



# Addendum #1

**IFB #2021-1224**

GENERAL CONTRACTOR FOR D. HAMILTON JACKSON TERRACE & ALPHONSO  
“PIGGY” GERARD COMPLEX REVITALIZATION  
ST. CROIX, U. S. VIRGIN ISLANDS

**This, and all addenda, must be acknowledged in your firm's proposal package.  
Please print a copy of this page and include it with your proposal package.  
If not acknowledged, your proposal will be removed from consideration.**

## ACKNOWLEDGMENT OF RECEIPT OF ADDENDA

The undersigned Respondent hereby acknowledges receipt of the following Addenda:

**Addendum Number**  
#1

**Dated**  
2/14/2022

**Acknowledge Receipt**  
**(Please Initial)**

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Acknowledged on behalf of:

\_\_\_\_\_  
(Name of Respondent)

By:

\_\_\_\_\_  
(Signature of Authorized Representative)

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_





## ADDENDUM #1

### Clarification Item #1

Included as an attachment to this addendum is the in-person sign-in sheet from the February 8th, 2022, Pre-Bid Conference/Site Inspection.

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### Clarification Item #2

Included in the SharePoint Link below is EXHIBIT A-F Lead Based Paint Abatement Scope & Associated D. Hamilton Jackson & Alphonso “Piggy” Gerard Reports:

<https://mdgny-my.sharepoint.com/:f:/p/jlarounis/EtS0m6WAIQ1LpJtG9LmtQjUBP98bv7SaLIPpwUeIsAFD1Q?e=EIIPfI>

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### Clarification Item #3

Included in the SharePoint Link below is EXHIBIT H- Form of the Contract:

<https://mdgny-my.sharepoint.com/:f:/p/jlarounis/EtS0m6WAIQ1LpJtG9LmtQjUBP98bv7SaLIPpwUeIsAFD1Q?e=EIIPfI>

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### Clarification Item #4

Exhibit B- IFB#2021-1224 Bid Form, Allowance #4 Language is revised to read:

“Provide allowance for mold remediation in each unit of 50 sqft. X 136 units = 6,800 total project allowance.”

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### Design Clarification Item #1

The Alphonso “Piggy” Gerard Issued for Bid Documents Design Changes & Clarifications Letter from SLM Architecture, P.C. & Design Solutions is included below. SLM’s corresponding Issued for Bid Documents revision package can be sourced utilizing the link below:

<https://mdgny-my.sharepoint.com/:f:/p/jlarounis/EtS0m6WAIQ1LpJtG9LmtQjUBP98bv7SaLIPpwUeIsAFD1Q?e=EIIPfI>

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Name / Company / Email / Phone # VIHA IFB 2021-1224  
(In-Person Attendance) Pre Bid Conference

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February 10th, 2022

Ms. Lydia Pelle  
Chief Operating Officer  
Virgin Islands Housing Authority  
9299 Estate Slob, Kingshill, VI 00850

Re.: **David Hamilton Jackson Housing**  
#7 Estate Richmond  
Christiansted, St. Croix, VI 00850

**Alphonse Piggy Gerard Housing**  
#8 Estate Richmond  
Christiansted, St. Croix, VI 00850

**ADDENDUM #1**

A. **GENERAL**

1. This Addendum shall supplement, amend, and become part of the Bid Documents. All Bids shall be based on these modifications.
2. Bidders shall acknowledge the receipt of this addendum.

B. **SPECIFIC**

The following revisions should be noted at the appropriate part of the Contract Documents and made a part thereof:

1. Drawings
  - a) Add Structural Drawings to Alphonse Piggy Gerard Housing Bid Documents:

<b>DWG. NO.</b>	<b>DWG. NAME</b>	<b>DATED</b>
S-1.01	STRUCTURAL NOTES	02.01.2022
S-1.02	PLAN SPECIFICATIONS	02.01.2022
S-1.03	SITE PLAN	02.01.2022
S-1.11	ROOF AND WALL PRESSURES DIAGRAMS - TYPE A	02.01.2022
S-1.12	ROOF AND WALL PRESSURES DIAGRAMS - TYPE B	02.01.2022
S-1.13	ROOF AND WALL PRESSURES DIAGRAMS - TYPE C	02.01.2022
S-1.14	ROOF AND WALL PRESSURES DIAGRAMS - TYPE D	02.01.2022
S-1.15	ROOF AND WALL PRESSURES DIAGRAMS - TYPE E	02.01.2022
<b>DWG. NO.</b>	<b>DWG. NAME</b>	<b>DATED</b>



# Architecture, P.C. | Design Solutions, Inc.

300 Old Country Road, Suite 241.Mineola, New York 11501. Phone 516.543.0377

S-1.16	ROOF AND WALL PRESSURES DIAGRAMS - MAIL AREA	02.01.2022
S-2.00	BLDG. TYPE A - FLOOR AND ROOF PLANS	02.01.2022
S-2.01	BLDG. TYPE B - FLOOR AND ROOF PLANS	02.01.2022
S-2.02	BLDG. TYPE C - FLOOR AND ROOF PLANS	02.01.2022
S-2.03	BLDG. TYPE D - FLOOR AND ROOF PLANS	02.01.2022
S-2.04	BLDG. TYPE E - FLOOR AND ROOF PLANS	02.01.2022
S-2.10	MAIL AREA AND BRIDGE FLOOR AND ROOF PLANS	02.01.2022
S-3.01	FOUNDATION DETAILS	02.01.2022
S-4.01	ROOF DETAILS	02.01.2022

## 2. Specifications

a) Changes as noted below:

<b>SPEC. SEC.</b>	<b>PAGES</b>	<b>SPEC. NAME</b>	<b>DATED</b>
028333	1-17	LEAD-BASED PAINT HAZARD REMOVAL, CONTROL AND WASTE MANAGEMENT	02.09.2022
099113	1 OF 7	EXTERIOR PAINTING	02.09.2022
099123	1 OF 9	INTERIOR PAINTING	02.09.2022

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**VIHA: D. HAMILTON JACKSON + A. PIGGY GERARD HOUSING**

**Modernization of a Multi-Family Residential Development**

**Specifications**

**Issue for Bid – Addendum #1**

**Technical Specification for Moderate Rehabilitation Project Manual Edition**

**February 10<sup>st</sup>, 2022**

***Developer/Owner:***

*D.H. Jackson & Piggy Gerard Developer LLC  
170 Froehlich Farm Blvd.  
Woodbury, NY 11797*

***Architect:***

*SLM Architecture, P.C.  
300 Old Country Road, Ste. 241  
Mineola, N.Y. 11501*

***Expediting & Permitting Architect:***

*Jaredian Design Group  
533 Raadets Gade, Suite 14  
St. Thomas, VI 00802-6900*

***Civil Engineer:***

*Harris Civil Engineers, LLC  
1200 Hillcrest Street  
Orlando, Florida 32803*

***Landscape Architect:***

*Witkin Hults + Partners  
307 S. 21st. Avenue  
Hollywood, FL 33020*

***Structural Engineer:***

*Bliss NYITRAY, Inc.  
5835 Blue Lagoon Drive, Suite 400  
Miami, Fl, 33126*

***MEP Engineer:***

*JMM Consulting Engineers, LLC.  
10251 Sunset Dr., Suite # 103  
Miami, Florida 33173*

**SECTION 028333 — LEAD-BASED PAINT HAZARD REMOVAL,  
CONTROL AND WASTE MANAGEMENT**

**PART 1 - GENERAL**

**1.1 SUMMARY**

A. DESCRIPTION

1. This section specifies abatement and disposal of lead-based paint (LBP) and controls needed to limit occupational and environmental exposure to lead hazards. The work is funded through the United States Department of Housing and Urban Development (HUD) and requires compliance with the Lead Safe Housing Rule (LSHR), additionally, all work involving renovation, repair or painting activities is subject to the United States Department of Environmental Protection (U.S. EPA) Renovation, Repair and Repainting Rule (RRP), when referencing these laws and regulations the more stringent requirements apply. All lead-hazards, which include friction, impact, and chewable surfaces containing lead-based paint deteriorated lead-based paint, elevated levels of lead in dust and or lead-in-soil, must be subject of abatement. In addition, all LBP is to be abated as part of this project.
2. The Contractor is required to follow all applicable federal, state, and local laws, all applicable regulations, and any requisite procedures. These regulations include but are not limited to Section: 24 CFR HUD regulations; 29 CYR Occupational Health and Safety Administration (OSHA) regulations; 40 Chit United States Environmental Protection Agency regulations; 49 CFR United States Department of Transportation regulations and USVI laws, regulations, codes and ordinances.

**1.2 RELATED WORK**

- A Section 02 41 00, DEMOLITION
- B. Section 09 91 00, PAINTING

### 1.3 APPLICABLE PUBLICATIONS

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.
- B. American National Standards Institute
  - 1. Z9.2-2006 Fundamentals Governing the Design and Operation
  - 2. Z88.6-2006 Respiratory Protection
- C. ASTM International (ASTM)
  - 1. ASTM E1613 (2012): Determination of Lead by Inductively Coupled Plasma Atomic Emission Spectrometry (ICP-AES). Flame Atomic Absorption Spectrometry (FAAS), or Graphite Furnace Atomic Absorption Spectrometry (GFAAS) Techniques.
  - 2. ASTM E1644: (2004; E 2012; R 2012) Hot Plate Digestion of Dust Wipe Samples for the Determination of Lead.
  - 3. ASTM E1726: (2001; R 2009) Preparation of Soil Samples by Hotplate Digestion for Subsequent Lead Analysis.
  - 4. ASTM E1728 (2010): Collection of Settled Dust Samples Using Wipe Sampling Methods for Subsequent Lead Determination
- D. Code of Federal Regulations (CFR)
  - 1. CFR 29 Part 1910 Occupational Safety and Health Standards.
  - 2. CFR 29 Part 1926 Safety and Health Regulations for Construction.
  - 3. CFR 40 Part 148 Hazardous Waste Injection Restrictions
  - 4. CFR 40 Part 260 Hazardous Waste Management System: General.
  - 5. CFR 40 Part 261 Identification and Listing of Hazardous Waste
  - 6. CFR 40 Part 262 Standards Applicable to Generators of Hazardous Waste.
  - 7. CRF 40 Part 263 Standards Applicable to Transporters of Hazardous Waste.
  - 8. CFR 40 Part 264 Standards for Owners and Operations of Hazardous Waste Treatment, Storage, and Disposal Facilities.
  - 9. CFR 40 Part 265 Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities.
  - 10. CFR 40 Part 268 Land Disposal Restrictions.
  - 11. 40 CFR Part 280, et al.....Hazardous Remediation Waste Management Requirements (HWIR-Media); Final Rule.
  - 12. CFR 40 Part 745 Lead-Based Paint Poisoning Prevention in Certain Residential Structures.

13. CFR 49 Part 172 Hazardous Material Table, Special Provisions Hazardous Material Communications, Emergency Response Information, and Training Requirements.
  14. CFR 49 Part 178 Specifications for Packaging.
  15. CFR 24 Part 35 Lead-Based Paint Poisoning Prevention in Certain Residential Structures (Lead Safe Housing Rule)
- E. Georgia Tech's Safety and Health Consultation Program Federal Lead Regulations Applicable to Construction
- F. HUD:
1. HUD Guidelines for the Evaluation and Control of Lead-Raced Paint Hazards in Housing.
  2. Lead Paint Safety. A field guide for painting, home maintenance, and renovation work.
  3. HUD Lead Safe Housing Rule (LSHR) - 24 CFR Part 35
- G. National Fire Protection Association (NFPA)
1. NFPA 701-2004 Methods of Fire Test for Flame-Resistant Textiles and Films.
- H. National Institute for Occupational Safety and Health (NIOSH)
1. NIOSH OSHA Booklet 3142. Lead in Construction
- I. Steel Structures Painting Council (SSPC)
1. SSPC-Guide 6 - Guide for Containing Debris Generated During Paint Removal Operations.
  2. SSPC-Guide 7 - Guide for the Disposal of Lead-Contaminated Surface Preparation Debris.
- J. Underwriters Laboratories (UL)
1. UL 586-1996 (Rev 2009) - High-Efficiency, Particulate, Air Filter Units.

#### 1.4 DEFINITIONS

- A. **Abatement:** For the purposes of this Specification, the term abatement shall refer to any procedure that impacts lead-based paint on any surface, lead in dust and lead in soil. Procedures can include: paint removal; whole removal of the surface (i.e. window replacement); encapsulation; enclosure; demolition and removal of painted surfaces; removal of dust containing elevated-lead-levels, removal of bare-soil containing elevated lead-levels; and clean-up of paint debris, and other activities designed to permanently eliminate lead-based paint hazards.
- B. **Action Level:** Employee exposure, without regard to use of respirations, to an airborne concentration of lead of 30 micrograms per cubic meter of air averaged over an 8-hour period. As used in this section, "30 micrograms per cubic meter of air" refers to the action level.
- C. **Change Rooms and Shower Facilities:** Rooms within the designated physical boundary around the lead control area equipped with separate storage facilities for clean protective work clothing and equipment and for street clothes which prevent cross-contamination, facilities for clean protective work clothing and equipment and for street clothes which prevent cross-contamination.
- D. **Owner to provide clearance:** consist of a visual assessment, dust wipe samples and a written clearance or abatement report and must be performed by a U.S. EPA certified risk assessor, and is necessary to determine if a dwelling unit or work area is safe for re-occupancy.
- E. **Clearance threshold levels:** clearance for a floor surface = 10  $\mu\text{g}/\text{ft}^2$  (micrograms per square foot); clearance for an interior window sill surface = 100  $\mu\text{g}/\text{ft}^2$ ; and clearance for a window well surface = 400  $\mu\text{g}/\text{ft}^2$ . Clearance or "passing" clearance can only be achieved when the required suite of the above samples are below/less than the threshold value.
- F. **Decontamination Room:** Room for removal of contaminated personal protective equipment (PPE).

- G. Owner will provide Dust Wipe Clearance Samples and Clearance Report: A dust wipe clearance sample is a sample taken by a third party (i.e., neither Owner/developer nor contractor), prior to re-occupancy, on the basis of a minimum of 2-3 wipes per unit/room where abatement is occurring, a floor sample, a window sill sample, and a window well sample (if present). A clearance report must be able to indicate the samples passed and are below thresholds, or the work area must be re-cleaned. The third party contractor must be properly certified by the EPA and an EPA certified risk assessor needs to issue the clearance report.
- H. Eight-Hour Time Weighted Average (TWA): Airborne concentration of lead averaged over an 8-hour workday to which an employee is exposed.
- L. Exempt Properties: Properties exempt from the LSHR are Properties found not to have lead-based paint as a result of acceptable testing and evaluation methods, Properties where all lead-based paint has been removed using acceptable methods. Zero-bedroom units (including efficiencies, dormitories, rental of individual rooms), Rehabilitation that does not disturb painted surfaces, Unoccupied units to be demolished and Non-residential property (however, common areas shared with covered residences are not exempt).
- J. High Efficiency Particulate Air (HEPA) Filter Equipment: HEPA filtered vacuuming equipment with a UL 586 filter system capable of collecting and retaining lead-contaminated paint dust. A high efficiency particulate filter means 99.97 percent efficient against 0.3 micron size particles.
- K. Lead: Metallic lead, inorganic lead compounds, and organic lead soaps. Excluded from this definition are other organic lead compounds.
- L. Lead Control Area: An enclosed area or structure with full containment to prevent the spread of lead dust, paint chips, or debris of lead-containing paint removal operations. The lead control area is isolated by physical boundaries to prevent unauthorized entry of personnel.
- M. Lead-Based Paint Hazards: Paint-lead hazard, dust-lead hazard or soil-lead hazard as identified in 40 CFR 745, Section 65.
- N. Lead Permissible Exposure Limit (PEL): Fifty micrograms per cubic meter of air as an 8-hour time weighted average as determined by 29 CFR 1910.1025. If an employee is exposed for more than 8 hours in a work day, the Pa shall be determined by the following formula.  $PEL \text{ (micrograms/cubic meter of air)} = 400/\text{No. of hrs worked per day}$ .

- O. Personnel Monitoring: Sampling of lead concentrations within the breathing zone of an employee to determine the 8-hour time weighted average concentration in accordance with 29 CFR 1910.1025. Samples shall be representative of the employee's work tasks Breathing zone shall be considered an area within a hemisphere, forward of the shoulders, with a radius of 150 mm to 225 mm (6 to 9 inches) and the center at the nose or mouth of an employee.
- P. Restricted Practices: The EPA restricts: open flame burning or torching; heat guns above 1100 degrees F; machine removal without HEPA vacuum attachment; and additionally HUD restricts, any heat guns that can char paint; dry scraping or sanding except when the area is within 1 ft. of an electrical outlet; and the use of methylene chloride, or any other volatile stripper in a space without appropriate and proper ventilation.
- Q. Target Housing: Residential real property which is housing constructed prior to 1978, except housing for the elderly or persons with disabilities (unless any one or more children age 6 years or under resides or is expected to reside, or visit the facility for more than 60 hours per year, in such housing for the elderly or persons with disabilities) or any 0 bedroom dwelling.
- R. Wipe Sampling. Clearance testing procedures, conducted by a U.S. EPA certified risk assessor, which determine the amount of existing lead-containing paint surface duct by atomic absorption spectroscopy analysis, or inductively coupled plasma emission spectrometry expressed in micrograms of lead per unit surface area

## 1.5 QUALITY ASSURANCE

- A. Before exposure to lead-contaminated dust. provide workers with a comprehensive medical examination as required by 29 CFR 1926.62 (1) (1) (1) & (ii). The examination shall not be required if adequate records show that employees have been examined as required by 29 CFR 1926.62(1) within the last year.
- B. Medical Records: Maintain complete and accurate medical records of employees in accordance with 29 CFR 1910.20.



- C. The Contractor will be responsible to:
1. Provide valid US EPA training certificates and licenses for all employees conducting rehabilitation, renovation, repair, or painting operations.
  2. Develop a lead-containing paint removal plan for conformance to the applicable laws, regulations, and referenced standards. GC to provide plan for Owner approval.
  3. Inspect or cause to inspect lead-containing paint removal work for conformance with the approved plan.
  4. Directly monitor operations.
  5. Ensure work is performed in strict accordance with specifications at all times.
  6. Ensure hazardous exposure to personnel, visitors, and occupants, and release to the environment are adequately controlled at all times.
- D. Training: Train each employee performing paint removal, disposal, and air sampling operations prior to the time of initial job assignment, in accordance with 29 CFR 1926.62.
- E. Respiratory Protection Program
1. Furnish each employee required to wear a negative pressure respirator or other appropriate type with a respirator fit test at the time of initial fitting and at least every 6 months thereafter as required by 29 CFR 1926.62.
  2. Establish and implement a respiratory protection program as required by 29 CFR 1910.134, 29 CFR 1910.1025, and 29 CFR 1926.62.

- F. Hazard Communication Program: Establish and implement a Hazard Communication Program as required by 29 CAR 1926.59. In addition, the contractor shall post
1. Warning Signs. Warning signs shall be provided at approaches to lead control areas. Signs shall be located at a distance from the lead control areas that will allow personnel to read the sign and take the necessary protective actions required before entering the lead control area. The signs shall comply with the requirements of 29 CFR Part 1926.62.
  2. Worker Information. Right-to-know notices shall be placed in clearly visible areas of the work site in compliance with federal, state and local regulations,
  3. Air Monitoring Results. Air monitoring results shall be prepared in order to be easily understood by the workers and shall be placed in a clearly visible area of the work site.
  4. Emergency Telephone Numbers. A list of telephone numbers shall be posted at the site. The list shall include numbers of the local hospital, emergency squad, police and fire departments. Government and Contractor representatives who can be reached 24 hours per thy and professional consultants directly involved in the project.
- G. Waste Management: The Lead-Based Paint Hazard Removal and Control Waste Management plan shall comply with applicable requirements of federal, state, and local laws, regulations, codes and ordinances pertaining to the generation of toxic, hazardous, universal and solid wastes and address:
1. Identification of hazardous wastes associated with the work
  2. Estimated quantities of wastes to be generated and disposed of
  3. Names and qualifications of each contractor that will be transporting, storing, treating, and disposing of the wastes. Include the facility location and a 24-hour point of contact.
  4. Names and qualifications (experience and training) of personnel who will be working on-site with hazardous and/or regulated wastes.
  5. List of waste handling equipment to be used in performing the work, to include cleaning, volume reduction, and transport equipment
  6. Spill prevention, containment, and cleanup contingency measures to be implemented.
  7. Work plan and schedule for waste containment, removal and disposal. Wastes shall be cleaned up and containerized daily.

H. Safety and Health Compliance:

1. In addition to the detailed requirements of this specification, comply with laws, ordinances, rules, and regulations of federal, state, and local authorities regarding removing, handling, storing, transporting, and disposing of lead or lead-containing waste materials. Comply with the applicable requirements of the current issue of 29 CFR 1910.1025.
  2. Where specification requirements and the referenced documents vary, the most stringent requirements shall apply.
- I. Pre-Construction Conference: The Contractor representative must discuss in detail the lead-hazard removal and control paint removal work plan, including work procedures and precautions for the work plan with all employees, and protection of all visitors, occupants, and release to the environment, prior to the start of work and at regular intervals.

1.6 SUBMITTALS

- A. Instructions: Paint removal materials. Include applicable material safety data sheets.
- B. Statements Certifications and Statements
1. Qualifications of employees: Submit name, address, and telephone number and copies of all requisite licenses.
  2. Testing Laboratory Submit the name, address, and telephone number of the testing laboratory selected to perform the monitoring, testing, and reporting of airborne concentrations of lead. Provide proper documentation that persons performing the analysis have been judged proficient by successful participation within the last year in the National Institute for Occupational Safety and Health (NIOSH) Proficiency Analytical Testing (PAT) Program. The laboratory shall be accredited by the American Industrial Hygiene Association (AIHA). Provide AIHA documentation along with date of accreditation/reaccreditation.

3. Lead-Hazard Removal and Control Plan.
  - a. Lead-Based Paint Removal Plan include a sketch showing the location, size, and details of lead control areas, location and details of decontamination rooms, change rooms, shower facilities, and mechanical ventilation system.
  - b. Include in the plan, eating, drinking, smoking and restroom procedures, interface of trades, sequencing of lead related work, collected wastewater and paint debris disposal plan, air sampling plan, respirators, protective equipment, and a detailed description of the method of containment of the operation to ensure that airborne lead concentrations of 30 micrograms per cubic meter of air are not exceeded outside of the lead control area.
  - c. Include air and wipe sampling, training and strategy, sampling methodology, frequency, duration of sampling, and qualifications of sampling personnel in the sampling portion of the plan.
4. Field Test Reports: Monitoring Results: Have and maintain monitoring results on-site within 3 working days of the test event or prior to occupancy, as required; they shall be signed by the testing laboratory employee performing the air monitoring, the employee that analyzed the sample.
5. Records:
  - a. Completed and signed hazardous waste manifest from treatment or disposal facility.
  - b. Certification of Medical Examinations.
  - c. Employee training certification.
6. Submit applicable Material Safety Data Sheets for paint removal products used in paint removal work.

## **PART 2 - PRODUCTS**

### **2.1 MATERIALS AND EQUIPMENT**

- A. Polyethylene sheet in a roll size to minimize the frequency of joints shall be delivered to job site with factory label indicating 6 mil conforming to ASTM Standard Specification for Polyethylene Film and Sheeting, ASTM D- 2103.
- B. Polyethylene disposable bags shall be six (6) mil with pre-printed label. Tie wraps for bags shall be plastic, five (5) inches long (minimum), pointed and looped to secure filled plastic bags.
- C. Tape or adhesive spray will be capable of sealing joints in adjacent polyethylene sheets and for attachment of polyethylene sheet to finished or unfinished surfaces of dissimilar materials and capable of adhering under both dry and wet conditions, including use of amended water.
- D. Impermeable containers are to be used to receive and retain any lead containing or contaminated materials until disposal at an acceptable disposal site. (The containers shall be labeled in accordance with EPA and DOT standards.
- E. All caustics shall be properly labeled and containerized in leak-tight containers.
- F. Machine sanding equipment shall be of the dual action, rotary action, orbital or straight line system type, fitted with a high efficiency particulate air (HEPA) dust pick-up system. Air compressors utilized to operate this equipment shall be designed to continuously provide 90 to 110 psi or as recommended by the manufacturer.
- G. Heat blower gun equipment (electrically-operated) shall be a flameless electrical paint softener type. The heat-blower shall have electronically controlled temperature settings to allow usage below a temperature of 1,100 degrees Fahrenheit. Heat-blower shall be DI type (non-grounded) 120 V, AC application. The heat-blower shall be equipped with various nozzles to cover all common applications (cone, fan, glass protector, spoon reflector, etc.).
- H. Chemical stripping removers shall contain no methylene chloride products. Chemical removers shall be compatible with, and not harmful to the substrate that they are applied to. Chemical removers used on masonry surfaces shall contain anti-stain formulation that inhibits discoloration of stone, granite, brick and other masonry construction. Chemical removers used on interior surfaces shall not raise or discolor the surface being abated.

- I. Lead encapsulant utilized must be an ASTM-approved lead encapsulating paint. Encapsulants should be compatible with the surfaces they are intended to encapsulate and shall be utilized per the manufacturer's specifications.
- J. To protect the building components and its occupants from exposure to potentially harmful volatile organic compounds (VOCs), only low-VOC and low-odor products shall be utilized.
- K. Chemical stripping agent neutralizer may be used on exterior surfaces only. Neutralizers shall be compatible with and not harmful to the substrate that they are applied to. Neutralizers shall be compatible with the stripping agent that has been applied to the surface substrate
- L. Vacuum units, of suitable size and capacities for project, shall have HEPA filter(s) capable of trapping and retaining at least 99.974 of all monodispersed particles of 0.3 micrometers in diameter.

### **PART 3 - EXECUTION**

#### **3.1 PROTECTION**

- A. Lead Control Area Requirements
  - 1. Establish a lead control area by completely enclosing the area or structure where lead-containing paint removal operations will be performed.
  - 2. Contain removal operations.
- B. Protection of Existing Work to Remain: Perform paint removal work without damage or contamination of adjacent areas. Where existing work is damaged or contaminated, restore work to its original condition.
- C. Boundary Requirements: Provide physical boundaries around the lead control area by cordoning off the area or providing curtains, portable partitions or other enclosures to ensure that airborne concentrations of lead will not reach 30 micro grams per cubic meter of air outside of the lead control area.
- D. Heating, Ventilating and Air Conditioning (HVAC) Systems: Shut down, lock out, and isolate HVAC systems that supply, exhaust, or pass through the lead control areas. Seal intake and exhaust vents in the lead control area with 6-mil plastic sheet and tape. Seal seams in HVAC components that pass through the lead control area.
- E. Change Room and Shower Facilities: As required provide clean change rooms and shower facilities within the physical boundary around the designated lead control area in accordance with requirements of 29 CFR 1926.62.

F. Mechanical Ventilation System

1. Use adequate ventilation to control personnel exposure to lead in accordance with 29 CFR 1926.57.
2. To the extent feasible, use fixed local exhaust ventilation connected to HEPA filters or other collection systems. Local exhaust ventilation systems shall be designed, constructed installed, and maintained in accordance with ANSI Z9.2.
3. If air from exhaust ventilation is recirculated into the work place, the system shall have a high efficiency filter with reliable back-up filter and controls to monitor the concentration of lead in the return air and to bypass the recirculation system automatically if it fails. Air may be recirculated only where exhaust to the outside is not feasible.

- G. Personnel Protection: Personnel shall wear and use protective clothing and equipment as specified herein. Eating, smoking, or drinking is not permitted in the lead control area. No one will be permitted in the lead control area unless they have been given appropriate training and protective equipment.

3.2 WORK PROCEDURES

- A. Perform removal of LBP and lead-hazards in accordance with a lead-lead hazard removal and control plan. Use procedures and equipment required to limit occupational and environmental exposure to lead when lead- containing paint is removed in accordance with 29 CFR 1926.62, except as specified herein. Dispose of removed paint chips and associated waste in compliance with Environmental Protection Agency (EPA), federal, state, and local requirements.

B. Personnel Exiting Procedures

1. Whenever personnel exit the lead-controlled area. they shall perform the following procedures and shall not leave the work place wearing any clothing or equipment worn during the work day.
  - a. Vacuum them-selves off.
  - b. Remove protective clothing in the decontamination room, and place them in an approved impermeable disposal bag.
  - c. Wash.
  - d. Change to clean clothes prior to leaving the physical boundary designated around the lead-contaminated job site.

C. Monitoring

1. Monitoring of airborne concentrations of lead shall be in accordance with 29 CFR 1910.1025 and as specified herein:
  - a. The US EPA Abatement Supervisor shall be on the job site directing the monitoring, and inspecting the lead-containing paint removal work to ensure that the requirements of the Contract have been satisfied during the lead-hazard removal operation.
  - b. In the event of exposure to lead at or in excess of the action level of 30 micrograms per cubic meter of air outside of the lead control area, immediately control the hazard and notify the contractor and Owner.
2. Monitoring During Paint Removal Work
  - a. Perform personal and area monitoring during the entire paint removal operation. Sufficient area monitoring shall be conducted at the physical boundary to ensure unprotected personnel are not exposed above 30 micrograms per cubic meter of air at all times. If releases occur outside the work boundary work shall be stopped, the condition shall be immediately collected and the area shall be cleaned immediately.

**3.3 LEAD-HAZARD REMOVAL**

- A. Remove lead-hazards within the areas of work in order to completely expose the substrate. Take whatever precautions are necessary to minimize damage to the underlying substrate.
- B. Indoor Removal: Select paint removal processes to minimize contamination of work areas with lead-contaminated dust or other lead-contaminated debris/waste. This paint removal process should be described in the lead-hazard and control removal plan.
- C. Indoor/Outdoor Encapsulation: Preparation of surfaces to be encapsulated should minimize contamination of work areas with lead-contaminated dust and/or debris/waste. Preparation may include limited manual sanding/scraping, the process for which should be described in the lead-hazard removal plan.
- D. Outside Lead Paint Removal: Select removal processes to minimize contamination of work areas with lead-contaminated dust or other lead-contaminated debris/waste. This paint removal process should be described in the lead-hazard removal plan. Perform manual sanding and scraping to the maximum extent feasible.



- E. As indicated on the provided Lead Based Paint Report, Lead Based Paint is seen on site. Abatement of all positive Lead Based Paint locations as per the reports and as further detailed in provided material and remove any loose or peeling paint in accordance with local and federal municipality requirements and guidelines. Perform lead hazard protection for building and site during construction, including daily clean-up to protect residents and workers.

### 3.4 SURFACE PREPARATIONS

- A. Avoid flash rusting or other deterioration of the substrate. Provide surface preparations for Painting-

### 3.5 CLEANUP AND DISPOSAL

- A. Cleanup: Maintain surfaces of the lead control area free of accumulations of paint chips and dust. Restrict the spread of dust and debris; keep waste from being distributed over the work area. Do not dry sweep or use compressed air to clean up the area. At the end of each shift and when the paint removal operation has been completed, clean the area of visible lead paint contamination by vacuuming with a HEPA filtered vacuum cleaner and wet mopping and wiping the areas utilizing a lead-specific detergent. All rooms in which lead abatement is performed are required to be cleaned. Re-clean areas showing dust or residual paint chips.
- B. Disposal
  - 1. Collect lead-contaminated waste, scrap, debris, bags, containers, equipment, and lead-contaminated clothing, which may produce airborne concentrations of lead particles.
  - 2. Store removed paint, lead-contaminated clothing and equipment, and lead-contaminated dust and cleaning debris as required by law. Properly labels waste (49 CH( 172) and the date wastes were generated. Obtain and complete the applicable Waste Manifest forms Comply with land disposal restriction notification requirements
    - a. Collect lead-contaminated waste, scrap, debris, bags, containers, equipment, and lead-contaminated clothing which may produce airborne concentrations of lead particles. Label the containers in accordance with 29 CFR 1926.62. Dispose of lead-contaminated waste material only at approved receiving facilities.

- b. Disposal Documentation Submit written evidence that the waste was characterized and disposed of at a treatment, storage, or disposal facility (TSD) approved to receive said waste by the EPA and state or local regulatory agencies having jurisdiction. Submit one copy of the completed manifest, signed and dated by the initial transporter in accordance with 40 CFR 262.

### 3.6 CLEARANCE DOCUMENTATION

- A. Following lead abatement activities, clearance of the work areas is required to be conducted by an EPA certified Lead Risk Assessor in accordance with Section 1.4.D of this document.
  1. Documentation of all abatement and clearance activities needs to be maintained and will be provided to the Owner to assist in preparing clearance reports.

### END OF SECTION 028333



## **SECTION 099113 - EXTERIOR PAINTING**

### **PART 1 - GENERAL**

#### **1.1 SUMMARY**

- A. Section includes surface preparation and the application of paint systems on the following exterior substrates:
  - 2. Ferrous metal.

#### **1.2 DEFINITIONS**

- A. Gloss Level 1: Not more than 5 units at 60 degrees and 10 units at 85 degrees, according to ASTM D 523.
- B. Gloss Level 3: 10 to 25 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D 523.
- C. Gloss Level 4: 20 to 35 units at 60 degrees and not less than 35 units at 85 degrees, according to ASTM D 523.
- D. Gloss Level 5: 35 to 70 twits at 60 degrees, according to ASTM D 523.
- E. Gloss Level 6: 70 to 85 units at 60 degrees, according to ASTM D 523.
- F. Gloss Level 7: More than 85 units at 60 degrees, according to ASTM D 523.

#### **1.3 ACTION SUBMITTALS**

- A. Product Data: For each type of product. Include preparation requirements and application instructions.
- B. Samples: For each type of paint system and each color and gloss of topcoat.
- C. Product List For each product indicated. Include printout of current "MPI Approved Products List" for each product category specified, with the proposed product highlighted.
- D. As indicated on the provided Lead Based Paint Report, Lead Based Paint is seen on site. Abatement of all positive Lead Based Paint locations as per the reports and as further detailed in provided material and remove any loose or peeling paint in accordance with local and federal municipality requirements and guidelines. Perform lead hazard protection for building and site during construction, including daily clean-up to protect residents and workers.

## **PART 2 - PRODUCTS**

### **2.1 MANUFACTURERS**

- A. Products: Subject to compliance with requirements, provide one of the products listed in other Part 2 articles for the paint category indicated.

### **2.2 PAINT, GENERAL**

- A. MPI Standards: Provide products that comply with MPI standards indicated and that are listed in its "MPI Approved Products List."
- B. Material Compatibility:
  - 1. Provide materials for use within each paint system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
  - 2. For each coat in a paint system, provide products recommended in writing by manufacturers of topcoat for use in paint system and on substrate indicated.
- C. VOC Content: Provide materials that comply with VOC limits of authorities having jurisdiction.
- D. Colors: As indicated in a color schedule.
- E. If alternative is selected GC to provide an approved equal to architect for review.
- F. Lead encapsulant utilized must be an ASTM-approved lead encapsulating paint. Encapsulants should be compatible with the surfaces they are intended to encapsulate and shall be utilized per the manufacturer's specifications. GC to provide product for Architects review and approval.

### **2.3 BLOCK FILLERS**

- A. Block Filler, Latex, Interior/Exterior: MPI #4.

### **2.4 PRIMERS/SEALERS**

- A. Primer, Alkali Resistant Water Based: MPI #3.
  - 1. Benjamin Moore: 20
- B. Primer, Bonding, Water Based: MPI #17.
- C. Primer, Bonding. Solvent Based: MPI #69.

## 2.5 METAL PRIMERS

- A. Primer, Alkyd, Anti-Corrosive for Metal: MPI #79.
  - 1. Benjamin Moore: P06 Super Spec HP.
- B. Primer, Galvanized, Water Based: MPI #134.
- C. Primer, Galvanized: As recommended in writing by topcoat manufacturer.

## 2.6 WOOD PRIMERS

- A. Primer, Latex for Exterior Wood: [MPI #6.]
- B. Primer, Alkyd for Exterior Wood: [MPI #5.]

## 2.7 WATER-BASED PAINTS

- A. Latex, Exterior Flat (Gloss Level 1): MPI #10.
- B. Latex, Exterior Semi-Gloss (Gloss Level 5): MPI #11.

## 2.8 SOLVENT-BASED PAINTS

- A. Alkyd, Exterior Flat (Gloss Level 1): MPI #8.
- B. Alkyd, Exterior, Semi-Gloss (Gloss Level 5): MPI #94.

## **PART 3 - EXECUTION**

### 3.1 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
- B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:
  - 1. Concrete: 12 percent.
  - 2. Masonry (Clay and CMU): 12 percent.
  - 3. Wood: 15 percent.
  - 4. Portland Cement Plaster: 12 percent.
  - 5. Gypsum Board: 12 percent.
- C. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.

- D. Proceed with coating application only after unsatisfactory conditions have been corrected.
  - 1. Application of coating indicates acceptance of surfaces and conditions.

### 3.2 PREPARATION

- A. Comply with manufacturer's written instructions and recommendations in "MPI Manual" applicable to substrates and paint systems indicated.
- B. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.
  - 1. Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce paint systems indicated.

### 3.3 APPLICATION

- A. Apply paints according to manufacturer's written instructions and recommendations in "MPI Manual."
- B. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

### 3.4 CLEANING AND PROTECTION

- A. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
- B. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

### 3.5 EXTERIOR PAINTING SCHEDULE

- A. CMU Substrates:
  - 1. Latex System:
    - a. Prime Coat: Block filler, latex, interior/exterior [, MPI #4].
    - b. Intermediate Coat: Latex, exterior, matching topcoat.
    - c. Topcoat: Latex, exterior fiat (Gloss Level 1) [, MPI #10].
    - d. Topcoat Latex, exterior, low sheen (Gloss Level 3-4) [, MPI #15].
    - e. Topcoat: Latex, exterior semi-gloss (Gloss Level 5) [, MPI #11].
  - 2. Latex over Alkali-Resistant Primer System:

- a. Prime Coat: Primer, alkali resistant, water based [, MPI #3].
  - b. Intermediate Coat: Latex, exterior, matching topcoat.
  - c. Topcoat: Latex, exterior, flat (Gloss Level 1) [, MPI #10].
  - d. Topcoat: Latex, exterior, low sheen (Gloss Level 3-4) [, MPI #15].
  - e. Topcoat Latex, exterior, semi-gloss (Gloss Level 5) [, MPI #11].
3. Latex Aggregate System:
- a. Prime Coat: As recommended in writing by topcoat manufacturer.
  - b. Intermediate Coat: As recommended in writing by topcoat manufacturer.
  - c. Topcoat: Textured coating latex, flat [, MPI #42].
- B. Ferrous Metal Substrates:
1. Alkyd System:
    - a. Prime Coat: Primer, alkyd, anticorrosive for metal [, MPI #79].
    - b. Intermediate Coat: Exterior alkyd enamel matching topcoat.
    - c. Topcoat: Alkyd, exterior, flat (Gloss Level 1) [, MPI #8].
    - d. Topcoat: Alkyd, exterior, semi-gloss (Gloss Level 5) [, MPI #94].
- C. Galvanized-Metal Substrates:
1. Alkyd System:
    - a. Prime Coat: Primer, galvanized metal, as recommended in writing by topcoat manufacturer for exterior use on galvanized-metal substrates with topcoat indicated.
    - b. Intermediate Coat: Exterior alkyd enamel matching topcoat.
    - c. Topcoat: Alkyd, exterior, flat (Gloss Level 5) [, MPI #8].
    - d. Topcoat: Alkyd, exterior, semi-gloss (Gloss Level 5) [, MPI #94].
- D. Wood Substrates: Including wood trim, doors and windows.
1. Latex System:
    - a. Prime Coat: Primer, latex for exterior wood [, MPI #6].
    - b. Intermediate Coat: Latex, exterior, matching topcoat
    - c. Topcoat: Latex, exterior, flat (Gloss Level 1) [, MPI #10].
    - d. Topcoat: Latex, exterior, semi-gloss (Gloss Level 5) [, MPI #11].
  2. Alkyd System:
    - a. Prime Coat: Primer, alkyd for exterior wood [, MPI #5].
    - b. Intermediate Coat: Exterior alkyd enamel matching topcoat.



- c. Topcoat: Alkyd, exterior, flat (Gloss Level 5) [, MPI #8].
  - d. Topcoat: Alkyd, exterior, semi-gloss (Gloss Level 5) [, MPI #94].
- E. Portland Cement Plaster Substrates:
- 1. Latex System:
    - a. Prime Coat: Latex, exterior, matching topcoat.
    - b. Intermediate Coat: Latex, exterior, matching topcoat.
    - c. Topcoat: Latex, exterior, flat (Gloss Level 1) [, MPI #10].
    - d. Topcoat: Latex, exterior, low sheen (Gloss Level 3-4) [, MPI #15].
    - e. Topcoat Latex, exterior, semi-gloss (Gloss Level 5) [, MPI #11].
  - 2. Latex over Alkali-Resistant Primer System:
    - a. Prime Coat: Primer, alkali resistant, water based [, MPI #3].
    - b. Intermediate Coat: Latex, exterior, matching topcoat.
    - c. Topcoat: Latex, exterior, flat (Gloss Level 1) [, MPI #10].
    - d. Topcoat: Latex, exterior, low sheen (Gloss Level 3-4) [, MPI #15].
    - e. Topcoat: Latex, exterior, semi-gloss (Gloss Level 5) [, MPI #11].
- F. Exterior Gypsum Board Substrates:
- 1. Latex System:
    - a. Prime Coat: Latex, exterior, matching topcoat.
    - b. Intermediate Coat: Latex, exterior, matching topcoat.
    - c. Topcoat: Latex, exterior, flat (Gloss Level 1) [, MPI #10].
    - d. Topcoat: Latex, exterior, low sheen (Gloss Level 3-4) [, MPI #15].
    - e. Topcoat: Latex, exterior, semi-gloss (Gloss Level 5) [, MPI #11].

**END OF SECTION 099113**



## **SECTION 099123 - INTERIOR PAINTING**

### **PART 1 - GENERAL**

#### **1.1 SUMMARY**

- A. Section includes surface preparation and the application of paint systems on interior substrates.
  - 1. Concrete.
  - 2. Concrete masonry units (CMU).
  - 3. Ferrous Metals.
  - 4. Cast iron.
  - 5. Galvanized metal.
  - 6. Aluminum (not anodized or otherwise coated).
  - 7. Wood.
  - 8. Gypsum board.
  - 9. Plaster.
  
- B. National Green Building Standard, Tropical Climate Path Exemption (collectively “NGBS”) Building Certification
  - 1. Mandatory Requirements
    - a. Low/No VOC Paints and Primers

#### **1.2 DEFINITIONS**

- A. Gloss Level 1: Not more than 5 units at 60 degrees and 10 units at 85 degrees, according to ASTM D 523.
- B. Gloss Level 2: Not more than 10 twits at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D 523.
- C. Gloss Level 3: 10 to 25 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D 523.
- D. Gloss Level 4: 20 to 35 units at 60 degrees and not less than 35 units at 85 degrees, according to ASTM D 523.
- E. Gloss Level 5: 35 to 70 units at 60 degrees, according to ASTM D 523.
- F. Gloss Level 6: 70 to 85 units at 60 degrees, according to ASTM D 523.
- G. Gloss Level 7: More than 85 units at 60 degrees, according to ASTM D 523.

### 1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product. Include preparation requirements and application instructions.
- B. Samples: For each type of paint system and in each color and gloss of topcoat.
- C. Product List: For each product indicated. Include printout of current "MPI Approved Products List" for each product category specified in Part 2, with the proposed product highlighted.
- D. As indicated on the provided Lead Based Paint Report, Lead Based Paint is seen on site. Abatement of all positive Lead Based Paint locations as per the reports and as further detailed in provided material and remove any loose or peeling paint in accordance with local and federal municipality requirements and guidelines. Perform lead hazard protection for building and site during construction, including daily clean-up to protect residents and workers.

### 1.4 INFORMATIONAL SUBMITTALS

- A. Product Data: Documentation for compliance with National Green Building Standard, Tropical Climate Path Exemption (collectively "NGBS") Building Certification.

### 1.5 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials, from the same product run, that match products Stalled and that are packaged with protective covering for storage and identified with labels describing contents.
  - 1. Paint: 5 percent, but not less than [1 gal.] of each material and color applied.

1.6 QUALITY ASSURANCE

- A. Mockups: Apply mockups of each paint system indicated and each color and finish selected to verify preliminary selections made under Sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
  1. Architect will select one surface to represent surfaces and conditions for application of each paint system specified in Part 3.
    - a. Vertical and Horizontal Surfaces: Paint one complete model apartment for approval by Architect, before proceeding with the work. Prior to occupancy, this apartment shall be repainted, unless otherwise directed by the Architect.
    - b. Other Items: Architect will designate items or areas required.
  2. Final approval of color selections will be based on mockups.
    - a. If preliminary color selections are not approved, apply additional mockups of additional colors selected by Architect at no added cost to Owner.

## **PART 2 - PRODUCTS**

### **2.1 MANUFACTURERS**

- A. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to products listed in other Part 2 articles for the paint category indicated.

### **2.2 PAINT, GENERAL**

- A. MPI Standards: Provide products that comply with MPI standards indicated and that are listed in its "MN Approved Products List."
- B. Material Compatibility:
  - 1. Provide materials for use within each paint system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
  - 2. For each coat in a paint system, provide products recommended in writing by manufacturers of topcoat for use in paint system and on substrate indicated.
- C. All interior paints and primers must be less than or equal to the following VOC levels, in grams per liter, based on a combination of the MPI and GreenSeal standards:
  - 1. Flat Paints and Coatings: 50 g/L.
  - 2. Nonflat Paints and Coatings: 50 g/L.
  - 3. Primers, Sealers, and Undercoaters: 50 g/L.
  - 4. Anticorrosive and Antirust Paints Applied to Ferrous Metals: 250 g/L.
  - 5. Floor Coatings: 100 g/L.
- D. Avoid epoxy-based paints, even those that comply with VOC standards, as these contain the chemical Bisphenol A. Bisphenol A was identified by the EPA on March 29, 2010, as a "chemical of concern."
- E. Colors: As indicated in a color schedule.
- F. If alternative is selected GC to provide an approved equal to architect for review.
- G. Lead encapsulant utilized must be an ASTM-approved lead encapsulating paint. Encapsulants should be compatible with the surfaces they are intended to encapsulate and shall be utilized per the manufacturer's specifications. GC to provide product for Architects review and approval.

### 2.3 BLOCK FILLERS

- A. Block Filler, Latex, Interior/Exterior: MPI #4.
  - 1. Benjamin Moore: 206/Super Spec, High Build Int/Ext Block Filler
  - 2. PPG Pittsburgh Paints: 6-15/Speedhide, Int/Ext HiFill Latex Block Filler
  - 3. Sherwin-Williams: B25W00025/PrepRite, Int/Ext Block Filler
  - 4. M.A.B. Paints: MB064145/Block Kote #1000, 100% Acrylic Sprayable Block Filler
  - 5. Or Approved equal

### 2.4 PRIMERS/SEALERS

- A. Primer Sealer, Latex. Interior: MPI #50.
  - 1. Benjamin Moore: 372/EcoSpec, Interior Latex Primer
  - 2. PPG Pittsburgh Paints: 6-2/Speedhide, Interior Latex Sealer Quick Drying
  - 3. Sherwin-Williams: B28WB1/Quali-Kote, Interior Latex Primer
  - 4. Or Approved equal
- B. Primer, Latex, for Interior Wood: MPI #39.
  - 1. Benjamin Moore: N023/Fresh Start, Multi-Purpose Latex Primer
  - 2. Sherwin-Williams: B51W00450/Multi-Purpose, Multi-Purpose Latex Primer/Sealer
  - 3. Diamond Vogel: DUI 508/Mill Max, Latex Enamel Undercoat
  - 4. Or Approved equal

### 2.5 METAL PRIMERS

- A. Primer, Rust-Inhibitive, Water Based: MPI #107.
  - 1. Benjamin Moore: P04/KP04 Super Spec HP, Acrylic Metal Primer
  - 2. Dunn-Edwards: BRPR00-1/Bloc-Rust Premium, Int/Ext Rust Preventative Primer
  - 3. Vista Paint: 9600/Protec Metal Prime, Vista Protec Metal Prime Alkyd Emulsion
  - 4. Or Approved equal
- B. Primer, Galvanized Water Based: MPI #134.
  - 1. Benjamin Moore: P04/KP04 Super Spec HP, Acrylic Metal Primer
  - 2. Sherwin-Williams: B66W1/Protective & Marine, DTM Acrylic Primer/Finish
  - 3. Cloverdale Paint: 70324/Performance Plus, Ecologic Waterborne Rustex Primer Grey
  - 4. Or Approved equal

## 2.6 WATER-BASED PAINTS

- A. Latex, Interior, Flat, (Gloss Level 1): MPI #53.
  - 1. Benjamin Moore: 373/Eco Spec WB, Interior Latex Flat Finish
  - 2. PPG Pittsburgh Paints: 72001/Olympic, Olympic Premium Interior Latex Flat
  - 3. Sherwin-Williams: B30WQ8151/Quali-Kote, Interior Latex Flat
- B. Latex. Interior, (Gloss Level 3): MPI #52.
  - 1. Benjamin Moore: N374/F374/Eco Spec WB, Interior Latex Eggshell Finish
  - 2. PPG Pittsburgh Paints: 72101/Olympic, Olympic Premium Interior Latex Satin
  - 3. Sherwin - Williams: B20W02651/ProMar 200 Zero VOC, Interior Latex Eg-Shel
- C. Latex, Interior, Semi-Gloss, (Gloss Level 5): MPI #54.
  - 1. Benjamin Moore: N376/Eco Spec WB, Interior Latex Semi-Gloss Finish
  - 2. PPG Pittsburgh Paints: 72201/Olympic, Premium Interior Latex Semi-Gloss
  - 3. Sherwin-Williams: A98W01251/Duration Home, Interior Latex Semi-Gloss
- D. Light Industrial Coating, Interior, Water Based, Semi-Gloss (Gloss Level 5): MPI #153.
  - 1. Rust-Oleum: 238752/Sierra Performance, MetalMax DTM Acrylic Enamel
  - 2. Sherwin-Williams: B66W00651/Pro Industrial, Acrylic Semi-Gloss Coating
  - 3. Pratt & Lambert: Z6761/Industrial Maintenance, Acrylic Waterborne DTM Semi-Gloss

## **PART 3 - EXECUTION**

### **3.1 EXAMINATION**

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
- B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:
  - 1. Concrete: 12 percent.
  - 2. Masonry (Clay and CMU): 12 percent.
  - 3. Wood: 15 percent.
  - 4. Gypsum Board: 12 percent.
  - 5. Plaster: 12 percent
- C. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.



- D. Proceed with coating application only after unsatisfactory conditions have been erected.
  - 1. Application of coating indicates acceptance of surfaces and conditions.

### 3.2 PREPARATION

- A. Comply with manufacturer's written instructions and recommendations in "MPI Manual" applicable to substrates indicated.
- B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
  - 1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.
- C. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.
  - 1. Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce paint systems indicated.

### 3.3 APPLICATION

- A. Apply paints according to manufacturer's written instructions and to recommendations in "MPI Manual."
- B. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, cap, ropiness, or other surface imperfections. Cut in sham lines and color breaks.

### 3.4 CLEANING AND PROTECTION

- A. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
- B. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

### 3.5 INTERIOR PAINTING SCHEDULE

- A. CMU Substrates:
  - 1. Latex System:
    - a. Block Filler. Block filler, latex, interior/exterior, MPI #4.
    - b. Intermediate Coat: Latex, interior, matching topcoat.
    - c. Topcoat: Latex, interior, semi-gloss, (Gloss Level 5), MPI #54.
- B. Ferrous metal Substrates:
  - 1. Water-Based Light Industrial Coating System:
    - a. Prime Coat: Primer, rust-inhibitive, water based MPI #107.
    - b. Intermediate Coat: Light industrial coating interior, water based, matching topcoat.
    - c. Topcoat: Light industrial coating, interior, water based semi-gloss (Gloss Level 5), MPI #153.
- C. Galvanized-Metal Substrates:
  - 1. Latex over Waterborne Primer System:
    - a. Prime Coat: Primer, galvanized, water based, MPI #134.
    - b. Intermediate Coat: Latex, interior, matching topcoat.
    - c. Topcoat: Latex, interior, semi-gloss, (Gloss Level 5), MPI #54.
- D. Wood Substrates: Including wood trim, architectural woodwork, doors, and windows.
  - 1. Latex System:
    - a. Prime Coat: Primer, latex, for interior wood, MPI #39.
    - b. Intermediate Coat: Latex, interior, matching topcoat.
    - c. Topcoat: Latex, interior, semi-gloss, (Gloss Level 5), MPI #54.
- E. Gypsum Board and Plaster Substrates:
  - 1. Latex System:
    - a. Prime Coat: Primer sealer, latex, interior, MPI #50.
    - b. Intermediate Coat: Latex, interior, matching topcoat
    - c. Topcoat for ceilings (except at bathrooms): Latex, interior, flat, (Gloss Level 1), MPI #53.
    - d. Topcoat for apartment hallways, bedroom and living room walls: Latex, interior, (Gloss Level 3), MPI #52.

- e. Topcoat for kitchen, bathroom wall and ceiling surfaces, closets, staircase and public hall walls: Latex, interior, semi-gloss, (Gloss Level 5), MPI #54.

**END OF SECTION 099123**