low-E coating (Low-E on scheduled exterior windows only).
        - Or
        - d) Inboard Lite: 3/16 inch thick Golden Light laminated glass.
        - e) Interior: Dehydrated 5/8 inch thick airspace with clear Panelite IGU/TC4 tubular honeycomb core (1/4 inch cell size).

- f) Outboard Lite: 3/16 inch thick, Golden Light laminated glass with Low-E coating (Low-E on scheduled exterior windows only).
- 3. Decorative Glazing 3:
  - a) Inboard Lite: 1/4 inch thick Azurlite blue tempered glass.
  - b) Interior: Dehydrated 5/8 inch thick airspace with clear Panelite IGU/TC4 tubular honeycomb core (1/4 inch cell size).
  - c) Outboard Lite: 1/4 inch thick, Azurlite blue tempered glass with Low-E coating (Low-E on scheduled exterior windows only)."
- 15. Section 092216, Non-Structural Metal Framing:
  - Par. 2.4.H, DELETE in its entirety.
  - Par. 3.5.E, DELETE in its entirety.
- 16. Section 092900, Gypsum Board:
  - Par. 1.2, ADD Subpar. D as follows:
    - "D. Products installed, but not furnished, under this Section include the following:
      - Hollow metal door frames in gypsum board openings, furnished under Division 08 Section "Steel Doors and Frames" And "Stainless Steel Doors and Frames."
  - Par. 2.2.A.1, ADD Subpar. d as follows: "d. e2 XP Extended Exposure Sheathing; National Gypsum Company."
- 17. Section 093000, Tiling, Par. 3.4.E.2, 3.4.E.3, 3.4.E.4, DELETE in their entirety and REPLACE with the following:
  - "2. Ceramic floor tile Basis of Design: Royal Mosa: 3/16 inch.
  - 3. Quarry tile: 3/8 inch.
  - 4. Glazed wall tile
    - a. Basis of Design: Royal Mosa: 1/8 inch.
    - b. Basis of Design: Crossville Color-Blox: 1/4 inch."
- 18. Section 099061, Anti Graffiti Coatings, ADD section attached.
- 19. Section 105126, Plastic Lockers:
  - Par. 1.2.B.1, DELETE the word "metal".
  - Par. 1.5.A, DELETE the word "metal".
  - Par. 3.2.A.1, DELETE the word "metal".
- 20. Section 107052, Sun Control Devices:
  - Par. 2.1.A, DELETE in its entirety and REPLACE with the following:
    - "A. Basis-of-Design: Subject to compliance with requirements, provide products by U.S. Aluminum Series 3600 Sun Shade system or comparable product by the following:"
      - 1. ASCA Inc., Portsmouth, NH"
  - Par. 2.1, ADD Subpar. B as follows: "B. System must be compatible with Glazed Aluminum Curtain Wall System."
- 21. Section 108000, Other Specialties, ADD section attached.

- 22. Section 114000, Foodservice Equipment, Par. 3.5:
  - Item #2, Quantity, DELETE "7" and REVISE to "5".
    - Item #: 33, DELETE in its entirety and REPLACE with the following: "Description: Traffic Barriers (Not Shown on Plan) Manufacturer: Lawrence (1-800-441-0019) Model #: 897-1P-33-BP SIS #: T037 Quantity: 2

Specification: Units to be model 897-1P-33-B9 wall mounted chrome plated, Black Belt, traffic barrier with wall mounted receptacle as manufactured by Lawrence Metal. Head and Belt color to be verified by owner before ordering."

- 23. Section 260543, Underground Ducts & Raceways for Electrical Systems:
  - Par. 3.1.A, DELETE "unless otherwise indicated."
  - Par. 3.1.D, DELETE in its entirety and REPLACE with "Underground Ducts for Telephone, Communications, Data or Cable Television Utility Service Cables: RNC, NEMA Type EPC-40-PVC, installed in direct-buried duct bank, unless otherwise indicated."
  - Par. 3.1.E, DELETE in its entirety.
  - Par. 3.1.F, DELETE "NEMA Type EPC-80-PVC."
  - Par. 3.4.H.2, 3.4.H.3, 3.4.H.4, DELETE in their entirety.
  - Par. 3.5.A, ADD "(by Division 31 Contractor)."
- 24. Section 312000, Earth Moving, Par. 3.14 D, DELETE in its entirety.

## DRAWING CHANGES:

- 25. Sheet CU101, Site Utility Plan:
  - Utility Legend Notes, Item F, DELETE in its entirety and REPLACE with the following: "F. Electrical transformer and other site electrical infrastructure – Electrical contractor is responsible for the purchase and preparation of structures, and for the installation of the conduit. Site contractor is responsible for excavation, bedding, installation, and backfilling of all electrical structures. Site contractor shall be responsible for excavation, required bedding for structures, and backfilling of all electrical trenches. In addition, site contractor shall place the required concrete encasement around the conduit in paved areas to meet Central Maine Power Company specifications. Concrete is specified in Division 03 Section "Cast in Place Concrete". See site electrical plans ES101 and ES501 for more information about the layout and structures required."
  - REVISE portions as indicated on Sketch ADD2-CU101-1.
- 26. Sheet AE101-C, First Floor Plan Segment C:
  - REVISE portions as indicated on Sketch ADD2-AE101-C-1. Directly adjacent to each boxed out column in all four "Ed Tech Small Group" areas, is a space too small for a scheduled locker. Provide a filler panel at this location to match adjacent locker material. This revision will be similar at drawings AE101-B, AE102-B, and AE102-C.
- 27. Sheet AE208, Interior Elevations, REVISE portions as indicated on Sketch ADD2-AE208-1.
- 28. Sheet AE214, Interior Elevations, Detail F1, Computer Lab #147, CHANGE two of the tackboards in this space to markerboards, the center visual display board at elevation 'D' and the northern most visual display board at elevation 'B'. Total visual display boards for this space includes two markerboards and three tackboards, all 4'-0" x 8'-0".

- 29. Sheet AE217, Interior Elevations, Detail J1 Corridor #204, all lockers shown as Single tier to be Double tier.
- 30. Sheet AE219, Interior Elevations, Detail A1 Corridor #214, all lockers shown as Single tier to be Double tier.
- 31. Sheet AE601, Door and Frame Schedule and Types, REVISE door and frame schedule as follows: Door E108C change door type from 'C' to 'A'.
- 32. Sheet QF101, Kitchen Equipment Plan, REVISE portions as indicated on Sketch ADD2-QF101-1.
- 33. Sheet ES101, Site Electrical Plan:
  - ADD the following to the Site Abbreviations: "COM shall indicate Underground communications."
  - REVISE portions as indicated on Sketch ADD2-ES101-1.
- 34. Sheet ES501, Site Electrical Details:
  - Detail A5, REVISE portions as indicated on Sketch ADD2-ES501-1.
  - Detail A10, REVISE portions as indicated on Sketch ADD2-ES501-2.
  - Detail E1, DELETE portion of Note 1 which reads "Under areas to be paved, conduit shall be Sch. 80, elsewhere, Sch. 40." Conduits shall be of material specified in Section 260543, Underground Ducts & Raceways for Electrical Systems.
  - Detail E5, DELETE portion of Note 1 which reads "Under areas to be paved, conduit shall be Sch. 80, elsewhere, Sch. 40." Conduits shall be of material specified in Section 260543, Underground Ducts & Raceways for Electrical Systems.
  - Detail E10, ADD Note "Transformer pad shall be provided by Division 26 and installed by Division 31."
- 35. Sheet EP101-B, First Floor Electrical Power Plan Seg. B, REVISE portions as indicated on attached Sketch ADD2-EP101-B-1.
- 36. Sheet EP101-C, First Floor Electrical Power Plan Seg. C, REVISE portions as indicated on attached Sketch ADD2-EP101-C-1.
- 37. Sheet EP102-B, Second Floor Electrical Power Plan Seg. B, REVISE portions as indicated on attached Sketch ADD2-EP102-B-1.
- 38. Sheet EY101-B, First Floor Electrical Systems Plan Seg. B, REVISE portions as indicated on attached Sketch ADD2-EY101-B-1.
- 39. Sheet EY101-C, First Floor Electrical Systems Plan Seg. C, REVISE portions as indicated on attached Sketch ADD2-EY101-C-1.
- 40. Sheet EY102-B, Second Floor Electrical Systems Plan Seg. B, REVISE portions as indicated on attached Sketch ADD2-EY102-B-1.

## END OF ADDENDUM

## SECTION 099061 - ANTI GRAFFITI COATINGS

### PART 1 - GENERAL

### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specifications Sections, apply to this section.

### 1.2 SUMMARY

- A. This section includes surface preparation and field application of anti-graffiti coating systems to items and surfaces scheduled.
- B. Related Sections include the following:
  - 1. Division 01 Section "Alternates" for information on alternate pertaining to this section.
  - 2. Division 09 Section "Painting" for general field painting.

### 1.3 SUBMITTALS

- A. Product Data: For each coating system indicated. Include block fillers and primers.
  - 1. Material List: An inclusive list of required coating materials. Indicate each material and crossreference the specific coating, finish system, and application. Identify each material by manufacturer's catalog number and general classification.
  - 2. Manufacturer's Information: Manufacturer's technical information, including label analysis and instructions for handling, storing, and applying each material specified.
- B. Certification by manufacturer that products supplied comply with requirements indicated that limit the amount of VOCs in coating products.
- C. Qualification Data: For Firms and persons specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names and addresses of architects and owner, and other information specified.
- D. Warranty.

### 1.4 QUALITY ASSURANCE

- A. Applicator Qualifications: Engage Manufacturer to provide an American Polymer "Certified" applicator who has completed anti-graffiti coating system applications similar in material and extent to those indicated for Project, and whose work has a record of successful in-service performance.
- B. Source Limitations: Obtain base coatings, top coatings, and removal agent from the same manufacturer.

### 1.5 PERFORMANCE REQUIREMENTS

- A. Provide anti-graffiti coating system complying with the following:
  - 1. Permanent coating system. Coatings shall not require re application regardless of number of graffiti taggings during the life of the 10 year performance warranty period.

- 2. Show no signs of deterioration, or change of appearance after graffiti removal during the warranty period. No ghosting staining or shadowing.
- 3. Capability of removing 100% of all types of paint and graffiti materials from treated surfaces without damaging the coating or the substrate.
- 4. Upon graffiti removal, no evidence of graffiti shall remain.
- 5. Capable of withstanding a minimum of 120 cleaning cycles <u>over the same area</u> without measurable coating deterioration.
- 6. Shall not increase dirt pick-up of substrate.
- 7. Meet the following test results for the following chemicals:
  - a. MEK No effect after 5 days
  - b. Carboxylic Acid No effect after 5 days
  - c. 75% Phosphoric Acid
  - d. 37% HCL
  - e. 50% Sulfuric Acid
  - f. 20% NIT

No effect after 5 days 3 hours blister No effect after 5 days 68 hours blister

## 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to Project site in manufacturer's original, unopened packages and containers bearing manufacturer's name and label with the following information:
  - 1. Name or title of material.
  - 2. Product description (generic classification or binder type).
  - 3. Manufacturer's stock number and date of manufacture.
  - 4. Contents by volume, for pigment and vehicle constituents.
  - 5. Thinning instructions.
  - 6. Application instructions.
  - 7. Color name and number.
  - 8. Handling instructions and precautions.
- B. Store materials not in use in tightly covered containers in a well-ventilated area at a minimum ambient temperature of 45 deg F. Maintain containers used in storage in a clean condition, free of foreign materials and residue.
  - 1. Keep storage area neat and orderly. Remove oily rags and waste daily. Take necessary measures to ensure that workers and work areas are protected from fire and health hazards resulting from handling, mixing, and applying coatings.

#### 1.7 PROJECT CONDITIONS

- A. Apply coatings only when temperature of surfaces to be coated and surrounding air temperatures are between 40 and 100 deg F.
- B. Do not apply coatings in snow, rain, fog, or mist; when relative humidity exceeds 85 percent; at temperatures less than 5 deg F above the dew point; or to damp or wet surfaces.
  - 1. Allow wet surfaces to dry thoroughly and attain temperature and conditions specified before proceeding with or continuing coating operation.

#### 1.8 EXTRA MATERIALS

- A. Furnish extra graffiti removal materials in quantities described below. Package coating material in unopened, factory-sealed containers for storage and identify with labels describing contents.
  - 1. Quantity: One full case (12, 16 ounce bottles).

### 1.9 WARRANTY

- A. System Performance Warranty: Provide written warranty signed by manufacturer that exhibits defects in materials or workmanship. Defects are defined to include failure to withstand complete graffiti removal, ghosting, shadowing, chemical staining, yellowing, and normal environmental effects. Refer to American Polymer Corporation 10 Year Warranty. To obtain warranty service the purchaser must contact American Polymer in writing.
  - 1. A third party that is authorized by American Polymer must inspect project.
  - 2. Warranty period: 10 years from date of completion.

### PART 2 - PRODUCTS

## 2.1 ANTI GRAFFITI SYSTEM/MANUFACTURER

- A. Basis-of-Design Product: Graffiti Solution System manufactured by American Polymer Corporation, is the only acceptable anti-graffiti product approved for use. Contact American Polymer in Sandy, Utah at 800-676-5963, 801-255-9505. Fax 801-255-7123.
- B. Approved Substitutions: Includes but is not limited to the following:
  - 1. Sacrificial Coating SC-1 by PROSOCO, Inc.

### 2.2 ANTI-GRAFFITI COATING MATERIALS

- A. VOC Classification: Provide materials that comply with the South Coast Air Quality Management District's VOC classification.
- B. Coatings shall meet requirements of the following:
  - 1. ASTM B 117 and ASTM D 714 (salt spray minimum acceptable of 8000 hours.
  - 2. ASTM D 530 (hardness)
  - 3. ASTM D 412 (tensile strength and elongation)
  - 4. ASTM D 522 (pass 3/8 inch mandral)
  - 5. ASTM 968 (abrasion test)
  - 6. ASTM E 96 (vapor transmission)
  - 7. Water clear, non-yellowing, free of waxes and urethanes.
  - 8. Shall allow moisture vapor transmission.
- C. GSS-10 Undercoating: Clear VU High Solids Base Coating (AP307); a water-based high performance under coating used as sealer. Specify Sure Bond (AP308) for metal, marble, slate and tile surfaces.
- D. GSS-10 Top coatings: permanent anti-graffiti top coating.
  - 1. Clear Finish: AP100 Clear Matte [Matte is defined as the finish of the top coating reading less than five degrees on a Gardner Gloss Meter] or AP101 Clear semi-gloss or AP102 Clear gloss.
  - 2. Pigmented Finish: AP 200 Pigmented Matte or AP 201 Pigmented semi-gloss or AP202 Pigmented gloss.
- E. Graffiti Remover: GSS Erasol; Non-flammable, biodegradable, with a pH 7 8.5 and recyclable, allowing graffiti removal without the use of blasting equipment, hot water, or high pressure wash equipment.

### PART 3 - EXECUTION

- A. Prior to bid, with Applicator present, a job "walk through" examining substrates and conditions under which anti-graffiti coatings will be applied for compliance with coating application requirements is essential. Surface / substrates will vary and must be taken into account.
  - 1. Apply coatings only after unsatisfactory conditions have been corrected and surfaces to receive coatings are thoroughly dry.
  - 2. Start of application is construed as Applicator's acceptance of surfaces within that particular area.
- B. Coordination of Work: Review other sections in which primers or other coatings are provided to ensure compatibility of total systems for various substrates. On request, furnish information on characteristics of specified finish materials to ensure compatible primers.
  - 1. If a potential incompatibility of primers applied by others exists, obtain the following from the primer Applicator before proceeding.
    - a. Confirmation of the primer's suitability for expected service conditions.
    - b. Confirmation of primer's ability to be top coated with materials specified.
  - 2. Notify Architect about anticipated problems before using the coatings specified over substrates primed by others.

#### 3.2 PREPARATION

- A. General: Remove plates, machined surfaces, and similar items already in place that are not to be coated. If removal is impractical or impossible because of the size or weight of item, provide surface-applied protection before surface preparation and coating.
  - 1. After completing coating operation, reinstall items that were removed; use workers skilled in the trades involved.
- B. Cleaning: Before applying coatings, clean substrates of substances that could impair bond of coatings. Remove oil and grease before cleaning.
  - 1. Schedule cleaning and coating application so dust and other contaminates from cleaning process will not fall on wet, newly coated surfaces.
- C. Surface preparation: Clean and prepare surfaces to be coated according to manufacturers written instructions for each substrate condition and as specified.
  - 1. Provide barrier coats over incompatible primers or remove primers and reprime substrate.
  - 2. Cementitious Substrates: Prepare concrete, brick, concrete masonry block, and cement plaster surfaces to be coated. Remove efflorescence, chalk, dust, dirt, grease, oils, and release agents. Roughen as required to remove glaze. If hardeners or sealers have been used to improve curing, use mechanical methods to prepare surfaces.
    - a. Do not coat surfaces if moisture content exceeds that permitted in manufacturer's written instructions.
- D. Material Preparation: Carefully mix and prepare coating materials according to the manufacturers written instructions.
  - 1. Maintain containers used in mixing and applying coatings in a clean condition, free of foreign materials and residue.
  - 2. Stir materials before applying to produce a mixture of uniform density. Stir as required during application.

- A. General: Apply coatings according to manufacturer's written instructions.
  - 1. Use applicators and techniques best suited for the material being applied.
    - a. Do not apply coatings over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to forming a durable coating film.
    - b. Allow sufficient time between successive coats to permit proper drying. Do not recoat surfaces until coating has dried to where it feels firm, does not deform or feel sticky under moderate thumb pressure, and application of another coat does not cause undercoat to lift or lose adhesion.
- B. Application Over Cementitious Surfaces:
  - 1. All natural surfaces to include concrete, all masonry units, brick tile and block should be treated with a siloxane penetrating water sealer: Aqua-lock WB Water Repellent by American Polymer is compatible with the Graffiti Solution System.
  - 2. Base: Minimum of 2 coats equaling 3 to 4 mils minimum dry film thickness, or as many as necessary to achieve a pinhole free surface, of GSS Barrier undercoating as specified by manufacturer.
  - 3. Finish: Minimum of 2 coats of top coating; 3 to 4 mils minimum dry film thickness, or as many coats as necessary to satisfy warranty requirements.
  - 4. Surfaces will vary and the objective is to have the coating work on all substrates, the number of coats could vary as well.
- C. Completed Work: Match approved Samples for color, texture, and coverage. Remove, refinish, or recoat work that does not comply with specified requirements.

### 3.4 FIELD QUALITY CONTROL

- A. Owner reserves the right to invoke the following procedure at any time and as often as Owner deems necessary during the period when coatings are being applied:
  - 1. Owner will engage the services of a qualified testing agency to sample coating material being used. Samples of material delivered to Project site will be taken, identified, sealed, and certified in presence of Contractor.
  - 2. Testing agency will perform appropriate tests for the following characteristics as required by Owner:
    - a. Quanitive materials analysis.
    - b. Absorption
    - c. Accelerated weathering.
    - d. Accelerated yellowness.
    - e. Alkali and mildew resistance.
    - f. Abrasion resistance.
    - g. Washability.
  - 3. Owner may direct Contractor to stop applying coatings if test results show materials being used do not comply with specified requirements. Contractor shall remove noncomplying coating materials from Project site, pay for testing, and recoat surfaces coated with rejected materials. If necessary, Contractor may be required to remove rejected materials from previously coated surfaces if, on recoating with specified materials, the two coatings are not compatible.
- B. Demonstration: Apply alkyd-based graffiti to a 2 ft. sq. treated area selected by the Architect. 5 days minimum after application, demonstrate complete removal of the graffiti in the presence of the Architect.

## 3.5 CLEANING

- A. Cleanup: At the end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
  - 1. After completing coating application, clean spattered surfaces. Remove spattered coatings by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.

## 3.6 PROTECTION

- A. Protect work of other trades, whether being coated or not, against damage from coating operation. Correct damage by cleaning, repairing, replacing, and recoating, as approved by Architect, and leave in an undamaged condition.
  - 1. Provide "Wet Paint" signs to protect newly coated finishes. After completing coating operations, remove temporary protective wrappings provided by others to protect their work.
  - 2. At completion of construction activities of other trades, touch up and restore damaged or defaced coated surfaces. Comply with procedures specified in PDCA P1.

### END OF SECTION 099061

#### SECTION 108000 - OTHER SPECIALTIES

#### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. This Section includes the following:
  - 1. Knox box.
  - 2. Scoreboard.

### 1.2 SUBMITTALS

A. Product Data: Include construction details, material descriptions and thicknesses, dimensions, profiles, fastening and mounting methods, specified options, and finishes for each type of accessory specified.

#### PART 2 - PRODUCTS

#### 2.1 KNOX BOX

- A. Where indicated on the drawings, provide Series 3200 Lift-Off Door Model, recessed mounted with face flange key box by Knox Box. Constructed of 1/4 inch plate steel housing, 1/2 inch thick steel door with interior gasket seal. Box and lock to be UL Listed.
  - 1. Dimensions: 7 inches wide by 7 inches high by 3-3/4 inches deep.
  - 2. Capacity: Holds up to 10 keys and access cards in interior compartment.
  - 3. Finish: Manufacturer's standard finish.
  - 4. Color: Black.

## 2.2 SCORE BOARD

- A. Where indicated on the drawings, provide Model No. 2350 Scoreboard by Electro-Mech Scoreboard Company (800-455-7846).
  - 1. Size: 9 by 3 feet.
  - 2. Digits: 12 and 9 inches.
  - 3. Weight: 85 lbs.
  - 4. Power: 120VAC, 1 amps.
  - 5. Colors: As selected by the Architect.

### PART 3 - EXECUTION

### 3.1 INSTALLATION

A. Install accessories according to manufacturers' written instructions, using fasteners appropriate to substrate indicated and recommended by unit manufacturer. Install units level, plumb, and firmly anchored in locations and at heights indicated.

## 3.2 ADJUSTING AND CLEANING

A. Adjust specialties for unencumbered, smooth operation and verify that mechanisms function properly. Replace damaged or defective items.

### 3.3 CLEANING

A. Clean surfaces prior to inspection. Replace damaged or defective items.

### END OF SECTION 108000

























